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**CROSSING THE LOW INCOME LINE**

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## EXECUTIVE SUMMARY

As part of SLID's release strategy for its 1994 data, a study on income transitions was conducted. The results of the study and the data were released on July 7, 1997. This document contains the complete study.

Statistics Canada has for many years published estimates of low income. The most widely-known results are based on "low income cutoffs" or LICOs. Trends in the prevalence of low income are used extensively by analysts concerned with income adequacy issues. However, these trends do not reveal whether it is the same people who find themselves in a state of low income year after year. Do many who are in low income one year manage to pull themselves out the next year, only to be replaced by a new set of people? What are the circumstances that trigger a fall in income that pulls a person down below the low income cutoff? Conversely, what are the changes that commonly boost income enough for someone to climb above the line? This study starts to answer some of these questions.

Among the key findings are:

- C Canada experienced a 25% turnover in the low income population between 1993 and 1994, based on after-tax income. Over one million Canadians dropped into low income, while almost as many were able to climb out of their difficult financial straits.
- C Youngsters under the age of six ran the highest risk of any age group of being in low income for two consecutive years, in this case 1993 and 1994.
- C Women outnumbered men in the population experiencing low income over the two years.

- C Flows into and out of low income were generally the result of substantial changes in family income.
- C While the labour market drove some of the shifts, it was not the whole story. Significant changes in the make-up of families, particularly marriages and separations, had a strong impact on family income between 1993 and 1994.

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## **1. Moving into and out of low income: a first look**

Statistics Canada has for many years published estimates of low income. The most widely known results are based on “low income cutoffs” or LICOs. People below the low income cutoff are likely to be in straitened financial circumstances; their income level is below what the average family spends in a year on food, shelter and clothing, plus a certain margin for other necessities (and taking into account family size and community size). Trends in the prevalence of low income are used extensively by analysts concerned with income adequacy issues. However, these trends do not reveal whether it is the same people who find themselves in a state of low income year after year. Do many who are in low income one year manage to pull themselves out the next, only to be replaced by a new set of people? What are the circumstances that trigger a fall in income that pulls a person below the low income cutoff? Conversely, what are the changes that commonly boost income enough for someone to climb above the line? The Survey of Labour and Income Dynamics (SLID) has been following the same sample of Canadians since 1993 to answer questions like these. This report presents the first results on the changes they experienced from 1993 to 1994.

We know from other data sources that income swings commonly occur. In the United States, the Panel Study on Income Dynamics showed that, from 1969 to 1978, from one-half to two-thirds of those defined as “poor” one year were still “poor” the next year. The study defined long-term poverty as lasting at least eight of the ten years; using this definition, under 3% were persistently poor. Results for the early 1990s from a different U.S. survey, the Survey of Income and Program Participation, show that one person in five defined as “poor” one year was not the next. Large changes in income are not just a North American phenomenon: the British Household Panel Survey shows that 13% of households experienced a

significant drop in income from 1992 to 1993; a roughly equal proportion had a substantial rise. In Canada, taxation data have recently been used to study some aspects of income stability. For example, one study of individual (as opposed to family or household) income showed that 56% improved their position on the income scale between 1989 and 1994 and, of these, half increased their income level by at least 50%. Another study focused on the market income of families and revealed that low market income is generally a long-term condition, not a transient one. A third study of the effect of separation on income shows women experiencing an average loss in adjusted family income of 23% following separation, while men's income rose an average 10%. The greatest losses were experienced by women heading single-parent families. What these studies have in common is that their results portray the experiences of individuals and families through time, to gain some insights into the degree of income stability and the effect of certain events on income.<sup>1</sup>

SLID has the potential to greatly expand our understanding of how labour market and family events influence family income stability. At this stage, with two years of data available, the results show that in 1994, an estimated 1.2 million persons fell below the low income line although they had been above it the year before. An estimated 846,000 people shifted in the opposite direction, climbing above the line.

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<sup>1</sup> Definitions and measurement approaches vary from one study to the next. For more information on these studies, see the appendix.



**Table 1****Persons shifting into and out of low income between 1993 and 1994\***

1993	1994			
	Below LICO		Above LICO	
	'000	%	'000	%
Below LICO	2,286	8.5	846	3.2
Above LICO	1,238	4.6	22,492	83.7

\* Estimates refer to persons of all ages, including unattached individuals and those in families. A person is classified as above or below the LICO based on his or her family's income, after tax. See *What is low income?* for details.

While some people moved into or out of low income, a slightly larger number remained below the line in both years. In all, 4.4 million persons were below the low income cutoff in at least one of the two years, representing 16% of the Canadian population. Of the 4.4 million in low income for at least one year, just over half stayed below the line in both years.

When a person crosses the line, how much has his/her income changed? Among those who dropped below the line between 1993 and 1994, the median change in family income was \$8,248 (adjusted for family size - see discussion of *Adult income equivalence scale* in *Technical Note 2*). Those who crossed the line in the

opposite direction had a median increase of \$6,239.<sup>2</sup> These are substantial amounts, suggesting that major events triggered the change in status.

Another way of looking at income stability is to examine shifts in a person's position in the overall income distribution. For example, were people in the top fifth of the income scale in 1993 still there in 1994? Or did many shift downward in relative terms, while others moved up? To answer this question, people were ranked by their family income<sup>3</sup> in 1993 and then divided into quintiles, that is, from the top fifth, to the bottom. The calculation was repeated for 1994, to see how many people had changed quintiles.

Again, the results show substantial movement. In 1994, 9.5 million Canadians were in a different quintile from the one they had occupied in 1993. In other words, they moved to a higher or lower relative position on the scale. (People who changed quintile are those not on the shaded diagonal in Table 2A or Table 2B). Most (78%) moved by only one quintile, but this still leaves more than one in five experiencing a more pronounced shift. As this represents over 2 million people, it indicates that sizeable income changes -- for the better or worse -- are far from being a rare event in Canada.

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<sup>2</sup> Very small income changes could result in a move across the low income line without being in any way meaningful. Therefore, such cases were treated the same in both years. The numbers involved are small. See Technical Note 2.

<sup>3</sup> For the purpose of defining quintiles, family income values were adjusted to account for different family sizes by dividing by an adult equivalence scale. See *Technical Note 2*.

**Table 2A****Persons classified by their family income quintile in 1993 and 1994****(thousands)**

Income quintile in 1993	Income quintile in 1994				
	1st (bottom)	2nd	3rd	4th	5th (top)
1st (bottom)	3,818	1,160	235	100	43
2nd	910	3,033	1,077	251	86
3rd	272	817	3,105	1,046	143
4th	165	301	768	3,233	918
5th (top)	134	122	200	728	4,199

