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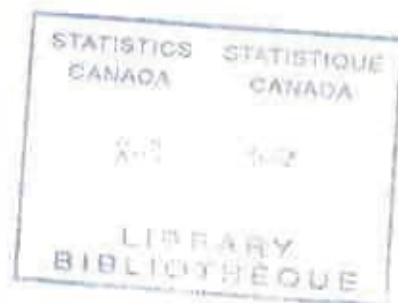


Catalogue 92-339E

Occupation

1991 Census Technical Reports

**According to the 1980
Standard Occupational
Classification**



21

Census



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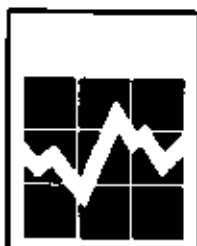
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Statistics Canada

1991 Census Technical Reports

Occupation According to the 1980 Standard Occupational Classification

Reference Products Series

Published by authority of the Minister responsible for Statistics Canada

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March 1994

Price: Canada: \$20.00
United States: US\$24.00
Other Countries: US\$28.00

Catalogue 92-339E

ISBN 0-660-14272-4

Ottawa

La version française de cette publication est disponible sur demande 92-339F

Note of Appreciation

Canada owes the success of its statistical system to a long-standing cooperation involving Statistics Canada, the population of Canada, its businesses and governments. Accurate and timely statistical information could not be produced without their continued cooperation and goodwill.

Canadian Cataloguing in Publication Data

Main entry under title:

Occupation According to the 1980 Standard Occupational Classification

(1991 census technical reports)

(Reference product series)

Issued also in French under title:

Profession selon la Classification type des professions de 1980

ISBN 0-660-14272-4

CS92-339E

1. Occupations -- Canada -- Statistics.

2. Canada -- Census, 1991 -- Handbooks, manuals, etc.

I. Statistics Canada. II. Title. III. Series.

HA741.5.1991 O32 1994 331.7'00971'021

C94-988046-9

How to Cite This Document

Statistics Canada. Occupation According to the 1980 Standard Occupational Classification.

1991 Census Technical Reports; Reference Products Series.

Ottawa: Minister of Industry, Science and Technology, 1994.

Catalogue number 92-339E.

Preface

Through time, the Census of Canada has become the primary source of information about Canadians and how they live. Decisions based on this information affect the social and economic affairs of all Canadians.

Statistics Canada, as the professional agency in charge of producing this information, has the responsibility for informing users of data quality. The agency must describe the concepts and methodology used in collecting and processing the data, as well as any other features that may affect their use or interpretation.

In order to describe the quality of the 1991 Census data, Statistics Canada has prepared the following publications: a census **Dictionary**, which provides concise and easy to understand textual and graphical information pertaining to census concepts; a **Handbook**, which provides an overview of how the census is conducted; and a series of **Technical Reports**, which present in greater detail, information on the quality of data for specific characteristics, such as occupation, as covered in this report.

Information on data quality is important for users. It allows them to assess the usefulness of census data for their purposes as well as the risks involved in basing conclusions or decisions on these data. The 1991 Census was a large and complex undertaking and, while considerable effort was taken to ensure high standards throughout all collection and processing operations, the resulting data are inevitably subject to a certain degree of error.

Information on data quality is also important to Statistics Canada. It is an integral part in the development and maintenance of pertinent and reliable statistical programs.

This publication is a major contribution to achieving these goals. It has been prepared by Nancy McLaughlin, with the support of staff from three Divisions in Statistics Canada: Labour and Households Surveys Analysis, Census Operations and Social Survey Methods.

Finally, I would like to express my appreciation to the millions of Canadians who completed their questionnaires on June 4, 1991, as well as to those who assisted Statistics Canada in planning and conducting the census.

Ivan P. Fellegi

Chief Statistician of Canada

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I. Introduction

Every five years a census of population is carried out in Canada. The national census of population is a major project conducted by Statistics Canada to collect, verify and publish data. The national census provides the most comprehensive database on the characteristics of Canadians, their families and their households. The information ranges from age and sex of individuals to their ethnic origin, education, occupation, labour force activity, industry, and sources of income, as well as their family and household characteristics. The census is an invaluable source of information that is useful to the various levels of government, to businesses, associations, educational institutions, interest groups, and to the general public. The data can be used in government planning of social and economic programs, assessment of the need for educational and health facilities, and planning by private enterprise.

Information is obtained through a series of questions established after detailed consultation and testing. It is collected by trained enumerators, checked for inconsistencies and entered into a computer database where missing and erroneous data are detected and corrected. The final results are stored in a computer database at Statistics Canada. Data are analyzed, published and disseminated in various forms.

In a massive project such as the census, however, the results are never perfect. Although considerable effort has been made to maintain high standards of quality, errors inevitably occur at various stages of the collection and processing operations. Users must be aware of the nature and scope of any errors that the census data may contain, as well as of the risks involved in basing conclusions or decisions on these data.

The **1991 Census Technical Reports** have been designed to inform data users of the potential problems or intricacies concerning the 1991 Census data. The reports inform users of the conceptual framework and definitions used in the data collection, of any unusual circumstances which may influence the data, of likely principal sources of error and, where possible, of the size of the error.

This product is a specialized analytical tool. It complements and coordinates other reference products and assists the more sophisticated user in understanding variable details and methodological information on coverage, sampling and weighting.

II. Concepts and Definitions

For census purposes, the term "occupation" refers to the kind of work persons were doing during the reference week, as determined by their reporting of their kind of work and the description of the most important duties in their job. Data are available for persons 15 years and over, excluding institutional residents. If the person did not have a job during the week prior to enumeration, the data relate to the job of longest duration since January 1, 1990. Persons with two or more jobs were to report the information for the job at which they worked the most hours.

For the 1991 Census, occupation data were available according to three different classifications:

- the 1971 Occupational Classification Manual (OCM)
- the 1980 Standard Occupational Classification (SOC)
- the 1991 Standard Occupational Classification

This report concentrates on occupation data classified according to the 1980 Standard Occupational Classification. Persons interested in occupation data classified according to the 1991 Standard Occupational Classification should refer to the report in the 1991 Census Technical Report Series titled "Occupation according to the 1991 Standard Occupational Classification".

The 1980 Standard Occupational Classification is a revision of the 1971 OCM. While the two classifications appear similar, certain occupations have different codes and thus appear in different unit groups depending on the classification. An example list of these occupations and their corresponding 1971 and 1980 codes is provided in Appendix D.

Occupation data are coded to the four-digit unit group level. The 1980 structure has 22 major groups, 80 minor groups and 514 unit groups. A full list of the unit groups, minor groups and major groups appears in Appendix C.

Occupation data are most frequently tabulated on the following subsets of the Population universe:

Population Who Worked Since January 1, 1990 - This is the largest universe for which occupation data are available.

Experienced Labour Force - Persons employed in the week prior to the census, as well as persons unemployed during the week preceding enumeration who had worked since January 1, 1990.

The census only asks the occupation question of persons who last worked since January 1, 1990, in order to minimize response burden. The term "experienced" is not intended to imply that persons who last worked before 1990 do not have work experience. It is used only to define the population of persons who were required to provide census occupation data.

It should be noted that the "inexperienced labour force" refers to unemployed persons who did not work since January 1, 1990. These persons appear in the category "Occupation not applicable". Together, the inexperienced and experienced labour forces form the "total labour force".

III. Data Collection and Coverage

For the 1991 Census, information was collected from more than 11 million dwellings, both in Canada and abroad. The data collection process consists of the drop-off and retrieval of approximately 11,500,000 questionnaires. These questionnaires are then edited to ensure they have been properly completed by all Canadians across the country. This phase employed approximately forty thousand (40,000) people in a variety of tasks, from mapping to post-censal activities.

1. Data Collection Methods

Two collection methods were used for the 1991 Census: **self-enumeration** and **canvasser enumeration**. In self-enumeration areas, a questionnaire (Form 2A or Form 2B) was dropped off at each household before Census Day (June 4). A member of the household was to complete the questionnaire on Census Day. Questionnaires were mailed back in pre-addressed envelopes. In 1991, less than 2% of households were enumerated by canvassers: census representatives completed a long questionnaire (Form 2D) for these households by interview. This method was used to enumerate each household in remote or northern areas, and on Indian reserves where irregular mail service makes mail-back impractical. Some of the remote areas were enumerated as early as March 1991. Data were collected on *every Canadian citizen, landed immigrant and non-permanent resident alive at midnight between June 3 and June 4, 1991*.

For the very first time, homeless persons were enumerated in designated soup kitchens across Canada. Census representatives interviewed each homeless person arriving at the soup kitchen, and completed the shelter and soup kitchen questionnaire (Form 3B). This procedure was performed on an experimental basis and did not contain questions on economic activity.

2. Sampling

Some census questions are asked of all Canadian residents, but most of the data – including information on occupation – are obtained from a sample of one in five households. The information collected from these households is "weighted" to produce estimates for the whole population. In the 1991 Census, a procedure known as the "Generalized Least Squares Estimation Procedure" (GLSEP) was used to weight the data.

3. Edit and Follow-up

Occupation information was obtained from two questions. The first, Question 39, asked respondents to report their kind of work. The second question, Question 40, asked respondents to indicate their most important duties or activities. Question 39 was identified as a mandatory question. This meant that in cases where this question should have been answered, but no response was supplied, follow-up by the Census Representative was required. The Census Representative first attempted to contact the respondent by telephone. If the required data could not be obtained in this fashion, a field follow-up (personal interview) was done.

4. Coverage

In order to meet eligibility criteria, it was necessary for respondents to fall into one of the following categories:

- Canadian citizen or landed immigrant who was in Canada on Census Day;
- Canadian citizen or landed immigrant who was outside Canada on Census Day, but who had a usual place of residence in Canada (e.g., Canadian government representatives, members of the Canadian Armed Forces, and persons on merchant vessels or ocean liners, and their families);
- Canadian citizen residing abroad, attached to a diplomatic mission or in a military corps.

For the first time in 1991, the census of population also included non-permanent residents. They included:

- persons holding student authorizations;
- persons holding employment authorizations;
- persons holding ministerial permits;
- refugee claimants.

Foreign residents are not enumerated and so are excluded from the census. They include:

- representatives of governments of other countries and their families;
- members of the Armed Forces of other countries and their families;
- residents of other countries visiting Canada temporarily.

5. Questionnaire and Instructions

Occupation information was asked for in Questions 39 and 40 on the 1991 Census questionnaire. Step 10 of the questionnaire instructed respondents to answer Questions 20 to 45 for each person aged 15 and over. Question 35 asked respondents when they last worked. Persons who answered "before 1990" or "never" were instructed to skip the remaining labour questions (Questions 36 to 44) and go to the question on income. In addition, a note which applied to Questions 36 to 42 appeared on the questionnaire, preceding Question 36. This note read as follows:

Questions 36 to 42 refer to this person's job or business last week. If this person held no job last week, answer for the job of longest duration since January 1, 1990. If this person held more than one job last week, answer for the job at which he/she worked the most hours.

The occupation questions appeared in the following format on the 1991 Census questionnaire:

39. What kind of work was this person doing?

Kind of work

For example, medical lab technician, accounting clerk, manager of civil engineering department, secondary school teacher, supervisor of data entry unit, food processing labourer, fishing guide (if in the Armed Forces, give rank only.)

40. In this work, what were this person's most important duties or activities?

Most important duties or activities

For example, analysing blood samples, verifying invoices, co-ordinating civil engineering projects, teaching mathematics, organizing work schedules and monitoring data entry systems, cleaning vegetables, guiding fishing parties.

The *1991 Census Guide* provided the following instructions:

Descriptions should be as precise as possible. Two or more words may be needed in both questions. Rather than using the terms **employee** or **worker**, use specific descriptions of the kind of work done. Be sure to indicate supervisory or management responsibilities if they apply.

**For example,
rather than:**

- maintenance
- repair work
- office work
- clerical
- inspecting
- supervising

**a more complete response
would be:**

- maintaining electrical equipment
- repair and maintenance of electrical motors
- typing, general office work
- typing and filing
- inspecting electronic equipment
- supervising assembly of electronic equipment

For persons who are members of a religious order engaged in teaching or nursing for example, report these secular activities rather than the religious activities.

IV. Data Assimilation

Data assimilation is the processing phase during which data from the census questionnaires are edited, coded and captured. The process includes the transformation of the questionnaire responses into data in machine-readable form.

The four main components of data assimilation are:

- Regional Office Processing
- Direct Data Entry
- Head Office Processing
- Automated Coding

Regional Office Processing (ROP)

At this stage, ROP staff ensured that information appearing on the questionnaires was suitable for key entry. This operation employed approximately 2,000 people, and was conducted in Revenue Canada Taxation (RTC) regional processing centres in St. John's, Jonquière, Shawinigan, Sudbury, Winnipeg and Surrey. In Ottawa it was conducted at the Statistics Canada head office. For the 1991 Census, the operation took place during the period between July and November 1991.

Regional Office Processing consists of four components:

- Receipt and Document Preparation
- Reverse Record Check
- Economic Coding
- Processing

With regard to occupation data, it was the Economic Coding phase which was of prime importance.

Economic Coding Operation

Within the Regional Office Processing project, coding of the occupation responses took place during Operation 4 - Economic Coding.

Coders were responsible for the coding of the responses to the questions on industry, place of work, occupation, and class of worker, as well as for a preliminary edit called "Edit of Work Since January 1, 1990". This edit was performed on each respondent's answers to determine whether or not the economic questions should have been answered.

With respect to occupation, coders were asked to determine an occupation title by considering the information provided in Question 39 - Kind of Work and Question 40 - Most Important Duties as well as the responses given to the industry questions (Questions 36 and 37). Coders then searched for this title in the alphabetical index of the coding manual. Once a title was found, the associated occupation four-digit code had to be verified in the definition section of the manual to ensure that the description for the unit group was appropriate for the kind of work performed by the respondent. If, after reading the unit group description, the coders determined that the code seemed inappropriate, they repeated the process until a suitable code was located. A referral system was in place to handle the more difficult cases.

The instructions on how to code were contained in the R-400 manual. In addition to the general instructions, the manual contained a flow chart and additional rules to follow for special cases.

Occupation Coding Manual

The occupation coding manual is a modified version of the 1980 Standard Occupational Classification produced by the Standards Division of Statistics Canada. The structure of the coding manual is the same as for the 1980 SOC. It differs from the SOC by the addition of "comparison codes" and the inclusion of a few additional titles in some unit groups. As indicated earlier, certain occupation titles appear in different unit groups depending upon whether one uses the 1971 or 1980 occupational classification. At the time of coding, these specific occupation titles are assigned a comparison code which allows for the restructuring of the occupation data into the 1971 or 1980 classification without the need for coding the data twice. In 1991, 244 comparison codes were used. The coding manual was modified to incorporate corrections identified after the 1986 Census.

Coding Consultants

In 1986, coding consultants from the ministry of Employment and Immigration were hired to assist in the coding operation. They were hired because of their knowledge of the occupation classification systems. This practice proved to be successful and was repeated in 1991. The coding consultants were trained by subject-matter experts in Ottawa.

Technical Assistance Request Forms (TARFs)

Technical assistance request forms were used as a means of communication between the coders and the coding consultants in the regional offices and the subject-matter officers responsible for coded variables. Some 50 TARFs received involved occupation. Generally, the TARFs were needed to resolve cases where more than one occupation was suggested by the response, cases of retired workers, cases where two occupations were reported, and requests for clarification of the coding manual.

ROP Evaluation Report

In general, the procedures for Economic Coding were found to be adequate. The following problems in coding occupation responses were noted:

- Some procedures did not provide sufficient information to code certain occupations easily. Some of these occupations included: owner/proprietor respondent running his/her own business, and general managers.

Problems were also encountered with the coding of Armed Forces personnel, farmers, Hutterites and occupations pertaining to oil fields.

With respect to the occupation coding manual, coders had difficulty using the comparison codes because only a title was given, with no description. There was inconsistency in the use of hyphens, e.g. "first aid" versus "first-aid". Since a hyphen changes the alphabetical order of an entry, the coders ran the risk of not finding some titles. New occupations were missing from the occupation manual. Coders found that the difference between managers and supervisors was not clearly explained. There were also difficulties in coding very general occupations such as foreman, inspector, operator, labourer, consultant, analyst, researcher, coordinator, and project manager.

Direct Data Entry (DDE)

The data entry activity was completed on behalf of Statistics Canada by Revenue Canada Taxation (RCT). Questionnaire data were key-entered at seven (7) RCT regional centres, transmitted to RCT headquarters in Ottawa, and stored on tape cartridges. This operation employed approximately 1,500 people sworn to secrecy under the Statistics Act.

Head Office Processing (HOP)

Occupation data were not subject to any structural edits at the HOP stage.

Head Office Processing is a combination of automated and manual processing designed to carry out structural edits on the census data and to process special enumeration returns. Included are returns for Canadians overseas, temporary residents, and merchant and naval ship's personnel. HOP also processes coverage study returns such as the **reverse record check (RRC)**, the **vacancy check (VC)**, and the **Overcoverage Study (OC)**. In addition, HOP is responsible for the preliminary and final population and dwelling counts and for the microfilming of census questionnaires for archival purposes. This operation employs approximately 150 people and is conducted at the Statistics Canada head office in Ottawa.

Automated Coding (AC)

In 1991, the written responses to the occupation questions were not subject to automated coding. The process of assigning codes was entirely manual.

The automated coding operation converted written responses into numeric codes for questions on mother tongue, home language, knowledge of other languages, registered Indian status, place of birth, ethnic origin, major field of study, religion, and place of residence 1 year ago and 5 years ago.

V. Edit and Imputation

In the Edit and Imputation phase, discrepancies, inconsistencies and missing answers are identified and corrected. The final set of usable "clean" data (free of invalid, inconsistent and missing responses) is produced, comprising a unique database which provides Canada's most detailed information about the population and its characteristics, ranging from the national to the neighbourhood level.

Errors found at this stage can be the result of respondents answering the questions incorrectly or incompletely, or they can be due to errors generated during coding activities and data capture. After errors are detected, values for missing or incomplete entries are imputed. Imputation, which is the correction of the errors, is done using either a "deterministic" or a "hot deck" method. For deterministic imputation, errors are corrected by inferring the appropriate value from answers to other questions. The "hot deck" approach selects a record that has a number of characteristics in common with the record in error, and imputes the missing information from this "donor" record.

Two automated systems are used for editing and imputing census data:

- **CANEDIT**
This system is used to correct the 100% demographic data for age, sex, relationship to Person 1 and marital status, and the labour data from the 20% sample (Form 2B).
- **SPIDER (System for Processing Instructions from Directly Entered Requirements)**
The SPIDER system was developed for the 1981 Census to handle the more complex coded variables and absolute values such as income. Most of the questions asked of 20% of the population are processed using SPIDER.

Imputation

An occupation response was imputed if a respondent was identified as having worked since January 1, 1990, but his/her occupation was not stated or the occupation code assigned was "invalid". An invalid code is one which is outside the acceptable range of values. This kind of error can occur during the coding operation or during key entry. Through the imputation procedure, using CANEDIT, an occupation code was obtained by matching the respondent with another respondent in the database with similar characteristics and assigning his/her occupation code. The matching criteria included demographic and education variables as well as dwelling type, farm operator status and aboriginal status. In addition, donor records which were considered to be "outliers" due to improbable combinations of industry and occupation were eliminated from the donor pool. Assignment of the imputed code was done at the minor group level of detail. Therefore, there were no imputed values at the unit group level of detail. Imputed values were included in the counts of each minor group and in the roll-ups to major groups.

The specifications used to edit and impute the 1991 occupation data are essentially the same as those followed in 1986. The intent of the processing modules did not change nor did the order in which the modules were used.

Effect of Imputation

Table 1 shows the frequency distribution of occupations (as reported by the respondents) at the minor group level and the frequency of the imputed occupations. It is evident that the final or total occupation distribution has changed only slightly from the distribution for reported occupations.

Table 2 shows, for the experienced labour force, the number of records imputed to each minor group for both 1986 and 1991. Of concern is the significant increase in the number of occupation responses which required imputation. This is a data quality problem which is evident for industry as well. For occupation, the increase was from 394,110 to 566,905 - an increase of 44%. By comparison the increase in the experienced labour force was only 12%. These increases have been investigated by analysts responsible for data on industry, occupation and labour force activity, but no definitive explanation is available. Some of the theories proposed include:

- (1) We found an increased number of responses to certain labour questions because of a change in the questionnaire format. In 1986, the labour force questions were asked in a multi-part presentation. In 1991,

the content did not change, but separate questions were asked corresponding to each part question from 1986. In addition, there were revisions to the general questionnaire format. Therefore, we were including workers that we had previously missed; however, they gave only incomplete, uncodable responses to the industry and occupation questions. In this context the increase is a relatively good result, since we are better identifying our universe, even though these incomplete responses require imputation.

- (2) It is also possible that the change in questionnaire format caused some respondents to OVER respond to certain labour questions, supplying information that was not required or incorrect. In this case, we would have been adding persons to our universe who did not belong, and, for consistency, missing industry and occupation codes would have been assigned.
- (3) There has been an increased incidence of coders missing questionnaires or questions, or of keyers missing coding boxes. In some cases, enough information from check boxes might have been captured to indicate that respondents belonged in our universe, but the missing industry and occupation codes would have had to be assigned.
- (4) Respondents may just be reluctant to respond to difficult questions such as those on industry and occupation, and, as such, this result reflects an overall lack-of-response problem (although not necessarily a complete non-response problem).

It is difficult to determine or prove with any certainty which of these theories may explain the increase in occupation and industry responses requiring imputation between 1986 and 1991.

Deterministic Edits

At the final stage of processing, deterministic edits were done on the data to correct inconsistencies or improbable combinations of industry, occupation and class of worker responses. These edits were done using SPIDER software. The edits undertaken in 1986 were reviewed, and in some cases modified, but essentially the set of edits used in 1991 was similar to that used in 1986.

In all, only 25% of the occupation codes (125 codes) were involved in edits which could possibly result in a change to the occupation code originally assigned. There were four kinds of edits. The most common type of edit changed the occupation code based on a class of worker value of "self-employed with paid help". Even though a respondent may not have specifically indicated supervisory duties, for some occupations it was assumed that the class of worker designation of "self-employed with paid help" implied a supervisory role. As a result, the occupation code was changed to reflect this information.

For example, respondents coded to 6191 - Janitors, Charworkers and Cleaners were changed to 6190 - Supervisors: Other Service Occupations if the class of worker was "self-employed with paid help". This latter category includes such titles as char supervisor, head charworker, etc.

A second common type of edit changed the occupation code assignment based on a combination of age and educational attainment. There are certain occupations for which one would expect the respondent to have a minimum level of education and/or work experience. In cases where the minimum conditions were not met, the occupation code was changed to another code within the same field, but at a technical or less specialized level.

For example, respondents coded to 2143 - Civil Engineers were assigned to 2165 - Engineering Technologists and Technicians if they were less than 25 years of age and had less than three years of university studies.

The edits based on age and education were designed to eliminate the most obvious conflicts but not to be so restrictive as to possibly eliminate true cases. These two kinds of edits accounted for 75% of the edits to the occupation responses. The other two types of edits involved changes to occupation, based on industry alone, or on industry in combination with class of worker. The majority of the deterministic edits specified changes within the major groups and often within the minor group.

In some instances, the occupation code assigned from a donor record by CANEDIT was changed deterministically after imputation. Twenty-five occupation codes were handled in this fashion. Responses which were originally blank, invalid, or not stated were assigned an occupation code based on the industry and/or class of worker responses. In these cases, it was felt that a direct assignment to a four-digit code would be more realistic than a donor assignment.

For example, a record which was originally blank, invalid or not stated for occupation was changed to 7119 - Farmers, n.e.c. if the person indicated he/she was self-employed in a farm or business that had not been incorporated and that the industry was Farms.

Since in these cases there was actually enough information on the questionnaire to code occupation, they were not included in counts of non-response.

In 1981 and 1986 an edit was instituted, for nuns and brothers, which identified respondents who were 65 years or older, who lived in religious institutions in Quebec, and had no wages or salary. These persons were considered to be "not in the labour force" on the grounds that their activities were more likely to be of a volunteer nature, and not work as defined elsewhere in the labour market. This edit was necessary because coders experienced difficulty in determining the appropriate coding procedure for these persons. In 1991, this edit was repeated, but it was also extended to the rest of Canada. Although the majority of nuns and brothers reside in Quebec, the reasoning for this edit applies regardless of the province of residence.

As a result of the review of the sample write-in file, and the evaluation of the preplanned deterministic edits, additional edits were created in a "fix module". In most cases, these edits corrected errors which occurred during the coding operation. These edits are discussed individually in the detailed analysis by major group found in Chapter VI.

Table 1. Persons Who Worked Since January 1, 1990, by Occupation Minor Groups Showing Occupation Reported and Imputed (Number and Percentage Distribution), by Sex, for Canada, 1991

Occupation Minor Groups	Both Sexes					
	Total	% Dist.	Occupation Reported	% Dist.	Occupation Imputed	% Dist.
Total All Occupations	15,509,255	100.0	14,736,670	100.0	772,580	100.0
Minor group 111	107,140	0.7	102,225	0.7	4,915	0.6
Minor group 113/114	1,263,730	8.1	1,217,715	8.3	46,015	6.0
Minor group 117	448,170	2.9	430,155	2.9	18,015	2.3
Minor group 211	48,970	0.3	47,385	0.3	1,585	0.2
Minor group 213	42,825	0.3	41,340	0.3	1,485	0.2
Minor group 214/215	197,880	1.3	190,975	1.3	6,905	0.9
Minor group 216	138,120	0.9	133,330	0.9	4,790	0.6
Minor group 218	171,025	1.1	164,480	1.1	6,545	0.8
Minor group 231	45,470	0.3	44,005	0.3	1,465	0.2
Minor group 233	171,560	1.1	162,325	1.1	9,235	1.2
Minor group 234	73,640	0.5	71,165	0.5	2,475	0.3
Minor group 235	32,555	0.2	31,035	0.2	1,520	0.2
Minor group 239	20,205	0.1	19,445	0.1	760	0.1
Minor group 251	36,625	0.2	33,510	0.2	3,115	0.4
Minor group 271	76,335	0.5	73,390	0.5	3,045	0.4
Minor group 273	446,730	2.9	430,515	2.9	16,215	2.1
Minor group 279	151,635	1.0	145,100	1.0	6,535	0.8
Minor group 311	88,140	0.6	85,735	0.6	2,405	0.3
Minor group 313	505,805	3.3	484,805	3.3	21,000	2.7
Minor group 315/316	176,300	1.1	169,365	1.1	6,935	0.9
Minor group 311	94,240	0.6	89,740	0.6	4,500	0.6
Minor group 333	57,400	0.4	54,435	0.4	2,965	0.4
Minor group 335	57,480	0.4	54,855	0.4	2,625	0.3
Minor group 336/337	65,125	0.4	60,645	0.4	4,480	0.6
Minor group 411	548,270	3.5	522,385	3.5	25,885	3.4
Minor group 413	960,705	6.2	907,985	6.2	52,720	6.8
Minor group 414	172,745	1.1	164,635	1.1	8,110	1.0
Minor group 415	291,600	1.9	275,320	1.9	16,280	2.1
Minor group 416	49,795	0.3	46,775	0.3	3,020	0.4
Minor group 417	323,825	2.1	305,010	2.1	18,815	2.4
Minor group 419	482,935	3.1	457,905	3.1	25,030	3.2
Minor group 513/514	1,179,470	7.6	1,117,720	7.6	61,750	8.0
Minor group 517	231,885	1.5	222,025	1.5	9,860	1.3
Minor group 519	37,910	0.2	36,205	0.2	1,705	0.2
Minor group 611	330,765	2.1	312,845	2.1	17,920	2.3
Minor group 612	816,985	5.3	762,375	5.2	54,610	7.1
Minor group 613	70,170	0.5	64,335	0.4	5,835	0.8
Minor group 614	370,240	2.4	348,020	2.4	22,220	2.9
Minor group 616	45,275	0.3	42,455	0.3	2,820	0.4
Minor group 619	463,935	3.0	432,130	2.9	31,805	4.1
Minor group 711	195,145	1.3	188,560	1.3	6,585	0.9
Minor group 718/719	329,645	2.1	308,045	2.1	21,600	2.8
Minor group 731	58,240	0.4	55,520	0.4	2,720	0.4

Table 1. Persons Who Worked Since January 1, 1990, by Occupation Minor Groups Showing Occupation Reported and Imputed (Number and Percentage Distribution), by Sex, for Canada, 1991 - Continued

Occupation Minor Groups	Both Sexes					
	Total	% Dist.	Occupation Reported	% Dist.	Occupation Imputed	% Dist.
Minor group 751	91,885	0.6	87,095	0.6	4,790	0.6
Minor group 771	68,645	0.4	65,805	0.4	2,840	0.4
Minor group 811	7,390	0.0	7,045	0.0	345	0.0
Minor group 813/814	47,280	0.3	44,715	0.3	2,565	0.3
Minor group 815	14,740	0.1	13,965	0.1	775	0.1
Minor group 816/817	41,140	0.3	39,155	0.3	1,985	0.3
Minor group 821/822	216,000	1.4	204,955	1.4	11,045	1.4
Minor group 823	43,770	0.3	41,455	0.3	2,315	0.3
Minor group 825	44,805	0.3	42,820	0.3	1,985	0.3
Minor group 826/827	28,760	0.2	26,940	0.2	1,820	0.2
Minor group 829	6,335	0.0	5,940	0.0	395	0.0
Minor group 831	89,050	0.6	84,855	0.6	4,195	0.5
Minor group 833	154,280	1.0	147,205	1.0	7,075	0.9
Minor group 835	12,195	0.1	11,475	0.1	720	0.1
Minor group 837	9,960	0.1	9,450	0.1	510	0.1
Minor group 839	15,265	0.1	14,555	0.1	710	0.1
Minor group 851/852	103,425	0.7	98,190	0.7	5,235	0.7
Minor group 853	129,570	0.8	123,580	0.8	5,990	0.8
Minor group 854	52,535	0.3	49,860	0.3	2,675	0.3
Minor group 855/856	180,000	1.2	168,360	1.1	11,640	1.5
Minor group 857	32,715	0.2	31,015	0.2	1,700	0.2
Minor group 858	363,670	2.3	349,425	2.4	14,245	1.8
Minor group 859	87,645	0.6	82,655	0.6	4,990	0.6
Minor group 871	120,960	0.8	114,990	0.8	5,970	0.8
Minor group 873	155,010	1.0	148,520	1.0	6,490	0.8
Minor group 878/879	626,910	4.0	595,465	4.0	31,445	4.1
Minor group 911	22,440	0.1	21,535	0.1	905	0.1
Minor group 913	24,725	0.2	23,810	0.2	915	0.1
Minor group 915	20,245	0.1	19,155	0.1	1,090	0.1
Minor group 917	466,115	3.0	443,385	3.0	22,730	2.9
Minor group 919	7,670	0.0	7,375	0.0	295	0.0
Minor group 931	251,060	1.6	235,635	1.6	15,425	2.0
Minor group 951	80,110	0.5	75,795	0.5	4,315	0.6
Minor group 953	54,635	0.4	52,340	0.4	2,295	0.3
Minor group 955	13,225	0.1	12,700	0.1	525	0.1
Minor group 959	15,355	0.1	14,675	0.1	680	0.1
Minor group 991	333,085	2.1	312,980	2.1	20,105	2.6

Table 1. Persons Who Worked Since January 1, 1990, by Occupation Minor Groups Showing Occupation Reported and Imputed (Number and Percentage Distribution), by Sex, for Canada, 1991 - Continued

