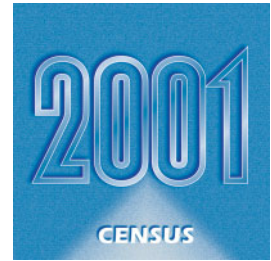




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**Industry (Based on the 1997 North American
Industry Classification System [NAICS])**

2001 Census Technical Report



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Introduction

The 2001 Census required the participation of the entire population of Canada, i.e. some 30 million people distributed over a territory of 9 million square kilometres. An endeavour of this magnitude represented a tremendous challenge. Although there are high quality standards governing the collection and processing of the data, and in spite of efforts aimed at reducing non-response, for example through the use of communications, it is not possible to eliminate all errors. While this term does not necessarily imply any mistake as such, some element of error is bound to result in view of decisions to control census costs.

Statistics Canada is committed to explaining the methods and concepts used to collect and process its data and to providing users with information on the quality of the data produced, as well as other data characteristics which might limit their usefulness or interpretation. This report is aimed at informing users on the complexity of the data and on any difficulties that could affect their use. It explains the theoretical framework and the definitions used to gather the data, and describes unusual circumstances that could affect data quality. Moreover, the report touches upon data capture, edit and imputation, and deals with the historical comparability of the data.

The **2001 Census Technical Reports Series** includes 16 reports covering the variables of the 2001 Census of Population, as well as *Coverage* and *Sampling and Weighting*.

This report deals with the industry variable as classified according to the 1997 North American Industrial Classification System. It has been prepared by Judy Hosein with the support of staff from Labour Statistics Division, Census Operations Division and Social Survey Methods Division.

Users will find additional information on census concepts, variables and geography in the *2001 Census Dictionary* (Catalogue No. 92-378-XIE), and an overview of the complete census process in the *2001 Census Handbook* (Catalogue No. 92-379-XIE).

1. Data Collection and Coverage

This stage of the census process ensures that each of the 11.8 million households in Canada is enumerated. The census enumerates the entire Canadian population, which consists of Canadian citizens (by birth and by naturalization), landed immigrants, and non-permanent residents, together with family members who live with them. Non-permanent residents are persons living in Canada who have a Minister's permit, a student or employment authorization, or who are claiming refugee status, and family members living with them.

The census also counts Canadian citizens and landed immigrants who are temporarily outside the country on Census Day. This includes federal and provincial government employees working outside Canada, Canadian embassy staff posted to other countries, members of the Canadian Armed Forces stationed abroad, and all Canadian crew members of merchant vessels. Because people outside the country are enumerated, the Census of Canada is considered a modified *de jure* census.

1.1 Collection Methods

To ensure the best possible coverage, the country is divided into small geographic areas called enumeration areas (EAs). Each census representative is responsible for at least one EA. The optimal number of households in an EA ranges from 175 in rural areas to 600 in urban areas. In the 2001 Census, there were 42,851 enumeration areas in Canada, and 38,000 people were engaged in collecting the data.

In 2001, approximately 98% of households were self-enumerated. Self-enumeration requires that a census representative drop off a questionnaire at each household during the two weeks before Census Day. An adult or responsible member of the household is asked to complete the questionnaire for all members of the household, and then mails the questionnaire in a pre-addressed envelope.

Approximately 2% of households were enumerated in the 2001 Census using the canvasser enumeration method. In this case, a census representative visits the household and completes a questionnaire for the household by interview. This method is normally used in remote and northern areas of the country, and on most Indian reserves. The canvasser enumeration method is also used in certain urban areas where it is considered highly possible that respondents would be unlikely to return a questionnaire.

1.2 Special Coverage Studies

Since 100% coverage is virtually impossible with such a large survey, a number of checks are performed on the collection of data. These studies measure the extent of coverage errors that occur when dwellings or individuals are missed, incorrectly included or double-counted. These checks are the Vacancy Check, the Reverse Record Check and the Overcoverage Study. These studies are discussed in the 2001 Census Technical Report on *Coverage* (Catalogue No. 92-394-XIE), planned for release in December 2004.

1.3 Questionnaire and Instructions

Remember, these questions are only for persons aged 15 and over.	
<p>Note: Questions 40 to 48 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, 2000. If this person held more than one job last week, answer for the job at which he/she worked the most hours.</p> <p>40 For whom did this person work? <i>For self-employed persons, enter the name of their business. If the business does not have a name, enter the person's name.</i></p>	<p>55.</p> <p>Name of firm, government agency, etc.</p> <p>01 <input type="text"/></p> <p>Section, plant, department, etc. (if applicable)</p> <p>02 <input type="text"/></p>
<p>41 What kind of business, industry or service was this? Please be specific. For example:</p> <ul style="list-style-type: none"> • road maintenance • secondary school • municipal police • wheat farm • retail shoe store • temporary help agency • full-service garage • trapping 	<p>Kind of business, industry or service</p> <p>03 <input type="text"/></p> <p>04 <input type="text"/></p>
<p>42 What was this person's work or occupation? Please be specific. For example:</p> <ul style="list-style-type: none"> • legal secretary • plumber • fishing guide • wood furniture assembler • restaurant manager • secondary school teacher <p><i>(If in the Armed Forces, give rank.)</i></p>	<p>Occupation</p> <p>05 <input type="text"/></p>
<p>43 In this work, what were this person's main activities? Please give details. For example:</p> <ul style="list-style-type: none"> • prepared legal documents • installed residential plumbing • guided fishing parties • made wood furniture products • managed operations of a restaurant • taught mathematics 	<p>Main activities</p> <p>06 <input type="text"/></p> <p>07 <input type="text"/></p>

2. Data Processing

This part of the census process involved the processing of all the completed questionnaires, from the data capture of the information through to the creation of an accurate and complete retrieval database. The final database was transferred to the Data Quality Measurement Project to determine the overall quality of the data, and to the Dissemination Project for the production and marketing of the 2001 Census products and services. A new objective for 2001 was to create an image retrieval system giving access to the images (pictures) of all the census questionnaires and visitation records, so that subsequent processes requiring access to original census forms would not have to handle the thousands of boxes and paper documents, as in previous censuses.

2.1 Regional Processing

Regional Processing was responsible for the manual coding of the industry and occupation responses and the data capture of the questionnaire information into a machine-readable format for subsequent processing systems. Given the enormous volume of census questionnaires and information to be captured (representing over 4 billion keystrokes), Regional Processing has been contracting this work out since 1981 to the Canada Customs and Revenue Agency (CCRA), formerly called Revenue Canada. By using the trained staff and infrastructure already in place at CCRA, the census realized cost savings by partnering with another government agency. For the 2001 Census, approximately 2,800 CCRA employees were sworn to secrecy under the *Statistics Act* to perform the census work, under the same rules and regulations as those which apply to the employees of Statistics Canada.

When the collection activities for a specific enumeration area (EA) were completed, the questionnaires, along with their maps and visitation records, were shipped in EA boxes from the field collection units to one of eight designated CCRA tax centres across the country.

The first step was to prepare the completed questionnaires for data capture. This traditionally included the manual assignment of codes to written answers that were provided by the respondents. For 2001, most of the written responses were converted to codes using automated systems (see Section 2.4). The only written responses that had to be manually coded for the 2001 Census were the questions on industry and occupation contained in the long-form questionnaires. Research into the automation of the coding of these questions has begun, and it is expected that an automated system will be operational for the 2006 Census.

2.1.1 Industry Coding

Industry responses were coded according to the 1997 NAICS. The NAICS is designed to provide a common framework for industry statistics, for Canada, the United States and Mexico, under the North American Free Trade Agreement (NAFTA). To reach the objective of economic coding, three sub-operations were required: Coding, Review and Referral.

Coding

At the Coding stage, written responses to Questions 40 to 43 from the questionnaire are converted into numeric codes for the Industry variable, and alphanumeric codes for the Occupation variable. Codes for Industry and Occupation were obtained from an online reference manual system that included two main

references for Industry – namely, the List of Establishments (LOE)¹ and the Industrial Coding Manual (ICM)².

Review

The second phase of Economic Coding is the Review phase. In Review, the quality control for coding is carried out. A sample of write-in entries on Forms 2B, 2C, 2D and 3B⁴ is recoded by the Review Clerk. Any discrepancies between these codes and the ones assigned by the initial coder are recorded on an Error Listing Form. The errors are then tallied and entered into the Census Automated Control System. If the total errors exceed a predefined threshold, the EA is rejected and returned to the coder for a recoding of the non-sampled questionnaires. The EA is then returned for second review. If the EA is rejected a second time, the non-sampled questionnaires are recoded by the reviewer. At each review, feedback is provided to the coder as to whether the EA is accepted or rejected. This information is useful to ensure that coding remains consistent and that errors are detected early to avoid repetition.

Referral

Responses that could not be coded using standard reference manuals were sent to Referral. The Referral Coder determines the appropriate code using additional reference materials (i.e. telephone books, city directories, etc.). Referral coders also coded late or stray questionnaires that were received after the EA was coded. Difficult cases that were not codeable by the referral coders were solved by a coding consultant. Whenever the Referral Unit, the Coding Consultant, the Coordinator and/or the Manager were unable to resolve coding problems, or whenever any errors in the procedures or manuals were identified, contact was made with Head Office through the use of the Technical Assistance Request Form (TARF) system accessible through the Regional Processing Help Desk.

The industry responses were coded at CCRA according to the North American Industry Classification System (NAICS), which was introduced as a standard within Statistics Canada a few years ago. NAICS is designed to provide a common framework for Canada, the United States and Mexico, which will enable the production of industry statistics under the North American Free Trade Agreement (NAFTA). This meant a change for industry coding - in 1996, industry was coded using the 1980 Standard Industrial Classification (SIC). In order to allow longitudinal comparisons, the 2001 industry question was also coded using the 1980 SIC during the Automated Coding phase (see Section 2.4). This phase was carried out with more automated means than in previous censuses.

Once the industry and occupation codes are assigned, the next step was to sort, label and batch the questionnaires in preparation for data capture. The labels affixed to each questionnaire contained a unique sequence number that was used to control the movement of the questionnaire throughout the CCRA operations. For the first time, the label also included a bar code to facilitate the scanning of the questionnaire in the imaging operation (see Section 2.2).

Data capture was then performed by traditional manual keying at mainly mainframe terminals. Verification of the accuracy of the data capture operation was done by selecting a sample of questionnaires that were already key-entered and capturing the information from the questionnaires in this sample a second time. Quality control statistics were produced by comparing the two sets of captured information.

¹ The LOE is a list of establishments, derived from Statistics Canada's central database of companies operating in Canada. It contains establishment names and the associated NAICS codes that were assigned to these establishments by coders working in the Business Register Division. The LOE uses the same industrial classification as the Industrial Coding Manual, and it was the first manual searched by coders.

² The ICM is arranged in the same format as the 1997 NAICS Manual, with the Classified Index followed by a more descriptive Analytical Section and finally an Alphabetical Listing of all industry descriptions. However, the ICM has been augmented by thousands more industry titles than were included in the original 1980 SIC Manual. In addition, the ICM has some modified coding instructions and some modified codes to reflect the coding level (principally 4-digit) used for census coding.

⁴ For more details, see the *2001 Census Handbook*, Catalogue No. 92-379-XPB or 92-379-XIE.

As the data were keyed, they were transmitted in real time over dedicated communication lines to the CCRA computer in Ottawa. Within 24 hours, the data were then transferred to tape cartridges and transported by bonded carrier to Statistics Canada, where they were loaded into the mainframe computer. Questionnaires were reassembled into their EA boxes for shipment to Statistics Canada's 2001 processing site in Ottawa.

2.2 Imaging

In previous censuses, the remaining processing steps that required access to the questionnaires and visitation records used the paper documents. For 2001, the need to handle the paper was eliminated by imaging (scanning) all the questionnaires and visitation records as soon as they arrived at the 2001 processing site from the CCRA tax centres. Subsequent operations then had access to the questionnaires and visitation record images, using an image retrieval system, rather than using the paper documents.

As the EA boxes arrived at the 2001 processing site, they were registered. Then, the documents were prepared for imaging. Since the questionnaires and visitation records were in booklet format, they had to be cut into separate sheets in order to be run through the scanners. Following the cutting, since the 2A questionnaire was actually two booklets glued together (one English and the other French), the unused portion had to be separated from the completed portion. Extra material that was included with the questionnaires was removed (e.g., paper clips, notes). The questionnaires were then batched by EA for imaging.

The 13 million documents were imaged using 15 high-volume scanners running five days a week, two shifts per day. The geographic identifier that was required to identify each document image was automatically assigned using the bar code on the label affixed during the data-capture operations at CCRA (see Section 2.1). Quality control was performed to ensure that each document contained the right number of pages, and that the number of questionnaires by form type was correct for each EA. A problem-resolution operation resolved any problems that arose. The images were then written to optical platters for subsequent access and archiving. As the questionnaires were scanned, their images were also kept in magnetic storage for immediate access by the Interactive Verification activities (see Section 2.3).

The images on the optical platters are being kept in a secure location and are only accessible to authorized Statistics Canada employees from within the secure location.

2.3 Interactive Verification

The main objective of Interactive Verification was to identify and correct errors in the data, for which proper resolution required reference to the images of the questionnaires and/or visitation records. A detailed set of edits was applied to the captured data to identify possible errors, such as households with missing or duplicate persons, incorrect enumeration of foreign or temporary residents, questionnaires assigned to the wrong household, or misclassification of households as occupied or unoccupied. A thorough review of the information on all relevant census forms was conducted to determine the appropriate corrective action for each edit failure. In some cases, this required adding and/or deleting persons or dwellings; consequently, this process had an impact on the census counts.

As the census data arrived on cartridges from CCRA, they were loaded into Statistics Canada's computers, ready for the Interactive Verification activities. A series of automated "structural" edits were performed, mainly to verify the information filled out by the Census Representative on the front cover of the questionnaire. These edits included, among other things, matching questionnaire and household types, cross-checking the number of questionnaires and people enumerated, and verifying that the geographic identifiers were unique. Some edits were also performed on the income information, so that anomalies could be extracted and examined by income subject-matter experts.

All edits were done by EA. Errors were flagged, and then corrected by referring to the images of the questionnaires and visitation record for that EA. The corrections were made to the electronic data using an interactive PC-based system. Some of the corrections were also noted on the questionnaire images, using a process commonly called "annotation".

Once the EA edits were completed, automated and manual processes were used to verify the block number that the Census Representative had copied from the EA map onto the questionnaire and visitation record.

A National Block Program has been implemented for the first time in 2001. A "block" is basically the smallest area bounded by streets or roads, lakes and rivers. In urban centres, "blocks" are generally recognizable city blocks. In rural areas, "blocks" are much larger areas, but are still bounded by identifiable features, with no significant feature splitting an area. These blocks are added together to create the EAs for data collection purposes, and the dissemination areas (DAs) for the dissemination of census products and services.

During the field collection operations, as census representatives delivered a questionnaire to each dwelling within their EA, they wrote the person's name (if possible) and the address in their visitation records (VRs). At the same time, they copied the VR line number from the VR onto the questionnaire, to uniquely identify the questionnaire for that dwelling. As well, they identified the block number for the dwelling from their EA map and copied the number into the VR and onto the questionnaire. These block numbers were data-captured, so that all the dwellings in Canada could be identified as belonging to a particular block.

As a final step in the Interactive Verification process, the data were reformatted and forwarded for the final processing steps, namely Automated Coding and Edit and Imputation.

Interactive Verification also performed some special processing to ensure that Canadians living outside Canada on Census Day (people aboard coast guard and Canadian Armed Forces vessels, Canadian-registered merchant vessels, and diplomatic and military personnel) were enumerated.

2.4 Automated Coding

Automated coding matched the write-in responses that were "data-captured" from the long-form questionnaires during Regional Processing (see Section 2.1) to entries in an automated reference file/classification structure containing a series of words or phrases and corresponding numerical codes. Although a large percentage of write-in responses can be coded in a purely automated manner, a series of responses always remains unmatched. Specially trained coders and subject-matter experts reviewed all unmatched responses and, with the assistance of PC-based interactive coding systems, assigned the appropriate numerical code after examining responses to other questions and from other members of the household. Automated coding was applied to write-in responses for the following questions on the long form (2B):

- relationship to Person 1;
- home language;
- non-official languages;
- first language learned in childhood (mother tongue);
- language of work (new in 2001);
- place of birth;
- place of birth of parents (new in 2001);
- citizenship;
- ethnic origin (ancestry);
- population group;
- Indian Band/First Nation;

- place of residence 1 year ago;
- place of residence 5 years ago;
- major field of study;
- religion (last asked in 1991);
- place of work;
- industry according to the 1980 SIC (first time for automated coding in 2001).

As the responses for a particular variable were coded, the data for that variable were sent to the Edit and Imputation phase.

2.5 Pre-processing

At the pre-processing stage, a "dispatch" file containing the captured 2001 Census questionnaire information was transferred to subject-matter specialists. This was the first opportunity subject-matter staff had to look at aggregate counts for the different codes assigned. Whenever there was a particular code that required examination, it was always possible to examine all responses for this code to identify coding errors, which are subsequently corrected through a process of "global fixes". Table B1 summarizes the major expert coding changes done for the Industry variable. Over 23,000 unweighted records, representing 0.7% of the codeable universe, were affected by this process. Table B2 shows the net effect of these changes at the detailed industry level.

