

# Survey of Labour and Income Dynamics: A Survey Overview 2011



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- . not available for any reference period
- .. not available for a specific reference period
- ... not applicable
- 0 true zero or a value rounded to zero
- 0<sup>s</sup> value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
- <sup>P</sup> preliminary
- <sup>r</sup> revised
- X suppressed to meet the confidentiality requirements of the *Statistics Act*
- <sup>E</sup> use with caution
- F too unreliable to be published
- \* significantly different from reference category ( $p < 0.05$ )

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# Survey of Labour and Income Dynamics (SLID) – 2011 Survey Overview

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## Survey objectives

The Survey of Labour and Income Dynamics (SLID) is an important source of income data for Canadian families, households and individuals. Introduced in 1993, SLID (Survey of Labour and Income Dynamics) provides an added dimension to traditional surveys on labour market activity and income: the changes experienced by individuals and families through time. Among the survey's key objectives is the understanding Canadians' economic well-being.

Starting with reference year 1998, SLID (Survey of Labour and Income Dynamics) officially replaced the annual Survey of Consumer Finances as the main source of information on family income. Over the 1993-to-1997 period, the two surveys were run in parallel: estimates for this period are produced by combining both samples. Together, these surveys cover a period that begins in 1976. The income content of the two surveys is similar, although SLID (Survey of Labour and Income Dynamics) uses a mixed collection mode that combined survey data with data from administrative sources. As well, SLID (Survey of Labour and Income Dynamics) adds a large selection of variables that capture transitions in Canadian jobs, income and family events.

As a longitudinal survey, SLID (Survey of Labour and Income Dynamics) interviews the same people from one year to the next for six years. The survey's longitudinal dimension enables evaluation of concurrent and often related events. This yields greater insight on the nature and extent of low income in Canada: What socio-economic shifts do individuals and families live through? How do these shifts

vary with changes in their paid work, family make-up, receipt of government transfers and other factors? What proportion of households are persistently in low income year after year, and what makes it possible for others to emerge from periods of low income?

SLID (Survey of Labour and Income Dynamics) also provides information on a broad selection of human capital variables, labour force experiences and demographic characteristics such as education, family relationships and household composition. Its breadth of content, combined with its relatively large sample, makes it a unique and valuable dataset.

## What's new?

### Final release from SLID

The 2011 data release is the last release from the Survey of Labour and Income Dynamics. This release contains cross-sectional estimates only. Effective with the 2012 reference year, cross-sectional income estimates will be available from the new Canadian Income Survey.

The longitudinal aspects contained in this Survey Overview pertain to data released from SLID up to and including 2010.

### Refinements to the Market Basket Measure (MBM) shelter component and disposable income

The MBM, including its definition of disposable income, was designed by a working group of Federal, Provincial and Territorial officials, led by HRSDC between 1997 and 1999 (Hatfield 2002; Michaud, Cotton and Bishop 2004). During 2009 and early 2010, the MBM underwent a comprehensive review of both content and methodology (Hatfield, Pyper and Gustajtis 2010). Though led by HRSDC, the consultation process involved officials from Provincial and Territorial governments, other federal Departments and agencies including Statistics Canada and a panel of experts in low income measurement. This review process led to a rebased series of thresholds (MBM 2008 base) which was revised historically to 2000, the beginning of the MBM time series. Among the changes to the MBM resulting from the comprehensive review was the revision of the shelter component to include the costs of homeowners without mortgages. This revision recognized that, in a given year, homeowners without mortgages may pay less for shelter than they would if they were renting.

During 2012, HRSDC officials re-examined the methodology for including homeowners without mortgages in order to better implement the conceptual decision to reflect these costs in the MBM. Following this re-examination, a revised methodology was adopted that adjusts the MBM disposable income of homeowners without mortgages to account for the potential differences in their shelter-related expenses. Specifically, the disposable income is adjusted in the following manner:

1. Shelter cost for mortgage-free owners is calculated, based on the median shelter cost for all two- and three- bedroom mortgage-free dwellings in each MBM region. These shelter costs reflect the actual distribution of two- and three-bedroom mortgage-free units in each MBM region.
2. Mortgage-free owners' difference in expenditures is calculated as the difference in the median shelter cost calculated in 1. above and that of renters (i.e. the cost of the shelter component)
3. Disposable income of owners without mortgages is adjusted by adding the mortgage-free owners' difference in expenditures prevailing in their MBM region to their MBM disposable income.

The shelter thresholds themselves are now exclusively a reflection of the median costs for all two- and three-bedroom rental units in each MBM region, weighted to take into account the actual distribution of such units.

The revision takes effect in 2011 and includes an historical revision back to 2002 (the first year in which housing tenure information is available in SLID).

As a result of this revision, the MBM portions of several CANSIM tables have been revised. These tables are 202-0802, 202-0803, 202-0804, 202-0806, 202-0807 and 202-0809.

## Introduction of new variables

### Market Basket Measure (2011-base)

There is a new series of variables based on the 2011-based Market Basket Measure (MBM). Following a review by Human Resources and Skills Development Canada, the shelter component of the basket and the definition of MBM disposable income were modified. New thresholds and disposable income have been created and new low-income variables have been produced. Due to data availability, these variables are available beginning in reference year 2002 only.

Low income variables based on the 2008-based MBM are set to "not applicable" beginning with 2011.

## Changes to variables

### Provincial Tax Credits

New programs were added to the existing variable:

- Quebec Solidarity Tax Credit: Quebec Sales Tax Credit Component and Housing Component
- Ontario Energy and Property Tax Credit: Energy Component
- Northern Ontario Energy Tax Credit
- Transitional Northern Ontario Energy Tax Credit (for 2011 only)

### Material Deprivation

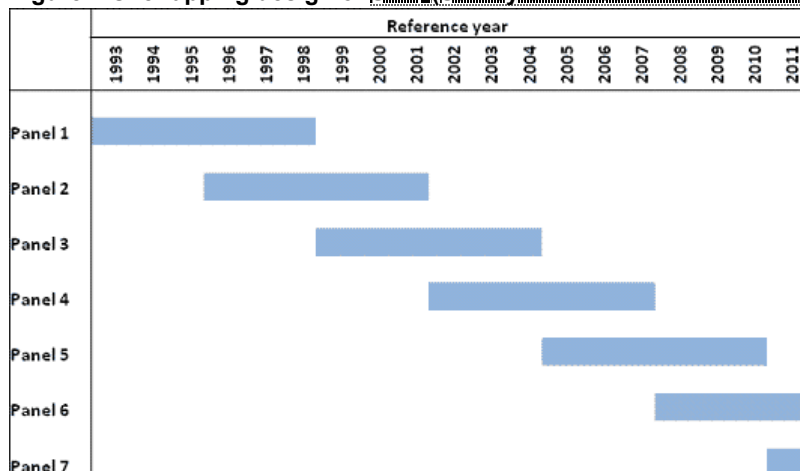
Ontario material deprivation (OMD) data were collected on behalf of the Ontario Government as research for their poverty reduction plan for the 2011 reference year. The data are available only for households in Ontario. Prior to the release of the 2011 reference year, the OMD variables were not imputed for non-response. As of the release of the 2011 reference year, the OMD variables have been imputed for all available reference years (2009 to 2011).

## Survey design

SLID (Survey of Labour and Income Dynamics) is a household survey that covers all individuals in Canada, excluding residents of Yukon, the Northwest Territories and Nunavut, residents of institutions and persons living on Indian reserves or in military barracks.

The SLID (Survey of Labour and Income Dynamics) sample is composed of two panels. Each panel consists of roughly 17,000 households and about 34,000 adults, and is surveyed for six consecutive years. A new panel is introduced every three years, so two panels always overlap.

**Figure 1 Overlapping design of SLID (Survey of Labour and Income Dynamics) sample**



From January to March following the reference year, interviewers contact respondents by telephone. Interviewers collect information regarding respondents' labour market experiences, educational activity, income and family relationships. The demographic characteristics of family and household members represent a snapshot of the population as of the end of each calendar year.

## Household relationships

This survey could be called the 'Survey of Labour, Income and Family Dynamics', since it has complete information on complex family structures and changes. How does it capture this information?

Unlike most household surveys, which describe how household members are related to one specific reference person, SLID (Survey of Labour and Income Dynamics) asks explicitly about the relationship among all members of a household. Information on complex family structures—for example, blended or multi-generational families—can help in understanding family dynamics.

However, because families change, it's impossible to present data for exactly the same families over time. Instead, the same individuals are analysed in light of their family characteristics—for example, their family's income or whether they belong to a blended family.

## **SLID (Survey of Labour and Income Dynamics): a longitudinal survey**

### **Description of a longitudinal survey**

There are two types of recurring surveys: in most surveys, a new cross-section of people are interviewed each time; in others, the same people are interviewed over a period of time—a longitudinal survey.

The advantage of cross-sectional surveys is that they are generally more representative of the population, and they reveal the levels and trends of income or labour for the whole population or its sub-groups. But such surveys do not answer questions about changes or fluctuations faced by individuals or families: What are the fluctuations in people's labour, income or family characteristics at the micro level? What events tend to coincide? How often do people change jobs or get laid off, with what impact on their total family income? How many families split or join together in a given time period? What proportion of households is 'persistently poor' year after year, and what enables others to emerge from periods of low income? These and many similar questions can only be answered by a longitudinal survey.

In a survey like SLID (Survey of Labour and Income Dynamics), the focus extends from static cross-sectional measures to a range of longitudinal events: transitions, durations, and repeat occurrences of people's financial and work situations. These yield a number of possible longitudinal research themes.

Paradoxically, the comprehensive data that make SLID (Survey of Labour and Income Dynamics) so valuable also makes the job of maintaining respondent confidentiality more complex for Statistics Canada. To comply with the strict confidentiality provisions of the Statistics Act, SLID (Survey of Labour and Income Dynamics) longitudinal data are made available through special modes of dissemination (see data services).

### **Longitudinal respondents**

Longitudinal respondents are the people belonging to the selected households when a new six-year panel of respondents is introduced. These respondents are interviewed once a year whether they stay, move away or split up. New joiners, called cohabitants in SLID (Survey of Labour and Income Dynamics), are interviewed as long as they continue to live with a longitudinal respondent. That is because the family make-up and family income situation of longitudinal respondents is of key interest. Interviewing cohabitants also improves the quality of cross-sectional estimates.

Children present in the original households are interviewed starting the year they reach 16 years old. People aged 70 years and older are not asked labour-related questions.

### **Longitudinal research themes**

Discussions with prospective users and insights from other panel surveys with similar content helped identify seven longitudinal research themes that illustrate some of the survey's potential. Depending on the angle of study, it may make sense to use individuals, jobs, employers, or spells (of unemployment, for example) as the unit of analysis. SLID (Survey of Labour and Income Dynamics) covers up to six jobs and six employers that a person might have during each calendar year.

