



# **Guide to the Labour Force Survey**

January 1997



Statistics  
Canada

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## TABLE OF CONTENTS

1	INTRODUCTION .....	1
2	BACKGROUND AND OBJECTIVES .....	1
3	DETERMINING LABOUR FORCE STATUS .....	2
4	DICTIONARY OF CONCEPTS AND DEFINITIONS .....	5
5	SURVEY METHODOLOGY .....	17
	5.1 Population Coverage .....	17
	5.2 Sample Design and Sample Size .....	17
	5.3 Sample Rotation.....	18
	5.4 Respondent Selection .....	18
6	DATA COLLECTION .....	19
	6.1 Interviewing for the LFS .....	19
	6.2 Supervision and Control.....	19
	6.3 Non-Response to the LFS .....	19
7	DATA PROCESSING.....	20
	7.1 Data Capture .....	20
	7.2 Editing .....	20
	7.3 Industry and Occupation Coding .....	21
	7.4 Creation of Derived Variables.....	21
	7.5 Weighting.....	21
	7.6 Seasonal Adjustment: LFS procedures .....	22
8	DATA QUALITY .....	23
	8.1 Non-Sampling Errors.....	23
	8.2 Sampling Errors .....	24
	8.3 Release criteria.....	25
	8.4 Approximate sampling variability table.....	25
9	INFORMATION PRODUCTS AND SERVICES .....	27

## 1. INTRODUCTION

The Labour Force Survey (LFS) is a household survey carried out monthly by Statistics Canada. Since its inception in 1945, the objectives of the LFS have been to divide the working-age population into three mutually exclusive classifications - employed, unemployed, and not in the labour force - and to provide descriptive and explanatory data on each of these categories. Data from the survey provide information on major labour market trends such as shifts in employment across industrial sectors, hours worked, labour force participation and unemployment rates.

## 2. BACKGROUND AND OBJECTIVES

The Canadian Labour Force Survey was developed following the Second World War to satisfy a need for reliable and timely data on the labour market. Information was urgently required on the massive labour market changes involved in the transition from a war-time to a peace-time economy. The survey was designed to provide estimates of employment by industry and occupation at the regional as well as the national level.

A quarterly survey initially, the LFS became a monthly survey in 1952. In 1960, the Interdepartmental Committee on Unemployment Statistics recommended that the LFS be designated the source of the official measure of unemployment in Canada. This endorsement was followed by a demand for a broader range of labour market statistics, in particular more detailed regional data. The information generated by the survey has expanded considerably over the years with a major redesign of the survey content in 1976 and again in 1997, and provides a rich and detailed picture of the Canadian labour market.

The LFS is the only source of monthly estimates of total employment including the self-employed, full and part-time employment, and unemployment. It publishes monthly standard labour market indicators such as the unemployment rate, the employment rate and the participation rate. The LFS is a major source of information on the personal characteristics of the working-age population, including age, sex, marital status, educational attainment, and family characteristics.

Employment estimates include detailed breakdowns by demographic characteristics, industry and occupation, job tenure, and usual and actual hours worked. The survey incorporates questions permitting analyses of many topical issues, such as involuntary part-time employment, multiple job-holding, and absence from work. Since January 1997, it also provides monthly information on the wages and union status of employees, as well as the number of employees at their workplace and the temporary or permanent nature of their job.

Unemployment estimates are produced by demographic group, duration of unemployment, and activity before looking for work. Information on industry and occupation, and reason for leaving last job is also available for persons currently unemployed or not in the labour market with recent labour market involvement.

In addition to providing national and provincial estimates, the LFS also releases estimates of labour force status for subprovincial areas such as Economic Regions and Census Metropolitan Areas.

### 3. DETERMINING LABOUR FORCE STATUS

The concepts of employment and unemployment are derived from the theory of the supply of labour as a factor of production. The production referred to is in turn defined as those goods and services included in the System of National Accounts. For this reason, unpaid housework and volunteer work are not counted as work by the survey, although these activities need not differ from paid work, either in purpose or in the nature of the tasks completed.

While the logical and precise unit of measurement of total labour supply is person-hours, the conceptual terms of reference for the survey require that individual members of the population be classified as employed, unemployed, or not in the labour force. Accordingly, persons who are supplying services in the reference period, regardless of the quantity supplied, are classified as employed while those who provide evidence that they are offering their labour services to the market (again regardless of quantity) are classified as unemployed. The remainder of the population, those neither currently supplying nor offering their labour services, are referred to as persons not in the labour force.

The concepts and definitions of employment and unemployment adopted by the survey are based on those endorsed by the International Labour Organisation (ILO).

**EMPLOYMENT:** Employed persons are those who, during the reference week:

- (a) did any work at all at a job or business, that is, paid work in the context of an employer-employee relationship, or self-employment. It also includes unpaid family work, which is defined as unpaid work contributing directly to the operation of a farm, business or professional practice owned and operated by a related member of the same household; or
- (b) had a job but were not at work due to factors such as own illness or disability, personal or family responsibilities, vacation, labour dispute or other reasons (excluding persons on layoff, between casual jobs, and those with a job to start at a future date.

**UNEMPLOYMENT:** Given the concept of unemployment as the unutilized supply of labour, the operational definition of unemployment is based primarily on the activity of job search and the availability to take a job. In addition to being conceptually appropriate, job search activities can, in a household survey, be objectively and consistently measured over time. The definition of unemployment is therefore the following:

Unemployed persons are those who, during reference week:

- a) were on temporary layoff during reference week with an expectation of recall and were available for work, or
- b) were without work, had actively looked for work in the past four weeks, and were available for work, or
- c) had a new job to start within four weeks from reference week, and were available for work.

Persons are regarded as available if they reported that they could have worked in the reference week if a suitable job had been offered (or recalled if on temporary layoff); or if the reason they could not take a job was of a temporary nature such as: because of own illness or disability, personal or family responsibilities, because they already have a job to start in the near future, or because of vacation (prior to 1997, those on vacation were not considered available). Full-time students currently attending school and looking for full-time work are not considered to be available for work during the reference week. They are assumed to be looking for a summer or co-op job or permanent job to start sometime in the future, and are therefore not part of the current labour supply.