2.6 Edit and Imputation

2.6.1 General

The data collected in any survey or census contain omissions or inconsistencies. These errors can be the result of respondents answering the questions incorrectly or incompletely, or they can be due to errors generated during processing. For example, a respondent may be reluctant to answer a question, may fail to remember the right answer or may misunderstand the question. Census staff may code responses incorrectly or may make other mistakes during processing.

Prior to Edit and Imputation, the questionnaires underwent some basic manual edits during collection. Field staff reviewed the questionnaires for missing responses or unacceptable multiple responses. Such problems were resolved by contacting the respondents and obtaining the required information. Following collection, Interactive Verification (see Section 2.3) performed some basic structural edits, where the images of the questionnaires and visitation records were referenced as necessary.

The final clean-up of the data was done in Edit and Imputation and was, for the most part, fully automated. It applied a series of detailed edit rules that identified any missing or inconsistent responses. These missing or inconsistent responses were corrected most of the time by changing the values of as few variables as possible through imputation. Imputation invoked "deterministic" and/or "minimum-change 'hot deck'" methods. For deterministic imputation, errors were corrected by inferring the appropriate response value from responses to other questions. For minimum-change "hot deck" imputation, a record with a number of characteristics in common with the record in error was selected. Data from this "donor" record were borrowed and used to change the minimum number of variables necessary to resolve all the edit failures.

Two different automated systems were used to carry out this processing.

The **Nearest-neighbour Imputation Method (NIM)**, developed for the 1996 Census to perform Edit and Imputation for basic demographic characteristics such as age, sex, marital status, common-law status and relationship to Person 1, was expanded for 2001 and implemented in a system called **CANCEIS (CANadian Census Edit and Imputation System)** to include Edit and Imputation for such variables as

labour, place of work, mode of transportation and mobility. As in 1996, CANCEIS continued to allow more extensive and exact edits to be applied to the response data, while preserving responses through minimum-change "hot deck" imputation.

SPIDER (**S**ystem for **P**rocessing **I**nstructions from **D**irectly **E**ntered **R**equirements) was used to process the remaining census variables, such as mother tongue, dwelling and income. This tool translated subject-matter requirements, identified through decision logic tables, into computer-executable modules. SPIDER performed both deterministic and "hot deck" imputation.

2.6.2 Industry Processing

At this stage, the two main processing modules are Edit and Imputation and Deterministic Edits.

Edit and Imputation

At the Edit and Imputation stage, the data were processed to provide representative industry values for respondents who did not answer the Industry questions. Imputation was required for Industry if a record met at least one of the following criteria:

- (a) the respondent was identified as having worked since January 1, 2000, but no industry code was assigned
- (b) the code assigned was 0000, indicating that the response was too vague to be coded and/or
- (c) the code assigned was "invalid" (i.e. was not contained in the list of acceptable industry codes)

Blank, invalid and inconsistent responses were imputed simultaneously using a single donor. Imputation was achieved by matching the characteristics of the "bad" record to those of "good" records known as donors. The donor record had to come from records with a similar set of population characteristics as the "bad" record. In addition to stratifying the population by household type, auxiliary matching constraints, such as occupation, age, sex and highest level of schooling, were also specified in CANCEIS. In 2001, 6.2% of all industry code assignments were imputed to records that were originally blank, invalid or not stated.

Deterministic Edits

After imputation, deterministic edits were applied to the data to eliminate any inconsistent or improbable combinations of industry, occupation and class of worker responses. The edits involving industry and/or occupation were of five basic types:

- (a) industry changed due to inconsistency with occupation
- (b) occupation changed due to inconsistency with industry
- (c) occupation changed due to inconsistency with industry and class of worker
- (d) industry changed due to inconsistency with occupation and class of worker
- (e) occupation changed due to inconsistency with age and education

These responses could not have been corrected in the normal edit processes because there are no cross-sectional edits in the processing modules.

Table B3 contains a summary of the "clean-up" actions for Industry and Occupation, and Table B4 contains a summary of the edits for Industry, Occupation, and Class of worker. Over 17,300 records were changed as a result of deterministic edits, representing 0.5% of the codeable universe. Table B5 shows the net effect of these changes at the industry group level.

2.6.3 Dwelling Classification Study (DCS)

The Dwelling Classification Study takes a sample of dwellings declared either unoccupied or absent during the collection process. Later, the DCS returns to these dwellings to determine if, on Census Day, they were occupied, unoccupied or should not have been listed because they did not meet the definition of a census dwelling. If a dwelling was occupied, one of two separate adjustments is made to the census database. If the dwelling was listed as vacant in the census, then a technique, called "random additions", was applied to add households and persons to the census database. In the 2001 Census, 111,626 households and 222,720 persons were added to the database to account for the estimated number of persons living in vacant dwellings. The second adjustment was concerned with absent households. These were adjusted by creating a new household size for all such dwellings on the census database. A total of 143,684 households with 317,587 persons were added to the census database through this adjustment.

2.6.4 Weighting

Data on age, sex, marital status, common-law status, mother tongue and relationship to Person 1 were collected from all Canadians. However, the bulk of the information gathered in the census came from the 20% sampling of the population. Weighting, applied to the respondent data after Edit and Imputation, was used to adjust the census sample to represent the whole population.

The weighting method produced fully representative estimates from the sample data. For the 2001 Census, weighting employed a methodology known as calibration (or regression) estimation. Calibration estimation started with initial weights of approximately 5 and then adjusted them by the smallest possible amount needed to ensure closer agreement between the sample estimates (e.g., number of males, number of people aged 15 to 19) and the actual population counts for age, sex, marital status, common-law status and household size.

Once invalid and non-response data were corrected, they were transferred to the final national retrieval databases for subsequent data quality studies and dissemination.

3. Data Quality Measurement

3.1 General

Throughout the census-taking process, every effort was made to ensure high-quality results. Rigorous quality standards were set for data collection and processing, and the Public Communications Program assisted in minimizing non-response. A Data Quality Measurement Program was established to provide users with information on the quality and limitations of census data.

Although considerable effort is made throughout the entire process to ensure high standards of data quality, the resulting data are subject to a certain degree of inaccuracy. To assess the usefulness of census data for their purposes and to understand the risk involved in drawing conclusions or making decisions on the basis of these data, users should be aware of their inaccuracies and appreciate their origin and composition.

Within the **2001 Census Technical Reports Series**, users will find detailed 2001 Census information on *Coverage* and *Sampling and Weighting*. These two reports are scheduled to be released in November and December 2004 respectively.

3.2 Non-response

The non-response rate is the number of respondents who did not respond to the industry questions, expressed as a percentage of the codeable universe. Tables B6 and B7 summarize the weighted and unweighted non-response rates for the Industry variable by document type, province and sex, for the 1996 and 2001 censuses.

Before Edit and Imputation, an additional 5,090 industry codes were assigned to respondents who were originally missed during regional processing. Since non-response rates are based on those respondents for whom a code was not assigned, there is an obvious data quality benefit in being able to code respondents who should have been coded during processing. This activity reduced the non-response rate from 6.8% to 6.7%.

Highlights

Non-response rates are higher in 2001 than in 1996. For Canada, the unweighted non-response rates increased from 5.3% to 6.7%.

Significant differences in non-response rates continue to be a salient feature of the provincial data. In 2001, non-response rates ranged from 11.0% (Yukon) to 5.3% (Nova Scotia and Newfoundland). Non-response rates among the provinces were also uneven from a historical perspective. Between 1996 and 2001, the non-response rate decreased by -0.2 percentage points in Nova Scotia and increased by as much as 3.9 percentage points in the Yukon.

In terms of document types, the occupied private 2B questionnaire continued to show the best non-response rate (6.0%) in a similar pattern to 1996. The 2C and 2D individual questionnaires had higher non-response rates of 6.1% and 13.0%, respectively. The collective versions of the 2B and 2D questionnaires had the worst non-response rates. The collective household 2D questionnaire had a non-response rate of 23.0% and the collective household 2B form had a non-response rate of 26.0%.

In reviewing the non-response rates based on sex, there is a slightly higher rate for males (6.8%) than for females (6.5%). This is a reversal from 1996, when the non-response rates for males and females were 4.4% and 5.3%, respectively.

There are also significant differences in non-response rates for males and females by form type. This is particularly evident in collective 2D forms, where the non-response rates for Canada were 19.5% for males and 29.0% for females. Provincially, the non-response rates ranged from 63.4% (Alberta) to 0.0% for males and from 43.0% (British Columbia) to 0.0% for females.

3.3 Outgoing Error Rate Study (OERS)

Since manual coding is an error-prone process, quality control procedures are put into place to ensure the quality of economic coding. The purpose of the OERS is to measure the quality of the economic coding operation. To achieve this, a sample of records that were originally coded by CCRA employees were recoded by subject-matter experts. The coding error rate was derived by comparing the coder's, reviewer's and referrer's codes to the subject-matter codes. Error rates are estimated for characteristics such as language of questionnaire and type of coder (general or reviewer), and at various levels of industry aggregations. The overall outgoing error rate for industry increased to 15.3% in 2001. This compares with 9.8% in 1996. The study attributes the relatively high outgoing error rates to the low rejection rates assigned by reviewers in the review phase of economic coding. A small portion of the outgoing error rate may also be due to non-sampling or operational errors, such as keying errors, transcription errors, and errors and ambiguities in the coding manual.

3.4 Evaluation Studies

Principal comparisons are made to the Labour Force Survey (LFS) and the Survey of Employment, Payroll and Hours (SEPH). In these particular data retrievals, the universe is restricted to the survey universe to which the census figures are being compared. For tables comparing the LFS data, census labour force estimates exclude the Yukon, Northwest Territories, Nunavut, overseas households and the Armed Forces. For tables comparing SEPH data, estimates exclude unpaid family workers and the unincorporated self-employed.

Analysis starts at the sector level and continues to lower-level comparisons as required. Table 1 outlines the trends for the census and the LFS, Table 2 presents the trends for the census and SEPH. Detailed tables are presented in Tables B8 and B9. Table 3 presents changes to the data as a result of specific processing stages. The net change from the beginning to the end of processing (excluding imputation) is included.

Table 1. Comparison of Weighted Labour Force Estimates for the Census and the Labour Force Survey, All Industries, 1996 and 2001

	2001 # of persons	1996 # of persons	Trend %
Census	15,380	14,120	+ 8.9
Labour Force Survey	15,980	14,550	+9.0

Table 2. Comparison of Weighted Employment Estimates for the Census and the Survey of Employment, Payrolls and Hours, All Industries, 1996 and 2001

	2001 # of persons	1996 # of persons	Trend %
Census	13,879	11,617	+16.3
SEPH	12,878	11,033	+14.3

As noted, SEPH estimates are not collected for Agriculture and Fishing and Trapping.

Table 3. Average Indicators of Change, All Industries, Unweighted, 1996 and 2001

Census Year	Total Records Added (%)	Expert Coding Additions (%)	Imputation Additions (%)	Deterministic Additions (%)	Net Change (Excluding Imputation) (%)
2001	6.7	0.5	6.2	0.3	-0.5
1996	6.3	1.4	4.6	0.2	-0.1

The 1996 and 2001 comparison of data quality indicators shows the effect of a higher non-response rate (i.e. there were more records that required imputation and therefore higher imputation rates). As can be seen from the "Net Change" column, the overall effect of all our processing (excluding imputation additions) is a marginal decrease in the codeable universe. This reflects exclusions of (a) persons under 15 years of age, (b) those identified as retired and (c) those identified as having worked only before January 1st of the previous year (or having never worked).

Table 3 gives some baseline figures for 2001 to refer to when evaluating the importance of changes made in particular industries. Table B10 presents the net effect of all processing for each sector. Sectors with the largest universe changes during processing are Holding Companies (-34.1%), Public Administration (-1.8%) and Mining (-1.7%).

Holding companies are difficult to code because census respondents do not generally provide sufficient information to code financial establishments in great detail. In 2001, this sector contained the highest amount of coder error during economic coding. The changes in counts that are reflected in Table B10 are primarily due to re-codes during expert coding. Public Administration is also a difficult area to code. Respondents tend to give the response "government" for any number of administrative, government, or government-related activities. There were some global fixes, as well as deterministic data adjustments to correct coding errors. In the Mining sector, there were no deterministic changes, and a very minor number of global fixes. Changes to the universe counts in this sector reflect the reassignment of blanks and invalids during expert coding.

4. Historical Comparability

The variable "Industry (based on the 1997 NAICS)" does not permit direct comparison to any previous census industry data. The 1980 Standard Industrial Classification should be used for comparisons between the 1986, 1991, 1996 and 2001 Censuses.

5. Conclusion

In 2001, the 1980 SIC was replaced with the 1997 NAICS. Minor problems were encountered during economic coding, and these were subsequently rectified in due course through expert coding and deterministic fixes. Industry data under the new classification were found to be of acceptable quality.

Appendix A. Glossary of Terms

The definitions of census terms, variables and concepts are presented here as they appear in the *2001 Census Dictionary* (Catalogue No. 92-378-XIE). Users should refer to the *2001 Census Dictionary* for full definitions and additional remarks related to any concepts, such as information on direct and derived variables and their respective universe.

Labour Market Activities: Industry (Based on the 1997 North American Industry Classification System [NAICS])

Refers to the general nature of the business carried out in the establishment where the person worked. If the person did not have a job during the week (Sunday to Saturday) prior to enumeration (May 15, 2001), the data relate to the job of longest duration since January 1, 2000. Persons with two or more jobs were required to report the information for the job at which they worked the most hours.

The 2001 industry data are produced according to the 1997 NAICS. The NAICS provides enhanced industry comparability among the three North American Free Trade Agreement (NAFTA) trading partners (Canada, United States and Mexico). This classification consists of a systematic and comprehensive arrangement of industries structured into 20 sectors, 99 subsectors and 300 industry groups. The criteria used to create these categories are similarity of input structures, labour skills or production processes used by the establishment. For further information on the classification, see *North American Industry Classification System, Canada, 1997*, Catalogue No. 12-501-XPE.

Appendix B. Tables

Table B1. Summary of Expert Coding Changes, Industry, 2001

Original Industry Code (NAICS 1997)	Description of Problem	Global Fix	Number of Records Initially Corrected*
0000	No industry code and occupation code.		879
0002	Persons who were retired in the reference week but also worked since January 1, 2000.		1,344
1133	Persons with occupations unique to processing, manufacturing and utilities (broad category J) were miscoded to a Logging (1133).	Changed NAICS code from 1133 to 3211, 3212, 3219, 3221, or 3222 if occupation was in broad category J	339
1141	There were a number of miscodes of persons working in fish processing with a manufacturing occupation to Fishing. This was sometimes due to incorrect entries in the LOE.	Changed fish plant workers with 1141 code to 3117	372
3117	Persons working in primary industries were mistakenly coded to fish processing.	Changed fishermen with 3117 code to 1141	594
3231	Persons working in photofinishing were miscoded to 3231 – Printing and Related Support Activities.	3231 was replaced with 8129 (Other Personal Services)	136
3361	There were a number of miscodes to 3361 – Motor Vehicle Manufacturing that should have been coded to auto parts or wholesale distribution.	Changed NAICS codes from 3361 to 3363 – Motor Vehicle Parts Manufacturing, 4152 – New Motor Vehicle Parts and Accessories Wholesale-Distributors, or 4153 – Used Motor Vehicle Parts and Accessories Wholesaler-Distributors	86

Original Industry Code (NAICS 1997)	Description of Problem	Global Fix	Number of Records Initially Corrected*
3361	Opposite to the 3361 coding problem. If the car is being manufactured (not the car parts) the code should be 3361 instead of 3363.	Changed NAICS codes from 3361 – Motor Vehicle Manufacturing to 3363 – Motor Vehicle Parts Manufacturing	283
4441	Persons working in full-service garages were often miscoded to automobile dealers or gasoline stations. This was a “special case” with specific instructions that were not followed well by the coders.	Changed NAICS codes from 4411 – Automobile Dealers or 4471 – Gasoline Stations to 8111 – Automotive Repair and Maintenance	607
4521	Persons working in independent establishments within department stores, such as hair salons, were erroneously coded to department stores. This was a “special case” with specific instructions that were not followed well by the coders.	Changed NAICS code from 4521 to a variety of other codes such as 5615 – Travel Arrangement and Reservation Services, 7222 – Limited Service Eating Places, or 8111 – Automotive Repair and Maintenance	563
5242	Code 5242 – Insurance and Real Estate Agencies should only be used for independent insurance agents that broker their services to a number of companies. Code 5241 – Insurance Carriers should be used for insurance agents that work for one company only. This was a common miscode that required correction.	Changed NAICS codes from 5242 – Agencies, Brokerages and Other Insurance Related Activities to 5241 – Insurance Carriers when the company was an insurance company and not an insurance agency or brokerage	517
5511	“Holding companies” or “intermediate companies” that operate other establishments should only be assigned code 5511 – Holding Companies if they are the actual administrative establishment. If they identify themselves by a specific activity (e.g., plumbing contracting) then they should be coded to this activity. There were instructions in the coding procedures for this “special case” but the instructions were not followed well.	Changed NAICS codes from 5511 to a variety of other codes if the establishment was performing a specific activity and if the occupation was not financial, clerical or administrative	1,548