Table 2B

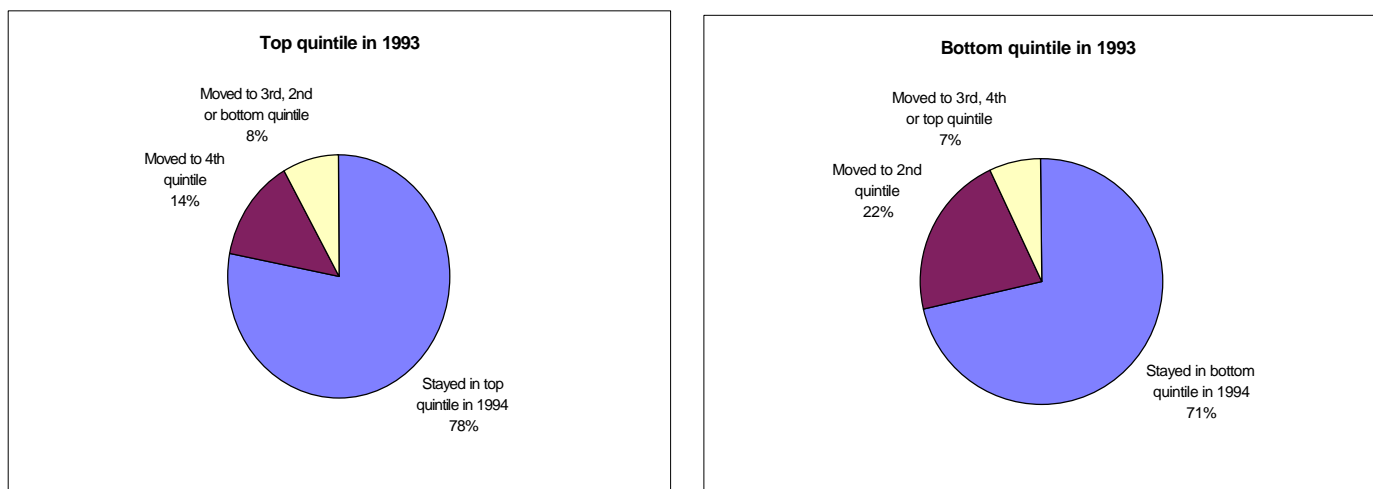
## Persons classified by the income quintile their family fell into in 1993 and 1994

(percentages)

Income quintile in 1993	Income quintile in 1994				
	1st (bottom)	2nd	3rd	4th	5th (top)
1st (bottom)	14.2	4.3	0.9	0.4	0.2
2nd	3.4	11.3	4.0	0.9	0.3
3rd	1.0	3.0	11.6	3.9	0.5
4th	0.6	1.1	2.9	12.0	3.4
5th (top)	0.5	0.5	0.7	2.7	15.6

Of the 5.4 million people who made up the bottom income quintile in 1993, 29% had managed to move into a higher quintile in 1994. For those in the top quintile in 1993, almost as many (22%) dropped to a lower quintile in 1994 (Chart 1).

**Chart 1: The top 5th and bottom 5th of the income distribution in 1993: where were they in 1994?**



The remainder of this report examines the characteristics of persons who move into and out of low income, particularly in contrast to those below the low income cutoff in both years. In Section 2, the major definitions and measures are explained. Section 3 presents findings by age, sex and province. Changes in the family that might trigger a shift into or out of low income are explored in Section 4. The conclusion and a discussion of what to expect in the future from the Survey of Labour and Income Dynamics make up Section 5. This report also contains a review of past studies on income dynamics (in Appendix), a large set of background tables providing much more detailed results than those in the text, and a number of technical notes.

## 2. What is “low income”?

Poverty is a concept that is very difficult to define. It requires an ideological context, or at least a set of value judgements about what constitutes an acceptable standard of living. In Canada, there is no agreed upon definition and no official poverty measure. However, Statistics Canada has since the 1960s produced estimates of the incidence of *low income*. The measures refer to individuals or families with family incomes below a certain pre-defined level. These cutoffs vary by family size and size of community. Specifically, separate cutoffs are calculated for unattached individuals (i.e., families of one) and for families of two to seven or more. Also, separate cutoffs are calculated for communities of different sizes, to reflect differences in the cost of living. There are five categories of community size, ranging from rural to 500,000 and over. This yields a total of 35 LICOs.

There are in effect two sets of LICOs, one for use with income before tax, the other for income after tax. This study highlights income after tax, which is closer to the notion of disposable income. Thus, after-tax low income cutoffs for 1993 and 1994 are used throughout the study. A brief explanation of how LICOs are calculated is provided in *Technical Note 1*.

Low income studies in Canada have generally examined trends or differences across social groups (for example, single-parent families contrasted with dual-earner families, or families in general). SLID adds a new dimension, by revealing whether it is the *same people* living in low income from one year to the next. This is an important first step towards understanding the persistence of poverty in Canada. Equally, the information will reveal something about the *process* of falling into low income. What triggers such a fall? Is it generally a crash or a slow

slide? This can shed some light on the best path for social policies and programs, to address the difficult questions of when and how they should intervene.

How does SLID differ from other surveys on income? SLID is a panel survey, following the same people over time. This is very different from most household surveys. The norm is to take a snapshot of conditions at a point in time. In contrast, a panel survey (or longitudinal survey) makes it possible to trace the fortunes of a group of people over the years -- for example, how many people experience major swings in their income from one year to the next? Also, by asking questions about work and job search, SLID threads together personal experiences in the labour market and change on the home front -- be it change in family circumstances or change in family income.

SLID is one of several longitudinal household surveys at Statistics Canada that started up in the early 1990s. Collectively, they will provide a wealth of new knowledge about the labour market, about the determinants of health and about the factors affecting child development. Other longitudinal data sources are also emerging, one of them based on taxation records. The Longitudinal Administrative Databank (LAD) contains over ten years of linked tax records for a sample of taxfilers. Although the family and labour market information is restricted to what can be gleaned from the tax system, the LAD provides a longer-term picture of income changes -- complementing the shorter-term but more textured information from SLID. Together, the two data sources will greatly increase the available information on income dynamics in Canada.

In the present study, we look at people selected for SLID in January 1993. They were contacted one year later for information on their work experiences and income earned throughout the whole of 1993. Over the intervening 12 months,

some had moved and some had undergone changes in their family composition. These changes were noted, and any new people they were living with also became part of the survey. Respondents were interviewed again in 1995, completing two of the six years of the life of this panel.

The target population for the study consists of individuals of all ages living in Canada throughout 1993 and 1994, excluding residents of Yukon and Northwest Territories, residents of institutions, Indian reserves and military barracks. For the approximately 35,000 survey respondents in this target population, we have established who they were living with on December 31 of both 1993 and 1994. Having fixed their family composition, each person's family income was then calculated, as the total income of all individuals in the family on December 31 of the year in question. For each person in the study, we could then ask:

- ! How much did their family's income change from 1993 to 1994?
  
- ! Where the change is substantial, were there any associated family change -- for example, a marriage break-up?
  
- ! Was there a major change in the family's sources of income, for example, a change in the number of breadwinners or in the value of government transfer payments?
  
- ! In general, when people crossed the low income line -- either upward or downward -- was it because of a big shift in income?

The results in this study look at persons of all ages. Children below working-age are, like all others, considered in the light of their economic family's income. An

economic family is defined as all persons living together on December 31 of the reference year and related by blood, marriage, adoption, foster relationship or common-law relationship. Although usually excluded from the definition of economic family, unattached individuals are considered by this study as families of size one. The labour and income information was collected from all persons aged 16 and over, a sample of about 26,000.

More background information is available in the appendix and in the technical notes.