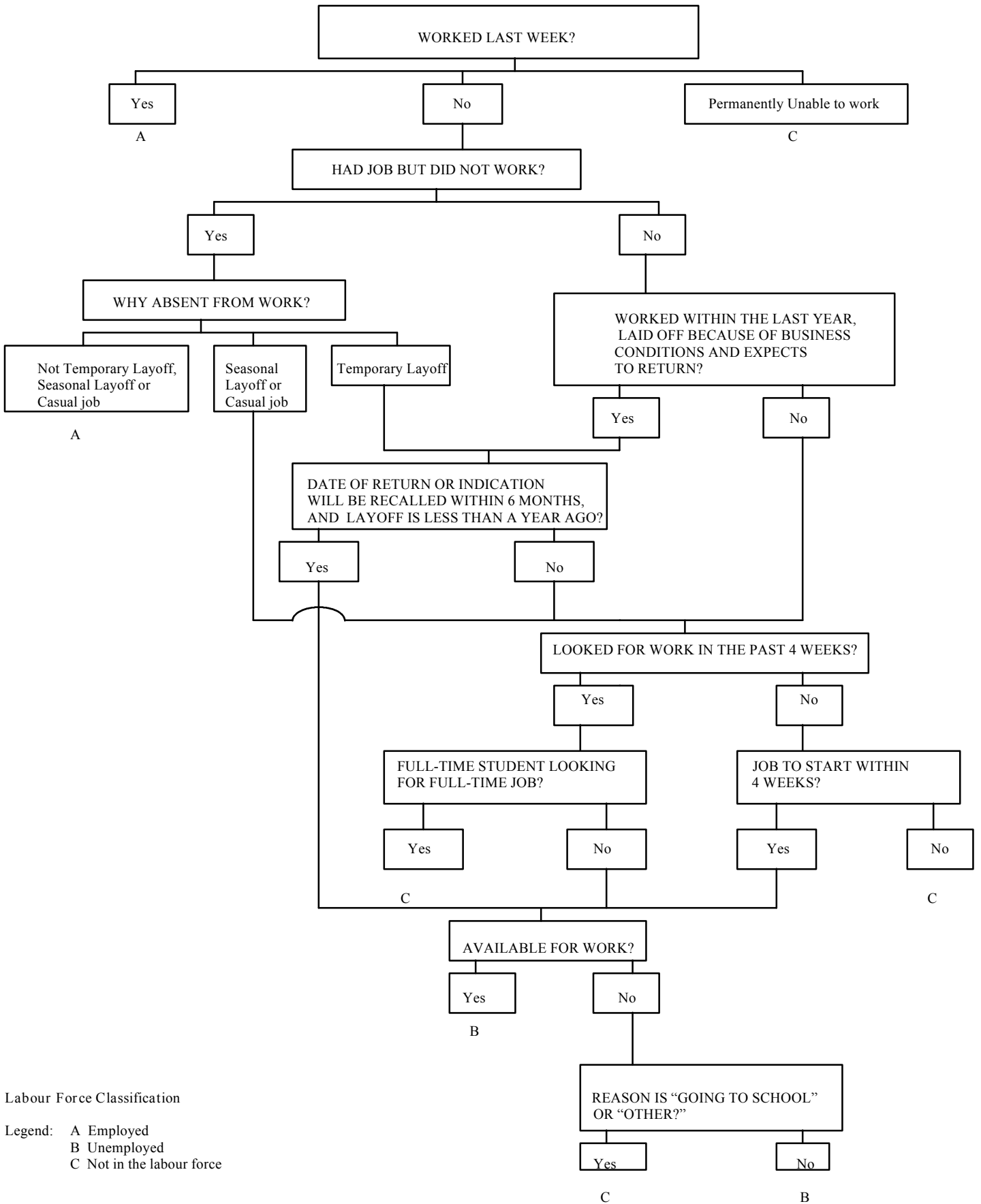
Note that in the above definition there are two groups for which job search is not required: persons on temporary layoff and persons with a job to start at a definite date in the future. Persons on layoff are included among the unemployed on the grounds that their willingness to supply labour services is apparent in their expectation of returning to work. A similar argument is applied for persons who will be starting at a new job in four weeks or less.

Finally, for the purposes of measuring job search as part of the identification of the unemployed, the LFS uses a four-week search period although the reference period for identifying the employed is that of one week. The justification for the difference is that delays inherent in job search (for example, periods spent awaiting the results of earlier job applications) require that the active element of looking for work be measured over a period greater than one week if a comprehensive measure of job search is to be obtained.

**NOT IN THE LABOUR FORCE:** Persons not in the labour force are those who, during the reference week, were unwilling or unable to offer or supply labour services under conditions existing in their labour markets, that is, they were neither employed nor unemployed.

### 3.1. Labour Force Classification and the LFS questionnaire

A labour force status classification (i.e.employed, unemployed, and not in the labour force) is assigned to each respondent aged 15 and over, according to their responses to a number of questions during the interview. The following decision table illustrates how the classification is derived.



#### 4. DICTIONARY OF CONCEPTS AND DEFINITIONS

The LFS dictionary provides users with definitions of terms and variables associated with the survey. Where appropriate, changes to definitions through time are documented.

**ABSENCE FROM WORK:** See HOURS (Hours lost).

**ACTIVITY PRIOR TO UNEMPLOYMENT:** Main activity before looking for work. Distinguishes between those who were working (that is, job leavers, job losers and temporary layoffs) and those who were not in the labour force but were keeping house, going to school, or involved in some other type of activity.

**AGE:** Age is collected for every household member in the survey, and the information on labour market activity is collected for all persons aged 15 and over. Prior to 1966, information on labour market activity was collected for persons aged 14 and over. Beginning January 1997, date of birth is collected to ensure inclusion of respondents who turn 15 during their six month rotation in the survey.

**AVAILABILITY:** Persons are regarded as available if they reported that they could have worked in the reference week if a suitable job had been offered (or recalled if on temporary layoff); or if they could not take a job because of their own illness or disability, personal or family responsibilities, because they already have a job to start in the near future, or because of vacation (Prior to 1997, those on vacation were not considered available). Full-time students currently attending school and looking for full-time work are not considered to be available for work during the reference week. They are assumed to be looking for a summer or co-op job or permanent job to start sometime in the future.

**AVERAGE HOURS WORKED:** See HOURS.

**AVERAGE WEEKLY/HOURLY WAGES:** See WAGES.

**CENSUS METROPOLITAN AREA (CMA):** Labour market area with an urbanised core (or continuously built-up area) having at least 100,000 inhabitants. A CMA is generally known by the name of the urban area forming the urbanised core.

CMA's include: (1) municipalities completely or partly inside the urbanised core; and (2) other municipalities if (a) at least 40% of the employed labour force living in the municipality works in the urbanised core (commuting flow to the urbanized core), or (b) at least 25% of the employed labour force working in the municipality lives in the urbanised core (commuting flow from the urbanized core).

**CLASS OF WORKER:** See STATUS IN EMPLOYMENT.

**DISCOURAGED SEARCHER:** (also called **DISCOURAGED WORKER**) Since 1997, discouraged searchers are defined as those persons who reported wanting to work at a job or business during reference week and were available but who did not look for work because they believed no suitable work was available. Prior to January 1997, the definition of discouraged searcher was limited to those who looked for work within the previous 6 months but not during the last 4 weeks although they were available, and did not look because they believed no suitable work was available. The change in concept and question wording results in a complete break in the series.

**DURATION OF JOBLESSNESS:** Number of months or years elapsed since persons who are not currently employed last worked, provided that they worked at some time in the past.

**DURATION OF UNEMPLOYMENT:** Number of continuous weeks during which a person has been on temporary layoff or without work and looking for work. Respondents are required to look for work at least once every four weeks, they are not required to undertake job search activities each week in order to be counted as unemployed. The LFS measures the duration of incomplete spells of unemployment, since the information is collected only from those currently unemployed. A spell of unemployment is interrupted or completed by any period of work or withdrawal from the labour force.

**DWELLING:** Any set of living quarters that is structurally separate and has a private entrance outside the building or from a common hall or stairway inside the building.

**EARNINGS:** See **WAGES**.

**ECONOMIC REGION:** LFS Economic Regions (ERs) have been established at each decennial sample redesign in consultation with the provinces. The regions generally correspond to regions used by the province for administrative and statistical purposes. The LFS ERs coincide with the official Subprovincial Regions (SPRs) defined by Standards Division in consultation with the provinces, for use in dissemination of subprovincial data by Statistics Canada.

**EDUCATIONAL ATTAINMENT:** Highest level of schooling completed. Questions relating to educational attainment were changed in 1990, to better capture the relationship between educational attainment and labour market outcomes.

From 1975 to 1989: data on primary and secondary education reflected the number of years of primary and secondary education completed. In the case of those whose highest level was grades 11 through 13, no attempt was made to determine if the respondent had actually graduated. However, post-secondary education was limited to the education which normally requires high school graduation. In addition, information on type of post-secondary was limited to three categories: 1) some post-secondary; 2) post-secondary certificate or diploma; 3) university degree.

