Catalogue No. 94-01

SLID FOLLOWING RULES: WHO TO TRACE AND WHO TO INTERVIEW

February 1994

Sylvie Michaud, Social Survey Methods Division Yves Saint-Pierre, Household Surveys Division

The SLID Research Paper Series is intended to document detailed studies and important decisions for the Survey of Labour and Income Dynamics. These research papers are available in English and French. To obtain a summary description of available documents or to obtain a copy of any, please contact Philip Giles, Manager, SLID Research Paper Series, by mail at 11-D8 Jean Talon Building, Statistics Canada, Ottawa, Ontario, CANADA K1A 0T6, by INTERNET (GILES@STATCAN.CA), by telephone (613) 951-2891, or by fax (613) 951-3253.

EXECUTIVE SUMMARY

In principle, the Survey of Labour and Income Dynamics follows each respondent for six years and interviews "cohabitants", people who move in with these respondents during the six years. In practice, the procedures are not so straightforward.

The purpose of this document is to describe the following rules - the rules governing who is traced and who is interviewed -- as comprehensively as possible. As well, the conceptual basis for these procedures is outlined.

TABLE OF CONTENTS

			Page
1.	Introd	uction	1
2.	Target	t population	1
	2.1	Differences between SLID and LFS in Definition of	
		Target Population	2
	2.2	Survey Objectives	3
3.	Select	ion of first panel in January 1993	6
4.	Follow	ving rules	7
	4.1	First Wave of Labour	7
	4.2	First Wave of Income	9
	4.3	Second Wave of Labour and Beyond	11
5.	Some	examples of SLID following rules	13
6.	Differe	ences relative to other longitudinal surveys	17
7.	Opera	tional issues related to non-respondents in SLID	20
Appe	ndix:	Terms and Definitions	21

1. INTRODUCTION

Longitudinal surveys require a set of procedures that govern who they trace and interview through time. Depending on the survey design, objectives and budget, these may be very simple or very complex. In the case of the Survey of Labour and Income Dynamics (SLID), these "following rules" are simple in principle, but operationally fairly complex.

This document describes SLID's following rules, and their rationale. In doing so, several terms will be introduced and defined. The terms and definitions are included in an appendix.

Section 2 discusses the target population and following rules at an abstract level. Then, using a chronological approach, the procedures are outlined for January 1994 (first wave, labour); May 1994 (first wave, income); and January 1995 (second wave, labour). This is followed by some examples of who SLID will follow and interview under various scenarios. Finally, the following rules for SLID are compared with those of other longitudinal household surveys, including two other new Statistics Canada surveys.

2. TARGET POPULATION

The first panel of SLID respondents was selected from the Labour Force Survey (LFS). The original design of SLID, its frame and target population are thus the same (with some minor adjustments) as those of the LFS.

The LFS covers the population aged 15 and over, excluding residents of the Northwest Territories, Indian reserves and inmates of penal and health institutions. The exclusions account for about 2% of the Canadian population.

The LFS sample is drawn from an area frame, using a multi-stage probability design. The final stage of selection is the dwelling. Once a dwelling falls in the sample, all usual residents of that dwelling are included in the LFS (with the exception of full-time members of the Armed Forces). Demographic information is recorded on all household members and labour market information is collected from those members aged 15 and over.

Once a dwelling is selected for the sample, it is retained for six months. If there is a change in household composition, the new members are interviewed. One-sixth of the sample is replaced each month.

The SLID sample was drawn from dwellings that were in the LFS for a six-month period ending in January or February 1993. The actual SLID sample is defined as of January 1993 -- that is, it consists of those individuals identified as household members in January 1993, regardless of any subsequent moves they may have made.

2.1 Differences between SLID and LFS in the definition of the target population

LFS and SLID cover fundamentally the same population. However there are a few differences worth noting. First, the SLID target population covers all ages, not just people 15 and over. The practical consequence of this difference is that SLID will follow children on those rare occasions when they move without an adult (for example, a situation where a child is moving permanently from one parent to the other).

In addition to usual residents, the LFS includes people staying in the dwelling who have no usual residence elsewhere.

Second, while people of all ages are in the target population, not all ages are eligible to answer labour and income questions. These questions are asked only of respondents aged 16 or over as of January 1 of the survey year.

Third, for now, the population is restricted to the ten provinces.

Finally, SLID covers the military who are living out of barracks, for example, in permanent married quarters (PMQs).