### **3. Results for major demographic groups**

Sixteen percent of the population experienced low income in at least one of the two years of the study. Just under half of these either entered or left a state of low income in 1994, while the rest were below the low income line in both years. These averages conceal substantial differences by age. Children under age six had both a high incidence of low income and a tendency to stay below the line. Thus, 22% of all children under 6 were part of a low income family in at least one of the two years; 13% were below the cutoff in *both* years, well above the average of 8.5% recorded for persons of all ages.<sup>4</sup>

The 16 to 24 year-olds also stand out (Chart 2). For this age group, one might expect to see sharp family income changes, linked with leaving home and finding partners. Indeed, both a high incidence of low income and large shifts are evident. About 24% of these young adults were below the low income cutoff in at least one of the two years. Roughly 8% of this age group shifted into low income in 1994,

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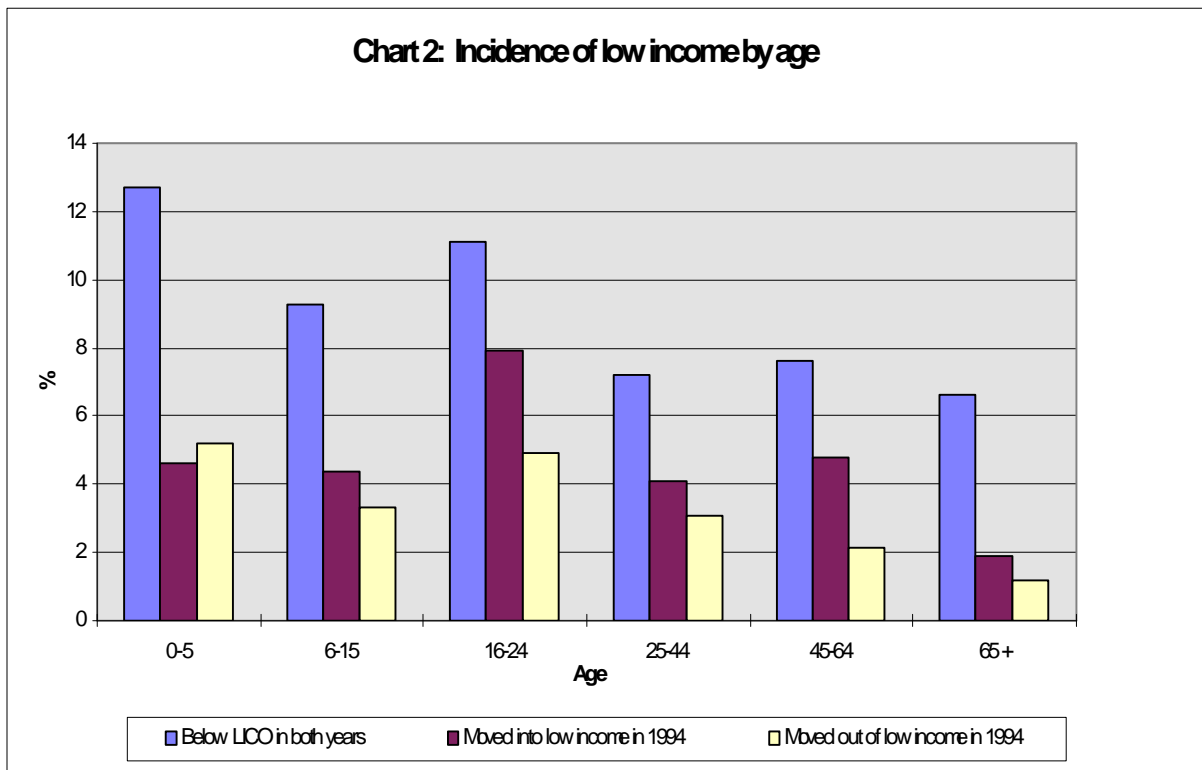
<sup>4</sup> Age groups are based on the age of respondents at the beginning of 1993.



while 5% shifted out; together these two groups in transition outnumber those who stayed in low income for the two years.

The two age groups with the highest incidence of low income are those under 6 and those 16 to 24. Why are those aged 6 to 15 seemingly better off? In general, younger children have younger parents, many of whom have not established themselves in the labour market. Consequently, their incomes will be lower. Any children of those aged 16 to 24 are likely to be under age 6, thus increasing the basic family income requirements.

It is well known that more females than males have low income (Table 3). Among seniors (aged 65 and over), 10% of all women were in low income during both years, compared with 2% of all men.



**Table 3****Shifts into and out of low income from 1993 to 1994, by sex**

	Total	Below LICO in both years	Moved out of low income in 1994	Moved into low income in 1994	Above LICO in both years
'000					
Both sexes	26,862	2,286	846	1,238	22,492
Males	13,232	1,010	406	578	11,239
Females	13,629	1,276	441	660	11,253
% females	50.7	55.8	52.1	53.3	50.0

For those who can achieve it, increased labour market activity is one possible way of escaping low income. Is it responsible for most of the flows out of low income? There are indications that, although important, greater labour market involvement is far from being the whole story. We considered two measures: the change in the number of breadwinners in the family and the change in the total hours worked by the family as a whole. Among people who rose above the low income cutoff in 1994, 32% were in families with at least one additional breadwinner than the year before. Regardless of the number of breadwinners, about 47% were in families in which the total number of hours worked by all family members rose by at least 500 hours -- roughly the equivalent of four months of full-time work.

These results are influenced in part by the seniors who represent a large share of the low income population and whose shifts above and below the low income line are not primarily a function of employment income. One might also ask: of all persons who were below the cutoff in 1993 *and* whose families experienced a

significant increase in work the next year, what proportion exited low income? In this case, the results show very strikingly what effect the labour market can have. Of those with an increase of at least one breadwinner, 54% managed to rise above the low income line; of those with an increase of at least 500 hours worked, 49% did.

In the case of flows into low income, what are the effects of a significant drop in employment activity? First, of all persons who dropped below the line in 1994, 29% had a reduction in the number of workers in their family. Whether or not the number of workers changed, 42% had a decline of at least 500 hours in the total number of hours worked by their family. Again, if these proportions seem low, it is likely a reflection of the effect of non-working seniors dropping below the line.

If one asks instead, of all persons who were above the cutoff in 1993 *and* who experienced a major reduction in their family's labour market involvement, what proportion dropped below the cutoff, the proportions are still relatively low because most of the population is sufficiently above the cutoff to absorb a reduction in work activity without falling below the line. Thus, of all those above the line in 1993 and whose families had a drop in the number of breadwinners in 1994, 17% fell below the line that year.

These changes in the family's employment picture can arise in two ways. Family members may find or lose jobs, work more hours or have their hours cut back. Equally, a person's family situation may change. For example, a senior in low income one year may move in with a working son or daughter the next year. Or, a fall below the cutoff can occur following a family dissolution in which the custodial parent does not have a job in the paid labour market, and other sources of income are not sufficient to offset the loss in earnings. These are just two examples of how

a change in family circumstances can trigger a shift into or out of low income. In the next section, the effect of changes in family composition -- reflecting major events in the family -- is examined.

#### **4. The role of family events**

Significant family events, capable of profoundly influencing family income, can occur at any time in life. Indeed, many are linked to stages in the life cycle, such as leaving home, forming a family, death of a spouse and so on. At the same time, not all family events will affect family income significantly, although they may be very important in other ways. One example is a young adult leaving the parents' home. Usually, the family income level of the father or mother will not be much affected.

From 1993 to 1994, about one in six Canadians experienced some change in the make-up of their family. Among those whose family composition changed, 17% *also* moved into or out of low income, well above the 8% recorded for the population at large (Table 4A and 4B). Put another way, 41% of all persons who dropped below the cutoff in 1994 underwent a change in family composition, as did 28% of those who managed to move out of low income. For over half of the people with a change in family make-up, the family event was a major one, that is, a separation, a marriage, a birth or a death.

Among those who rose above the low income cutoff in 1994, 22% had gained at least one additional family member that year. Conversely, 34% of all persons who dropped below the cutoff in 1994 lost at least one family member that year.