Beginning January 1990: data on primary and secondary education reflects the highest grade completed. This provides a more consistent measure for those who accelerate or fail a grade than did years of school. A question on high school graduation has also been added since it is generally



believed that persons who have never completed their secondary education have greater difficulty competing in the labour market. With the new questions, any education that could be counted towards a degree, certificate or diploma from an educational institution is taken as post-secondary education. The change allows more persons into the post-secondary education category. For example, trades programs offered through apprenticeship, vocational schools or private trade schools do not always require high school graduation. Such education is now considered as post-secondary while only primary or secondary would have been recognised prior to 1990. Finally, more information is collected on the type of post-secondary education: 1) some post-secondary; 2) trades certificate or diploma from a vocational or apprenticeship training; 3) Non-university certificate or diploma from a community college, CEGEP, school of nursing, etc.; 4) University certificate below bachelors degree; 5) Bachelors degree; and 6) University degree or certificate above bachelors degree.

EMPLOYEE: See STATUS IN EMPLOYMENT.

EMPLOYMENT: Employed persons are those who, during the reference week did any work for pay or profit, or had a job and were absent from work. (See Section 3: DETERMINATION OF LABOUR FORCE STATUS for more detail).

EMPLOYMENT RATE: (employment/population ratio) Number of employed persons expressed as a percentage of the population 15 years of age and over. The employment rate for a particular group (age, sex, marital status, province, etc.) is the number employed in that group expressed as a percentage of the population for that group.

ESTABLISHMENT SIZE: See WORKPLACE SIZE.

EXTRA HOURS WORKED: See HOURS.

FAMILY: The LFS identifies families according to the criteria for "Economic families": a group of two or more persons who live in the same dwelling and who are related by blood, marriage (including common-law) or adoption. A person living alone or who is related to no one else in the dwelling where he or she lives is classified as an unattached individual.

FLOWS INTO UNEMPLOYMENT: Characterises the unemployed in terms of their activity immediately prior to looking for work. See JOB LEAVERS, JOB LOSERS, RE-ENTRANTS and NEW ENTRANTS.

FULL-TIME EMPLOYMENT: See TYPE OF WORK.

FUTURE STARTS: Persons who did not have a job during the survey reference week and did not search for work within the previous four weeks, but were available to work and had a job to start within the next four weeks. These persons are classified as unemployed, despite the lack of job search within the previous four weeks, since it is apparent that they are part of the current supply of labour. In contrast, those with jobs to start at a later time than the next four weeks are

designated as long-term future starts and are classified as not in the labour force since they are not part of current labour supply.

**GOODS-PRODUCING INDUSTRIES** (or goods sector, or goods industries): Includes agriculture, other primary industries (forestry; fishing and trapping; mines, quarries and oil wells), manufacturing, construction, and utilities (electric power, gas and water).

**GOVERNMENT SECTOR:** See PUBLIC/PRIVATE SECTOR.

**HEAD OF FAMILY:** See REFERENCE PERSON.

## HOURS

**Variable hours:** Beginning January 1997, information is collected to determine if the number of hours worked varies from week to week. In these cases, usual hours worked are calculated as the average of the hours worked in the last 4 weeks.

**Actual hours worked:** Number of hours actually worked by the respondent during the reference week, including paid and unpaid hours.

**Usual hours worked:** Prior to January 1997, usual hours were the number of hours usually worked by the respondent in a typical week, regardless of whether they were paid. Beginning January 1997, usual hours for employees refers to their normal paid or contract hours, not counting any overtime. However, the definition of usual hours remains unchanged for the self-employed and unpaid family workers.

**Average hours worked:** Average number of hours worked per week, usual or actual, is calculated by dividing total hours by the total number of employed persons.

Also available is the average number of actual hours worked per week calculated by excluding persons who were not at work during the reference week.

**Hours lost (Absence from work):**

A distinction is made between those who lose hours from work because they missed part of the work week or the full work week. Reasons for the absence are collected for both situations.

**Part-week absence:** Collected for employees only. Reasons for absence include: own illness or disability, personal or family responsibilities, maternity leave (females only), vacation, weather, labour dispute, job started or ended during reference week, holiday, working short time, other reasons.

**Full-week absence:** Collected for all employed persons. Reasons for absence include: own illness or disability, personal or family responsibilities, maternity leave (females only), vacation, labour dispute, work schedule, self-employed (no

work available), seasonal business (self-employed), other reasons. The number of full weeks absent from work are recorded. In addition, employees and self-employed with an incorporated business are asked if they received wages or salary for any time off in reference week.

**Extra hours worked:** The number of hours worked during the reference week in excess of the usual hours reported in all jobs combined. It includes all extra hours, whether the work was done at a premium or regular wage rate, or without pay. Since January 1997, extra hours are collected from employees only, in the form of 2 questions: number of paid overtime hours worked in reference week, and number of extra hours worked without pay.

**Paid overtime:** includes any hours worked during the reference week over and above standard or scheduled paid hours, for overtime pay or compensation (including time off in lieu).

**Extra hours without pay (unpaid overtime):** refers to time spent directly on work or work-related activities over and above scheduled paid hours. These must be extra hours worked for which the respondent received no additional compensation.

**HOUSEHOLD:** Any person or group of persons living in a dwelling. A household may consist of any combination of: one person living alone, one or more family, a group of people who are not related but who share the same dwelling.

**INDUSTRY:** The general nature of the business carried out by the employer for whom the respondent works (main job only). If a person did not have a job during the survey reference week, the information is collected for the last job held, providing the person worked within the previous twelve months.

**INVOLUNTARY PART-TIME:** See REASON FOR WORKING PART-TIME.

**JOB LEAVERS:** Persons currently not employed, who last worked within the previous year and left that job voluntarily. That is, the employer did not initiate the termination. Detailed reasons collected are: own illness, personal or family responsibilities, going to school, no specific reason, changed residence, dissatisfied with job, retired. Since 1997, further detail is available, including business sold or closed down (self-employed only), pregnancy.

**JOB LOSERS:** Persons currently not employed, who last worked within the previous year and left that job involuntarily (employer initiated because of business conditions, downsizing etc.). Prior to 1997, this category was broken down into those on temporary layoff and those laid off on a permanent basis. Since January 1997, more detail for reason for permanent layoff is available: end of seasonal job; end of temporary, term or contract job; casual job, no work; company moved; company went out of business; laid off due to business conditions with no expectation of recall; dismissal by employer; other reasons.

**JOB PERMANENCY:** Beginning January 1997, information is collected to allow the categorization of paid jobs as either permanent or temporary. This classification is based on the

intentions of the employer, and characteristics of the job, rather than the intentions of the employee. If a job that was formerly considered permanent is ending in the near future because of downsizing or closure, it is still regarded as permanent.

**Permanent:** A permanent job is one that is expected to last as long as the employee wants it, given that business conditions permit. That is, there is no pre-determined termination date.

**Temporary:** A temporary job has a predetermined end date, or will end as soon as a specified project is completed. Information is collected to allow the sub-classification of temporary jobs into four groups: seasonal; temporary, term or contract, including work done through a temporary help agency; casual job; and other temporary work.

**JOB SEARCH:** See METHOD OF JOB SEARCH.

**JOB SECURITY:** See JOB PERMANENCY.

**JOB TENURE:** The number of consecutive months or years a person has worked for the current (or, if employed within the previous twelve months, the most recent) employer. The employee may have worked in one or more occupations or in one or more locations, or have experienced periods of temporary layoff with recall and still be considered to have continuous tenure if the employer has not changed. But if a person has worked for the same employer over different periods of time, job tenure measures the most recent period of uninterrupted work.