Apart from these four exceptions, the SLID and LFS target populations are identical *at the point of sample selection*. However, that definition of the target population is a static, point-in-time definition. To make any progress on the question of who to follow and who to interview, one must consider the survey's objectives and operational constraints.

2.2 Survey Objectives

The objectives of the survey have been stated as follows:

"The goal of the Survey of Labour and Income Dynamics is to enhance public understanding and to support research on *changes* through time in the labour market experiences and well-being of Canadians.

Two key features of the survey flow from this goal. First SLID, is longitudinal, returning to the same respondents for six years. A longitudinal perspective will shed new light on such issues as long-term unemployment, barriers to advancement in the workplace, transitions from school to work and from work to retirement, and flows into and out of poverty.

Second, the range of topics examined in SLID is broad enough to yield information on the links that exist between demographic events (such as the birth of a child, a move, family formation and dissolution), labour market behaviour, income and wealth."

To meet these objectives, it is necessary that people be traced throughout the six years, and the fewer exceptions to this rule the better. Although there are several geographical exclusions in the original sample frame, moving "out of scope" is not in itself a reason for dropping a respondent. By tracing and interviewing such cases, the data are unquestionably more complete. Moreover, tracing ensures that respondents who subsequently move back "into scope" are identified as such. Thus the aim is to follow and interview wherever possible.

Practical constraints have led to compromises in the following cases:

- ! It must be possible to follow up by telephone; otherwise the case is dropped.
- ! For extended stays in institutions (that is, stays of over six months in health care or penal institutions)², the person is traced but not interviewed. The person's location is verified at every collection period. If he or she leaves the institution, interviewing is resumed.

The term "institution" refers here only to health care and penal facilities. Other types of establishments are sometimes popularly called "institutions". For example, convents, monasteries and university dormitories, are covered in the survey frame. In the vocabulary of the LFS, these establishments are "non-institutional collective dwellings". If a large facility of this kind is selected for the LFS sample, it may be split up (for example by wing or by floor) and treated like several dwellings so that all residents are not in the sample simultaneously. In SLID, a longitudinal respondent can move to a large collective dwelling. In this case, the interviewing rule will be modified to interview only people in the collective dwelling who are related to the longitudinal respondent.

- ! For respondents who move to the US, a labour and income interviews are conducted. In the case of income, the information collected will relate to income form Canadian sources. (The income questionnaire includes several income sources which would not be applicable in the US.)
- ! Respondents moving to the Territories, to an Indian Reserve or into military barracks are treated just like other movers within Canada -- they are traced and interviewed. They will be included in the longitudinal estimates, but not in the cross-sectional estimates.
- ! Respondents moving overseas are treated like those moving to an institution -- traced but not interviewed.

The SLID objectives also highlight the importance of demographic and family information. It is thus important to the SLID design to follow *all members* of original households should there be a household split and, further, to interview all persons who join the household of a SLID respondent.

The term *longitudinal respondent* refers to people in selected dwellings at the point where the panel is selected. The term *cohabitant* refers to a person who subsequently shares a dwelling with a longitudinal respondent. Cohabitants are interviewed in SLID as long as they continue to live with a longitudinal respondent. This approach ensures that the household and family information for longitudinal respondents is kept up-to-date.

While the survey's objectives are clearly longitudinal, there is also a requirement to produce annual "cross-sectional" estimates of labour market activity and income that can be analyzed in time-series fashion. All of the following rules described below are useful if not essential in a longitudinal context. Some have very

beneficial effects in cross-sectional estimation. For example, cohabitants do not receive longitudinal weights but they do receive cross-sectional weights.

3. SELECTION OF FIRST PANEL IN JANUARY 1993

SLID's first panel was selected in January 1993 and consisted of the residents of LFS dwellings rotating out of the LFS in that or the following month (Rotation Groups 2 and 3). In January 1993, a preliminary interview was conducted for SLID as a supplement to the LFS. The objectives of the preliminary interview were as follows:

- ! to collect background demographic, personal history and work experience information, and to expand the LFS data on schooling;
- ! to collect current labour market information (again supplementing what is routinely collected in the LFS), in order to feed it back to respondents during the first labour interview in January 1994 as an aid to recall;
- ! to identify for respondents a contact from outside the household to help in tracing should a move occur during 1993.

This information was collected for all respondents aged 15 and over. The age cutoff is one year below the one used for labour and income because, by January 1994, these people will be eligible for labour and income questions. Note that the term *eligible* is used throughout to refer to household members who will receive a particular set of questions. Thus a six-year-old child is in SLID's target population but is not eligible for labour and income questions, nor for the preliminary interview.)