**Table 4A****Changes in family composition between 1993 and 1994 by low income status****(thousands)**

	Below LICO in both years	Moved out of low income in 1994	Moved into low income in 1994	Above LICO in both years
Total	2,286	846	1,238	22,492
Family composition changed	255	235	503	3,381
Family composition did not change	2,031	612	734	19,111

**Table 4B****Changes in family composition between 1993 and 1994 by low income status****(percentage)**

	Below LICO in both years	Moved out of low income in 1994	Moved into low income in 1994	Above LICO in both years
Total	100.0	100.0	100.0	100.0
Family composition changed	11.2	27.8	40.6	15.0
Family composition did not change	88.8	72.3	59.3	85.0

**New partner or separation: effect on income**

A shift into or out of low income can accompany a marriage or new common-law relationship. Across the income spectrum, of all persons with a marriage or new common-law relationship in their family during 1994, how many experienced a change in income status, either dropping below or rising above the low income cutoff? The results show that many crossed the line, but the change is not always for the better. Indeed, just over one in ten low-income people in 1993 with a marriage or new relationship in the family moved into low income (Chart 4). This can happen, for example, when someone with an income level just over the cutoff joins someone with a substantially lower income level. But new relationships can also have more favourable income consequences: two-thirds of all members of families in which a marriage or new common law relationship occurred moved above the low income line.

What effect does the formation of new relationships have on families with low income headed by single mothers? Is this really the most likely route to exiting low income, as some would claim? Of all members of families headed by single mothers who moved out of low income in 1994, one-third were in families with a marriage or a new relationship in 1994. However, the remaining two-thirds (an estimated 84,000 persons) had managed to rise above the low income line without gaining a new partner.

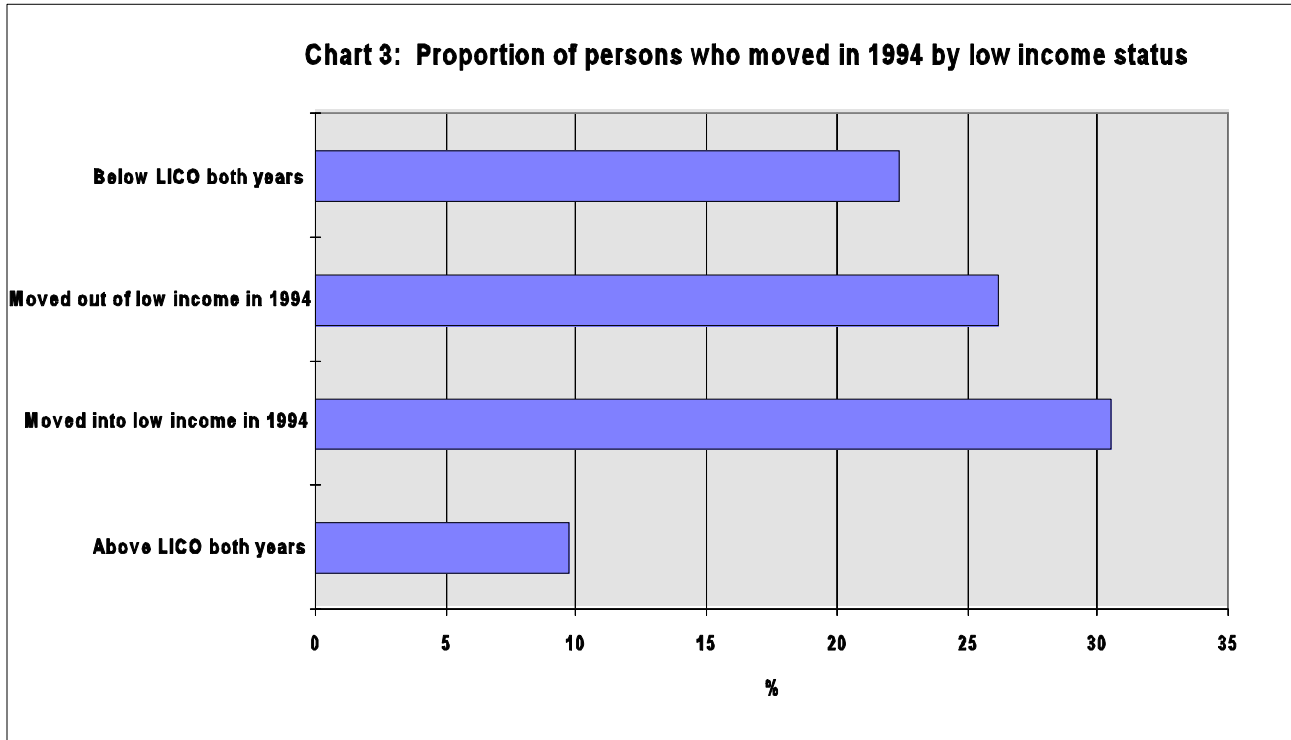
Results from other studies show that separation often entails a drop into low income. This is also evident in the SLID data. Of all persons above the low income cutoff in 1993 who experienced a marital separation (including dissolution of a common-law relationship) in their family, one in four dropped into low income. It also appears that while a shift above the line can accompany a marriage or new

common-law relationship in the family, it rarely accompanies a separation in the family.

Caution should be used in interpreting the results on separations, as the financial circumstances in the year of separation may be complex. When survey results for 1995 become available, it will be possible to compare family income in the year before and the year after the separation occurs, which will provide a clearer picture.

### **Moving and low income**

We have seen that important family events such as marriage, a new common-law relationship or separation can trigger a move across the low income line. Since important family events such as these generally involve moving -- changing dwellings -- for at least one person, one might suspect that changing dwelling and crossing the low income line tend to go hand in hand. The results bear this out. Among persons who were above the low income cutoff in both years, 10% moved at some time in 1994 (chart 3). While this is substantial (and represents 2.2 million "movers"), it is well below the mobility rate of those who experienced low income in at least one of the two years. The highest rates were recorded for persons who dropped below the low income cutoff in 1994 although they had been above it in 1993; nearly one in three also moved that year. Mobility among those below the low income line is also very high: 22% of those in low income both years changed dwellings in 1994.





## 5. Conclusion

Many events can put at risk a family's income stability. From 1993 to 1994, just over 2 million Canadians experienced a shift either into or out of low income. Another 2.3 million spent both years in low income.

Income inadequacy affects many families with children, as well as those experiencing a major event such as a marriage, a new common law relationship, or a separation. Over 50% of those who moved into or out of low income were in families experiencing a major family event in 1994. Not surprisingly, marriages and separations can have a dramatic effect on a family's income situation. It will be important to examine the data for 1995, to see if this effect is generally transitory or longer term.

These results are based on two years of data from the Survey of Labour and Income Dynamics. This is an extensive source of information, which is growing over time as the same people are contacted for several years. With further studies and with additional years of data, it will be possible to shed greater light on the dynamics of low income.

## APPENDIX

**Summary of selected past studies on income dynamics**

Past studies based on various longitudinal data sources have shaped what we know about low income dynamics. The following is an informal review of some findings from earlier studies, to help situate the SLID results.

**Longitudinal Administrative Databank**

Statistics Canada's Longitudinal Administrative Databank (LAD) is an important new source of longitudinal income data. Based on tax returns, LAD is a random sample of 10% of all taxfilers and their dependents and now covers the period 1982 to 1994. Data are available for 2.4 million persons, of whom 1.2 million were present at the beginning of the 13-year period currently covered by the database. The database provided 96% coverage of Canadians (aged 18 and up) in 1994. The following is a brief overview of three recent studies based on LAD.

*Income Dynamics: 1989 to 1994 (Colleen Clark)*

This analysis concerns the degree of income mobility in Canada from 1989 to 1994. The study is based on individual incomes. The population is divided into income quintiles for the two years, and population shifts from one quintile to another are considered. Other measures of change are also examined. Entrants and leavers -- people who start or stop filing -- are considered throughout the study, and are an integral part of the quintiles for both years observed.