**LABOUR FORCE:** Civilian non-institutional population 15 years of age and over who, during the survey reference week, were employed or unemployed. Prior to 1976, persons aged 14 and over were covered by the survey.

**LABOUR FORCE BY INDUSTRY OR OCCUPATION:** See UNEMPLOYMENT BY INDUSTRY OR OCCUPATION.

**LABOUR FORCE STATUS:** Designates the status of the respondent vis-à-vis the labour market: a member of the non-institutional population 15 years of age and over is either employed, unemployed, or not in the labour force. See Section 4: DETERMINING LABOUR FORCE STATUS.

**MAIN JOB:** When a respondent holds more than one job or business, the job or business involving the greatest number of usual hours worked is considered to be the main job. The full or part-time status and industry and occupation information available from the survey refer to the main job, as does information for employees on wages, union status, job permanency, and workplace size.

**MARITAL STATUS:** Refers to the marital status reported by the respondent. No differentiation is made between married and common-law relationships, both are classified as married in the

survey. The classification of single is reserved for those who have never married, otherwise, respondents are classified as either widowed or separated/divorced.

**METHOD OF JOB SEARCH:** Identifies the various methods of job search activities undertaken by unemployed persons in the previous four weeks. If more than one method is used, each one is recorded. Search methods include: checked with public employment agency, private employment agency, union, employers directly, friends or relatives, placed or answered ads, looked at job ads, other methods.

**MULTIPLE JOB HOLDER:** Persons who, during the reference week, were employed in two or more jobs simultaneously. This group is sometimes referred to as “Moonlighters”.

**NEW ENTRANTS:** Persons entering the labour force in search of their first job (unemployed).

**NOT IN THE LABOUR FORCE:** See SECTION 4: DETERMINING LABOUR FORCE STATUS.

**OCCUPATION:** Refers to the kind of work persons were doing during the reference week, as determined by the kind of work reported and the description of the most important duties. For those not currently employed, information on occupation is collected for the most recent job held within the previous year.

**OTHER JOB:** (See also MAIN JOB) Information collected on the second job of multiple job holders and the old job of those who changed jobs during reference week is limited to: usual hours, actual hours worked, and status in employment.

**PAID WORKER:** See STATUS IN EMPLOYMENT.

**PARTICIPATION RATE:** Total labour force expressed as a percentage of the population aged 15 years and over. The participation rate for a particular group (for example, women aged 25 years and over) is the labour force in that group expressed as a percentage of the population for that group.

**PART-TIME EMPLOYMENT:** See TYPE OF WORK and REASON FOR WORKING PART-TIME.

**PERMANENT JOB:** See JOB PERMANENCY.

**PERSONAL OR FAMILY RESPONSIBILITIES:** beginning January 1997, more detail is collected on the personal or family reasons for the following data items: reason for absence from work, reason for leaving last job, reason for working part-time, and reason for not looking for work. The greater detail includes a) caring for own children; b) caring for elder relative, and c) other personal or family reasons. Pregnancy is also included in the response list for the question on reason for leaving last job, and maternity is included in the response list for the question on reason for absence from work.

**POPULATION:** The target population covered by the survey corresponds to all persons aged 15 years and over residing in the provinces of Canada, with the exception of the following: persons living on Indian reserves, full-time members of the regular Armed Forces, and persons living in institutions (for example, inmates of penal institutions and patients in hospitals or nursing homes who have resided in the institution for more than six months).

**PUBLIC/PRIVATE SECTOR EMPLOYMENT:** The public sector includes employees in public administration at the federal, provincial and municipal levels, as well as in Crown corporations, liquor control boards and other government institutions, such as schools, government owned hospitals and public libraries. The private sector comprises all other employees and self-employed owners of businesses (including unpaid family workers in those businesses), and self-employed persons without businesses.

**REASON FOR LEAVING LAST JOB:** Asked of all persons classified as unemployed or not in the labour force who last worked within the previous year. See Job Losers and Job Leavers for detailed reasons.

**REASON FOR NOT LOOKING FOR WORK:** Beginning January 1997, asked of those who were not employed and did not search for work, but said they wanted work during reference week. Prior to 1997, asked of persons who had looked for work in the previous six months but not during the past four weeks. See also DISCOURAGED SEARCHERS.

**REASON FOR TIME LOST/ABSENCE FROM WORK:** See Hours lost.

**REASON FOR WORKING PART-TIME:** (See also TYPE OF WORK) Prior to the introduction of the revised questionnaire in January 1997, the question on reason for working part-time was asked of all persons whose total usual work hours at all jobs or businesses were below 30 per week. Reasons included: own illness, personal or family responsibilities, going to school, could only find part-time work, did not want full-time work, other, and full-time work under 30 hours. This last category of respondents were redefined as full-time workers and not counted in any part-time estimates. The involuntary part-time rate was calculated by dividing those who reported they could only find part-time work by the total employed part-time.

Beginning January 1997, all respondents who usually worked less than 30 hours per week at their main or only job are asked if they want to work more or less than 30 hours at a (single) job or business. Depending on the response, the main reason for working part-time is collected. For those who respond that they want to work less than 30 hours, the main reason for not wanting to work 30 or more hours per week is collected. Responses include: own illness, personal or family responsibilities, going to school, personal preference, other.

For those who respond that they want to work 30 or more hours per week, the main reason for working less than 30 hours is collected. Responses include: own illness, personal or family responsibilities, going to school, business conditions, could not find work with 30 or more hours, other. Those whose response is “business conditions” or “could not find work with 30 or more

hours” are then asked if they looked for work with 30 or more hours during the past four weeks. Those who searched for full-time work are considered to be involuntary part-time workers. The involuntary part-time rate is calculated by dividing this group by the total number of persons working part-time at their main or only job. The change in concepts and definitions introduced in January 1997 results in a complete break in the involuntary part-time series.

**RE-ENTRANTS:** Persons currently unemployed who had worked in the past and were out of the labour force for some time following separation from their last job.

**REFERENCE PERSON:** At the time of interview the respondent designates a reference person for the family. The reference person is normally an adult with responsibility for the care or support of the family. The relationship of each family member to that reference person is recorded. See also **RELATIONSHIP TO FAMILY REFERENCE PERSON**.

**REFERENCE WEEK:** The entire calendar week (from Sunday to Saturday) covered by the Labour Force Survey each month. It is usually the week containing the 15th day of the month. The interviews are conducted during the following week, called the Survey Week, and the labour force status determined is that of the reference week.

**RELATIONSHIP TO FAMILY REFERENCE PERSON:** Relationship of each family member to the person who has been identified as the reference person (i.e. Someone with responsibility for the care or support of the family). Relationships include: self, spouse, son or daughter, grandchild, son or daughter-in-law, foster child, parent, parent-in-law, brother or sister, other relative.

**RETURNING STUDENTS:** Since a majority of students are not attending school during the summer, supplementary questions are asked from May to August to identify those who are on summer break so that their labour market situation can be monitored. Youths (aged 15 to 24) are given the status of ‘returning student’ if they reported that they were attending school full-time in the previous March and intend to return to school full-time in the fall. Information is also available for those who were full-time students in the previous March but do not intend to return to school full-time or are unsure of their intentions.

**SCHOOL ATTENDANCE:** Establishes whether or not a respondent is attending an educational establishment. For those who are students, information is collected on the type of school, and whether enrolment is full or part-time, as designated by the educational establishment.