### **Employment and unemployment dynamics**

Labour force activity data usually show total employment, unemployment and inactivity. Changes in employment and unemployment between two months or two years are calculated by comparing these totals. SLID (Survey of Labour and Income Dynamics), however, shows the flow into each type of labour force activity experienced by individuals. Flow data of persons or jobs are possible by industry, occupation, or worker characteristics. Durations of spells may be of interest too; for example, to what extent are long spells of unemployment experienced by the same individuals? What are the major determinants? Why do people withdraw from the labour market, and what precedes a transition into self-employment?

### **Life cycle labour market transitions**

Using SLID (Survey of Labour and Income Dynamics) data, one can study major labour market transitions associated with particular stages of the life cycle, such as transitions from school to work, transitions from work to retirement and work absences taken to have or raise children. What are typical life-cycle patterns in Canada today? What are the subsequent activities of high school drop-outs, and

what precedes a return to school?

## **Job quality**

SLID (Survey of Labour and Income Dynamics) supports research in such areas as wage differences between men and women, underemployment, occupational mobility, earnings growth over a period of several years, as well as wage and hours polarization among the working population.

## **Family economic mobility**

How stable is family income? What proportion of families experience a significant improvement or deterioration in income between two points in time? What are the determinants of these changes? How important are changes in family composition (divorce, remarriage) in explaining a change in financial well-being?

## **Dynamics of low income**

This research theme concerns the prevalence and duration of spells of low income and the factors related to families moving into or out of low income. Researchers can isolate and characterize a persistently in low income sub-population, as is done using longitudinal surveys in other countries. There is also interest in looking at receipt of employment insurance benefits, social assistance and other government transfers in relation to flows into and out of low income.

## **Life events and family changes**

Central to SLID (Survey of Labour and Income Dynamics)'s demographic potential is information on family relationships, which makes it possible to accurately identify blended and multi-generational families. The longitudinal aspect permits the study of life events and their determinants or impact. For example, what are the family's economic circumstances preceding a marriage breakup, and what are they for each spouse and child following a separation?

## **Educational advancement and combining school and work**

It is possible to view educational activity and attainment in the evolving context of an individual's other activities and family circumstances? What are the family circumstances of young people pursuing post-secondary education? How much do high school or postsecondary students combine work and school?

## **Computer-assisted telephone interviewing**

SLID (Survey of Labour and Income Dynamics) uses computer-assisted telephone interviewing (CATI) for data collection. CATI (computer-assisted telephone interviewing) interviews are conducted by telephone and the results are simultaneously entered in a computer that guides the interviewer through the questionnaire.

Because of its complexity as a longitudinal survey, SLID (Survey of Labour and Income Dynamics) benefits greatly from CATI (computer-assisted telephone interviewing)'s potential for improving data quality. For example, there are many dates to collect in the course of a labour interview—dates worked, dates of jobless spells, absences from work and so on. With CATI (computer-assisted telephone interviewing), interviewers can remind respondents of information they provided in a previous interview. This helps respondents remember start and end dates of jobs and reduces the tendency to incorrectly associate these dates with the beginning or end of calendar years.

Computer-assisted interviewing helps keep track of members returning to the household and individuals returning to employers, rather than treating these members or employers as completely new.

Proxy response is accepted in SLID (Survey of Labour and Income Dynamics). This procedure allows one household member to answer questions on behalf of any or all other members of the household, provided he or she is willing to do so and is knowledgeable.



## Survey content

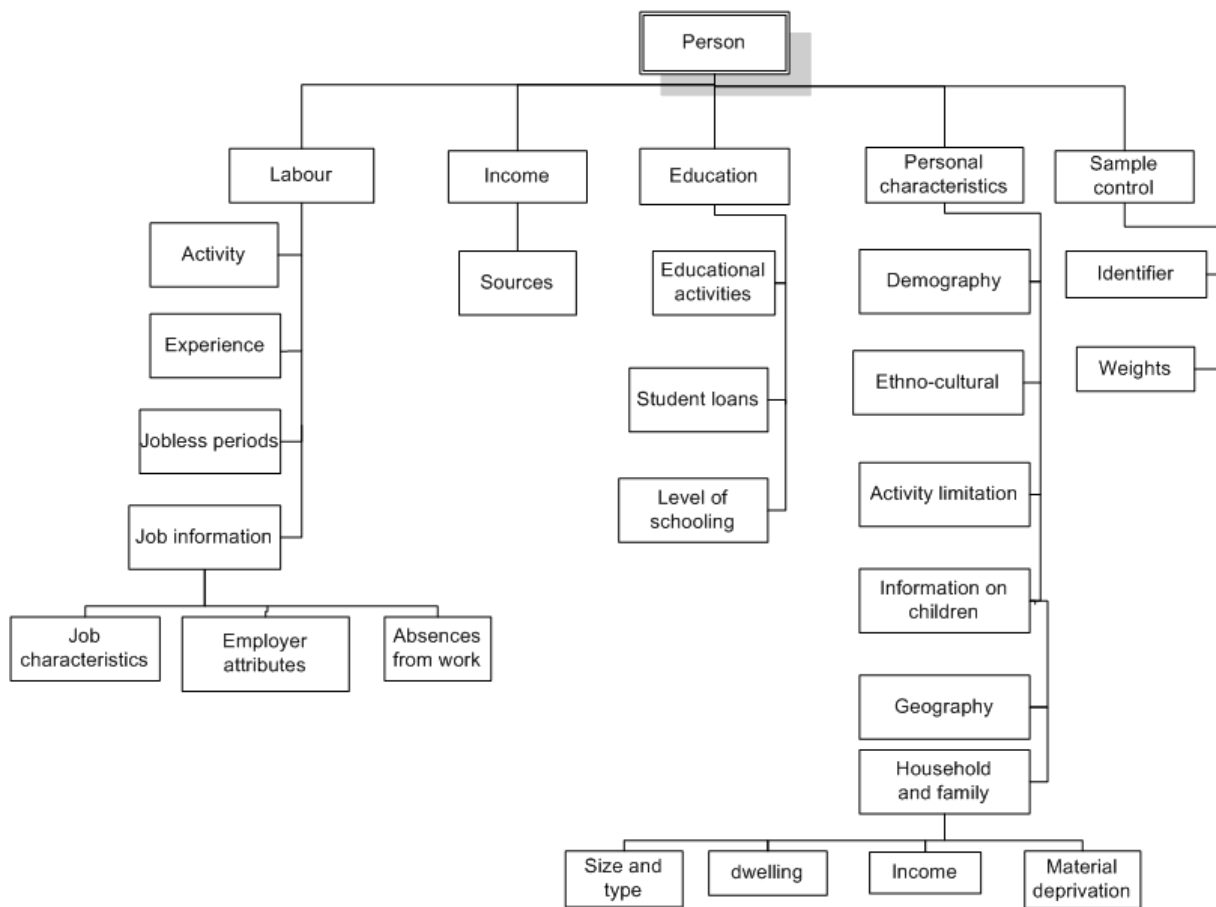
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SLID (Survey of Labour and Income Dynamics) collects data on a wide range of topics. Some are inherently “dynamic”, involving transitions and spells, while others have important explanatory value.

For more detailed information on survey variables, refer to the [SLID \(Survey of Labour and Income Dynamics\) electronic data dictionary](#).

### **Figure 2 Organization of SLID (Survey of Labour and Income Dynamics) content**







# Labour

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## Labour market activity

- major activity during year
- employment/unemployment spells (start and end dates, durations)
- weekly labour force status
- total weeks of employment, unemployment and inactivity by year
- multiple job-holding spells
- work absence spells

## Work experience

- years of full-time and part-time employment
- years of experience in full-time, full-year equivalents

## Jobless periods

- job search during spell
- dates of search spells
- desire for employment
- reason for not looking

## Job characteristics<sup>1</sup>

- start and end dates, first date ever worked for this employer
- wages

- work schedule (hours and type)
- benefits
- union membership
- occupation
- supervisory and managerial responsibilities
- class of worker
- tenure
- how job was obtained
- reason for job separation

### **Absences from work<sup>2</sup>**

- absence dates
- reason
- paid or unpaid

### **Employer attributes**

- industry
- firm size
- public or private sector

### **Notes**

1. Job characteristics are updated annually for up to six jobs per year with dates of change recorded.
2. Absences lasting one or more weeks are collected on the first and last absence each year, for each employer.



# Income and wealth

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## Income sources

- annual information on many income sources

For example:

- market income
- government transfers
- taxes paid
- after-tax income
- inter-household transfers

## Receipt of Employment Insurance/social assistance/workers' compensation<sup>1</sup>

- employment insurance
- social assistance
- workers' compensation

1. Amount and timing of monthly benefits received from each source.



# Education

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## Educational activity

- enrolled in a credit program, months attended
- type of institution
- full-time or part-time student
- certificates received (if applicable)

## Level of schooling/educational attainment<sup>1</sup>

- years of schooling
- degrees and diplomas
- major field of study

## Student loans

- received a student loan
- total amount borrowed
- amount currently owing

1. Updated annually



# Personal characteristics

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## Demographics

- year of birth/age
- sex
- marital status
- duration of current marital status
- year/age at first marriage

## Ethno-cultural

- ethnic background
- member of an employment equity designated group
- mother tongue
- date of immigration
- country of birth
- parents' schooling and place of birth

## Activity limitation

- annual information on activity limitations and their impact on working
- satisfaction with work

## Information on children

- number of children born, raised

- year and person's age when first child born

## Geography and geographic mobility

- economic region or census metropolitan area of current residence
- size of community
- moved during year
- move dates
- reason for move
- nature of move (full household/household split)

## Household and family information<sup>1</sup>

- key characteristics of other household/family members (e.g. (for example), age, sex, relationship, income, annual hours worked)
- low income status according to various measures
- family events (marriage, separation, deaths, births)
- Housing information:
  - type of dwelling
  - dwelling condition
  - characteristics of dwelling
  - ownership / mortgage / rent
  - payments / costs / rent inclusions
  - housing suitability indicator
  - shelter costs to income ratio
- Income
  - Income sources
  - Low income status
- Material Deprivation (Ontario households only)<sup>2</sup>

## Notes

1. Annual summary information, e.g. (for example), size, type

2. For further information, see [Ontario Material Deprivation Survey \(OMDS\), 2009 Public Use Microdata File](http://news.ontario.ca/mcys/en/2009/12/ontario-deprivation-index.html) and <http://news.ontario.ca/mcys/en/2009/12/ontario-deprivation-index.html>.