The study shows that 29% of Canadians with income in 1989 had improved their status by 1994; 17% experienced a drop in income (constant dollars). If only those who were part of the sample in 1989 and 1994 are considered, 56% improved their

situation with respect to income, and half of these experienced an increase of over 50%. In contrast, only 12% of earners in both years recorded a decrease of this magnitude. Entrants and leavers are confined largely to the bottom end of income distribution. In fact, almost half of all entrants between 1989 and 1994 were in the bottom quintile in 1994. They represented 43% of that quintile.

From 1989 to 1994, women experienced greater upward income mobility than men. In fact, 34% of women rose to a higher quintile between the two years, compared with 25% of men. There was also greater upward movement among young people (aged 15 to 24 in 1989). There was room for improvement, since 80% of them started out in the first or second quintile in 1989. Income recipients aged 25 to 44 in 1989 had greatly improved their income situation by 1994.

*Low Market Incomes of Canadian Families with Children 1982-1993: A Dynamic Analysis Based on the Longitudinal Administrative Databank (Ross Finnie)*

This study is based on LAD data for 1982 to 1993. Its focus is *low market incomes* of families with children under 19 and a family head aged 18 to 59. The low market income category is derived using 1986-based LICOs, adjusted for inflation. The family definition approximates a census family (parents and unmarried children) rather than an economic family (all persons related by blood, marriage, common law or adoption).

The study presents both cross-sectional and longitudinal results. The author addresses several questions. Among them: What proportion of families enters or leaves the low market income category in a given year? How are exit rates affected by the number of years during which the family experienced low market income?

What proportion of families remain persistently in that state? How do the results vary for different family types and for different stages in the business cycle?

The analysis demonstrates that low market income is generally a long-term condition, not a transient experience. Even if low market income rates vary during an economic cycle, average incomes do not change.

*Family Income After Separation (Diane Galarneau and Jim Sturrock)*

This analysis deals with the family income of married persons with children who separated between 1987 and 1993. It highlights the different economic situations facing men and women after divorce or separation. Family composition is observed the year before separation and in subsequent years. The year of separation is not considered, owing to the numerous family adjustments that occur during that year.

The analysis brings out changes in the after-tax income and income sources of former spouses by comparing adjusted family income before and after separation. To adjust a family's income to reflect its composition and number of persons dependent on the income, the authors adopt the equivalence scale used for the Low Income Measures (LIM). This is a relative measure of low income. An equivalence scale is used to reflect differing requirements of families of different sizes. The LIM for a two-person family (for example, an adult couple or an adult with a child) is 1.4 times higher than for a single person. This figure increases by 0.3 for each additional child, and by 0.4 for each additional adult.

The income-related results presented in the study include the following: After separation, women experience losses in adjusted family income of approximately 23% between the year before and the year following separation. Men experience a

10% increase in adjusted family income. Five years after separation, women still record a 5% income shortfall, whereas men have made gains of approximately 15%. Women heading single-parent families experience the greatest losses.

According to the authors, there are two root causes of the difference in post-separation income for men and women: first, women in general have a lower personal income than men, which leads to a significant drop in family income after separation. Secondly, most women have custody of their children after separation.

*Years of Poverty, Years of Plenty* (Greg J. Duncan)

The data used come from the University of Michigan Research Center Panel Study of Income Dynamics (PSID, 1969-78). This is a panel survey of 5,000 families in the United States, which began in 1968. The annual interviews focus primarily on the economic situation of families, their jobs, and their income from various sources, including government transfers such as unemployment insurance or social assistance, and on other aspects of their lives. As in SLID, the survey follows people who move, including married people who split up and children leaving home.

This study focuses on the economic mobility of individuals, based on their family income. The author discusses some of the measurement issues in relation to poverty and income mobility. Among others, the study considered the following analytical questions: What is the extent of turnover in the poor population, and how significant is the "persistently poor" segment of the population? How do these estimates of the extent of poverty react to a raised "poverty threshold"? What are the characteristics of the "persistently poor"? With respect to long-term poverty determinants, can individual or environmental characteristics be isolated as causative factors?

The study shows that 24.4% of the population experienced a (variable length) period of poverty at least once during the decade covered, and 54% to 65% of people were poor for two consecutive years between 1969 and 1978. The definition of "long-term poverty" used in this study was at least 8 out of 10 years. Approximately 2.6% of the population was poor on a continuing basis during the 1969-78 period.

This study also evaluates the effect on the incidence of short- or long-term poverty of a 25% increase in the poverty threshold. The annual incidence of poverty increases from 6.8% to 11.0%, and the incidence of long-term poverty almost doubles (from 2.6% to 5.1%). This indicates that a large proportion of the population is living on the edge of poverty.

Although the study covers two five-year periods (1969 to 1973 and 1974 to 1978) with significant structural changes and differing economic conditions and social policies, the structure of short- and long-term poverty saw no perceptible changes. The proportion of the population that was poor for at least one out of five years was similar for both periods: 17.5% and 16.6% respectively.

The demographic characteristics of the "temporarily poor" are more or less the same as those of the population in general; unlike the "persistently poor", these are people who have had only an unfortunate year or two -- such as illness, bad economic conditions, death or the departure of a spouse. On the other hand, the "persistently poor" are generally found in two potentially overlapping groups: households headed by a woman, and households made up of black persons.

*Changing Households (The British Household Panel Survey 1990-1992)*

This study is the result of a cooperative effort by a number of researchers who contributed to development of the BHPS, a longitudinal survey that gathered information from a sample of approximately 5,000 British families (10,000 individuals). Two waves of the survey are examined, the first of which took place in the last quarter of 1992 and the second in the last quarter of 1993. The questionnaire deals with six major topics: household organization, labour market, housing, income and wealth, health, and socio-economic values.

The authors use deciles to measure income mobility. (As there are more categories, this results in more movement than quintiles.) Dealing with a number of topics related to household changes, the analysis compares the situation of families in its two successive waves. The incomes of individuals making up the families are examined, and an income equivalence scale is used to take account of family composition.

About 13% of households experienced a significant income reduction (two-three deciles), and approximately the same proportion experienced an increase of the same magnitude. In contrast, 5% of the households saw their income fall by four or more deciles between wave 1 and wave 2. Households in which a birth occurred generally experienced a small adjusted income loss, whereas those experiencing the departure of an adult child recorded a moderate income gain. In some cases, a departure of this nature resulted in a considerable loss of adjusted income, probably situations of elderly parents living with their child, who was the family's main support.

After a separation, almost 50% of women experienced an income loss of two or more deciles (17% for men), whereas 25% of men experienced an income increase

(as opposed to 9% of women). These trends are reversed when a new partner joins the household.

*Who Stay Poor? Who Doesn't? (T.J. Eller)*

This study was based on the Survey of Income and Program Participation (SIPP), conducted by the U.S. Bureau of the Census, using data for October 1991 to April 1994.

Monthly poverty measures for 1992 and 1993 are used to derive annual poverty estimates. These estimates are obtained by adding monthly family incomes for a given year and comparing these with the total of 12 monthly poverty thresholds, all based on family size and composition for each month. The monthly measures also make it possible to develop poverty rates for an average month, a measure used throughout the study to evaluate income mobility. The author also determines the numbers of the short-term poor (a few months) and persistently poor (every month in 1992 and 1993). Transitions from one status to the other from one year to the next are also considered.

According to annual estimates, approximately 22% of people who were poor in 1992 were not poor in 1993. (The current SLID study shows the equivalent number to be 27%, but for a slightly different time period.) Children and seniors tended more to remain poor than middle-aged adults. About 4.8% of the population was poor during each of the 24 months of the study period (persistently poor). Some 38% of the members of single-parent families headed by a woman were poor during an average month in 1993, 46% of these people for 2 months, and 17% on a continuing basis (24 months). Half of all periods of poverty lasted 4.9 months or longer.