**SEASONAL ADJUSTMENT:** Fluctuations in economic time series are caused by seasonal, cyclical and irregular movements. A seasonally adjusted series is one from which seasonal movements have been eliminated. Seasonal movements are defined as those which are caused by regular annual events such as climate, holidays, vacation periods and cycles related to crops, production and retail sales associated with Christmas and Easter. It should be noted that the seasonally adjusted series contain irregular as well as longer-term cyclical fluctuations.

The seasonal adjustment program is a complicated computer program which differentiates

between these seasonal, cyclical and irregular movements in a series over a number of years and, on the basis of past movements, estimates appropriate seasonal factors for current data. On an annual basis, the historic series of seasonally adjusted data are revised in light of the most recent information on changes in seasonality.

SELF-EMPLOYED: See STATUS IN EMPLOYMENT.

SENIORITY: See JOB TENURE.

SERVICE-PRODUCING INDUSTRIES (or service sector or service industries): Includes transportation, storage, communications; trade (wholesale and retail); finance, insurance and real estate; community, business and personal services (services); and public administration.

STATUS IN EMPLOYMENT: There are two broad categories of workers: Those who work for others and those who work for themselves. These two groups can be subdivided into a total of seven classes of workers as described below. (See also PUBLIC AND PRIVATE EMPLOYMENT).

Employees:

Employees (private): Those who work as employees of a private firm or business.

Employees (government or public): Those who work for a local, provincial or federal government, for a government service or agency, a crown corporation, or a government owned public establishment such as a school or a hospital.

Self-employed:

Working owners of incorporated businesses: Working owners of an incorporated business, farm or professional practice. This group is further subdivided as follows:

With paid help  
Without paid help

Working owners of unincorporated businesses and other self-employed: Working owners of a business, farm or professional practice that is not incorporated and self-employed persons who do not have a business (for example, baby-sitters, newspaper carriers). This group is further subdivided as follows:

With paid help  
Without paid help

Unpaid family workers: Persons who work without pay on a farm or in a business or professional practice owned and operated by another family member living in the same dwelling.



Note: The definition of a Paid Worker may vary depending on the nature of the analysis. Those concerned with estimating the number of workers associated with total labour income usually include both employees and the self-employed with an incorporated business in estimates of paid workers. In contrast, most labour market analysts include only employees in paid worker estimates, while incorporated owners are grouped with the rest of the self-employed.

STUDENT: See SCHOOL ATTENDANCE and RETURNING STUDENTS.

TEMPORARY LAYOFF: Persons on temporary layoff are employees who did not work during the reference week because they had been temporarily released by their employer due to business conditions (not enough work, drop in orders or sales, retooling etc.). They must have a definite date to return to work, or an indication from their employer that they will be recalled in the future, and they must be available for work during the reference week. Persons on temporary layoff are not required to undertake any job search in order to be counted as unemployed.

Prior to January 1997 the wording and structure of the questionnaire was such that it was likely that a number of persons on temporary layoff were not identified as such, and were classified as “not in the labour force” rather than “unemployed”. The 1997 redesign addressed this problem, resulting in a higher number of identified persons on temporary layoff. These changes result in a break in the temporary layoff series. Since those on temporary layoff account for a small proportion of the unemployed (less than 10%) the impact of these changes on the overall unemployment rate is negligible.

TEMPORARY WORK: See JOB PERMANENCY.

TENURE: See JOB TENURE.

TYPE OF WORK: Full-time or part-time work schedule. Full-time employment consists of persons who usually work 30 hours or more per week at their main or only job. Part-time employment consists of persons who usually work less than 30 hours per week at their main or only job. This information is available for those currently employed or who last worked within the previous year. Note: prior to 1996, full-time and part-time had been defined according to usual hours at all jobs, and those who considered their work schedule of less than 30 hours per week to be full-time work were classified as full-time workers. In January 1996, when the definition was revised, all historical data and records were adjusted to reflect this new definition. Thus, there is no break in part-time and full-time data series.

TYPE OF WORK SOUGHT: Identifies whether a job searcher is looking for full-time or part-time work. Unemployed persons on temporary layoff are classified as looking for full or part-time on the basis of their usual hours at their former job. This information is not available for non-searchers who are classified as unemployed because they have a job to start in the next four weeks (future-starts).

**UNATTACHED INDIVIDUALS:** Persons who live alone or who are not related to anyone else in the household. They are excluded from the family member counts.

**UNEMPLOYMENT:** Unemployed persons are those who, during reference week were available for work and were either on temporary layoff, had looked for work in the past four weeks or had a job to start within the next four weeks. See Section 3 DETERMINING LABOUR FORCE STATUS for more details.

**UNEMPLOYMENT BY INDUSTRY/OCCUPATION:** The LFS produces information on the number of unemployed, the unemployment rate and the labour force by industry and occupation. The basis for these categories is industry or occupation of last job for those currently unemployed who have held a job in the previous year. It is important to note that no information is collected on industry or occupation of job search. Thus, these data should be interpreted with caution. For example, a recent graduate of law school looking for work as a lawyer in a law firm, may have last held a job as a waiter in a restaurant. For this person, unemployment is attributed to the personal service industry and the services occupation.

**UNEMPLOYMENT RATE:** Number of unemployed persons expressed as a percentage of the labour force. The unemployment rate for a particular group (age, sex, marital status, etc.) is the number unemployed in that group expressed as a percentage of the labour force for that group.

**UNION STATUS:** Beginning January 1997, employees are classified as to their union status: a) union member; b) not a member but covered by a union contract or collective agreement; or c) non-unionised.

**UNPAID FAMILY WORKERS:** See STATUS IN EMPLOYMENT.

**USUAL HOURS WORKED:** See HOURS.

**WAGES:** Beginning January 1997, information is collected on the usual wages or salary of employees at their main job. Respondents are asked to report their wage/salary before taxes and other deductions, and include tips, commissions and bonuses. Weekly and hourly wages/salary are calculated in conjunction with usual paid work hours per week. Average hourly wages, average weekly wages, and wage distributions can then be cross-tabulated by other characteristics such as age, sex, education, occupation, and union status. Those who are paid on an hourly basis are also identified.

**WORK:** Includes any work for pay or profit, that is, paid work in the context of an employer-employee relationship, or self-employment. It also includes work performed by those working in family business without pay (unpaid family workers).

**WORKPLACE SIZE:** Beginning January 1997, the number of employees at the location of employment (i.e. building or compound) is collected from employees. Responses are recorded according to the following size groups: less than 20, 20 to 99, 100 to 500, more than 500. The

concept of location of employment approximates the concept of establishment used by many Statistics Canada business surveys.

## 5. SURVEY METHODOLOGY

### 5.1. Population Coverage

The LFS is a monthly household survey of a sample of individuals who are representative of the civilian, non-institutionalised population 15 years of age or older in Canada's ten provinces. Specifically excluded from the survey's coverage are residents of the Yukon<sup>1</sup> and Northwest Territories, persons living on Indian Reserves, full-time members of the Canadian Armed Forces and inmates of institutions. These groups together represent an exclusion of approximately 2% of the population aged 15 or over.

### 5.2. Sample Design and size

Canada's population lives in various geographic areas such as provinces and regions within provinces. For the purposes of sampling, the population in these areas is further partitioned into strata, in order to maximize the reliability of the estimates while keeping collection costs at a minimum. Households in strata are not selected directly. Instead each stratum is divided into clusters, and then a sample of clusters is selected in the stratum. Then, in each selected cluster, a sample of households is chosen. Chosen in this fashion, the sample is representative of the population.