Occupation Minor Groups	Females					
	Total	% Dist.	Occupation Reported	% Dist.	Occupation Imputed	% Dist.
Total All Occupations	7,114,400	100.0	6,736,410	100.0	377,990	100.0
Minor group 111	38,375	0.5	36,485	0.5	1,890	0.5
Minor group 113/114	437,480	6.1	419,810	6.2	17,670	4.7
Minor group 117	215,870	3.0	206,740	3.1	9,125	2.4
Minor group 211	12,335	0.2	12,000	0.2	335	0.1
Minor group 213	13,295	0.2	12,765	0.2	530	0.1
Minor group 214/215	22,155	0.3	21,220	0.3	935	0.2
Minor group 216	20,350	0.3	19,635	0.3	715	0.2
Minor group 218	53,295	0.7	51,120	0.8	2,170	0.6
Minor group 231	22,300	0.3	21,510	0.3	790	0.2
Minor group 233	124,520	1.8	117,830	1.7	6,685	1.8
Minor group 234	27,155	0.4	26,160	0.4	995	0.3
Minor group 235	25,600	0.4	24,320	0.4	1,280	0.3
Minor group 239	13,190	0.2	12,715	0.2	475	0.1
Minor group 251	8,910	0.1	7,495	0.1	1,415	0.4
Minor group 271	27,540	0.4	26,180	0.4	1,360	0.4
Minor group 273	316,595	4.5	304,090	4.5	12,505	3.3
Minor group 279	91,850	1.3	87,690	1.3	4,160	1.1
Minor group 311	25,160	0.4	24,450	0.4	710	0.2
Minor group 313	453,875	6.4	434,790	6.5	19,085	5.0
Minor group 315/316	133,645	1.9	128,350	1.9	5,295	1.4
Minor group 311	45,890	0.6	43,765	0.6	2,125	0.6
Minor group 333	20,350	0.3	19,190	0.3	1,160	0.3
Minor group 335	29,990	0.4	28,520	0.4	1,470	0.4
Minor group 336/337	27,420	0.4	25,835	0.4	1,590	0.4
Minor group 411	538,910	7.6	513,610	7.6	25,300	6.7
Minor group 413	823,345	11.6	778,825	11.6	44,520	11.8
Minor group 414	131,890	1.9	125,690	1.9	6,200	1.6
Minor group 415	77,905	1.1	73,455	1.1	4,450	1.2
Minor group 416	41,965	0.6	39,470	0.6	2,490	0.7
Minor group 417	244,970	3.4	230,255	3.4	14,715	3.9
Minor group 419	366,645	5.2	347,640	5.2	19,005	5.0
Minor group 513/514	579,545	8.1	546,185	8.1	33,365	8.8
Minor group 517	95,085	1.3	91,135	1.4	3,950	1.0
Minor group 519	14,920	0.2	14,135	0.2	785	0.2
Minor group 611	61,405	0.9	57,755	0.9	3,650	1.0
Minor group 612	535,850	7.5	500,335	7.4	35,515	9.4
Minor group 613	51,080	0.7	46,770	0.7	4,310	1.1
Minor group 614	328,770	4.6	309,005	4.6	19,765	5.2
Minor group 616	28,770	0.4	26,910	0.4	1,860	0.5
Minor group 619	202,410	2.8	188,640	2.8	13,775	3.6
Minor group 711	39,255	0.6	35,550	0.5	3,705	1.0
Minor group 718/719	112,170	1.6	104,635	1.6	7,535	2.0

Table 1. Persons Who Worked Since January 1, 1990, by Occupation Minor Groups Showing Occupation Reported and Imputed (Number and Percentage Distribution), by Sex, for Canada, 1991 - Continued

Occupation Minor Groups	Females					
	Total	% Dist.	Occupation Reported	% Dist.	Occupation Imputed	% Dist.
Minor group 731	8,280	0.1	7,875	0.1	405	0.1
Minor group 751	8,185	0.1	7,775	0.1	410	0.1
Minor group 771	1,995	0.0	1,950	0.0	45	0.0
Minor group 811	380	0.0	380	0.0	0	0.0
Minor group 813/814	2,850	0.0	2,745	0.0	105	0.0
Minor group 815	2,260	0.0	2,160	0.0	100	0.0
Minor group 816/817	8,060	0.1	7,545	0.1	515	0.1
Minor group 821/822	88,365	1.2	83,320	1.2	5,045	1.3
Minor group 823	2,530	0.0	2,360	0.0	165	0.0
Minor group 825	3,045	0.0	2,895	0.0	150	0.0
Minor group 826/827	13,475	0.2	12,535	0.2	945	0.3
Minor group 829	2,570	0.0	2,390	0.0	180	0.0
Minor group 831	5,480	0.1	5,135	0.1	345	0.1
Minor group 833	8,065	0.1	7,585	0.1	480	0.1
Minor group 835	1,140	0.0	1,075	0.0	65	0.0
Minor group 837	1,970	0.0	1,885	0.0	80	0.0
Minor group 839	1,855	0.0	1,770	0.0	90	0.0
Minor group 851/852	21,960	0.3	20,685	0.3	1,280	0.3
Minor group 853	24,860	0.3	23,140	0.3	1,720	0.5
Minor group 854	6,675	0.1	6,385	0.1	290	0.1
Minor group 855/856	137,675	1.9	128,190	1.9	9,485	2.5
Minor group 857	8,500	0.1	7,940	0.1	560	0.1
Minor group 858	6,775	0.1	6,480	0.1	295	0.1
Minor group 859	19,135	0.3	17,930	0.3	1,205	0.3
Minor group 871	2,315	0.0	2,215	0.0	100	0.0
Minor group 873	6,300	0.1	6,025	0.1	275	0.1
Minor group 878/879	17,670	0.2	16,650	0.2	1,020	0.3
Minor group 911	2,335	0.0	2,225	0.0	105	0.0
Minor group 913	1,235	0.0	1,210	0.0	25	0.0
Minor group 915	1,015	0.0	980	0.0	40	0.0
Minor group 917	46,220	0.6	43,660	0.6	2,560	0.7
Minor group 919	420	0.0	400	0.0	20	0.0
Minor group 931	60,385	0.8	56,360	0.8	4,020	1.1
Minor group 951	26,900	0.4	25,130	0.4	1,770	0.5
Minor group 953	2,480	0.0	2,430	0.0	50	0.0
Minor group 955	2,400	0.0	2,325	0.0	75	0.0
Minor group 959	7,680	0.1	7,370	0.1	310	0.1
Minor group 991	68,920	1.0	64,625	1.0	4,295	1.1

Table 1. Persons Who Worked Since January 1, 1990, by Occupation Minor Groups Showing Occupation Reported and Imputed (Number and Percentage Distribution), by Sex, for Canada, 1991 - Continued

Occupation Minor Groups	Males					
	Total	% Dist.	Occupation Reported	% Dist.	Occupation Imputed	% Dist.
Total All Occupations	8,394,855	100.0	8,000,260	100.0	394,590	100.0
Minor group 111	68,765	0.8	65,735	0.8	3,030	0.8
Minor group 113/114	826,245	9.8	797,905	10.0	28,345	7.2
Minor group 117	232,305	2.8	223,415	2.8	8,890	2.3
Minor group 211	36,630	0.4	35,380	0.4	1,250	0.3
Minor group 213	29,530	0.4	28,575	0.4	955	0.2
Minor group 214/215	175,730	2.1	169,755	2.1	5,975	1.5
Minor group 216	117,775	1.4	113,700	1.4	4,075	1.0
Minor group 218	117,730	1.4	113,355	1.4	4,375	1.1
Minor group 231	23,170	0.3	22,495	0.3	675	0.2
Minor group 233	47,040	0.6	44,490	0.6	2,550	0.6
Minor group 234	46,485	0.6	45,005	0.6	1,480	0.4
Minor group 235	6,950	0.1	6,710	0.1	240	0.1
Minor group 239	7,015	0.1	6,730	0.1	280	0.1
Minor group 251	27,715	0.3	26,015	0.3	1,700	0.4
Minor group 271	48,795	0.6	47,115	0.6	1,680	0.4
Minor group 273	130,135	1.6	126,425	1.6	3,710	0.9
Minor group 279	59,780	0.7	57,405	0.7	2,375	0.6
Minor group 311	62,980	0.8	61,285	0.8	1,695	0.4
Minor group 313	51,930	0.6	50,015	0.6	1,915	0.5
Minor group 315/316	42,655	0.5	41,015	0.5	1,640	0.4
Minor group 311	48,350	0.6	45,970	0.6	2,380	0.6
Minor group 333	37,055	0.4	35,250	0.4	1,805	0.5
Minor group 335	27,490	0.3	26,335	0.3	1,155	0.3
Minor group 336/337	37,705	0.4	34,810	0.4	2,895	0.7
Minor group 411	9,360	0.1	8,775	0.1	585	0.1
Minor group 413	137,355	1.6	129,155	1.6	8,200	2.1
Minor group 414	40,850	0.5	38,940	0.5	1,910	0.5
Minor group 415	213,695	2.5	201,865	2.5	11,835	3.0
Minor group 416	7,830	0.1	7,300	0.1	530	0.1
Minor group 417	78,855	0.9	74,755	0.9	4,100	1.0
Minor group 419	116,290	1.4	110,260	1.4	6,030	1.5
Minor group 513/514	599,925	7.1	571,535	7.1	28,390	7.2
Minor group 517	136,800	1.6	130,890	1.6	5,910	1.5
Minor group 519	22,990	0.3	22,070	0.3	920	0.2
Minor group 611	269,365	3.2	255,095	3.2	14,270	3.6
Minor group 612	281,135	3.3	262,045	3.3	19,095	4.8
Minor group 613	19,090	0.2	17,565	0.2	1,525	0.4
Minor group 614	41,470	0.5	39,015	0.5	2,460	0.6
Minor group 616	16,505	0.2	15,545	0.2	955	0.2
Minor group 619	261,525	3.1	243,495	3.0	18,030	4.6
Minor group 711	155,890	1.9	153,005	1.9	2,885	0.7
Minor group 718/719	217,470	2.6	203,405	2.5	14,065	3.6

Table 1. Persons Who Worked Since January 1, 1990, by Occupation Minor Groups Showing Occupation Reported and Imputed (Number and Percentage Distribution), by Sex, for Canada, 1991 - Concluded

Occupation Minor Groups	Males					
	Total	% Dist.	Occupation Reported	% Dist.	Occupation Imputed	% Dist.
Minor group 731	49,960	0.6	47,645	0.6	2,315	0.6
Minor group 751	83,700	1.0	79,320	1.0	4,380	1.1
Minor group 771	66,650	0.8	63,855	0.8	2,795	0.7
Minor group 811	7,005	0.1	6,665	0.1	345	0.1
Minor group 813/814	44,430	0.5	41,970	0.5	2,460	0.6
Minor group 815	12,480	0.1	11,810	0.1	670	0.2
Minor group 816/817	33,080	0.4	31,610	0.4	1,470	0.4
Minor group 821/822	127,635	1.5	121,635	1.5	6,000	1.5
Minor group 823	41,240	0.5	39,095	0.5	2,150	0.5
Minor group 825	41,765	0.5	39,925	0.5	1,840	0.5
Minor group 826/827	15,285	0.2	14,410	0.2	875	0.2
Minor group 829	3,765	0.0	3,550	0.0	215	0.0
Minor group 831	83,575	1.0	79,720	1.0	3,850	1.0
Minor group 833	146,215	1.7	139,620	1.7	6,595	1.7
Minor group 835	11,055	0.1	10,400	0.1	655	0.2
Minor group 837	7,995	0.1	7,565	0.1	425	0.1
Minor group 839	13,410	0.2	12,785	0.2	625	0.2
Minor group 851/852	81,460	1.0	77,505	1.0	3,960	1.0
Minor group 853	104,710	1.2	100,440	1.3	4,270	1.1
Minor group 854	45,860	0.5	43,475	0.5	2,385	0.6
Minor group 855/856	42,325	0.5	40,170	0.5	2,155	0.5
Minor group 857	24,215	0.3	23,070	0.3	1,145	0.3
Minor group 858	356,890	4.3	342,945	4.3	13,945	3.5
Minor group 859	68,510	0.8	64,725	0.8	3,785	1.0
Minor group 871	118,640	1.4	112,775	1.4	5,870	1.5
Minor group 873	148,710	1.8	142,495	1.8	6,215	1.6
Minor group 878/879	609,240	7.3	578,815	7.2	30,425	7.7
Minor group 911	20,110	0.2	19,310	0.2	800	0.2
Minor group 913	23,490	0.3	22,595	0.3	895	0.2
Minor group 915	19,230	0.2	18,175	0.2	1,050	0.3
Minor group 917	419,895	5.0	399,725	5.0	20,170	5.1
Minor group 919	7,250	0.1	6,975	0.1	275	0.1
Minor group 931	190,675	2.3	179,270	2.2	11,405	2.9
Minor group 951	53,215	0.6	50,670	0.6	2,545	0.6
Minor group 953	52,155	0.6	49,910	0.6	2,245	0.6
Minor group 955	10,820	0.1	10,375	0.1	450	0.1
Minor group 959	7,675	0.1	7,305	0.1	370	0.1
Minor group 991	264,165	3.1	248,355	3.1	15,810	4.0

Table 2. Occupation Imputed Values, Showing Percent Distribution and Percent Change for the Experienced Labour Force, for Canada, 1986 and 1991

	Both Sexes					Males					Females				
	1986	% Dist	1991	% Dist	% Change	1986	% Dist	1991	% Dist	% Change	1986	% Dist	1991	% Dist	% Change
Total Imputed Values	394,110	100.0	566,905	100.0	43.8	223,960	100.0	304,255	100.0	35.9	170,170	100.0	262,650	100.0	54.3
131	2,360	0.6	3,790	0.7	60.6	1,745	0.8	2,325	0.8	33.2	615	0.4	1,465	0.6	138.2
113_114	21,065	5.3	37,900	6.7	79.9	14,365	6.4	24,145	7.9	68.1	6,705	3.9	13,755	5.2	105.1
117	9,050	2.3	14,395	2.5	59.1	4,865	2.2	7,410	2.4	52.3	4,190	2.5	6,985	2.7	66.7
211	1,210	0.3	1,305	0.2	7.9	905	0.4	1,035	0.3	14.4	305	0.2	265	0.1	-13.1
213	775	0.2	1,185	0.2	52.9	545	0.2	775	0.3	42.2	230	0.1	410	0.2	78.3
214_215	3,475	0.9	5,585	1.0	60.7	3,255	1.5	4,830	1.6	48.4	215	0.1	755	0.3	251.2
216	2,800	0.7	3,945	0.7	40.9	2,465	1.1	3,415	1.1	38.5	330	0.2	530	0.2	60.6
218	2,875	0.7	5,740	1.0	99.7	1,995	0.9	3,925	1.3	96.7	875	0.5	1,815	0.7	107.4
231	950	0.2	1,105	0.2	16.3	475	0.2	550	0.2	15.8	475	0.3	555	0.2	16.8
233	3,755	1.0	6,315	1.1	68.2	1,040	0.5	1,780	0.6	71.2	2,720	1.6	4,540	1.7	66.9
234	980	0.2	1,990	0.4	103.1	660	0.3	1,200	0.4	81.8	320	0.2	790	0.3	146.9
235	860	0.2	1,180	0.2	37.2	180	0.1	180	0.0	0.0	680	0.4	1,000	0.4	47.1
239	300	0.1	620	0.1	106.7	90	0.0	235	0.1	161.1	205	0.1	385	0.1	87.8
251	3,080	0.8	2,405	0.4	-21.9	1,485	0.7	1,310	0.4	-11.8	1,600	0.9	1,095	0.4	-31.6
271	1,400	0.4	2,135	0.4	52.5	800	0.4	1,210	0.4	51.2	600	0.4	930	0.4	55.0
273	9,855	2.5	12,480	2.2	26.6	2,715	1.2	3,065	1.0	12.9	7,140	4.2	9,415	3.6	31.9
279	4,075	1.0	4,565	0.8	12.0	2,020	0.9	1,700	0.6	-15.8	2,055	1.2	2,865	1.1	39.4
311	1,240	0.3	2,015	0.4	62.5	940	0.4	1,430	0.5	52.1	300	0.2	585	0.2	95.0
313	11,060	2.8	16,270	2.9	47.1	1,175	0.5	1,720	0.6	46.4	9,885	5.8	14,555	5.5	47.2
315_316	3,045	0.8	5,630	1.0	84.9	750	0.3	1,355	0.4	80.7	2,295	1.3	4,280	1.6	86.5
331	1,985	0.5	3,570	0.6	79.8	1,090	0.5	2,015	0.7	84.9	895	0.5	1,535	0.6	73.7
333	1,460	0.4	2,165	0.4	48.3	895	0.4	1,395	0.5	55.9	565	0.3	770	0.3	36.3
335	1,080	0.3	2,045	0.4	89.4	595	0.3	930	0.3	56.3	485	0.3	1,115	0.4	129.9
336_337	1,850	0.5	2,460	0.4	33.0	1,120	0.5	1,565	0.5	39.7	730	0.4	895	0.3	22.6
411	13,675	3.5	18,610	3.3	36.1	275	0.1	435	0.1	58.2	13,400	7.9	18,175	6.9	35.6
413	23,635	6.0	36,915	6.5	56.2	3,640	1.6	5,975	2.0	64.1	19,995	11.8	30,940	11.8	54.7
414	3,885	1.0	6,220	1.1	60.1	885	0.4	1,535	0.5	73.4	3,000	1.8	4,685	1.8	56.2
415	8,315	2.1	11,980	2.1	44.1	6,455	2.9	8,985	3.0	39.2	1,860	1.1	2,995	1.1	61.0
416	1,670	0.4	1,945	0.3	16.5	320	0.1	305	0.1	-4.7	1,350	0.8	1,640	0.6	21.5
417	8,070	2.0	12,825	2.3	58.9	2,275	1.0	3,165	1.0	39.1	5,795	3.4	9,660	3.7	66.7
419	11,215	2.8	18,220	3.2	62.5	3,155	1.4	4,625	1.5	46.6	8,055	4.7	13,590	5.2	68.7
513_514	29,020	7.4	42,660	7.5	47.0	15,540	6.9	21,255	7.0	36.8	13,480	7.9	21,400	8.1	58.8
517	4,280	1.1	7,605	1.3	77.7	2,855	1.3	4,590	1.5	60.8	1,425	0.8	3,015	1.1	111.6
519	925	0.2	1,200	0.2	29.7	650	0.3	740	0.2	13.8	275	0.2	460	0.2	67.3
611	11,165	2.8	13,660	2.4	22.3	9,435	4.2	11,170	3.7	18.4	1,730	1.0	2,490	0.9	43.9
612	24,010	6.1	35,400	6.2	47.4	8,840	3.9	13,025	4.3	47.3	15,165	8.9	22,380	8.5	47.6
613	3,070	0.8	3,750	0.7	22.1	985	0.4	1,005	0.3	2.0	2,085	1.2	2,745	1.0	31.7
614	8,145	2.1	14,235	2.5	74.8	1,085	0.5	1,765	0.6	62.7	7,060	4.1	12,470	4.7	76.6
616	1,565	0.4	1,905	0.3	21.7	570	0.3	710	0.2	24.6	1,000	0.6	1,200	0.5	20.0
619	14,355	3.6	20,875	3.7	45.4	8,985	4.0	12,020	4.0	33.8	5,370	3.2	8,855	3.4	64.9
711	1,820	0.5	3,770	1.0	217.0	1,500	0.7	2,380	0.8	58.7	315	0.2	3,385	1.3	974.6
718_719	12,975	3.3	14,180	2.5	9.3	8,165	3.6	9,535	3.1	16.8	4,810	2.8	4,640	1.8	-3.5
731	1,465	0.4	1,705	0.3	16.4	1,355	0.6	1,500	0.5	10.7	110	0.1	205	0.1	86.4
751	3,640	0.9	3,435	0.6	-5.6	3,435	1.5	3,170	1.0	-7.7	205	0.1	265	0.1	29.3
771	2,245	0.6	2,300	0.4	2.4	2,210	1.0	2,265	0.7	2.5	40	0.0	35	0.0	-12.5
811	205	0.0	300	0.0	46.3	190	0.1	300	0.1	57.9	15	0.0	0	0.0	-100.0
813_814	1,680	0.4	2,020	0.4	20.2	1,550	0.7	1,945	0.6	25.5	130	0.1	75	0.0	-42.3
815	580	0.1	585	0.1	0.9	500	0.2	505	0.2	1.0	80	0.0	80	0.0	0.0

Table 2. Occupation Imputed Values, Showing Percent Distribution and Percent Change for the Experienced Labour Force, for Canada, 1986 and 1991 - Concluded

	Both Sexes					Males					Females				
	1986	% Dist	1991	% Dist	% Change	1986	% Dist	1991	% Dist	% Change	1986	% Dist	1991	% Dist	% Change
816_817	1,235	0.3	1,720	0.3	39.3	915	0.4	1,295	0.4	41.5	320	0.2	425	0.2	32.8
821_822	6,205	1.6	7,885	1.4	27.1	3,765	1.7	4,590	1.5	21.9	2,445	1.4	3,295	1.3	34.8
823	1,675	0.4	1,860	0.3	11.0	1,560	0.7	1,740	0.6	11.5	115	0.1	120	0.0	4.3
825	1,280	0.3	1,635	0.3	27.7	1,205	0.5	1,520	0.5	26.1	75	0.0	115	0.0	53.3
826_827	1,190	0.3	1,325	0.2	11.3	655	0.3	660	0.2	0.8	535	0.3	670	0.3	25.2
829	240	0.1	225	0.0	-6.2	175	0.1	140	0.0	-20.0	65	0.0	85	0.0	30.8
831	2,535	0.6	3,455	0.6	36.3	2,395	1.1	3,200	1.1	33.6	140	0.1	255	0.1	82.1
833	5,015	1.3	5,610	1.0	11.9	4,665	2.1	5,275	1.7	13.1	350	0.2	335	0.1	-4.3
835	350	0.1	620	0.1	77.1	335	0.1	585	0.2	74.6	15	0.0	40	0.0	166.7
837	420	0.1	400	0.1	-4.8	330	0.1	320	0.1	-3.0	90	0.0	75	0.0	-16.7
839	490	0.1	595	0.1	21.4	435	0.2	530	0.2	21.8	60	0.0	70	0.0	16.7
851_852	3,310	0.8	4,280	0.8	29.3	2,825	1.3	3,305	1.1	17.0	485	0.3	975	0.4	101.0
853	4,155	1.1	4,970	0.9	19.6	3,235	1.4	3,670	1.2	13.4	920	0.5	1,305	0.5	41.8
854	1,830	0.5	2,070	0.4	13.1	1,635	0.7	1,890	0.6	15.6	195	0.1	180	0.1	-7.7
855_856	7,605	1.9	8,365	1.5	10.0	1,595	0.7	1,655	0.5	3.8	6,010	3.5	6,710	2.6	11.6
857	1,345	0.3	1,310	0.2	-2.6	1,020	0.5	925	0.3	-9.3	335	0.2	385	0.1	14.9
858	9,325	2.4	11,935	2.1	28.0	9,140	4.1	11,695	3.8	28.0	180	0.1	240	0.1	33.3
859	3,130	0.8	3,820	0.7	22.0	2,525	1.1	2,955	1.0	17.0	605	0.4	860	0.3	42.1
871	3,710	0.9	4,740	0.8	27.8	3,660	1.6	4,680	1.5	27.9	50	0.0	65	0.0	30.0
873	3,450	0.9	5,290	0.9	53.3	3,375	1.5	5,065	1.7	50.1	80	0.0	225	0.1	181.2
878_879	17,570	4.5	24,230	4.3	37.9	17,185	7.7	23,570	7.7	37.2	390	0.2	655	0.2	67.9
911	455	0.1	785	0.1	72.5	415	0.2	690	0.2	66.3	40	0.0	95	0.0	137.5
913	815	0.2	725	0.1	-11.0	795	0.4	700	0.2	-11.9	20	0.0	25	0.0	25.0
915	795	0.2	805	0.1	1.3	740	0.3	790	0.3	6.8	55	0.0	15	0.0	-72.7
917	12,305	3.1	17,925	3.2	45.7	11,350	5.1	16,090	5.3	41.8	955	0.6	1,835	0.7	92.1
919	210	0.0	265	0.0	26.2	195	0.1	245	0.1	25.6	10	0.0	15	0.0	50.0
931	8,675	2.2	10,990	1.9	26.7	6,705	3.0	8,295	2.7	23.7	1,975	1.2	2,700	1.0	36.7
951	2,605	0.7	3,310	0.6	27.1	1,685	0.8	2,065	0.7	22.6	920	0.5	1,245	0.5	35.3
953	1,400	0.4	1,980	0.3	41.4	1,380	0.6	1,935	0.6	40.2	15	0.0	45	0.0	200.0
955	315	0.1	425	0.1	34.9	275	0.1	365	0.1	32.7	45	0.0	55	0.0	22.2
959	330	0.1	495	0.1	50.0	150	0.1	290	0.1	93.3	175	0.1	205	0.1	17.1
991	7,945	2.0	13,755	2.4	73.1	6,615	3.0	11,105	3.6	67.9	1,335	0.8	2,650	1.0	98.5

VI. Data Evaluation

The quality of the occupation data was evaluated at various stages throughout processing. The initial review occurred at the "load stage". This is the stage at which the data are transferred from magnetic tape to the census database. It was at this stage that the first coded values were available. The data were compared to similar "load stage" data from 1986. Some possible problem cases were identified for investigation and an assessment of non-response was carried out. The effect of edit and imputation (discussed in the previous section) forms an important part of the certification process. Once processing was completed, a detailed review of the occupation data occurred before the data were released. In this section, the highlights of the review process are presented.

1. Non-response

Table 3 presents 1991 non-response rates for males and females for Canada and the provinces, showing unweighted and weighted data. Non-response was calculated by dividing the number of persons who should have answered the occupation questions, but left them blank, by the number of persons who should have given a response. Invalid responses are not considered as non-responses, since the invalidity could have been caused by coding or keying errors.

At the Canada level, the weighted non-response for the occupation question was 4.9%. The non-response rate was slightly higher for women (5.2%) than men (4.7%). Only in the Yukon was the weighted non-response rate higher for men. The 1991 non-response rates are higher than those calculated in 1986, when the weighted non-response for males and females was estimated at 3.5% and 3.7% respectively. The weighted rates are consistently lower than the unweighted rates, especially in the Yukon. This is due to the fact that non-response is much higher in collective dwellings and in areas where the 2D canvasser questionnaire was used. In these areas, no sampling occurs. Thus, when the estimates from occupied private dwellings (2B documents) are weighted, there is an overall lowering of non-response rates. The unweighted non-response rate in the Yukon for persons in occupied private dwellings (based on Forms 2B) was 3.7%.

Lack of response to the occupation questions may be attributed to several factors. For example, respondent burden applies to all questions and logically should be more pronounced for occupation and industry questions than for some others, since these questions require a write-in response and appear near the end of the questionnaire. Problems have been historically identified which relate to a lack of comprehension by respondents of the census concept of work. The self-enumeration methodology does not permit interviewer probing to elicit responses from persons doing occasional work at jobs requiring a minimum of training or from those doing work for which remuneration is not received. Respondents doing such work may not recall it when the questionnaire is being completed or may not consider it as "work", but rather as an everyday activity in which they perceive the census would not likely be interested. There is also the question of proxy responses. A parent might not consider a child's babysitting or newspaper delivering as "work". Non-response may also occur because a respondent's occupation is not specific, that is, that it may change frequently to permit him or her to accomplish any of a large variety of tasks.

Table 3 - Non-response Rates for Canada, Provinces and Territories, 1991 Census

	Total	Males	Females
Canada			
Unweighted	5.7	5.6	5.8
Weighted	4.9	4.7	5.2
Newfoundland			
Unweighted	4.2	4.1	4.2
Weighted	4.0	3.9	4.1
Prince Edward Island			
Unweighted	4.8	4.4	5.2
Weighted	4.0	3.6	4.4
Nova Scotia			
Unweighted	4.1	3.9	4.4
Weighted	3.7	3.5	4.0
New Brunswick			
Unweighted	4.6	4.4	5.0
Weighted	4.3	4.1	4.5
Quebec			
Unweighted	5.9	5.7	6.2
Weighted	5.2	5.0	5.4
Ontario			
Unweighted	5.9	5.9	5.9
Weighted	5.1	4.9	5.3
Manitoba			
Unweighted	6.3	6.2	6.3
Weighted	4.9	4.6	5.3
Saskatchewan			
Unweighted	6.3	5.8	6.9
Weighted	5.7	5.1	6.5
Alberta			
Unweighted	5.2	4.9	5.6
Weighted	4.6	4.1	5.1
British Columbia			
Unweighted	5.7	5.7	5.7
Weighted	4.7	4.4	4.9
Yukon			
Unweighted	11.2	12.1	10.1
Weighted	7.4	7.9	6.8
Northwest Territories			
Unweighted	3.7	3.6	3.9
Weighted	3.7	3.6	3.9

2. Detailed Review by Major Group

The final occupation data were evaluated by making comparisons to occupation data from the 1986 Census as well as to data from the 1991 May Labour Force Survey. Whenever census and Labour Force Survey data were compared, adjustments were made, where possible, to account for differences in coverage, methodology and processing between the two sources. Comparisons to the Labour Force Survey were limited to the major and minor group levels. Due to sample size restrictions, the Labour Force Survey does not publish estimates down to the unit group (four digit) level, and therefore comparisons to this level are not supportable.

In this section, the results of this evaluation are presented for each major group. Comparative labour force figures from the 1986 and 1991 Censuses, and figures from the 1991 Census and the Labour Force Survey for the larger universe of persons who worked since January 1, 1990, introduce each major group. The discussion which follows includes a general review as well as information on any problems encountered and the steps taken to handle them. In 1991, the written responses to occupation and industry were not data-captured. For evaluation purposes, a representative sample file of written responses to occupation and industry questions was captured. This file consisted of 53,000 records. Throughout the following section, references are made to this sample file.

All cautionary notes for 1991 are included in the presentation for the relevant major group.

Appendix A contains the 1986 and 1991 detailed occupation data.

All occupations

Experienced labour force

1986 Census	12,740,225
1991 Census	14,220,230
% change	11.6%

Population who worked since January 1, 1990

1991 Census (LFS universe)	15,311,000
1991 Labour Force Survey (census concepts)	15,121,000
% difference	1.3%

The figures for all occupations are equivalent to those of the experienced labour force, which consists of persons employed during the census reference week as well as persons unemployed during the reference week who last worked at some time in the 17 months prior to Census Day. The increase in the experienced labour force between 1986 and 1991 for women was 17.2%, and for men, 7.5%. These estimates are provided to give a benchmark for the data which follows by occupation major group.

Major Group 11 - Managerial, Administrative and Related Occupations**Labour force**

1986 Census	1,341,970	10.5% of experienced labour force
1991 Census	1,739,165	12.2% of experienced labour force
% change	29.6%	

Population who worked since January 1, 1990

1991 Census (LFS universe)	1,804,000
1991 Labour Force Survey (census concepts)	1,834,000
% difference	-1.6%

The number of persons reporting managerial and administrative occupations has increased for both men and women since 1986. However, the increases were greater for women (55%) than for men (18%). There was a decrease in the number of persons reporting Post Office Management for both men and women. The number of males also decreased in the following categories: General Managers and Other Senior Officials, and Purchasing Officers and Buyers Except Wholesale and Retail Trade.

The decrease in the number of men in Unit Group 1130 - General Managers and Other Senior Officials was a departure from the trend found between 1981 and 1986, which showed a 76% increase for this group. Women in this unit group continued to increase their numbers between 1986 and 1991 but at a lesser rate (39% increase from 1986 to 1991 compared to an 194% increase from 1981 to 1986).

In 1986, there was a special instruction in the Regional Office Processing specifications concerning the coding of General Managers and Other Senior Officials. These instructions were not repeated in 1991, since it seemed that they were overused to code vague responses to "management".

The "General Manager and Other Senior Officials" category is often associated by data users with increased levels of responsibility, and, consequently, with higher levels of employment income. Based upon the definition in the classification manual, this interpretation is justified to some extent. The 1991 Census data show that 40% of males and 13% of females coded to this unit group reported employment income exceeding \$60,000. In addition, in this unit group the average age of men was 45.2 years and that of women was 42.0 years. One would expect senior managers to have several years of work experience and therefore, the average age of 44.3 years appears appropriate.

In 1986, the following cautionary note for Unit Group 1130 was included in the publications:

General managers and other senior officials (1130): The unit group "General managers and other senior officials (1130)" should not be interpreted as being exclusively senior managers or corporate managers. These people are coded to this category but other respondents who consider themselves general managers have also been assigned this code. The term "manager" is used more and more frequently in the labour market and persons having this "title" may have a variety of responsibilities. These people respond to the Census questionnaire in a general way because the nature of their work is varied. It is suggested that employment income data be used in conjunction with that for occupation as an indicator of senior management.

This special note was included in 1991 as well.