Original Industry Code (NAICS 1997)	Description of Problem	Global Fix	Number of Records Initially Corrected*
6111	There were numerous instances where persons who were working as contractors in a capacity other than academic or administrative were erroneously coded to school boards. Examples would be construction trades, transportation, and janitorial services.	Changed NAICS code 6111 – Elementary and Secondary Schools to a variety of other codes	195
8139	There were a number of cases where persons were assigned the code for unions instead of construction trade. This was especially evident if the person worked for a contractor or sub-contractor.	Changed NAICS code 8139 – Business, Professional, Labour and Other Membership Organizations to a variety of codes in the construction sector.	423
9120, 9130	There were a number of cases of health care, home care, nursing care, etc. that were coded to municipal or provincial government when they should have been coded to the specific codes in the Health Care and Social Assistance sector. Only in cases where there is a specific administrative function should the government codes have been used.	Changed NAICS codes 9120 – Provincial and Territorial Public Administration and 9130 – Local, Municipal and Regional Public Administration to various codes in sector 62 – Health Care and Social Assistance	866
9130	“Sanitation” and “garbage removal” were often miscoded to Local Government Service Industries or Water Systems Industry. There were specific coding instructions regarding this type of activity, but responses were often vague and difficult to categorize.	Changed NAICS codes to 5621 – Waste Collection, 5622 – Waste Treatment and Disposal, or 2213 – Water, Sewage and Other Systems	419
9141	There were a number of cases of Indian bands that were assigned municipal or aboriginal government codes when they should have been coded to the specific codes in other sectors. Only in cases where there is a specific administrative function should the government codes have been used.	Multiple re-codes	1,377

Original Industry Code (NAICS 1997)	Description of Problem	Global Fix	Number of Records Initially Corrected*
1110, 2324, 4529	Persons working in retail were wrongly coded to farming, trade contracting, or other general merchandise stores.	Changed NAICS code from 1110 – Farms to 4442 – Lawn and Garden Equipment and Supplies Stores; 2324 – Building Interior Finishing Work to 4422 – Home Furnishings Stores if occupation was in sales or service; and 4529 – Other General Merchandise Stores to 4521 – Department Stores or 4442	319
2312, 2313, 9120, 9130	There were a number of miscodes of persons working on road maintenance to either Building Construction or government codes. Similarly, some records that were coded to road maintenance should have been coded to Support Activities for Road Transportation.	Changed 2313 – Engineering Construction to 4884 – Support Activities for Road Transportation; 2312 – Building Construction to 2313 or 4884; and 9120 – Provincial and Territorial Public Administration and 9130 – Local, Municipal and Regional Public Administration to 2313	771
6111, 6112, 6113	Persons working in an academic capacity at universities were wrongly coded to colleges and secondary schools. There were also cases where persons who worked at independent establishments at the university, such as a travel agency, were coded to the university instead of the relevant industry.	Multiple codes	701
Blank	No industry code and no occupation code.		5,090
Invalid	Erroneous codes.		1,710
Multiple Codes	The original entry by either the coder or the key entry operator was an invalid code.		2,038

Original Industry Code (NAICS 1997)	Description of Problem	Global Fix	Number of Records Initially Corrected*
Multiple Codes	Persons who reported that they worked in fish plants were miscoded to 1141.	Changed NAICS codes to 3117 if the industry reported was fish plant and the occupation was not J173 or J318	44
Multiple Codes	Persons working as fish plant workers or labourers in fish processing were miscoded to a diverse range of occupations.	Changed NAICS codes to 3117 when occupation was J318 or J173	251
Multiple Codes	Persons working as Fishing Masters and Officers (I171), Fishing Vessel Skippers and Fishermen (I172), and Fishing Vessel Deckhands (I181) were miscoded to a diverse range of occupations.	Changed NAICS codes to 1141 when occupation was I171, I172 and I181	327
Multiple Codes	Persons working as Sawmill Machine Operators (J141) were miscoded to a diverse range of industries.	Changed NAICS codes to 3211 – Sawmills and Wood Preservation when occupation was J141	297
Multiple Codes	Persons working as Pulp Mill Machine Operators (J142) were miscoded to a diverse range of industries.	Changed NAICS codes to 3221 – Pulp, Paper, and Paperboard Mills) when occupation was J142	130
Multiple Codes	The Rolls Royce company builds aircraft engines in Canada. However, “Rolls Royce” entries were often miscoded to a diverse range of industries rather than 3364 – Aerospace Product and Parts Manufacturing.	NAICS codes were changed to 3364	227
Multiple Codes	“Asbestos removal” was assigned a number of codes in trade contracting and elsewhere. The correct code is 5629 – Remediation and Other Waste Management Services.	Changed NAICS code to 5629 when the type of business was asbestos removal	65

Original Industry Code (NAICS 1997)	Description of Problem	Global Fix	Number of Records Initially Corrected*
Multiple Codes	There were a number of miscodes in the LOE.	These were verified and then changed to the appropriate NAICS code	78
Multiple Codes	Workers' Compensation Boards were often miscoded to government codes.	Changed NAICS codes to 5241 – Insurance Carriers	116
Multiple Codes	Restaurants were often miscoded to a variety of other codes.	Changed NAICS codes to 7221, 7222, or 7224	3,479
Multiple Codes	Newspaper delivery should be in 4543 – Direct Selling Establishments rather than 5111 – Newspaper, Periodical, Book, and Database Publishers. Similarly, delivery of flyers should be coded to 5418 – Advertising and Related Services rather than direct sales; and deliveries at depots or commercial establishments should be coded to 4922 – Local Messengers and Local Delivery.	Persons reporting newspaper delivery were coded to 4543, 5418, or 4922	504

* These numbers reflect initial changes only. The counts were adjusted due to universe changes that took place in other processes.

Table B2. Labour force distributions Before and After Global Fixes, Industry, 2001

NAICS 1997 Code	Industry Description	Unweighted			Weighted		
		Before Fixes	After Fixes	Difference (%)	Before Fixes	After Fixes	Difference (%)
1110	Farms (1111 to 1129)	99,345	100,050	0.7	437,015	439,430	0.6
1131	Timber Tract Operations	295	300	1.7	1,235	1,245	0.8
1132	Forest Nurseries and Gathering of Forest Products	565	570	0.9	2,440	2,450	0.4
1133	Logging	15,960	15,780	-1.1	70,095	69,120	-1.4
1141	Fishing	10,610	11,175	5.3	42,880	45,130	5.2
1142	Hunting and Trapping	960	950	-1.0	1,865	1,830	-1.9
1150	Support Activities for Agriculture and Forestry (1151 to 1152)	2,625	2,635	0.4	13,585	13,620	0.3
1153	Support Activities for Forestry	7,185	7,225	0.6	27,530	27,625	0.3
2111	Oil and Gas Extraction	9,695	9,710	0.2	48,055	48,150	0.2
2121	Coal Mining	1,290	1,295	0.4	6,705	6,725	0.3
2122	Metal Ore Mining	7,540	7,595	0.7	31,900	32,080	0.6
2123	Non-Metallic Mineral Mining and Quarrying	5,035	5,040	0.1	23,390	23,420	0.1
2131	Support Activities for Mining and Oil and Gas Extraction	12,880	12,900	0.2	62,085	62,180	0.2
2199	Mining - Unspecified	840	850	1.2	3,605	3,625	0.6
2211	Electric Power Generation, Transmission and Distribution	17,820	17,890	0.4	87,845	88,160	0.4
2212	Natural Gas Distribution	3,100	3,130	1.0	16,000	16,150	0.9
2213	Water, Sewage and Other Systems	3,805	3,925	3.2	16,405	16,855	2.7
2311	Land Subdivision and Land Development	1,645	1,650	0.3	8,360	8,380	0.2
2312	Building Construction	50,150	50,630	1.0	236,495	238,200	0.7
2313	Engineering Construction	25,120	25,110	0.0	119,500	119,440	-0.1
2314	Construction Management	1,600	1,600	0.0	8,110	8,115	0.1
2321	Site Preparation Work	10,015	10,035	0.2	49,515	49,540	0.1
2322	Building Structure Work	11,020	11,145	1.1	56,200	56,525	0.6
2323	Building Exterior Finishing Work	13,035	13,045	0.1	67,530	67,545	0.0
2324	Building Interior Finishing Work	24,730	24,870	0.6	126,705	127,270	0.4
2325	Building Equipment Installation	38,055	38,200	0.4	195,910	196,530	0.3
2329	Other Special Trade Contracting	4,830	4,850	0.4	24,410	24,500	0.4
3111	Animal Food Manufacturing	2,110	2,110	0.0	10,955	10,985	0.3
3112	Grain and Oilseed Milling	1,780	1,775	-0.3	9,320	9,315	-0.1

NAICS 1997 Code	Industry Description	Unweighted			Weighted		
		Before Fixes	After Fixes	Difference (%)	Before Fixes	After Fixes	Difference (%)
3113	Sugar and Confectionery Product Manufacturing	2,595	2,595	0.0	13,725	13,725	0.0
3114	Fruit and Vegetable Preserving and Specialty Food Manufacturing	4,385	4,390	0.1	22,825	22,885	0.3
3115	Dairy Product Manufacturing	4,280	4,285	0.1	22,460	22,500	0.2
3116	Meat Product Manufacturing	11,975	11,970	0.0	61,620	61,625	0.0
3117	Seafood Product Preparation and Packaging	9,170	9,245	0.8	43,305	43,405	0.2
3118	Bakeries and Tortilla Manufacturing	9,435	9,435	0.0	49,465	49,465	0.0
3119	Other Food Manufacturing	4,700	4,690	-0.2	24,660	24,615	-0.2
3121	Beverage Manufacturing	5,620	5,635	0.3	29,520	29,585	0.2
3122	Tobacco Manufacturing	850	850	0.0	4,195	4,195	0.0
3131	Fibre, Yarn and Thread Mills	960	960	0.0	4,995	4,990	-0.1
3132	Fabric Mills	3,085	3,085	0.0	16,215	16,215	0.0
3133	Textile and Fabric Finishing and Fabric Coating	1,270	1,270	0.0	6,755	6,755	0.0
3141	Textile Furnishings Mills	2,050	2,050	0.0	10,700	10,720	0.2
3149	Other Textile Product Mills	2,320	2,325	0.2	12,080	12,095	0.1
3151	Clothing Knitting Mills	2,465	2,465	0.0	12,980	12,980	0.0
3152	Cut and Sew Clothing Manufacturing	18,405	18,410	0.0	95,905	95,940	0.0
3159	Clothing Accessories and Other Clothing Manufacturing	1,050	1,055	0.5	5,515	5,550	0.6
3161	Leather and Hide Tanning and Finishing	380	380	0.0	1,835	1,840	0.3
3162	Footwear Manufacturing	1,165	1,165	0.0	6,000	6,000	0.0
3169	Other Leather and Allied Product Manufacturing	725	730	0.7	3,695	3,710	0.4
3211	Sawmills and Wood Preservation	17,130	17,660	3.1	81,695	84,255	3.1
3212	Veneer, Plywood and Engineered Wood Product Manufacturing	4,950	4,935	-0.3	25,070	24,905	-0.7
3219	Other Wood Product Manufacturing	10,310	10,270	-0.4	52,595	52,375	-0.4
3221	Pulp, Paper and Paperboard Mills	14,230	14,350	0.8	71,565	72,200	0.9
3222	Converted Paper Product Manufacturing	6,665	6,625	-0.6	35,025	34,815	-0.6
3231	Printing and Related Support Activities	18,580	18,460	-0.6	97,535	96,895	-0.7
3241	Petroleum and Coal Products Manufacturing	3,175	3,200	0.8	16,410	16,520	0.7
3251	Basic Chemical Manufacturing	3,550	3,560	0.3	18,525	18,565	0.2
3252	Resin, Synthetic Rubber, and Artificial and Synthetic Fibres and Filaments Manufacturing	1,990	1,995	0.3	10,400	10,420	0.2
3253	Pesticide, Fertilizer and Other Agricultural Chemical Manufacturing	1,110	1,115	0.5	5,710	5,710	0.0

NAICS 1997 Code	Industry Description	Unweighted			Weighted		
		Before Fixes	After Fixes	Difference (%)	Before Fixes	After Fixes	Difference (%)
3254	Pharmaceutical and Medicine Manufacturing	5,295	5,295	0.0	27,710	27,730	0.1
3255	Paint, Coating and Adhesive Manufacturing	1,900	1,905	0.3	10,100	10,105	0.0
3256	Soap, Cleaning Compound and Toilet Preparation Manufacturing	2,890	2,890	0.0	15,495	15,500	0.0
3259	Other Chemical Product Manufacturing	2,530	2,550	0.8	13,020	13,145	1.0
3261	Plastic Product Manufacturing	18,170	18,185	0.1	95,150	95,260	0.1
3262	Rubber Product Manufacturing	4,920	4,930	0.2	25,740	25,795	0.2
3271	Clay Product and Refractory Manufacturing	1,165	1,165	0.0	5,960	5,955	-0.1
3272	Glass and Glass Product Manufacturing	2,760	2,760	0.0	14,645	14,655	0.1
3273	Cement and Concrete Product Manufacturing	5,040	5,045	0.1	26,065	26,105	0.2
3274	Lime and Gypsum Product Manufacturing	550	545	-0.9	2,800	2,800	0.0
3279	Other Non-Metallic Mineral Product Manufacturing	1,780	1,775	-0.3	9,535	9,520	-0.2
3311	Iron and Steel Mills and Ferro-Alloy Manufacturing	5,940	5,970	0.5	30,625	30,780	0.5
3312	Steel Product Manufacturing from Purchased Steel	2,555	2,555	0.0	13,435	13,440	0.0
3313	Alumina and Aluminum Production and Processing	3,965	3,965	0.0	20,580	20,590	0.0
3314	Non-Ferrous Metal (except Aluminum) Production and Processing	3,255	3,255	0.0	15,595	15,595	0.0
3315	Foundries	3,500	3,495	-0.1	18,150	18,150	0.0
3321	Forging and Stamping	2,335	2,330	-0.2	12,300	12,280	-0.2
3322	Cutlery and Hand Tool Manufacturing	1,105	1,100	-0.5	5,840	5,835	-0.1
3323	Architectural and Structural Metals Manufacturing	10,440	10,435	0.0	54,540	54,520	0.0
3324	Boiler, Tank and Shipping Container Manufacturing	2,880	2,885	0.2	15,100	15,115	0.1
3325	Hardware Manufacturing	1,715	1,715	0.0	9,190	9,190	0.0
3326	Spring and Wire Product Manufacturing	1,735	1,740	0.3	9,070	9,075	0.1
3327	Machine Shops	7,815	7,840	0.3	40,855	40,970	0.3
3328	Coating, Engraving, Heat Treating and Allied Activities	3,020	3,020	0.0	15,890	15,885	0.0
3329	Other Fabricated Metal Product Manufacturing	4,440	4,450	0.2	23,390	23,395	0.0
3331	Agricultural, Construction and Mining Machinery Manufacturing	4,405	4,405	0.0	22,830	22,815	-0.1
3332	Industrial Machinery Manufacturing	3,220	3,250	0.9	16,820	16,930	0.7
3333	Commercial and Service Industry Machinery Manufacturing	2,460	2,460	0.0	12,980	12,980	0.0
3334	Ventilation, Heating, Air-Conditioning and Commercial Refrigeration Equipment Manufacturing	3,005	3,010	0.2	15,720	15,735	0.1
3335	Metalworking Machinery Manufacturing	5,475	5,480	0.1	28,805	28,815	0.0

NAICS 1997 Code	Industry Description	Unweighted			Weighted		
		Before Fixes	After Fixes	Difference (%)	Before Fixes	After Fixes	Difference (%)
3336	Engine, Turbine and Power Transmission Equipment Manufacturing	1,515	1,335	-11.9	7,845	6,935	-11.6
3339	Other General-Purpose Machinery Manufacturing	6,255	6,275	0.3	32,370	32,440	0.2
3341	Computer and Peripheral Equipment Manufacturing	3,610	3,610	0.0	19,185	19,210	0.1
3342	Communications Equipment Manufacturing	6,655	6,655	0.0	35,210	35,205	0.0
3343	Audio and Video Equipment Manufacturing	390	390	0.0	2,115	2,155	1.9
3344	Semiconductor and Other Electronic Component Manufacturing	7,120	7,130	0.1	37,640	37,695	0.1
3345	Navigational, Measuring, Medical and Control Instruments Manufacturing	4,545	4,545	0.0	23,890	23,885	0.0
3346	Manufacturing and Reproducing Magnetic and Optical Media	965	965	0.0	5,115	5,120	0.1
3351	Electric Lighting Equipment Manufacturing	1,700	1,705	0.3	8,905	8,930	0.3
3352	Household Appliance Manufacturing	1,700	1,695	-0.3	8,835	8,840	0.1
3353	Electrical Equipment Manufacturing	3,525	3,525	0.0	18,520	18,520	0.0
3359	Other Electrical Equipment and Component Manufacturing	4,675	4,680	0.1	24,855	24,870	0.1
3361	Motor Vehicle Manufacturing	11,880	12,085	1.7	61,535	62,570	1.7
3362	Motor Vehicle Body and Trailer Manufacturing	3,770	3,775	0.1	19,590	19,605	0.1
3363	Motor Vehicle Parts Manufacturing	21,150	20,990	-0.8	110,830	110,005	-0.7
3364	Aerospace Product and Parts Manufacturing	10,145	10,380	2.3	53,235	54,420	2.2
3365	Railroad Rolling Stock Manufacturing	1,960	1,955	-0.3	9,910	9,910	0.0
3366	Ship and Boat Building	2,900	2,895	-0.2	14,860	14,850	-0.1
3369	Other Transportation Equipment Manufacturing	1,155	1,160	0.4	5,940	5,960	0.3
3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing	14,405	14,400	0.0	75,215	75,235	0.0
3372	Office Furniture (including Fixtures) Manufacturing	4,965	4,960	-0.1	26,265	26,255	0.0
3379	Other Furniture-Related Product	1,340	1,340	0.0	7,170	7,175	0.1
3391	Medical Equipment and Supplies Manufacturing	3,780	3,780	0.0	19,940	19,945	0.0
3399	Other Miscellaneous Manufacturing	12,610	12,700	0.7	64,475	64,965	0.8
4111	Farm Product Wholesaler-Distributors	2,090	2,110	1.0	10,975	11,095	1.1
4121	Petroleum Product Wholesaler-Distributors	2,965	2,970	0.2	14,810	14,840	0.2
4131	Food Wholesaler-Distributors	15,350	15,175	-1.1	79,930	79,185	-0.9
4132	Beverage Wholesaler-Distributors	1,835	1,835	0.0	9,600	9,620	0.2
4133	Cigarette and Tobacco Product Wholesaler-Distributors	400	395	-1.3	2,050	2,050	0.0
4141	Textile, Clothing and Footwear Wholesaler-Distributors	4,005	4,010	0.1	21,510	21,535	0.1
4142	Home Entertainment Equipment and Household Appliance Wholesaler-Distributors	1,325	1,325	0.0	7,160	7,160	0.0