# Sample control

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## Identifiers

- person
- household
- economic family
- census family

## Weights

- cross-sectional
- cross-sectional combined SCF (Survey of Consumer Finances )-SLID (Survey of Labour and Income Dynamics) sample (1993-1997 inclusive)
- cross-sectional adjusted for labour non-response
- longitudinal (not available in 2011)
- longitudinal combined panel (not available in 2011)





# Classification of income

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## Classification of income by source

### Market Income

- Earnings
  - Wages, salaries and commissions
  - Self-employment income
    - Farm
    - Non-farm
- Investment income
- Retirement pensions
- Other income

### (plus) Government transfers

- Child tax benefits
  - Child tax benefits
  - Universal child care benefit
- Canada Pension Plan (CPP)/Quebec Pension Plan (QPP) benefits
- Old Age Security and Guaranteed Income Supplement/Spouse's Allowance
- Employment Insurance benefits
- Social assistance
- Workers' compensation benefits
- GST (goods and services tax)/HST (Harmonized Sales Tax) credit
- Provincial/territorial tax credits

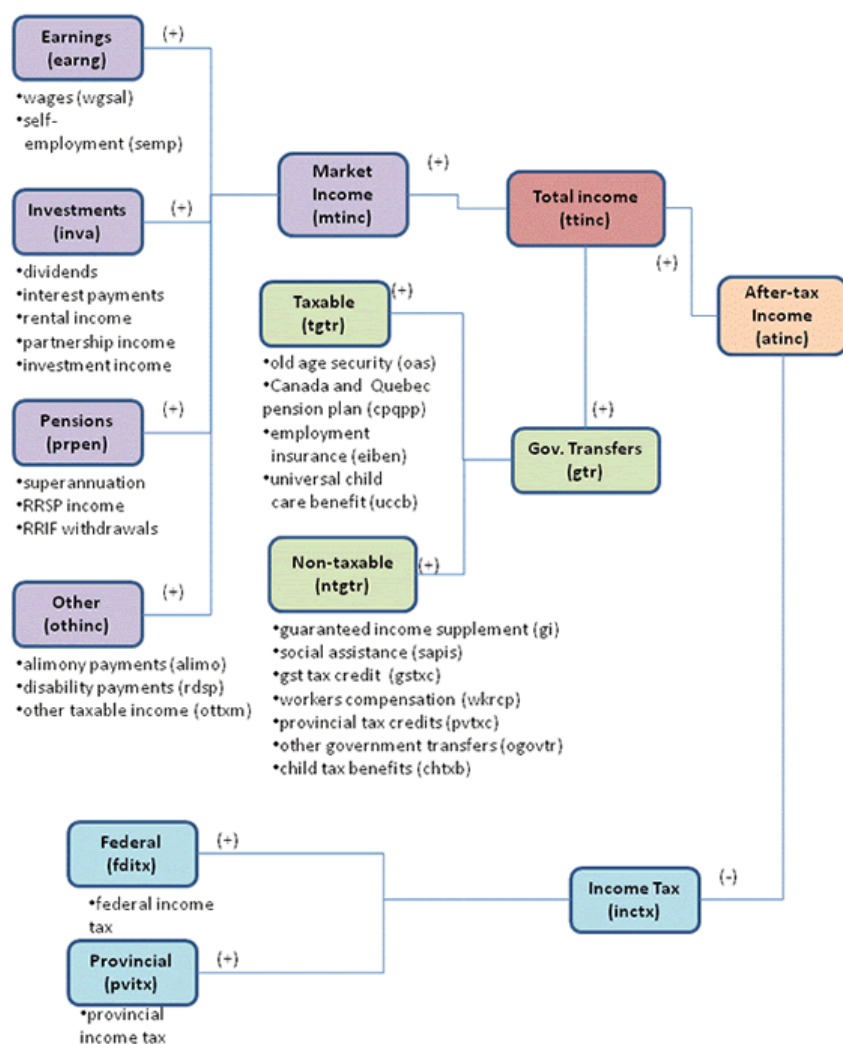
- Other government transfers

**(equals) Total income**  
**(minus) Income taxes**  
**(equals) After-tax income**  
**(minus) Non-discretionary expenses**

- Employment Insurance contributions
- Canada Pension Plan/Quebec Pension Plan contributions
- Registered pension plan contributions
- Union dues and professional membership dues and malpractice liability insurance premiums
- Child care expenses incurred in order to hold a paid job
- Support payments paid
- Public health insurance premiums
- Direct medical expenses, including private insurance premiums

**(plus) Mortgage-free owners' difference in expenditures (for owners without mortgages only)**  
**(equals) Disposable income**

Figure Classification of income





## Income

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This section reviews the definitions of the main income concepts and their components. In order to highlight the relationships between them, this section is organized according to the "Classification of income", described above.

## The concept of income

There are several important inclusions and exclusions in the concept of income:

- The concept of income covers income received by residents of Canada or deemed relevant for income tax purposes in Canada. This excludes some, but not all, foreign income.
- Retirement income received as a regular pension or annuity during retirement is included, while cash withdrawals from private pension plans, including Registered Retirement Savings Plans (RRSPs), prior to retirement, are excluded.
- Realized capital gains from financial investments are excluded.
- In the Canadian System of National Accounts (CSNA) and the present income classification, taxes on capital gains are included in income taxes, as are taxes on RRSP (Registered Retirement Savings Plans) withdrawals. Both capital gains (the taxable portion thereof) and RRSP (Registered Retirement Savings Plans) withdrawals figure in the calculation of taxes, but are not part of total income in the CSNA (Canadian System of National Accounts) or in SLID (Survey of Labour and Income Dynamics)'s Classification of income.
- SLID (Survey of Labour and Income Dynamics)'s classification of income includes all refundable tax credits and benefits, including those that are not considered for income tax purposes, such as child tax benefits, the Goods and Services Tax Credit/Harmonized Sales Tax Credit, and other provincial or territorial tax credits. There are other smaller differences between SLID (Survey of Labour and Income Dynamics)'s total income and total income defined for tax purposes (see Other income and Other government transfers).
- Contributions to Employment Insurance and the Canada and Quebec Pension Plans, both federal programs, are not included in income taxes, nor are they deducted from income to arrive at after-tax income. However, the CSNA (Canadian System of National Accounts) recently revised its definition of taxes on production to include these payroll taxes, in accordance with international recommendations on national accounting.

## Market income

Market income is the sum of earnings (from employment and net self-employment), net investment income, (private) retirement income, and the items under "Other income". It is equivalent to total income minus government transfers. It is also called income before taxes and transfers.

## Earnings

This includes earnings from both paid employment (wages and salaries) and self-employment.

## Wages, salaries and commissions

These are gross earnings from all jobs held as an employee, before payroll deductions such as income taxes, employment insurance contributions or pension plan contributions, etc. (and so on). Wages and salaries include the earnings of owners of incorporated businesses, although some amounts may instead be reported as investment income. Commission income received by salespersons as well as occasional earnings for baby-sitting, for delivering papers, for cleaning, etc. (and so on) are included. Overtime pay is included.

## Self-employment income

This is net self-employment income after deduction of expenses. Negative amounts (losses) are accepted. It includes income received from self-employment, in partnership in an unincorporated business, or in independent professional practice. Income from roomers and boarders (excluding that received from relatives) is included. Note that because of the various inclusions, receipt of self-employment income does not necessarily mean the person held a job.

Self-employment income is subdivided into farm self-employment income and non-farm self-employment income. Farm self-employment income is reported by individuals who operate their own or a rented farm, either on own account or in partnership. Included are money receipts from the sale of farm products as well as related supplementary and assistance payments from governments. Income in kind is excluded.

## Investment income

This includes interest received on bonds, deposits and savings certificates from Canadian or foreign sources, dividends received from Canadian and foreign corporate stocks, cash dividends received from insurance policies, net rental income from real estate and farms, interest received on loans and mortgages, regular income from an estate or trust fund and other investment income. Realized capital

gains from the sale of assets are excluded. Negative amounts are accepted.

## Retirement pensions

This is retirement pensions from all private sources, primarily employer pension plans. Amounts may be received in various forms such as annuities, superannuation or RRIFs (Registered Retirement Income Funds). Withdrawals from RRSP (registered retirement savings plan)s (Registered Retirement Savings Plans) are not included in retirement pensions. However, they are taken into account as necessary for the estimation of certain government transfers and taxes. For data obtained from administrative records, income withdrawn from RRSP (Registered Retirement Savings Plans)s before the age of 65 is treated as RRSP (Registered Retirement Savings Plans) withdrawals, and income withdrawn from RRSP (Registered Retirement Savings Plans)s at ages 65 or older is treated as retirement pensions. Retirement pensions may also be called pension income.

## Other income

This sub-total includes all items of market income not included elsewhere. Among them are support payments received (also called alimony and child support) and income from a Registered Disability Savings Plan (RDSP). The coverage of other items depends at least to some extent on the method of income data collection, whether from administrative income tax records or by interview. Those items which are included on line 130 of the T1 tax return are well covered. These include, but are not restricted to, retirement allowances (severance pay/termination benefits), scholarships, lump-sum payments from pensions and deferred profit-sharing plans received when leaving a plan, the taxable amount of death benefits other than those from CPP (Canada Pension Plan) or QPP (Quebec Pension Plan), and supplementary unemployment benefits not included in wages and salaries.

## Government transfers

Government transfers include all direct payments from federal, provincial and municipal governments to individuals or families. See the table Classification of income for a list of the government transfers identified separately in the latest reference year. It should be noted that many features of the tax system also carry out social policy functions but are not government transfers per se. The tax system uses deductions and non-refundable tax credits, for example, to reduce the amount of tax payable, without providing a direct income.

## Child benefits

Federal child tax benefits began in 1993 and replaced both the federal Family Allowances and the Child Tax Credit. Several provincial and territorial programs have since been introduced, in addition to Quebec family allowances which already existed before 1993. To be eligible, a person must have the primary responsibility for the care and upbringing of one or more children under the age of 18. Most benefits are calculated by setting a maximum amount per family or per child and reducing that total by a certain percentage of the family's net income.

The programs which were explicitly accounted for in the data were the federal basic benefit and National Child Benefit Supplement (together called the Canada Child Tax Benefit, began in 1998), the Newfoundland and Labrador Child Benefit (began in 1999), the Nova Scotia Child Benefit (began in 1998), the New Brunswick Child Tax Benefit (began in 1997), the New Brunswick Working Income Supplement (began in 1997), the Child Assistance Payment (effective January, 2005; replacing Quebec Family Allowance, which began in 1981), the Quebec Allocation à la naissance (began in 1998), the Ontario Child Care Supplement for Working Families (began in 1998), and the Ontario Child Benefit (commencing with a one-time payment in July of 2007, and regular payments began in July 2008), the Saskatchewan Child Benefit (began in 1998), the Alberta Family Employment Tax Credit (began in 1997), the BC Family Bonus (began in 1996), and the BC Earned Income Benefit (began in 1998). Benefits from these programs are non-taxable.

Effective July 2007, the Canada Child Tax Benefit under 7 supplement within the Canada Child Tax Benefit program ceased to exist. This supplement was only paid for children who were six years of age between July 2006 and June 2007. In addition, as of July 2006, the Saskatchewan Child Benefit was fully phased out and replaced by the full federal increases to the National Child Benefit Supplement.

In July 2006, a new Child Benefit program was introduced at the federal level. The Universal Child Care Benefit for children under 6 was introduced in the second half of 2006. Unlike the other child tax benefits, this benefit is taxable and is available to all families with children under 6 years of age regardless of their income. Families can receive \$100 per month for each eligible child. This new benefit has been added to the Child Tax Benefits data.

