

**Unified Enterprise Survey  
Data Quality Statement**

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**Taxi and Limousine Services Industry  
Reference Year 1999**

**Statistics Canada  
July 2001**

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## 1.0 Concepts\*

The 1999 Taxi and Limousine Services Industry results represent fiscal year estimates of financial statistics for the industry as a whole, and for companies / associations and self-employed drivers separately. *These 1999 results are based both on survey data and tax data.*

Classified under the North American Industrial Classification System (NAICS) code 4853, this industry comprises establishments primarily engaged in providing passenger transportation by taxi and limousine, not operated on regular schedules or routes. Taxicab fleet owners and organizations that provide dispatch services are included, regardless of whether drivers are hired, rent their cabs or are otherwise compensated. Owner-operated taxicabs (self-employed drivers) are also included.

## 2.0 Definitions

### 2.1 A business entity and an establishment

A business entity is an economic transactor having the responsibility and the authority to allocate resources in the production of goods and services.

A statistical establishment is one production entity or the smallest grouping of production entities which produces as homogeneous a set of goods and/or services as possible; which does not cross provincial boundaries; and for which records provide data on the value of output together with the cost of principal intermediate inputs used and cost and quantity of labor resources used to produce the output.

### 2.2 The population of interest

The population of interest is all statistical establishments classified to NAICS 4853 and operating for at least one day during the reference year 1999. This industry group is further split into:

- **485310** Taxi service, including operators, brokers, dispatchers and other specialized taxi services;
- **485320** Limousine service.

### 2.3 Financial variables

#### 2.3.1 Revenue

- Revenue from sales of goods and services are generated from taxi, limousine and dispatch services as well as from the sales of other goods and services like fuel.
- Other operating revenue includes notably revenue from rental and leasing of motor vehicles, taxi stand, taxi licenses and permits as well as communication equipment.

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\* Changes in the concepts, definitions and methods from the 1998 survey are indicated in Italics.

- Total operating revenue is the sum of revenue from sales of goods and services and other operating revenue.
- Non-operating revenue comprises income from interest and dividends.
- Total revenue is the sum of operating and non-operating revenues.

### 2.3.2 Expenses

- Salaries, wages and benefits refer first to salaries and wages payments, including notably vacation pay and commissions, for all employees for whom a T4 Supplementary Form were completed. This category also includes the employer portion of employee benefits for items such as Canada Pension Plan contributions or Employment Insurance premiums.
- Cost of energy and supplies includes the cost of office and other operating supplies together with the cost of electricity, gasoline, propane and other energy types.
- Rental and leasing expenses are those costs incurred to rent or lease office, motor vehicles, computers or any other machinery and equipment.
- Repair and maintenance expenses are payments made to purchase maintenance and repair services of buildings, motor vehicles or any other machinery and equipment.
- Licenses, property and business taxes include all types of property and business taxes together with expenses for taxi licenses. Provincial health and education payroll taxes are excluded from this category.
- Other purchased services includes items such as payments to owner-operators, goods transportation, telephone and other telecommunications costs, insurance premiums, advertising and sales promotion.
- Depreciation charges are charges related to depreciation and amortization of buildings, vehicles and other machinery and equipment.
- Other operating expenses includes items such as royalties and franchise fees, bad debts and inventory adjustments. Provincial health and education payroll taxes are included in this category.
- Total operating expenses is the sum of all operating expenses.
- Non-operating expenses relates to interest expenses on loans or the interest component of a capital lease.
- Total expenses are the sum of operating and non-operating expenses.

### 2.3.3 Net operating revenue

- Operating margin is the difference between operating revenue and operating expenses.
- Operating ratio is the ratio of operating expenses over operating revenue.

## 3.0 Methods

The data were produced as part of Statistics Canada's Unified Enterprise Survey (UES). The survey incorporates several annual business surveys into an integrated survey. It aims to ensure Statistics Canada receives consistent and integrated data from many types of surveys and sizes of businesses, with enough detail to produce accurate provincial statistics.

### 3.1 Target Population

The target population is all establishments classified to NAICS 4853 on the Business Register and operating for at least one day during the reference year 1999.

### 3.2 Frame and sample design

#### 3.2.1 Frame

The frame for the selection of the probability sample is Statistics Canada's Business Register.

On the Business Register, under NAICS code 4853, there were 9,228 establishments having operated for at least one day during the reference year 1999. This represents an increase of 37% over the 6,745 establishments in 1998. This increase is mainly due to the larger number of unincorporated enterprises (self-employed drivers) identified on the Business Register in 1999 (7,390) compared to 1998 (5,027). By comparison, there were 1,838 establishments of incorporated enterprises (companies and associations) having been identified in 1999 on the Business Register, an increase of 7% over 1998.

#### 3.2.2 Sampling plan

Two sources of data were used to derive the estimates:

- a probability sample survey of taxi and limousine establishments with an annual gross business revenue above survey thresholds,
- taxation data to estimate for businesses with an annual gross business revenue below survey thresholds.

In most provinces and territories, the survey thresholds stood at \$30,000. In total for the Taxi and Limousine Services Industry, 5,989 establishments on the Business Register had annual revenue above survey thresholds in 1999. Out of these, 4,849 were

establishments of unincorporated enterprises (self-employed drivers) and 1,140 were establishments of incorporated enterprises (companies and associations).