NAICS 1997 Code	Industry Description	Unweighted			Weighted		
		Before Fixes	After Fixes	Difference (%)	Before Fixes	After Fixes	Difference (%)
4143	Home Furnishings Wholesaler-Distributors	2,255	2,260	0.2	11,935	11,965	0.3
4144	Personal Goods Wholesaler-Distributors	3,865	3,860	-0.1	20,405	20,400	0.0
4145	Pharmaceuticals, Toiletries, Cosmetics and Sundries Wholesaler-Distributors	5,465	5,470	0.1	28,550	28,570	0.1
4151	Motor Vehicle Wholesaler-Distributors	3,330	3,330	0.0	17,205	17,190	-0.1
4152	New Motor Vehicle Parts and Accessories Wholesaler-Distributors	7,005	7,010	0.1	36,835	36,880	0.1
4153	Used Motor Vehicle Parts and Accessories Wholesaler-Distributors	870	875	0.6	4,630	4,635	0.1
4161	Electrical, Plumbing, Heating and Air-Conditioning Equipment and Supplies Wholesaler-Distributors	7,030	7,030	0.0	36,400	36,415	0.0
4162	Metal Service Centres	3,115	3,115	0.0	16,495	16,495	0.0
4163	Lumber, Millwork, Hardware and Other Building Supplies Wholesaler-Distributors	10,035	10,010	-0.2	51,555	51,375	-0.3
4171	Farm, Lawn and Garden Machinery and Equipment Wholesaler-Distributors	3,500	3,510	0.3	18,350	18,385	0.2
4172	Construction, Forestry, Mining, and Industrial Machinery, Equipment and Supplies Wholesaler-Distributors	11,325	11,330	0.0	59,235	59,275	0.1
4173	Computer and Communications Equipment and Supplies Wholesaler-Distributors	10,950	10,955	0.0	57,915	57,935	0.0
4179	Other Machinery, Equipment and Supplies Wholesaler-Distributors	10,285	10,290	0.0	53,885	53,925	0.1
4181	Recyclable Material	3,595	3,600	0.1	18,620	18,650	0.2
4182	Paper, Paper Product and Disposable Plastic Product Wholesaler-Distributors	2,890	2,890	0.0	15,080	15,055	-0.2
4183	Agricultural Supplies	2,800	2,805	0.2	14,620	14,685	0.4
4184	Chemical (except Agricultural) and Allied Product Wholesaler-Distributors	2,360	2,355	-0.2	12,340	12,340	0.0
4189	Other Miscellaneous Wholesaler-Distributors	6,060	6,060	0.0	31,580	31,595	0.0
4191	Wholesale Agents and Brokers	8,005	7,990	-0.2	41,625	41,535	-0.2
4411	Automobile Dealers	23,895	23,585	-1.3	124,805	123,125	-1.3
4412	Other Motor Vehicle Dealers	3,175	3,180	0.2	16,070	16,085	0.1
4413	Automotive Parts, Accessories and Tire Stores	5,320	5,325	0.1	27,730	27,740	0.0
4421	Furniture Stores	6,690	6,695	0.1	34,615	34,640	0.1
4422	Home Furnishings Stores	5,890	5,935	0.8	30,680	30,915	0.8
4431	Electronics and Appliance Stores	13,645	13,660	0.1	71,815	71,900	0.1
4441	Building Material and Supplies Dealers	17,860	17,875	0.1	91,805	91,840	0.0
4442	Lawn and Garden Equipment and Supplies Stores	2,580	2,660	3.1	13,515	13,910	2.9
4451	Grocery Stores	75,990	76,100	0.1	383,885	384,390	0.1
4452	Specialty Food Stores	8,810	8,820	0.1	45,570	45,645	0.2
4453	Beer, Wine and Liquor Stores	4,795	4,800	0.1	24,905	24,910	0.0

NAICS 1997 Code	Industry Description	Unweighted			Weighted		
		Before Fixes	After Fixes	Difference (%)	Before Fixes	After Fixes	Difference (%)
4461	Health and Personal Care Stores	26,650	26,710	0.2	138,915	139,235	0.2
4471	Gasoline Stations	17,940	17,470	-2.6	84,675	82,460	-2.6
4481	Clothing Stores	29,435	29,485	0.2	154,315	154,570	0.2
4482	Shoe Stores	4,690	4,690	0.0	24,890	24,900	0.0
4483	Jewellery, Luggage and Leather Goods Stores	4,680	4,695	0.3	24,455	24,500	0.2
4511	Sporting Goods, Hobby and Musical Instrument Stores	11,745	11,790	0.4	61,000	61,175	0.3
4512	Book, Periodical and Music Stores	4,735	4,765	0.6	24,845	24,990	0.6
4521	Department Stores	27,470	27,060	-1.5	143,705	141,690	-1.4
4529	Other General Merchandise Stores	21,360	21,285	-0.4	98,630	98,175	-0.5
4531	Florists	3,390	3,395	0.1	17,275	17,305	0.2
4532	Office Supplies, Stationery and Gift Stores	10,130	10,135	0.0	51,300	51,350	0.1
4533	Used Merchandise Stores	4,130	4,140	0.2	21,470	21,530	0.3
4539	Other Miscellaneous Store Retailers	9,410	9,450	0.4	48,810	48,960	0.3
4541	Electronic Shopping and Mail-Order Houses	2,235	2,245	0.4	11,840	11,870	0.3
4542	Vending Machine Operators	1,115	1,115	0.0	5,665	5,665	0.0
4543	Direct Selling Establishments	9,455	9,795	3.6	48,810	50,755	4.0
4811	Scheduled Air Transportation	12,490	12,495	0.0	61,615	61,630	0.0
4812	Non-Scheduled Air Transportation	2,480	2,500	0.8	11,335	11,405	0.6
4821	Rail Transportation	8,740	8,765	0.3	44,275	44,395	0.3
4831	Deep Sea, Coastal and Great Lakes Water Transportation	2,635	2,640	0.2	13,475	13,505	0.2
4832	Inland Water Transportation	540	545	0.9	1,980	1,980	0.0
4841	General Freight Trucking	31,960	32,140	0.6	164,065	164,875	0.5
4842	Specialized Freight Trucking	17,280	17,305	0.1	86,595	86,670	0.1
4851	Urban Transit Systems	7,250	7,260	0.1	38,040	38,075	0.1
4852	Interurban and Rural Bus Transportation	1,070	1,075	0.5	5,280	5,305	0.5
4853	Taxi and Limousine Service	7,840	7,845	0.1	38,335	38,345	0.0
4854	School and Employee Bus Transportation	7,685	7,810	1.6	37,365	37,830	1.2
4855	Charter Bus Industry	700	705	0.7	3,495	3,530	1.0
4859	Other Transit and Ground Passenger Transportation	905	925	2.2	4,230	4,295	1.5
4861	Pipeline Transportation of Crude Oil	490	490	0.0	2,330	2,330	0.0
4862	Pipeline Transportation of Natural Gas	525	525	0.0	2,575	2,575	0.0

NAICS 1997 Code	Industry Description	Unweighted			Weighted		
		Before Fixes	After Fixes	Difference (%)	Before Fixes	After Fixes	Difference (%)
4869	Other Pipeline Transportation	110	110	0.0	530	535	0.9
4871	Scenic and Sightseeing Transportation, Land	310	315	1.6	1,680	1,680	0.0
4872	Scenic and Sightseeing Transportation, Water	475	475	0.0	2,240	2,255	0.7
4879	Scenic and Sightseeing Transportation, Other	45	45	0.0	245	245	0.0
4881	Support Activities for Air Transportation	4,415	4,455	0.9	22,130	22,355	1.0
4882	Support Activities for Rail Transportation	665	660	-0.8	3,385	3,390	0.1
4883	Support Activities for Water Transportation	2,255	2,250	-0.2	11,405	11,385	-0.2
4884	Support Activities for Road Transportation	4,805	5,330	10.9	23,545	26,095	10.8
4885	Freight Transport Arrangement	5,340	5,340	0.0	27,855	27,880	0.1
4889	Other Support Activities for Transportation	660	665	0.8	3,340	3,345	0.1
4911	Postal Service	14,250	14,255	0.0	72,450	72,470	0.0
4921	Couriers	9,305	9,305	0.0	48,665	48,690	0.1
4922	Local Messengers and Local Delivery	2,460	2,475	0.6	12,770	12,845	0.6
4931	Warehousing and Storage	6,345	6,340	-0.1	32,725	32,705	-0.1
5111	Newspaper, Periodical, Book and Database Publishers	16,875	16,565	-1.8	87,545	85,845	-1.9
5112	Software Publishers	4,440	4,440	0.0	23,740	23,750	0.0
5121	Motion Picture and Video Industries	11,515	11,520	0.0	61,655	61,680	0.0
5122	Sound Recording Industries	985	985	0.0	5,175	5,175	0.0
5131	Radio and Television Broadcasting	7,230	7,245	0.2	35,280	35,345	0.2
5132	Pay TV, Specialty TV and Program Distribution	3,635	3,640	0.1	19,345	19,365	0.1
5133	Telecommunications	26,500	26,600	0.4	138,860	139,340	0.3
5141	Information Services	9,025	9,700	7.5	46,460	49,935	7.5
5142	Data Processing Services	1,670	1,670	0.0	9,075	9,075	0.0
5211	Monetary Authorities - Central Bank	325	325	0.0	1,665	1,665	0.0
5221	Depository Credit Intermediation	51,940	52,175	0.5	269,430	270,585	0.4
5222	Non-Depository Credit Intermediation	5,135	5,140	0.1	26,730	26,770	0.1
5223	Activities Related to Credit Intermediation	1,855	1,855	0.0	9,750	9,755	0.1
5231	Securities and Commodity Contracts Intermediation and Brokerage	10,805	10,820	0.1	57,250	57,345	0.2
5232	Securities and Commodity Exchanges	480	485	1.0	2,535	2,540	0.2
5239	Other Financial Investment Activities	12,810	12,810	0.0	66,740	66,770	0.0
5241	Insurance Carriers	21,450	22,130	3.2	112,415	115,775	3.0

NAICS 1997 Code	Industry Description	Unweighted			Weighted		
		Before Fixes	After Fixes	Difference (%)	Before Fixes	After Fixes	Difference (%)
5242	Agencies, Brokerages and Other Insurance Related Activities	17,755	17,415	-1.9	92,285	90,530	-1.9
5261	Pension Funds	160	155	-3.1	850	845	-0.6
5269	Other Funds and Financial Vehicles	765	765	0.0	4,005	4,005	0.0
5311	Lessors of Real Estate	13,475	13,475	0.0	66,895	66,890	0.0
5312	Offices of Real Estate Agents and Brokers	14,265	14,270	0.0	74,690	74,705	0.0
5313	Activities Related to Real Estate	9,075	9,120	0.5	47,515	47,740	0.5
5321	Automotive Equipment Rental and Leasing	3,765	3,770	0.1	20,005	20,030	0.1
5322	Consumer Goods Rental	6,275	6,280	0.1	32,460	32,495	0.1
5323	General Rental Centres	730	730	0.0	3,715	3,720	0.1
5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	3,825	3,825	0.0	20,085	20,095	0.0
5331	Lessors of Non-Financial Intangible Assets (except Copyrighted Works)	375	375	0.0	1,930	1,925	-0.3
5411	Legal Services	23,710	23,770	0.3	123,625	123,890	0.2
5412	Accounting, Tax Preparation, Bookkeeping and Payroll Services	24,470	24,495	0.1	127,460	127,580	0.1
5413	Architectural, Engineering and Related Services	33,500	33,565	0.2	173,610	173,945	0.2
5414	Specialized Design Services	8,480	8,485	0.1	44,735	44,790	0.1
5415	Computer Systems Design	42,055	42,115	0.1	223,015	223,335	0.1
5416	Management, Scientific and Technical Consulting Services	24,360	24,420	0.2	125,155	125,455	0.2
5417	Scientific Research and Development Services	9,860	9,865	0.1	50,930	50,950	0.0
5418	Advertising and Related Services	12,070	12,175	0.9	63,340	63,855	0.8
5419	Other Professional, Scientific and Technical Services	13,975	13,995	0.1	72,500	72,570	0.1
5511	Management of Companies and Enterprises	4,710	3,130	-33.5	24,365	16,145	-33.7
5611	Office Administrative Services	3,215	3,210	-0.2	16,435	16,385	-0.3
5612	Facilities Support Services	300	300	0.0	1,485	1,490	0.3
5613	Employment Services	17,050	17,075	0.1	86,935	87,070	0.2
5614	Business Support Services	16,410	16,485	0.5	85,610	86,020	0.5
5615	Travel Arrangement and Reservation Services	10,525	10,555	0.3	53,800	53,915	0.2
5616	Investigation and Security Services	14,885	14,925	0.3	76,345	76,425	0.1
5617	Services to Buildings and Dwellings	49,455	49,990	1.1	249,215	250,580	0.5
5619	Other Support Services	7,155	7,155	0.0	37,000	37,010	0.0
5621	Waste Collection	1,605	1,875	16.8	8,280	9,320	12.6
5622	Waste Treatment and Disposal	2,400	2,470	2.9	11,985	12,260	2.3

NAICS 1997 Code	Industry Description	Unweighted			Weighted		
		Before Fixes	After Fixes	Difference (%)	Before Fixes	After Fixes	Difference (%)
5629	Remediation and Other Waste Management Services	1,780	1,855	4.2	8,890	9,235	3.9
6111	Elementary and Secondary Schools	145,245	145,765	0.4	689,165	690,905	0.3
6112	Community Colleges and C.E.G.E.P.s	18,840	18,850	0.1	94,090	94,085	0.0
6113	Universities	37,100	36,565	-1.4	191,490	188,580	-1.5
6114	Business Schools and Computer and Management Training	1,700	1,700	0.0	8,690	8,700	0.1
6115	Technical and Trade Schools	2,075	2,090	0.7	10,415	10,450	0.3
6116	Other Schools and Instruction	15,060	15,095	0.2	77,705	77,820	0.1
6117	Educational Support Services	1,210	1,225	1.2	5,795	5,830	0.6
6211	Offices of Physicians	19,875	19,990	0.6	102,095	102,710	0.6
6212	Offices of Dentists	15,185	15,240	0.4	79,000	79,230	0.3
6213	Offices of Other Health Practitioners	13,810	13,860	0.4	71,525	71,755	0.3
6214	Out-Patient Care Centres	15,505	16,105	3.9	70,755	73,385	3.7
6215	Offices of Other Health Practitioners	3,910	3,915	0.1	20,370	20,380	0.0
6216	Home Health Care Services	9,315	9,390	0.8	46,265	46,550	0.6
6219	Other Ambulatory Health Care Services	3,780	3,790	0.3	18,810	18,875	0.3
6220	Hospitals (6221 to 6223)	103,150	103,515	0.4	524,270	526,065	0.3
6230	Nursing and Residential Care Facilities (6231 to 6239)	53,385	53,625	0.4	268,885	270,030	0.4
6241	Individual and Family Services	27,420	27,735	1.1	122,860	123,850	0.8
6242	Community Food and Housing, and Emergency and Other Relief Services	1,700	1,700	0.0	7,900	7,910	0.1
6243	Vocational Rehabilitation Services	5,635	5,635	0.0	28,105	28,115	0.0
6244	Child Day-Care Services	37,530	37,805	0.7	180,680	181,810	0.6
7111	Performing Arts Companies	4,025	4,035	0.2	20,840	20,900	0.3
7112	Spectator Sports	3,415	3,430	0.4	17,715	17,790	0.4
7113	Promoters (Presenters) of Performing Arts, Sports and Similar Events	2,660	2,660	0.0	13,335	13,340	0.0
7114	Agents and Managers for Artists, Athletes, Entertainers and Other Public Figures	640	640	0.0	3,400	3,400	0.0
7115	Independent Artists, Writers and Performers	9,060	9,070	0.1	45,530	45,595	0.1
7121	Heritage Institutions	5,495	5,455	-0.7	26,855	26,665	-0.7
7131	Amusement Parks and Arcades	1,730	1,735	0.3	8,825	8,830	0.1
7132	Gambling Industries	9,115	9,065	-0.5	44,745	44,475	-0.6
7139	Other Amusement and Recreation Industries	30,020	29,705	-1.0	151,260	149,515	-1.2
7211	Traveller Accommodation	42,175	39,920	-5.3	192,665	181,880	-5.6