## Old Age Security (OAS)

The Old Age Security (OAS) pension is targeted to Canadian residents aged 65 and over. OAS (Old Age Security) recipients who have little or no other income may also receive the federal Guaranteed Income Supplement (GIS); and their spouses, if aged 60 to 64 (and not yet eligible for OAS (Old Age Security) and GIS (Guaranteed Income Supplement) themselves), receive the Spouse's Allowance.

## **Canada Pension Plan (CPP) and Quebec Pension Plan (QPP)**

The CPP (Canada Pension Plan) and QPP (Quebec Pension Plan) are compulsory contributory social insurance programs that provide a source of retirement income and protect workers and their families against loss of income due to disability or death.

## **Employment Insurance**

Employment Insurance is a federal program which includes the following types of benefits: regular unemployment benefits, sickness benefits, maternity and parental benefits, and benefits for persons taking approved training courses or participating in job creation or job-sharing projects. To qualify, the claimant must have ceased receiving employment income and have worked a minimum number of weeks or hours of insurable employment over the preceding period.

## **Social assistance**

Social assistance covers many provincial and municipal income supplements to individuals and families. It is usually provided only after all other possible sources of support have been exhausted.

## **Workers' compensation**

Workers' compensation is provided to protect all full-time and part-time employees from loss of salary due to work accidents or occupational diseases and help them to pay their medical expenses and other costs.

## **Goods and Services Tax/Harmonized Sales Tax credit**

Introduced in conjunction with the Goods and Services Tax in 1990, it is intended to offset the GST (Goods and Services Tax)/HST (Harmonized Sales Tax) for lower income families and individuals. In Nova Scotia, New Brunswick, and Newfoundland and Labrador, it is called the Harmonized Sales Tax Credit because the administration of the tax is combined with the provincial sales tax. Included are the federal Relief for Heating Expenses paid in 2001 and the Federal Energy Cost Benefit paid in 2006.

## **Provincial/territorial tax credits**

Included here are refundable tax credits other than those for children (included with child tax benefits) and provincial income supplements for seniors. Some are designed to help low income individuals and families to pay property taxes, education taxes, rent and living expenses, and so on. Provincial credits include the Newfoundland HST Credit (NHSTC), Nova Scotia Affordable Living Tax Credit (NSALTC), Nova Scotia Poverty Reduction Tax Credit (NSPRTC), Quebec Sales Tax Credit Component and Housing Component of the Quebec Solidarity Tax Credit (QSTC), Ontario Sales Tax Credit (OSTC), Energy Component of the Ontario Energy and Property Tax Credit (OEPTC), Northern Ontario Energy Credit (NOEC), Saskatchewan Low-Income Tax Credit (SLITC), British Columbia Harmonized Sales Tax Credit (BCHSTC), and British Columbia Climate Action Tax Credit (BCCATC) - also included are the Ontario Sales Tax Transition Benefit (OSTTB) for 2010-2011 only, Transitional Northern Ontario Energy Credit (TNOEC) for 2011 only, and the Alberta Energy Tax Refund of 2000-2001. Provincial income supplements for seniors include the Newfoundland Seniors Benefit, New Brunswick Low-Income Senior's Benefit, Ontario Guaranteed Annual Income System, Manitoba 55 Plus, Saskatchewan Seniors Income Plan, Alberta Seniors Benefit Plan, and British Columbia Senior's Supplement. The Quebec abatement, although refundable, is not included here but rather with income taxes.

## **Other government transfers**

This includes government transfers not included elsewhere, mainly any other non-taxable transfers. In SLID (Survey of Labour and Income Dynamics), these amounts are included with "Other income". This is partly because the coverage of any transfers not taxed through the income tax system is low. There may be under-reporting of these transfers, which are mainly collected using an open question in SLID (Survey of Labour and Income Dynamics) interviews. Nonetheless, the types of transfers which have come under this heading include: training program payments not reported elsewhere, the Veteran's pension, pensions to the blind and the disabled, regular payments from provincial automobile insurance plans (excluding lump-sum payments), and benefits for fishing industry

employees. The Working Income Tax Benefit (WITB) was included in the other government transfers from 2007. It is a refundable tax credit intended to provide tax relief for eligible working low-income individuals and families who are already in the workforce and to encourage other Canadians to enter the workforce.

## **Total income**

Total income refers to income from all sources including government transfers before deduction of federal and provincial income taxes. It may also be called income before tax (but after transfers). All sources of income are identified as belonging to either market income or government transfers.

## **Income tax**

Income tax is the sum of federal and provincial income taxes payable (accrued) for the taxation year. Income taxes include taxes on income, capital gains and RRSP (registered retirement savings plan) withdrawals, after taking into account exemptions, deductions, non-refundable tax credits, and the refundable Quebec abatement. The data are either taken directly from administrative records or estimated based on aggregate data from administrative records, as this yields better results than the amounts reported by interview.

## **After-tax income**

After-tax income is total income, which includes government transfers, less income tax. It may also be called income after tax.

## **Disposable income**

Disposable income is income after deducting not only direct income taxes but also several expenditures. These expenses are Employment Insurance, Canada Pension Plan, Quebec Pension Plan and Registered Pension Plan contributions, union dues (including professional membership dues and malpractice liability insurance premiums), child care expenses incurred in order to hold a paid job, support payments paid, public health insurance premiums and direct medical expenses including private insurance premiums. Disposable income is also adjusted in the following manner:

1. Shelter cost for mortgage-free owners is calculated, based on the median shelter cost for all two- and three- bedroom mortgage-free dwellings in each MBM region. These shelter costs reflect the actual distribution of two- and three-bedroom mortgage-free units in each MBM region.
2. Mortgage-free owners' difference in expenditures is calculated as the difference in the median shelter cost calculated in 1. above and that of renters (i.e. the cost of the shelter component).
3. Disposable income of owners without mortgages is adjusted by adding the mortgage-free owners' difference in expenditures prevailing in their MBM region to their MBM disposable income.

Disposable income is used with the MBM thresholds to determine low-income based on the MBM.



# Family

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## Dwelling

In general terms, a dwelling is defined as a set of living quarters. A private dwelling is a separate set of living quarters with a private access. A collective dwelling may be institutional, communal or commercial in nature. Of the different types of collective dwellings, SLID (Survey of Labour and Income Dynamics) covers only communal dwellings.

## Household

A household is defined as a person or group of persons residing in a dwelling. SLID (Survey of Labour and Income Dynamics) defines households and families according to the living arrangements on December 31 of the reference year. Residents of Canada are also defined at those points in time.

## Adults



Adults are defined in [SLID \(Survey of Labour and Income Dynamics\)](#) as individuals 16 or older as of December 31st of the reference year.

## Family and household income

Family income is the sum of income of each adult in the family as defined above. Household income is likewise the sum of incomes of all adults in the household. Family and household membership is defined at a particular point in time, while income is based on the entire calendar year. The family members or "composition" may have changed during the reference year, but no adjustment is made to family income to reflect this change.

## Economic family type

"Economic family type" refers to either economic families or unattached individuals. An economic family is defined as a group of two or more persons who live in the same dwelling and are related to each other by blood, marriage, common law or adoption. An unattached individual is a person living either alone or with others to whom he or she is unrelated, such as roommates or a lodger. See [Economic Family Classification in Table B](#) for detailed groupings.

## Census family type

"Census family type" refers to either census families or persons not in census families. The term "census family" corresponds to what is commonly referred to as a "nuclear family" or "immediate family". In general, it consists of a married couple or common-law couple with or without children, or a lone-parent with a child or children. Furthermore, each child does not have his or her own spouse or child living in the household. A "child" of a parent in a census family must be under the age of 25 and there must be a parent-child relationship (guardian relationships such as aunt or uncle are not sufficient).

Persons "not in census families" are those living alone, living with unrelated individuals, or living with relatives but not in a husband-wife or parent-unmarried child (including guardianship-child) relationship.

By definition, all persons who are members of a census family are also members of the same economic family.

See [Census Family Classification in Table B](#) for more detailed groupings.

## Household type

"Household type" groups households based on the number and type of economic families living in the dwelling. See [Household Classification in Table B](#) for detailed groupings.

## Major income earner

This characteristic is important for the derivation of detailed family and household types (see [Classification of family and household types](#)). For each household and family, the major income earner is the person with the highest income before tax, with one exception: a child living in the same census family as his/her parent(s) cannot be identified as the major income earner of the census family (this does not apply to economic families).

For persons with negative total income before tax, the absolute value of their income is used, to reflect the fact that negative incomes generally arise from losses "earned" in the market-place which are not meant to be sustained. In the rare situations where two persons have exactly the same income, the older person is the major income earner.

## Family and household classification

[SLID \(Survey of Labour and Income Dynamics\)](#) uses the [major income earner](#) to classify families and households.

### Table B Classification of families and households

#### Economic Family Classification:

#### Economic families, 2 persons or more

## Elderly families

- Married couples
- Other elderly families

## Non-elderly families

- Married couples without children
- Two-parent families with children
- Married couples with other relatives
- Lone-parent families
  - Male lone-parent families
  - Female lone-parent families
- Other non-elderly families

## Unattached individuals

Elderly male

Elderly female

Non-elderly male

Non-elderly female

## Census Family Classification:

### Census families, 2 persons or more

- Married couples without children
- Married couples with children
- Lone-parent families
  - Male lone-parent families
  - Female lone-parent families

### Persons not in census families

- In a one-person economic family
- In a multi-person economic family

## Household Classification:

### One person households

- Elderly male
- Elderly female
- Non-elderly male
- Non-elderly female

### One economic family households

- Non-elderly married couple without children
- Non-elderly married couple with children
- Non-elderly married couple with other relatives
- Elderly married couple
- Other family type (elderly male)
- Other family type (elderly female)
- Female lone-parent
- Male lone-parent
- Other family type (non-elderly)

### Two or more economic family households

- Elderly male
- Elderly female
- Non-elderly male
- Non-elderly female

**Elderly family or household**

The major income earner is aged 65 or over.

**Non-elderly family or household**

The major income earner is under age 65.

**Married couples/spouses**

Married couples, including legally married, common-law and same-sex relationships, where one of the spouses is the major income earner.

**Children**

A child or children (by birth, adopted, step, or foster) of the major income earner under age 18. Other relatives may also be in the family.

**Lone-parent family**

Includes at least one child as defined above. Families where the parent is 65 years or older are excluded.

**Relative**

A person related to the major income earner by blood, marriage, adoption or common-law.

**Other relative**

A person in the economic family who is not the major income earner nor his/her spouse or child under age 18.



## Analytical concepts

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### Current dollars versus constant dollars

"Current dollars" are what we usually mean when we refer to a currency in the current time period. The term "constant dollars" refers to dollars of several years expressed in terms of their value ("purchasing power") in a single year, called the base year. This type of adjustment is done to eliminate the impact of widespread price changes.