For the preliminary interviews on first panel, a response rate of 88% was obtained. Our plan originally was to return to non-respondents -- who were mostly refusals -- in January 1994 and attempt to gain their cooperation. For budget reasons this plan was abandoned. (The question of non-response follow-up is discussed further in Section 7.)

4. FOLLOWING RULES

The rules on who to trace and who to interview increase gradually in complexity over the first few waves of data collection. They are laid out below in chronological order.

4.1 First wave of labour

Between January 1993 and January 1994, some longitudinal respondents will move and some cohabitants will join the sample. The cases that need to be considered are as follows.

- ! Longitudinal respondents aged 16 and over³ who have moved to another dwelling in scope⁴ are traced to their new location and interviewed for labour.
- ! Longitudinal respondents aged 16 and over who have moved to the Territories, into barracks, onto an Indian reserve or to the US (all

Wherever age is used, it refers specifically to the respondent's age as of January 1 of the survey year.

The term *in scope* applies to a dwelling covered in the original LFS frame.

of which are out of scope) are traced and interviewed for labour just like those who move to another dwelling in scope.

- ! For longitudinal respondents aged 16 and over who have moved into an institution (with an expected stay of more than six months) or overseas, the new address is recorded. In future interviews, their current location will be verified with the contact person or another household member, with the intention of resuming interviewing should they return. (Note that the interviewer must decide whether someone who has moved into a care environment is indeed in an "institution". Facilities exist that some people would regard as institutions while others see them as specialized rooming or boarding houses. The fall-back rule is: if in doubt, trace and interview.)
- ! For a longitudinal respondent who has died, no information other than the date of death is collected. From an operational perspective, the person is dropped from the sample, but the person's information will be retained in the dataset.
- ! Some longitudinal respondents will now be living with cohabitants. Any person now living with a longitudinal respondent who was not doing so in January 1993 is a cohabitant, and is included in the SLID sample as long as he or she continues to live with a longitudinal respondent. In the first wave of labour all cohabitants are necessarily *joiners*, that is they are being interviewed for SLID for the first time. A joiner aged 16+ completes a short version of the preliminary interview (called *preliminary-short*), in addition to a labour interview.

- ! Occasionally, a longitudinal respondent may move into a non-institutional collective. The general rule of interviewing all cohabitants can be rather problematic if, say, the person moves into a monastery which houses fifty other monks. To avoid this problem, in cases where a respondent moves into a non-institutional collective, only members of that person's economic family (that is, any person related by blood, marriage, common law or adoption) are counted as cohabitants and included in SLID.
- ! All 15-year-olds -- whether longitudinal or cohabitant -- complete a preliminary interview in preparation for their first labour interview in 1995.
- ! Longitudinal respondents under age 15 who move are traced using identical rules to those used for older persons. The information recorded for them, and for young cohabitants, is limited to basic demographics and school grade.

4.2 First wave of income

In May 1993, the first wave of income data will be collected for the first panel. The reason for collecting the information in May is to allow respondents to consult their tax records. In a sense, this interview is simply deferred from January for practical reasons; it is not really a separate wave. Like the labour data, the income data refer to the previous year. Thus we are interested in the income received by persons who formed a household as of the January labour interview, *regardless of moves occurring between January and May*. This has implications for the following rules used for cohabitants.

The cases to be considered in the first wave of income interviews are as follows:

- ! For longitudinal respondents aged 16 and over who moved to a new location between January and May, the rules are the same as those used in January.
- ! The first wave of income is our first opportunity to encounter returners -- longitudinal respondents who moved away from the original dwelling in 1993 and then moved back some time after the January labour interview of 1994. This highly mobile group is a source of concern to longitudinal surveys because if their status as a returner is not detected they may be counted twice (even in some cases interviewed twice). They would also not be treated like longitudinal respondents and would likely not receive the proper questionnaire. To guard against this, whenever a joiner is identified, the interviewer checks a roster of former household members (referred to as "ghosts") to ensure that this is indeed a joiner and not a returner. Returners are interviewed for income, while joiners receive a preliminary long.
- ! Returners include longitudinal respondents who have moved back and forth between two dwellings in scope. There is another class of returners that includes people who have returned from an institution or from overseas. These people may return to a former dwelling, or they may move to a new dwelling. Either way, the procedures are the same.
- ! For cohabitants (non-joiners) aged 16+ who moved between January and May, and continue to live with a longitudinal

respondent, the rules are identical to those for longitudinal respondents, i.e., we trace and interview them for income.