The number of persons reporting Farm Management Occupations (Unit Group 1146) has increased significantly for both men (59%) and women (168%). This increase is most likely linked to a change in the census of agriculture questionnaire. In previous censuses, only one person per household could be identified as a farm operator. In 1991, this restriction was removed and multiple farm operators were reported. Between 1986 and 1991, the number of farm operators increased by 28% overall (600% for women).

The census classifies all farmers who are farm operators and either "employees" or "self-employed in an incorporated business" into the farm management category. The majority of persons in the farm management category were originally assigned one of the three farmer codes (7113, 7115, or 7119). The Labour Force Survey does not process respondent data in this manner.

Due to the increasing number of persons in Unit Group 1146 - Farm Management Occupations, the following special note was included in the 1991 publications to explain the link between farmers and farm management:

Farm management occupations (1146). This unit group includes occupations concerned with managing farms or holdings, for an employer, on a paid basis. Most farmers who are working for wages and salaries or who are self-employed in incorporated companies do not indicate farm management when responding to the Census questionnaire. They are initially coded to a farming code and subsequently reassigned to 1146 during processing. Data users interested in farmers should be aware that most of the persons coded to 1146 consider themselves to be farmers.

There was a large increase in the number of persons coded to Unit Group 1149 - Other Managers and Administrators, n.e.c. (representing an 81% increase for males and a 72% increase for females). This increase may be indicative of vague or incomplete responses to the occupation and industry questions. The title Manager, n.e.c. is included in this group. The deletion of special instructions from the ROP specifications for 1130 - General Managers and Other Senior Officials may have reduced the number of vague responses coded to 1130 and increased the number coded to 1149.

Major Group 21 - Occupations in Natural Sciences, Engineering and Mathematics

Labour force

1986 Census	447,800	3.5% of experienced labour force
1991 Census	572,515	4.0% of experienced labour force
% change	27.9%	

Population who worked since January 1, 1990

1991 Census (LFS universe)	596,000
1991 Labour Force Survey (census concepts)	556,000
% difference	7.2%

At the major group level, census data showed increases for both men (24%) and women (46%). In fact, there were increases for men and women at each minor group level as well.

Among the occupations in the physical sciences, women maintained their numbers in Geologists and showed increases in the other unit groups. They continued, however, to be concentrated among the Technologists and Technicians and in the Chemist unit group. These two unit groups accounted for 85% of women reported to the physical sciences. There were decreases for males in Geologists, Meteorologists and Occupations in Physical Sciences, n.e.c.

Occupations in life sciences increased for all unit groups for both men and women.

Among Architects, Engineers and Community Planners (Minor Group 214/215), women more than doubled their numbers while men showed a more modest increase of 24%. The number of persons reporting "community planning" increased by 79%.

Systems Analysts and Computer Programming Occupations have increased since the 1986 Census for both males (51%) and females (43%).

Major Group 23 - Occupations in Social Sciences and Related Fields

Labour force

1986 Census	246,465	1.9% of experienced labour force
1991 Census	316,365	2.2% of experienced labour force
% change	28.4%	

Population who worked since January 1, 1990

1991 Census (LFS universe)	338,000
1991 Labour Force Survey (census concepts)	305,000
% difference	10.8%

Between 1986 and 1991, the census estimates of persons reporting occupations in the social sciences increased 18% for males and 36% for females. Among the notable increases for women were Economists (65%), Social Workers (49%), Lawyers and Notaries (71%), and Educational and Vocational Counsellors (59%). Women also showed a large percentage increase for Judges and Magistrates (82%); however, their numbers remain small.

For both sexes, the only occupations which showed a decline were Supervisors: Occupations in Library, Museums and Archival Science and Occupations in Library, Museums and Archival Sciences, n.e.c.

Major Group 25 - Occupations in Religion

Labour force

1986 Census	34,100	0.3% of experienced labour force
1991 Census	33,690	0.2% of experienced labour force
% change	-1.2%	

Population who worked since January 1, 1990

1991 Census (LFS universe)	36,000
1991 Labour Force Survey (census concepts)	32,000
% difference	12.5%

The estimate of men in religious occupations remained virtually unchanged between 1986 and 1991. Over this period, the number of women reporting occupations in religion declined by 5%.

Unit group 2511 - Ministers in Religion accounts for 71% of those persons coded to Major Group 25. Between 1981 and 1986, women increased their numbers in Unit Group 2511 by 42%. This trend has continued into 1991, with a 25% increase since 1986. However, men still dominate this occupation group, accounting for 88% of the estimate.

The estimate for nuns and brothers declined by 29%, although the small number of men in this group actually increased slightly. The decline in the number of nuns and brothers was evident in almost all the provinces and territories. In addition to the natural aging of this population, this decline was due to processing procedures. Coders experienced difficulty in determining how to code nuns and brothers since their responses often appeared to be volunteer work. In 1981 and 1986, an edit was instituted which identified respondents who were 65 years or older, who lived in religious institutions in Quebec and had no wages or salary. These persons were considered to be "not in the labour force" on the grounds that their activities were more likely of a volunteer nature, and not work as defined elsewhere in the labour market. In 1991, this edit was extended to the rest of Canada. Although the majority of nuns and brothers reside in Quebec, the reasoning for this edit applies regardless of the province of residence.

Major Group 27 - Teaching and Related Occupations**Labour force**

1986 Census	543,640	4.3% of experienced labour force
1991 Census	626,520	4.4% of experienced labour force
% change	15.3%	

Population who worked since January 1, 1990

1991 Census (LFS universe)	668,000
1991 Labour Force Survey (census concepts)	647,000
% difference	3.2%

The estimate for men (8%) and women (20%) in teaching occupations has increased since 1986. At the Canada level, the estimates increased for elementary, secondary, community college and university teachers for both sexes, although the increases were greater for women in all of these cases.

Provincially, the census estimates for elementary and kindergarten teachers declined for men in all but New Brunswick, Ontario, Saskatchewan and the Yukon. The number of women showed increases since 1986 in all provinces and territories, except Quebec.

Elementary and Secondary School Teaching and Related Occupations, n.e.c (Unit Group 2739) increased by 72% since 1986. A review of the sample write-in file indicated that this code was often used to code vague responses, such as "teacher - teaching", where it was not clear whether the respondent was teaching in an elementary or a secondary school.

Major Group 31 - Occupations in Medicine and Health**Labour force**

1986 Census	614,095	4.8% of experienced labour force
1991 Census	727,335	5.1% of experienced labour force
% change	18.4%	

Population who worked since January 1, 1990

1991 Census (LFS universe)	767,000
1991 Labour Force Survey (census concepts)	749,000
% difference	2.4%

At the major group level, census estimates increased for both men (16%) and women (19%).

With the exception of Veterinarians, women showed greater increases in all of the "Health Diagnosing and Treating" occupations than men. Females increased their numbers in Physicians and Surgeons (47%), Dentists (24%), Osteopaths and Chiropractors (123%). Women have increased their representation in Health Diagnosing and Treating Occupations, from 23% in 1986 to 28% in 1991.

Among the Nursing, Therapy and Related Assisting Occupations, census estimates increased in all categories but Orderlies (Unit Group 3132) and Registered Nursing Assistants (Unit Group 3134).

Our review of the data revealed a coding problem for female orderlies. This code was overused. The sample write-in file indicated that women who responded "care of the elderly" were frequently coded here even though the work title "orderly" did not appear on the questionnaire. If the response coding had been left unchanged, female orderlies would have increased almost 300% while the number of male orderlies would have decreased 27%. A fix was performed which retained only female orderlies who had indicated that they worked in hospitals or extended care hospitals. The remainder were assigned to Nursing Attendants (Unit Group 3135), where "care of the elderly" was a common response for persons coded to this unit group.

Data from the *Health Reports* (Hospital Annual Statistics)¹ 1981/1982 data and 1987/1988 data were compared. Data from these reports were limited to persons in hospitals. According to this source, the nursing staff in Canada increased by 10.5% between 1981/1982 and 1987/1988. This increase was entirely due to an increase in part-time staff. The number of full-time nursing staff decreased over this period. Both the number of nursing assistants and of orderlies declined between 1981/1982 and 1987/1988. These trends are similar to those noted in the census data.

Among occupations in the minor group Other Occupations in Medicine and Health, all unit groups with the exception of male Denturists and Dispensing Opticians showed increases in their estimates. The largest increases occurred for Optometrists, especially women (80%), Medical Laboratory Technologists and Technicians, and Dental Hygienists and Dental Assistants.

1. Statistics Canada, *Health Reports*, Supplement No. 20, "Hospital Annual Statistics 1987-88: Volume 4 - Personnel" (Ottawa: Supply and Services Canada, 1991), Catalogue No. 83-242 (new).

Major Group 33 - Artistic, Literary, Recreational and Related Occupations

Labour force

1986 Census	207,790	1.6% of experienced labour force
1991 Census	245,505	1.7% of experienced labour force
% change	18.2%	

Population who worked since January 1, 1990

1991 Census (LFS universe)	272,000
1991 Labour Force Survey (census concepts)	293,000
% difference	-7.2%

The census estimates of persons in Artistic, Literary, Recreational and Related Occupations increased 14% for men and 24% for women.

Men decreased their numbers in Musicians and Singers (11%), and Supervisors: Occupations in Sports and Recreation (10%).

The estimates of persons in writing occupations increased 25%, 19% for males and 31% for females. There were large increases in the number of Translators and Interpreters (34%).

In comparison with the Labour Force Survey, the census estimates of persons in Occupations in Sports and Recreation were lower due to lower estimates of Attendants, Sports and Recreation and Coaches, Trainers and Instructors, Sports and Recreation. These occupations are often associated with the young and with part-time workers, groups which are traditionally undercovered by the census. Respondents have a tendency to forget to include this work or to consider it as unimportant.

Major Group 41 - Clerical and Related Occupations

Labour force

1986 Census	2,318,620	18.2% of experienced labour force
1991 Census	2,573,065	18.1% of experienced labour force
% change	11.0%	

Population who worked since January 1, 1990

1991 Census (LFS universe)	2,811,000
1991 Labour Force Survey (census concepts)	2,439,000
% difference	15.3%

The increase in the estimate of men in clerical occupations (13%) was greater than the increase of men in the labour force (11%). By contrast, the increase in the estimate of women in clerical occupations (10.6%) was smaller than the influx of women to the labour force (16%).

Clerical and Related Occupations continues to be, by far, the largest category for women. In 1991, 31.6% of women in the labour force were in clerical occupations. However, this is a decrease from 34% in 1986.

The trend towards automation in the work place continues to be evident. The estimate of Typists and Clerk-typists decreased by 47%, while Electronic Data-processing Equipment Operators increased by 24% and General Office Clerks by 34%. There were also declines in Weighers; Material Recording, Scheduling and Distributing Occupations; and Library, File and Correspondence Clerks and Related Occupations.

There were large increases between 1986 and 1991 for both men and women in the following occupations: Collectors; Claim Adjusters; and Receptionists and Information Clerks. In addition, for men, there were large percentage increases for Telephone Operators; Cashiers and Tellers; and Insurance, Bank and Other Finance Clerks.

Major Group 51 - Sales Occupations**Labour force**

1986 Census	1,153,160	9.1% of experienced labour force
1991 Census	1,308,705	9.2% of experienced labour force
% change	13.5%	

Population who worked since January 1, 1990

1991 Census (LFS universe)	1,444,000
1991 Labour Force Survey (census concepts)	1,466,000
% difference	-1.5%

The census estimates of men in Sales Occupations increased 10%, while that of women increased 18%.

While, overall, persons in Sales Occupations: Commodities increased by 12%, there were declines among Technical Sales Occupations and Related Advisers; Commercial Travellers; and Street Vendors and Door-to-door Sales Occupations. The estimates, at the minor group level, of persons in Sales Occupations: Commodities compare very well with those of the Labour Force Survey.

Sales Occupations, Services increased 25% between 1986 and 1991: 14% for men and 44% for women. Only the "not elsewhere classified" category showed a decline. The largest increases for women were in Supervisors: Sales Occupations, Services (58%), Insurance Sales Occupations (62%) and Real Estate Sales Occupations (34%). Comparisons to the Labour Force Survey were good at the minor group level.

The census estimates of Other Sales Occupations, n.e.c. have declined since 1986, especially for Route Drivers.

Major Group 61 - Service Occupations**Labour force**

1986 Census	1,617,520	12.7% of experienced labour force
1991 Census	1,818,375	12.8% of experienced labour force
% change	12.4%	

Population who worked since January 1, 1990

1991 Census (LFS universe)	2,006,000
1991 Labour Force Survey (census concepts)	2,182,000
% difference	-8.1%

The census estimates of persons in Service Occupations increased 7% for men and 17% for women.

Protective Service Occupations increased for all groups except non-commissioned Armed Forces personnel. The census estimates of the Armed Forces were lower than those supplied by the Department of National Defence by approximately 12%. Coding instructions request that where a respondent's rank is not given, the appropriate civilian occupation code be assigned. Thus, some members of the Armed Forces will be found in other occupation major groups. There was an 84% increase in the number of female police officers reported.

Among Food and Beverage Preparation and Related Service Occupations, the census estimates increased for all but Bartenders.

Occupations in Lodging and Other Accommodation have declined since 1986 by 20%. Most of this decline was due to a decrease in the number of persons coded to 6130 Supervisors: Occupations in Lodging and Other Accommodation. All of this decrease was due to a processing change since 1986. A review of the sample write-in file revealed incompatible occupation and industry combinations. For example, many of the respondents indicated that they worked in hospitals or extended care homes; others worked in private households. The following adjustments were made:

- code 6130 was retained for persons with a compatible industry (Accommodation and Lodging Industry);
- code 6130 was recoded to 6142 - Housekeepers, Servants and Related Occupations for persons who were in the Private Households Industry;
- the remaining persons with code 6130 were recoded to 6191 - Janitors, Charworkers and Cleaners.

This change involved an approximate weighted count of 14,000 persons.

Occupations in personal services increased 33% since 1986. The largest component of this increase was in Child-care Occupations. The estimate for this unit group increased 59%. The census estimates of persons in Personal Service Occupations were lower than those of the Labour Force Survey. However, the estimates were much closer to the LFS figures in 1991 than they had been in 1986. Child-care occupations are difficult to enumerate in the census, especially for the younger population. Parents answering for their children who do babysitting may not report this kind of work. Some persons may prefer not to report it because of fear of penalization by Revenue Canada.

Census estimates for persons in the Apparel and Furnishings Service Occupations declined by 6%. Decreases were evident for all unit groups except Laundering and Dry Cleaning Occupations, which remained constant.

Occupations in Other Service Occupations increased 13% since 1986. Janitors, Charworkers and Cleaners increased by 14%. Part of this increase was due to the recoding of persons from code 6130 to code 6191. This group, however, would still have shown an increase of about 8% had the adjustment not occurred.

Major Group 71 - Farming, Horticultural and Animal Husbandry Occupations**Labour force**

1986 Census	508,310	4.0% of experienced labour force
1991 Census	474,360	3.3% of experienced labour force
% change	-6.7%	

Population who worked since January 1, 1990

1991 Census (LFS universe)	522,000
1991 Labour Force Survey (census concepts)	584,000
% difference	-10.6%

The census estimates for the number of persons in Farming, Horticultural and Animal Husbandry Occupations decreased 10.9% for men and increased 6.2% for women. Much of the decrease for men was due to a decline in the estimate of persons in the minor group Farmers (Unit Groups 7113, 7115, and 7119). Female farmers increased by 69%. In 1991, the census of agriculture introduced a change in the collection of information for farm operators. This change allowed for the reporting of multiple farm operators per household. As a consequence, the number of farm operators increased by 1% for men and by 600% for women. It is possible that many women were encouraged by this change to report themselves as farmers when answering the occupation questions.

In 1986, the three farmer codes 7113 - Livestock Farmers, 7115 - Crop Farmers and 7119 - Farmers, n.e.c. were combined into one code, 7111 - Farmers. This collapsing was done due to the difficulty coders encountered in making the distinction between the three types of farming. The timing of the census may also have been a factor, as the reference week - being the last week in May - may have biased coding in favour of crop farming.

In 1991, the estimate of Livestock Farmers decreased by 18%, that of Crop Farmers decreased by 37%, while Farmers, n.e.c. increased by 23%. It is difficult to determine whether these figures represent a more realistic view of farmers. It was decided that farmer categories would be collapsed in 1991 as well.

In comparison with the Labour Force Survey, the census estimates of all farmers were lower. This was mainly due to processing differences. Farmers who reported that they were employees or self-employed in an incorporated company were considered to be farm managers and assigned code 1146 in the census. A note to that effect is included in the publications.

The census counts of livestock and crop farm workers declined by about a third since 1986, while those of Other Farming, Horticultural and Animal Husbandry increased (28%). Despite the decrease in the crop farm workers the census estimates were still higher than those of the Labour Force Survey. Even though the data compared more closely with the LFS in 1991, it was recommended that the cautionary note which appeared in 1986 publications be repeated:

Farm workers (7183, 7185, 7199): Data for farm workers should be used with caution. The reference period for the Census was the last week of May, 1986. Farmers and farm workers, whether livestock, crop or a combination of these, will be primarily occupied at this period of time in seeding, planting or otherwise working the land. The principal activities reported on the Census questionnaires may imply, therefore, that these people are crop farm workers. Crop farm workers (7185) may consequently be overstated at the expense of livestock workers (7183) and other farming, horticultural and animal husbandry occupations, n.e.c. (7199).

Major Group 73 - Fishing, Trapping and Related Occupations

Labour force

1986 Census	45,950	0.4% of experienced labour force
1991 Census	49,315	0.4% of experienced labour force
% change	7.3%	

Population who worked since January 1, 1990

1991 Census (LFS universe)	55,000
1991 Labour Force Survey (census concepts)	62,000
% difference	-11.3%

There was a much greater percentage increase since 1986 for women (53%) than men (3%), although in absolute terms the number of women increased by only 2,280 persons. The estimate for men in Net, Trap and Line Fishing Occupations actually decreased (4%).

Major Group 75 - Forestry and Logging Occupations

Labour force

1986 Census	89,745	0.7% of experienced labour force
1991 Census	82,095	0.6% of experienced labour force
% change	-8.5%	

Population who worked since January 1, 1990

1991 Census (LFS universe)	88,000
1991 Labour Force Survey (Census concepts)	86,000
% difference	2.3%

The decline in the estimates for persons in Forestry and Logging Occupations was solely due to decreases for men (-10%). The number of women increased by 10% (600 women). The only unit groups which showed increases were Occupations in Labouring and Other Elemental Work: Forestry and logging and Forestry and Logging Occupations, n.e.c. These figures were consistent with those found for the Forestry and Logging Industry.

Major Group 77 - Mining and Quarrying Including Oil and Gas Field Occupations

Labour force

1986 Census	67,145	0.5% of experienced labour force
1991 Census	64,545	0.5% of experienced labour force
% change	-3.9%	

Population who worked since January 1, 1990

1991 Census (LFS Universe)	67,000
1991 Labour Force Survey (census concepts)	73,000
% difference	-8.2%

Between 1986 and 1991, the number of men in mining and quarrying occupations decreased by 5%. For women, there was an increase of 30% (400 persons). These trends are consistent with those found in the Mining, Quarrying and Oil Well Industries.

Major Group 81/82 - Processing Occupations**Labour force**

1986 Census	446,800	3.5% of experienced labour force
1991 Census	410,665	2.9% of experienced labour force
% change	-8.1%	

Population who worked since January 1, 1990

1991 Census (LFS universe)	448,000
1991 Labour Force Survey (census concepts)	456,000
% difference	-1.8%

Decreases in the number of persons in Processing Occupations were experienced by both men (10%) and women (3%). These decreases were felt across all minor groups with the exception of 811 - Mineral Ore Treating Occupations and 821/822 - Food, Beverage and Related Processing Occupations, which remained stable over the five-year period.

At the unit group level, there were several groups which did show increases, the most notable being 8213 - Baking, Confectionery Making and Related Occupations, which increased by 23% (40% for women).

With the aid of the sample write-in file, it was found that some persons originally coded to Major Group 81/82 were miscoded and had to be re-assigned to a more appropriate code.

Some persons who reported their kind of work as installing windows or laying tiles were coded to 8151 - Furnace and Kiln Workers: Clay, Glass and Stone. Workers in this unit group are involved in the processing of clay, glass, stone and related materials. The industry response was used to recode occupation. Respondents coded to Industry 423 - Exterior Close-in Work were recoded to occupation Unit Group 8795 - Glaziers. Respondents coded to Industry 427 - Interior and Finishing Work were recoded to occupation Unit Group 8782 - Brick and Stone Masons and Tile Setters.

Some respondents who indicated that they made handicrafts, pottery, etc. were coded to 8155 - Forming Occupations, Clay, Glass and Stone. Persons who were coded to industry comparison code 0146 - Pottery, handicraft, retail, and Industry 9998 - Other Services, n.e.c. (which contains the title Artists (Painters), Own-account) were recoded to occupation Unit Group 3311 - Painters, Sculptors and Related Artists.

Some persons who indicated that they were a cook's helper or equivalent were coded to 8229 - Food, Beverage and Related Processing Occupations. Respondents who were coded to an industry code related to food or accommodation industries were recoded to occupation Unit Group 6129 - Food and Beverage Preparation and Related Service Occupations, n.e.c.

Some respondents who indicated activities related to harvesting and planting tobacco were coded to 8293 - Tobacco Processing Occupations. Respondents who were coded to industries related to agriculture were recoded to occupation Unit Group 7185 - Crop Farm Workers, which contains occupation titles such as Tobacco Worker, Tobacco Cutter, etc.

Major Group 83 - Machining and Related Occupations

Labour force

1986 Census	280,735	2.2% of experienced labour force
1991 Census	266,185	1.9% of experienced labour force
% change	-5.2%	

Population who worked since January 1, 1990

1991 Census (LFS universe)	280,000
1991 Labour Force Survey (census concepts)	226,000
% difference	23.9%

The decline in the estimate of persons in Major Group 83 - Machining and Related Occupations was experienced by both men (4%) and women (15%). Decreases were evident for all the minor groups, and only a few unit groups showed gains: 8313 - Machinist and Machine Tool Setting-up Occupations, 8335 - Welding and Flame Cutting Occupations, 8337 - Boilermakers, Platers and Structural Metal Workers, 8373 - Abrading and Polishing Occupations: Clay, Glass, Stone and Related Materials, and 8395 - Patternmakers and Mouldmakers, n.e.c.

The sample write-in file was useful in detecting a coding error. Some persons who indicated that they were babysitters were incorrectly coded to 8319 - Metal Machining Occupations, n.e.c. The occupation title "Babysitter - any ind." appears directly under the title "Babbitter - any ind." (babbitt metal is an alloy used for lining bearings) in the occupation coding manual. Respondents coded to Industry 9740 - Private Households; 9799 - Other Personal and Household Services n.e.c.; or 8640 - Non-institutional Social Services were recoded to occupation Unit Group 6147 - Child-care Occupations.

Some respondents who indicated that they installed windows were miscoded to 8379 - Clay, Glass, Stone and Related Materials Machining Occupations, n.e.c. These persons were reassigned to 8795 - Glaziers based on their industry code.

Major Group 85 - Product Fabricating, Assembling and Repairing Occupations**Labour force**

1986 Census	955,155	7.5% of experienced labour force
1991 Census	888,985	6.3% of experienced labour force

Population who worked since January 1, 1990

1991 Census (LFS universe)	946,000
1991 Labour Force Survey (census concepts)	1,146,000
% difference	-17.5%

The decrease in the estimates of persons in Product Fabricating, Assembling and Repairing Occupations was evident for both men (-5%) and women (-14%). While declines were experienced in all minor groups, the largest percentage changes occurred in Textile, Fur and Leather Products and Rubber, Plastic and Related Products. This is consistent with the declines reported for such industries as Plastic Products; Leather and Allied; Primary Textiles; and Clothing Industries.

At the unit group level, there were a few exceptions to the general decrease in this major group. Increases were evident for Motor Vehicle Fabricating and Assembling Occupations, n.e.c. and Aircraft Fabricating and Assembling Occupations, n.e.c. (Unit Groups 8513 and 8515) and Motor Vehicle Mechanics and Repairers and Aircraft Mechanics and Repairers (Unit Groups 8581 and 8582). These increases were consistent with increases experienced in the Transport Equipment Industries. Increases were also reported in Electronic and Related Equipment Installing and Repairing Occupations, n.e.c. (Unit Group 8535), Cabinet and Wood Furniture Makers (Unit Group 8541) and Inspecting, Testing, Grading and Sampling Occupations: Equipment Repair, n.e.c. (Unit Group 8586).

In 1986, confusion was noted in the coding of Tailors and Dressmakers (Unit Group 8553) and Sewing Machine Operators, Textile and Similar Materials (Unit Group 8563). This problem existed in 1991 as well. The sample write-in file showed that titles such as "Couturière, Couture" and "Seamstress" were coded to both unit groups. The problem was again most severe in the province of Quebec.

It was recommended that the special note which appeared in publications in 1986 be repeated:

Tailors and dressmakers (8553) and sewing machine operators (8563): In minor group 855-856, Occupations associated with textile, fur and leather products, there is confusion in the coding of tailors and dressmakers (8553) and sewing machine operators (8563), particularly in the province of Quebec. Consequently, tailors and dressmakers estimates are high at the expense of the machine operators.

Major Group 87 - Construction Trades Occupations

Labour force

1986 Census	753,485	5.9% of experienced labour force
1991 Census	843,345	5.9% of experienced labour force
% change	11.9%	

Population who worked since January 1, 1990

1991 Census (LFS universe)	889,000
1991 Labour Force Survey (census concepts)	912,000
% difference	-2.5%

The census estimates for persons in Construction Trades Occupations increased for both men (12%) and women (26%). There were increases for all three minor groups.

Only a few unit groups experienced declines. The estimate of Railway Section and Track Workers decreased by 39%. The other unit groups which declined between 1986 and 1991 were 8718 - Occupations in Labouring and Other Elemental Work: Excavating, Grading, Paving and Related Activities; 8730 - Foremen/women: Electrical Power, Lighting and Wire Communications Equipment Erecting, Installing and Repairing Occupations; and 8780 - Foremen/women: Other Construction Trades Occupations for men only; 8791 - Pipefitting, Plumbing and Related Occupations for women only; and 8798 - Occupations in Labouring and Other Elemental Work: Other Construction Trades for both sexes.

Major Group 91 - Transport Equipment Operating Occupations**Labour force**

1986 Census	468,830	3.7% of experienced labour force
1991 Census	508,565	3.6% of experienced labour force
% change	8.5%	

Population who worked since January 1, 1990

1991 Census (LFS universe)	536,000
1991 Labour Force Survey (census concepts)	550,000
% difference	-2.5%

The census estimates of persons in Transport Equipment Operating Occupations increased 7% for men and 29% for women. At the minor group level, there were decreases in Railway Transport Operating Occupations and Water Transport Operating Occupations (Minor Groups 913 and 915) and increases in the remaining minor groups.

Truck Drivers (Unit Group 9175) continued to be one of the largest unit groups for men. In 1991, it accounted for 59% of the males coded to Major Group 91, and 3.5% of the labour force.

Women in Unit Group 9171 - Bus Drivers increased their numbers by a third.

Major Group 93 - Material Handling and Related Occupations, n.e.c.

Labour force

1986 Census	236,480	1.9% of experienced labour force
1991 Census	225,660	1.6% of experienced labour force
% change	-4.6%	

Population who worked since January 1, 1990

1991 Census (LFS universe)	249,000
1991 Labour Force Survey (census concepts)	344,000
% difference	-27.6%

The census estimates of Material Handlers decreased for both men (5%) and women (4%).

For men, the declines occurred in all unit groups, with the exception of Packaging Occupations, n.e.c., which remained stable. For women the situation was reversed. Packaging Occupations, n.e.c. was the only unit group which declined (11%). However, for women, this unit group was by far the largest; it accounted for the decrease of the major group as a whole.

The census estimates were lower than those produced by the Labour Force Survey by nearly 100,000 persons. The occupations in this group were largely unskilled and marginal to the labour market. This creates two problems for the census. Firstly, respondents' answers are likely vague and, therefore, difficult to code precisely. Thus, some respondents may be coded to the less specific occupations in other major groups, or to Major Group 99 - Occupations Not Elsewhere Classified. Secondly, these occupations are often performed by the young and transient workers, a group for which the census has traditionally experienced coverage problems.

Major Group 95 - Other Crafts and Equipment Operating Occupations**Labour force**

1986 Census	146,960	1.2% of experienced labour force
1991 Census	153,155	1.1% of experienced labour force
% change	4.2%	

Population who worked since January 1, 1990

1991 Census (LFS universe)	163,000
1991 Labour Force Survey (census concepts)	180,000
% difference	-9.4%

The census estimates of persons reporting Other Crafts and Equipment Operating occupations increased for both men (4%) and women (5%).

At the minor group level, there were declines in Printing and Related Occupations for both sexes, mainly due to decreases in Photoengraving and Related Occupations for men and Bookbinding and Related Occupations for women. Stationary Engine and Utilities Equipment Operating and Related Occupations increased for all unit groups with the exception of male foremen (Unit Group 9530). Among the Electronic and Related Communications Equipment Operating Occupations, n.e.c., the only decreases occurred for Motion Picture Projectionists (Unit Group 9557), male Telegraph Operators (Unit Group 9553) and Foremen/women: Electronic and Related Communications Equipment Operating Occupations, n.e.c. (Unit Group 9550).

Occupations in Other Crafts and Equipment Operating Occupations, n.e.c. increased by 25%.

Major Group 99 - Occupations Not Elsewhere Classified

Labour force

1986 Census	215,495	1.7% of experienced labour force
1991 Census	292,115	2.1% of experienced labour force
% change	35.6%	

The Labour Force Survey does not classify persons to the "Not elsewhere classified" category. Interviewers are able to obtain sufficient information to code to a more precise category.

The estimate of persons coded to "Occupations Not Elsewhere Classified" increased 32% for men and 51% for women.

Occupations coded to this major group are those which cannot be properly classified to any other major group. Responses which are vague or very general often are coded here. Increases in this group may also reflect inadequacies in the coding manual. The 1980 Standard Occupation Classification has existed since the late 1970s and may, therefore, be lacking in some respects in terms of relevant job titles and appropriate job descriptions. Any of these explanations could be valid for the 1991 data.

3. Recommendations

As a result of the detailed evaluation, the following recommendations were included in the 1991 Certification Report on Occupation Data based on the 1980 Standard Occupational Classification:

It was recommended that the data be released on March 2, 1993, subject to the two following constraints:

1. That the data for farmers, unit groups 7113 - Livestock Farmers; 7115 - Crop Farmers; and 7119 - Farmers, n.e.c. be collapsed into one group, 7111 - Farmers.
2. That special cautionary notes be included in the publications for:
 - 1130 - General Managers and Other Senior Officials
 - 1146 - Farm Management Occupations
 - 7111 - Farmers
 - 7183 - Livestock Farm Workers
 - 7185 - Crop Farm Workers
 - 7199 - Other Farming, Horticultural and Animal Husbandry Occupations, n.e.c.
 - 8553 - Tailors and Dressmakers, and 8563 - Sewing Machine Operators, Textile and Similar Materials

The content of these notes would be as follows:

General Managers and Other Senior Officials (1130): The unit group "General Managers and Other Senior Officials (1130)" should not be interpreted as being exclusively senior managers or corporate managers. These people are coded to this category but other respondents who consider themselves general managers have also been assigned this code. The term "manager" is used more and more frequently in the labour market and persons having this "title" may have a variety of responsibilities. These people respond to the census questionnaire in a general way because the nature of their work is varied. It is suggested that employment income data be used in conjunction with that for occupation as an indicator of senior management.

Farm Management Occupations (1146): This unit group includes occupations concerned with managing farms or holdings, for an employer, on a paid basis. Most farmers who are working for wages and salaries or who are self-employed in incorporated companies do not indicate farm management when responding to the census questionnaire. They are initially coded to a farming code and subsequently reassigned to 1146 during processing. Data users interested in farmers should be aware that most of the persons coded to 1146 consider themselves to be farmers.

Farmers (7111): Data for farmers, Unit Group (7111), are a grouping of Livestock Farmers (7113), Crop Farmers (7115) and Farmers, n.e.c. (7119). These three farmer codes were collapsed due to the difficulty encountered in coding vague responses. In addition farmers, whether livestock, crop or a combination of these, may report as their principal activities tasks associated with crop farming (i.e. seeding and planting, etc.) due to the reference period being the last week in May for the census.