Current dollars are converted to constant dollars using an index of price movements. The most widely used index for household or family incomes, provided that no specific uses of the income are identified, is the all-items annual Consumer Price Index (CPI), which reflects average spending patterns by consumers in Canada.

The all-items annual Consumer Price Index can be found in [CANSIM Table 326-0021](#). To convert current dollars of any year to constant dollars, divide them by the index of that year and multiply them by the index of the base year you choose (remember that the numerator contains the index value of the year you want to move to). For example, using this index, \$10,000 in 1997 would be \$13,263 in 2011 constant dollars ( $\$10,000 \times 119.9 / 90.4 = \$13,263$ ).

## **Earners/Income recipient**

An earner is a person who received income from employment (wages and salaries) and/or self-employment during the reference year. The term income recipient is generally used for someone who received a positive (or negative) amount of income of any given type.

## **Mean income (average income)**

The mean or average income is computed as the total or "aggregate" income divided by the number of units in the population. It offers a convenient way of tracking aggregate income while adjusting for changes in the size of the population.

There are two drawbacks to using average income for analysis. First, since everyone's income is counted, the mean is sensitive to extreme values: unusually high income values will have a large impact on the estimate of the mean income, while unusually low ones, i.e., (that is to say) highly negative values, will drive it down. (See also [Recipients versus non-recipients](#) and [Negative values](#).) Secondly, it does not give any insight into the allocation of income across members of the population. To examine allocation of income, measures such as [Percentiles](#) or [Gini coefficients](#) may be used.

## **Recipients versus non-recipients (zero values)**

For every table showing average incomes, it must be kept in mind whether non-recipients of that type of income are included or excluded from the population. In the case of total family income, the difference from including or excluding units with zero income is small since there are very few such families. However, if one is interested in the average amount of individual self-employment earnings, the value will be quite different if one includes those persons who were not self-employed.

## **Negative values**

Negative income amounts can arise in two ways: net losses from self-employment (expenses exceed receipts), or net investment losses (losses exceed gains). As with zero values, negative values can have a large impact on results. In general, the published income tables treat negative values no differently than positive values, but there are a few exceptions: for the calculation of both Gini coefficients and the low income gap, negative values are converted to zeroes; and in the derivation of the major income earner of a family or household, the absolute value is used instead (see [Major income earner](#)).

## **Percentiles**

Income percentiles, like quintiles and deciles, are a convenient way of categorizing units of a given population from lowest income to highest income for the purposes of drawing conclusions about the relative situation of people at either end or in the middle of the scale. Rather than using fixed income ranges, as in a typical distribution of income, it is the fraction of each population group that is fixed.

First, all the units of the population, whether individuals or families, are ranked from lowest to highest by the value of their income of a specified type, such as after-tax income. Then the ranked population is divided into five groups of equal numbers of units, called quintiles. Analogously, dividing the population ranked by income into ten groups, each comprising the same number of units, produces deciles.

Most analyses should be carried out on the people of different percentiles within one population distribution. Care should be taken in making comparisons between percentiles that resulted from different distributions, because any difference in either the population or the income concept used to rank units could have a large effect. It is probable that both the income ranges represented by each percentile and the people making up each percentile will be different.

## **Median income**

The median income is the value for which half of the units in the population have lower incomes and half has higher incomes. To derive the median value of income, units are ranked from lowest to highest according to their income and then separated into two equal-sized groups. The value that separates these groups is the median income (50th percentile).

Because the median corresponds exactly to the midpoint of the income distribution, it is not, contrary to the mean, affected by extreme income values. This is a useful feature of the median, as it allows one to abstract from unusually high values held by relatively few people.

Since income distributions are typically skewed to the left - that is, concentrated at the low end of the income scale - median income is usually lower than mean income.

## **Implicit rate of government transfers or taxes**

The implicit rate of government transfers or taxes is a way of showing the relative importance of transfers received or taxes paid for different families or individuals. This concept is similar, but not identical, to the effective rate of taxation. For a given individual or family, the effective rate is the amount of transfers/taxes expressed as a percentage of their market income, total income, or after-tax income. The implicit rate for a given population is the average (or aggregate) amount of transfers/taxes expressed as a percentage of their average (or aggregate) income.

## **Family or household size adjustment (equivalence scale)**

When comparing grouping unit (family or household) incomes to study such things as income adequacy or socio-economic status, one often wants to take the unit size and composition into account. The income amount itself is not sufficient to understand a unit's financial well-being without knowing how many people are sharing it. In general, two approaches have been used to help with the analysis of grouping unit income. One is to produce data by detailed unit types, so that within a given type, differences in unit size are not significant. In fact, many income measures have been reported by detailed unit types in the published tables. The other way to take into account unit size and composition is to adjust the income amount by an adjustment factor.

The simplest method is to use per capita income, that is, to divide the grouping unit income by the number of members it includes. A limitation of per capita income, however, is that it tends to underestimate economic well-being for larger units as compared to smaller units. This is due to the fact that it assumes equal living costs for each member of the unit, but some costs, primarily those related to shelter, decrease proportionately with unit size (they may also be lower for children than for adults). For example, the shelter costs for an adult married couple with no children are arguably not much more than those for an adult living alone.

To take such economies of scale into account, it is common to use an "equivalence scale" to adjust grouping unit incomes. Instead of implicitly assuming equal costs for additional unit members as the per capita approach does, the equivalence scale is a set of decreasing factors assigned to the first member, the second member, and so on. The adjusted income amount for the unit is obtained by dividing the unit's income by the sum of the factors assigned to each member. The concept can be applied to the grouping unit after-tax income, grouping unit market income as well as any other grouping unit income sources, even grouping unit tax paid.

In order to ensure international consistency and to facilitate the calculation of adjusted family or household income, a new scale was introduced with the release of the 2008 data. Adjusted income is now obtained by dividing family or household income by the square root of the number of members in the family or household. The estimates for years prior to 2008 have been revised accordingly. The square root adjustment is very close to the previous scale, particularly for families with six members or less.

## **Gini coefficient**

The Gini coefficient measures the degree of inequality in the income distribution. Gini coefficients are published for market income, total income and after-tax income, and are used to compare the uniformity of income allocation between different income concepts, across different populations or within the same population over time.

Values of the Gini coefficient can range from 0 to 1. A value of zero indicates income is equally divided among the population with all units receiving exactly the same amount of income. At the opposite extreme, a Gini coefficient of 1 denotes a perfectly unequal distribution where one unit possesses all of the income in the economy. A decrease in the value of the Gini coefficient can, by and large, be interpreted as reflecting a decrease in inequality, and vice versa.



# Low income definitions

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## Low Income Cut-offs (LICOs)

Low income cut-offs (LICOs) are established using data from the Survey of Household Spending. They convey the income level at which a family may be in straitened circumstances because it has to spend a greater proportion of its income on necessities than the average family of similar size. Specifically, the threshold is defined as the income below which a family is likely to spend 20 percentage points more of its income on food, shelter and clothing than the average family. There are separate cut-offs for seven sizes of family - from unattached individuals to families of seven or more persons - and for five community sizes - from rural areas to urban areas with a population of more than 500,000.

The first step in the production of a set of low income cut-offs is to calculate the average proportion of income that a family spends on food, shelter and clothing. The 1992 Family Expenditure Survey found that, on average, families spend 43% of their after-tax income (and 35% of their total "before-tax" income) on these necessities. Then, 20 percentage points are added, giving 63% of after-tax income. This is done on the grounds that a family spending more than this proportion of its income on necessities is significantly worse off than the average family. The final step is to look at the distribution of income by expenditure and determine, using a regression line, the level of income at which a family tends to spend 20 percentage points more than the average on the necessities of food, shelter and clothing.

Every year a [research paper](#) is produced which provides a detailed description of the [LICO \(low income cut-offs\)](#) including a time series of the lines.

## Rebasing and Indexing the LICOs (Low Income Cut-offs)

Over time, Canadian families have spent a smaller percentage of their income on the necessities of food, shelter and clothing. This relationship between families' income and spending is associated with a specific point in time, i.e. the year of the expenditure survey used to derive the cut-offs. That particular year is referred to as the base year for the set of cut-offs.

After having calculated LICOs (Low Income Cut-offs) in the base year, cut-offs for other years are obtained by applying the corresponding Consumer Price Index (CPI) inflation rate to the cut-offs from the base year - the process of indexing the LICOs (Low Income Cut-offs).

## Use of after-tax and before-tax LICOs (Low Income Cut-offs)

Statistics Canada produces two sets of low income cut-offs and their corresponding rates - those based on total income (i.e., income including government transfers, before the deduction of income taxes) and those based on after-tax income. Derivation of before-tax versus after-tax low income cut-offs are each done independently. There is no simple relationship, such as the average amount of taxes payable, to distinguish the two types of cut-offs.

Although both sets of low income cut-offs continue to be available, Statistics Canada prefers the use of the after-tax LICOs (Low Income Cut-offs). The before-tax rates only partly reflect the entire redistributive impact of Canada's tax/transfer system. It is therefore logical that the low income rate is higher on a before-tax basis than on an after-tax basis.

## Low Income Measures (LIMs)

For the purpose of making international comparisons, the LIM (Low Income Measures) is the most commonly used low income measure. Unlike the low income cut-offs, which are derived from an expenditure survey and then compared to an income survey, the LIMs are both derived and applied using a single income survey. The LIM (Low Income Measures) is a fixed percentage (50%) of median adjusted household income, where "adjusted" indicates that household needs are taken into account. See [the Family or Household Size Adjustment \(equivalence scale\)](#) for more information.

The LIM (Low Income Measures)s are calculated three times; using market income, before-tax income, and after-tax income. They do not require updating using an inflation index because they are calculated using an annual survey of household income.

As opposed to the other low income lines, the Low Income Measures (LIMs) depend on the SLID (Survey of Labour and Income Dynamics) samples. Every year the *Low Income Lines* paper in the [Income Research Papers Series](#) provides a detailed description of the LIMs (Low Income Measures) including a time series of the lines.

## Market Basket Measure (MBM)

The MBM is a measure of low income based on the cost of a specific basket of goods and services representing a modest, basic standard of living. It includes the costs of food, clothing, footwear, transportation, shelter and other expenses for a reference family of two adults aged 25-49 and two children (aged 9 and 13). It provides thresholds for a finer geographic level than the LICO, allowing, for example, different costs for rural areas in the different provinces. These thresholds are compared to disposable income of families to determine low income status. Disposable income is defined as the sum remaining after deducting the following from total family income: total income taxes paid; 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 family; out-of-pocket spending on child care; and non-insured but medically prescribed health-related expenses such as dental and vision care, prescription drugs, and aids for persons with disabilities.