- ! If a longitudinal respondent or cohabitant dies between January and May, last year's income is not collected for reasons of sensitivity.
- ! Cohabitants aged 16+ who no longer live with a longitudinal respondents are also interviewed for income, but they will not be interviewed again. Also any new persons they are now living with are not interviewed at all.
- ! New cohabitants (joiners) aged 15+ identified for the first time in May complete a preliminary interview but not an income interview because they were not living with a longitudinal respondent in January.
- ! Basic demographics are recorded for joiners under age 15.

4.3 Second wave of labour and beyond

In January 1995, the second wave of labour will be conducted. At that time, the final refinements to the following rules will be introduced. The cases to be considered are as follows:

! Longitudinal respondents aged 16 and over who have moved to another dwelling in scope, to the Territories, into barracks, onto an Indian Reserve or to the US are traced to their new location and interviewed for labour, as in January 1994.

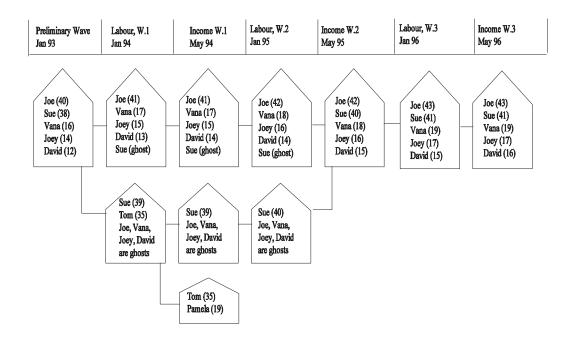
- ! Longitudinal respondents aged 16 and over who are returners are interviewed for labour in their current dwelling.
- ! For a longitudinal respondent or cohabitant who has died, no information other than the date of death is collected. From an operational perspective, the person is dropped from the sample, but the person's information will be retained in the dataset.
- ! For joiners aged 16+, the procedures are the same as in January 1994.
- ! Cohabitants no longer living with a longitudinal respondent are dropped.
- ! For cohabitants (including joiners) and longitudinal respondents aged 15, a preliminary interview is completed, as in January 1994.

In the third and subsequent waves of labour, the procedures are identical to those outlined above. The procedures for income are identical to those given for the first wave.

5. SOME EXAMPLES OF SLID FOLLOWING RULES

The purpose of this section is to illustrate the following rules, as they are applied to hypothetical households through time.

Example 1



The first case shows a nuclear family with three children, aged 16, 14 and 12, when the first panel is selected. All five are, by definition, longitudinal respondents; Joe, Sue and Vana all complete a preliminary interview in January 1993.

In January 1994, Sue has moved out and is now living with Tom, a new cohabitant (i.e., a joiner). Sue completes a labour interview. Tom completes a preliminary-short and a labour interview. Joe and the three children still share a dwelling. Joe

and Vana complete a labour interview. Joey, now 15, completes a preliminary interview.

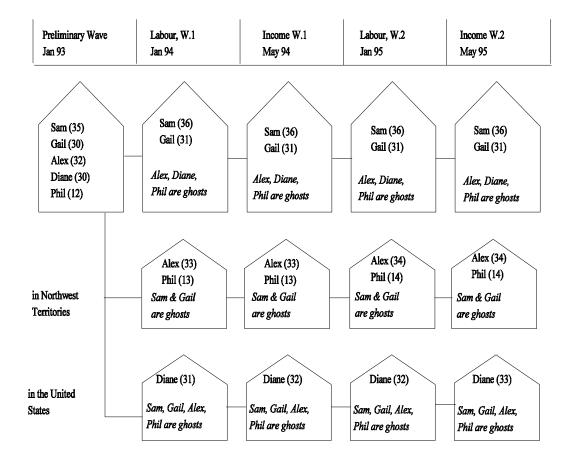
In May 1994, Sue and Tom are no longer living together. Sue, the longitudinal respondent, completes income. So does Tom, because he was a cohabitant of Sue's in January. However, no information is collected for Pamela, who is now sharing a dwelling with Tom. Note that Sue is a ghost in the household of Joe, Vana, Joey and David. Reciprocally, Joe, Vana, Joey and David are ghosts in Sue's household.

The following January, Joe, Vana, Joey and Sue will all complete labour interviews. Tom is now excluded from the sample. Finally, in May 1995, Sue moves back -- she is a returner; all but David complete an income interview. Although he is now 15, David will not complete a preliminary interview until the following January -- the age of eligibility is always determined as of January 1 of the survey year.