NAICS 1997 Code	Industry Description	Unweighted			Weighted		
		Before Fixes	After Fixes	Difference (%)	Before Fixes	After Fixes	Difference (%)
7212	RV (Recreational Vehicle) Parks and Recreational Camps	5,775	5,780	0.1	22,575	22,620	0.2
7213	Rooming and Boarding Houses	820	820	0.0	3,590	3,595	0.1
7221	Full-Service Restaurants	84,325	88,135	4.5	437,665	455,820	4.1
7222	Limited-Service Eating Places	64,125	64,465	0.5	332,670	334,380	0.5
7223	Special Food Services	12,145	12,155	0.1	60,990	61,090	0.2
7224	Drinking Places (Alcoholic Beverages)	10,835	10,890	0.5	56,340	56,560	0.4
8111	Automotive Repair and Maintenance	30,940	31,720	2.5	158,720	162,760	2.5
8112	Electronic and Precision Equipment Repair and Maintenance	3,710	3,715	0.1	19,610	19,625	0.1
8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	9,395	9,550	1.6	47,985	48,720	1.5
8114	Personal and Household Goods Repair and Maintenance	7,525	7,530	0.1	38,350	38,385	0.1
8121	Personal Care Services	25,665	25,695	0.1	133,695	133,850	0.1
8122	Funeral Services	2,555	2,555	0.0	13,085	13,085	0.0
8123	Dry-Cleaning and Laundry Services	6,305	6,300	-0.1	32,955	32,945	0.0
8129	Other Personal Services	4,955	5,305	7.1	26,080	27,855	6.8
8131	Religious Organizations	16,370	16,460	0.5	72,935	73,125	0.3
8132	Grant-Making and Giving Services	2,700	2,700	0.0	13,625	13,625	0.0
8133	Social Advocacy Organizations	4,585	4,575	-0.2	22,375	22,305	-0.3
8134	Civic and Social Organizations	11,055	11,005	-0.5	53,600	53,360	-0.4
8139	Business, Professional, Labour and Other Membership Organizations	12,350	11,930	-3.4	63,085	60,940	-3.4
8141	Private Households	17,285	17,310	0.1	86,845	86,945	0.1
9111	Defence Services	22,100	22,210	0.5	92,615	92,895	0.3
9112	Federal Protective Services (9112 to 9119)	56,965	56,945	0.0	281,140	281,160	0.0
9120	Provincial and Territorial Public Administration (9121 to 9129)	53,180	52,575	-1.1	257,410	254,535	-1.1
9130	Local, Municipal and Regional Public Administration (9131 to 9139)	57,155	56,350	-1.4	279,305	275,630	-1.3
9141	Aboriginal Public Administration	24,820	23,450	-5.5	30,315	28,780	-5.1
9191	International and Other Extra-Territorial Public Administration	605	605	0.0	2,940	2,945	0.2
0000	Unspecified and undefined	18,840	18,885	0.2	96,210	96,440	0.2
0000 - 9191	Total	3,235,120	3,242,165	0.2	16,170,815	16,201,920	0.2

Table B3. Summary of Edits Actions to Ensure Consistency Between Industry and Occupation data, 2001

Occupation Code (NOCS 2001)	Description of Edit ¹	Number of Records Initially Corrected
A011 – Legislators	If industry is not 9112, 9120, 9141, 9191, or 9111 (government administrative codes), or 6111 – Elementary or Secondary Education then prorate records as follows: 6111 (5%), 9111 (1%), 9112 (5%), 9120 (10%), 9130 (21%), 9141 (56%), and 9191 (1%)	16
A312 – Postal and Courier Services Managers	If industry is not 4911, 4921, 4922, 4461, or 5111 then prorate records as follows: 4911 (50%), 4921 (39%), 4922 (7%), 4461 (3%), and 5111 (1%)	75
A353 – Commissioned Officers, Armed Forces	If industry is not 6111 – Elementary or Secondary Education or 9111 – Defence Services then change industry to 9111	140
B317 – Court Officers and Justices of the Peace	If Industry sector is not Government Services Industries then prorate records as follows: 9120 (60%), 9130 (21%), 9112 (16%), and 9141 (3%)	97
B318 – Immigration, Unemployment Insurance and Revenue Officers	If industry sector is not Government Services Industries then prorate records as follows: 9112 (85%), 9120 (11%), 9130 (2%), 9141 (1%), and 9191 (1%)	130
B543 – Court Clerks	If industry sector is not Government Services Industries or 5411 – Legal Services then prorate records as follows: 9120 (69%), 9112 (12%), 9130 (9%), 5411 (5%), 9141 (4%), and 5614 (1%)	47
B562 – Letter Carriers	If industry is not 4911 then change industry to 4911 – Postal Service	198

Occupation Code (NOCS 2001)	Description of Edit ¹	Number of Records Initially Corrected
C014 – Meteorologists	If Industry is not 5419 – Other Professional, Scientific and Technical Services, then prorate records as follows: 5131 (1%), 5416 (2%), 5417 (2%), 5419 (21%), 9111 (5%), 9112 (60%), 9120 (6%), 9130 (1%), and 9191 (2%)	52
C043 – Mining Engineers	If Industry is not 5413 – Architectural, Engineering and Related Services, 5416 – Management, Scientific and Technical Consulting Services, nor 2314 – Construction Management, then prorate records as follows: 2111 (6%), 2121 (4%), 2122 (44%), 2123 (11%), 2131 (12%), 2199 (6%), and 5413 (17%)	514
C051 – Architects	If industry is not 5413, 2312, 9112, 9120, or 9130 then change industry to 5413	10
C052 – Landscape Architects	If industry is not 5413, 5617, 9130, 5416, or 5414 then prorate records as follows: 5413 (55%), 5414 (1%), 5416 (3%), 5617 (29%), and 9130 (12%)	3
C054 – Land Surveyors	If industry is not 5413, 2313, 9130, or 9120 then prorate records as follows: 2313 (10%), 5413 (76%), 9120 (6%), and 9130 (8%)	770
C124 – Conservation and Fishery Officers	If industry is not 9120, 9112, 9141, 7121, 1153, 9130, 8133, 8134, 7212, 9111, 1142, or 7139 then prorate records as follows: 9120 (44%), 9112 (15%), 9141 (12%), 7121 (8%), 1153 (6%), 9130 (5%), 8133 (3%), 8134 (2%), 7212 (2%), 9111 (1%), 1142 (1%), and 7139 (1%)	1,888

Occupation Code (NOCS 2001)	Description of Edit ¹	Number of Records Initially Corrected
D011 – Specialist Physicians	If industry is not 5417, 6211, 6220, 9120, 6214, 6215, 6230, or 9112 then prorate records to the following industries: 6220 (52%) and 6211 (48%)	449
D012 – General Practitioners and Family Physicians	If industry is not 6211, 6220, 6214, or 6230 then prorate records as follows: 6211 (69%), 6220 (27%), 6214 (3%), and 6230 (1%)	820
D013 – Dentists	If industry is not 6212, 6220, or 9111 then change industry to 6212	208
D014 – Veterinarians	If industry is not 9112, 9120, 9130, or 9141 (government administration codes) then prorate records as follows: 9120 – Provincial and Territorial Public Administration (62%) or 9112 – Other Federal Services (38%)	138
D021 – Optometrists	If industry is neither 6213 nor 4461 then prorate records as follows: 6213 (90%) and 4461 (10%)	93
D031 – Pharmacists	If industry is not 5417, 4461, 6220, or 6230 then prorate records as follows: 4461 (82%), 6220 (17%), and 6230 (1%)	467
D041 – Audiologists and Speech-Language Pathologists	If industry is not 6220, 6111, 6213, 6214, 6230, 6241, 6216, 6243, 6117, 6116, 6113, or 6112 then prorate records as follows: 6111 (25%), 6112 (1%), 6113 (1%), 6116 (1%), 6116 (1%), 6213 (19%), 6214 (11%), 6216 (2%), 6220 (31%), 6230 (3%), 6241 (3%), and 6243 (2%)	1,235

Occupation Code (NOCS 2001)	Description of Edit ¹	Number of Records Initially Corrected
D042 – Physiotherapists	If industry is not 6213, 6220, 6214, 6230, or 6216 then prorate records as follows: 6213 (45%), 6214 (6%), 6216 (3%), 6220 (41%), and 6230 (5%)	277
D043 – Occupational Therapists	If industry is not 6220, 6213, 6230, 6214, 6216, 6243, 6111, or 9120 then prorate records as follows: 6111 (2%), 6213 (15%), 6216 (6%), 6220 (48%), 6230 (12%), 6243 (4%), and 9120 (1%)	188
D231 – Opticians	If industry is neither 4461 nor 6213 then prorate records as follows: 4461 (81%) and 6213 (19%)	144
E011 – Judges	If industry is not 9112, 9120, 9130, or 9141 then prorate records as follows: 9120 (62%) and 9112 (38%)	34
E021 – Psychologists	If industry is not Industry Class (Health) ² then prorate records as follows: 6111 (17%), 6112 (1%), 6113 (3%), 6211 (4%), 6213 (38%), 6214 (7%), 6220 (19%), 6230 (3%), 6243 (1%), 9112 (3%), 9120 (2%), 9130 (1%), and 9141 (1%)	3,312
E037 – Program Officers Unique to Government	If industry is not Sector 91 – Public Administration then prorate records as follows: 9112 – Other Federal Services (71%) or 9120 – Provincial and Territorial Public Administration (29%)	151
E111 – University Professors	If industry is not 6113 – Universities, or 5417 – Scientific Research and Development Services then change industry to 6113	67

Occupation Code (NOCS 2001)	Description of Edit ¹	Number of Records Initially Corrected
E131 – Secondary School Teachers	If industry is not 6111, 6116, 6241, 6242, 6243, 6244, 9111, 9112, or 9120 then change industry to 6111 – Elementary and Secondary Schools	339
E132 – Elementary School and Kindergarten Teachers	If industry is not 6111, 6116, 6241, 6242, 6243, 6244, 9111, 9112, or 9120 then change industry to 6111 – Elementary and Secondary Schools	339
F033 – Musicians and Singers	If industry is not 6116, 7111, 7115, 8131, 4511, or 5122 then prorate records as follows: 4511 (2%), 5122 (2%), 6116 (51%), 7111 (22%), 7115 (17%), and 8131 (6%)	640
F034 – Dancers	If industry is not 6116, 7111, 7115, 7139, 7224, or 8134 then prorate records as follows: 6116 (73%), 7111 (12%), 7115 (7%), 7139 (5%), 7224 (2%), and 8134 (1%)	1,374
F035 – Actors	If industry is not 6111, 6116, 6241, 6242, 6243, 6244, 9111, 9112, or 9120 then change industry to 5121 – Motion Picture and Video Industries (29%), 7111 – Performing Arts Companies (23%), 7114 – Agents and Managers for Artists (7%), and 7115 – Independent Artists, Writers and Performers (41%)	2
F036 – Painters, Sculptors and Other Visual Artists	If industry is not 6111, 6116, 6241, 6242, 6243, 6244, 9111, 9112, or 9120 then prorate records as follows: 7115 (75%), 6116 (8%), 5414 (4%), 3399 (3%), 4539 (3%), 5121 (2%), 7111 (2%), 7121 (2%), and 3231 (1%)	556

Occupation Code (NOCS 2001)	Description of Edit ¹	Number of Records Initially Corrected
F121 – Photographers	If industry is not 8129, 3231, 511, 5419, or 7115 then prorate records as follows: 5419 (82%), 7115 (11%), and 5111 (7%)	469
F122 – Film and Video Camera Operators	If industry is not 5121, 5131, 5132, 5419, or 7115 then prorate records as follows: 5121 (49%), 5131 (40%), 5132 (5%), and 7115 (6%)	147
G624 – Other Ranks, Armed Forces	If industry is not 9111 – Defence Services or 9112 – Other Federal Services then change industry to 9111	135
I211 – Harvesting Labourers	If industry is not 1110 – Farms, 1150 – Support Activities for Farms, 5613 – Employment Services, or 1132 – Forest Nurseries and Gathering of Forest Products then change industry to 1110	0
I171 – Fishing Masters and Officers	If industry is not 1141, 317, 9112, or 9141 then change industry to 1141	20
I172 – Fishing Vessel Skippers and Fishermen/women	If industry is not 1141, 317, 9112, or 9141 then change industry to 1141	30

¹ For records requiring multiple code changes, the data were prorated based on the patterns from the 2001 write-in file.

² Class (Health) refers to the following industry codes: 6213, 6220, 6111, 6211, 6214, 6113, 6230, 9112, 9120, 6243, 9130, 9141, and 6112.

Table B4. Summary of Edits for Occupation, Industry and Class of Worker, Including the Number of Records Changed, 2001

Occupation (NOCS 2001)	Class of Worker	Industry (NAICS 1997)	Change to Class of Worker	Number of Records Initially Changed
B543 – Court Clerks	Must be "paid"			
C012 – Chemists	If self-employed with or without paid help, AND	Industry is not 6215 – Medical and Diagnostic Laboratories,	THEN change Class of Worker to "paid"	11
C021 – Biologists and Related Scientists	If self-employed with or without paid help, AND	Industry is not 6215 – Medical and Diagnostic Laboratories,	THEN change Class of Worker to "paid"	13
C034 – Chemical Engineers	If self-employed with or without paid help, AND	Industry is not 6215 – Medical and Diagnostic Laboratories,	THEN change Class of Worker to "paid"	0
C045 – Petroleum Engineers	If self-employed with or without paid help, AND	Industry is not 5413, 5416, 5417, 2314, 2131, or 2111, THEN change Industry to 5413		15
C111 – Applied Chemical Technologists and Technicians	If self-employed with or without paid help, AND	if Industry is not 6215 – Medical and Diagnostic Laboratories,	THEN change Class of Worker to "paid"	1
C121 – Biological Technologists and Technicians	If self-employed with or without paid help, AND	if Industry is not 6215 – Medical and Diagnostic Laboratories,	THEN change Class of Worker to "paid"	4

Occupation (NOCS 2001)	Class of Worker	Industry (NAICS 1997)	Change to Class of Worker	Number of Records Initially Changed
C124 – Conservation and Fishery Officers	Must be "paid"	if Industry is not 9120, 9112, 9141, 7121, 1153, 9130, 8153, 8134, 7212, 9111, 1142, or 7139, then prorate records to the above industries as follows: 44%, 15%, 12%, 8%, 6%, 5%, 3%, 2%, 2%, 1%, 1%, and 1%, respectively		1,888
D211 – Medical Laboratory Technologists and Pathologists' Assistants	If Class of Worker is self-employed with or without paid help, AND	if Industry is not 6215 or 6219,	THEN change Class of Worker to "paid"	34
D212 – Medical Laboratory Technicians	If Class of Worker is self-employed with or without paid help, AND	if Industry is not 6215 or 6219,	THEN change Class of Worker to "paid"	26
D215 – Medical Radiation Technologists	If Class of Worker is self-employed with or without paid help, AND	if Industry is not 6215 or 6219,	THEN change Class of Worker to "paid"	28
G411 – Chefs	If Class of Worker is self-employed with or without paid help, AND	Industry is not 8141, 7221, 7222, 7223, or 7224,	THEN change Class of Worker to "paid"	97
G412 – Cooks	If Class of Worker is self-employed with or without paid help, AND	Industry is not 8141, 7221, 7222, 7223, or 7224,	THEN change Class of Worker to "paid"	719