### **Tables used in study**

These data tables use the low-income cutoffs (LICOs) for income after tax to determine those in low income in each year. Although LICOs are often referred to as poverty lines, they have no official status as such, and Statistics Canada does not recommend their use for this purpose.

Table A1: Province of residence at end of 1994  
 Distribution by Low income transition group  
 Persons of all ages

Province of residence in 1993		TOTAL	Low Income Transition Group			
			Below LICO In both years	Moved out of Low Income in 1994	Moved into Low Income in 1994	Above LICO in both year
TOTAL	'000	26,862	2,286	846	1,238	22,492
	%	100.0	8.5	3.2	4.6	83.7
Newfoundland	'000	552	39	25	28	460
	%	100.0	7.1	4.4	5.1	83.4
Prince Edward Island	'000	128	-	-	-	118
	%	100.0	-	-	-	92.3
Nova Scotia	'000	851	54	27	28	742
	%	100.0	6.3	3.1	3.3	87.2
New Brunswick	'000	702	53	19	31	600
	%	100.0	7.5	2.6	4.4	85.5
Quebec	'000	6,873	890	196	335	5,452
	%	100.0	12.9	2.9	4.9	79.3
Ontario	'000	10,001	554	284	479	8,684
	%	100.0	5.5	2.8	4.8	86.8
Manitoba	'000	1,019	121	48	41	809
	%	100.0	11.9	4.7	4.0	79.4
Saskatchewan	'000	903	75	28	41	759
	%	100.0	8.3	3.1	4.5	84.1
Alberta	'000	2,475	246	122	115	1,993
	%	100.0	9.9	4.9	4.6	80.5
British Columbia	'000	3,357	252	94	137	2,875
	%	100.0	7.5	2.8	4.1	85.6

Table A2: Number of employed family members 1993 and 1994  
 Distribution by Low income transition group  
 Persons of all ages

# of family members employed in 1993	TOTAL		# of family members employed in 1994							
			Zero		One		Two or more		Don't know	
	'000	%	'000	%	'000	%	'000	%	'000	%
Below LICO in both years										
TOTAL	2,286	100.0	1,052	46.0	653	28.5	400	17.5	181	7.9
Zero	920	40.3	770	33.7	109	4.8	-	-	37	1.6
One	627	27.4	129	5.7	392	17.2	67	2.9	38	1.7
Two or more	369	16.1	11	0.5	46	2.0	282	12.4	30	1.3
Don't know	370	16.2	142	6.2	105	4.6	46	2.0	77	3.4
Moved out of low income in 1994										
TOTAL	846	100.0	136	16.1	297	35.1	377	44.6	36	4.3
Zero	181	21.4	95	11.2	59	6.9	24	2.8	4	0.5
One	282	33.4	11	1.3	130	15.4	131	15.4	10	1.2
Two or more	218	25.7	494	0.1	57	6.7	158	18.7	2	0.2
Don't know	166	19.6	30	3.5	51	6.0	64	7.6	20	2.4
Moved into low income in 1994										
TOTAL	1,238	100.0	304	24.5	501	40.5	338	27.3	95	7.7
Zero	168	13.6	131	10.6	31	2.5	1	0.1	4	0.3
One	332	26.8	65	5.3	210	17.0	33	2.7	23	1.9
Two or more	521	42.1	41	3.3	170	13.8	264	21.4	45	3.6
Don't know	217	17.5	66	5.4	89	7.2	39	3.2	23	1.9
Above LICO in both years										
TOTAL	22,492	100.0	2,896	12.9	5,380	23.9	13,046	58.0	1,170	5.2
Zero	2,523	11.2	2,346	10.4	103	0.5	26	0.1	47	0.2
One	4,715	21.0	235	1.0	3,500	15.6	830	3.7	150	0.7
Two or more	12,176	54.1	92	0.4	1,055	4.7	10,380	46.2	648	2.9
Don't know	3,078	13.7	223	1.0	722	3.2	1,808	8.0	324	1.4

Table A3: Age group at beginning of 1993 by Sex

Distribution by Low income transition group

Persons of all ages

Age group at beginning of 1993	TOTAL		Sex			
			Male		Female	
	'000	%	'000	%	'000	%
Below LICO in both years						
TOTAL	2,286	100.0	1,010	44.2	1,276	55.8
0 to 5	299	13.1	149	6.5	151	6.6
6 to 15	380	16.6	205	9.0	174	7.6
16 to 24	372	16.3	179	7.9	192	8.4
25 to 44	661	28.9	273	11.9	387	16.9
45 to 64	400	17.5	183	8.0	217	9.5
65 and over	175	7.7	21	0.9	154	6.7
Moved out of low income in 1994						
TOTAL	846	100.0	406	47.9	441	52.1
0 to 5	123	14.5	72	8.5	51	6.0
6 to 15	133	15.7	72	8.5	61	7.2
16 to 24	163	19.2	68	8.1	95	11.2
25 to 44	284	33.5	138	16.4	145	17.2
45 to 64	111	13.2	47	5.5	64	7.6
65 and over	33	3.9	-	-	25	2.9

Table A3: Age group at beginning of 1993 by Sex  
 Distribution by Low income transition group  
 Persons of all ages

Age group at beginning of 1993	TOTAL		Sex			
			Male		Female	
	'000	%	'000	%	'000	%
Moved into low income in 1994						
TOTAL	1,238	100.0	578	46.7	660	53.3
0 to 5	109	8.8	48	3.9	61	5.0
6 to 15	181	14.6	94	7.6	87	7.0
16 to 24	264	21.3	119	9.6	145	11.7
25 to 44	379	30.6	201	16.3	178	14.4
45 to 64	252	20.4	109	8.8	143	11.5
65 and over	52	4.2	-	-	45	3.7
Above LICO in both years						
TOTAL	22,492	100.0	11,239	50.0	11,253	50.0
0 to 5	1,832	8.1	938	4.2	894	4.0
6 to 15	3,380	15.0	1,737	7.7	1,643	7.3
16 to 24	2,551	11.3	1,309	5.8	1,243	5.5
25 to 44	7,836	34.8	3,934	17.5	3,902	17.3
45 to 64	4,480	19.9	2,255	10.0	2,226	9.9
65 and over	2,412	10.7	1,066	4.7	1,346	6.0

Table A4: Change in paid hours at a job from 1993 to 1994 by all family members

## Distribution by Low income transition group

## Persons of all ages

Difference in paid hours for family		TOTAL	Low Income Transition Group			
			Below LICO In both years	Moved out of Low Income in 1994	Moved into Low Income in 1994	Above LICO in both year
TOTAL	'000	26,862	2,286	846	1,238	22,492
	%	100.0	100.0	100.0	100.0	100.0
Drop: 500 or more	'000	3,783	178	61	354	3,191
	%	14.1	7.8	7.2	28.6	14.2
Drop: 250 to 499	'000	1,305	93	35	26	1,150
	%	4.9	4.1	4.2	2.1	5.1
Drop: less than 250	'000	6,691	855	134	202	5,501
	%	24.9	37.4	15.8	16.3	24.5
Jump: Less than 250	'000	1,843	101	32	44	1,666
	%	6.9	4.4	3.7	3.5	7.4
Jump: 250 to 499	'000	1,548	134	37	34	1,343
	%	5.8	5.9	4.4	2.7	6.0
Jump: 500 or more	'000	4,172	279	265	173	3,454
	%	15.5	12.2	31.4	14.0	15.4
Don't know	'000	7,521	647	283	405	6,186
	%	28.0	28.3	33.4	32.8	27.5