Example 2

The second example is a household made up of two couples, one with a 12-year-old son. In January 1993, the four adults receive a preliminary interview. A year later, they have split into three households. Alex has moved with Phil to NWT, while Diane is in Alaska. All are traced to their new location; all except Phil complete a labour interview.

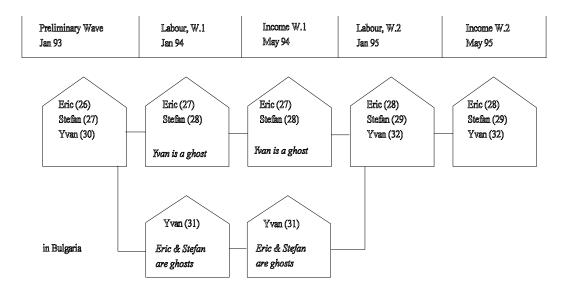
In May 1994, Sam, Gail and Alex complete an income interview. Diane will be asked to report income she received from Canadian sources.



Example 3

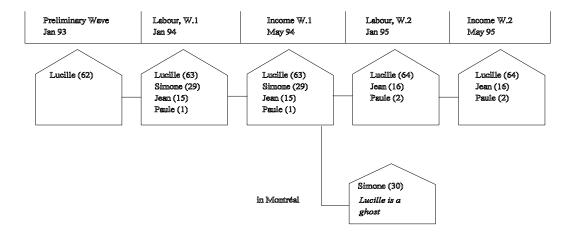
In January 1993, this household consisted of three young men sharing a dwelling. All three complete a preliminary interview.

In January 1994, Yvan has moved to Bulgaria. The information collected on Yvan at this point is limited to his new location, the move date and the reason for the move. Eric and Stefan complete a labour interview. The following May, they complete an income interview. The interviewer checks with them and confirms that Yvan is still overseas. By January 1995, however, he has returned and completes a labour interview along with Eric and Stefan.



Example 4

Lucille, who lives alone, completes a preliminary interview in January 1993. When the interviewer tries to reach her in January 1994, she has moved.



Through a contact, the interviewer locates her: she is now living with her daughter, who has two children. Simone, Jean and Paule are now cohabitants. Simone completes a preliminary-short and a labour interview. Her son Jean completes a

full preliminary but no labour interview, as he is aged 15. Lucille of course completes a labour interview.

In January 1995, Simone has moved out and is dropped from the sample. Lucille and Jean complete a labour interview.

6. DIFFERENCES RELATIVE TO OTHER LONGITUDINAL SURVEYS

This section summarizes the differences between SLID's following rules and those used by other longitudinal household surveys. The surveys considered include two other new Statistics Canada surveys, the National Population Health Survey (NPHS) and the National Longitudinal Survey of Children (NLSC). In addition, two established American surveys are considered, the Panel Study on Income Dynamics (PSID), the Survey of Income and Program Participation (SIPP). The objective is to compare the rules at a broad level, not at the level of detail used above.

National Population Health Survey (NPHS)

This panel study of health, also using computer-assisted interviewing, is currently being developed at Statistics Canada. Initial interviews will be conducted in May 1994, with one-quarter of the sample interviewed in each of the following quarters. The second and subsequent waves will be conducted at two-year intervals.

NPHS collects some information on all household members in selected dwellings, and then selects one household member to become the longitudinal respondent. An additional sample of individuals (longitudinal respondents) is selected from institutions. In a given year, cohabitants are interviewed to produce the cross-

sectional estimates, but they are not followed from year to year. Longitudinal respondents who move in Canada, whether to private dwellings or health-care institutions, are traced to their new location and interviewed. If they move outside Canada, they are traced, but not interviewed; interviewing is resumed if they return to Canada. Longitudinal respondents are followed indefinitely.

There are certain exclusions in the NPHS sample frame, among them penal institutions, and some other institutions (yet to be defined) and Indian Reserves. Longitudinal respondents who move into one of these (that is, move "out of scope") are traced, but not interviewed until they move back in scope. NPHS will collect the same information from joiners as from cohabitants.

National Longitudinal Survey of Children

This annual survey is sponsored by Human Resources and Development Canada and will also be implemented using computer-assisted interviewing, in 1994. There is some integration between NPHS and NLSC in that if the longitudinal respondent selected in NPHS is a child, the NLSC questionnaires are used for the child.