Table B5. Distributions Before and After Deterministic Edits, Industry, 2001

NAICS 1997 Code	Industry Description	Unweighted # of Persons			Weighted # of Persons		
		Before Edits	After Edits	Difference (%)	Before Edits	After Edits	Difference (%)
1110	Farms (1111 to 1129)	105,525	105,580	0.1	462,165	462,445	0.1
1131	Timber Tract Operations	320	325	1.6	1,325	1,325	0.0
1132	Forest Nurseries and Gathering of Forest Products	630	630	0.0	2,670	2,660	-0.4
1133	Logging	17,195	17,180	-0.1	73,865	73,795	-0.1
1141	Fishing	11,945	11,870	-0.6	47,320	47,285	-0.1
1142	Hunting and Trapping	985	985	0.0	1,860	1,845	-0.8
1150	Support Activities for Agriculture and Forestry (1151 to 1152)	2,770	2,765	-0.2	14,290	14,270	-0.1
1153	Support Activities for Forestry	8,005	7,985	-0.2	29,575	29,470	-0.4
2111	Oil and Gas Extraction	10,150	10,085	-0.6	50,100	49,795	-0.6
2121	Coal Mining	1,330	1,305	-1.9	6,950	6,825	-1.8
2122	Metal Ore Mining	8,010	7,770	-3.0	33,180	32,105	-3.2
2123	Non-Metallic Mineral Mining and Quarrying	5,325	5,265	-1.1	24,485	24,250	-1.0
2131	Support Activities for Mining and Oil and Gas Extraction	13,710	13,615	-0.7	65,590	65,165	-0.6
2199	Mining - Unspecified	875	845	-3.4	3,680	3,530	-4.1
2211	Electric Power Generation, Transmission and Distribution	18,605	18,565	-0.2	91,395	91,180	-0.2
2212	Natural Gas Distribution	3,270	3,265	-0.2	16,765	16,735	-0.2
2213	Water, Sewage and Other Systems	4,215	4,205	-0.2	17,800	17,765	-0.2
2311	Land Subdivision and Land Development	1,740	1,715	-1.4	8,825	8,735	-1.0
2312	Building Construction	54,225	54,165	-0.1	251,815	251,520	-0.1
2313	Engineering Construction	26,860	26,875	0.1	126,295	126,330	0.0
2314	Construction Management	1,690	1,780	5.3	8,515	8,950	5.1
2321	Site Preparation Work	10,700	10,680	-0.2	52,480	52,370	-0.2
2322	Building Structure Work	11,875	11,865	-0.1	59,745	59,715	-0.1
2323	Building Exterior Finishing Work	13,850	13,845	0.0	71,290	71,270	0.0
2324	Building Interior Finishing Work	26,430	26,395	-0.1	134,615	134,420	-0.1
2325	Building Equipment Installation	40,230	40,225	0.0	206,300	206,265	0.0
2329	Other Special Trade Contracting	5,135	5,120	-0.3	25,815	25,760	-0.2
3111	Animal Food Manufacturing	2,215	2,210	-0.2	11,525	11,510	-0.1
3112	Grain and Oilseed Milling	1,860	1,860	0.0	9,710	9,705	-0.1
3113	Sugar and Confectionery Product Manufacturing	2,745	2,745	0.0	14,470	14,470	0.0

NAICS 1997 Code	Industry Description	Unweighted # of Persons			Weighted # of Persons		
		Before Edits	After Edits	Difference (%)	Before Edits	After Edits	Difference (%)
3114	Fruit and Vegetable Preserving and Specialty Food Manufacturing	4,630	4,625	-0.1	24,070	24,060	0.0
3115	Dairy Product Manufacturing	4,485	4,485	0.0	23,540	23,535	0.0
3116	Meat Product Manufacturing	12,700	12,690	-0.1	65,115	65,080	-0.1
3117	Seafood Product Preparation and Packaging	9,880	9,845	-0.4	46,000	45,875	-0.3
3118	Bakeries and Tortilla Manufacturing	10,080	10,075	0.0	52,885	52,880	0.0
3119	Other Food Manufacturing	4,960	4,960	0.0	25,980	25,975	0.0
3121	Beverage Manufacturing	5,975	5,975	0.0	31,305	31,285	-0.1
3122	Tobacco Manufacturing	880	880	0.0	4,385	4,385	0.0
3131	Fibre, Yarn and Thread Mills	1,000	1,000	0.0	5,180	5,170	-0.2
3132	Fabric Mills	3,225	3,225	0.0	16,965	16,960	0.0
3133	Textile and Fabric Finishing and Fabric Coating	1,350	1,345	-0.4	7,150	7,115	-0.5
3141	Textile Furnishings Mills	2,195	2,195	0.0	11,445	11,440	0.0
3149	Other Textile Product Mills	2,455	2,455	0.0	12,795	12,780	-0.1
3151	Clothing Knitting Mills	2,670	2,670	0.0	14,020	14,015	0.0
3152	Cut and Sew Clothing Manufacturing	19,740	19,735	0.0	102,915	102,895	0.0
3159	Clothing Accessories and Other Clothing Manufacturing	1,105	1,105	0.0	5,825	5,825	0.0
3161	Leather and Hide Tanning and Finishing	410	405	-1.2	1,980	1,980	0.0
3162	Footwear Manufacturing	1,230	1,235	0.4	6,275	6,265	-0.2
3169	Other Leather and Allied Product Manufacturing	760	760	0.0	3,880	3,875	-0.1
3211	Sawmills and Wood Preservation	18,935	18,935	0.0	89,215	89,190	0.0
3212	Veneer, Plywood and Engineered Wood Product Manufacturing	5,260	5,265	0.1	26,395	26,380	-0.1
3219	Other Wood Product Manufacturing	10,910	10,885	-0.2	55,385	55,270	-0.2
3221	Pulp, Paper and Paperboard Mills	15,065	15,060	0.0	75,255	75,240	0.0
3222	Converted Paper Product Manufacturing	7,010	7,010	0.0	36,700	36,685	0.0
3231	Printing and Related Support Activities	19,535	19,535	0.0	102,335	102,345	0.0
3241	Petroleum and Coal Products Manufacturing	3,350	3,345	-0.1	17,225	17,210	-0.1
3251	Basic Chemical Manufacturing	3,735	3,730	-0.1	19,405	19,385	-0.1
3252	Resin, Synthetic Rubber, and Artificial and Synthetic Fibres and Filaments Manufacturing	2,095	2,095	0.0	10,945	10,935	-0.1
3253	Pesticide, Fertilizer and Other Agricultural Chemical Manufacturing	1,155	1,155	0.0	5,930	5,930	0.0
3254	Pharmaceutical and Medicine Manufacturing	5,550	5,475	-1.4	28,965	28,510	-1.6

NAICS 1997 Code	Industry Description	Unweighted # of Persons			Weighted # of Persons		
		Before Edits	After Edits	Difference (%)	Before Edits	After Edits	Difference (%)
3255	Paint, Coating and Adhesive Manufacturing	2,025	2,020	-0.2	10,685	10,680	0.0
3256	Soap, Cleaning Compound and Toilet Preparation Manufacturing	3,055	3,050	-0.2	16,330	16,305	-0.2
3259	Other Chemical Product Manufacturing	2,695	2,685	-0.4	13,895	13,860	-0.3
3261	Plastic Product Manufacturing	19,425	19,410	-0.1	101,720	101,650	-0.1
3262	Rubber Product Manufacturing	5,155	5,150	-0.1	26,980	26,975	0.0
3271	Clay Product and Refractory Manufacturing	1,225	1,215	-0.8	6,320	6,265	-0.9
3272	Glass and Glass Product Manufacturing	2,940	2,930	-0.3	15,550	15,485	-0.4
3273	Cement and Concrete Product Manufacturing	5,355	5,350	-0.1	27,585	27,570	-0.1
3274	Lime and Gypsum Product Manufacturing	585	580	-0.9	3,025	2,985	-1.3
3279	Other Non-Metallic Mineral Product Manufacturing	1,865	1,850	-0.8	9,960	9,895	-0.7
3311	Iron and Steel Mills and Ferro-Alloy Manufacturing	6,230	6,220	-0.2	32,075	32,035	-0.1
3312	Steel Product Manufacturing from Purchased Steel	2,700	2,705	0.2	14,145	14,145	0.0
3313	Alumina and Aluminum Production and Processing	4,105	4,105	0.0	21,280	21,265	-0.1
3314	Non-Ferrous Metal (except Aluminum) Production and Processing	3,395	3,365	-0.9	16,200	16,060	-0.9
3315	Foundries	3,660	3,650	-0.3	18,940	18,905	-0.2
3321	Forging and Stamping	2,460	2,455	-0.2	12,925	12,915	-0.1
3322	Cutlery and Hand Tool Manufacturing	1,155	1,155	0.0	6,135	6,135	0.0
3323	Architectural and Structural Metals Manufacturing	11,105	11,100	0.0	57,865	57,845	0.0
3324	Boiler, Tank and Shipping Container Manufacturing	3,005	3,005	0.0	15,715	15,710	0.0
3325	Hardware Manufacturing	1,840	1,840	0.0	9,785	9,785	0.0
3326	Spring and Wire Product Manufacturing	1,855	1,855	0.0	9,645	9,645	0.0
3327	Machine Shops	8,280	8,280	0.0	43,175	43,160	0.0
3328	Coating, Engraving, Heat Treating and Allied Activities	3,220	3,215	-0.2	16,995	16,985	-0.1
3329	Other Fabricated Metal Product Manufacturing	4,715	4,710	-0.1	24,725	24,700	-0.1
3331	Agricultural, Construction and Mining Machinery Manufacturing	4,660	4,650	-0.2	24,085	24,025	-0.2
3332	Industrial Machinery Manufacturing	3,420	3,420	0.0	17,855	17,845	-0.1
3333	Commercial and Service Industry Machinery Manufacturing	2,585	2,570	-0.6	13,630	13,555	-0.6
3334	Ventilation, Heating, Air-Conditioning and Commercial Refrigeration Equipment Manufacturing	3,170	3,170	0.0	16,550	16,545	0.0
3335	Metalworking Machinery Manufacturing	5,775	5,765	-0.2	30,220	30,180	-0.1
3336	Engine, Turbine and Power Transmission Equipment Manufacturing	1,395	1,395	0.0	7,245	7,235	-0.1

NAICS 1997 Code	Industry Description	Unweighted # of Persons			Weighted # of Persons		
		Before Edits	After Edits	Difference (%)	Before Edits	After Edits	Difference (%)
3339	Other General-Purpose Machinery Manufacturing	6,610	6,605	-0.1	34,175	34,170	0.0
3341	Computer and Peripheral Equipment Manufacturing	3,855	3,850	-0.1	20,360	20,325	-0.2
3342	Communications Equipment Manufacturing	6,995	6,990	-0.1	36,920	36,885	-0.1
3343	Audio and Video Equipment Manufacturing	425	420	-1.2	2,310	2,310	0.0
3344	Semiconductor and Other Electronic Component Manufacturing	7,535	7,535	0.0	39,815	39,795	-0.1
3345	Navigational, Measuring, Medical and Control Instruments Manufacturing	4,785	4,775	-0.2	25,160	25,095	-0.3
3346	Manufacturing and Reproducing Magnetic and Optical Media	1,040	1,035	-0.5	5,480	5,470	-0.2
3351	Electric Lighting Equipment Manufacturing	1,830	1,830	0.0	9,565	9,555	-0.1
3352	Household Appliance Manufacturing	1,755	1,750	-0.3	9,145	9,140	-0.1
3353	Electrical Equipment Manufacturing	3,705	3,705	0.0	19,380	19,385	0.0
3359	Other Electrical Equipment and Component Manufacturing	4,960	4,955	-0.1	26,295	26,260	-0.1
3361	Motor Vehicle Manufacturing	12,665	12,660	0.0	65,450	65,430	0.0
3362	Motor Vehicle Body and Trailer Manufacturing	3,975	3,975	0.0	20,515	20,515	0.0
3363	Motor Vehicle Parts Manufacturing	22,120	22,115	0.0	115,840	115,800	0.0
3364	Aerospace Product and Parts Manufacturing	10,910	10,905	0.0	57,200	57,160	-0.1
3365	Railroad Rolling Stock Manufacturing	2,055	2,055	0.0	10,445	10,450	0.0
3366	Ship and Boat Building	3,105	3,100	-0.2	15,835	15,830	0.0
3369	Other Transportation Equipment Manufacturing	1,210	1,210	0.0	6,220	6,220	0.0
3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing	15,310	15,300	-0.1	79,905	79,870	0.0
3372	Office Furniture (including Fixtures) Manufacturing	5,340	5,335	-0.1	28,220	28,210	0.0
3379	Other Furniture-Related Product	1,455	1,455	0.0	7,760	7,760	0.0
3391	Medical Equipment and Supplies Manufacturing	3,995	3,940	-1.4	20,970	20,700	-1.3
3399	Other Miscellaneous Manufacturing	13,415	13,425	0.1	68,310	68,345	0.1
4111	Farm Product Wholesaler-Distributors	2,255	2,245	-0.4	11,785	11,745	-0.3
4121	Petroleum Product Wholesaler-Distributors	3,115	3,115	0.0	15,500	15,490	-0.1
4131	Food Wholesaler-Distributors	16,165	16,150	-0.1	84,310	84,255	-0.1
4132	Beverage Wholesaler-Distributors	1,935	1,935	0.0	10,130	10,125	0.0
4133	Cigarette and Tobacco Product Wholesaler-Distributors	420	420	0.0	2,145	2,135	-0.5
4141	Textile, Clothing and Footwear Wholesaler-Distributors	4,320	4,315	-0.1	23,015	23,000	-0.1
4142	Home Entertainment Equipment and Household Appliance Wholesaler-Distributors	1,400	1,400	0.0	7,550	7,540	-0.1
4143	Home Furnishings Wholesaler-Distributors	2,420	2,415	-0.2	12,845	12,820	-0.2

NAICS 1997 Code	Industry Description	Unweighted # of Persons			Weighted # of Persons		
		Before Edits	After Edits	Difference (%)	Before Edits	After Edits	Difference (%)
4144	Personal Goods Wholesaler-Distributors	4,110	4,100	-0.2	21,750	21,700	-0.2
4145	Pharmaceuticals, Toiletries, Cosmetics and Sundries Wholesaler-Distributors	5,755	5,680	-1.3	29,910	29,540	-1.2
4151	Motor Vehicle Wholesaler-Distributors	3,515	3,510	-0.1	18,115	18,115	0.0
4152	New Motor Vehicle Parts and Accessories Wholesaler-Distributors	7,440	7,430	-0.1	39,100	39,070	-0.1
4153	Used Motor Vehicle Parts and Accessories Wholesaler-Distributors	940	940	0.0	4,980	4,980	0.0
4161	Electrical, Plumbing, Heating and Air-Conditioning Equipment and Supplies Wholesaler-Distributors	7,410	7,405	-0.1	38,235	38,210	-0.1
4162	Metal Service Centres	3,335	3,335	0.0	17,610	17,610	0.0
4163	Lumber, Millwork, Hardware and Other Building Supplies Wholesaler-Distributors	10,615	10,615	0.0	54,305	54,285	0.0
4171	Farm, Lawn and Garden Machinery and Equipment Wholesaler-Distributors	3,675	3,665	-0.3	19,250	19,205	-0.2
4172	Construction, Forestry, Mining, and Industrial Machinery, Equipment and Supplies Wholesaler-Distributors	12,020	12,010	-0.1	62,685	62,635	-0.1
4173	Computer and Communications Equipment and Supplies Wholesaler-Distributors	11,575	11,570	0.0	61,195	61,185	0.0
4179	Other Machinery, Equipment and Supplies Wholesaler-Distributors	10,855	10,825	-0.3	56,715	56,580	-0.2
4181	Recyclable Material	3,835	3,830	-0.1	19,735	19,705	-0.2
4182	Paper, Paper Product and Disposable Plastic Product Wholesaler-Distributors	3,060	3,060	0.0	15,970	15,970	0.0
4183	Agricultural Supplies	2,960	2,955	-0.2	15,465	15,455	-0.1
4184	Chemical (except Agricultural) and Allied Product Wholesaler-Distributors	2,490	2,490	0.0	13,065	13,050	-0.1
4189	Other Miscellaneous Wholesaler-Distributors	6,415	6,395	-0.3	33,315	33,220	-0.3
4191	Wholesale Agents and Brokers	8,465	8,455	-0.1	43,915	43,830	-0.2
4411	Automobile Dealers	24,875	24,865	0.0	129,725	129,660	-0.1
4412	Other Motor Vehicle Dealers	3,370	3,370	0.0	16,955	16,950	0.0
4413	Automotive Parts, Accessories and Tire Stores	5,640	5,640	0.0	29,385	29,385	0.0
4421	Furniture Stores	7,115	7,110	-0.1	36,775	36,775	0.0
4422	Home Furnishings Stores	6,280	6,270	-0.2	32,695	32,635	-0.2
4431	Electronics and Appliance Stores	14,510	14,485	-0.2	76,220	76,090	-0.2
4441	Building Material and Supplies Dealers	18,985	18,975	-0.1	97,270	97,230	0.0
4442	Lawn and Garden Equipment and Supplies Stores	2,845	2,840	-0.2	14,840	14,830	-0.1
4451	Grocery Stores	81,370	81,165	-0.3	409,300	408,195	-0.3
4452	Specialty Food Stores	9,475	9,470	-0.1	48,835	48,820	0.0
4453	Beer, Wine and Liquor Stores	5,080	5,080	0.0	26,280	26,275	0.0
4461	Health and Personal Care Stores	28,315	28,745	1.5	147,310	149,555	1.5

