Unified Enterprise Survey
Data Quality Statement

Couriers and Local Messengers Industry
Reference Year 2002

Statistics Canada
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1.0 Concepts

The 2002 Couriers and Local Messengers Industry Survey results represent fiscal year estimates of financial and operating statistics for the industry.

Classified under the North American Industrial Classification System (NAICS) code 492, this industry comprises establishments primarily engaged in providing courier delivery services, or messenger and delivery services of small parcels within a single urban area. The type and size of parcels carried, the speed of delivery, and premium services such as guaranteed delivery and track and trace service are the main features of their activities.

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 labour resources used to produce the output.

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.

2.2 The population of interest

The population of interest is all establishments classified to NAICS 492 and operating for at least one day during the reference year 2002. This industry group is further split into:

- **4921** Courier services and courier operations of post office;
- **4922** Local messengers and local delivery of small parcels within a single urban area.

2.3 Financial variables

2.3.1 Revenue

- Revenue from sales of goods and services are generated from delivery services and from the sales of other goods and services like cargo services and custom brokerage.

- Other operating revenue includes notably franchise fees and repair and maintenance revenue.

- 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.

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 was 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 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.

- Property and business taxes include all types of property and business taxes. 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 include 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.

2.4 Operating and other variables

Pieces are the equivalent to envelopes, boxes, parcels or packages. Pieces carried by couriers and local messengers companies generally weigh less than 100 kg.

Shipment is the movement of one or more pieces from a pick-up location or origin to a delivery location or destination. The origin is classified by region in Canada. The destination is classified as Canada, United States or other countries.

Delivery services can be broken down into three sub-categories:

- Same-day services refer to shipments delivered the same day they are picked up;

- Next-day / overnight services refer to shipments delivered one day after pick-up;

- Second-day / other services refer to shipments delivered two days or more after pick-up.

Average revenue per piece is the revenue generated from delivery services divided by the number of pieces carried.

Carrier is a term generally used to identify businesses operating in transportation industries. In the data tables, the number of carriers is based on the number of establishments.

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 for this survey is all establishments classified to NAICS 492 on the Business Register and operating for at least one day during the reference year 2002.

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 492, there were 6,373 establishments of simple and complex enterprises having operated for at least one day during the reference year 2002.

3.2.2 Sampling plan

Two sources of data were used to derive the estimates:

- a probability sample survey of couriers and local messengers establishments with an annual gross business revenue above survey thresholds,

- taxation data to estimate for businesses with annual gross business revenue below survey thresholds.

Slight changes were made in the coverage of the sample frame (BR) and the survey methodology in 2002. In particular, the exclusion cut-offs for the probability sample survey were raised from 5% to 10% between 2001 and 2002. This increased the survey cut-offs from $250,000 to $850,000 for courier establishments (NAICS 4921) and from $30,000 to $50,000 for local messenger establishments (NAICS 4922). In addition, because of the improved coverage of the sample frame (BR), the adjustment made for the purpose of estimating establishments that had annual revenues above the survey cut-offs but were not in the BR was dropped from the sample design. Although these changes had a fairly marginal impact at the aggregate level, they may have resulted in an increase in revenues and expenses, especially for small firms (annual revenues of less than $1 million).

In total for the Couriers and Local Messengers Industry, 2,125 establishments on the Business Register in 2002 had annual revenue above survey thresholds in 2002.

3.2.3 Sampling Unit

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".

3.2.4 Sampling rate

Of the total 2,125 establishments above survey thresholds, 603 establishments were selected in the sample. The overall sampling rate was at 28 %.

3.3 Data Collection and Processing

3.3.1 Data Collection

Questionnaires were mailed in the beginning of the year 2003 (February) to establishments selected in the sample and identified as employers on the Business Register. Tax records were used for establishments selected in the sample and identified as non-employers (mostly self-employed owner-operators).

Establishments having received a questionnaire 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 September 2003.

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, 39 % of the records went through the imputation process in 2002. The 2002 rate 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 a number of cases, respondents reported data combining many sampling units located in more than one province, 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 provinces where this enterprise is in operation. 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.

In Table 1 from the *Service bulletin - Surface and marine transport* (50-002-XIE), estimates are provided by province and territory for all carriers in the Couriers and Local Messengers Industry (NAICS 492) and for the financial variables listed in the *Definitions* section.

In Table 2, estimates for all carriers and for the same set of financial variables are provided first by activity (Couriers and Local Messengers separately) and then by size (large, medium and small carriers).

In Table 3, estimates for carriers over $1 million on delivery revenue, number of pieces and average revenue per piece by type of services (same-day, next-day/overnight and second-day/ other) are provided by activity and by size.

In Table 4, estimates for carriers over $1 million are provided on origin and destination of shipments by activity.

In Table 5, estimates for carriers over $1 million are provided on vehicles and equipment in service by activity.

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 B** below, 68% of the 603 questionnaires sent in the sample survey were fully and partly completed in 2002. Another 7% were identified as out-of-scope to NAICS 492 in 2002. Also, 17% of the respondents either refused to complete the questionnaire, did not complete the questionnaire before collection cut-off, or were found unable to contact in 2002. The response rate, measured as the proportion of completed questionnaires out of in-scope questionnaires, reached 72% in 2002.

Tableau B

Questionnaires	2002	
	Number	%
Fully/partially completed	407	68%
Out-of-scope	34	6%
Non-response / refusal / unable to contact	105	17%
Other (Non-response)	57	9%
Total	603	100%

4.2 Coefficients of variation

Coefficients of variation (CV) of the final estimates were computed. The quality of the estimates is classified as follows:

- 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 C** below, the total revenue estimates at the NAICS 492 level were judged to be excellent both at the national and at the provincial/territorial level in 2002. At the NAICS 4921 level (Couriers), the estimates were also judged to be excellent at the provincial and territorial level. At the NAICS 4922 level (Local Messengers and Local Delivery), the quality of the estimates is generally judged to be very good.

Table C

	492	**4921**	**4922**
NFLD	Excellent	Census	Excellent
PEI	Census	Census	.
NS	Excellent	Census	Very Good
NB	Excellent	Census	Very Good
QUE	Excellent	Excellent	Very Good
ONT	Excellent	Excellent	Very Good
MAN	Excellent	Excellent	Very Good
SASK	Excellent	Census	Excellent
ALB	Excellent	Excellent	Very Good
BC	Excellent	Excellent	Acceptable
YUK	Census	Census	.
NWT	Census	Census	.
NUN	Census	Census	Census
CANADA	**Excellent**	**Excellent**	**Very Good**

Overall, the 2002 preliminary estimates are viewed as providing an accurate and reliable portrait of the Couriers and Local Messengers industry in Canada.