Farm Workers (7183, 7185, and 7199): Data for farm workers should be used with caution. The reference period for the census was the last week of May, during 1986 and 1991. Farm workers, whether livestock, crop or a combination of these, will be primarily occupied at this period of time in seeding, planting or otherwise working the land. The principal activities reported on the census questionnaires may imply, therefore, that these people are crop farm workers. Crop Farm Workers (7185) may consequently be overstated at the expense of Livestock Workers (7183) and Other Farming, Horticultural and Animal Husbandry Occupations, n.e.c. (7199).

Tailors and Dressmakers (8553) and Sewing Machine Operators (8563): In Minor Group 855/856, occupations associated with textile, fur and leather products, there is confusion in the coding of Tailors and Dressmakers (8553) and Sewing Machine Operators (8563), particularly in the province of Quebec. Consequently, estimates for tailors and dressmakers are high at the expense of the machine operators.

VII. Historical Comparability

Many users of occupation data are interested in change over time. Although occupation data has been collected since the late eighteen hundreds, it has only been since 1971 that occupation data has been collected and classified on the basis of the kind of work performed and a description of the person's most important duties.

The 1991 Census occupation data are available according to both the 1971 Occupation Classification Manual (OCM) and the 1980 Standard Occupational Classification.

In 1971, occupation was coded using the 1971 Occupational Classification Manual. Prior to the 1981 Census, a new classification manual - the 1980 Standard Occupational Classification - was created. This classification was a revision of the 1971 OCM. Both of these classifications categorize occupations by major groups which are subdivided into minor groups and further subdivided into unit groups. The 1971 OCM consists of 23 major groups, 81 minor groups and 496 unit groups. The 1980 SOC consists of 22 major groups, 80 minor groups and 514 unit groups.

In order to truly classify the population according to both these classifications it would have been necessary to code the written responses twice, once to the 1971 OCM following one set of procedures, and then a second time using different coders following the 1980 SOC procedures. This would have been a very costly and time consuming process. As an alternative, a special coding manual was created which allowed occupation titles which had changed unit groups between the 1971 and 1980 classifications to be identified with a unique set of codes called "comparison codes". With these comparison codes it was possible to have particular occupations appear in one unit group according to the 1971 classification and in another according to the 1980 SOC. This process of coding to an interim coding manual and subsequently creating two distinct occupation variables took place in 1981, 1986 and 1991.

The occupation variable based on the 1971 OCM must be used whenever data comparisons dating back to 1971 are made. In 1971 the questions asked and the processing methods used to determine labour force status differed from those used in 1991; therefore, a labour force variable which reflects the 1971 labour force concept must be used to select the universe. Data users familiar with published occupation data based on the 1980 SOC will note that the 1991 experienced labour force figure based on the 1971 OCM is actually higher than the 1991 figure based on the 1980 SOC (14,329,095 persons versus 14,220,230). This is due to the fact that some persons considered to be in the labour force according to 1971 concepts are classified as "not in the labour force" according to the 1991 labour force concepts. Information on comparability of labour force concepts can be found in the *1991 Census Dictionary* or in the 1991 Census Technical Report - *Labour Force Activity* (Catalogue Number 92-337E).

When 1991 occupation data are shown based on the 1971 OCM, respondents who had worked since January 1, 1990, but did not specify an occupation (or gave a response too vague to be coded), were assigned to Major Group 00 - Occupation Not Stated. The 1991 occupation data based on 1980 OCM shows these persons as assigned (through imputation) at the minor group level. Therefore, the sum of all assigned categories is equivalent to the Not Stated category.

In general, data from 1971 is not comparable to data from earlier censuses, however a sample of 1961 Census data was recoded to the 1971 OCM. This data is only available at the occupation major group level.

Users wishing to compare occupation data dating back to 1981 only can use occupation classified according to the 1980 Standard Occupational Classification.

The following table shows occupation data at the major group level based on the 1971 OCM for five census years: 1961, 1971, 1981, 1986 and 1991.

Table 4. Experienced Labour Force by Occupation Major Groups (Based on 1971 Classification) and Sex, for Canada, 1961(1), 1971, 1981, 1986 and 1991 Censuses

Occupation	1961	1971	1981	1986	1991
Canada					
Both Sexes					
Experienced labour force	6,922,045	8,626,925	12,005,320	12,783,505	14,329,095
Major group 11	210,681	372,245	814,035	1,008,990	1,284,385
Major group 21	153,171	234,135	402,965	450,320	575,660
Major group 23	39,774	79,055	188,610	240,780	307,290
Major group 25	22,140	23,590	32,275	30,945	31,235
Major group 27	189,607	349,290	489,170	527,585	606,980
Major group 31	198,714	326,555	519,180	599,190	704,445
Major group 33	57,720	80,480	165,465	199,960	236,495
Major group 41	956,043	1,373,565	2,190,585	2,260,130	2,490,425
Major group 51	736,270	815,740	1,146,250	1,267,395	1,436,895
Major group 61	854,899	969,920	1,431,050	1,621,375	1,826,000
Major group 71	694,648	512,150	508,695	536,265	529,960
Major group 73	32,535	27,180	39,820	43,800	47,225
Major group 75	94,648	67,260	81,535	86,700	79,360
Major group 77	63,998	59,165	75,260	65,760	63,190
Major group 81/82	356,462	334,740	471,995	437,720	401,375
Major group 83	198,643	240,935	307,065	274,720	259,695
Major group 85	568,866	634,355	930,320	932,820	864,850
Major group 87	588,505	568,565	769,630	735,885	821,190
Major group 91	321,733	338,435	457,340	455,540	489,995
Major group 93	182,295	205,840	243,140	227,610	216,035
Major group 95	118,245	108,835	143,480	144,735	149,870
Major group 99	124,732	167,630	178,760	237,520	322,820
Not Stated	157,717	737,270	418,690	397,765	583,700

Table 4. Experienced Labour Force by Occupation Major Groups (Based on 1971 Classification) and Sex, for Canada, 1961(1), 1971, 1981, 1986 and 1991 Censuses - Continued

Occupation	1961	1971	1981	1986	1991
Canada					
Females					
Experienced labour force	2,007,687	2,961,210	4,853,115	5,466,515	6,428,680
Major group 11	25,829	58,310	202,295	324,325	496,395
Major group 21	6,339	17,105	56,880	80,065	116,310
Major group 23	13,172	29,530	99,045	139,050	187,795
Major group 25	4,478	3,705	8,545	6,620	6,710
Major group 27	133,132	211,125	290,935	326,160	388,380
Major group 31	136,268	242,690	403,055	471,725	557,115
Major group 33	12,471	21,895	65,815	84,650	104,820
Major group 41	606,515	940,180	1,702,510	1,776,570	1,948,385
Major group 51	221,929	247,765	467,390	544,515	644,390
Major group 61	410,669	447,980	748,265	869,705	1,017,220
Major group 71	97,445	106,850	107,565	126,880	144,120
Major group 73	179	525	2,235	4,065	6,240
Major group 75	462	1,415	5,105	6,065	6,570
Major group 77	101	380	1,630	1,355	1,815
Major group 81/82	71,118	59,565	104,615	107,015	103,415
Major group 83	8,251	13,680	20,900	19,300	16,410
Major group 85	153,996	150,210	226,725	222,960	191,345
Major group 87	3,696	5,125	15,350	18,250	22,745
Major group 91	2,245	8,190	29,650	35,360	44,910
Major group 93	34,288	40,455	55,040	52,445	50,085
Major group 95	11,908	13,540	30,240	32,820	34,460
Major group 99	12,403	21,730	31,050	45,040	69,335
Not Stated	40,792	319,270	178,275	171,590	269,705

Table 4. Experienced Labour Force by Occupation Major Groups (Based on 1971 Classification) and Sex, for Canada, 1961(1), 1971, 1981, 1986 and 1991 Censuses - Concluded

Occupation	1961	1971	1981	1986	1991
Canada					
Males					
Experienced labour force	4,914,358	5,665,715	7,152,205	7,316,990	7,900,405
Major group 11	184,852	313,930	611,740	684,670	787,990
Major group 21	146,832	217,025	346,085	370,255	459,355
Major group 23	26,602	49,525	89,560	101,730	119,495
Major group 25	17,662	19,885	23,730	24,325	24,525
Major group 27	56,475	138,170	198,235	201,430	218,600
Major group 31	62,446	83,865	116,125	127,470	147,330
Major group 33	45,249	58,585	99,650	115,310	131,675
Major group 41	349,529	433,380	488,070	483,555	542,035
Major group 51	514,341	567,980	678,860	722,880	792,500
Major group 61	444,229	521,935	682,785	751,670	808,780
Major group 71	597,202	405,300	401,135	409,390	385,845
Major group 73	32,356	26,655	37,590	39,735	40,990
Major group 75	94,186	65,845	76,435	80,635	72,790
Major group 77	63,897	58,780	73,640	64,405	61,370
Major group 81/82	285,344	275,180	367,380	330,705	297,955
Major group 83	190,392	227,260	286,170	255,425	243,285
Major group 85	414,870	484,145	703,590	709,860	673,510
Major group 87	584,809	563,440	754,280	717,630	798,445
Major group 91	319,487	330,240	427,685	420,180	445,085
Major group 93	148,006	165,390	188,100	175,160	165,955
Major group 95	106,338	95,300	113,240	111,915	115,410
Major group 99	112,329	145,900	147,705	192,480	253,490
Not Stated	116,925	418,000	240,410	226,170	313,990

(1) The 1961 occupation data presented in this table are based on a sample of 1961 Census questionnaires which were recoded to the 1971 classification. These data include persons who worked at any time during the twelve month period preceeding the census date.

VIII. Products and Services

The 1991 Products and Services line is divided into five categories - data products, analytical products, reference products, tabulation services, and workshops and seminars. This section describes the various products and services which provide data or information on occupation.

Data Products

The Nation Series

Occupation - Catalogue No. 93-327

This publication presents detailed occupation data (based on the 1980 Standard Occupational Classification) for the 1986 and 1991 Censuses. Data were collected from a 20% sample of all households and are cross-classified by sex for Canada, provinces and territories.

Employment Income by Occupation - Catalogue No. 93-332

This publication presents information on the average employment income of the population 15 years of age and over in 1985 and 1990. The data are provided for Canada, provinces and territories for the population working full year, full time, by sex and detailed occupation.

Basic Summary Tabulations - 20% Sample

The 1991 Basic Summary Tabulations (BSTs) are a series of tabulations available on magnetic tape for each of the following standard geographic areas:

- Canada, provinces and territories;
- census divisions and census subdivisions;
- census metropolitan areas and tracted census agglomerations;
- census tracts;
- enumeration areas;
- federal electoral districts.

The following tables containing occupation data are included in the BST program:

N9107	Experienced Labour Force 15 Years and Over by Sex and Occupation Major Groups (Based on the 1980 Occupational Classification) Showing Age Groups.
N9108	Experienced Labour Force 15 Years and Over by Sex and Occupation Major Groups (Based on the 1980 Occupational Classification) Showing Industry Divisions (Based on the 1980 Industrial Classification)
N9109	Experienced Labour Force 15 Years and Over by Sex and Occupation Major Groups (Based on the 1971 Occupational Classification) Showing Industry Divisions (Based on the 1970 Industrial Classification)

Area Profile series

This series gives a statistical overview, or profile of geographic areas. A wide range of census variables are covered in limited detail. The geographic areas include:

- census divisions and census subdivisions
- census metropolitan areas and census agglomerations
- census tracts for CMAs and selected census-tracted CAs
- federal electoral districts
- urban and rural areas
- enumeration areas
- urban forward sortation areas

For each of these geographic areas, there are two parts:

- Part A (showing variables obtained on a 100% basis);
- Part B (showing variables obtained on a 20% sample basis).

Among the variables included in Part B is **Occupation (Based on the 1980 Standard Occupational Classification)** shown at the major group level of detail cross-classified by sex.

Reference Products

1991 Census Dictionary (Cat. No. 92-301E)

The 1991 Census Dictionary provides detailed information on all of the concepts, variables and geographic elements of the 1991 Census. The information provided for each variable includes a definition, a historical summary, the related population, the associated census question number(s), applicable response categories or classifications, and special remarks. There is also an electronic version of the census dictionary.

1991 Census Catalogue (Cat. No. 92-302E)

The 1991 Census Catalogue gives a full description of products and services available, including information on release dates, prices, media, table titles and catalogue numbers.

1991 Census Handbook (Cat. No. 92-303E)

The 1991 Census Handbook provides a non-technical overview of the census. It introduces data users to the census variables and geography, and provides an overview of products and services.

Tabulation Services

Electronic Shelf

All data released in published formats are available on a table-by-table basis in electronic or print format. In addition, some supplementary tables are also planned. The following supplementary tables include **occupation** data:

- N9110 Experienced Labour Force by Detailed Occupation (Based on the 1980 Standard Occupational Classification), Showing Detailed Industry (Based on the 1980 Standard Industrial Classification) and Sex, for Canada, Provinces and Territories, 1991 - 20% Sample Data
- N9111 Experienced Labour Force by Detailed Occupation (Based on the 1971 Occupational Classification Manual), Showing detailed Industry (Based on the 1970 Standard Industrial Classification) and Sex, for Canada, Provinces and Territories, 1991 - 20% Sample Data
- N9112 Experienced Labour Force by Detailed Occupation (Based on the 1980 Standard Occupational Classification), Showing Age Groups and Sex, for Canada, Provinces and Territories, 1991 - 20% Sample Data
- N9113 Experienced Labour Force by Detailed Occupation (Based on the 1980 Standard Occupational Classification), Showing Weeks Worked in 1990 (Total and Mostly Full Time) and Sex, for Canada, Provinces and Territories, 1991 - 20% Sample Data

Workshops and Seminars

Workshops and seminars are offered to provide new and current census data users with relevant information and to assist them in maximizing the value of census data to meet their needs.

IX. Conclusion

On March 2, 1993, occupation data based on the 1980 Standard Occupational Classification were released. At that time, the Nation publication (Cat. No. 93-927) *Occupation* was available to the public.

This report has provided users with information on the steps that took place prior to that release date. It includes a review of the entire project covering such topics as the occupation questions asked, the collection phase, the coding activities, a description of the edit and imputation process and an evaluation of the occupation data. Other products which may be of interest to users of occupation data are listed in the products and services section.

Throughout the process, great care was taken to reflect as accurately as possible the wide-ranging "kinds of work" performed by the Canadian population. In order to meet this objective, the role played by the respondent is of prime importance. It is essential that the questions asked elicit detailed codeable responses. Each census, the entire process is reviewed - from the design of the questionnaire to the final approval of the data - in an effort to improve the quality of the results.

As part of the preparation for the 1996 Census, a National Census Test was held on November 8, 1993. The two occupation questions on "kind of work" and "most important duties" were asked. The written responses to these questions will be captured and analyzed. The results of this test will be taken into consideration in planning the various stages of processing for 1996.

Appendix A

Labour Force by Detailed Occupation (Based on the 1980 Standard Occupational Classification) and Sex, Showing Counts and Percentage Change, for Canada, 1986 and 1991

Appendix A. Labour Force by Detailed Occupation (Based on the 1980 Standard Occupational Classification) and Sex, Showing Counts and Percentage Change, for Canada, 1986 and 1991

Detailed Occupations	Both Sexes			Males			Females		
	1986	1991	% Change	1986	1991	% Change	1986	1991	% Change
Total labour force	13,049,860	14,474,945	10.9	7,441,170	7,957,835	6.9	5,608,690	6,517,110	16.2
Not applicable	309,635	254,710	-17.7	146,955	118,590	-19.3	162,675	136,120	-16.3
All occupations	12,740,225	14,220,230	11.6	7,294,215	7,839,245	7.5	5,446,015	6,380,985	17.2
111 - assigned	2,360	3,790	60.6	1,745	2,325	33.2	615	1,465	138.2
1111	3,255	4,580	40.7	2,420	3,010	24.4	835	1,570	88.0
1113	29,075	38,040	30.8	20,835	24,100	15.7	8,240	13,940	69.2
1115	5,790	4,680	-19.2	2,305	1,660	-28.0	3,485	3,020	-13.3
1116	29,125	35,770	22.8	23,130	26,190	13.2	6,000	9,580	59.7
1119	9,535	14,870	56.0	6,160	8,150	32.3	3,375	6,725	99.3
Minor group 111	79,150	101,730	28.5	56,595	65,435	15.6	22,555	36,295	60.9
113_114 - assigned	21,065	37,900	79.9	14,365	24,145	68.1	6,705	13,755	105.1
1130	161,260	156,235	-3.1	137,410	122,990	-10.5	23,855	33,245	39.4
1131	13,650	16,345	19.7	12,460	13,980	12.2	1,185	2,365	99.6
1132	9,305	9,820	5.5	3,875	3,860	-0.4	5,430	5,955	9.7
1133	38,135	43,620	14.4	26,795	27,055	1.0	11,345	16,570	46.1
1134	16,150	22,550	39.6	6,465	7,890	22.0	9,685	14,660	51.4
1135	69,180	92,060	33.1	46,830	52,300	11.7	22,345	39,760	77.9
1136	31,105	44,010	41.5	19,905	25,440	27.8	11,195	18,565	65.8
1137	219,425	255,885	16.6	157,030	170,755	8.7	62,390	85,130	36.4
1141	14,120	17,595	24.6	11,630	12,960	11.4	2,490	4,635	86.1
1142	63,670	88,915	39.6	40,975	51,425	25.5	22,695	37,490	65.2
1143	52,060	68,315	31.2	46,245	57,865	25.1	5,815	10,450	79.7
1145	22,035	31,810	44.4	21,245	30,245	42.4	790	1,570	98.7
1146	39,910	71,515	79.2	32,555	51,815	59.2	7,355	19,700	167.8
1147	16,700	20,390	22.1	13,780	16,050	16.5	2,925	4,340	48.4
1151	3,935	4,875	23.9	2,900	3,600	24.1	1,030	1,270	23.3
1152	9,235	18,250	97.6	6,225	13,335	114.2	3,010	4,915	63.3
1153	12,845	20,440	59.1	8,165	13,230	62.0	4,680	7,210	54.1
1154	5,010	12,280	145.1	2,835	7,700	171.6	2,175	4,580	110.6
1155	11,980	20,595	71.9	8,235	13,945	69.3	3,745	6,650	77.6
1156	22,265	41,620	86.9	13,860	25,595	84.7	8,405	16,025	90.7
1157	38,045	67,445	77.3	14,110	27,735	96.6	23,935	39,710	65.9
1158	28,885	48,320	67.3	14,920	24,115	61.6	13,965	24,205	73.3
1149 (occupations 1151-1158)	132,195	233,820	76.9	71,260	129,250	81.4	60,940	104,565	71.6
Minor group 113_114	919,965	1,210,785	31.6	662,835	798,030	20.4	257,135	412,755	60.5
117 - assigned	9,050	14,395	59.1	4,865	7,410	52.3	4,190	6,985	66.7
1171	189,025	229,730	21.5	112,715	121,755	8.0	76,310	107,970	41.5
1173	10,900	16,350	50.0	7,940	11,430	44.0	2,965	4,920	65.9
1174	36,850	43,880	19.1	17,135	18,880	10.2	19,715	25,000	26.8
1175	17,160	16,455	-4.1	11,935	10,320	-13.5	5,225	6,135	17.4
1176	8,480	10,790	27.2	6,880	7,840	14.0	1,600	2,950	84.4
1179	71,390	95,050	33.1	38,800	45,040	16.1	32,595	50,010	53.4
Minor group 117	342,860	426,650	24.4	200,265	222,685	11.2	142,590	203,965	43.0
Major group 11	1,341,970	1,739,165	29.6	919,690	1,086,150	18.1	422,280	653,015	54.6
211 - assigned	1,210	1,305	7.9	905	1,035	14.4	305	265	-13.1
2111	10,680	11,345	6.2	7,865	8,000	1.7	2,820	3,345	18.6
2112	7,950	7,815	-1.7	7,040	6,900	-2.0	915	915	0.0
2113	1,155	1,390	20.3	1,065	1,215	14.1	90	175	94.4
2114	1,070	1,095	2.3	965	945	-2.1	100	150	50.0

For the corresponding description of occupation codes - See Appendix C

Appendix A. Labour Force by Detailed Occupation (Based on the 1980 Standard Occupational Classification) and Sex, Showing Counts and Percentage Change, for Canada, 1986 and 1991 - Continued

Detailed Occupations	Both Sexes			Males			Females		
	1986	1991	% Change	1986	1991	% Change	1986	1991	% Change
2117	18,425	22,385	21.5	13,220	15,820	19.7	5,210	6,565	26.0
2119	1,270	1,190	-6.3	1,170	970	-17.1	100	215	115.0
Minor group 211	41,770	46,525	11.4	32,235	34,890	8.2	9,535	11,635	22.0
213 - assigned	775	1,185	52.9	545	775	42.2	230	410	78.3
2131	8,915	10,915	22.4	7,145	8,310	16.3	1,775	2,605	46.8
2133	8,020	9,765	21.8	5,105	6,180	21.1	2,915	3,580	22.8
2135	10,125	12,190	20.4	6,385	7,855	23.0	3,735	4,335	16.1
2139	4,665	6,425	37.7	3,625	5,035	38.9	1,045	1,390	33.0
Minor group 213	32,500	40,480	24.6	22,805	28,155	23.5	9,695	12,325	27.1
214_215 - assigned	3,475	5,585	60.7	3,255	4,830	48.4	215	755	251.2
2141	8,550	11,810	38.1	7,460	9,555	28.1	1,085	2,255	107.8
2142	5,795	6,015	3.8	5,265	5,270	0.1	525	745	41.9
2143	30,730	41,010	33.5	29,375	37,935	29.1	1,360	3,080	126.5
2144	30,710	37,360	21.7	29,125	34,100	17.1	1,585	3,260	105.7
2145	16,340	21,620	32.3	14,585	17,995	23.4	1,760	3,620	105.7
2146	630	785	24.6	560	705	25.9	65	80	23.1
2147	22,605	25,575	13.1	21,920	24,205	10.4	675	1,370	103.0
2151	1,560	1,855	18.9	1,480	1,765	19.3	80	90	12.5
2153	2,950	3,420	15.9	2,830	3,240	14.5	125	180	44.0
2154	4,195	4,680	11.6	3,915	4,370	11.6	275	305	10.9
2155	2,785	4,490	61.2	2,690	4,260	58.4	90	230	155.6
2156	730	1,080	47.9	665	980	47.4	65	100	53.8
2157	7,155	12,790	78.8	5,310	8,930	68.2	1,850	3,865	108.9
2159	8,555	11,505	34.5	8,105	10,500	29.5	445	1,005	125.8
Minor group 214_215	146,760	189,590	29.2	136,545	168,650	23.5	10,215	20,940	105.0
216 - assigned	2,800	3,945	40.9	2,465	3,415	38.5	330	530	60.6
2160	5,595	4,500	-19.6	5,320	4,115	-22.7	275	385	40.0
2161	16,885	16,815	-0.4	15,960	15,570	-2.4	920	1,245	35.3
2163	36,945	34,775	-5.9	30,195	27,490	-9.0	6,750	7,285	7.9
2164	1,555	2,285	46.9	1,265	1,825	44.3	290	460	58.6
2165	48,810	64,985	33.1	43,815	56,680	29.4	4,990	8,305	66.4
2169	3,530	4,190	18.7	3,065	3,600	17.5	460	590	28.3
Minor group 216	116,105	131,495	13.3	102,080	112,700	10.4	14,030	18,800	34.0
218 - assigned	2,875	5,740	99.7	1,995	3,925	96.7	875	1,815	107.4
2181	6,020	7,765	29.0	3,985	4,710	18.2	2,035	3,050	49.9
2183	100,830	149,885	48.7	69,275	104,700	51.1	31,550	45,185	43.2
2189	945	1,035	9.5	490	595	21.4	445	440	-1.1
Minor group 218	110,665	164,420	48.6	75,750	113,930	50.4	34,915	50,490	44.6
Major group 21	447,800	572,515	27.9	369,420	458,325	24.1	78,380	114,190	45.7
231 - assigned	950	1,105	16.3	475	550	15.8	475	555	16.8
2311	14,810	19,650	32.7	10,690	12,845	20.2	4,120	6,805	65.2
2313	1,325	1,740	31.3	705	855	21.3	615	885	43.9
2315	11,435	14,160	23.8	4,690	5,150	9.8	6,735	9,010	33.8
2319	6,090	6,460	6.1	2,465	2,780	12.8	3,625	3,680	1.5
Minor group 231	34,610	43,115	24.6	19,030	22,180	16.6	15,570	20,935	34.5
233 - assigned	3,755	6,315	68.2	1,040	1,780	71.2	2,720	4,540	66.9
2331	43,700	60,530	38.5	14,435	17,010	17.8	29,265	43,520	48.7
2333	61,680	77,535	25.7	16,390	20,710	26.4	45,295	56,825	25.5
2339	6,470	8,530	31.8	2,230	2,745	23.1	4,235	5,785	36.6
Minor group 233	115,605	152,905	32.3	34,095	42,240	23.9	81,510	110,665	35.8
234 - assigned	980	1,990	103.1	660	1,200	81.8	320	790	146.9

For the corresponding description of occupation codes - See Appendix C

Appendix A. Labour Force by Detailed Occupation (Based on the 1980 Standard Occupational Classification) and Sex, Showing Counts and Percentage Change, for Canada, 1986 and 1991 - Continued

Detailed Occupations	Both Sexes			Males			Females		
	1986	1991	% Change	1986	1991	% Change	1986	1991	% Change
2341	2,315	2,650	14.5	2,025	2,125	4.9	290	530	82.8
2343	41,980	53,575	27.6	32,835	37,965	15.6	9,145	15,610	70.7
2349	10,025	12,915	28.8	3,605	3,815	5.8	6,415	9,100	41.9
Minor group 234	55,300	71,135	28.6	39,125	45,105	15.3	16,170	26,030	61.0
235 - assigned	860	1,180	37.2	180	180	0.0	680	1,000	47.1
2350	2,090	2,030	-2.9	700	665	-5.0	1,395	1,365	-2.2
2351	17,725	20,875	17.8	3,470	3,830	10.4	14,255	17,045	19.6
2353	3,095	3,410	10.2	955	1,125	17.8	2,140	2,285	6.8
2359	2,765	2,625	-5.1	700	680	-2.9	2,065	1,940	-6.1
Minor group 235	26,535	30,120	13.5	6,000	6,490	8.2	20,535	23,635	15.1
239 - assigned	300	620	106.7	90	235	161.1	205	385	87.8
2391	7,305	9,995	36.8	3,270	3,575	9.3	4,030	6,420	59.3
2399	6,815	8,475	24.4	2,275	2,820	24.0	4,540	5,655	24.6
Minor group 239	14,415	19,090	32.4	5,645	6,635	17.5	8,770	12,455	42.0
Major group 23	246,465	316,365	28.4	103,895	122,650	18.1	142,565	193,715	35.9
251 - assigned	3,080	2,405	-21.9	1,485	1,310	-11.8	1,600	1,095	-31.6
2511	23,175	23,775	2.6	20,880	20,925	0.2	2,290	2,850	24.5
2513	2,420	1,715	-29.1	555	565	1.8	1,870	1,145	-38.8
2519	5,425	5,800	6.9	2,955	3,060	3.6	2,470	2,740	10.9
Minor group 251	34,100	33,690	-1.2	25,875	25,860	0.0	8,230	7,830	-4.9
Major group 25	34,100	33,690	-1.2	25,870	25,860	0.0	8,225	7,830	-4.8
271 - assigned	1,400	2,135	52.5	800	1,210	51.2	600	930	55.0
2711	36,695	44,795	22.1	26,945	31,545	17.1	9,750	13,255	35.9
2719	17,940	20,090	12.0	9,985	10,930	9.5	7,960	9,160	15.1
Minor group 271	56,040	67,025	19.6	37,725	43,685	15.8	18,315	23,340	27.4
273 - assigned	9,855	12,480	26.6	2,715	3,065	12.9	7,140	9,415	31.9
2731	189,130	204,370	8.1	36,810	37,485	1.8	152,320	166,885	9.6
2733	131,625	139,105	5.7	72,690	73,205	0.7	58,940	65,900	11.8
2739	37,215	63,855	71.6	6,255	11,280	80.3	30,960	52,575	69.8
Minor group 273	367,835	419,810	14.1	118,470	125,040	5.5	249,365	294,770	18.2
279 - assigned	4,075	4,565	12.0	2,020	1,700	-15.8	2,055	2,865	39.4
2791	36,375	39,225	7.8	20,910	21,320	2.0	15,470	17,905	15.7
2792	22,395	26,670	19.1	5,945	7,280	22.5	16,450	19,390	17.9
2793	4,830	7,495	55.2	1,280	2,450	91.4	3,550	5,045	42.1
2795	23,375	26,135	11.8	5,810	5,795	-0.3	17,565	20,335	15.8
2797	15,480	18,110	17.0	9,460	10,420	10.1	6,015	7,690	27.8
2799	13,235	17,490	32.1	5,830	7,040	20.8	7,405	10,450	41.1
Minor group 279	119,765	139,685	16.6	51,250	56,010	9.3	68,515	83,675	22.1
Major group 27	543,640	626,520	15.2	207,450	224,730	8.3	336,190	401,790	19.5
311 - assigned	1,240	2,015	62.5	940	1,430	52.1	300	585	95.0
3111	46,800	54,510	16.5	36,920	39,975	8.3	9,885	14,535	47.0
3113	12,075	12,820	6.2	10,475	10,845	3.5	1,600	1,975	23.4
3115	4,180	4,460	6.7	2,725	3,010	10.5	1,455	1,445	-0.7
3117	2,910	4,055	39.3	2,435	3,005	23.4	470	1,045	122.3
3119	4,480	7,450	66.3	1,815	2,860	57.6	2,670	4,590	71.9
Minor group 311	71,685	85,310	19.0	55,305	61,130	10.5	16,380	24,185	47.6
313 - assigned	11,060	16,270	47.1	1,175	1,720	46.4	9,885	14,555	47.2
3130	19,695	17,135	-13.0	1,720	1,615	-6.1	17,975	15,520	-13.7
3131	221,925	255,425	15.1	10,520	13,255	26.0	211,405	242,170	14.6
3132	4,510	3,405	-24.5	3,730	2,740	-26.5	780	665	-14.7
3134	37,335	30,510	-18.3	2,880	2,435	-15.5	34,455	28,070	-18.5

For the corresponding description of occupation codes - See Appendix C

Appendix A. Labour Force by Detailed Occupation (Based on the 1980 Standard Occupational Classification) and Sex, Showing Counts and Percentage Change, for Canada, 1986 and 1991 - Continued