NAICS 1997 Code	Industry Description	Unweighted # of Persons			Weighted # of Persons		
		Before Edits	After Edits	Difference (%)	Before Edits	After Edits	Difference (%)
4471	Gasoline Stations	18,905	18,890	-0.1	88,090	88,030	-0.1
4481	Clothing Stores	31,535	31,520	0.0	164,975	164,910	0.0
4482	Shoe Stores	5,060	5,055	-0.1	26,640	26,625	-0.1
4483	Jewellery, Luggage and Leather Goods Stores	4,985	4,985	0.0	26,015	26,010	0.0
4511	Sporting Goods, Hobby and Musical Instrument Stores	12,640	12,620	-0.2	65,480	65,380	-0.2
4512	Book, Periodical and Music Stores	5,090	5,075	-0.3	26,550	26,475	-0.3
4521	Department Stores	28,680	28,605	-0.3	149,815	149,415	-0.3
4529	Other General Merchandise Stores	23,045	23,010	-0.2	105,215	105,050	-0.2
4531	Florists	3,580	3,575	-0.1	18,215	18,205	-0.1
4532	Office Supplies, Stationery and Gift Stores	10,840	10,800	-0.4	54,710	54,550	-0.3
4533	Used Merchandise Stores	4,375	4,370	-0.1	22,685	22,675	0.0
4539	Other Miscellaneous Store Retailers	10,035	10,030	0.0	51,890	51,880	0.0
4541	Electronic Shopping and Mail-Order Houses	2,405	2,400	-0.2	12,715	12,655	-0.5
4542	Vending Machine Operators	1,170	1,170	0.0	5,935	5,935	0.0
4543	Direct Selling Establishments	10,260	10,245	-0.1	52,935	52,880	-0.1
4811	Scheduled Air Transportation	13,135	13,120	-0.1	64,485	64,405	-0.1
4812	Non-Scheduled Air Transportation	2,650	2,645	-0.2	11,915	11,895	-0.2
4821	Rail Transportation	9,040	9,035	-0.1	45,435	45,400	-0.1
4831	Deep Sea, Coastal and Great Lakes Water Transportation	2,780	2,765	-0.5	14,085	13,995	-0.6
4832	Inland Water Transportation	580	580	0.0	2,085	2,080	-0.2
4841	General Freight Trucking	34,115	34,105	0.0	174,365	174,310	0.0
4842	Specialized Freight Trucking	18,530	18,525	0.0	92,275	92,265	0.0
4851	Urban Transit Systems	7,660	7,650	-0.1	40,055	40,015	-0.1
4852	Interurban and Rural Bus Transportation	1,135	1,135	0.0	5,580	5,580	0.0
4853	Taxi and Limousine Service	8,350	8,350	0.0	40,505	40,485	0.0
4854	School and Employee Bus Transportation	8,310	8,315	0.1	40,015	40,015	0.0
4855	Charter Bus Industry	755	755	0.0	3,725	3,725	0.0
4859	Other Transit and Ground Passenger Transportation	980	985	0.5	4,525	4,530	0.1
4861	Pipeline Transportation of Crude Oil	515	510	-1.0	2,415	2,415	0.0
4862	Pipeline Transportation of Natural Gas	550	545	-0.9	2,670	2,660	-0.4
4869	Other Pipeline Transportation	120	120	0.0	575	565	-1.7

NAICS 1997 Code	Industry Description	Unweighted # of Persons			Weighted # of Persons		
		Before Edits	After Edits	Difference (%)	Before Edits	After Edits	Difference (%)
4871	Scenic and Sightseeing Transportation, Land	345	340	-1.4	1,820	1,790	-1.6
4872	Scenic and Sightseeing Transportation, Water	515	505	-1.9	2,440	2,395	-1.8
4879	Scenic and Sightseeing Transportation, Other	45	50	11.1	250	250	0.0
4881	Support Activities for Air Transportation	4,695	4,675	-0.4	23,455	23,360	-0.4
4882	Support Activities for Rail Transportation	685	690	0.7	3,520	3,520	0.0
4883	Support Activities for Water Transportation	2,380	2,360	-0.8	11,970	11,890	-0.7
4884	Support Activities for Road Transportation	5,665	5,645	-0.4	27,580	27,505	-0.3
4885	Freight Transport Arrangement	5,660	5,655	-0.1	29,450	29,420	-0.1
4889	Other Support Activities for Transportation	695	695	0.0	3,505	3,505	0.0
4911	Postal Service	14,995	15,215	1.5	75,920	76,930	1.3
4921	Couriers	9,920	9,950	0.3	51,730	51,865	0.3
4922	Local Messengers and Local Delivery	2,630	2,625	-0.2	13,705	13,705	0.0
4931	Warehousing and Storage	6,790	6,780	-0.1	34,930	34,870	-0.2
5111	Newspaper, Periodical, Book and Database Publishers	17,370	17,360	-0.1	89,665	89,645	0.0
5112	Software Publishers	4,685	4,680	-0.1	25,010	24,980	-0.1
5121	Motion Picture and Video Industries	12,265	12,300	0.3	65,405	65,465	0.1
5122	Sound Recording Industries	1,030	1,030	0.0	5,400	5,390	-0.2
5131	Radio and Television Broadcasting	7,595	7,590	-0.1	36,945	36,860	-0.2
5132	Pay TV, Specialty TV and Program Distribution	3,830	3,830	0.0	20,330	20,355	0.1
5133	Telecommunications	27,900	27,870	-0.1	145,900	145,775	-0.1
5141	Information Services	10,300	10,265	-0.3	52,670	52,520	-0.3
5142	Data Processing Services	1,765	1,755	-0.6	9,630	9,595	-0.4
5211	Monetary Authorities - Central Bank	335	330	-1.5	1,725	1,675	-2.9
5221	Depository Credit Intermediation	54,810	54,780	-0.1	284,025	283,830	-0.1
5222	Non-Depository Credit Intermediation	5,365	5,360	-0.1	27,940	27,910	-0.1
5223	Activities Related to Credit Intermediation	1,950	1,945	-0.3	10,205	10,195	-0.1
5231	Securities and Commodity Contracts Intermediation and Brokerage	11,345	11,325	-0.2	60,055	59,955	-0.2
5232	Securities and Commodity Exchanges	505	505	0.0	2,645	2,640	-0.2
5239	Other Financial Investment Activities	13,515	13,490	-0.2	70,190	70,065	-0.2
5241	Insurance Carriers	23,240	23,150	-0.4	121,445	120,960	-0.4
5242	Agencies, Brokerages and Other Insurance Related Activities	18,195	18,185	-0.1	94,435	94,370	-0.1

NAICS 1997 Code	Industry Description	Unweighted # of Persons			Weighted # of Persons		
		Before Edits	After Edits	Difference (%)	Before Edits	After Edits	Difference (%)
5261	Pension Funds	165	165	0.0	895	895	0.0
5269	Other Funds and Financial Vehicles	800	800	0.0	4,190	4,185	-0.1
5311	Lessors of Real Estate	14,345	14,320	-0.2	70,770	70,650	-0.2
5312	Offices of Real Estate Agents and Brokers	14,975	14,970	0.0	78,315	78,255	-0.1
5313	Activities Related to Real Estate	9,610	9,585	-0.3	50,160	50,045	-0.2
5321	Automotive Equipment Rental and Leasing	3,990	3,990	0.0	21,140	21,145	0.0
5322	Consumer Goods Rental	6,715	6,700	-0.2	34,610	34,545	-0.2
5323	General Rental Centres	775	770	-0.6	3,875	3,875	0.0
5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	4,045	4,040	-0.1	21,235	21,195	-0.2
5331	Lessors of Non-Financial Intangible Assets (except Copyrighted Works)	390	385	-1.3	2,015	2,000	-0.7
5411	Legal Services	24,825	24,970	0.6	129,150	129,930	0.6
5412	Accounting, Tax Preparation, Bookkeeping and Payroll Services	25,795	25,740	-0.2	134,040	133,705	-0.2
5413	Architectural, Engineering and Related Services	35,135	35,685	1.6	181,620	184,010	1.3
5414	Specialized Design Services	8,930	8,920	-0.1	47,085	47,035	-0.1
5415	Computer Systems Design	44,400	44,345	-0.1	234,480	234,180	-0.1
5416	Management, Scientific and Technical Consulting Services	25,625	25,565	-0.2	131,230	130,860	-0.3
5417	Scientific Research and Development Services	10,385	10,300	-0.8	53,360	52,990	-0.7
5418	Advertising and Related Services	12,885	12,820	-0.5	67,500	67,155	-0.5
5419	Other Professional, Scientific and Technical Services	14,780	15,225	3.0	76,390	78,810	3.2
5511	Management of Companies and Enterprises	3,295	3,295	0.0	17,020	16,985	-0.2
5611	Office Administrative Services	3,405	3,375	-0.9	17,345	17,250	-0.5
5612	Facilities Support Services	320	320	0.0	1,555	1,555	0.0
5613	Employment Services	18,190	18,140	-0.3	92,155	91,935	-0.2
5614	Business Support Services	17,565	17,540	-0.1	91,490	91,350	-0.2
5615	Travel Arrangement and Reservation Services	11,140	11,120	-0.2	56,680	56,595	-0.1
5616	Investigation and Security Services	15,890	15,850	-0.3	81,065	80,855	-0.3
5617	Services to Buildings and Dwellings	53,600	53,585	0.0	266,335	266,220	0.0
5619	Other Support Services	7,575	7,520	-0.7	39,000	38,760	-0.6
5621	Waste Collection	1,965	1,960	-0.3	9,745	9,745	0.0
5622	Waste Treatment and Disposal	2,635	2,635	0.0	13,005	12,990	-0.1
5629	Remediation and Other Waste Management Services	1,970	1,965	-0.3	9,785	9,780	-0.1

NAICS 1997 Code	Industry Description	Unweighted # of Persons			Weighted # of Persons		
		Before Edits	After Edits	Difference (%)	Before Edits	After Edits	Difference (%)
6111	Elementary and Secondary Schools	151,510	152,285	0.5	713,140	716,835	0.5
6112	Community Colleges and C.E.G.E.P.s	19,680	19,535	-0.7	97,845	97,070	-0.8
6113	Universities	38,645	38,455	-0.5	196,815	195,635	-0.6
6114	Business Schools and Computer and Management Training	1,775	1,760	-0.8	9,020	8,950	-0.8
6115	Technical and Trade Schools	2,205	2,180	-1.1	10,940	10,795	-1.3
6116	Other Schools and Instruction	15,945	15,495	-2.8	81,690	79,520	-2.7
6117	Educational Support Services	1,285	1,240	-3.5	6,080	5,830	-4.1
6211	Offices of Physicians	20,955	21,520	2.7	107,225	110,215	2.8
6212	Offices of Dentists	15,925	16,035	0.7	82,615	83,135	0.6
6213	Offices of Other Health Practitioners	14,495	14,730	1.6	74,800	75,995	1.6
6214	Out-Patient Care Centres	16,940	16,980	0.2	76,400	76,625	0.3
6215	Offices of Other Health Practitioners	4,075	4,000	-1.8	21,220	20,860	-1.7
6216	Home Health Care Services	9,890	9,875	-0.2	48,715	48,585	-0.3
6219	Other Ambulatory Health Care Services	3,955	3,925	-0.8	19,675	19,530	-0.7
6220	Hospitals (6221 to 6223)	107,740	108,540	0.7	545,590	549,770	0.8
6230	Nursing and Residential Care Facilities (6231 to 6239)	56,175	56,210	0.1	282,235	282,470	0.1
6241	Individual and Family Services	29,510	29,150	-1.2	129,800	128,020	-1.4
6242	Community Food and Housing, and Emergency and Other Relief Services	1,810	1,805	-0.3	8,270	8,230	-0.5
6243	Vocational Rehabilitation Services	5,850	5,810	-0.7	29,090	28,885	-0.7
6244	Child Day-Care Services	39,975	39,925	-0.1	190,915	190,650	-0.1
7111	Performing Arts Companies	4,295	4,445	3.5	22,055	22,870	3.7
7112	Spectator Sports	3,710	3,680	-0.8	19,020	18,835	-1.0
7113	Promoters (Presenters) of Performing Arts, Sports and Similar Events	2,810	2,720	-3.2	14,085	13,605	-3.4
7114	Agents and Managers for Artists, Athletes, Entertainers and Other Public Figures	675	630	-6.7	3,590	3,325	-7.4
7115	Independent Artists, Writers and Performers	9,570	10,260	7.2	47,665	51,110	7.2
7121	Heritage Institutions	5,785	5,775	-0.2	28,160	28,070	-0.3
7131	Amusement Parks and Arcades	1,935	1,925	-0.5	9,770	9,730	-0.4
7132	Gambling Industries	9,600	9,595	-0.1	46,770	46,715	-0.1
7139	Other Amusement and Recreation Industries	32,255	32,215	-0.1	161,585	161,415	-0.1
7211	Traveller Accommodation	43,705	43,655	-0.1	193,595	193,395	-0.1
7212	RV (Recreational Vehicle) Parks and Recreational Camps	6,540	6,530	-0.2	24,970	24,925	-0.2

NAICS 1997 Code	Industry Description	Unweighted # of Persons			Weighted # of Persons		
		Before Edits	After Edits	Difference (%)	Before Edits	After Edits	Difference (%)
7213	Rooming and Boarding Houses	920	925	0.5	3,865	3,865	0.0
7221	Full-Service Restaurants	94,585	94,525	-0.1	486,630	486,330	-0.1
7222	Limited-Service Eating Places	69,575	69,570	0.0	360,360	360,310	0.0
7223	Special Food Services	13,045	13,040	0.0	65,145	65,105	-0.1
7224	Drinking Places (Alcoholic Beverages)	11,545	11,510	-0.3	59,695	59,500	-0.3
8111	Automotive Repair and Maintenance	33,425	33,425	0.0	170,965	170,950	0.0
8112	Electronic and Precision Equipment Repair and Maintenance	3,910	3,895	-0.4	20,545	20,475	-0.3
8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	10,045	10,035	-0.1	50,995	50,960	-0.1
8114	Personal and Household Goods Repair and Maintenance	7,915	7,905	-0.1	40,225	40,185	-0.1
8121	Personal Care Services	26,815	26,800	-0.1	139,370	139,300	-0.1
8122	Funeral Services	2,715	2,710	-0.2	13,920	13,920	0.0
8123	Dry-Cleaning and Laundry Services	6,695	6,695	0.0	34,805	34,795	0.0
8129	Other Personal Services	5,615	5,575	-0.7	29,330	29,150	-0.6
8131	Religious Organizations	16,855	16,835	-0.1	75,865	75,845	0.0
8132	Grant-Making and Giving Services	2,850	2,800	-1.8	14,320	14,065	-1.8
8133	Social Advocacy Organizations	4,825	4,765	-1.2	23,330	23,050	-1.2
8134	Civic and Social Organizations	11,725	11,625	-0.9	56,565	56,120	-0.8
8139	Business, Professional, Labour and Other Membership Organizations	12,560	12,370	-1.5	63,850	62,900	-1.5
8141	Private Households	18,635	18,625	-0.1	92,910	92,865	0.0
9111	Defence Services	24,670	24,765	0.4	97,360	97,735	0.4
9112	Federal Protective Services (9112 to 9119)	59,470	59,520	0.1	292,420	292,600	0.1
9120	Provincial and Territorial Public Administration (9121 to 9129)	54,825	54,905	0.1	264,130	264,185	0.0
9130	Local, Municipal and Regional Public Administration (9131 to 9139)	59,350	59,315	-0.1	289,440	289,105	-0.1
9141	Aboriginal Public Administration	27,115	27,155	0.1	32,695	33,070	1.1
9191	International and Other Extra-Territorial Public Administration	635	625	-1.6	3,055	3,020	-1.1
1110 - 9191	All Industries	3,413,760	3,413,760	0.0	16,961,475	16,961,475	0.0

Table B6. Non-response Rates by Sex, Document Type, and Province, Industry, 1996 and 2001, Weighted

	CAN		NFLD		PEI		NS		NB		QUE		ONT		MAN		SASK		ALTA		BC		YT		NWT		NUN	
	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Both Sexes																												
All Document Types	4.9	6.1	5.1	5.3	5	5.2	5.2	5.2	5.1	5.7	4.4	5.6	5.4	6.5	3.8	4.8	4.7	5.2	4.5	5.9	5.2	7.1	5.9	7.7	3.8	7.2	..	
Occupied Private 2B	4.8	6	5.1	5.3	4.9	5.1	5.1	5.2	5	5.7	4.3	5.6	5.3	6.3	3.6	4.6	4.5	5.1	4.4	5.8	5	6.8	5.4	4.9	4.6	4.8	..	50
Collective Household 2B	24	26	14	15	16	31	23	23	30	18	25	25	32	36	15	8	13	6.2	19	16	27	54	22	29	11	69
Overseas Household 2C	7.3	6.1	14	5.5	15	0	4.3	5.4	14	4.8	9.6	7.1	6	5.2	1.6	8	3.8	10	14	8.2	8.9	8.3	0	0	0	0		
Occupied Private 2D	7.6	13	4.6	3.8	3.5	5.7	6.8	6	14	8	8.3	5	9.2	32	5.1	7.8	7.5	8.3	7.7	12	11	19	6.3	13	3.1	9.4		
Collective Household 2D	13	23	20	..	0	..	0	0	0	100	13	27	13	16	27	23	0	22	13	58	12	32	12	11	9.7	16	...	11
Males																												
All Document Types	4.5	6.2	3.7	5.5	3.5	5.3	3.1	5.3	4.5	5.8	4.8	5.7	4.6	6.5	4.1	4.8	4.8	5.4	3.9	6.1	4.2	7.3	4	7.9	3.1	7.4	..	5.6
Occupied Private 2B	4.7	6.0	5.1	5.5	4.7	5.3	5.1	5.3	5.0	5.8	4.3	5.6	5.2	6.3	3.5	4.7	4.2	5.3	4.1	5.9	4.9	6.9	5.7	5.0	4.8	4.7	..	
Collective Household 2B	25.6	28.2	16.8	16.6	16.9	26.8	20.5	24.7	32.9	17.7	24.6	25.0	32.9	35.8	18.0	9.8	16.0	7.8	20.6	19.0	28.2	56.5	25.3	33.8	8.0	76.1	..	
Overseas Household 2C	4.8	3.8	4	6.7	2	0	3.3	4.5	3	0	8.5	4.4	3.6	2.9	2.1	3	6.3	10.3	4.6	7.4	3.7	5.1	0	0	0	0	..	0
Occupied Private 2D	7.6	13.7	4.5	4.7	3	3.2	7	7.2	14	7.9	8.6	4.9	9.2	3.3	4.9	8	7.3	8.5	7.5	12.1	11	13.7	6.6	12.8	3	9.6	..	5.2
Collective Household 2D	13.4	19.5	0	0	0	0	0	0	0	100	12.5	21.1	13.5	10.7	28.3	11.8	0	33.3	17.2	63.4	12.2	24.1	13.2	8.5	8.9	15.6	..	7