Table A5: Family composition 1993 and 1994  
 Distribution by Low income transition group  
 Persons of all ages below LICO in both years

Family composition in 1993	TOTAL		Family composition in 1994											
			Unattached individual		Married couple/ no children		Married couple with children		Female lone-parent with children		Other economic family types		Don't know	
	'000	%	'000	%	'000	%	'000	%	'000	%	'000	%	'000	%
TOTAL	2,286	100.0	768	33.6	118	5.2	682	29.8	425	18.6	242	10.6	51	2.2
Unattached individual	760	33.3	721	31.5	-	-	-	-	-	-	-	-	-	-
Married couple/ no children	112	4.9	-	-	96	4.2	-	-	-	-	-	-	-	-
Married couple with children	714	31.2	-	-	-	-	646	28.3	31	1.3	-	-	-	-
Female lone-parent with children	400	17.5	-	-	-	-	-	-	369	16.1	-	-	-	-
Other economic family types	241	10.6	-	-	-	-	-	-	-	-	207	8.5	-	-
Don't know	59	2.6	-	-	-	-	-	-	-	-	-	-	41	1.8

Table A5: Family composition 1993 and 1994  
 Distribution by Low income transition group  
 Persons of all ages Moved out of low income in 1994

Family composition in 1993	TOTAL		Family composition in 1994											
			Unattached individual		Married couple/ no children		Married couple with children		Female lone-parent with children		Other economic family types		Don't know	
	'000	%	'000	%	'000	%	'000	%	'000	%	'000	%	'000	%
TOTAL	846	100.0	159	18.8	77	9.0	348	41.1	76	9.0	164	19.4	22	2.6
Unattached individual	246	29.1	139	16.5	41	4.8	-	-	-	-	40	4.7	-	-
Married couple/ no children	35	4.1	-	-	31	3.6	-	-	-	-	-	-	-	-
Married couple with children	310	36.6	-	-	-	-	285	33.7	-	-	-	-	-	-
Female lone parent with children	131	15.5	-	-	-	-	35	4.2	61	7.2	19	2.2	-	-
Other economic family types	88	10.4	-	-	-	-	-	-	-	-	74	8.8	-	-
Don't know	36	4.2	-	-	-	-	13	1.6	-	-	-	-	-	-



Table A5: Family composition 1993 and 1994  
 Distribution by Low income transition group  
 Persons of all ages Moved into Low income in 1994

Family composition in 1993	TOTAL		Family composition in 1994											
			Unattached individual		Married couple/ no children		Married couple with children		Female Lone-parent with children		Other economic family types		Don't know	
	'000	%	'000	%	'000	%	'000	%	'000	%	'000	%	'000	%
TOTAL	1,238	100.0	384	31.0	117	9.5	379	30.6	130	10.5	208	16.8	19	1.5
Unattached individual	148	12.0	142	11.4	-	-	-	-	-	-	-	-	-	-
Married couple/ no children	157	12.7	48	3.9	85	6.8	-	-	-	-	-	-	-	-
Married couple with children	541	43.7	90	7.3	-	-	333	26.9	63	5.1	-7	-	-	-
Female lone parent with children	80	6.4	-	-	-	-	-	-	53	4.3	-	-	-	-
Other economic family types	283	22.9	76	6.1	-	-	19	1.5	-	-	161	13.0	-	-
Don't know	28	2.3	-	-	-	-	-	-	-	-	-	-	-	-

Table A5: Family composition 1993 and 1994  
 Distribution by Low income transition group  
 Persons of all ages Above LICO in both years

Family composition in 1993	TOTAL		Family composition in 1994											
			Unattached individual		Married couple/ no children		Married couple with children		Female lone-parent with children		Other economic family types		Don't know	
	'000	%	'000	%	'000	%	'000	%	'000	%	'000	%	'000	%
TOTAL	22,492	100.0	2,315	10.3	4,654	20.7	10,752	47.8	940	4.2	3,450	15.3	379	1.7
Unattached individual	2,179	9.7	1,906	8.5	132	0.6	38	0.2	-	-	67	0.3	-	-
Married couple/ no children	4,553	20.2	109	0.5	4,181	18.6	199	0.9	-	-	55	0.2	-	-
Married couple with children	10,962	48.7	88	0.4	143	0.6	10,062	44.7	120	0.5	483	2.1	66	0.3
Female lone-parent with children	879	3.9	-	-	-	-	56	0.3	721	3.2	48	0.2	19	0.1
Other economic family types	3,333	14.8	144	0.6	160	0.7	190	0.8	66	0.3	2,738	12.2	35	0.2
Don't know	585	2.6	43	0.2	28	0.1	206	0.9	-	-	60	0.3	231	1.0

Table A6: Major family event (marriage, separation, birth, death) during 1994

Distribution by Low income transition group

Persons of all ages with change in family composition

Major family event in person's family during year		TOTAL	Low income transition group			
			Below LICO in both years	Moved out of Low Income in 1994	Moved into Low Income in 1994	Above LICO in both years
TOTAL	'000	4,328	251	230	496	3,352
	%	100.0	100.0	100.0	100.0	100.0
Yes	'000	2,238	130	87	229	1,792
	%	51.7	51.7	37.6	46.2	53.5
No	'000	1,732	100	111	224	1,298
	%	40.0	39.8	48.1	45.2	38.7
Don't know	'000	358	-	33	43	261
	%	8.3	-	14.3	8.6	7.8

Table A7: Separation (or dissolution of common-law relationship) in person's family during 1994

Distribution by Low income transition group  
Persons of all ages with change in family composition

Separation in person's family during year		TOTAL	Low income transition group			
			Below LICO in both years	Moved out of Low Income in 1994	Moved into Low Income in 1994	Above LICO in both years
TOTAL	'000	4,328	251	230	496	3,352
	%	100.0	100.0	100.0	100.0	100.0
Yes	'000	528	56	-	112	351
	%	12.2	22.5	-	22.5	10.5
No	'000	3,470	184	188	334	2,763
	%	80.2	73.5	81.8	67.3	82.4
Don't know	'000	330	-	33	50	238
	%	7.6	-	14.1	10.1	7.1

Table A8: Death in person's family during 1994  
 Distribution by Low income transition group  
 Persons of all ages with change in family composition

Death in person's family during year		TOTAL	Low income transition group			
			Below LICO in both years	Moved out of Low Income in 1994	Moved into Low Income in 1994	Above LICO in both years
TOTAL	'000	4,328	251	230	496	3,352
	%	100.0	100.0	100.0	100.0	100.0
Yes	'000	142	-	-	25	112
	%	3.3	-	-	5.1	3.3
No	'000	3,632	212	181	403	2,837
	%	83.9	84.6	78.3	81.3	84.7
Don't know	'000	553	36	48	67	402
	%	12.8	14.2	20.8	13.6	12.0

Table A9: Birth in person's family during 1994  
 Distribution by Low income transition group  
 Persons of all ages with change in family composition

Birth in person's family during year		TOTAL	Low income transition group			
			Below LICO in both years	Moved out of Low Income in 1994	Moved into Low Income in 1994	Above LICO in both years
TOTAL	'000	4,328	251	230	496	3,352
	%	100.0	100.0	100.0	100.0	100.0
Yes	'000	922	41	18	56	808
	%	21.3	16.3	7.7	11.2	24.1
No	'000	3,406	210	213	440	2,544
	%	78.7	83.7	92.3	88.8	75.9

Table A10: Marriage (or formation of common-law relationship) in person's family  
during 1994

Distribution by Low income transition group  
Persons of all ages with change in family composition