As of the writing of this paper, it has not been decided how long NLSC will follow children. Those who move into an institution will be traced and interviewed. The first wave of data will be collected in two steps: the fall of 1994 and early in 1995. Subsequent waves will be conducted at two-year intervals. There is a household level questionnaire that is completed at each interview and, if household composition changes, the information refers to household members as of the time of the interview. NLSC also has a questionnaire for all of the child's family members and one for the child's caregiver. Because NLSC uses personal

interviews, it is doubtful that they would follow children out of the country, however, the following rules of NLSC will be refined at a later date.

NLSC is also required to produce cross-sectional estimates, and hence it plans to interview additional people for a cross-sectional sample. These will not be followed in later years.

Panel Study of Income Dynamics

Conducted by the Survey Research Center of the University of Michigan, PSID follows indefinitely the members of family units selected in 1968. Adult offspring are also interviewed, including those born after 1968 and who have since moved away. In addition to these individuals, "co-residents" are interviewed but not traced if they move. If the respondent moves into an institution (defined to include college dormitories) or joins the military, PSID keeps track of the person and interviews only when the person leaves the institution. Respondents who move to a foreign country are traced, fill in their own questionnaires and mail them back to PSID. Interviews are conducted annually.

Survey of Income and Program Participation

The Survey of Income and Program Participation (SIPP), conducted by the U.S Bureau of the Census, interviews its sample members every four months for 32 months. Movers are traced and interviewed as long as they remain in the civilian non-institutionalized population. People who become institutionalized are traced but not interviewed, unless they renter the non-institutionalized population during the life of the panel. Persons moving abroad or into barracks are not followed. Coresidents are interviewed as long as they continue to live with a longitudinal respondent.

7. OPERATIONAL ISSUES RELATED TO NON-RESPONDENTS IN SLID

The following rules as described above are not complete without a description of procedures used in the survey when respondents cannot be located or when they refuse to participate in a particular wave. The success of a longitudinal survey clearly hinges on its ability to locate respondents and obtain their cooperation. There is however a point at which the costs of follow-up outweigh the benefits.

Refusals

The plan for refusals is to send a letter encouraging collaboration in future interviews, and attempt again to interview at the next opportunity. This approach was tried in our field test in 1993, and 25% who refused the labour interview in January agreed to participate in the income interview in May. If there are two refusals in a row, the respondent is dropped from the sample and will not be reinterviewed.

"Hard refusals" -- people who have telephoned the Regional Office to indicate that they do not want to participate are dropped from the sample without any attempt to convert.

Other non-response

In all other cases of non-response, there is an attempt to interview the next time. If there are three successive instances of non-response (for example, the labour and income interviews for a year, and the next labour interview), the person is dropped from the sample.

APPENDIX -- TERMS AND DEFINITIONS

Cohabitant

A person sharing a dwelling with a longitudinal respondent at some point after panel selection. Cohabitants are interviewed as long as they continue to live with a longitudinal respondent.

Eligibility

Depending on age, respondents are eligible for various questionnaires. Fifteenyear-olds complete a preliminary interview, as do joiners aged 16 and over. For purposes of determining eligibility, age always refers to the respondent's age as of January 1 of the survey year.

Following rules

The set of procedures in a longitudinal survey governing who should be traced and who should be interviewed.

In scope/out of scope

Describes the status of a dwelling in terms of LFS frame from which the SLID sample was drawn. For example, institutions are not covered in the LFS frame; a longitudinal respondent who moves into an institution moves "out of scope". Longitudinal respondents who move to another dwelling in scope are invariably followed. Those who move out of scope are always traced; whether or not they are interviewed depends on a number of factors.

Institution

A health care or penal facility.

Joiner

A cohabitant being interviewed in SLID for the first time. Joiners complete a preliminary interview.

Longitudinal respondent

All people living in selected dwellings at the time of panel selection. Longitudinal respondents are followed and interviewed for six years, the lifespan of a panel.

Non-institutional collective dwelling

A boarding house, university dormitory or other living quarters shared by 10 or more unrelated persons. When a longitudinal respondent moves into a non-institutional collective dwelling, only other residents related by blood, marriage, common-law or adoption are interviewed as cohabitants.

Returner

A longitudinal respondent who rejoins a household he or she was part of at the time of an earlier interview. If a person's status as a returner is not detected, he or she may be double-counted.

Wave

A year of data collection. For example, the first wave of labour and income data will be collected in 1994 (and refer to activities and income during 1993). To distinguish the two separate collection periods in a year, the terms *Wave One--Labour* and *Wave One--Income* are used.