	CAN		NFLD		PEI		NS		NB		QUE		ONT		MAN		SASK		ALTA		BC		YT		NWT		NUN	
	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001
Females																												
All Document Types	5	6.1	5.2	5.2	5.3	5	5.2	5	5	5.6	4.4	5.6	5.4	66	3.7	4.7	5	4.9	4.9	5.8	5.2	7	5.4	7.6	3.8	7	...	6.6
Occupied Private 2B	4.9	6	5.2	5.2	5.2	4.9	5.2	5	5	5.6	4.4	5.5	5.4	6.4	3.6	4.6	4.8	4.8	4.8	5.7	5.1	6.7	5.2	4.8	4.4	4.9	...	0
Collective Household 2B	21.7	20.7	11.2	13.3	14.6	38.3	28.3	19.0	22.8	20.2	25.9	24.1	31.2	35.2	10.4	5.7	10.3	4.1	16.4	10.4	23.0	47.9	11.8	18.2	17.2	52.6	...	0
Overseas Household 2C	9.7	9.2	22.6	4	17	0	8.2	6.8	17	12.5	12	10.6	8	8.2	0	15.2	4.3	10.5	19	9.2	15	13.3	0	0	0	0	...	0
Occupied Private 2D	7.6	13	4.8	2.6	4.1	6.9	6.6	4.7	15	8.2	8	5	9.1	31.3	5.4	7.6	7.8	8	8	11.7	11	18.8	6	13.2	3.1	9.2	...	6.1
Collective Household 2D	13.2	29.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.3	36.4	13.2	25.0	25.3	42.9	0.0	0.0	0.0	40.0	10.0	43.0	8.0	14.8	12.5	17.6	...	20.5

* Invalid included as a response

Table B7. Non-response Rates by Sex, Document Type, and Province, Industry, 1996 and 2001, Unweighted

	CAN		NFLD		PEI		NS		NB		QUE		ONT		MAN		SASK		ALTA		BC		YT		NWT		NUN	
	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Both Sexes																												
All Document Types	5.3	6.7	5.2	5.3	5.3	5.6	5.5	5.3	5.6	5.9	4.8	5.8	5.7	7.2	4.3	5.3	5.2	5.6	5.1	6.4	5.7	8.2	7.1	11	3.8	7.2	...	5.7
Occupied Private 2B	4.8	6	5.1	5.3	4.9	5.3	5.1	5.1	5	5.6	4.4	5.6	5.2	6.3	3.6	4.7	4.6	5.1	4.3	5.8	5	6.8	6.7	5.5	4.6	4.8	...	5.0
Collective Household 2B	24	26	14	15	16	31	23	23	30	18	25	25	32	36	15	8	13	6.2	19	16	27	54	22	29	11	69	...	0
Overseas Household 2C	7.3	6.1	14	5.5	15	0	4.3	5.4	14	4.8	9.6	7.1	6	5.2	1.6	8	3.8	10	14	8.2	8.9	8.3	0	0	0	0	...	0
Occupied Private 2D	7.3	13	4.6	3.8	3.5	5.5	6.8	5.3	14	8.3	8.3	5	9.2	33	5.1	7.8	7.5	8.2	7.8	12	11	19	6.3	13	3.1	9.4	...	11
Collective Household 2D	13	23	20	..	0	..	0	0	0	100	13	27	13	16	27	23	0	22	13	58	12	32	12	11	9.7	16	...	11
Males																												
All Document Types	4.4	6.8	3.6	5.4	3.6	5.7	3.2	5.5	4.1	6.1	4.8	5.8	4.6	7.3	4.1	5.5	4.8	5.9	3.9	6.7	4.2	8.6	3.7	11.1	3.1	7.4	..	4.8
Occupied Private 2B	4.7	5.9	5.0	5.4	4.7	5.5	5.1	5.2	5.0	5.7	4.3	5.6	5.1	6.2	3.5	4.7	4.2	5.3	4.0	5.8	4.9	6.8	7.2	5.6	4.7	4.7	..	50.0
Collective Household 2B	25.6	28.2	16.8	16.6	16.9	26.8	20.5	24.7	32.9	17.7	24.6	25.0	32.9	35.8	18.0	9.8	16.0	7.8	20.6	19.0	28.2	56.5	25.3	33.8	8.0	76.1	..	0
Overseas Household 2C	4.8	3.8	4	6.7	2	0	3.3	4.5	3	0	8.5	4.4	3.6	2.9	2.1	3	6.3	10.3	4.6	7.4	3.7	5.1	0	0	0	0	..	0
Occupied Private 2D	7.6	13.7	4.5	4.8	3	4	7	6.3	14	8.3	8.6	4.9	9.2	33.2	4.8	8	7.3	8.5	7.6	11.9	11	19.6	6.6	12.8	3	9.6	..	5.2
Collective Household 2D	13.4	19.5	0	0	0	0	0	0	0	0	12.5	21.1	13.5	10.7	28.3	11.8	0	33.3	17.2	63.4	12.2	24.1	13.2	8.5	8.9	15.6	..	7

	CAN		NFLD		PEI		NS		NB		QUE		ONT		MAN		SASK		ALTA		BC		YT		NWT		NUN	
	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996	2001
Females																												
All Document Types	5.3	6.5	5.3	5.1	5.5	5.4	5.5	5.1	5.4	5.8	4.8	5.7	5.7	7.1	4.1	5.1	5.4	5.3	5.3	6.2	5.6	7.7	6.3	11	3.8	7.1	...	4.8
Occupied Private 2B	4.9	6	5.3	5.2	5.1	5.1	5.2	5	5	5.6	4.4	5.5	5.4	6.4	3.6	4.6	4.9	4.9	4.7	5.7	5.1	6.7	6.3	5.3	4.4	5	...	0
Collective Household 2B	21.7	20.7	11.2	13.3	14.6	38.3	28.3	19.0	22.8	20.2	25.9	24.1	31.2	35.2	10.4	5.7	10.3	4.1	16.4	10.4	23.0	47.9	11.8	18.2	17.2	52.6	...	0
Overseas Household 2C	9.7	9.2	23	4	17	0	8.2	6.8	17	12.5	12	10.6	8	8.2	0	15.2	4.3	10.5	19	9.2	15	13.3	0	0	0	0	...	0
Occupied Private 2D	7.6	13	4.8	2.6	4.1	7.7	6.6	4.2	15	8.3	8	5	9.1	31.6	5.4	7.6	7.8	7.8	8.1	11.7	11	18.8	6	13.2	3.1	9.2	...	6.1
Collective Household 2D	13.2	29.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.3	36.4	13.2	25.0	25.3	42.9	0.0	0.0	0.0	40.0	10.0	43.0	8.0	14.8	12.5	17.6	...	20.5

* Invalid included as a response

Table B8. Comparison of Labour force estimates for the Sector Level Comparisons, 2001 Census and the Labour Force Survey (LFS), May 2001

NAICS 1997 Code	Sector Description	Census Data			Labour Force Survey Data		Percentage Distribution				
		LFS Concept, Labour Force (000's)	LFS Concept, Experienced Only (000's)	LFS Concept, Employed Only (000's)	Labour Force Universe (000's)	Employed Universe (000's)	Census			Labour Force Survey	
							LFS Concept, Labour Force %	LFS Concept, Experienced Only %	LFS Concept, Employed Only %	Labour Force %	Employed %
11	Agriculture, Forestry, Fishing and Hunting	559.8	559.8	504.6	503.1	454.0	3.6	3.6	3.5	3.1	3.0
21	Mining and Oil and Gas Extraction	166.8	166.8	152.8	192.7	182.6	1.1	1.1	1.1	1.2	1.2
22	Utilities	117.3	117.3	114.0	123.8	121.4	0.8	0.8	0.8	0.8	0.8
23	Construction	867.6	867.6	786.9	948.7	865.0	5.6	5.6	5.4	5.9	5.7
31-33	Manufacturing	2,168.8	2,168.8	2,028.8	2,438.5	2,300.9	14.1	14.1	14.0	15.3	15.1
41	Wholesale Trade	684.9	684.9	655.4	576.2	552.2	4.5	4.5	4.5	3.6	3.6
44-45	Retail Trade	1,743.3	1,743.3	1,649.0	1,912.6	1,827.4	11.3	11.3	11.4	12.0	12.0
48-49	Transportation and Warehousing	767.9	767.9	730.1	819.0	795.5	5.0	5.0	5.0	5.1	5.2
51	Information and Cultural Industries	415.0	415.0	393.4	436.0	412.6	2.7	2.7	2.7	2.7	2.7
52	Finance and Insurance	634.2	634.2	615.7	665.6	653.3	4.1	4.1	4.2	4.2	4.3
53	Real Estate and Rental and Leasing	257.9	257.9	247.8	242.6	235.3	1.7	1.7	1.7	1.5	1.5
54	Professional, Scientific and Technical Services	979.0	979.0	934.9	1,039.9	998.8	6.4	6.4	6.4	6.5	6.6
55	Management of Companies and Enterprises	15.3	15.3	14.7	2.5	1.9	0.1	0.1	0.1	0.0	0.0
56	Administrative and Support, Waste Management and Remediation Services	601.1	601.0	552.3	597.3	551.6	3.9	3.9	3.8	3.7	3.6
61	Educational Services	1,006.6	1,006.6	973.1	1,004.8	975.4	6.5	6.5	6.7	6.3	6.4
62	Health Care and Social Assistance	1,494.3	1,494.3	1,452.6	1,562.6	1,529.6	9.7	9.7	10.0	9.8	10.0

NAICS 1997 Code	Sector Description	Census Data			Labour Force Survey Data		Percentage Distribution				
		LFS Concept, Labour Force (000's)	LFS Concept, Experienced Only (000's)	LFS Concept, Employed Only (000's)	Labour Force Universe (000's)	Employed Universe (000's)	Census			Labour Force Survey	
							LFS Concept, Labour Force %	LFS Concept, Experienced Only %	LFS Concept, Employed Only %	Labour Force %	Employed %
71	Arts, Entertainment and Recreation	300.4	300.4	273.1	333.7	310.2	2.0	2.0	1.9	2.1	2.0
72	Accommodation and Food Services	1,038.4	1,038.4	953.0	1,062.5	991.4	6.8	6.8	6.6	6.6	6.5
81	Other Services (except Public Administration)	744.0	744.0	704.3	709.1	681.1	4.8	4.8	4.9	4.4	4.5
91	Public Administration	817.4	817.4	784.0	809.4	786.3	5.3	5.3	5.4	5.1	5.2
11-91	All Industries	15,380.0	15,380.0	14,521.0	15,981.0	15,226.0	100.0	100.0	100.0	100.0	100.0

Note: Totals may not add up due to rounding.

Table B9. Comparison of Labour force estimates for the 2001 Census and the Survey of Employment, Payrolls and Hours (SEPH) May 2001

NAICS 1997 Code	Sector Description	Weighted			Percentage Distribution		
		Census Data		SEPH Data	Census		SEPH
		SEPH Concept Employed only (000's)	SEPH Concept Experienced only (000's)	(000's)	Employed %	Experienced %	%
11	Forestry and Logging	53.6	78.9	66.4	0.4	0.6	0.5
21	Mining and Oil and Gas Extraction	147.1	161.0	140.3	1.1	1.2	1.1
22	Utilities	114.0	117.3	112.9	0.9	0.8	0.9
23	Construction	630.4	706.6	589.8	4.8	5.1	4.6
31-33	Manufacturing	1,964.3	2,102.5	2,060.7	15.0	15.1	16.0
41	Wholesale Trade	619.9	648.7	735.8	4.7	4.7	5.7
44-45	Retail Trade	1,538.3	1,630.8	1,489.5	11.8	11.8	11.6
48-49	Transportation and Warehousing	656.3	691.9	617.3	5.0	5.0	4.8
51	Information and Cultural Industries	369.6	390.3	340.9	2.8	2.8	2.6
52	Finance and Insurance	588.2	606.3	561.6	4.5	4.4	4.4
53	Real Estate and Rental and Leasing	213.4	223.0	214.1	1.6	1.6	1.7
54	Professional, Scientific and Technical Services	719.9	758.4	646.3	5.5	5.5	5.0
55	Management of Companies and Enterprises	13.3	13.8	83.0	0.1	0.1	0.6
56	Administrative and Support, Waste Management and Remediation Services	465.9	512.0	533.7	3.6	3.7	4.1
61	Educational Services	944.0	976.9	992.2	7.2	7.0	7.7
62	Health Care and Social Assistance	1,314.4	1,354.2	1,265.8	10.1	9.8	9.8
71	Arts, Entertainment and Recreation	220.9	246.6	230.5	1.7	1.8	1.8
70	Accommodation and Food Services	903.1	987.3	959.6	6.9	7.1	7.5
81	Other Services (except Public Administration)	456.0	485.1	477.9	3.6	3.6	3.7
91	Public Administration	793.5	827.6	760.4	6.1	6.0	5.9
11-91	All Industries	12,843.4	13,644.4	12,884.3	100.0	100.0	100.0

Note: Totals may not add up due to rounding.

Table B10. Net Effect of All Processing by Sector, 2001

NAICS 1997 Code	Sector Description	Unweighted			Weighted		
		Unadjusted Data	Final Data	Net Movement Excluding Imputation (%)	Unadjusted Data	Final Data	Net Change Excluding Imputation (%)
11	Agriculture, Forestry, Fishing and Hunting	137,540	147,310	-0.7	596,645	633,085	-0.8
21	Mining and Oil and Gas Extraction	37,280	38,895	-1.7	175,740	181,670	-1.6
22	Utilities	24,725	26,030	0.2	120,255	125,675	0.0
23	Construction	180,210	192,675	-0.3	892,730	945,335	-0.4
31-33	Manufacturing	425,445	450,775	-0.5	2,204,640	2,329,180	-0.5
41	Wholesale Trade	132,720	140,270	-0.6	693,280	731,450	-0.5
44-45	Retail Trade	357,210	380,370	-0.7	1,825,985	1,937,080	-0.7
48-49	Transportation and Warehousing	154,020	164,315	0.0	777,980	825,335	0.0
51	Information and Cultural Industries	81,870	86,685	0.0	427,140	450,585	0.0
52	Finance and Insurance	123,485	130,030	-0.2	643,655	676,675	-0.2
53	Real Estate and Rental and Leasing	51,785	54,765	-0.5	267,290	281,710	-0.5
54	Professional, Scientific and Technical Services	192,480	203,560	0.5	1,004,370	1,058,680	0.5
55	Management of Companies and Enterprises	4,710	3,290	-34.1	24,365	16,985	-34.3
56	Administrative and Support, Waste Management and Remediation Services	124,780	134,015	0.1	635,975	677,025	-0.2
61	Educational Services	221,230	230,945	-0.8	1,077,360	1,114,635	-0.9
62	Health Care and Social Assistance	310,190	328,500	0.3	1,541,525	1,622,980	0.3
71	Arts, Entertainment and Recreation	66,165	71,230	0.0	332,505	355,680	0.0
72	Accommodation and Food Services	220,200	239,750	-0.1	1,106,495	1,193,425	-0.1
81	Other Services (except Public Administration)	155,395	164,065	-1.0	782,935	824,570	-0.7
91	Public Administration	214,820	226,280	-1.8	943,735	979,720	-1.4
11-91	All Industries	3,216,275	3,413,760	-0.5	16,074,610	16,961,470	-0.4

Note: Totals may not add up due to rounding.

Appendix C. 2001 Census Products and Services

The census is a reliable source for describing the characteristics of Canada's people and dwellings. The range of products and services derived from census information is designed to produce statistics that will be useful, understandable and accessible to all users. Sources, such as the *2001 Census Catalogue*, the Statistics Canada Web site (<http://www.statcan.ca>) and, specifically, the On-Line Catalogue, contain detailed information about the full range of 2001 Census products and services.

There are several new product and service features for the 2001 Census:

1. Media

- The Internet is the preferred medium for disseminating standard data products and reference products.
- More census data are available to the public free of charge via the Internet.

2. Content

- Data tables for the 2001 Census are released by topics, that is, groups of variables on related subjects.
- Wherever possible, the language and vocabulary used in 2001 Census products available on the Internet is simplified to make the information accessible to more people.
- Users are offered various methods of searching and navigating through census standard products (including reference products) on the Internet.

3. Geography

- Geographic units such as dissemination areas, urban areas, designated places and metropolitan influenced zones were added to the standard products line. Some new units, such as dissemination areas, replace others.

4. Variables

- Information on the following new subjects was collected in the 2001 Census: birthplace of parents, other languages spoken at home and language of work. The 2001 questionnaire also included the question on religion, which is asked in every decennial census. The family structure variable was broadened to include same-sex couples.