Detailed Occupations	Both Sexes			Males			Females		
	1986	1991	% Change	1986	1991	% Change	1986	1991	% Change
3135	74,755	89,695	20.0	13,930	15,270	9.6	60,825	74,425	22.4
3136	2,700	3,700	37.0	355	325	-8.5	2,350	3,375	43.6
3137	11,230	14,870	32.4	1,830	2,555	39.6	9,395	12,315	31.1
3138	5,085	6,775	33.2	670	820	22.4	4,420	5,960	34.8
3139	27,045	36,840	36.2	6,215	8,850	42.4	20,830	27,995	34.4
Minor group 313	415,345	474,630	14.3	43,030	49,580	15.2	372,315	425,045	14.2
315_316 - assigned	3,045	5,630	84.9	750	1,355	80.7	2,295	4,280	86.5
3151	16,515	20,070	21.5	8,140	8,895	9.3	8,375	11,175	33.4
3152	4,180	5,390	28.9	180	275	52.8	4,000	5,115	27.9
3153	2,505	3,320	32.5	1,695	1,855	9.4	815	1,470	80.4
3154	4,060	4,755	17.1	2,130	2,085	-2.1	1,935	2,665	37.7
3155	9,645	11,405	18.2	1,610	2,220	37.9	8,035	9,185	14.3
3156	38,410	55,385	44.2	8,445	12,895	52.7	29,965	42,495	41.8
3157	1,895	1,920	1.3	1,620	1,510	-6.8	275	410	49.1
3158	22,605	30,360	34.3	440	820	86.4	22,165	29,540	33.3
3161	4,440	5,100	14.9	2,820	3,275	16.1	1,625	1,825	12.3
3162	2,825	3,610	27.8	915	1,175	28.4	1,910	2,435	27.5
3169	16,935	20,450	20.8	3,180	4,425	39.2	13,750	16,020	16.5
Minor group 315_316	127,065	167,395	31.7	31,935	40,780	27.7	95,125	126,615	33.1
Major group 31	614,095	727,335	18.4	130,275	151,490	16.3	483,820	575,845	19.0
331 - assigned	1,985	3,570	79.8	1,090	2,015	84.9	895	1,555	73.7
3311	9,180	11,450	24.7	4,685	5,755	22.8	4,495	5,695	26.7
3313	24,125	29,970	24.2	9,155	11,050	20.7	14,970	18,920	26.4
3314	24,560	28,720	16.9	14,610	16,775	14.8	9,945	11,945	20.1
3315	11,310	12,330	9.0	8,965	9,475	5.7	2,345	2,860	22.0
3319	1,030	1,080	4.9	565	600	6.2	460	480	4.3
Minor group 331	72,190	87,115	20.7	39,075	45,665	16.9	33,110	41,450	25.2
333 - assigned	1,460	2,165	48.3	895	1,395	55.9	565	770	36.3
3330	12,040	15,165	26.0	8,160	9,465	16.0	3,875	5,700	47.1
3331	1,330	1,635	22.9	945	1,175	24.3	390	460	17.9
3332	12,205	11,650	-4.5	9,015	8,035	-10.9	3,185	3,615	13.5
3333	1,255	1,240	-1.2	1,090	1,000	-8.3	175	235	34.3
3334	1,490	1,445	-3.0	350	270	-22.9	1,140	1,175	3.1
3335	3,635	4,125	13.5	2,150	2,405	11.9	1,490	1,720	15.4
3337	7,065	7,825	10.8	5,595	5,940	6.2	1,465	1,885	28.7
3339	6,100	6,990	14.6	4,130	4,665	13.0	1,965	2,325	18.3
Minor group 333	46,585	52,245	12.1	32,335	34,350	6.2	14,250	17,895	25.6
335 - assigned	1,080	2,045	89.4	595	930	56.3	485	1,115	129.9
3351	34,235	41,550	21.4	18,570	21,500	15.8	15,665	20,055	28.0
3355	7,200	9,615	33.5	2,525	3,435	36.0	4,680	6,175	31.9
3359	255	300	17.6	85	130	52.9	170	170	0.0
Minor group 335	42,775	53,510	25.1	21,775	26,000	19.4	21,000	27,515	31.0
336_337 - assigned	1,850	2,460	33.0	1,120	1,565	39.7	730	895	22.6
3360	5,045	4,835	-4.2	3,590	3,240	-9.7	1,455	1,595	9.6
3370	23,155	25,770	11.3	10,105	11,350	12.3	13,050	14,420	10.5
3371	1,010	1,430	41.6	890	1,245	39.9	120	185	54.2
3373	1,250	1,430	14.4	1,125	1,285	14.2	125	145	16.0
3375	10,440	12,515	19.9	7,420	8,725	17.6	3,020	3,790	25.5
3379	3,490	4,200	20.3	2,795	3,380	20.9	695	825	18.7
Minor group 336_337	46,245	52,640	13.8	27,045	30,785	13.8	19,195	21,850	13.8
Major group 33	207,790	245,505	18.2	120,230	136,800	13.8	87,560	108,705	24.1

For the corresponding description of occupation codes - See Appendix C

Appendix A. Labour Force by Detailed Occupation (Based on the 1980 Standard Occupational Classification) and Sex, Showing Counts and Percentage Change, for Canada, 1986 and 1991 - Continued

Detailed Occupations	Both Sexes			Males			Females		
	1986	1991	% Change	1986	1991	% Change	1986	1991	% Change
411 - assigned	13,675	18,610	36.1	275	435	58.2	13,400	18,175	35.6
4110	3,330	2,410	-27.6	175	115	-34.3	3,150	2,295	-27.1
4111	430,075	456,200	6.1	4,985	6,625	32.9	425,090	449,580	5.8
4113	50,895	26,800	-47.3	1,685	1,250	-25.8	49,210	25,545	-48.1
Minor group 411	497,970	504,020	1.2	7,115	8,425	18.4	490,850	495,600	1.0
413 - assigned	23,635	36,915	56.2	3,640	5,975	64.1	19,995	30,940	54.7
4130	26,380	22,445	-14.9	5,955	4,325	-27.4	20,420	18,120	-11.3
4131	386,700	399,825	3.4	62,590	62,640	0.1	324,110	337,185	4.0
4133	286,165	336,740	17.7	27,345	39,775	45.5	258,820	296,965	14.7
4135	48,055	56,415	17.4	5,780	8,270	43.1	42,275	48,145	13.9
4137	7,235	7,875	8.8	2,025	2,445	20.7	5,210	5,425	4.1
4139	4,975	4,825	-3.0	1,280	1,385	8.2	3,700	3,440	-7.0
Minor group 413	783,145	865,040	10.5	108,610	124,815	14.9	674,535	740,225	9.7
414 - assigned	3,885	6,220	60.1	885	1,535	73.4	3,000	4,685	56.2
4140	7,050	6,715	-4.8	2,875	3,070	6.8	4,175	3,645	-12.7
4141	10,465	10,270	-1.9	3,310	3,630	9.7	7,160	6,640	-7.3
4143	111,270	137,520	23.6	22,340	30,195	35.2	88,930	107,325	20.7
Minor group 414	132,660	160,725	21.2	29,410	38,430	30.7	103,255	122,295	18.4
415 - assigned	8,315	11,980	44.1	6,455	8,985	39.2	1,860	2,995	61.0
4150	15,845	15,290	-3.5	13,025	12,420	-4.6	2,820	2,870	1.8
4151	14,420	16,705	15.8	8,645	9,930	14.9	5,775	6,770	17.2
4153	97,165	103,730	6.8	79,920	82,530	3.3	17,255	21,200	22.9
4155	97,400	109,105	12.0	68,785	77,260	12.3	28,615	31,850	11.3
4157	4,460	3,815	-14.5	2,795	2,415	-13.6	1,665	1,400	-15.9
4159	7,560	6,260	-17.2	3,900	3,330	-14.6	3,660	2,930	-19.9
Minor group 415	245,170	266,890	8.9	183,515	196,870	7.3	61,655	70,020	13.6
416 - assigned	1,670	1,945	16.5	320	305	-4.7	1,350	1,640	21.5
4160	1,810	1,780	-1.7	355	335	-5.6	1,455	1,440	-1.0
4161	41,055	37,930	-7.6	6,135	5,520	-10.0	34,920	32,405	-7.2
4169	2,150	2,115	-1.6	505	620	22.8	1,650	1,495	-9.4
Minor group 416	46,675	43,765	-6.2	7,310	6,780	-7.3	39,370	36,985	-6.1
417 - assigned	8,070	12,825	58.9	2,275	3,165	39.1	5,795	9,660	66.7
4170	8,400	8,675	3.3	4,760	4,785	0.5	3,645	3,895	6.9
4171	113,620	141,840	24.8	7,010	9,780	39.5	106,610	132,060	23.9
4172	25,890	27,825	7.5	20,585	20,835	1.2	5,310	6,990	31.6
4173	40,200	41,185	2.5	17,250	17,875	3.6	22,945	23,310	1.6
4175	29,855	29,935	0.3	2,150	3,235	50.5	27,705	26,700	-3.6
4177	8,220	8,545	4.0	5,720	5,765	0.8	2,500	2,775	11.0
4179	17,660	19,420	10.0	6,205	7,545	21.6	11,450	11,880	3.8
Minor group 417	251,920	290,250	15.2	65,950	72,980	10.7	185,970	217,270	16.8
419 - assigned	11,215	18,220	62.5	3,155	4,625	46.6	8,055	13,590	68.7
4190	23,620	26,470	12.1	8,195	9,340	14.0	15,425	17,130	11.1
4191	10,625	14,390	35.4	3,640	4,675	28.4	6,990	9,715	39.0
4192	13,625	17,360	27.4	4,085	5,995	46.8	9,540	11,365	19.1
4193	30,170	34,585	14.6	8,955	9,660	7.9	21,210	24,925	17.5
4194	12,420	13,405	7.9	4,170	4,380	5.0	8,255	9,020	9.3
4195	5,935	6,235	5.1	955	1,130	18.3	4,970	5,105	2.7
4197	168,040	225,640	34.3	32,055	39,625	23.6	135,985	186,015	36.8
4199	85,420	86,070	0.8	27,270	28,665	5.1	58,145	57,405	-1.3
Minor group 419	361,070	442,370	22.5	92,495	108,100	16.9	268,580	334,270	24.5
Major group 41	2,318,620	2,573,065	11.0	494,415	556,395	12.5	1,824,210	2,016,665	10.6

For the corresponding description of occupation codes - See Appendix C

Appendix A. Labour Force by Detailed Occupation (Based on the 1980 Standard Occupational Classification) and Sex, Showing Counts and Percentage Change, for Canada, 1986 and 1991 - Continued

Detailed Occupations	Both Sexes			Males			Females		
	1986	1991	% Change	1986	1991	% Change	1986	1991	% Change
513_514 - assigned	29,020	42,660	47.0	15,540	21,255	36.8	13,480	21,400	58.8
5130	113,520	140,565	23.8	74,935	86,890	16.0	38,585	53,680	39.1
5131	17,020	15,220	-10.6	14,735	12,805	-13.1	2,285	2,415	5.7
5133	73,475	65,180	-11.3	61,720	50,630	-18.0	11,760	14,545	23.7
5135	625,885	705,100	12.7	279,310	325,280	16.5	346,570	379,820	9.6
5141	19,165	14,820	-22.7	9,730	6,155	-36.7	9,440	8,660	-8.3
5143	9,580	9,680	1.0	7,950	7,455	-6.2	1,635	2,225	36.1
5145	38,865	47,180	21.4	32,895	38,530	17.1	5,970	8,650	44.9
5149	13,345	14,275	7.0	4,745	5,580	17.6	8,600	8,695	1.1
Minor group 513_514	939,875	1,054,675	12.2	501,555	554,575	10.6	438,325	500,100	14.1
517 - assigned	4,280	7,605	77.7	2,855	4,590	60.8	1,425	3,015	111.6
5170	21,565	26,935	24.9	15,105	16,735	10.8	6,460	10,200	57.9
5171	51,080	64,260	25.8	34,250	37,050	8.2	16,835	27,210	61.6
5172	65,205	82,755	26.9	39,325	48,200	22.6	25,880	34,555	33.5
5173	14,775	16,215	9.7	11,005	11,405	3.6	3,770	4,810	27.6
5174	10,220	12,340	20.7	5,880	6,635	12.8	4,330	5,710	31.9
5177	5,295	6,250	18.0	3,460	3,885	12.3	1,830	2,365	29.2
5179	3,835	3,390	-11.6	2,410	2,150	-10.8	1,420	1,240	-12.7
Minor group 517	176,240	219,750	24.7	114,295	130,650	14.3	61,945	89,105	43.8
519 - assigned	925	1,200	29.7	650	740	13.8	275	460	67.3
5190	2,325	2,105	-9.5	1,900	1,460	-23.2	430	645	50.0
5191	9,825	9,275	-5.6	5,975	5,105	-14.6	3,850	4,170	8.3
5193	14,735	11,735	-20.4	13,800	11,015	-20.2	935	720	-23.0
5199	9,225	9,970	8.1	3,580	3,535	-1.3	5,650	6,435	13.9
Minor group 519	37,040	34,280	-7.5	25,900	21,860	-15.6	11,140	12,420	11.5
Major group 51	1,153,160	1,308,705	13.5	641,750	707,085	10.2	511,410	601,625	17.6
611 - assigned	11,165	13,660	22.3	9,435	11,170	18.4	1,730	2,490	43.9
6111	25,565	27,300	6.8	25,240	26,900	6.6	325	400	23.1
6112	55,500	61,470	10.8	52,240	55,465	6.2	3,265	6,000	83.8
6113	4,580	5,840	27.5	3,460	4,460	28.9	1,125	1,380	22.7
6115	93,025	104,795	12.7	73,605	79,825	8.5	19,425	24,970	28.5
6116	17,425	18,525	6.3	16,145	16,520	2.3	1,285	2,000	55.6
6117	62,200	54,660	-12.1	54,820	47,115	-14.1	7,385	7,545	2.2
6119	15,970	19,180	20.1	8,955	9,875	10.3	7,015	9,305	32.6
Minor group 611	285,435	305,430	7.0	243,890	251,335	3.1	41,550	54,095	30.2
612 - assigned	24,010	35,400	47.4	8,840	13,025	47.3	15,165	22,380	47.6
6120	56,905	61,240	7.6	27,960	27,995	0.1	28,940	33,245	14.9
6121	188,615	220,980	17.2	95,870	112,815	17.7	92,750	108,165	16.6
6123	42,205	40,225	-4.7	18,245	17,145	-6.0	23,960	23,080	-3.7
6125	263,450	283,505	7.6	52,665	61,160	16.1	210,785	222,345	5.5
6129	47,285	56,480	19.4	10,905	14,240	30.6	36,380	42,240	16.1
Minor group 612	622,470	697,830	12.1	214,495	246,380	14.9	407,980	451,455	10.7
613 - assigned	3,070	3,750	22.1	985	1,005	2.0	2,085	2,745	31.7
6130	36,380	22,800	-37.3	13,160	8,780	-33.3	23,220	14,020	-39.6
6133	28,825	26,315	-8.7	2,545	2,700	6.1	26,275	23,615	-10.1
6135	2,780	2,550	-8.3	2,550	2,315	-9.2	230	240	4.3
6139	3,305	4,245	28.4	2,020	2,255	11.6	1,285	1,990	54.9
Minor group 613	74,360	59,655	-19.8	21,260	17,050	-19.8	53,095	42,605	-19.8
614 - assigned	8,145	14,235	74.8	1,085	1,765	62.7	7,060	12,470	76.6
6141	3,685	4,250	15.3	3,235	3,580	10.7	455	670	47.3
6142	34,895	44,020	26.1	2,125	3,075	44.7	32,765	40,945	25.0

For the corresponding description of occupation codes - See Appendix C

Appendix A. Labour Force by Detailed Occupation (Based on the 1980 Standard Occupational Classification) and Sex, Showing Counts and Percentage Change, for Canada, 1986 and 1991 - Continued

Detailed Occupations	Both Sexes			Males			Females		
	1986	1991	% Change	1986	1991	% Change	1986	1991	% Change
6143	87,585	96,945	10.7	16,645	15,930	-4.3	70,940	81,020	14.2
6144	7,015	7,715	10.0	2,600	2,915	12.1	4,420	4,800	8.6
6145	9,170	11,145	21.5	2,440	2,460	0.8	6,725	8,685	29.1
6147	82,640	131,570	59.2	2,580	4,355	68.8	80,055	127,215	58.9
6149	5,675	6,650	17.2	2,710	3,065	13.1	2,965	3,585	20.9
Minor group 614	238,805	316,530	32.5	33,420	37,140	11.1	205,385	279,390	36.0
616 - assigned	1,565	1,905	21.7	570	710	24.6	1,000	1,200	20.0
6160	4,240	3,360	-20.8	2,465	1,855	-24.7	1,780	1,505	-15.4
6162	19,605	19,825	1.1	5,490	5,605	2.1	14,110	14,220	0.8
6165	9,380	7,905	-15.7	2,410	2,310	-4.1	6,970	5,595	-19.7
6169	8,440	7,575	-10.2	4,355	4,690	7.7	4,090	2,890	-29.3
Minor group 616	43,240	40,570	-6.2	15,290	15,170	-0.8	27,950	25,400	-9.1
619 - assigned	14,355	20,875	45.4	8,985	12,020	33.8	5,370	8,855	64.9
6190	17,250	18,445	6.9	12,995	13,080	0.7	4,255	5,365	26.1
6191	238,280	270,400	13.5	138,925	146,260	5.3	99,360	124,140	24.9
6193	1,750	1,620	-7.4	1,545	1,455	-5.8	205	165	-19.5
6198	69,430	73,545	5.9	42,040	44,790	6.5	27,395	28,755	5.0
6199	12,140	13,475	11.0	9,775	10,360	6.0	2,365	3,115	31.7
Minor group 619	353,200	398,360	12.8	214,255	227,960	6.4	138,945	170,400	22.6
Major group 61	1,617,520	1,818,375	12.4	742,615	795,030	7.1	874,905	1,023,345	17.0
711 - assigned	1,820	5,770	217.0	1,500	2,380	58.7	315	3,385	974.6
7111	205,595	180,535	-12.2	186,365	148,040	-20.6	19,230	32,490	69.0
Minor group 711	207,410	186,305	-10.2	187,865	150,425	-19.9	19,545	35,880	83.6
718, 719 - assigned	12,975	14,180	9.3	8,165	9,535	16.8	4,810	4,640	-3.5
7180	9,070	10,040	10.7	7,635	7,945	4.1	1,435	2,095	46.0
7183	54,140	36,765	-32.1	31,030	22,485	-27.5	23,110	14,280	-38.2
7185	72,720	47,205	-35.1	35,115	23,200	-33.9	37,605	24,005	-36.2
7195	82,620	96,830	17.2	69,505	79,620	14.6	13,115	17,210	31.2
7196	1,965	2,300	17.0	635	680	7.1	1,335	1,620	21.3
7197	11,130	8,770	-21.2	9,480	7,595	-19.9	1,650	1,175	-28.8
7199	56,275	71,965	27.9	34,540	40,820	18.2	21,735	31,145	43.3
Minor group 718, 719	300,900	288,055	-4.3	196,105	191,885	-2.2	104,795	96,170	-8.2
Major group 71	508,310	474,360	-6.7	383,970	342,310	-10.8	124,340	132,050	6.2
731 - assigned	1,465	1,705	16.4	1,355	1,500	10.7	110	205	86.4
7311	3,320	3,955	19.1	3,290	3,900	18.5	25	55	120.0
7313	36,280	36,710	1.2	33,435	32,270	-3.5	2,850	4,440	55.8
7315	650	965	48.5	615	840	36.6	35	125	257.1
7319	4,235	5,985	41.3	2,955	4,220	42.8	1,280	1,760	37.5
Minor group 731	45,950	49,315	7.3	41,650	42,730	2.6	4,305	6,585	53.0
Major group 73	45,950	49,315	7.3	41,645	42,730	2.6	4,305	6,585	53.0
751 - assigned	3,640	3,435	-5.6	3,435	3,170	-7.7	205	265	29.3
7510	8,015	7,000	-12.7	7,650	6,645	-13.1	370	355	-4.1
7511	6,790	5,275	-22.3	6,050	4,765	-21.2	740	510	-31.1
7513	35,705	29,885	-16.3	34,955	29,290	-16.2	755	595	-21.2
7516	2,595	2,290	-11.8	2,245	1,935	-13.8	355	350	-1.4
7517	14,125	12,365	-12.5	13,970	12,210	-12.6	155	155	0.0
7518	14,985	17,465	16.5	11,480	13,185	14.9	3,500	4,280	22.3
7519	3,900	4,380	12.3	3,800	4,130	8.7	100	250	150.0
Minor group 751	89,745	82,095	-8.5	83,570	75,330	-9.9	6,175	6,765	9.6
Major group 75	89,745	82,095	-8.5	83,570	75,330	-9.9	6,175	6,765	9.6
771 - assigned	2,245	2,380	2.4	2,210	2,265	2.5	40	35	-12.5

For the corresponding description of occupation codes - See Appendix C

Appendix A. Labour Force by Detailed Occupation (Based on the 1980 Standard Occupational Classification) and Sex, Showing Counts and Percentage Change, for Canada, 1986 and 1991 - Continued

Detailed Occupations	Both Sexes			Males			Females		
	1986	1991	% Change	1986	1991	% Change	1986	1991	% Change
7710	11,675	11,885	1.8	11,495	11,635	1.2	175	250	42.9
7711	8,750	7,285	-16.7	8,640	7,200	-16.7	110	85	-22.7
7713	8,320	7,665	-7.9	8,185	7,555	-7.7	135	105	-22.2
7715	1,790	1,795	0.3	1,760	1,775	0.9	30	20	-33.3
7717	14,980	15,595	4.1	14,715	15,310	4.0	265	290	9.4
7718	10,590	10,720	1.2	10,195	10,045	-1.5	390	675	73.1
7719	8,795	7,305	-16.9	8,625	7,050	-18.3	175	255	45.7
Minor group 771	67,140	64,545	-3.9	65,830	62,830	-4.6	1,315	1,715	30.4
Major group 77	67,145	64,545	-3.9	65,830	62,830	-4.6	1,315	1,715	30.4
811 - assigned	205	300	46.3	190	300	57.9	15	0	-100.0
8110	890	955	7.3	850	935	10.0	45	20	-55.6
8111	1,930	2,075	7.5	1,880	2,000	6.4	50	75	50.0
8113	1,045	950	-9.1	980	860	-12.2	65	90	38.5
8115	255	175	-31.4	245	155	-36.7	10	20	100.0
8116	300	525	75.0	280	475	69.6	25	50	100.0
8118	1,900	1,760	-7.4	1,780	1,690	-5.1	125	70	-44.0
8119	400	280	-30.0	365	255	-30.1	35	25	-28.6
Minor group 811	6,935	7,020	1.2	6,565	6,675	1.7	370	345	-6.8
813_814 - assigned	1,680	2,020	20.2	1,550	1,945	25.5	130	75	-42.3
8130	6,930	4,800	-30.7	6,775	4,685	-30.8	155	110	-29.0
8131	4,515	3,570	-20.9	4,365	3,455	-20.8	150	115	-23.3
8133	1,105	920	-16.7	1,040	880	-15.4	70	40	-42.9
8135	2,250	1,765	-21.6	2,155	1,575	-26.9	95	190	100.0
8137	6,930	6,305	-9.0	6,510	5,925	-9.0	420	380	-9.5
8141	2,700	2,255	-16.5	2,285	2,020	-11.6	415	235	-43.4
8143	2,825	2,040	-27.8	2,545	1,860	-26.9	280	175	-37.5
8146	3,660	2,445	-33.2	3,190	2,155	-32.4	465	290	-37.6
8148	12,325	9,060	-26.5	11,595	8,545	-26.3	735	515	-29.9
8149	9,315	9,275	-0.4	8,770	8,805	0.4	550	470	-14.5
Minor group 813_814	54,230	44,455	-18.0	50,775	41,860	-17.6	3,455	2,595	-24.9
815 - assigned	580	585	0.9	500	505	1.0	80	80	0.0
8150	1,720	1,225	-28.8	1,610	1,155	-28.3	105	70	-33.3
8151	1,455	1,130	-22.3	1,170	910	-22.2	290	220	-24.1
8153	2,560	2,655	3.7	2,510	2,575	2.6	50	80	60.0
8155	3,560	2,820	-20.8	2,960	2,360	-20.3	600	460	-23.3
8156	1,840	1,270	-31.0	1,090	775	-28.9	755	490	-35.1
8158	2,610	1,515	-42.0	2,175	1,300	-40.2	440	220	-50.0
8159	2,790	2,570	-7.9	2,455	2,145	-12.6	335	425	26.9
Minor group 815	17,115	13,780	-19.5	14,465	11,735	-18.9	2,655	2,045	-23.0
816_817 - assigned	1,235	1,720	39.3	915	1,295	41.5	320	425	32.8
8160	5,575	4,070	-27.0	5,015	3,745	-25.3	555	325	-41.4
8161	5,445	5,480	0.6	4,715	4,810	2.0	730	670	-8.2
8163	490	555	13.3	430	445	3.5	60	110	83.3
8165	3,100	3,025	-2.4	3,040	2,880	-5.3	60	145	141.7
8167	655	650	-0.8	580	585	0.9	70	70	0.0
8171	625	615	-1.6	515	535	3.9	105	80	-23.8
8173	705	945	34.0	530	730	37.7	170	215	26.5
8176	3,935	3,625	-7.9	2,820	2,590	-8.2	1,115	1,030	-7.6
8178	5,370	4,355	-18.9	4,140	3,445	-16.8	1,230	910	-26.0
8179	15,480	13,915	-10.1	12,025	10,535	-12.4	3,450	3,380	-2.0
Minor group 816_817	42,610	38,955	-8.6	34,740	31,595	-9.1	7,870	7,360	-6.5

For the corresponding description of occupation codes - See Appendix C

Appendix A. Labour Force by Detailed Occupation (Based on the 1980 Standard Occupational Classification) and Sex, Showing Counts and Percentage Change, for Canada, 1986 and 1991 - Continued

Detailed Occupations	Both Sexes			Males			Females		
	1986	1991	% Change	1986	1991	% Change	1986	1991	% Change
821_822 - assigned	6,205	7,885	27.1	3,765	4,590	21.9	2,445	3,295	34.8
8210	11,965	9,035	-24.5	10,105	7,385	-26.9	1,855	1,650	-11.1
8211	3,050	2,575	-15.6	2,890	2,345	-18.9	160	230	43.8
8213	35,885	44,025	22.7	20,550	22,630	10.1	15,335	21,395	39.5
8215	43,900	44,675	1.8	35,295	35,055	-0.7	8,600	9,620	11.9
8217	32,630	29,430	-9.8	12,145	10,970	-9.7	20,485	18,460	-9.9
8221	3,860	3,805	-1.4	1,635	1,600	-2.1	2,225	2,205	-0.9
8223	5,230	4,480	-14.3	4,535	3,900	-14.0	695	580	-16.5
8225	465	430	-7.5	400	360	-10.0	65	70	7.7
8226	8,520	8,285	-2.8	3,950	4,010	1.5	4,565	4,275	-6.4
8227	4,170	4,090	-1.9	3,740	3,530	-5.6	430	555	29.1
8228	30,140	26,725	-11.3	18,390	16,255	-11.6	11,745	10,470	-10.9
8229	7,810	6,840	-12.4	5,250	4,630	-11.8	2,560	2,210	-13.7
Minor group 821_822	193,825	192,285	-0.8	122,650	117,270	-4.4	71,175	75,015	5.4
823 - assigned	1,675	1,860	11.0	1,560	1,740	11.5	115	120	4.3
8230	5,220	4,415	-15.4	5,140	4,330	-15.8	75	80	6.7
8231	9,710	6,945	-28.5	9,370	6,720	-28.3	345	225	-34.8
8233	2,515	2,005	-20.3	1,980	1,680	-15.2	535	325	-39.3
8235	1,170	915	-21.8	1,020	840	-17.6	145	75	-48.3
8236	4,955	5,445	9.9	4,400	5,020	14.1	555	425	-23.4
8238	15,605	12,660	-18.9	14,730	12,020	-18.4	870	640	-26.4
8239	6,785	6,485	-4.4	6,480	6,200	-4.3	305	285	-6.6
Minor group 823	47,630	40,730	-14.5	44,685	38,555	-13.7	2,945	2,180	-26.0
825 - assigned	1,280	1,635	27.7	1,205	1,520	26.1	75	115	53.3
8250	5,685	4,795	-15.7	5,575	4,675	-16.1	105	120	14.3
8251	2,995	2,940	-1.8	2,860	2,790	-2.4	135	145	7.4
8253	9,455	9,775	3.4	9,070	9,345	3.0	380	425	11.8
8256	3,440	2,915	-15.3	2,850	2,495	-12.5	585	420	-28.2
8258	13,500	12,355	-8.5	12,805	11,590	-9.5	695	765	10.1
8259	7,410	7,595	2.5	6,780	6,915	2.0	635	680	7.1
Minor group 825	43,755	42,005	-4.0	41,150	39,340	-4.4	2,605	2,670	2.5
826_827 - assigned	1,190	1,325	11.3	655	660	0.8	535	670	25.2
8260	2,560	1,915	-25.2	1,875	1,475	-21.3	685	440	-35.8
8261	740	575	-22.3	510	400	-21.6	225	175	-22.2
8263	2,200	1,135	-48.4	905	540	-40.3	1,300	590	-54.6
8265	2,145	1,320	-38.5	870	565	-35.1	1,275	755	-40.8
8267	3,910	2,565	-34.4	2,255	1,545	-31.5	1,660	1,025	-38.3
8271	3,660	2,410	-34.2	1,220	1,010	-17.2	2,440	1,395	-42.8
8273	1,560	1,680	7.7	1,350	1,440	6.7	210	240	14.3
8275	1,395	1,385	-0.7	870	900	3.4	525	490	-6.7
8276	3,485	2,885	-17.2	1,220	1,130	-7.4	2,265	1,755	-22.5
8278	8,045	6,765	-15.9	4,455	3,480	-21.9	3,590	3,285	-8.5
8279	2,760	1,990	-27.9	1,455	1,020	-29.9	1,305	970	-25.7
Minor group 826-827	33,645	25,950	-22.9	17,640	14,160	-19.7	16,010	11,790	-26.4
829 - assigned	240	225	-6.2	175	140	-20.0	65	85	30.8
8290	340	255	-25.0	260	190	-26.9	75	65	-13.3
8293	2,035	1,035	-49.1	1,005	495	-50.7	1,035	540	-47.8
8295	1,780	1,340	-24.7	1,315	915	-30.4	470	425	-9.6
8296	1,250	1,205	-3.6	465	415	-10.8	780	785	0.6
8298	700	595	-15.0	470	385	-18.1	230	210	-8.7
8299	710	830	16.9	635	765	20.5	75	65	-13.3

For the corresponding description of occupation codes - See Appendix C

Appendix A. Labour Force by Detailed Occupation (Based on the 1980 Standard Occupational Classification) and Sex, Showing Counts and Percentage Change, for Canada, 1986 and 1991 - Continued

Detailed Occupations	Both Sexes			Males			Females		
	1986	1991	% Change	1986	1991	% Change	1986	1991	% Change
Minor group 829	7,050	5,480	-22.3	4,320	3,310	-23.4	2,725	2,170	-20.4
Major group 81_82	446,800	410,665	-8.1	336,980	304,495	-9.6	109,820	106,170	-3.3
831 - assigned	2,535	3,455	36.3	2,395	3,200	33.6	140	255	82.1
8310	6,640	5,855	-11.8	6,550	5,715	-12.7	95	145	52.6
8311	13,315	12,540	-5.8	12,910	12,160	-5.8	405	375	-7.4
8313	49,675	50,030	0.7	47,885	47,635	-0.5	1,790	2,395	33.8
8315	10,700	9,315	-12.9	9,535	8,245	-13.5	1,165	1,070	-8.2
8316	2,410	1,800	-25.3	1,785	1,400	-21.6	620	400	-35.5
8319	2,200	1,905	-13.4	1,510	1,575	4.3	695	330	-52.5
Minor group 831	87,475	84,900	-2.9	82,560	79,930	-3.2	4,915	4,970	1.1
833 - assigned	5,015	5,610	11.9	4,665	5,275	13.1	350	335	-4.3
8330	8,895	7,220	-18.8	8,730	7,095	-18.7	165	125	-24.2
8331	3,340	2,700	-19.2	3,208	2,540	-20.6	140	160	14.3
8333	23,030	21,075	-8.5	21,585	20,130	-6.7	1,445	945	-34.6
8334	16,415	12,155	-26.0	13,285	9,980	-24.9	3,125	2,175	-30.4
8335	88,820	89,395	0.6	84,615	86,570	2.3	4,205	2,830	-32.7
8336	1,690	1,475	-12.7	1,380	1,285	-6.9	315	195	-38.1
8337	4,010	4,070	1.5	3,935	3,960	0.6	75	110	46.7
8339	3,420	2,575	-24.7	2,835	2,185	-22.9	580	395	-31.9
Minor group 833	154,635	146,280	-5.4	144,230	139,015	-3.6	10,400	7,265	-30.1
835 - assigned	350	620	77.1	335	585	74.6	15	40	166.7
8350	960	895	-6.8	935	840	-10.2	30	55	83.3
8351	355	225	-36.6	335	195	-41.8	15	30	100.0
8353	4,485	3,970	-11.5	4,150	3,675	-11.4	335	295	-11.9
8355	3,710	3,685	-0.7	3,455	3,455	0.0	255	230	-9.8
8356	215	205	-4.7	165	135	-18.2	40	70	75.0
8357	1,455	1,105	-24.1	1,150	905	-21.3	305	205	-32.8
8359	635	590	-7.1	570	535	-6.1	60	55	-8.3
Minor group 835	12,160	11,305	-7.0	11,095	10,320	-7.0	1,060	985	-7.1
837 - assigned	420	400	-4.8	330	320	-3.0	90	75	-16.7
8370	1,130	660	-41.6	1,065	600	-43.7	65	60	-7.7
8371	3,360	3,100	-7.7	3,025	2,795	-7.6	340	305	-10.3
8373	2,300	2,655	15.4	1,775	1,815	2.3	525	835	59.0
8376	740	600	-18.9	485	380	-21.6	255	225	-11.8
8379	2,670	1,875	-29.8	2,340	1,540	-34.2	330	335	1.5
Minor group 837	10,620	9,285	-12.6	9,020	7,450	-17.4	1,600	1,835	14.7
839 - assigned	490	595	21.4	435	530	21.8	60	70	16.7
8390	535	310	-42.1	495	290	-41.4	40	25	-37.5
8391	945	765	-19.0	525	420	-20.0	415	340	-18.1
8393	9,965	8,650	-13.2	9,250	8,000	-13.5	715	655	-8.4
8395	2,495	2,680	7.4	2,205	2,340	6.1	290	340	17.2
8396	245	200	-18.4	175	125	-28.6	70	80	14.3
8399	1,180	1,210	2.5	1,005	1,015	1.0	175	190	8.6
Minor group 839	15,850	14,415	-9.1	14,090	12,720	-9.7	1,760	1,695	-3.7
Major group 83	280,735	266,185	-5.2	261,000	249,435	-4.4	19,730	16,750	-15.1
851_852 - assigned	3,310	4,280	29.3	2,825	3,305	17.0	485	975	101.0
8510	9,850	6,740	-31.6	9,235	6,240	-32.4	610	500	-18.0
8511	5,605	4,100	-26.9	3,720	2,760	-25.8	1,885	1,345	-28.6
8513	40,740	44,195	8.5	32,565	33,805	3.8	8,175	10,390	27.1
8515	5,635	7,220	28.1	4,965	6,255	26.0	665	965	45.1
8523	6,200	4,905	-20.9	5,680	4,515	-20.5	520	385	-26.0