The number of households sampled across the country has varied over the years as a result of varying levels of funding, and improvements in the survey design. The sample size has been 52,350 households since July 1995. The sample is allocated to provinces and strata within provinces in the way that best meets the need for reliable estimates at various geographic levels. These include national, provincial, census metropolitan areas (large cities), economic regions, and employment insurance regions. The following guidelines were used in sample allocation:

Canada and provinces: estimates of unemployment should not have a CV (standard error relative to the estimate)<sup>2</sup> greater than 2 percent for Canada, and 4 to 7 percent for the provinces.

Census Metropolitan Areas (CMAs)/Employment Insurance Regions: CVs of 15 percent or less for 3 month average estimates of unemployed.

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<sup>1</sup> Since 1992, the survey has been administered in the Yukon, using an alternative methodology that accommodates some of the operational difficulties inherent to remote locales. To improve reliability due to small sample size, estimates are available on a three month average basis only. These estimates are not included in national totals.

<sup>2</sup> See section 8.1 for explanation of sampling error and CVs (Coefficients of variation).

Economic Regions (ERs): CVs of 25 percent or less for 3 month average estimates of unemployed.

PROVINCE	SAMPLE SIZE (as of July 1995)
Newfoundland	1,884
Prince Edward Island	1,421
Nova Scotia	3,557
New Brunswick	2,988
Québec	10,567
Ontario	15,858
Manitoba	3,813
Saskatchewan	3,463
Alberta	3,991
British Columbia	4,808
CANADA	52,350

### 5.3. Sample rotation

The LFS follows a rotating panel sample design, in which households remain in the sample for six consecutive months. The total sample consists of six representative sub-samples or panels, and each month a panel is replaced after completing its six month stay in the survey. Outgoing households are replaced by households in the same or a similar area. This results in a five-sixths month-to-month sample overlap, which makes the design efficient for estimating month-to-month changes. The rotation after six months prevents undue respondent burden for households that are selected for the survey.

### 5.4. Respondent Selection

Demographic information is obtained for all persons in a household for whom the selected dwelling is the usual place of residence. LFS information is obtained for all civilian household members 15 years of age or older. Respondent burden is minimized for the elderly (age 70 and over) by carrying forward their responses for the initial interview to the subsequent five months in survey.

## 6. DATA COLLECTION

### 6.1. Interviewing for the LFS

Data collection for the LFS is carried out each month during the week following the LFS reference week. The reference week is normally the week containing the 15th day of the month.

Statistics Canada interviewers are part-time employees hired and trained to carry out the LFS and other household surveys. Each month they contact the sampled dwellings to obtain the required labour force information. Each interviewer contacts approximately 75 dwellings per month.

Dwellings new to the sample are usually contacted through a personal visit. The interviewer first obtains socio-demographic information for each household member and then obtains labour force information for all members aged 15 and over who are not members of the regular armed forces. Provided there is a telephone in the dwelling and permission has been granted, subsequent interviews are conducted by telephone. As a result, approximately 85% of all households are interviewed by telephone. In subsequent monthly interviews the interviewer confirms the socio-demographic information collected in the first month and collects the labour force information for the current month.

In each dwelling, information about all household members is usually obtained from one knowledgeable household member. Such 'proxy' reporting, which accounts for approximately 65% of the information collected, is used to avoid the high cost and extended time requirements that would be involved in repeat visits or calls necessary to obtain information directly from each respondent.

If, during the course of the six months that a dwelling normally remains in the sample, an entire household moves out and is replaced by a new household, information is obtained about the new household for the remainder of the six-month period.

### 6.2. Supervision and Control

All LFS interviewers are under the supervision of a staff of senior interviewers who are responsible for ensuring that interviewers are familiar with the concepts and procedures of the LFS and its many supplementary surveys, and also for periodically monitoring their interviewers. The senior interviewers are, in turn, under the supervision of the LFS program managers, located in each of the six Statistics Canada regional offices.

### 6.3. Non-Response to the LFS

Non-response to the LFS tends to average about 5% of eligible households. Interviewers are instructed to make all reasonable attempts to obtain LFS interviews with members of eligible

households. For individuals who at first refuse to participate in the LFS, a letter is sent from the Regional Office to the dwelling address stressing the importance of the survey and the household's co-operation. This is followed by a second call (or visit) from the interviewer. For cases in which the timing of the interviewer's call (or visit) is inconvenient, an appointment is arranged to call back at a more convenient time. For cases in which there is no one home, numerous call backs are made. Under no circumstances are sampled dwellings replaced by other dwellings for reasons of non-response.

Each month, after all attempts to obtain interviews have been made, a small number of non-responding households remain. For households non-responding to the LFS and for which LFS information was obtained in the previous month, this information is brought forward and used as the current month's LFS information. If no information is available, a weight adjustment is applied to account for non-responding households.

## 7. DATA PROCESSING

### 7.1. Data Capture

Since 1994, responses to survey questions are captured directly by the interviewer at the time of the interview using a computerized questionnaire on a lap-top computer. The computerized questionnaire reduces processing time and costs associated with data entry, transcription errors, and data transmission. The response data are encrypted to ensure confidentiality and sent via modem to the appropriate Statistics Canada Regional Office. From there they are transmitted over a secure line to Ottawa for further processing. Prior to the introduction of computer assisted interviewing (CAI), information was recorded by the interviewer on a paper questionnaire, which was then sent for data capture in the Regional Office before transmission to Ottawa.

### 7.2. Editing

Some editing is done directly at the time of interview. Where the information entered is out of range (too large or small) of expected values, or inconsistent with previous entries, the interviewer is prompted, through message screens on the computer, to correct the information. However, interviewers have the option of bypassing the edits, and of skipping questions if the respondent does not know the answer or refuses to answer. Therefore, the response data are subjected to further edit and imputation processes once they arrive in head office.

The editing and imputation phases of processing involve the identification of logically inconsistent or missing information items, and the correction of such conditions. Since the true value of each entry on the questionnaire is not known, the identification of errors can be done only through recognition of obvious inconsistencies (for example, a 15 year-old respondent who is recorded as having last worked in 1940). If a value is in fact wrong but reasonable, the erroneous value will find its way into the monthly statistics. For that reason

emphasis must be placed on quality controls and interviewer training to ensure that errors are both minimal in number and non-systematic in nature.

Where errors or omissions are detected, the erroneous or missing items are replaced by the imputation of logically consistent values. Such changes are made automatically by the edit and imputation system or through clerical intervention. These changes are based on pre-specified criteria, and may involve the internal logic of the questionnaire, reference to earlier month's information (if available), or the use of similar records to impute one or more values.

In all cases, editing changes are recorded and this information is used to assess various aspects of survey performance. These records of errors are also used to advise interviewers of mistakes made in the past in order to avoid repetition of these mistakes in the future.

### 7.3. Industry and occupation coding

In this process, industry and occupation codes are assigned using the respondent's job description on the questionnaire. The first step is an attempt to code each record using a computerized procedure. If this is unsuccessful, the coding is performed manually. In both cases, codes assigned are based on the classifications described in the Standard Industrial and Occupational Classification manuals.

### 7.4. Creation of Derived Variables

A number of data items (variables) on the microdata file are derived by combining items on the questionnaire according to classification rules. For example, labour force status is derived from specific combinations of responses to a number of survey questions regarding work activity, status in employment, job search, availability, etc..

### 7.5. Weighting

The sample data must be weighted to enable tabulations of estimates at national, provincial, and subprovincial levels of aggregation.

The sample design determines a certain number of weighting factors to be used in the calculation of the individual weights. The main component is the inverse of the probability of selection, known as the basic weight. For example, in an area where 2 percent of the households are sampled, each household would be assigned a basic weight of  $1/.02=50$ . The basic weight is then adjusted for any sub-sampling due to growth that may have occurred in the area. This weight is then adjusted for non-response and coverage error.