The MBM, including its definition of disposable income, was designed by a working group of Federal, Provincial and Territorial officials, led by HRSDC between 1997 and 1999 (Hatfield 2002 and Michaud et al. 2004). During 2009 and early 2010, the MBM underwent a comprehensive review of both content and methodology (Hatfield, Pyper and Gustajtis 2010). Though led by HRSDC, the consultation process involved officials from Provincial and Territorial governments, other federal departments and agencies including Statistics Canada and a panel of experts in low income measurement. This review process led to a rebased series of thresholds (MBM 2008 base). Among the changes to the MBM resulting from the comprehensive review was the revision of the shelter component to include the costs of homeowners without mortgages. This revision recognized that, in a given year, homeowners without mortgages may pay less for shelter than they would if they were renting.

During 2012, HRSDC officials re-examined the methodology for including homeowners without mortgages in order to better implement the conceptual decision to reflect these costs in the MBM. Following this re-examination, a revised methodology was adopted that adjusts the MBM disposable income of homeowners without mortgages to account for the potential differences in their shelter-related



expenses. The shelter thresholds themselves are now exclusively a reflection of the median costs for all two- and three-bedroom rental units in each MBM region, weighted to take into account the actual distribution of such units.

The annual report *Low Income Lines* of the *Income Research Paper Series* provides a detailed description of the MBM including a time series of the thresholds.

### **Low income rate and low income gap ratio**

To determine whether a person is in low income, the appropriate low income line (LIL) is compared to the income of the person's family<sup>1</sup> (or household)<sup>2</sup>. If their income is below the cut-off, the individual is considered to be in low income. In other words, "persons in low income" should be interpreted as persons who are part of low income families (or households), including persons living alone whose income is below the cut-off. Similarly, "children in low income" means "children who are living in low income families (or households)". Overall, the low income rate for persons can then be calculated as the number of persons in low income divided by the total population. The same can be done for various sub-groups of the population; for example, low income rates by age, sex, or province.

After having determined that an individual is in low income, the low income gap ratio can be analysed by using the amount that the person's family (or household) income falls short of the relevant low income cut-off, expressed as a percentage of the relevant low income cut-off. For example, an individual living in a family (or household) with an income of \$15,000 and a low income cut-off of \$20,000 would have a low income gap of \$5,000. In percentage terms, the "gap ratio" would be 25%.<sup>3</sup> The average (or median) gap ratio for a given population is the average (or median) of these values as calculated for each person.

### **Notes**

1. The family concept used is the economic family, that is, all persons living in the same dwelling and related by blood, marriage, common-law relationship or adoption.
2. When using the LICO or the MBM, the economic family is the appropriate unit. When using the LIM, the household is the appropriate unit.
3. For the calculation of this low income gap, negative incomes are treated as zero.



## Data sources

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There have been two surveys focused on income. The Survey of Consumer Finances (SCF) was conducted until 1997 and the Survey of Labour and Income Dynamics (SLID) began in 1993. The estimates of *Income in Canada* are drawn from both surveys. Estimates from 1976 to 1992 are based on [SCF \(Survey of Consumer Finances\)](#) data while estimates from 1998 to 2009 are based on [SLID \(Survey of Labour and Income Dynamics\)](#) data. For the 1993-1997 period, estimates are based on a combined sample of both [SCF \(Survey of Consumer Finances\)](#) and [SLID \(Survey of Labour and Income Dynamics\)](#)<sup>1</sup>.

### 1976 to 1992

Some of the [SCF \(Survey of Consumer Finances\)](#) information is available through the [SLID \(Survey of Labour and Income Dynamics\)](#) database including most of the income variables as well as others, such as demographic information. This permits users to access a longer period of historical data from a unique database<sup>2</sup>. Variables were adapted as much as possible to [SLID \(Survey of Labour and Income Dynamics\)](#) concepts.

Here is the [list](#) of [SCF \(Survey of Consumer Finances\)](#) variables available in [SLID \(Survey of Labour and Income Dynamics\)](#) database.

There were three changes made to the definition of families. One of the concepts modified was the "head of the family". In the original [SCF \(Survey of Consumer Finances\)](#) the family type was defined using the characteristics of the "head of the family". For example the head of the family in a couple was always the male. In [SLID \(Survey of Labour and Income Dynamics\)](#) the family type is based on the characteristics of "[major income earner](#)" regardless of the sex. Converting the [SCF \(Survey of Consumer Finances\)](#) into [SLID \(Survey of Labour and Income Dynamics\)](#), the major income earner concept was used to define the family type within couples but no other family types were changed. This has caused a shift from elderly families to non-elderly families since wives are on average younger than husbands especially for older couples.

Another concept modified was the definition of lone-parent families. In original [SCF \(Survey of Consumer Finances\)](#), to be defined as a lone parent family, the parent had to be without a spouse, had at least one child below 18 years old, all children had to be unmarried and no other family member could be present. In [SLID \(Survey of Labour and Income Dynamics\)](#), a lone parent family is defined as a

family with a parent without a spouse, with at least one child below 18 years old. The conversion resulted in a decrease in the numbers of "other non-elderly families" and an increase of lone-parent families.

Another concept modified relates to families where children are not the natural, adopted or foster children of the adult in the family. For example in original SCF (Survey of Consumer Finances), a family where a child lived with his grandparents was defined as a two-parent family with children. In SLID (Survey of Labour and Income Dynamics), this family would be defined as a couple with other relatives. The impact of the conversion was a decrease in the number of two-parent families with children and an increase in the number of couples with other relatives.

Beside the family type concept changes there were two significant modifications related to jobs. In SCF (Survey of Consumer Finances), working full year meant working 50 weeks compared to 52 weeks for SLID (Survey of Labour and Income Dynamics). For this reason, after the conversion there were less full-year full-time workers and their average earnings increased. Additionally, job characteristics in SCF (Survey of Consumer Finances) were defined based on the job involving the greatest number of usual hours worked during the reference week of the Labour Force Survey (LFS). If the respondent had not worked during the reference week, the job characteristics were defined by the most recent job within the last year (for the 1996 and 1997 reference years) or the last five years (for the 1976 to 1995 reference years). With the conversion of SCF (Survey of Consumer Finances) into SLID (Survey of Labour and Income Dynamics), job characteristics were kept only if the respondent had worked during the reference year. This change explains why respondents who had not worked during the reference year do not have job characteristics.

There was only one modification to income. Amounts for the Federal Sales Tax Credits from 1987 to 1990 were moved from provincial and territorial tax credits to Goods and Services Tax (GST) and Harmonized Sales Tax (HST) Credits. This explains why a value is found for GST (Goods and Services Tax) and HST (Harmonized Sales Tax) between 1987 and 1989.

## 1993 to 1997

The Survey of Labour and Income Dynamics was introduced in 1993. When SLID (Survey of Labour and Income Dynamics) was originally created, changes in income concepts were kept to a minimum while nonetheless making some important improvements in survey practices<sup>3</sup>. Both surveys took place during this period with SCF (Survey of Consumer Finances) last being conducted in 1997.

One notable improvement that occurred as a result of new survey techniques introduced in SLID (Survey of Labour and Income Dynamics) is better coverage of small income amounts received by respondents. It has been observed in surveys conducted by questionnaire that respondents tend to forget or neglect small income amounts they received in the past. This means an underestimation of income in general. The use of administrative income tax files in SLID (Survey of Labour and Income Dynamics) for approximately 80% of sample respondents means that there is considerably better coverage of non-zero amounts of income, and in general, a greater number of recipients of most kinds of income.

## 1998 and on

For this period SLID (Survey of Labour and Income Dynamics) is used exclusively.

## Notes

1. While the combined sample is used in this publication, microdata covering the SCF (Survey of Consumer Finances) sample (1976-1997) and SLID (Survey of Labour and Income Dynamics) sample (1993 and over) are also available in the SLID (Survey of Labour and Income Dynamics) database.
2. Users still have the choice of using the SCF (Survey of Consumer Finances) original files, if it better suits their needs.
3. Before replacing the SCF (Survey of Consumer Finances) series with SLID (Survey of Labour and Income Dynamics), a study was done on the overlapping reference years, particularly the years 1996 and 1997. The results of the study are contained in a research paper, A Comparison of the Results of the Survey of Labour and Income Dynamics (SLID) and the Survey of Consumer Finances (SCF) 1993-1997: Update (75F002MIE99007).



## Comparisons with previous editions

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Data from different editions are not directly comparable. Every edition has some modifications done on data. The modification which is applied every year is the expression of all dollar amounts in constant dollars of the latest reference year. (See "[Current dollars versus constant dollars](#)".)

Periodically, the weights are updated to reflect the availability of new population benchmarks provided by a new census. The most recent multi-year weight revision for the Survey of Labour and Income Dynamics occurred with the release of data for 2010, when the 2006 to 2009 survey weights were updated to take into account new population estimates based on the 2006 Census rather than the 2001 Census. For more information, please refer to the research paper [Survey of Labour and Income Dynamics: Historical revision, 2006 to 2009](#), Statistics Canada.



# Methodology

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## Survey universe

SLID (Survey of Labour and Income Dynamics) is a household survey that covers all individuals in Canada, excluding residents of the Yukon, the Northwest Territories and Nunavut, residents of institutions and persons living on Indian reserves or in military barracks. Overall, these exclusions amount to less than three percent of the population.

## The sample

The samples for SLID (Survey of Labour and Income Dynamics) are selected from the monthly Labour Force Survey (LFS) and thus share the latter's sample design. The LFS (Labour Force Survey) sample is drawn from an area frame and is based on a stratified, multi-stage design that uses probability sampling. The total sample is composed of six independent samples, called rotation groups because each month one sixth of the sample (or one rotation group) is replaced. For more information on the LFS (Labour Force Survey) design, refer to the Statistics Canada Publication Methodology of the Canadian Labour Force Survey.

The SLID (Survey of Labour and Income Dynamics) sample is composed of two panels. Each panel consists of two LFS (Labour Force Survey) rotation groups and includes roughly 17,000 households. A panel is surveyed for a period of six consecutive years. A new panel is introduced every three years, so two panels always overlap. With the 2008 reference year, a new SLID (Survey of Labour and Income Dynamics) panel (panel 6) was selected from the LFS (Labour Force Survey). This is the first SLID (Survey of Labour and Income Dynamics) panel to be selected from the new LFS (Labour Force Survey) design introduced at the end of 2004. SLID (Survey of Labour and Income Dynamics) panels 3 to 5 were selected from the 1994 LFS (Labour Force Survey) design and SLID (Survey of Labour and Income Dynamics) panels 1 and 2 were selected from the 1984 LFS (Labour Force Survey) design.

For the reference years 1993 to 1997, the SLID (Survey of Labour and Income Dynamics) cross-sectional sample was combined with the sample of the Survey of Consumer Finances (SCF). The SCF (Survey of Consumer Finances) samples were also selected from the LFS (Labour Force Survey). Each year, the SCF (Survey of Consumer Finances) sample consisted of four LFS (Labour Force Survey) rotation groups.

## Weighting

The estimation of population characteristics from a survey is based on the premise that each sampled unit represents, in addition to itself, a certain number of unsampled units in the population. A basic survey weight is attached to each record to indicate the number of units in the population that are represented by that unit in the sample.