For the corresponding description of occupation codes - See Appendix C

Appendix A. Labour Force by Detailed Occupation (Based on the 1980 Standard Occupational Classification) and Sex, Showing Counts and Percentage Change, for Canada, 1986 and 1991 - Continued

Detailed Occupations	Both Sexes			Males			Females		
	1986	1991	% Change	1986	1991	% Change	1986	1991	% Change
8525	950	665	-30.0	385	290	-24.7	565	375	-33.6
8526	12,240	10,275	-16.1	10,300	8,355	-18.9	1,940	1,920	-1.0
8527	2,200	1,615	-26.6	1,350	1,225	-9.3	845	390	-53.8
8528	5,065	3,170	-37.4	4,200	2,660	-36.7	860	510	-40.7
8529	13,730	10,765	-21.6	10,655	8,455	-20.6	3,085	2,305	-25.3
Minor group 851_852	105,515	97,925	-7.2	85,875	77,865	-9.3	19,635	20,060	2.2
853 - assigned	4,155	4,970	19.6	3,235	3,670	13.4	920	1,305	41.8
8530	8,685	5,290	-39.1	7,740	4,750	-38.6	940	540	-42.6
8531	21,040	15,575	-26.0	11,865	9,330	-21.4	9,170	6,245	-31.9
8533	44,030	43,100	-2.1	42,985	42,260	-1.7	1,045	835	-20.1
8534	15,195	13,385	-11.9	5,700	5,695	-0.1	9,495	7,685	-19.1
8535	17,630	21,310	20.9	16,260	19,555	20.3	1,370	1,755	28.1
8536	8,685	5,495	-36.7	5,485	3,270	-40.4	3,205	2,225	-30.6
8537	9,150	9,185	0.4	8,795	8,795	0.0	350	390	11.4
8538	3,930	3,010	-23.4	2,210	1,820	-17.6	1,715	1,190	-30.6
8539	2,665	1,525	-42.8	1,745	1,065	-39.0	920	460	-50.0
Minor group 853	135,160	122,840	-9.1	106,025	100,210	-5.5	29,135	22,630	-22.3
854 - assigned	1,830	2,070	13.1	1,635	1,890	15.6	195	180	-7.7
8540	5,660	5,245	-7.3	5,355	4,825	-9.9	310	420	35.5
8541	29,575	31,620	6.9	26,065	27,965	7.3	3,505	3,650	4.1
8546	545	455	-16.5	400	340	-15.0	145	115	-20.7
8548	5,615	4,495	-19.9	4,655	3,795	-18.5	955	700	-26.7
8549	6,705	5,110	-23.8	5,750	4,315	-25.0	955	795	-16.8
Minor group 854	49,925	48,990	-1.9	43,855	43,135	-1.6	6,070	5,860	-3.5
855_856 - assigned	7,605	8,365	10.0	1,595	1,655	3.8	6,010	6,710	11.6
8550	8,845	5,915	-33.1	4,675	2,880	-38.4	4,170	3,035	-27.2
8551	10,310	7,825	-24.1	6,280	4,695	-25.2	4,030	3,135	-22.2
8553	32,360	29,990	-7.3	4,180	4,425	5.9	28,180	25,565	-9.3
8555	2,800	1,595	-43.0	1,420	815	-42.6	1,385	780	-43.7
8557	455	410	-9.9	140	105	-25.0	315	305	-3.2
8561	11,700	7,500	-35.9	4,525	3,645	-19.4	7,175	3,855	-46.3
8562	12,505	11,215	-10.3	9,685	8,790	-9.2	2,815	2,420	-14.0
8563	73,045	68,775	-5.8	4,875	5,610	15.1	68,170	63,165	-7.3
8566	5,110	3,250	-36.4	755	690	-8.6	4,360	2,565	-41.2
8568	5,725	4,015	-29.9	1,710	1,580	-7.6	4,015	2,435	-39.4
8569	13,640	10,095	-26.0	4,630	4,120	-11.0	9,005	5,975	-33.6
Minor group 855_856	184,105	158,950	-13.7	44,475	39,005	-12.3	139,625	119,940	-14.1
857 - assigned	1,345	1,310	-2.6	1,020	925	-9.3	335	385	14.9
8570	3,630	2,660	-26.7	3,265	2,380	-27.1	365	280	-23.3
8571	7,270	7,285	0.2	6,545	6,550	0.1	725	735	1.4
8573	6,285	6,410	2.0	4,110	4,240	3.2	2,180	2,170	-0.5
8575	1,420	970	-31.7	950	655	-31.1	475	315	-33.7
8576	2,660	1,945	-26.9	1,735	1,290	-25.6	925	655	-29.2
8578	6,030	4,540	-24.7	4,190	3,230	-22.9	1,835	1,315	-28.3
8579	9,260	5,580	-39.7	5,795	3,750	-35.3	3,465	1,830	-47.2
Minor group 857	37,900	30,705	-19.0	27,605	23,020	-16.6	10,295	7,680	-25.4
858 - assigned	9,325	11,935	28.0	9,140	11,695	28.0	180	240	33.3
8580	36,710	29,640	-19.3	36,120	28,760	-20.4	590	880	49.2
8581	151,375	167,200	10.5	149,530	165,135	10.4	1,855	2,065	11.3
8582	10,330	12,820	24.1	10,110	12,385	22.5	220	435	97.7
8583	8,765	7,010	-20.0	8,640	6,925	-19.8	120	90	-25.0

For the corresponding description of occupation codes - See Appendix C

Appendix A. Labour Force by Detailed Occupation (Based on the 1980 Standard Occupational Classification) and Sex, Showing Counts and Percentage Change, for Canada, 1986 and 1991 - Continued

Detailed Occupations	Both Sexes			Males			Females		
	1986	1991	% Change	1986	1991	% Change	1986	1991	% Change
8584	96,060	82,525	-14.1	95,120	81,795	-14.0	940	730	-22.3
8585	11,215	10,760	-4.1	10,805	10,090	-6.6	410	670	63.4
8586	2,165	2,255	4.2	2,085	2,080	-0.2	75	175	133.3
8587	1,605	1,550	-3.4	1,490	1,395	-6.4	120	150	25.0
8588	4,520	4,005	-11.4	4,395	3,850	-12.4	120	155	29.2
8589	20,235	19,350	-4.4	19,600	18,765	-4.3	635	580	-8.7
Minor group 858	352,300	349,040	-0.9	347,025	342,870	-1.2	5,280	6,170	16.9
859 - assigned	3,130	3,820	22.0	2,525	2,955	17.0	605	860	42.1
8590	6,070	5,155	-15.1	5,275	4,570	-13.4	790	585	-25.9
8591	6,315	6,250	-1.0	4,080	4,340	6.4	2,235	1,910	-14.5
8592	9,145	8,375	-8.4	8,845	8,155	-7.8	300	220	-26.7
8593	10,730	8,880	-17.2	7,460	6,275	-15.9	3,270	2,605	-20.3
8595	28,250	26,145	-7.5	25,060	23,005	-8.2	3,190	3,135	-1.7
8596	1,500	1,100	-26.7	645	485	-24.8	855	615	-28.1
8598	2,455	2,060	-16.1	1,690	1,340	-20.7	765	720	-5.9
8599	22,645	18,750	-17.2	14,700	12,825	-12.8	7,940	5,925	-25.4
Minor group 859	90,245	80,535	-10.8	70,295	63,950	-9.0	19,950	16,585	-16.9
Major group 85	955,155	888,985	-6.9	725,160	690,055	-4.8	229,995	198,930	-13.5
871 - assigned	3,710	4,740	27.8	3,660	4,680	27.9	50	65	30.0
8710	14,120	14,270	1.1	13,955	14,120	1.2	160	150	-6.3
8711	48,530	56,290	16.0	47,940	55,580	15.9	590	705	19.5
8713	8,405	9,035	7.5	8,260	8,795	6.5	145	240	65.5
8715	9,870	5,990	-39.3	9,720	5,935	-38.9	150	60	-60.0
8718	17,450	17,035	-2.4	17,000	16,370	-3.7	455	665	46.2
8719	5,110	6,615	29.5	5,020	6,490	29.3	95	120	26.3
Minor group 871	107,200	113,975	6.3	105,560	111,970	6.1	1,640	2,005	22.3
873 - assigned	3,450	5,290	53.3	3,375	5,065	50.1	80	225	181.3
8730	19,500	16,790	-13.9	19,035	16,275	-14.5	465	515	10.8
8731	12,145	13,145	8.2	11,915	12,800	7.4	230	345	50.0
8733	52,925	65,565	23.9	52,335	64,765	23.8	585	800	36.8
8735	30,535	35,850	17.4	28,695	33,130	15.5	1,835	2,715	48.0
8736	3,940	4,275	8.5	3,315	3,560	7.4	625	720	15.2
8738	2,590	3,010	16.2	2,375	2,625	10.5	215	385	79.1
8739	3,845	3,870	0.7	3,700	3,705	0.1	150	160	6.7
Minor group 873	128,925	147,795	14.6	124,745	141,930	13.8	4,180	5,865	40.3
878_879 - assigned	17,570	24,230	37.9	17,185	23,570	37.2	390	655	67.9
8780	68,920	68,050	-1.3	67,860	66,680	-1.7	1,060	1,370	29.2
8781	129,340	150,795	16.6	127,400	148,555	16.6	1,940	2,240	15.5
8782	23,910	27,565	15.3	23,660	27,225	15.1	250	340	36.0
8783	6,705	8,050	20.1	6,630	7,960	20.1	80	90	12.5
8784	17,155	23,280	35.7	16,855	22,895	35.8	305	385	26.2
8785	41,740	45,040	7.9	38,510	40,905	6.2	3,225	4,135	28.2
8786	6,295	6,725	6.8	6,100	6,400	4.9	195	325	66.7
8787	13,625	17,385	27.6	13,420	17,130	27.6	205	255	24.4
8791	50,495	57,650	14.2	49,945	57,155	14.4	550	495	-10.0
8793	8,355	9,960	19.2	8,260	9,835	19.1	95	130	36.8
8795	7,160	10,830	51.3	6,900	10,310	49.4	265	515	94.3
8796	4,695	5,695	21.3	4,555	5,320	16.8	140	380	171.4
8798	77,485	76,430	-1.4	75,120	74,485	-0.8	2,365	1,945	-17.8
8799	43,905	49,895	13.6	42,695	48,200	12.9	1,210	1,695	40.1
Minor group 878_879	517,360	581,580	12.4	505,085	566,630	12.2	12,275	14,945	21.8

For the corresponding description of occupation codes - See Appendix C

Appendix A. Labour Force by Detailed Occupation (Based on the 1980 Standard Occupational Classification) and Sex, Showing Counts and Percentage Change, for Canada, 1986 and 1991 - Continued

Detailed Occupations	Both Sexes			Males			Females		
	1986	1991	% Change	1986	1991	% Change	1986	1991	% Change
Major group 87	753,485	843,345	11.9	735,390	820,530	11.6	18,095	22,815	26.1
911 - assigned	455	785	72.5	415	690	66.3	40	95	137.5
9110	1,770	2,055	16.1	1,675	1,810	8.1	100	240	140.0
9111	7,765	10,130	30.5	7,440	9,610	29.2	320	520	62.5
9113	5,140	6,155	19.7	4,580	5,250	14.6	555	900	62.2
9119	1,595	2,025	27.0	1,300	1,625	25.0	295	400	35.6
Minor group 911	16,720	21,140	26.4	15,410	18,985	23.2	1,315	2,155	63.9
913 - assigned	815	725	-11.0	795	700	-11.9	20	25	25.0
9130	4,855	4,115	-15.2	4,745	3,965	-16.4	110	150	36.4
9131	6,905	6,365	-7.8	6,750	6,165	-8.7	155	200	29.0
9133	7,880	6,860	-12.9	7,525	6,480	-13.9	355	380	7.0
9135	6,385	4,450	-30.3	5,980	4,055	-32.2	405	395	-2.5
9139	675	445	-34.1	650	410	-36.9	30	30	0.0
Minor group 913	27,525	22,955	-16.6	26,445	21,775	-17.7	1,080	1,180	9.3
915 - assigned	795	805	1.3	740	790	6.8	55	15	-72.7
9151	5,530	5,410	-2.2	5,375	5,210	-3.1	150	200	33.3
9153	3,125	2,670	-14.6	3,065	2,645	-13.7	60	25	-58.3
9155	5,715	5,550	-2.9	5,460	5,255	-3.8	250	295	18.0
9157	1,100	900	-18.2	1,085	885	-18.4	20	20	0.0
9159	3,040	2,950	-3.0	2,770	2,675	-3.4	265	275	3.8
Minor group 915	19,300	18,285	-5.3	18,500	17,455	-5.6	805	830	3.1
917 - assigned	12,305	17,925	45.7	11,350	16,090	41.8	955	1,835	92.1
9170	16,630	17,080	2.7	15,555	15,975	2.7	1,070	1,105	3.3
9171	54,680	63,315	15.8	38,565	41,740	8.2	16,115	21,575	33.9
9173	29,955	32,130	7.3	27,470	29,865	8.7	2,485	2,265	-8.9
9175	261,195	279,660	7.1	254,135	270,560	6.5	7,060	9,100	28.9
9179	23,845	29,015	21.7	18,735	22,630	20.8	5,105	6,385	25.1
Minor group 917	398,600	439,120	10.2	365,815	396,860	8.5	32,790	42,260	28.9
919 - assigned	210	265	26.2	195	245	25.6	10	15	50.0
9190	1,025	1,335	30.2	910	1,225	34.6	110	110	0.0
9191	1,210	740	-38.8	1,130	675	-40.3	80	60	-25.0
9193	660	595	-9.8	615	570	-7.3	35	25	-28.6
9199	3,585	4,130	15.2	3,415	3,965	16.1	165	165	0.0
Minor group 919	6,680	7,065	5.8	6,270	6,685	6.6	410	380	-7.3
Major group 91	468,830	508,565	8.5	432,435	461,760	6.8	36,385	46,805	28.6
931 - assigned	8,675	10,990	26.7	6,705	8,295	23.7	1,975	2,700	36.7
9310	11,925	11,295	-5.3	10,970	10,190	-7.1	960	1,105	15.1
9311	17,600	16,610	-5.6	17,380	16,340	-6.0	220	270	22.7
9313	47,680	44,120	-7.5	45,390	40,765	-10.2	2,290	3,355	46.5
9314	2,605	2,670	2.5	2,340	2,320	-0.9	265	350	32.1
9315	37,135	36,915	-0.6	35,935	35,475	-1.3	1,195	1,435	20.1
9317	75,600	71,045	-6.0	31,245	31,405	0.5	44,355	39,640	-10.6
9318	31,400	28,640	-8.8	28,610	25,450	-11.0	2,795	3,195	14.3
9319	3,860	3,370	-12.7	3,620	3,040	-16.0	245	330	34.7
Minor group 931	236,475	225,660	-4.6	182,190	173,280	-4.9	54,290	52,380	-3.5
Major group 93	236,480	225,660	-4.6	182,190	173,280	-4.9	54,290	52,380	-3.5
951 - assigned	2,605	3,310	27.1	1,685	2,065	22.6	920	1,245	35.3
9510	6,365	5,575	-12.4	5,180	4,565	-11.9	1,190	1,005	-15.5
9511	9,605	8,045	-16.2	4,205	3,285	-21.9	5,400	4,765	-11.8
9512	23,915	24,425	2.1	21,040	21,600	2.7	2,875	2,825	-1.7
9513	85	80	-5.9	85	65	-23.5	5	10	100.0

For the corresponding description of occupation codes - See Appendix C

Appendix A. Labour Force by Detailed Occupation (Based on the 1980 Standard Occupational Classification) and Sex, Showing Counts and Percentage Change, for Canada, 1986 and 1991 - Concluded

Detailed Occupations	Both Sexes			Males			Females		
	1986	1991	% Change	1986	1991	% Change	1986	1991	% Change
9514	3,435	3,355	-2.3	3,065	2,760	-10.0	370	595	60.8
9515	2,590	2,060	-20.5	2,155	1,490	-30.9	430	575	33.7
9517	9,140	9,130	-0.1	3,165	3,495	10.4	5,975	5,640	-5.6
9518	3,975	4,025	1.3	2,285	2,460	7.7	1,690	1,565	-7.4
9519	13,840	13,950	0.8	8,150	8,420	3.3	5,690	5,530	-2.8
Minor group 951	75,555	73,960	-2.1	51,015	50,205	-1.6	24,545	23,755	-3.2
953 - assigned	1,400	1,980	41.4	1,380	1,935	40.2	15	45	200.0
9530	7,325	6,600	-9.9	7,075	6,330	-10.5	250	270	8.0
9531	6,940	8,075	16.4	6,665	7,540	13.1	275	530	92.7
9539	32,475	35,680	9.9	31,775	34,270	7.9	700	1,410	101.4
Minor group 953	48,140	52,330	8.7	46,895	50,075	6.8	1,245	2,255	81.1
955 - assigned	315	425	34.9	275	365	32.7	45	55	22.2
9550	1,410	1,390	-1.4	1,180	1,190	0.8	230	200	-13.0
9551	4,710	5,525	17.3	3,945	4,585	16.2	765	940	22.9
9553	1,240	860	-30.6	780	390	-50.0	455	470	3.3
9555	2,370	2,755	16.2	2,070	2,415	16.7	300	345	15.0
9557	1,295	1,025	-20.8	1,190	940	-21.0	100	85	-15.0
9559	445	585	31.5	370	460	24.3	75	125	66.7
Minor group 955	11,780	12,565	6.7	9,815	10,350	5.5	1,965	2,215	12.7
959 - assigned	330	495	50.0	150	290	93.3	175	205	17.1
9590	815	1,055	29.4	565	650	15.0	255	405	58.8
9591	9,835	12,320	25.3	4,775	6,065	27.0	5,060	6,255	23.6
9599	510	425	-16.7	290	255	-12.1	220	170	-22.7
Minor group 959	11,485	14,300	24.5	5,780	7,255	25.5	5,710	7,040	23.3
Major group 95	146,960	153,155	4.2	113,500	117,890	3.9	33,465	35,260	5.4
991 - assigned	7,945	13,755	73.1	6,615	11,105	67.9	1,335	2,650	98.5
9910	9,700	11,550	19.1	8,040	9,165	14.0	1,660	2,385	43.7
9916	1,215	880	-27.6	1,005	775	-22.9	205	100	-51.2
9919	84,320	88,280	4.7	71,965	75,645	5.1	12,355	12,635	2.3
9921	44,665	72,345	62.0	31,610	50,490	59.7	13,055	21,855	67.4
9922	7,945	10,265	29.2	7,520	9,220	22.6	425	1,045	145.9
9923	14,125	23,330	65.2	11,895	18,130	52.4	2,230	5,200	133.2
9924	16,505	22,555	36.7	12,655	16,940	33.9	3,845	5,615	46.0
9925	12,490	15,215	21.8	10,990	13,110	19.3	1,500	2,100	40.0
9926	16,590	33,940	104.6	14,640	29,495	101.5	1,945	4,450	128.8
9918 (Occupations 9921-9926)	112,315	177,650	58.2	89,310	137,385	53.8	23,005	40,265	75.0
Minor group 991 and Major group 99	215,495	292,115	35.6	176,940	234,080	32.3	38,555	58,035	50.5

For the corresponding description of occupation codes - See Appendix C

Appendix B

1971 Occupational Classification Manual: List of Major Groups, Minor Groups and Unit Groups

1971 Classification

List of Major Groups, Minor Groups
and Unit GroupsMajor Group 11 - Managerial, Administrative and
Related Occupations

- 111 Officials and administrators unique to government**
- 1111 Members of legislative bodies
 - 1113 Government administrators
 - 1115 Postmasters
 - 1116 Inspectors and regulatory officers, government
 - 1119 Officials and administrators unique to government, n.e.c.
- 113/114 Other managers and administrators**
- 1130 General managers and other senior officials
 - 1131 Management occupations, natural sciences and engineering
 - 1132 Management occupations, social sciences and related fields
 - 1133 Administrators in teaching and related fields
 - 1134 Administrators in medicine and health
 - 1135 Financial management occupations
 - 1136 Personnel and industrial relations management occupations
 - 1137 Sales and advertising management occupations
 - 1141 Purchasing management occupations
 - 1142 Services management occupations
 - 1143 Production management occupations
 - 1145 Management occupations, construction operations
 - 1147 Management occupations, transport and communications operations
 - 1149 (1151-1158) Other managers and administrators, n.e.c. (in the following industries):
 - 1151 Mines (including milling), quarries and oil wells
 - 1152 Durable goods manufacturing(1)
 - 1153 Non-durable goods manufacturing(2)
 - 1154 Construction
 - 1155 Transportation, communication and other utilities
 - 1156 Trade
 - 1157 Community, business and personal service industries
 - 1158 Other industries and unspecified(3)
- 117 Occupations related to management and administration**
- 1171 Accountants, auditors and other financial officers
 - 1174 Personnel and related officers

- 1175 Purchasing officers and buyers, except wholesale and retail trade
- 1176 Inspectors and regulatory officers, non-government
- 1179 Occupations related to management and administration, n.e.c.

Major Group 21 - Occupations in Natural
Sciences, Engineering and Mathematics

- 211 Occupations in physical sciences**
- 2111 Chemists
 - 2112 Geologists
 - 2113 Physicists
 - 2114 Meteorologists
 - 2117 Physical sciences technologists and technicians
 - 2119 Occupations in physical sciences, n.e.c.
- 213 Occupations in life sciences**
- 2131 Agriculturists and related scientists
 - 2133 Biologists and related scientists
 - 2135 Life sciences technologists and technicians
 - 2139 Occupations in life sciences, n.e.c.
- 214/215 Architects and engineers**
- 2141 Architects
 - 2142 Chemical engineers
 - 2143 Civil engineers
 - 2144 Electrical engineers
 - 2145 Industrial engineers
 - 2147 Mechanical engineers
 - 2151 Metallurgical engineers
 - 2153 Mining engineers
 - 2154 Petroleum engineers
 - 2155 Aeronautical engineers
 - 2157 Nuclear engineers
 - 2159 Architects and engineers, n.e.c.
- 216 Other occupations in architecture and engineering**
- 2160 Supervisors: other occupations in architecture and engineering
 - 2161 Surveyors
 - 2163 Draughtsmen
 - 2165 Architectural and engineering technologists and technicians
 - 2169 Other occupations in architecture and engineering, n.e.c.

1971 Classification**List of Major Groups, Minor Groups
and Unit Groups**

218 Occupations in mathematics, statistics, systems analysis and related fields	Major Group 25 - Occupations in Religion
2181 Mathematicians, statisticians and actuaries	251 Occupations in religion
2183 Systems analysts, computer programmers and related occupations	2511 Ministers of religion
2189 Occupations in mathematics, statistics, systems analysis and related fields, n.e.c.	2513 Nuns and brothers, n.o.r.
	2519 Occupations in religion, n.e.c.
Major Group 23 - Occupations in Social Sciences and Related Fields	Major Group 27 - Teaching and Related Occupations
231 Occupations in social sciences	271 University teaching and related occupations
2311 Economists	2711 University teachers
2313 Sociologists, anthropologists and related social scientists	2719 University teaching and related occupations, n.e.c.
2315 Psychologists	
2319 Occupations in social sciences, n.e.c.	273 Elementary and secondary school teaching and related occupations
233 Occupations in social work and related fields	2731 Elementary and kindergarten teachers
2331 Social workers	2733 Secondary school teachers
2333 Occupations in welfare and community services	2739 Elementary and secondary school teaching and related occupations, n.e.c.
2339 Occupations in social work and related fields, n.e.c.	
234 Occupations in law and jurisprudence	279 Other teaching and related occupations
2341 Judges and magistrates	2791 Community college and vocational school teachers
2343 Lawyers and notaries	2792 Fine arts school teachers
2349 Occupations in law and jurisprudence, n.e.c.	2793 Post-secondary school teachers, n.e.c.
	2795 Teachers of exceptional students, n.e.c.
235 Occupations in library, museum and archival sciences	2797 Instructors and training officers, n.e.c.
2350 Supervisors: occupations in library, museum and archival sciences	2799 Other teaching and related occupations, n.e.c.
2351 Librarians and archivists	
2353 Technicians in library, museum and archival sciences	Major Group 31 - Occupations in Medicine and Health
2359 Occupations in library, museum and archival sciences, n.e.c.	311 Health diagnosing and treating occupations
239 Other occupations in social sciences and related fields	3111 Physicians and surgeons
2391 Educational and vocational counsellors	3113 Dentists
2399 Other occupations in social sciences and related fields, n.e.c.	3115 Veterinarians
	3117 Osteopaths and chiropractors
	3119 Health diagnosing and treating occupations, n.e.c.

1971 Classification

List of Major Groups, Minor Groups
and Unit Groups

313	Nursing, therapy and related assisting occupations	337	Occupations in sport and recreation
3130	Supervisors: nursing occupations	3370	Coaches, trainers, instructors and managers, sport and recreation
3131	Nurses, graduate, except supervisors	3371	Referees and related officials
3133	Nurses-in-training	3373	Athletes
3134	Nursing assistants	3375	Attendants, sport and recreation
3135	Nursing aides and orderlies	3379	Occupations in sport and recreation, n.e.c.
3137	Physiotherapists, occupational and other therapists		
3139	Nursing, therapy and related assisting occupations, n.e.c.		
315	Other occupations in medicine and health	Major Group 41 - Clerical and Related Occupations	
3151	Pharmacists	411	Stenographic and typing occupations
3152	Dietitians and nutritionists	4110	Supervisors: stenographic and typing occupations
3153	Optometrists	4111	Secretaries and stenographers
3154	Dispensing opticians	4113	Typists and clerk-typists
3155	Radiological technologists and technicians	413	Bookkeeping, account-recording and related occupations
3156	Medical laboratory technologists and technicians	4130	Supervisors: bookkeeping, account-recording and related occupations
3157	Dental hygienists, assistants and technicians	4131	Bookkeepers and accounting clerks
3159	Other occupations in medicine and health, n.e.c.	4133	Tellers and cashiers
Major Group 33 - Artistic, Literary, Recreational and Related Occupations		4135	Insurance, bank and other finance clerks
331	Occupations in fine and commercial art, photography and related fields	4137	Statistical clerks
3311	Painters, sculptors and related artists	4139	Bookkeeping, account-recording and related occupations, n.e.c.
3313	Product and interior designers	414	Office machine and electronic data-processing equipment operators
3314	Advertising and illustrating artists	4140	Supervisors: office machine and electronic data-processing equipment operators
3315	Photographers and cameramen	4141	Office machine operators
3319	Occupations in fine and commercial art, photography and related fields, n.e.c.	4143	Electronic data-processing equipment operators
333	Occupations in performing and audio-visual arts	415	Material recording, scheduling and distributing occupations
3330	Producers and directors, performing and audio-visual arts	4150	Supervisors: material recording, scheduling and distributing operations
3332	Musicians	4151	Production clerks
3333	Dancers and choreographers	4153	Shipping and receiving clerks
3335	Actors	4155	Stock clerks and related occupations
3337	Radio and television announcers	4157	Weighers
3339	Occupations in performing and audio-visual arts, n.e.c.	4159	Material recording, scheduling and distributing occupations, n.e.c.
335	Occupations in writing	416	Library, file and correspondence clerks and related occupations
3352	Writers and editors	4160	Supervisors: library, file and correspondence clerks and related occupations
3355	Translators and interpreters		
3359	Occupations in writing, n.e.c.		

1971 Classification**List of Major Groups, Minor Groups
and Unit Groups**

4161	Library and file clerks
4169	Library, file and correspondence clerks and related occupations, n.e.c.
417	Reception, information, mail and message distribution occupations
4170	Supervisors: reception, information, mail and message distribution occupations
4171	Receptionists and information clerks
4172	Mail carriers
4173	Mail and postal clerks
4175	Telephone operators
4177	Messengers
4179	Reception, information, mail and message distribution occupations, n.e.c.
419	Other clerical and related occupations
4190	Supervisors: other clerical and related occupations, n.e.c.
4191	Collectors
4192	Adjusters, claim
4193	Travel clerks, ticket, station and freight agents
4194	Hotel clerks
4195	Personnel clerks
4197	General office clerks
4199	Other clerical and related occupations, n.e.c.

Major Group 51 - Sales Occupations

513/514	Sales occupations, commodities
5130	Supervisors: sales occupations, commodities
5131	Technical salesmen and related advisers
5133	Commercial travellers
5135	Salesmen and salespersons, commodities, n.e.c.
5137	Sales clerks, commodities
5141	Street vendors and door-to-door salesmen
5143	Newsboys
5145	Service station attendants
5149	Sales occupations: commodities, n.e.c.
517	Sales occupations, services
5170	Supervisors: sales occupations, services
5171	Insurance salesmen and agents
5172	Real estate salesmen
5173	Salesmen and traders, securities
5174	Advertising salesmen
5177	Business services salesmen
5179	Sales occupations: services, n.e.c.

519	Other sales occupations
5190	Supervisors: other sales occupations
5191	Buyers, wholesale and retail trade
5193	Driver-salesmen
5199	Other sales occupations, n.e.c.

Major Group 61 - Service Occupations

611	Protective service occupations
6111	Fire-fighting occupations
6112	Policemen and detectives, government
6113	Policemen and investigators, private
6115	Guards and watchmen
6116	Commissioned officers, Armed Forces
6117	Other ranks, Armed Forces
6119	Protective service occupations, n.e.c.
612	Food and beverage preparation and related service occupations
6120	Supervisors: food and beverage preparation and related service occupations
6121	Chefs and cooks
6123	Bartenders
6125	Waiters, hostesses and stewards, food and beverage
6129	Food and beverage preparation and related service occupations, n.e.c.
613	Occupations in lodging and other accommodation
6130	Supervisors: occupations in lodging and other accommodation
6131	Managers: hotel, motel and other accommodation
6133	Chambermaids and housemen
6135	Sleeping-car and baggage porters, and bellmen
6139	Occupations in lodging and other accommodation, n.e.c.
614	Personal service occupations
6141	Funeral directors, embalmers and related occupations
6143	Barbers, hairdressers and related occupations
6144	Guides
6145	Hostesses and stewards, except food and beverage
6147	Baby-sitters
6149	Personal service occupations, n.e.c.

1971 Classification**List of Major Groups, Minor Groups
and Unit Groups****616 Apparel and furnishings service occupations**

- 6160 Supervisors: apparel and furnishings service occupations
- 6162 Laundering and dry cleaning occupations
- 6165 Pressing occupations
- 6169 Apparel and furnishings service occupations, n.e.c.