In the LFS, some survey non-response is compensated for by carrying forward last month's data if they are available and appropriate. Any remaining non-response is accounted for by adjusting the weights for the responding households in the same area. This non-response adjustment assumes that the characteristics of the responding households are not significantly different than the non-responding households. To the extent that this assumption is true, non-

response will not be a source of bias in the LFS estimates. The weights derived after the non-response adjustments are applied are called the subweights.

The final adjustment to the weight is made to correct for coverage errors. The subweights are compared to independently derived estimates of population and adjusted so that the survey estimates of population conform to these control totals. These final weights are used in the LFS tabulations.

## 7.6. Seasonal Adjustment: LFS procedures

Most estimates associated with the labour market are subject to seasonal variation, that is, annually-recurring fluctuations attributable to climate and regular institutional events such as vacations, and holiday seasons. Seasonal adjustment is used to remove these seasonal variations from almost 1,300 series from the LFS, in order to facilitate analysis of short-term change for major indicators such as employment and unemployment by age and sex, employment by industry, and employment by status in employment (employee or self-employed). Many of these indicators are adjusted at national and provincial levels. Main labour force status estimates are also seasonally adjusted for Census Metropolitan Areas (CMAs), and published as three-month moving averages to reduce irregular movements caused by relatively small sample sizes.

### Procedures

Seasonally adjusted estimates of overall employment and unemployment for Canada are derived by summing adjusted estimates for major age/sex groups (men aged 15 to 24, 25 to 54 and 55+; women aged 15-24, 25-54 and 55+). The resulting overall estimate is used as a benchmark for other seasonally adjusted series. For example, employment estimates by industry and status in employment are adjusted independently and then increased or decreased proportionately so that their total sums to the overall benchmark. This procedure is known as raking ratio adjustment.

Overall employment and unemployment estimates for the provinces are also derived by summing adjusted estimates for major age/sex groups (men 15-24, 25+; women aged 15-24, 25+). However, prior to the summation, the estimate for each age/sex group is raked to the corresponding national estimate. Similarly, estimates of employment by industry are raked to both the provincial employment total and the national estimates for each industry (2-way raking).

Seasonally adjusted estimates of labour force for any particular group are derived by adding the seasonally adjusted estimates of employment and unemployment for that group. Similarly, seasonally adjusted rates (e.g. unemployment rate, participation rate) are calculated by dividing the seasonally adjusted numerator by the seasonally adjusted denominator. In the case of the employment rate, only the numerator is seasonally adjusted since it is not appropriate to adjust population.



## Adjustment for reference week effect

The definition of the LFS reference week (usually the week with the 15th day of the month) implies that the actual dates of the week vary from year to year. This variability may impact on the month-to-month change in major labour market estimates. For example, more students may have finished exams and entered the labour market before the end of reference week in years when the 15th day of June falls near the beginning of the week, than is the case in years when the 15th falls near the end of reference week. In order to remove reference week effects so that the underlying trend is easier to interpret, prior adjustments have been made to benchmark series and their components. These adjustments compensate for early or late reference weeks.

## Adjustment for holiday effects on actual hours worked

In addition, actual hours of work are particularly affected by variability in the dates of the reference week combined with the presence of fixed (Remembrance Day) or moving holidays (Easter, Thanksgiving) during the reference week in some years but not in others. This variability introduces significant fluctuation in estimates of actual hours worked that is not removed by the usual seasonal adjustment procedures. Similarly, fluctuations can also occur in July, depending on the timing of the reference week relative to the usual vacation period which tends to peak in the latter half of July. The presence of these fluctuations can greatly distort the month-to-month movements of the seasonally adjusted series making trend analysis a rather difficult task.

In order to remove these distortions, permanent prior adjustment factors are applied to estimates of actual hours worked before seasonal adjustment is performed. These factors remove unusual holiday effects. That is, if a holiday usually occurs in reference week, priors are used to add this effect to estimates in years when the holiday does not occur. Conversely, for holidays that do not usually take place during reference week, priors are introduced to remove the holiday effect when it occurs.

Since holiday effects on actual hours worked vary a great deal from industry to industry depending on the characteristics of each regarding the observance of holidays and summer vacation practices, prior adjustments are calculated and performed separately for each major industry group.

## 8. DATA QUALITY

### 8.1. Non-Sampling Errors

Errors which are not related to sampling may occur at almost every phase of a survey operation. Interviewers may misunderstand instructions, respondents may make errors in answering questions, the answers may be incorrectly entered on the questionnaire and errors

may be introduced in the processing and tabulation of the data. These are all examples of non-sampling errors.

Over a large number of observations, randomly occurring errors will have little effect on estimates derived from the survey. However, errors occurring systematically will contribute to biases in the survey estimates. Considerable time and effort is made to reduce non-sampling errors in the survey. Quality assurance measures are implemented at each step of the data collection and processing cycle to monitor the quality of the data. These measures include the use of highly skilled interviewers, extensive training of interviewers with respect to the survey procedures and questionnaire, observation of interviewers to detect problems of questionnaire design or misunderstanding of instructions, edits to ensure that data entry errors are minimized and coding and edit quality checks to verify the processing logic.

## 8.2. Sampling Errors

The survey produces estimates based on information collected from and about a sample of individuals. Somewhat different estimates might have been obtained if a complete census had been taken using the same questionnaire, interviewers, supervisors, processing methods, etc. as those actually used in the survey. The difference between the estimates obtained from the sample and those resulting from a complete count taken under similar conditions is called the sampling error of the estimate. Since it is unavoidable that estimates from a sample survey are subject to sampling error, sound statistical practice calls for researchers to provide users with some indication of the magnitude of this sampling error. Approximate measures of sampling error accompany Labour Force Survey products and users are urged to make use of them while analysing the data.

A measure of the sampling error is the standard error. This measurement is based on the idea of selecting several samples, although in a survey only one sample is drawn and information is collected on units in that sample. Using the sampling plan, if a large number of samples were to be drawn from the same population, then about 68% of the samples would produce a sample estimate within one standard error of the census value and in about 95% of the samples it will be within two standard errors of the census value.

Sampling variability can also be expressed relative to the estimate itself. The standard error as a percentage of the estimate is called the coefficient of variation (CV) or the relative standard error. For LFS estimates, the CV is used to give an indication of the uncertainty associated with the estimates. Probability statements can also be made about CVs; for example, if an estimate is 100,000 with a CV of 7%, the true (census) value will lie between 93,000 and 107,000 with 68% certainty, and between 86,000 and 114,000 with 95% certainty.

Small CVs are desirable since the smaller the CV the smaller the sampling variability is relative to the estimate. The CV depends on the size of the estimate, the sample size that the estimate is based on, and the distribution of the sample. Of two estimates, the one with the larger sample will likely have a smaller sampling error; and, of two estimates of the same size the one referring to a characteristic that is more clustered geographically will have a larger

variability associated with it. In addition, estimates relating only to age and sex are usually more reliable than other estimates of comparable sample size because, in the LFS, the sample is calibrated by age, sex and geographic region to independent sources.