For each reference year, SLID (Survey of Labour and Income Dynamics) produces two sets of weights: one is representative of the initial population (the longitudinal weights) while the other is representative of the current population (the cross-sectional weights).

For the production of longitudinal weights, three types of adjustments are applied to the basic survey weights in order to improve the reliability of the estimates. The basic weights are first inflated to compensate for non-response and then adjusted for influential values. These adjusted weights are then further adjusted to ensure that estimates on relevant population characteristics would respect population totals from sources other than the survey.

The first set of population totals used for SLID (Survey of Labour and Income Dynamics) is based on Statistics Canada's Demography Division population counts for different age/sex groups as well as counts by household and family size at the provincial level. These annual population totals are based in large part on totals from the Census of population. The second set of totals is derived from Canada Revenue Agency (CRA) administrative data (T4 file) and is intended to ensure that the weighted distribution of income (based on wages and salaries) in the data set matches that of the Canadian population.

The switch from 1996 to 2001 Census-based population totals for recent years and the use of T4 information from CRA (Canada Revenue Agency) were introduced with the release of data for 2003. SCF (Survey of Consumer Finances) estimates from 1990 to 1995 and SLID (Survey of Labour and Income Dynamics) estimates from 1996 to 2002 were revised back to 1990 at the same time. For reference year 2010, the 2006 Census-based population totals were used in the derivation of the weights. At the same time, estimates for reference years 2006 to 2009 based on the 2001 Census population were revised according to weights based on the 2006 Census population counts.

For the production of the cross-sectional weights, SLID (Survey of Labour and Income Dynamics) combines the two panels and assigns a probability of selection to individuals who joined the sample after the panel was selected. As with the longitudinal weights, the cross-sectional weights are adjusted for non-response and influential values. The cross-sectional weights are also adjusted to ensure that estimates on specific population characteristics respect totals of the cross-sectional target population. The types of population totals are the same as those used for the longitudinal weights but correspond to the cross-sectional population.

Since 2002, a third set of weights has been produced which combined two overlapping panels to form a new longitudinal sample. These weights are referred to as the combined longitudinal weights. These weights allow SLID (Survey of Labour and Income Dynamics) data users to conduct longitudinal analyses using both panels. The analyses, however, are limited to the period of up to three years where the panels overlap and refer to the population at the time of selection of the most recent panel.

For a detailed description of the weighting process, refer to the publication Longitudinal and Cross-sectional Weighting of the Survey of Labour and Income Dynamics. For a description of the combined panel weighting, refer to the publication Combined-panel Longitudinal Weighting, Survey of Labour and Income Dynamics.

## Cross-sectional representation

Each longitudinal sample, or "panel" in SLID (Survey of Labour and Income Dynamics) initially constitutes a representative cross-sectional sample of the population. However, because the real population changes each year, whereas by design the longitudinal sample does not, the sample must be modified to properly reflect these changes to the composition of the population. This is done by

adding to the sample all new people in the population who are found to be living with the initial respondents (and likewise dropping them from the sample if they leave at later time-points).

Any original respondents who leave the target population (by moving abroad, into institutions, etc. (and so on)) are given a zero weight for cross-sectional purposes. In this way, the cross-sectional sample, composed of the original respondents minus those who left the target population plus those who have entered it, is virtually fully representative of the population at each subsequent time-point. The missing group is composed of persons who have newly entered the target population and are not living with anyone who was in the target population when the most recent panel was selected. However, since SLID (Survey of Labour and Income Dynamics) introduces a new panel every three years, this group is quite small.

## Data quality

There are two types of errors inherent in sample survey data, namely, non-sampling errors and sampling errors. The reliability of survey estimates depends on the combined impact of non-sampling and sampling errors.

## Non-sampling errors

Non-sampling errors generally result from human errors such as simple mistakes, misunderstanding or misinterpretation. The impact of randomly occurring errors over a large number of observations will be minimal. Errors occurring systematically can, on the other hand, have a major impact on the reliability of estimates. Considerable time and effort is invested into reducing non-sampling errors in SLID (Survey of Labour and Income Dynamics).

Non-sampling errors may arise from a variety of sources such as coverage, response, non-response and processing errors.

Coverage error arises when sampling frame units do not exactly represent the target population. Units may have been omitted from the sampling frame (under-coverage), or units not in the target population may have been included (overcoverage), or units may have been included more than once (duplicates). Undercoverage represents the most common coverage problem.

Slippage is a measure of survey coverage error. It is defined as the percentage difference between control totals (Census population projections) and weighted sample counts. Slippage rates for household surveys are generally positive because some people that should be enumerated are missed. In table A below, slippage rates from 1997 to 2005 are calculated using the 2001 Census population projections while slippage rates from 2006 to 2010 are based on the 2006 Census population projections. According to the numbers in the table below, in 2011, SLID (Survey of Labour and Income Dynamics) covered 87.4% of its target population. SLID (Survey of Labour and Income Dynamics) estimation procedures use Census population projections to compensate for determined slippage.

Rates are also available upon request for sex, province and age groupings.

**Table A**  
**Person level slippage rates in SLID (Survey of Labour and Income Dynamics)**

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Canada (%)	8.4	9.0	8.4	9.5	10.6	12.4	13.4	14.2	14.5	16.0	16.3	13.3	13.0	13.5	12.6

Response errors may be due to many factors, such as faulty questionnaire design, interviewers' or respondents' misinterpretation of questions, or respondents' faulty reporting. Great effort is invested in SLID (Survey of Labour and Income Dynamics) to reduce the occurrence of response error. Measures undertaken to minimize response errors include the use of highly-skilled and well-trained interviewers, and supervision of interviewers to detect misinterpretation of instructions or problems with the questionnaire design. Response error can also be brought about by respondents who, willingly or not, provide inaccurate responses.

Income data are especially prone to misreporting, as income is a sensitive issue and includes many items for which respondents are not always familiar. To minimize response burden and data errors, the respondents are given the choice of granting Statistics Canada permission to access their tax files. The majority of respondents grant permission, allowing SLID to collect income data directly from administrative files.

Non-response errors occur in sample surveys because not all potential respondents cooperate fully. The extent of non-response varies from partial non-response to total non-response.

Total non-response occurs when the interviewer is unable to contact the respondent, no member of the household is able to provide information, or the respondent refuses to participate in the survey.

Response is calculated at the household level. A household is considered to be "respondent" if at least one of its members responds to the interview. There is the additional stipulation that the information on the household's composition cannot be missing for more than one year.

Total household non-response is handled by adjusting the basic survey weight for individuals within responding households to compensate for individuals in non-responding households.

Non-responding members (if any) within responding households will have final data that are either shown as "missing" on the final database or imputed, depending on the variable (see partial non-response section for details on imputation).

The importance of the non-response error is unknown but in general this error is significant when a group of people with particular characteristics in common refuse to cooperate and where those characteristics are important determinants of survey results. The bias introduced by non-response increases with the differences between respondent and non-respondent characteristics. Methods employed to compensate for non-response make use of information available for both respondents and non-respondents in an attempt to minimize this bias.

High response rates are essential for the data quality of any survey and thus considerable effort is invested to encourage effective participation from SLID (Survey of Labour and Income Dynamics) respondents.

Cross-sectional households' response rates, given in Table B, range between 67.3% (2011) and 85.9% (1996).

**Table B**  
**Response rates in SCF (Survey of Consumer Finances) (1990-1992), SCF (Survey of Consumer Finances) SLID (Survey of Labour and Income Dynamics) (1993-1997) and SLID (Survey of Labour and Income Dynamics) (1998-2011)**

Year	Response rate (%)
1990	79.0
1991	80.0
1992	80.7
1993	84.2
1994	82.6
1995	83.3
1996	85.9
1997	83.9
1998	82.7
1999	82.7
2000	79.2
2001	79.1
2002	79.0
2003	78.3
2004	74.7
2005	76.1
2006	74.9
2007	71.8
2008	70.6
2009	70.1
2010	67.3
2011	67.3

Partial non-response occurs when the respondent does not understand or misinterprets a question, refuses to answer a question, or is unable to recall the requested information. Imputing missing values compensates for this partial non-response.

Income data are imputed using previous years' data updated for any changes in circumstances. In the absence of previous years' data, data is imputed using the "nearest neighbour" technique, in which a respondent with certain similar characteristics becomes the "donor" for the imputed value.



Amounts received through certain government programs, such as child tax benefits, the Goods and Services Harmonized Sales Tax Credit, and the Guaranteed Income Supplement, are also derived from other information.

Processing errors can occur at various stages in the survey: data capture, editing, coding, weighting or tabulation. The computer-assisted collection method used for SLID (Survey of Labour and Income Dynamics) reduces the chance of introducing capture errors because checks for consistency and completeness of the data are built into the computer application. To minimize coding, weighting or tabulation errors, diagnostic tests are carried out periodically. These tests include comparisons of results with other data sources.

## Sampling errors

Sampling errors occur because inferences about the entire population are based on information obtained from only a sample of the population. The results are usually different from those that would be obtained if information were collected from the whole population. Errors due to the extension of conclusions based on the sample to the entire population are known as sampling errors. The sample design, the variability of the population characteristics measured by the survey, and the sample size determine the magnitude of the sampling error. In addition, for a given sample design, different methods of estimation will result in sampling errors of different sizes.

## Standard error and coefficient of variation

A common measure of sampling error is the standard error (SE). The standard error measures the degree of variation introduced in estimates by selecting one particular sample rather than another of the same size and design. The standard error may also be used to calculate confidence intervals associated with an estimate (Y). Confidence intervals are used to express the precision of the estimate. It has been demonstrated mathematically that, if the sampling was repeated many times, the true population value would lie within the confidence interval  $Y \pm 2SE$  (standard error) 95 times out of 100 and within the narrower confidence interval defined by  $Y \pm SE$  (standard error), 68 times out of 100. Another important measure of sampling error is given by the coefficient of variation, which is computed as the estimated standard error as a percentage of the estimate Y (i.e. (that is to say),  $100 \times SE$  (standard error) / Y).

To illustrate the relationship between the standard error, the confidence intervals and the coefficient of variation, let us take the following example. Suppose that the estimated average income from a given source is \$10,000, and that its corresponding standard error is \$200. The coefficient of variation is therefore equal to 2%. The 95% confidence interval estimated from this sample ranges from \$9,600 to \$10,400, i.e. (that is to say)  $\$10,000 \pm \$400$ . Thus it is assumed with a 95% degree of confidence that the average income of the target population is between \$9,600 and \$10,400.

The bootstrap approach is used for the calculation of the standard errors of the estimates. For more information on the bootstrap technique and examples of software that can be used to produce bootstrap variances see the document [Using bootstrap weights with WesVar and SUDAAN](#).