Marriage in person's family during year		TOTAL	Low income transition group			
			Below LICO in both years	Moved out of Low Income in 1994	Moved into Low Income in 1994	Above LICO in both years
TOTAL	'000	4,328	251	230	496	3,352
	%	100.0	100.0	100.0	100.0	100.0
Yes	'000	762	33	67	74	588
	%	17.6	13.3	29.0	14.9	17.5
No	'000	3,280	210	140	379	2,550
	%	75.8	83.9	60.9	76.5	76.1
Don't know	'000	286	-	23	43	213
	%	6.6	-	10.1	8.6	6.4

Table A11: New member in person's family during 1994

Distribution by Low income transition group

Persons of all ages

New person joined family during year		TOTAL	Low income transition group			
			Below LICO in both years	Moved out of Low Income in 1994	Moved into Low Income in 1994	Above LICO in both years
TOTAL	'000	4,328	251	230	496	3,352
	%	100.0	100.0	100.0	100.0	100.0
Yes	'000	2,162	105	188	122	1,747
	%	50.0	42.0	81.7	24.5	52.1
No	'000	2,152	144	42	368	1,597
	%	49.7	57.6	18.3	74.2	47.7
Don't know	'000	14	-	.	-	-
	%	0.3	-	.	-	-



Table A12: Member left person's family during 1994

Distribution by Low income transition group

Persons of all ages

Person left person's family during year		TOTAL	Low income transition group			
			Below LICO in both years	Moved out of Low Income in 1994	Moved into Low Income in 1994	Above LICO in both years
TOTAL	'000	4,328	251	230	496	3,352
	%	100.0	100.0	100.0	100.0	100.0
Yes	'000	2,494	151	67	410	1,867
	%	57.6	60.2	29.0	82.7	55.7
No	'000	1,775	97	146	85	1,446
	%	41.0	38.8	63.5	17.2	43.2
Don't know	'000	59	-	-	-	38
	%	1.4	-	-	-	1.1

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## Technical Notes

### 1. How low income cutoffs are calculated

Low income cutoffs (LICOs) are established using data from Statistics Canada's Family Expenditure Survey. This survey, which has traditionally been done on a national scale every four years or so, collects information on all expenditures made by the household over a calendar year. The Family Expenditure Survey also collects income data. This makes it possible to analyse consumption patterns in the light of family income levels.

The LICOs are intended to convey the income level at which a family is in straitened circumstances because generally it has to spend a greater proportion of their income on the basics (food, shelter and clothing) than the "average" family. A LICO is calculated for families of different sizes (from one person to seven or more) and for communities of different sizes. There are five different community size categories. In addition, there are a set of LICOs based on before-tax income and another set of LICOs based on after-tax income.

To determine the LICOs the following steps are followed. First, using the Family Expenditure Survey data, the average proportion of family income spent on basics is determined. In 1992, which is the last available year of Family Expenditure Survey data, this was 34.7% of before-tax income (for after-tax income, the corresponding percentage is 43.6%). Next, (an admittedly arbitrary) 20 percentage points is added, yielding 54.7% as the proportion of income actually used for determining the LICOs. Finally, for each family size and community size, family spending on essentials is examined in the light of total family income. For each size of family and community size of residence, the low income cutoff before-tax is the income level at

which 54.7% would be spent, on average, on the basics of food, shelter and clothing.

LICOs have generally been updated with every Family Expenditure Survey. Since the first ones were calculated, based on the 1959 survey, the proportion of before-tax family income spent on food, shelter and clothing has dropped from 50% to the current 34.7%. In this regard, the LICOs follow a national norm of spending patterns. In years between Family Expenditure Surveys, the LICOs have been updated to reflect the effect of inflation, using the Consumer Price Index. The LICOs used in SLID are identical to those used with data from the Survey of Consumer Finances (SCF). Tables of low income cutoffs developed for SCF are available in Statistics Canada catalogue numbers 13-551, 13-569 and 13-210.

A comparison of the cross-sectional incidence of low income after tax for 1993 and 1994 between SLID and SCF reveals some slight differences.

#### **Percentage of persons below the low-income cutoff based on after-tax income**

	SLID	SCF
	%	%
1993	11.7	13.1
1994	13.1	12.5

## **2. Adjustments made to income data for purposes of this study**

In principle, minor changes in income can lead to a shift across the low income line. To avoid spurious flows, income transitions that occurred with a dollar change of less than 5% of the LICO were not classified as true flows. Instead, they were left in

their original category, either below or above the line. This reduces the number of transitions, although only slightly. The following table shows the distribution that would have been obtained had this 5% criterion not been applied.

**Shifts into and out of low income between 1993 and 1994 -- without 5% adjustment -- after-tax income**

1993	1994			
	Below LICO		Above LICO	
	'000	%	'000	%
Below LICO	2,255	8.4	878	3.3
Above LICO	1,265	4.7	22,464	83.6

If this table is compared with Table 1, it can be seen that the transition rates are only marginally affected.

As a related definitional issue, the results in this report are based on after-tax low income cutoffs. It may be of some interest to see what the transition rates are like using before-tax LICOs. The following table contains results using before tax income data. To facilitate comparison with Table 1, the 5% adjustment has been applied.

**Shifts into and out of low income between 1993 and 1994 -- before-tax income  
with 5% adjustment**

1993	1994			
	Below LICO		Above LICO	
	'000	%	'000	%
Below LICO	3,287	12.2	925	3.4
Above LICO	1,439	5.4	21,211	79.0

*Adult income equivalence scales*

When comparing family incomes with the relevant LICO, one need not account for the increased basic income requirements for families of different size, as there are different LICOs for families of different sizes. However, when comparing one person's family income with that of another, one possible way of accounting for family size is to work with "per capita" income obtained by dividing the family income by the family size. However this implies that a family of two requires twice the income of a single person, and does not allow for "economies of scale". Instead of dividing by the family size, many users divide by an "adult equivalence scale", which depends on the ages of the various family members. There is no one generally-accepted adult equivalence scale. This study has adopted the one used by Statistics Canada for its LIM (low-income measure) calculations. This assigns a weight of 1.0 to the oldest family member. The next oldest family member receives a weight of 0.4, regardless of age. All subsequent family members aged 16 or over receive a weight of 0.4, while those under 16 have a 0.3 weight value. The adult equivalence scale is derived as the sum of the weights assigned to each family member.

### **3. Family events and time**

Each person's family composition is "fixed" as of December 31 of each year. In a discussion of family events, the focus is on a phenomenon -- a separation, for example -- that occurred at some time during 1994. The separation may directly involve the person in question or it may have occurred to someone in their family, as defined at the end of 1993. For example, if a couple living with children and in-laws at the end of 1993 separated in 1994, all of the individuals concerned (whatever the current living arrangements) will have experienced that particular family event in 1994.

### **4. What to do with "don't knows"?**

In the course of an interview, it sometimes happens that respondents are unable or unwilling to answer a particular question. Various other errors may occur in the collection of the data. In these cases, the missing information is tagged as "don't know" in data processing. How should these cases be handled at the analysis stage?

This issue had to be dealt with for most of the tables presented in this study. One approach, often the simplest, is to redistribute the "don't know" cases proportionately over the other cells in the table in a way that does not alter the proportions observed among respondents with valid answers. Alternatively, the "don't knows" can be kept as separate categories in the tables, and include them in the totals. Either approach quite rightly includes the "don't knows" in the totals.

In this study, the second approach was generally used, that is, the "don't knows" were not redistributed. Estimates of levels may therefore be slightly low. In particular, users should recognize that the absolute size of subpopulations will be under-estimated.

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