### 8.3. Release criteria

It is not possible to calculate exact measures of variability for each estimate released by the LFS. Since the size of the estimate is highly correlated with the degree of variability, the LFS suppresses estimates below the following levels:

	Minimum size for release (000s)
Estimates rounded to thousands	4.0
Estimates rounded to hundreds	
Canada	1.5
Newfoundland	0.5
Prince Edward Island	0.2
Nova Scotia	0.5
New Brunswick	0.5
Québec	1.5
Ontario	1.5
Manitoba	0.5
Saskatchewan	0.5
Alberta	1.5
British Columbia	1.5

### 8.4. Approximate sampling variability tables

The following tables give approximate coefficients of variation as a function of the size of the estimate and geography. The rows give the geographic area of the estimate while the columns indicate the resulting level of accuracy in terms of the CV, given the size of the estimate. To determine the CV for an estimate of size  $x$  in an area  $A$ , look across the row for area  $A$ , find the estimate that is less than or equal to  $x$ . Then the title of the column will give the approximate CV. For example, to determine the sampling error for an estimate of 42.0 thousand unemployed in Manitoba in August 1996, we find the closest but smaller estimate of 15.0 thousand giving a CV of 10%. Therefore, the estimate of 42,000 unemployed in Manitoba has a CV of roughly 10%.

The tables are supplied as a rough guide to the sampling variability. The sampling variability is modelled so that, given an estimate, approximately 75% of the CVs will be less than or

equal to the CVs derived from the table. There will, however, be 25% of the estimates that will have a CV somewhat higher than that given by the table.

Table A: CVs for Estimates\* of Monthly Totals for Canada and the Provinces

Geographic Area	Coefficient of Variation								
	1%	2.5%	5%	10%	15%	20%	25%	30%	50%
Canada	2,587.6	522.4	155.7	46.4	22.9	13.8	9.4	6.8	2.8
Newfoundland	840.9	160.4	45.8	13.1	6.3	3.7	2.5	1.8	0.7
PEI	164.4	36.0	11.4	3.6	1.9	1.2	0.8	0.6	0.3
Nova Scotia	633.0	137.8	43.5	13.7	7.0	4.3	3.0	2.2	0.9
New Brunswick	499.0	106.4	33.1	10.3	5.2	3.2	2.2	1.6	0.7
Québec	2,535.9	537.8	166.4	51.5	25.9	15.9	10.9	8.0	3.4
Ontario	2,521.7	530.9	163.3	50.3	25.2	15.5	10.6	7.8	3.3
Manitoba	606.5	139.3	45.8	15.0	7.8	4.9	3.5	2.6	1.1
Saskatchewan	684.0	145.6	45.2	14.0	7.1	4.4	3.0	2.2	0.9
Alberta	1,330.6	309.0	102.4	33.9	17.8	11.2	7.9	5.9	2.6
British Columbia	1,817.1	397.3	125.8	39.8	20.3	12.6	8.7	6.4	2.8

\* Estimates are in thousands.

Table B: CVs for Estimates\* of Annual Averages for Canada and the Provinces

Geographic Area	Coefficient of Variation								
	1%	2.5%	5%	10%	15%	20%	25%	30%	50%
Canada	1,207.9	227.8	64.5	18.3	8.7	5.2	3.4	2.5	1.0
Newfoundland	541.8	84.9	20.9	5.1	2.3	1.3	0.8	0.6	0.2
PEI	157.6	23.8	5.7	1.4	0.6	0.3	0.2	0.1	-
Nova Scotia	348.0	67.3	19.4	5.6	2.7	1.6	1.1	0.8	0.3
New Brunswick	315.6	55.5	14.9	4.0	1.9	1.1	0.7	0.5	0.2
Québec	1,576.8	256.0	64.7	16.4	7.3	4.1	2.7	1.8	0.7
Ontario	1,659.1	251.0	60.1	14.4	6.2	3.5	2.2	1.5	0.5
Manitoba	421.8	80.5	23.0	6.6	3.2	1.9	1.3	0.9	0.4
Saskatchewan	517.0	85.5	21.9	5.6	2.5	1.4	0.9	0.6	0.2
Alberta	942.9	172.8	47.9	13.3	6.3	3.7	2.4	1.7	0.7
British Columbia	1,085.7	195.0	53.2	14.5	6.8	4.0	2.6	1.9	0.7

\* Estimates are in thousands.

## 9. INFORMATION PRODUCTS AND SERVICES

A broad range of tabulated data compiled from the Labour Force Survey is contained in regular publications, on CD-ROM, and CANSIM (Statistics Canada's On-line electronic database). Analyses focusing on particular aspects of the labour market are published on a quarterly basis by the LFS. In addition, analytical articles based on LFS data frequently appear in popular Statistics Canada flagship publications such as Perspectives on Labour and Income, Canadian Social Trends, and the Canadian Economic Observer. However, the wealth of information that can be extracted from the survey, and the variety of questions that can be addressed, are far too vast for regular publication. In order to meet particular analytical needs, and address issues of current interest, the survey provides a custom tabulation service on a cost-recovery basis. A public use microdata file is also available for clients wishing to do their own data extractions and analyses.

### Catalogued publications

Monthly: Labour Force Information (Cat. 71-001-PPB)

This press release is available at 7 am on the morning of each monthly release. It contains an analysis of the latest labour market developments in the context of recent trends, charts of major data series, and tables of indicators for main demographic groups, industries, provincial and sub-provincial areas.

The timeliness and analytical content of this publication contribute to its popularity and use by the media, government and research institutions, etc. who need quick reference to the latest labour market trends. A fax service ensures timely delivery (Cat. 71-001-PFB).

The analytical commentary contained in this publication also appears electronically on the Statistics Canada Home page on the Internet (<http://www.statcan.ca>). It is updated at 7:00 am on the day of each monthly release, and is also carried in the Daily at 8:30 am the day of release.

Quarterly: The Labour Force: Update series (Cat. 71-001-XPB)

Beginning in 1997, The Labour Force (71-001) became a quarterly publication with an analytical focus. Each quarter it features the latest information and relevant trends relating to a particular issue in the labour market. Informative commentary, charts and analytical tables provide a concise and up-to-date reference on the topic as well as a useful starting point for further research. Each publication also contains a section about the survey, data reliability, dictionary of terms, and a guide to further sources of data on the topic.

Examples of topics covered by the quarterly are : Youths and the Labour Market, Work Hours, Wages, and Non-standard work.

Annual: Labour Force Historical Review on CD-ROM (71F0004XCB)

Introduced in 1995, this annual product contains thousands of cross-classified data series, spanning 1976 to latest complete calendar year. The software is easy to use and gives the user control over the content and time-period of each data view. Selected data can be easily printed or copied to other Windows-based software packages for further manipulation.

This product solves a number of problems in data dissemination: a single CD represents more than 7 feet of shelf space for the equivalent paper product; unlike paper products which become obsolete because of data revisions, changes to classification schemes, etc., the annual CD reflects the latest updates for official historical series; finally, the CD removes the time and expense and potential for error involved in transcribing data from paper.

Annual: Historical Labour Force Statistics (Cat. 71-201-XPB)

This publication provides a handy reference to the historical time series associated with the seasonally adjusted estimates presented in the monthly press release (71-001-PPB). Each year, the series are updated and revised according to the latest information on seasonal models and factors. The series presented in the publication are a sub-set of LFS's seasonally adjusted holdings, all of which are available electronically on CANSIM, and the annual Labour Force Historical Review on CD-ROM.

### CANSIM

A large selection of high-demand LFS monthly and annual average time series are available electronically through CANSIM, Statistics Canada's electronic on-line database. Series are updated at the time of release, and revised when appropriate. The base contains about 9,000 series (including about 1,300 seasonally adjusted series), updated on a monthly and annual basis.

### Custom tabulations

Custom tabulations can be arranged on an ad hoc or regular basis. This service enables users to specify tables and time series to meet their own requirements. For example, users may wish to have labour force estimates for age groups or educational levels that differ from those used in LFS publications. The LFS provides subject matter and tabulation expertise to ensure that the customized data package is accurate and appropriate.