### 3.2.3 Sampling Unit

The sampling unit used for the selection of unincorporated businesses is the grouping of all establishments of one enterprise that operate in the same industry and the same province. Therefore, the sampling unit can be called a “cluster of establishments”.

### 3.2.4 Sampling rate

Out of 5,989 establishments, 428 were selected in the sample for an overall sampling rate of 7%. More precisely, a total of 227 establishments of unincorporated enterprises (self-employed drivers) were selected out of 4,849 (5%) and 201 establishments of incorporated enterprises (companies and associations) were sampled out of 1,140 (18%).

## 3.3 Data Collection and Processing

### 3.3.1 Data Collection

Questionnaires were mailed in the spring of 2000 to the 428 establishments selected in the sample. Respondents were asked to report information for their most recent 12-month fiscal period.

In addition to the mail-out / mail-back questionnaire approach, the survey was also conducted using Computer Assisted Telephone Interviews (CATI) for data collection, capture, edit and follow-up. The collection period ended in October 2000.

### 3.3.2 Data processing - Imputation

Reported data were examined for completeness and inconsistencies using automated edits coupled with analytical review. Another automated system was used to impute data for refusals, no response and unable to contact, partially with the assistance of taxation data. This imputation process was also coupled with a manual analytical review. In total, 21% of the records went through the imputation process in 1999. This is considered as fairly good for a business survey. With the use of taxation data, the quality of the data coming out of the imputation process is judged to be very good for the aggregate variables, such as total revenue and total expenses, and to be good for more detailed variables.

### 3.3.3 Data processing - Allocation

In some cases, respondents reported data combining many sampling units, resulting in the need for data allocation. Auxiliary information, stemming mainly from the T4 Supplementary Form, was used to allocate the data reported on the combined report among the various sampling units. This source of information used for allocation purposes provides an adequate distribution of revenue and expenses by province and territory.

### 3.3.4 Data processing - Estimation

The sampling weights derived from the sample survey design were modified and improved using updated information. This was possible because, during the passage of time since the sample was selected, the Business Register was updated further with more complete information. The final set of weights reflects as closely as possible the changing characteristics of the population in this industry. The final estimates were derived by combining the survey estimates and the taxation data estimates. The standard output includes the following tables:

In Table 1, final industry estimates are provided by province and territory for **all carriers** in the Taxi and Limousine Services Industry (NAICS 4853) and for the financial variables listed in the *Definitions* section.

In Table 2, final industry estimates are provided by province and territory for **taxi and limousine companies and associations** and for the financial variables listed in the *Definitions* section.

In table 3, final industry estimates are provided by province and territory **for self-employed taxi and limousine drivers** and for the financial variables listed in the *Definitions* section.

## 4.0 Data Quality

All surveys are subject to sampling and non-sampling errors. Statistics Canada uses a variety of methods to minimize all types of errors. Efforts were taken for instance through regular frame (Business Register) analysis, appropriate respondent follow-up, adequate imputation model and detailed analysis of the estimates to minimize the non-sampling error of omission, duplication, reporting and processing.

### 4.1 Response rate

As depicted in **Table A** below, 75% of the 428 questionnaires sent in the sample survey were fully and partly completed in 1999. Another 5% were identified as out-of-scope to NAICS 4853 in 1999. Finally, 19% of the respondents refused to complete the questionnaire, did not complete the questionnaire before collection cut-off, or were found unable to contact in 1999. The response rate, measured as the proportion of completed questionnaires out of in-scope questionnaires, reached 80% in 1999.

**Table A**

Questionnaires	1999	
	Number	%
Fully/partially completed	320	75%
Out-of-scope	22	5%
Non-response / refusal / unable to contact	83	19%
Other	3	1%
Total	428	100%

#### 4.2 Coefficients of variation

Coefficients of variation (CV) of the final estimates are generally recognized as a good indicator of sampling error. Based on the calculated coefficients of variation, the quality of the final estimates is classified as follows:

- Census No sampling error
- Excellent CV is 0.01 to 4.99%
- Very good CV is 5.00% to 9.99%
- Good CV is 10.00% to 14.99%
- Acceptable CV is 15.00% to 24.99%
- Use with caution CV is 25.00% to 34.99%
- Unreliable CV is larger than 35.00%

Based on these ratings and as depicted in **Table B** below, the total revenue estimates for the whole industry were judged to be excellent at the national level and good to excellent at the provincial/territorial level in 1999. The total revenue estimates for the taxi and limousine companies and associations and for the self-employed drivers separately were judged to be very good at the national level and acceptable to very good at the provincial/territorial level.



**Table B**

	<b>ALL</b>	<b>COMPANIES</b>	<b>DRIVERS</b>
NFLD	Good	Acceptable	Use with caution
PEI	Excellent	Very Good	Very Good
NS	Very Good	Acceptable	Acceptable
NB	Very Good	Very Good	Acceptable
QUE	Very Good	Good	Good
ONT	Very Good	Good	Good
MAN	Good	Census	Acceptable
SASK	Good	Acceptable	Acceptable
ALB	Very Good	Good	Acceptable
BC	Good	Acceptable	Good
YUK	Census	Census	Census
NWT	Census	Census	Census
NUN	Census	Census	Census
<b>CANADA</b>	<b>Excellent</b>	<b>Very good</b>	<b>Very good</b>

Overall, the final estimates are viewed as providing a reliable portrait of the Taxi and Limousine Services Industry in Canada.