619 Other service occupations

- 6190 Supervisors: other service occupations
- 6191 Janitors, charworkers and cleaners
- 6193 Elevator operating occupations
- 6198 Occupations in labouring and other elemental work, services
- 6199 Other service occupations, n.e.c.

Major Group 71 - Farming, Horticultural and Animal Husbandry Occupations**711 Farmers**

- 7112 Farmers

713 Farm management occupations

- 7131 Farm management occupations

718/719 Other farming, horticultural and animal husbandry occupations

- 7180 Foremen: other farming, horticultural and animal husbandry occupations
- 7182 Farm workers
- 7195 Nursery and related workers
- 7197 Farm machinery operators and custom operators
- 7199 Other farming, horticultural and animal husbandry occupations, n.e.c.

Major Group 73 - Fishing, Hunting, Trapping and Related Occupations**731 Fishing, hunting, trapping and related occupations**

- 7311 Captains and other officers, fishing vessels
- 7313 Fishermen: net, trap and line
- 7315 Hunting, trapping and related occupations
- 7319 Fishing, hunting, trapping and related occupations, n.e.c.

Major Group 75 - Forestry and Logging Occupations**751 Forestry and logging occupations**

- 7510 Foremen: forestry and logging occupations
- 7511 Forestry conservation occupations
- 7513 Timber cutting and related occupations
- 7516 Log inspecting, grading, scaling and related occupations
- 7517 Log hoisting, sorting, moving and related occupations
- 7518 Occupations in labouring and other elemental work, forestry and logging
- 7519 Forestry and logging occupations, n.e.c.

Major Group 77 - Mining and Quarrying Including Oil and Gas Field Occupations**771 Mining and quarrying including oil and gas field occupations**

- 7710 Foremen: mining and quarrying including oil and gas field occupations
- 7711 Rotary well-drilling and related occupations
- 7713 Other rock and soil-drilling occupations
- 7715 Blasting occupations
- 7717 Mining and quarrying: cutting, handling and loading occupations
- 7718 Occupations in labouring and other elemental work, mining and quarrying including oil and gas fields
- 7719 Mining and quarrying including oil and gas field occupations, n.e.c.

Major Group 81/82 - Processing Occupations**811 Mineral ore treating occupations**

- 8110 Foremen: mineral ore treating occupations
- 8111 Crushing and grinding occupations, mineral ores
- 8113 Mixing, separating, filtering and related occupations, mineral ores
- 8115 Melting and roasting occupations, mineral ores
- 8116 Inspecting, testing, grading and sampling occupations, mineral ore treating
- 8118 Occupations in labouring and other elemental work, mineral ore treating
- 8119 Mineral ore treating occupations, n.e.c.

1971 Classification

List of Major Groups, Minor Groups
and Unit Groups**813/814 Metal processing and related occupations**

- 8130 Foremen: metal processing and related occupations
- 8131 Metal smelting, converting and refining furnacemen
- 8133 Metal heat treating occupations
- 8135 Metal rolling occupations
- 8137 Moulding, coremaking and metal casting occupations
- 8141 Metal extruding and drawing occupations
- 8143 Plating, metal spraying and related occupations
- 8146 Inspecting, testing, grading and sampling occupations, metal processing
- 8148 Occupations in labouring and other elemental work, metal processing
- 8149 Metal processing and related occupations, n.e.c.

815 Clay, glass and stone processing, forming and related occupations

- 8150 Foremen: clay, glass and stone processing, forming and related occupations
- 8151 Furnacemen and kilnmen: clay, glass and stone
- 8153 Separating, grinding, crushing and mixing occupations: clay, glass and stone
- 8155 Forming occupations: clay, glass and stone
- 8156 Inspecting, testing, grading and sampling occupations: clay, glass and stone processing and forming
- 8158 Occupations in labouring and other elemental work: clay, glass and stone processing and forming
- 8159 Clay, glass and stone processing, forming and related occupations, n.e.c.

816/817 Chemicals, petroleum, rubber, plastic and related materials processing occupations

- 8160 Foremen: chemicals, petroleum, rubber, plastic and related materials processing occupations
- 8161 Mixing and blending occupations, chemicals and related materials
- 8163 Filtering, straining and separating occupations, chemicals and related materials
- 8165 Distilling, subliming and carbonizing occupations, chemicals and related materials
- 8167 Roasting, cooking and drying occupations, chemicals and related materials

- 8171 Crushing and grinding occupations, chemicals and related materials
- 8173 Coating and calendering occupations, chemicals and related materials
- 8176 Inspecting, testing, grading and sampling occupations: chemicals, petroleum, rubber, plastic and related materials processing
- 8178 Occupations in labouring and other elemental work: chemicals, petroleum, rubber, plastic and related materials processing
- 8179 Chemicals, petroleum, rubber, plastic and related materials processing occupations, n.e.c.

821/822 Food, beverage and related processing occupations

- 8210 Foremen: food, beverage and related processing occupations
- 8211 Flour and grain milling occupations
- 8213 Baking, confectionery making and related occupations
- 8215 Slaughtering and meat cutting, canning, curing and packing occupations
- 8217 Fish canning, curing and packing occupations
- 8221 Fruit and vegetable canning, preserving and packing occupations
- 8223 Milk processing occupations
- 8225 Sugar processing and related occupations
- 8226 Inspecting, testing, grading and sampling occupations: food, beverage and related processing
- 8227 Beverage processing occupations
- 8228 Occupations in labouring and other elemental work: food, beverage and related processing
- 8229 Food, beverage and related processing occupations, n.e.c.
- 823 Wood processing occupations, except pulp and papermaking
- 8230 Foremen: wood processing occupations, except pulp and papermaking
- 8231 Sawmill sawyers and related occupations
- 8233 Plywood making and related occupations
- 8235 Wood treating occupations
- 8236 Inspecting, testing, grading and sampling occupations: wood processing, except pulp and papermaking

1971 Classification

List of Major Groups, Minor Groups
and Unit Groups

8238	Occupations in labouring and other elemental work: wood processing, except pulp and papermaking	8313	Machinist and machine tool setting-up occupations
8239	Wood processing occupations, except pulp and papermaking, n.e.c.	8315	Machine tool operating occupations
825	Pulp and papermaking and related occupations	8316	Inspecting, testing, grading and sampling occupations, metal machining
8250	Foremen: pulp and papermaking and related occupations	8319	Metal machining occupations, n.e.c.
8251	Cellulose pulp preparing occupations	833	Metal shaping and forming occupations, except machining
8253	Papermaking and finishing occupations	8330	Foremen: metal shaping and forming occupations, except machining
8256	Inspecting, testing, grading and sampling occupations, pulp and papermaking	8331	Forging occupations
8258	Occupations in labouring and other elemental work, pulp and papermaking	8333	Sheet metal workers
8259	Pulp and papermaking and related occupations, n.e.c.	8334	Metalworking-machine operators, n.e.c.
826/827	Textile processing occupations	8335	Welding and flame cutting occupations
8260	Foremen: textile processing occupations	8336	Inspecting, testing, grading and sampling occupations: metal shaping and forming, except machining
8261	Textile fibre preparing occupations	8337	Boilermakers, platers and structural metal workers
8263	Textile spinning and twisting occupations	8339	Metal shaping and forming occupations, except machining, n.e.c.
8265	Textile winding and reeling occupations	835	Wood machining occupations
8267	Textile weaving occupations	8350	Foremen: wood machining occupations
8271	Knitting occupations	8351	Wood patternmaking occupations
8273	Textile bleaching and dyeing occupations	8353	Wood sawing and related occupations, except sawmill
8275	Textile finishing and calendering occupations	8355	Planing, turning, shaping and related wood machining occupations
8276	Inspecting, testing, grading and sampling occupations, textile processing	8356	Inspecting, testing, grading and sampling occupations, wood machining
8278	Occupations in labouring and other elemental work, textile processing	8357	Wood sanding occupations
8279	Textile processing occupations, n.e.c.	8359	Wood machining occupations, n.e.c.
829	Other processing occupations	837	Clay, glass and stone and related materials machining occupations
8290	Foremen: other processing occupations	8370	Foremen: clay, glass and stone and related materials machining occupations
8293	Tobacco processing occupations	8371	Cutting and shaping occupations: clay, glass and stone
8295	Hide and pelt processing occupations	8373	Abrading and polishing occupations: clay, glass and stone, n.e.c.
8296	Inspecting, testing, grading and sampling occupations, processing, n.e.c.	8376	Inspecting, testing, grading and sampling occupations: clay, glass and stone machining
8298	Occupations in labouring and other elemental work, other processing	8379	Clay, glass and stone and related materials machining occupations, n.e.c.
8299	Other processing occupations, n.e.c.	839	Other machining and related occupations
Major Group 83 - Machining and Related Occupations		8390	Foremen: other machining and related occupations, n.e.c.
831	Metal machining occupations	8391	Engravers, etchers and related occupations
8310	Foremen: metal machining occupations		
8311	Tool and die making occupations		

1971 Classification

List of Major Groups, Minor Groups and Unit Groups

8393	Filing, grinding, buffing, cleaning and polishing occupations, n.e.c.	8534	Electronic equipment fabricating and assembling occupations	
8395	Patternmakers and mouldmakers, n.e.c.	8535	Electronic and related equipment installing and repairing occupations, n.e.c.	
8396	Inspecting, testing, grading and sampling occupations, machining, n.e.c.	8536	Inspecting, testing, grading and sampling occupations: fabricating, assembling, installing and repairing electrical, electronic and related equipment	
8399	Other machining and related occupations, n.e.c.	8537	Radio and television service repairmen	
Major Group 85 – Product Fabricating, Assembling and Repairing Occupations		8538	Occupations in labouring and other elemental work: fabricating, assembling, installing and repairing electrical, electronic and related equipment	
851/852	Fabricating and assembling occupations, metal products, n.e.c.	8539	Fabricating, assembling, installing and repairing occupations: electrical, electronic and related equipment, n.e.c.	
8510	Foremen: Fabricating and assembling occupations, metal products, n.e.c.	854	Fabricating, assembling and repairing occupations, wood products	
8511	Engine and related equipment fabricating and assembling occupations, n.e.c.		8540	Foremen: fabricating, assembling and repairing occupations, wood products
8513	Motor vehicle fabricating and assembling occupations, n.e.c.		8541	Cabinet and wood furniture makers
8515	Aircraft fabricating and assembling occupations, n.e.c.		8546	Inspecting, testing, grading and sampling occupations: fabricating, assembling and repairing, wood products
8523	Industrial, farm, construction and other mechanized equipment and machinery fabricating and assembling occupations, n.e.c.	8548	Occupations in labouring and other elemental work: fabricating, assembling and repairing, wood products	
8525	Business and commercial machines fabricating and assembling occupations, n.e.c.	8549	Fabricating, assembling and repairing occupations, wood products, n.e.c.	
8526	Inspecting, testing, grading and sampling occupations, fabricating and assembling metal products, n.e.c.	855/856	Fabricating, assembling and repairing occupations: textiles, fur and leather products	
8527	Precision instruments and related equipment fabricating and assembling occupations, n.e.c.		8550	Foremen: fabricating, assembling and repairing occupations, textile, fur and leather products
8528	Occupations in labouring and other elemental work, fabricating and assembling metal products, n.e.c.		8551	Patternmaking, marking and cutting occupations: textile, fur and leather products
8529	Other fabricating and assembling occupations, metal products, n.e.c.		8553	Tailors and dressmakers
853	Fabricating, assembling, installing and repairing occupations: electrical, electronic and related equipment	8555	Furriers	
	8530	Foremen: fabricating, assembling, installing and repairing occupations, electrical, electronic and related equipment	8557	Milliners, hat and cap makers
	8531	Electrical equipment fabricating and assembling occupations	8561	Shoemaking and repairing occupations
	8533	Electrical and related equipment installing and repairing occupations, n.e.c.	8562	Upholsterers
		8563	Sewing machine operators, textile and similar materials	
		8566	Inspecting, testing, grading and sampling occupations: fabricating, assembling and repairing, textile, fur and leather products	

List of Major Groups, Minor Groups and Unit Groups

8568	Occupations in labouring and other elemental work: fabricating, assembling and repairing, textile, fur and leather products	859	Other product fabricating, assembling and repairing occupations
8569	Fabricating, assembling and repairing occupations: textile, fur and leather products, n.e.c.	8590	Foremen: product fabricating, assembling and repairing occupations, n.e.c.
857	Fabricating, assembling and repairing occupations: rubber, plastic and related products	8591	Jewellery and silverware fabricating, assembling and repairing occupations
8570	Foremen: fabricating, assembling and repairing occupations, rubber, plastic and related products	8592	Marine craft fabricating, assembling and repairing occupations
8571	Bonding and cementing occupations, rubber, plastic and related products	8593	Paper product fabricating and assembling occupations
8573	Moulding occupations, rubber, plastic and related products	8595	Painting and decorating occupations, except construction
8575	Cutting and finishing occupations, rubber, plastic and related products	8596	Inspecting, testing, grading and sampling occupations: product fabricating, assembling and repairing, n.e.c.
8576	Inspecting, testing, grading and sampling occupations: fabricating, assembling and repairing, rubber, plastic and related products	8598	Occupations in labouring and other elemental work: product fabricating, assembling and repairing, n.e.c.
8578	Occupations in labouring and other elemental work: fabricating, assembling and repairing, rubber, plastic and related products	8599	Other product fabricating, assembling and repairing occupations, n.e.c.
8579	Fabricating, assembling and repairing occupations: rubber, plastic and related products, n.e.c.		
858	Mechanics and repairmen, except electrical	Major Group 87 - Construction Trades Occupations	
8580	Foremen: mechanics and repairmen, except electrical	871	Excavating, grading, paving and related occupations
8581	Motor vehicle mechanics and repairmen	8710	Foremen: excavating, grading, paving and related occupations
8582	Aircraft mechanics and repairmen	8711	Excavating, grading and related occupations
8583	Rail transport equipment mechanics and repairmen	8713	Paving, surfacing and related occupations
8584	Industrial, farm and construction machinery mechanics and repairmen	8715	Railway sectionmen and trackmen
8585	Business and commercial machine mechanics and repairmen	8718	Occupations in labouring and other elemental work: excavating, grading and paving
8586	Inspecting, testing, grading and sampling occupations, equipment repair, except electrical	8719	Excavating, grading, paving and related occupations, n.e.c.
8587	Watch and clock repairmen	873	Electrical power, lighting and wire communications equipment erecting, installing and repairing occupations
8588	Precision instrument mechanics and repairmen	8730	Foremen: electrical power, lighting and wire communications equipment erecting, installing and repairing occupations
8589	Mechanics and repairmen, except electrical, n.e.c.	8731	Electrical power linemen and related occupations
		8733	Construction electricians and repairmen
		8735	Wire communications and related equipment installing and repairing occupations
		8736	Inspecting, testing, grading and sampling occupations: electrical power, lighting and wire communications equipment erecting, installing and repairing

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List of Major Groups, Minor Groups
and Unit Groups

8738	Occupations in labouring and other elemental work: electrical power, lighting and wire communications equipment erecting, installing and repairing	915	Water transport operating occupations
8739	Electrical power, lighting and wire communications equipment erecting, installing and repairing occupations, n.e.c.	9151	Deck officers
878/879	Other construction trades occupations	9153	Engineering officers, ship
8780	Foremen: other construction trades occupations	9155	Deck crew, ship
8781	Carpenters and related occupations	9157	Engine and boiler-room crew, ship
8782	Brick and stone masons and tile setters	9159	Water transport operating occupations, n.e.c.
8783	Concrete finishing and related occupations	917	Motor transport operating occupations
8784	Plasterers and related occupations	9170	Foremen: motor transport operating occupations
8785	Painters, paperhangers and related occupations	9171	Bus drivers
8786	Insulating occupations, construction	9173	Taxi drivers and chauffeurs
8787	Roofing, waterproofing and related occupations	9175	Truck drivers
8791	Pipefitting, plumbing and related occupations	9179	Motor transport operating occupations, n.e.c.
8793	Structural metal erectors	919	Other transport and related equipment operating occupations
8795	Glaziers	9190	Foremen: other transport and related equipment operating occupations
8796	Inspecting, testing, grading and sampling occupations, construction, except electrical	9191	Subway and street railway operating occupations
8798	Occupations in labouring and other elemental work, other construction trades	9193	Motormen and dinkeymen, except rail transport
8799	Other construction trades occupations, n.e.c.	9199	Other transport and related equipment operating occupations, n.e.c.
Major Group 91 - Transport Equipment Operating Occupations			
911	Air transport operating occupations	Major Group 93 - Materials Handling and Related Occupations, n.e.c.	
9110	Foremen: air transport operating occupations	931	Materials handling and related occupations, n.e.c.
9111	Air pilots, navigators and flight engineers	9310	Foremen: materials handling and related occupations, n.e.c.
9113	Air transport operating support occupations	9311	Hoisting occupations, n.e.c.
9119	Air transport operating occupations, n.e.c.	9313	Longshoremen, stevedores and freight handlers
913	Railway transport operating occupations	9315	Materials handling equipment operators, n.e.c.
9130	Foremen: railway transport operating occupations	9317	Packaging occupations, n.e.c.
9131	Locomotive engineers and firemen	9318	Occupations in labouring and other elemental work, materials handling
9133	Conductors and brakemen, railway	9319	Materials handling and related occupations, n.e.c.
9135	Railway transport operating support occupations	Major Group 95 - Other Crafts and Equipment Operating Occupations	
9139	Railway transport operating occupations, n.e.c.	951	Printing and related occupations
		9510	Foremen: printing and related occupations
		9511	Typesetters and compositors

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List of Major Groups, Minor Groups and Unit Groups

9512 Printing press occupations
9513 Stereotypers and electrotypers
9514 Printing engravers, except photoengravers
9515 Photoengravers and related occupations
9517 Bookbinders and related occupations
9518 Occupations in labouring and other
elemental work: printing and related, n.e.c.
9519 Printing and related occupations, n.e.c.

953 Stationary engine and utilities equipment operating and related occupations

9530 Foremen: stationary engine and utilities
equipment operating and related
9531 Power station operators
9539 Stationary engine and utilities equipment
operating and related occupations, n.e.c.

955 Electronic and related communications equipment operating occupations, n.e.c.

9550 Foremen: electronic and related
communications equipment operating
occupations, n.e.c.
9551 Radio and television broadcasting equipment
operators
9553 Telegraph operators
9555 Sound recording and reproduction
equipment operators
9557 Motion picture projectionists
9559 Electronic and related communications
equipment operating occupations, n.e.c.

959 Other crafts and equipment operating occupations, n.e.c.

9590 Foremen: other crafts and equipment
operating occupations, n.e.c.
9591 Photographic processing occupations
9599 Other crafts and equipment operating
occupations, n.e.c.

9923 Trade
9924 Community, business and personal
service
9925 Public administration and defence
9926 Other industries and unspecified(4)
9919 Other occupations, n.e.c.

Major Group 00 - Occupations not Stated

000 Occupations not stated

0000 Occupations not stated

Major Group 99 - Occupations not Elsewhere Classified

991 Occupations not elsewhere classified

9910 Supervisors and foremen, n.e.c.
9916 Inspecting, testing, grading and sampling
occupations, n.e.c.
9918 (9921-9926) Occupations in labouring
and other elemental work, n.e.c. (in the
following industries):
9921 Manufacturing industries
9922 Transportation, communication and other
utilities

1971 Classification

List of Major Groups, Minor Groups and Unit Groups

Footnotes

- (1) Includes wood industries, furniture and fixture industries, primary metal industries, metal fabricating industries (except machinery and transportation equipment industries), machinery industries (except electrical machinery), transportation equipment industries, electrical products industries and non-metallic mineral products industries.
- (2) Includes fruit and beverage industries, tobacco products industries, rubber and plastics products industries, leather industries, textile industries, knitting mills, clothing industries, paper and allied industries, printing, publishing and allied industries, petroleum and coal products industries, chemical and chemical products industries, and miscellaneous manufacturing industries.
- (3) Includes industry unspecified or undefined, agriculture, forestry, fishing and trapping, finance, insurance and real estate and public administration and defence.
- (4) Includes industry unspecified or undefined, agriculture, forestry, fishing and trapping, mines (including milling), quarries and oil wells, construction industry and finance, insurance and real estate.

Abbreviations

- n.e.c. = not elsewhere classified.
n.o.r. = not otherwise reported.

Appendix C

1980 Standard Occupational Classification: List of Unit Groups, Minor Groups and Major Groups

1980 Classification

List of Major Groups, Minor Groups
and Unit GroupsMajor Group 11 - Managerial, Administrative and
Related Occupations111 Officials and Administrators Unique to
Government

- 1111 Members of Legislative Bodies
- 1113 Government Administrators
- 1115 Post Office Management Occupations
- 1116 Inspectors and Regulatory Officers,
Government
- 1119 Officials and Administrators Unique to
Government, n.e.c.

113/114 Other Managers and Administrators

- 1130 General Managers and Other Senior Officials
- 1131 Management Occupations, Natural Sciences
and Engineering
- 1132 Management Occupations, Social Sciences
and Related Fields
- 1133 Administrators in Teaching and Related
Fields
- 1134 Administrators in Medicine and Health
- 1135 Financial Management Occupations
- 1136 Personnel and Industrial Relations
Management Occupations
- 1137 Sales and Advertising Management
Occupations
- 1141 Purchasing Management Occupations
- 1142 Services Management Occupations
- 1143 Production Management Occupations
- 1145 Management Occupations, Construction
Operations
- 1146 Farm Management Occupations
- 1147 Management Occupations, Transport and
Communications Operations
- 1149 (1151-1158) Other Managers and
Administrators, n.e.c. (in the following
industries):
 - 1151 Mines (Including Milling), Quarries and
Oil Wells
 - 1152 Durable Goods Manufacturing(1)
 - 1153 Non-durable Goods Manufacturing(2)
 - 1154 Construction
 - 1155 Transportation, Communication and
Other Utilities
 - 1156 Trade
 - 1157 Community, Business and Personal
Service Industries
 - 1158 Other Industries and Unspecified(3)

117 Occupations Related to Management and
Administration

- 1171 Accountants, Auditors and Other Financial
Officers
- 1173 Organization and Methods Analysts
- 1174 Personnel and Related Officers
- 1175 Purchasing Officers and Buyers, Except
Wholesale and Retail Trade
- 1176 Inspectors and Regulatory Officers, n.e.c.
- 1179 Occupations Related to Management and
Administration, n.e.c.

Major Group 21 - Occupations in Natural
Sciences, Engineering and Mathematics

211 Occupations in Physical Sciences

- 2111 Chemists
- 2112 Geologists
- 2113 Physicists
- 2114 Meteorologists
- 2117 Physical Sciences Technologists and
Technicians
- 2119 Occupations in Physical Sciences, n.e.c.

213 Occupations in Life Sciences

- 2131 Agriculturists and Related Scientists
- 2133 Biologists and Related Scientists
- 2135 Life Sciences Technologists and Technicians
- 2139 Occupations in Life Sciences, n.e.c.

214/215 Architects, Engineers and Community
Planners

- 2141 Architects
- 2142 Chemical Engineers
- 2143 Civil Engineers
- 2144 Electrical Engineers
- 2145 Industrial Engineers
- 2146 Agricultural Engineers
- 2147 Mechanical Engineers
- 2151 Metallurgical Engineers
- 2153 Mining Engineers
- 2154 Petroleum Engineers
- 2155 Aerospace Engineers
- 2156 Nuclear Engineers
- 2157 Community Planners
- 2159 Professional Engineers, n.e.c.

1980 Classification

List of Major Groups, Minor Groups and Unit Groups

- 216 Other Occupations in Architecture and Engineering**
- 2160 Supervisors: Other Occupations in Architecture and Engineering
 - 2161 Surveyors
 - 2163 Draughting Occupations
 - 2164 Architectural Technologists and Technicians
 - 2165 Engineering Technologists and Technicians
 - 2169 Other Occupations in Architecture and Engineering, n.e.c.
- 218 Occupations in Mathematics, Statistics, Systems Analysis and Related Fields**
- 2181 Mathematicians, Statisticians and Actuaries
 - 2183 Systems Analysts, Computer Programmers and Related Occupations
 - 2189 Occupations in Mathematics, Statistics, Systems Analysis and Related Fields, n.e.c.

Major Group 23 - Occupations in Social Sciences and Related Fields

- 231 Occupations in Social Sciences**
- 2311 Economists
 - 2313 Sociologists, Anthropologists and Related Social Scientists
 - 2315 Psychologists
 - 2319 Occupations in Social Sciences, n.e.c.
- 233 Occupations in Social Work and Related Fields**
- 2331 Social Workers
 - 2333 Occupations in Welfare and Community Services
 - 2339 Occupations in Social Work and Related Fields, n.e.c.
- 234 Occupations in Law and Jurisprudence**
- 2341 Judges and Magistrates
 - 2343 Lawyers and Notaries
 - 2349 Occupations in Law and Jurisprudence, n.e.c.
- 235 Occupations in Library, Museum and Archival Sciences**
- 2350 Supervisors: Occupations in Library, Museum and Archival Sciences
 - 2351 Librarians, Archivists and Conservators

- 2353 Technicians in Library, Museum and Archival Sciences
 - 2359 Occupations in Library, Museum and Archival Sciences, n.e.c.
- 239 Other Occupations in Social Sciences and Related Fields**
- 2391 Educational and Vocational Counsellors
 - 2399 Other Occupations in Social Sciences and Related Fields, n.e.c.

Major Group 25 - Occupations in Religion

- 251 Occupations in Religion**
- 2511 Ministers of Religion
 - 2513 Nuns and Brothers
 - 2519 Occupations in Religion, n.e.c.

Major Group 27 - Teaching and Related Occupations

- 271 University Teaching and Related Occupations**
- 2711 University Teachers
 - 2719 University Teaching and Related Occupations, n.e.c.
- 273 Elementary and Secondary School Teaching and Related Occupations**
- 2731 Elementary and Kindergarten Teachers
 - 2733 Secondary School Teachers
 - 2739 Elementary and Secondary School Teaching and Related Occupations, n.e.c.
- 279 Other Teaching and Related Occupations**
- 2791 Community College and Vocational School Teachers
 - 2792 Fine Arts Teachers, n.e.c.
 - 2793 Post-secondary School Teachers, n.e.c.
 - 2795 Teachers of Exceptional Students, n.e.c.
 - 2797 Instructors and Training Officers, n.e.c.
 - 2799 Other Teaching and Related Occupations, n.e.c.

1980 Classification

List of Major Groups, Minor Groups
and Unit Groups

Major Group 31 - Occupations in Medicine and Health

311 Health Diagnosing and Treating Occupations

- 3111 Physicians and Surgeons
- 3113 Dentists
- 3115 Veterinarians
- 3117 Osteopaths and Chiropractors
- 3119 Health Diagnosing and Treating Occupations, n.e.c.

313 Nursing, Therapy and Related Assisting Occupations

- 3130 Supervisors: Nursing, Therapy and Related Assisting Occupations
- 3131 Nurses, Registered, Graduate and Nurses-in-training
- 3132 Orderlies
- 3134 Registered Nursing Assistants
- 3135 Nursing Attendants
- 3136 Audio and Speech Therapists
- 3137 Physiotherapists
- 3138 Occupational Therapists
- 3139 Nursing, Therapy and Related Assisting Occupations, n.e.c.

315/316 Other Occupations in Medicine and Health

- 3151 Pharmacists
- 3152 Dietitians and Nutritionists
- 3153 Optometrists
- 3154 Dispensing Opticians
- 3155 Radiological Technologists and Technicians
- 3156 Medical Laboratory Technologists and Technicians
- 3157 Denturists
- 3158 Dental Hygienists and Dental Assistants
- 3161 Dental Laboratory Technicians
- 3162 Respiratory Technicians
- 3169 Other Occupations in Medicine and Health, n.e.c.

Major Group 33 - Artistic, Literary, Recreational and Related Occupations

331 Occupations in Fine and Commercial Art, Photography and Related Fields

- 3311 Painters, Sculptors and Related Artists
- 3313 Product and Interior Designers
- 3314 Advertising and Illustrating Artists

- 3315 Photographers and Camera Operators
- 3319 Occupations in Fine and Commercial Art, Photography and Related Fields, n.e.c.

333 Occupations in Performing and Audio-visual Arts

- 3330 Producers and Directors, Performing and Audio-visual Arts
- 3331 Conductors, Composers and Arrangers
- 3332 Musicians and Singers
- 3333 Occupations Related to Music and Musical Entertainment, n.e.c.
- 3334 Dancers and Choreographers
- 3335 Actors/Actresses
- 3337 Radio and Television Announcers
- 3339 Occupations in Performing and Audio-visual Arts, n.e.c.

335 Occupations in Writing

- 3351 Writers and Editors
- 3355 Translators and Interpreters
- 3359 Occupations in Writing, n.e.c.

336/337 Occupations in Sports and Recreation

- 3360 Supervisors: Occupations in Sports and Recreation
- 3370 Coaches, Trainers and Instructors, Sports and Recreation
- 3371 Referees and Related Officials
- 3373 Athletes
- 3375 Attendants, Sports and Recreation
- 3379 Occupations in Sports and Recreation, n.e.c.

Major Group 41 - Clerical and Related Occupations

411 Stenographic and Typing Occupations

- 4110 Supervisors: Stenographic and Typing Occupations
- 4111 Secretaries and Stenographers
- 4113 Typists and Clerk-typists

413 Bookkeeping, Account-recording and Related Occupations

- 4130 Supervisors: Bookkeeping, Account-recording and Related Occupations
- 4131 Bookkeepers and Accounting Clerks
- 4133 Cashiers and Tellers
- 4135 Insurance, Bank and Other Finance Clerks

1980 Classification

List of Major Groups, Minor Groups
and Unit Groups

- 4137 Statistical Clerks
4139 Bookkeeping, Account-recording and Related Occupations, n.e.c.

414 Office Machine and Electronic Data-processing Equipment Operators

- 4140 Supervisors: Office Machine and Electronic Data-processing Equipment Operators
4141 Office Machine Operators
4143 Electronic Data-processing Equipment Operators

415 Material Recording, Scheduling and Distributing Occupations

- 4150 Supervisors: Material Recording, Scheduling and Distributing Occupations
4151 Production Clerks
4153 Shipping and Receiving Clerks
4155 Stock Clerks and Related Occupations
4157 Weighers
4159 Material Recording, Scheduling and Distributing Occupations, n.e.c.

416 Library, File and Correspondence Clerks and Related Occupations

- 4160 Supervisors: Library, File and Correspondence Clerks and Related Occupations
4161 Library and File Clerks
4169 Library, File and Correspondence Clerks and Related Occupations, n.e.c.

417 Reception, Information, Mail and Message Distribution Occupations

- 4170 Supervisors: Reception, Information, Mail and Message Distribution Occupations
4171 Receptionists and Information Clerks
4172 Mail Carriers
4173 Mail and Postal Clerks
4175 Telephone Operators
4177 Messengers
4179 Reception, Information, Mail and Message Distribution Occupations, n.e.c.

419 Other Clerical and Related Occupations

- 4190 Supervisors: Other Clerical and Related Occupations, n.e.c.
4191 Collectors
4192 Claim Adjusters
4193 Travel Clerks, Ticket, Station and Freight Agents
4194 Hotel Clerks
4195 Personnel Clerks

- 4197 General Office Clerks
4199 Other Clerical and Related Occupations, n.e.c.

Major Group 51 - Sales Occupations

513/514 Sales Occupations, Commodities

- 5130 Supervisors: Sales Occupations, Commodities
5131 Technical Sales Occupations and Related Advisers
5133 Commercial Travellers
5135 Sales Clerks and Salespersons, Commodities, n.e.c.
5141 Street Vendors and Door-to-door Sales Occupations
5143 Newspaper Carriers and Vendors
5145 Service Station Attendants
5149 Sales Occupations: Commodities, n.e.c.

517 Sales Occupations, Services

- 5170 Supervisors: Sales Occupations, Services
5171 Insurance Sales Occupations
5172 Real Estate Sales Occupations
5173 Sales Agents and Traders, Securities
5174 Advertising Sales Occupations
5177 Business Services Sales Occupations
5179 Sales Occupations: Services, n.e.c.

519 Other Sales Occupations

- 5190 Supervisors: Other Sales Occupations
5191 Buyers, Wholesale and Retail Trade
5193 Route Drivers
5199 Other Sales Occupations, n.e.c.