## Quality indicators

Quality indicators (QIs) are based on the estimate's coefficient of variation (CV) and suppression rules. The following symbols are used:

**Table C**  
**Quality rules**

QI (Quality indicators) Code	Description
A	Excellent ( $0\% \leq CV$ (coefficient of variation) $< 2\%$ )
B	Very good ( $2\% \leq CV$ (coefficient of variation) $< 4\%$ )
C	Good ( $4\% \leq CV$ (coefficient of variation) $< 8\%$ )
D	Acceptable ( $8\% \leq CV$ (coefficient of variation) $< 16\%$ )
E	Use with caution (CV (coefficient of variation) greater than or equal to 16%)
F	Too unreliable to be published
.	Not available for a complete reference period
..	Not available for a specific reference period
...	Not applicable
p	Preliminary

r	Revised
x	Suppressed to meet the confidentiality requirements of the Statistics Act

## Suppression rules

Suppression rules, or data reliability cutoffs, are currently established based on the sample size that underlies the estimate. In general, a sample size of 25 observations is required for the estimate to be published. Depending on the type of estimate, this rule can vary slightly. These rules help protect the confidentiality of survey respondents and ensure the reliability of estimates.

**Table D**  
**Suppression rules**

Estimate	Suppress if:
<b>Percentage, Distribution, Proportion/Shares</b>	
<ul style="list-style-type: none"> <li>• % under the low-income cutoff (LICO)</li> <li>• Income distribution</li> <li>• Proportion of families with income=0</li> </ul>	Denominator sample size <sup>*</sup> < 25 or Denominator sample size <sup>*</sup> < 100 and numerator sample size < 5
<b>Ratios</b>	
<ul style="list-style-type: none"> <li>• Female/male earnings</li> </ul>	Numerator sample size < 25 or Denominator sample size < 25
<b>Quintiles (shares, means and upper income limits)</b>	
<ul style="list-style-type: none"> <li>• Shares of income by quintile</li> <li>• Average income by quintile</li> <li>• Upper income limits</li> </ul>	Sample /5 < 25 or Upper income limit for upper income quintile or total of quintiles
<b>Other estimates</b>	
<ul style="list-style-type: none"> <li>• Counts</li> <li>• Mean</li> <li>• Medians</li> <li>• Gini coefficients</li> </ul>	sample < 25

\*The denominator sample size refers to the sample size of the total estimate from which the distribution, percentage, proportion or share is derived.



## Data products

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The links below are related to data products generated by [SLID \(Survey of Labour and Income Dynamics\)](#) and other surveys. Below is a list of additional Statistics Canada data products created from [SLID \(Survey of Labour and Income Dynamics\)](#) as well as other surveys. Additional support for the use and interpretation of [SLID \(Survey of Labour and Income Dynamics\)](#) estimates are available from a number of user guides, publications, and research paper series, also listed below.

### Free SLID analytical products

- [Income in Canada](#)
- [SLID \(Survey of Labour and Income Dynamics\) cross sectional public use microdata files](#)

### Other free analytical products

- [Analytical Studies Branch research paper series](#)
- [Perspectives on labour and income](#)
- [Detailed tables on CANSIM](#)
- [Income, pensions, spending and wealth](#)

### [SLID \(Survey of Labour and Income Dynamics\) documentation for researchers](#)

- [SLID \(Survey of Labour and Income Dynamics\) Electronic Data Dictionary](#)
- [SLID questionnaires](#)
- [Data Quality of the Survey of Labour and Income Dynamics \(SLID\)](#)
- [Income research paper series](#); includes SLID users' guides for the SLID public-use microdata and publications on the low-income lines



## Data services

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### **Custom tabulations of SLID (Survey of Labour and Income Dynamics) data**

For clients with specialized data needs, custom tabulations can be produced on a cost-recovery basis. Contact Client Services, Income Statistics Division (1-888-297-7355 or 613-951-7355; [income@statcan.gc.ca](mailto:income@statcan.gc.ca)).

### **Remote access to SLID (Survey of Labour and Income Dynamics) data**

Remote access is an initiative that enables external researchers to access and use SLID (Survey of Labour and Income Dynamics) data.

Under this arrangement, researchers contact the Income Statistics Division to indicate their interest in remote access to SLID (Survey of Labour and Income Dynamics) data and provide a short abstract outlining the objectives for their research. Upon approval of their access request, researchers are provided with a copy of the SLID (Survey of Labour and Income Dynamics) retrieval software (SLIDRET), as well as an empty SLID (Survey of Labour and Income Dynamics) database structure.

Researchers write and test their own computer programs, then send these programs to Statistics Canada over the Internet. We submit their programs, vet the output for confidentiality, and e-mail the results back. This process opens up our complex data set to even more researchers and increases research volume.

This service is an alternative to Statistics Canada's [Research Data Centres](#) and regional offices.

Contact Client Services, Income Statistics Division (1-888-297-7355 or 613-951-7355; [income@statcan.gc.ca](mailto:income@statcan.gc.ca)).

## Research Data Centres

Research Data Centres are part of an initiative by Statistics Canada, the Social Sciences and Humanities Research Council (SSHRC) and university consortia to help strengthen Canada's social research capacity and to support the policy research community.



## Publications

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The following are some examples of publications using SLID data.

### 2012

Income Statistics Division. 2012. "Low Income Lines, 2010-2011". Income Series Research Papers. no.2. June. Statistics Canada Catalogue no. 75F0002MWE.

Income Statistics Division. 2012. "Survey of Labour and Income Dynamics: Historical Revision, 2006 to 2009". Income Series Research Papers. no.3. November. Statistics Canada Catalogue no. 75F0002MWE.

Murphy, Brian, Xuelin Zhang and Claude Dionne. 2012. "Low Income in Canada: a Multi-line and Multi-index Perspective". Income series Research Papers. no.1. March. Statistics Canada Catalogue no. 75F0002MWE.

### 2011

Bohnert, Nora. 2011. "Examining the determinants of union dissolution among married and common law unions in Canada". *Canadian Studies in Population*, 38(3), 75-92.

Chen, Wen-Hao and Jean-Yves Duclos. 2011. "Testing for poverty dominance: An application to Canada". *Canadian Journal of Economics*, 44(3), 781-803.

Chung, Jackson. 2011. "Measuring voluntary interhousehold transfers in Canada". *Perspectives on Labour and Income*. Vol. (volume). 23, no. (number). 2. May. Statistics Canada Catalogue no. (number). 75-001-X.

Fuller, Sylvia. 2011. "Up and on or down and out? Gender, immigration and the consequences of temporary employment in Canada". *Research in Social Stratification & Mobility*, 29(2), 155-180.

Income Statistics Division. 2011. "Low Income Lines, 2009-2010". Income Series Research Papers. no. (number). 2. June. Statistics Canada Catalogue no. (number). 75F0002MWE.

King, Karen M. and K. Bruce Newbold. 2011. Internal migration of Canadian immigrants, 1993-2004: Evidence from the Survey of Labour and Income Dynamics. *Canadian Studies in Population*, 38(1), 1-18.

LaRoche-Côté, Sébastien and Sharanjit Uppal. 2011. "The financial well-being of the self-employed". *Perspectives on Labour and Income*. Vol. (volume). 23, no. (number). 3. Sept. Statistics Canada Catalogue no. (number). 75-001-X.

Makdissi, Paul and Myra Yazbeck. 2011. Assessing the redistributive impact of higher education tuition fees reforms: The case of Quebec. *Applied Economics Letters*, 18(2), 143-147.

Ren, Zhe (Jerry) and Kuan Xu. 2011. "Low-income Dynamics and Determinants under Different Thresholds: New Findings for Canada in 2000 and Beyond". Income Series Research Papers. no. (number). 3. Feb. Statistics Canada Catalogue no. (number). 75F0002MWE.

Scott-Marshall, H. and E. Tompa. 2011. The health consequences of precarious employment experiences. *Work*, 38(4), 369-382.

Van Rhijn, Tricia, Trudy Smit Quosai and Donna S. Lero. 2011. A profile of undergraduate student parents in Canada. *Canadian Journal of Higher Education*, 41(3), 59-80.

Wong, I. S., C. B. McLeod and P. A. Demers. 2011. Shift work trends and risk of work injury among Canadian workers. *Scandinavian Journal of Work, Environment & Health*, 37(1), 54-61.

## 2010

Bernard, André and Diane Galarneau. 2010. "Layoffs in Canada". *Perspectives on Labour and Income*. Vol. (volume). (volume) 11, no. (Number) 5. May. Statistics Canada Catalogue no. (Number) 75-001-XIE.

Crespo, Stéphane. 2010. "Entrer et sortir d'un épisode de faible revenu". Portrait social du Québec. Institut de la statistique du Québec. Pages 191-212.

Drolet, Marie. 2010. "Why has the gender wage gap narrowed?" *Perspectives on Labour and Income*. Vol. (volume) 11, no. (Number) 12. December. Statistics Canada Catalogue no. (Number) 75-001-XIE.

LaRoche-Côté, Sébastien. 2010. "Self-employment in the downturn". *Perspectives on Labour and Income*. Vol. (volume) 11, no. (Number) 3. March. Statistics Canada Catalogue no. (Number) 75-001-XIE.

Luong, May. 2010. "The financial impact of student loans". *Perspectives on Labour and Income*. Vol. (volume) 11, no. (Number) 1. January. Statistics Canada Catalogue no. (Number) 75-001-XIE.

Murphy, Brian, Xuelin Zhang and Claude Dionne. 2010. "Revising Statistics Canada's LIMs". Income series Research Papers. no. (Number) 4. June. Statistics Canada Catalogue no. (Number) 75F0002MWE.

Scott-Marshall, Heather. 2010. "The Social Patterning of Work-Related Insecurity and its Health Consequences". Social Indicators Research, Vol. (volume) 96, no. (Number) 2.

Yuen, Jennifer. 2010. "Job-education match and mismatch: Wage differentials". *Perspectives on Labour and Income*. Vol. (volume) 11, no. (Number) 4. April. Statistics Canada Catalogue no. (Number) 75-001-XIE.

Zhang, Xuelin. 2010. "Low Income Measurement in Canada: What do different Lines and Indexes tell us?" Income research paper series. No. 3. May. Statistics Canada Catalogue no. (Number) 75F0002MWE.

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Ahmad Nisar and Rayhaneh. 2009. "Immigrant-Native Difference in Earnings Mobility Processes: Evidence from Canadian and Danish Data". Economics Working Papers, 13. University of Aarhus.

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Galarneau, Diane and Marian Radulescu. 2009. "Employment among the disabled". *Perspectives on Labour and Income*. Vol. (volume) 10, no. (Number) 5. May. Statistics Canada Catalogue no. (Number) 75-001-XIE.

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LaRoche-Côté, Sébastien and Claude Dionne. 2009. "Family work patterns." *Perspectives on Labour and Income*. Vol. (volume) 10, no. (Number) 8. August. Statistics Canada Catalogue no. (Number) 75-001-XIE.

LaRoche-Côté, Sébastien and Claude Dionne. 2009. "International differences in low-paid work." *Perspectives on Labour and Income*. Vol. (volume) 10, no. (Number) 6. June. Statistics Canada Catalogue no. (Number) 75-001-XIE.

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