Taxi and Limousine Service Industry

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Data Quality Statement – Unified Enterprise Survey
Taxi and Limousine Service Industry
Reference Year 1997

Concepts

The Taxi and Limousine Service Financial Statistics represent fiscal year estimates of revenue and expenses for the industry.

Under the North American Industrial Classification System (NAICS), 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 are included.

The estimates provide selected revenue and expense items at the national and provincial level.

Definitions

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 labour resources used to produce the output.

The population of interest

The population of interest is all establishments classified to NAICS 4853 and operating for at least one day during the reference year 1997. This industry group is further split into:

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

Financial variables

Revenue:

- Revenue from sales of goods and services are generated from the sales of taxi, limousine and dispatch services and the sales of goods, mainly gasoline and propane.

- Other operating revenue includes notably revenue from rental or leasing of motor vehicles (without driver) and licenses as well as revenue from franchise fees and repair and maintenance.

- Total operating revenue is the sum of all operating revenue.

- Non-operating revenue comprises income from interest and dividends.

- Total revenue is the sum of operating and non-operating revenues.

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.

- License fees, property and business taxes includes the taxi permits and any other property and business taxes.

- Other purchased services includes items such as payments to owner-operators, 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.

- Total operating revenue is the sum of all operating revenue.

- Non-operating expenses relates to interest expenses on loans or the interest component of a capital lease.

- Total operating expenses is the sum of operating and non-operating expenses.

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

- Operating ratio is the ratio of operating expenses over operating revenue.

Methods

The data were produced as part of Statistics Canada's Unified Enterprise Survey (UES) conducted in 1997 for the first time. 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.

Target Population

The target population for this survey is all establishments classified to NAICS 4853 on the Business Register and operating for at least one day during the reference year 1997.

Frame and sample design

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 of greater than or equal to $150,000 and

- taxation data to estimate for businesses with an annual gross business revenue of less than $150,000.

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

The sampling unit used in the probability survey is the establishments of one enterprise that operate in the same industry and the same province. (The sampling unit can be called a "cluster of establishments".) This type of sampling unit links establishments directly to their enterprise and the enterprise's other establishments in other provinces (if there are any). Thus, when a unit is selected in the sample, all related establishments in scope to NAICS 4853 and the parent enterprise are included in the sample.

A complex enterprise is an enterprise that has establishments operating in more than one province or in more than one industry and as well it may be multi-legal entity (it contains establishments that link to more than one legal entity). A simple enterprise is an enterprise that operates only in one province and industry and is not multi-legal.

On the Business Register, under NAICS code 4853, there were 5,277 establishments of simple and complex enterprises, with annual revenue of $150,000 or more and having operated for at least one day during the reference year 1997. Seven establishments of complex enterprises were selected and 314 establishments of simple enterprises were selected in the sample. The overall sampling rate was at 6%.

Data Collection and Processing

Questionnaires were mailed to establishments selected in the sample in the spring of 1998. Establishments were asked to report information for their 12-month fiscal period for which the final day occurs on or between January 1st and December 31st 1997. 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 mid-October 1998.

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 no contact, partially with the assistance of taxation data. This imputation process was also coupled with a manual analytical review. Since less than 5% of the records went through the imputation process, the quality of the final estimates is not likely to be significantly affected.

In one case, a respondent reported data combining many sampling units located in more than one province, resulting in the need for data allocation. Auxiliary information, stemming mainly from taxation data, was used to allocate the data reported on the combined report among the various provinces where this enterprise is in operation. Given only one record was subject to allocation and the quality of the auxiliary information used, this processing step did not have any significant impact on the quality of the final estimates.

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.

Final estimates were produced by province and territory for the Taxi and Limousine Service industry (NAICS 4853) and for the financial variables listed in the *Definitions* section.

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. Every effort was made to minimize the non-sampling error of omission, duplication, reporting and processing.

66% of the 321 questionnaires sent in the sample survey were completed, 31% were identified as out-of-scope to NAICS 4853, and 3% represent respectively respondents who refused to complete the questionnaire, did not complete the questionnaire before collection cut-off, or found unable to contact. The response rate, measured as the proportion of completed questionnaires of in-scope questionnaires, was 96%.

Coefficients of variation (CV) of the final estimates were computed. The quality of the estimates are classified as 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%); and Unreliable (> 35.00%).

Based on these ratings, the total revenue and total expenses estimates were judged to be very good to excellent both at the national and at the provincial/territorial level.

To assist in evaluating the reliability of the final estimates, they were compared to and found to be consistent with administrative data sources. The final estimates, representing the supply of taxi services in Canada, were also compared to the household demand for taxi services, made available from the Income and Expenditure Accounts and the Survey of Family Expenditures. Based on this comparison, the household sector is estimated to account for about 53% of total demand for taxi services in 1997, the remaining 46% representing the business and government share. These are comparable to the proportions currently observed in United States. Overall, the final estimates are viewed as providing an accurate and reliable portrait of the taxi and limousine industry in Canada.