Major Group 61 - Service Occupations

611 Protective Service Occupations

- 6111 Fire-fighting Occupations
6112 Police Officers and Detectives, Government
6113 Police Agents and Investigators, Private
6115 Guards and Related Security Occupations
6116 Commissioned Officers, Armed Forces
6117 Other Ranks, Armed Forces
6119 Protective Service Occupations, n.e.c.

1980 Classification

List of Major Groups, Minor Groups
and Unit Groups

612	Food and Beverage Preparation and Related Service Occupations
6120	Supervisors: Food and Beverage Preparation and Related Service Occupations
6121	Chefs and Cooks
6123	Bartenders
6125	Food and Beverage Serving Occupations
6129	Food and Beverage Preparation and Related Service Occupations, n.e.c.
613	Occupations in Lodging and Other Accommodation
6130	Supervisors: Occupations in Lodging and Other Accommodation
6133	Lodging Cleaners, Except Private Household
6135	Sleeping-car and Baggage Porters
6139	Occupations in Lodging and Other Accommodation, n.e.c.
614	Personal Service Occupations
6141	Funeral Directors, Embalmers and Related Occupations
6142	Housekeepers, Servants and Related Occupations
6143	Barbers, Hairdressers and Related Occupations
6144	Guides
6145	Travel and Related Attendants, Except Food and Beverage
6147	Child-care Occupations
6149	Personal Service Occupations, n.e.c.
616	Apparel and Furnishings Service Occupations
6160	Supervisors: Apparel and Furnishings Service Occupations
6162	Laundrying and Dry Cleaning Occupations
6165	Pressing Occupations
6169	Apparel and Furnishings Service Occupations, n.e.c.
619	Other Service Occupations
6190	Supervisors: Other Service Occupations
6191	Janitors, Charworkers and Cleaners
6193	Elevator-operating Occupations
6198	Occupations in Labouring and Other Elemental Work: Other Services
6199	Other Service Occupations, n.e.c.

Major Group 71 - Farming, Horticultural and Animal Husbandry Occupations

711	Farmers
7113	Livestock Farmers
7115	Crop Farmers
7119	Farmers, n.e.c.
718/719	Other Farming, Horticultural and Animal Husbandry Occupations
7180	Foremen/women: Other Farming, Horticultural and Animal Husbandry Occupations
7183	Livestock Farm Workers
7185	Crop Farm Workers
7195	Nursery and Related Workers
7196	Inspecting, Testing, Grading and Sampling Occupations: Other Farming, Horticultural and Animal Husbandry
7197	Farm Machinery Operators
7199	Other Farming, Horticultural and Animal Husbandry Occupations, n.e.c.

Major Group 73 - Fishing, Trapping and Related Occupations

731	Fishing, Trapping and Related Occupations
7311	Captains and Other Officers, Fishing Vessels
7313	Net, Trap and Line Fishing Occupations
7315	Trapping and Related Occupations
7319	Fishing, Trapping and Related Occupations, n.e.c.

Major Group 75 - Forestry and Logging Occupations

751	Forestry and Logging Occupations
7510	Foremen/women: Forestry and Logging Occupations
7511	Forestry Conservation Occupations
7513	Timber Cutting and Related Occupations
7516	Log Inspecting, Grading, Scaling and Related Occupations
7517	Log Hoisting, Sorting, Moving and Related Occupations

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List of Major Groups, Minor Groups
and Unit Groups

- 7518 Occupations in Labouring and Other
Elemental Work: Forestry and Logging
7519 Forestry and Logging Occupations, n.e.c.

Major Group 77 - Mining and Quarrying
Including Oil and Gas Field Occupations

- 771 Mining and Quarrying Including Oil and
Gas Field Occupations**
7710 Foremen/women: Mining and Quarrying
Including Oil and Gas Field Occupations
7711 Rotary Well-drilling and Related Occupations
7713 Rock and Soil Drilling Occupations
7715 Blasting Occupations
7717 Mining and Quarrying: Cutting, Handling
and Loading Occupations
7718 Occupations in Labouring and Other
Elemental Work: Mining and Quarrying
Including Oil and Gas Fields
7719 Mining and Quarrying Including Oil and Gas
Field Occupations, n.e.c.

Major Group 81/82 - Processing Occupations

- 811 Mineral Ore Treating Occupations**
8110 Foremen/women: Mineral Ore Treating
Occupations
8111 Crushing and Grinding Occupations, Mineral
Ores
8113 Mixing, Separating, Filtering and Related
Occupations, Mineral Ores
8115 Melting and Roasting Occupations, Mineral
Ores
8116 Inspecting, Testing, Grading and Sampling
Occupations: Mineral Ore Treating
8118 Occupations in Labouring and Other
Elemental Work: Mineral Ore Treating
8119 Mineral Ore Treating Occupations, n.e.c.
**813/814 Metal Processing and Related
Occupations**
8130 Foremen/women: Metal Processing and
Related Occupations
8131 Metal Smelting, Converting and Refining
Occupations
8133 Metal Heat-treating Occupations
8135 Metal Rolling Occupations

- 8137 Moulding, Coremaking and Metal Casting
Occupations
8141 Metal Extruding and Drawing Occupations
8143 Plating, Metal Spraying and Related
Occupations
8146 Inspecting, Testing, Grading and Sampling
Occupations, Metal Processing
8148 Occupations in Labouring and Other
Elemental Work: Metal Processing
8149 Metal Processing and Related Occupations,
n.e.c.

**815 Clay, Glass and Stone Processing, Forming
and Related Occupations**

- 8150 Foremen/women: Clay, Glass and Stone
Processing, Forming and Related
Occupations
8151 Furnace and Kiln Workers: Clay, Glass and
Stone
8153 Separating, Grinding, Crushing and Mixing
Occupations: Clay, Glass and Stone
8155 Forming Occupations: Clay, Glass and Stone
8156 Inspecting, Testing, Grading and Sampling
Occupations: Clay, Glass and Stone
Processing and Forming
8158 Occupations in Labouring and Other
Elemental Work: Clay, Glass and Stone
Processing and Forming
8159 Clay, Glass and Stone Processing, Forming
and Related Occupations, n.e.c.

**816/817 Chemicals, Petroleum, Rubber, Plastic and
Related Materials Processing Occupations**

- 8160 Foremen/women: Chemicals, Petroleum,
Rubber, Plastic and Related Materials
Processing Occupations
8161 Mixing and Blending Occupations, Chemicals
and Related Materials
8163 Filtering, Straining and Separating
Occupations, Chemicals and Related
Materials
8165 Distilling, Subliming and Carbonizing
Occupations, Chemicals and Related
Materials
8167 Roasting, Cooking and Drying Occupations,
Chemicals and Related Materials
8171 Crushing and Grinding Occupations,
Chemicals and Related Materials
8173 Coating and Calendering Occupations,
Chemicals and Related Materials

1980 Classification

List of Major Groups, Minor Groups
and Unit Groups

8176	Inspecting, Testing, Grading and Sampling Occupations: Chemicals, Petroleum, Rubber, Plastic and Related Materials Processing	825	Pulp and Papermaking and Related Occupations
8178	Occupations in Labouring and Other Elemental Work: Chemicals, Petroleum, Rubber, Plastic and Related Materials Processing	8250	Foremen/women: Pulp and Papermaking and Related Occupations
8179	Chemicals, Petroleum, Rubber, Plastic and Related Materials Processing Occupations, n.e.c.	8251	Cellulose Pulp Preparing Occupations
821/822	Food, Beverage and Related Processing Occupations	8253	Papermaking and Finishing Occupations
8210	Foremen/women: Food, Beverage and Related Processing Occupations	8256	Inspecting, Testing, Grading and Sampling Occupations: Pulp and Papermaking
8211	Flour and Grain Milling Occupations	8258	Occupations in Labouring and Other Elemental Work: Pulp and Papermaking
8213	Baking, Confectionery Making and Related Occupations	8259	Pulp and Papermaking and Related Occupations, n.e.c.
8215	Slaughtering and Meat Cutting, Canning, Curing and Packing Occupations	826/827	Textile Processing Occupations
8217	Fish Canning, Curing and Packing Occupations	8260	Foremen/women: Textile Processing Occupations
8221	Fruit and Vegetable Canning, Preserving and Packing Occupations	8261	Textile Fibre Preparing Occupations
8223	Milk Processing and Related Occupations	8263	Textile Spinning and Twisting Occupations
8225	Sugar Processing and Related Occupations	8265	Textile Winding and Reeling Occupations
8226	Inspecting, Testing, Grading and Sampling Occupations: Food, Beverage and Related Processing	8267	Textile Weaving Occupations
8227	Beverage Processing and Related Occupations	8271	Knitting Occupations
8228	Occupations in Labouring and Other Elemental Work: Food, Beverage and Related Processing	8273	Textile Bleaching and Dyeing Occupations
8229	Food, Beverage and Related Processing Occupations, n.e.c.	8275	Textile Finishing and Calendering Occupations
823	Wood Processing Occupations, Except Pulp and Papermaking	8276	Inspecting, Testing, Grading and Sampling Occupations, Textile Processing
8230	Foremen/women: Wood Processing Occupations, Except Pulp and Papermaking	8278	Occupations in Labouring and Other Elemental Work: Textile Processing
8231	Sawmill Sawyers and Related Occupations	8279	Textile Processing Occupations, n.e.c.
8233	Plywood Making and Related Occupations	829	Other Processing Occupations
8235	Wood Treating Occupations	8290	Foremen/women: Other Processing Occupations
8236	Inspecting, Testing, Grading and Sampling Occupations: Wood Processing, Except Pulp and Papermaking	8293	Tobacco Processing Occupations
8238	Occupations in Labouring and Other Elemental Work: Wood Processing, Except Pulp and Papermaking	8295	Hide and Pelt Processing Occupations
8239	Wood Processing Occupations, Except Pulp and Papermaking, n.e.c.	8296	Inspecting, Testing, Grading and Sampling Occupations: Other Processing
		8298	Occupations in Labouring and Other Elemental Work: Other Processing
		8299	Other Processing Occupations, n.e.c.
		Major Group 83 - Machining and Related Occupations	
		831	Metal Machining Occupations
		8310	Foremen/women: Metal Machining Occupations
		8311	Tool and Die Making Occupations
		8313	Machinist and Machine Tool Setting-up Occupations
		8315	Machine Tool Operating Occupations

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8534	Electronic and Related Equipment Fabricating and Assembling Occupations	8568	Occupations in Labouring and Other Elemental Work: Fabricating, Assembling and Repairing Textile, Fur and Leather Products
8535	Electronic and Related Equipment Installing and Repairing Occupations, n.e.c.	8569	Fabricating, Assembling and Repairing Occupations: Textile, Fur and Leather Products, n.e.c.
8536	Inspecting, Testing, Grading and Sampling Occupations: Fabricating, Assembling, Installing and Repairing Electrical, Electronic and Related Equipment	857	Fabricating, Assembling and Repairing Occupations: Rubber, Plastic and Related Products
8537	Radio and Television Repairers	8570	Foremen/women: Fabricating, Assembling and Repairing Occupations: Rubber, Plastic and Related Products
8538	Occupations in Labouring and Other Elemental Work: Fabricating, Assembling, Installing and Repairing Electrical, Electronic and Related Equipment	8571	Bonding and Cementing Occupations: Rubber, Plastic and Related Products
8539	Fabricating, Assembling, Installing and Repairing Occupations: Electrical, Electronic and Related Equipment, n.e.c.	8573	Moulding Occupations: Rubber, Plastic and Related Products
854	Fabricating, Assembling and Repairing Occupations: Wood Products	8575	Cutting and Finishing Occupations: Rubber, Plastic and Related Products
8540	Foremen/women: Fabricating, Assembling and Repairing Occupations: Wood Products	8576	Inspecting, Testing, Grading and Sampling Occupations: Fabricating, Assembling and Repairing Rubber, Plastic and Related Products
8541	Cabinet and Wood Furniture Makers	8578	Occupations in Labouring and Other Elemental Work: Fabricating, Assembling and Repairing Rubber, Plastic and Related Products
8546	Inspecting, Testing, Grading and Sampling Occupations: Fabricating, Assembling and Repairing Wood Products	8579	Fabricating, Assembling and Repairing Occupations: Rubber, Plastic and Related Products, n.e.c.
8548	Occupations in Labouring and Other Elemental Work: Fabricating, Assembling and Repairing Wood Products	858	Mechanics and Repairers, n.e.c.
8549	Fabricating, Assembling and Repairing Occupations: Wood Products, n.e.c.	8580	Foremen/women: Mechanics and Repairers, n.e.c.
855/856	Fabricating, Assembling and Repairing Occupations: Textile, Fur and Leather Products	8581	Motor Vehicle Mechanics and Repairers
8550	Foremen/women: Fabricating, Assembling and Repairing Occupations: Textile, Fur and Leather Products	8582	Aircraft Mechanics and Repairers
8551	Patternmaking, Marking and Cutting Occupations: Textile, Fur and Leather Products	8583	Rail Transport Equipment Mechanics and Repairers
8553	Tailors and Dressmakers	8584	Industrial, Farm and Construction Machinery Mechanics and Repairers
8555	Furriers	8585	Business and Commercial Machine Mechanics and Repairers
8557	Milliners, Hat and Cap Makers	8586	Inspecting, Testing, Grading and Sampling Occupations: Equipment Repair, n.e.c.
8561	Shoemaking and Repairing Occupations	8587	Watch and Clock Repairers
8562	Upholsterers	8588	Precision Instrument Mechanics and Repairers
8563	Sewing Machine Operators, Textile and Similar Materials	8589	Other Mechanics and Repairers, n.e.c.
8566	Inspecting, Testing, Grading and Sampling Occupations: Fabricating, Assembling and Repairing Textile, Fur and Leather Products		

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and Repairing Occupations**

- 8590 Foremen/women: Other Product Fabricating, Assembling and Repairing Occupations
- 8591 Jewellery and Silverware Fabricating, Assembling and Repairing Occupations
- 8592 Marine Craft Fabricating, Assembling and Repairing Occupations
- 8593 Paper Product Fabricating and Assembling Occupations
- 8595 Painting and Decorating Occupations, n.e.c.
- 8596 Inspecting, Testing, Grading and Sampling Occupations: Other Product Fabricating, Assembling and Repairing
- 8598 Occupations in Labouring and Other Elemental Work: Other Product Fabricating, Assembling and Repairing
- 8599 Other Product Fabricating, Assembling and Repairing Occupations, n.e.c.

**Major Group 87 - Construction Trades
Occupations****871 Excavating, Grading, Paving and Related
Occupations**

- 8710 Foremen/women: Excavating, Grading, Paving and Related Occupations
- 8711 Excavating, Grading and Related Occupations
- 8713 Paving, Surfacing and Related Occupations
- 8715 Railway Section and Track Workers
- 8718 Occupations in Labouring and Other Elemental Work: Excavating, Grading, Paving and Related Activities
- 8719 Excavating, Grading, Paving and Related Occupations, n.e.c.

**873 Electrical Power, Lighting and Wire
Communications Equipment Erecting,
Installing and Repairing Occupations**

- 8730 Foremen/women: Electrical Power, Lighting and Wire Communications Equipment Erecting, Installing and Repairing Occupations
- 8731 Electrical Power Line Workers and Related Occupations
- 8733 Construction Electricians and Repairers
- 8735 Wire Communications and Related Equipment Installing and Repairing Occupations

8736 Inspecting, Testing, Grading and Sampling Occupations: Electrical Power, Lighting and Wire Communications Equipment Erecting, Installing and Repairing

8738 Occupations in Labouring and Other Elemental Work: Electrical Power, Lighting and Wire Communications Equipment Erecting, Installing and Repairing

8739 Electrical Power, Lighting and Wire Communications Equipment Erecting, Installing and Repairing Occupations, n.e.c.

878/879 Other Construction Trades Occupations

- 8780 Foremen/women: Other Construction Trades Occupations
- 8781 Carpenters and Related Occupations
- 8782 Brick and Stone Masons and Tile Setters
- 8783 Concrete Finishing and Related Occupations
- 8784 Plasterers and Related Occupations
- 8785 Painters, Paperhangers and Related Occupations
- 8786 Insulating Occupations, Construction
- 8787 Roofing, Waterproofing and Related Occupations
- 8791 Pipefitting, Plumbing and Related Occupations
- 8793 Structural Metal Erectors
- 8795 Glaziers
- 8796 Inspecting, Testing, Grading and Sampling Occupations: Other Construction Trades
- 8798 Occupations in Labouring and Other Elemental Work: Other Construction Trades
- 8799 Other Construction Trades Occupations, n.e.c.

**Major Group 91 - Transport Equipment
Operating Occupations****911 Air Transport Operating Occupations**

- 9110 Foremen/women: Air Transport Operating Occupations
- 9111 Air Pilots, Navigators and Flight Engineers
- 9113 Air Transport Operating Support Occupations
- 9119 Air Transport Operating Occupations, n.e.c.

913 Railway Transport Operating Occupations

- 9130 Foremen/women: Railway Transport Operating Occupations
- 9131 Locomotive Operating Occupations
- 9133 Conductors and Brake Workers, Railway

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9135 Railway Transport Operating Support Occupations 9139 Railway Transport Operating Occupations, n.e.c.	Major Group 95 - Other Crafts and Equipment Operating Occupations
915 Water Transport Operating Occupations	
9151 Deck Officers 9153 Engineering Officers, Ship 9155 Deck Crew, Ship 9157 Engine and Boiler-room Crew, Ship 9159 Water Transport Operating Occupations, n.e.c.	951 Printing and Related Occupations
917 Motor Transport Operating Occupations	9510 Foremen/women: Printing and Related Occupations 9511 Typesetting and Composing Occupations 9512 Printing Press Occupations 9513 Stereotyping and Electrotyping Occupations 9514 Printing Engraving, Except Photoengraving, Occupations 9515 Photoengraving and Related Occupations 9517 Bookbinding and Related Occupations 9518 Occupations in Labouring and Other Elemental Work: Printing and Related Activities 9519 Printing and Related Occupations, n.e.c.
9170 Foremen/women: Motor Transport Operating Occupations 9171 Bus Drivers 9173 Taxi Drivers and Chauffeurs 9175 Truck Drivers 9179 Motor Transport Operating Occupations, n.e.c.	953 Stationary Engine and Utilities Equipment Operating and Related Occupations
919 Other Transport Equipment Operating Occupations	
9190 Foremen/women: Other Transport Equipment Operating Occupations 9191 Subway and Street Railway Operating Occupations 9193 Rail Vehicle Operators, Except Rail Transport 9199 Other Transport Equipment Operating Occupations, n.e.c.	9530 Foremen/women: Stationary Engine and Utilities Equipment Operating and Related Occupations 9531 Power Station Operators 9539 Stationary Engine and Utilities Equipment Operating and Related Occupations, n.e.c.
Major Group 93 - Material Handling and Related Occupations, n.e.c.	955 Electronic and Related Communications Equipment Operating Occupations, n.e.c.
931 Material Handling and Related Occupations, n.e.c.	9550 Foremen/women: Electronic and Related Communications Equipment Operating Occupations, n.e.c. 9551 Radio and Television Broadcasting Equipment Operators 9553 Telegraph Operators 9555 Sound and Video Recording and Reproduction Equipment Operators 9557 Motion Picture Projectionists 9559 Other Electronic and Related Communications Equipment Operating Occupations, n.e.c.
9310 Foremen/women: Material Handling and Related Occupations, n.e.c. 9311 Hoisting Occupations, n.e.c. 9313 Longshore Workers, Stevedores and Freight Handlers 9314 Parcel Carriers, n.e.c. 9315 Material Handling Equipment Operators, n.e.c. 9317 Packaging Occupations, n.e.c. 9318 Occupations in Labouring and Other Elemental Work: Material Handling and Related Activities, n.e.c. 9319 Other Material Handling and Related Occupations, n.e.c.	959 Other Crafts and Equipment Operating Occupations, n.e.c.
	9590 Foremen/women: Other Crafts and Equipment Operating Occupations, n.e.c. 9591 Photographic Processing Occupations 9599 Other Crafts and Equipment Operating Occupations, n.e.c.

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**Major Group 99 - Occupations not Elsewhere
Classified**

991 Occupations Not Elsewhere Classified

- 9910 Supervisors and Foremen/women, n.e.c.
- 9916 Inspecting, Testing, Grading and Sampling
Occupations, n.e.c.
- 9918 (9921-9926) Occupations in Labouring and
Other Elemental Work: n.e.c. (in the
following industries):
 - 9921 Manufacturing Industries
 - 9922 Transportation, Communication and
Other Utilities
 - 9923 Trade
 - 9924 Community, Business and Personal
Service
 - 9925 Public Administration and Defence
 - 9926 Other Industries and Unspecified(4)
- 9919 Other Occupations, n.e.c.

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**List of Major Groups, Minor Groups
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Footnotes

- (1) Includes wood industries, furniture and fixture industries, primary metal industries, metal fabricating industries (except machinery and transportation equipment industries), machinery industries (except electrical machinery), transportation equipment industries, electrical products industries and non-metallic mineral products industries.
- (2) Includes food and beverage industries, tobacco products industries, rubber and plastic products industries, leather industries, textile industries, knitting mills, clothing industries, paper and allied industries, printing, publishing and allied industries, petroleum and coal products industries, chemical and chemical products industries, and miscellaneous manufacturing industries.
- (3) Includes industry unspecified or undefined, agriculture, forestry, fishing and trapping, finance, insurance and real estate and public administration and defence.
- (4) Includes industry unspecified or undefined, agriculture, forestry, fishing and trapping, mines (including milling), quarries and oil wells, construction industry and finance, insurance and real estate.

Abbreviation

n.e.c. = not elsewhere classified.

Appendix D

Relating the 1971 Occupational Classification Manual (OCM) and the 1980 Standard Occupational Classification (SOC)

Relating the 1971 OCM and 1980 SOC

Since the completion of the OCM in 1971, technological and industrial changes have occurred which have changed the nature of a number of occupations such that some occupational titles have become obsolete while others seem to be omitted from the classification structure. As well, experience in using the 1971 classification revealed the need for changes to some occupational groups, not to mention a number of incorrectly coded titles. For these reasons, the 1980 SOC was created to revise and update the 1971 OCM.

For purposes of historical continuity, however, 1991 Census data were coded to both the 1971 OCM and 1980 SOC. To avoid coding the occupation data twice, special codes are assigned to those titles which have changed unit groups between 1971 and 1980. These special codes, called "comparison codes", allow for the restructuring of the occupation data into the 1971 OCM or 1980 SOC without the need for two coding operations. The following is an example of some occupations that changed codes between 1971 and 1980 and their associated comparison codes.

An Example of Occupation Titles Whose Units Group Code Differs between the 1971 OCM and 1980 SOC.

Comparison Code - Occupation	1971 OCM	1980 SOC
0109 - Articled Clerk - Off. of Chartered & Certified Accountants	4131	1171
0109 - Student Accountant - Any Ind.	4131	1171
0109 - Économe - Gestion de l'éducation: ind. des services d'enseignement	4131	1171
0109 - Étudiant-comptable - Serv. de comptabilité et de tenue de livres	4131	1171
0110 - Automobile Underwriter - Insce. Ind.	5171	1171
0110 - Bond Underwriter - Insce. Ind.	5171	1171
0110 - Insurance Underwriter - Insce. Ind.	5171	1171
0110 - Liability Underwriter - Insce. Ind.	5171	1171
0110 - Underwriter - Insce. & Real Estate Agen.	5171	1171
0111 - Restaurant Manager - Any Ind.	6120	1142
0112 - Management Analyst - Any Ind.	2145	1173
0112 - Management Consultant - Any Ind.	2145	1173
0112 - Management Engineer - Any Ind.	2145	1173
0112 - Methods and Procedures Analyst - Any Ind.	2145	1173
0113 - Agent - Bus. Assoc.; Prof. Membership Assoc.; Labour Org.	1142	1179
0113 - Director - Bus. Assoc.; Prof. Membership Assoc.; Labour Org.	1142	1179
0113 - Employees Representative - Bus. Assoc.; Prof. Membership Assoc.; Labour Org.	1142	1179
0113 - Field Representative - Bus. Assoc.; Membership Assoc.; Labour Org.	1142	1179
0113 - Field Representative - N.e.c.	1142	1179
0113 - Labour Representative - Labour Org.	1142	1179
0113 - Official - Bus. Assoc.; Prof. Membership Assoc.; Labour Org.	1142	1179
0113 - Organizer - Bus. Assoc.; Prof. Membership Assoc.; Labour Org.	1142	1179
0113 - Representative - Bus. Assoc.; Prof. Membership Assoc.; Labour Org.	1142	1179
0113 - Representative, Field - N.e.c.	1142	1179
0113 - Union Organizer - Bus. Assoc.; Prof. Membership Assoc.; Labour Org.	1142	1179
0113 - Union Representative - Bus. Assoc.; Prof. Membership Assoc.; Labour Org.	1142	1179
0114 - Astronomer - Any Ind.	2119	2113
0114 - Astronome - Toutes ind.	2119	2113
0115 - Industrial Hygienist - Any Ind.	3159	2145
0116 - Irrigation Specialist - Any Ind.	2131	2146
0116 - Irrigationist - Any Ind.	2131	2146
0117 - Forest Engineer - Logging & Forestry Ind.	2143	2159
0117 - Ingénieur forestier - Exploitation forestière: ind. des serv. forestiers	2143	2159
0118 - Corrosion Engineer - Any Ind.	2144	2159
0119 - Geological Engineer - Any Ind.	2153	2159
0120 - Detailer - Furn. & Fixture Ind.; Motor Veh. Ind.	9318	2163
0121 - Midwife - Health & Soc. Serv. Ind.	3135	3134

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<u>Comparison Code - Occupation</u>	<u>1971 OCM</u>	<u>1980 SOC</u>
0121 - Practical Nurse - Health & Soc. Serv. Ind.	3135	3134
0122 - Audiometrist - Health & Soc. Serv. Ind.	3156	3139
0123 - Apprentice Pharmacist - Any Ind.	3159	3151
0123 - Druggist's Apprentice - Any Ind.	3159	3151
0124 - Artificial-limb Assembler - Sci. & Prof. Equip. Ind.	8399	3169
0124 - Artificial-limb Maker - Sci. & Prof. Equip. Ind.	8399	3169
0124 - Finisher, Lens - Sci. & Prof. Equip. Ind.	8399	3169
0124 - Fitter - Ophthalmic Goods Ind.	8399	3169
0124 - Orthopedic Mechanic - Sci. & Prof. Equip. Ind.	8399	3169
0124 - Orthopedic Technologist and Technician - Sci. & Prof. Equip. Ind.	8399	3169
0125 - Safety Deposit Box Attendant - Banks & Other Intermed.	4199	4135
0125 - Safety Deposit Boxes Custodian - Any Ind.	4199	4135
0125 - Vault Attendant - Banks & Other Intermed.	4199	4135
0125 - Vault Custodian - Banks & Other Intermed.	4199	4135
0126 - Demurrage Clerk - Railway Trans. Serv. Ind.; Water Trans. Ind.	4131	4139
0127 - Tariff Clerk - Railway Trans. Serv. Ind.	4199	4139
0128 - Supercargo Clerk - Water Trans. Ind.	4159	4153
0129 - Hospital Clerk - Hospitals	4113	4197
0129 - Ward Clerk - Hospitals	4113	4197
0130 - Catalogue Compiler - Any Ind.	4137	4199
0130 - Directory Compiler - Any Ind.	4137	4199
0131 - Proprietor (E) - Prescription Drugs & Patent Medicine Stores	3151	5130
0131 - Commerçant (E) - Pharmacies	3151	5130
0131 - Propriétaire (E) - Pharmacies	3151	5130
0132 - Sales Representative - Elec. Power Syst. Ind.	5179	5131
0133 - Ingénieur de contrôle - Ind. de la diffusion des télécomm.	2165	9551
0134 - Bus Boy/Girl - Accom., Food & Bev. Serv. Ind.	6198	6125
0135 - Cremator - Any Ind.	6199	6141
0135 - Crematory Operator - Any Ind.	6199	6141
0136 - Garçon de bar - Ind. de l'hébergement et de la restauration	6121	6198
0137 - Entrepreneur plâtrier (E) - Plâtrage et crépissage	8780	8784
0138 - Child-care Attendant - Other Pers. & Hhld. Serv. N.e.c.	6149	6147
0138 - Children's Nurse, Private Households - Other Pers. & Hhld. Serv. N.e.c.	6149	6147
0138 - Foster Mother - Other Pers. & Hhld. Serv. N.e.c.	6149	6147
0138 - Foster Parent - Other Pers. & Hhld. Serv. N.e.c.	6149	6147
0138 - Guardian, Children - Any Ind.	6149	6147
0138 - House Mother - Any Ind.	6149	6147
0138 - House Parent - Any Ind.	6149	6147
0138 - Nursemaid - Other Pers. & Hhld. Serv. N.e.c.	6149	6147
0138 - Nursery Attendant - Other Pers. & Hhld. Serv. N.e.c.	6149	6147
0139 - Labourer - Private Households	9918	6149
0140 - Furnace Cleaner - Any Ind.	6198	6191
0140 - Nettoyeur de fournaies - Toutes ind.	6198	6191

¹ For the complete list of titles, contact the subject-matter representative for Occupation, Labour and Household Surveys Analysis Division.

Bibliography

Swain, Sandra and Grainger, Patricia. *User's Guide to 1986 Census Data on Occupation*. Ottawa: Statistics Canada. Catalogue No. 99-109E

Statistics Canada. Pre-capture Systems Unit, 1991 Census of Canada Data Assimilation Task. *Regional Office Processing Evaluation Report*. Ottawa: Statistics Canada, May 1993.

Statistics Canada. *Health Reports*. Supplement No. 20: "*Hospital Annual Statistics 1987-1988*, Volume 4 - Personnel". Ottawa: Supply and Services Canada, 1991. Catalogue No. 83-242 (new).

Canada. Statistics Canada. *1991 Census Dictionary*. 1991 Census of Canada. Ottawa: Supply and Services Canada, 1992. Catalogue No. 92-301E.

Statistics Canada. *1991 Census Handbook*. 1991 Census of Canada. Ottawa: Supply and Services Canada, 1992. Catalogue No. 92-305E.

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Vancouver

The University of British Columbia
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University of Victoria
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1000 Berlin 30
Germany

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The British Library
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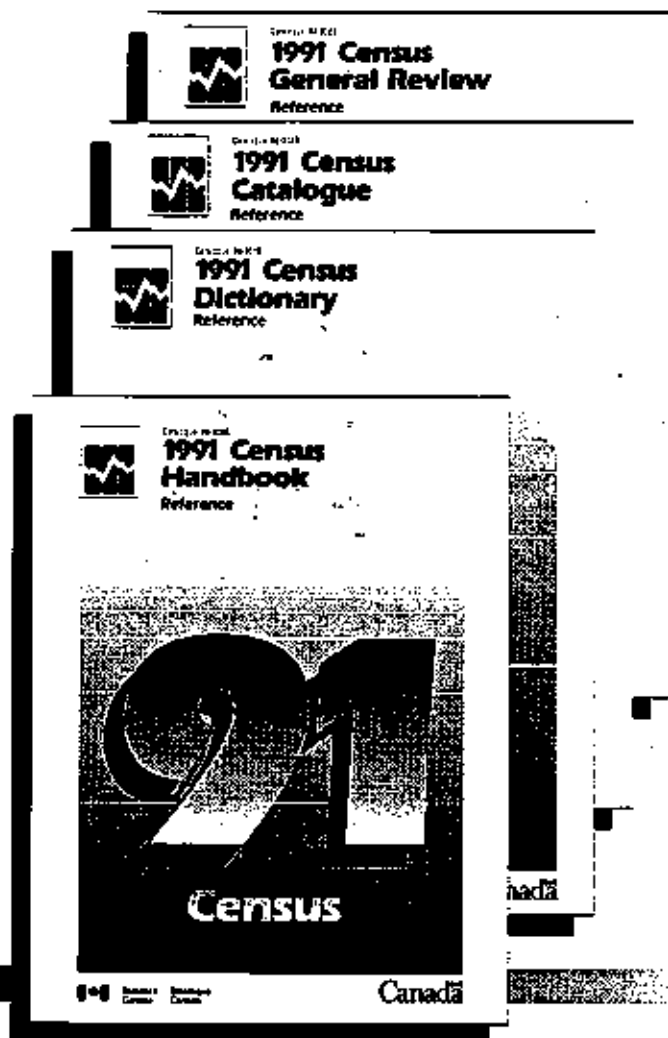
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