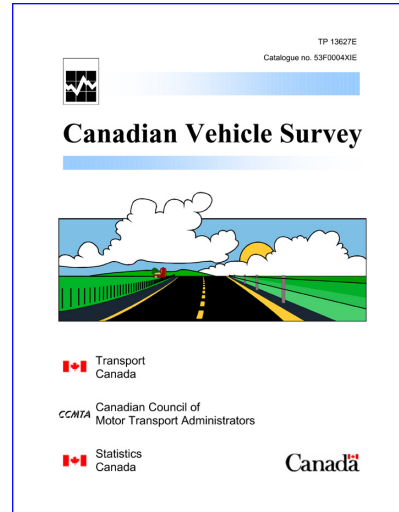




Catalogue no. 53F0004XIE

# Canadian vehicle survey

Third quarter 2003



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Statistics Canada

Transportation Division

# Canadian vehicle survey

Third quarter 2003

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## Note of appreciation

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

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## Symbols

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*The following symbols are used to indicate the quality of the estimates in this publication:*

.	<i>not available for any reference period.</i>
..	<i>not available for a specific reference period.</i>
...	<i>not applicable</i>
<i>p</i>	<i>preliminary</i>
<i>r</i>	<i>revised</i>
<i>x</i>	<i>suppressed to meet confidentiality requirements</i>
<i>A</i>	<i>excellent</i>
<i>B</i>	<i>very good</i>
<i>C</i>	<i>good</i>
<i>D</i>	<i>acceptable</i>
<i>E</i>	<i>use with caution</i>
<i>F</i>	<i>too unreliable to be published</i>

*The quality of estimates not accompanied by a quality symbol is "good or better".*

---

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## Highlights

- Over 18.3 million vehicles were in-scope for the Canadian Vehicle Survey during this quarter.
- Between July 1 and September 30, 2003, these vehicles travelled an estimated 91.1 billion kilometres.
- During this quarter, vehicles weighing less than 4 500 kilograms were driven an average of 4 750 kilometres while the largest of the trucks (trucks with gross weight 15 000 kilograms or more) were driven an average of 16 850 kilometres.

## 1. Introduction

Canadian transport activity statistics were inadequate due to the lack of any routine measurement of road vehicle activity. While road vehicles dominate passenger travel and freight traffic, no measures of total vehicle-kilometres or passenger-kilometres were available.

The Canadian Vehicle Survey (CVS) was developed at the request of Transport Canada to fill this data gap. The survey provides quarterly and annual estimates of the amount of road travel, broken down by types of vehicles and characteristics, such as age and sex of driver, time of day and season. The results will be the prime source of road vehicle use information for researchers and interested members of the public.

Transport Canada plans to combine survey data with other data to improve road safety, monitor fuel consumption and deal with the impact of vehicle usage on the environment.

This document describes concepts, employed methods and discusses data quality. The reference period for all the information presented in this document is the third quarter of 2003.

## 2. Survey overview

The CVS is a voluntary vehicle-based survey that provides annual estimates of road vehicle activity (vehicle-kilometres and passenger-kilometres) of vehicles registered in Canada. A quarterly sample of vehicles is drawn from vehicle registration lists provided by the provincial and territorial governments.

The provincial component of the survey consists of two stages. The first stage is a computer assisted telephone interview (CATI) with the registered owners of the sampled vehicles. This interview is used to collect some general information on the usage of the vehicle as well as to ask the respondent to complete a seven-day trip log. The trip log is then mailed out. If respondents cannot be contacted by phone, the trip log is mailed out with a short questionnaire to collect some of the information normally collected during the CATI.

The territorial component of the survey consists of two postcards. One is mailed to the respondents at the beginning of the quarter and the other is mailed at the end of the quarter. The first postcard asks respondents to record the odometer reading at the beginning of the first day of the quarter. All those returning the first postcards are mailed second postcards asking them to record the odometer reading at the beginning of the first day of the next quarter. These two odometer readings allow the calculation of the distance the vehicle was driven during the quarter.

Survey collection began on February 1, 1999. Only eight provincial / territorial vehicle registration lists were received in time to be included in the sample at that time, but over the remainder of 1999, the other lists were received. Starting October 1, 1999, vehicles from all provinces and territories were included in the survey.

The CVS provides annual and quarterly estimates of road activity for vehicles registered in Canada. The estimates are provided by type of vehicle and other variables, such as driver and vehicle characteristics, time of day and season.

Users who require additional information from Statistics Canada can obtain it from the Transportation Division upon request by phoning 1 866 500-8400 or e-mailing [transportationstatistics@statcan.ca](mailto:transportationstatistics@statcan.ca).



### 3. Concepts and definitions

#### 3.1 The population of interest

The *in-scope vehicles* for the CVS include all motor vehicles except motorcycles, off road vehicles (e.g., snowmobiles, dune buggies, amphibious vehicles) and special equipment (e.g., cranes, street cleaners, snowplows and backhoes) registered in Canada anytime during the survey reference period that have not been scrapped or salvaged.

The *population of interest* consists of vehicle-days composed from the in-scope vehicles and the days within the survey reference period.

#### 3.2 Definitions of variables in tables

*Vehicle-kilometres* is the distance traveled by vehicles on roads.

*Passenger-kilometres* is the sum of the distances traveled by individual passengers. Trucks with gross vehicle weight of 4.5 tonnes or more (see the *Vehicle type* definition in section 3.3) and urban buses were not required to report passengers. Therefore, these passengers are not included in the estimates of passenger-kilometres. Also the number of passengers is calculated as the average of the number of passengers at the beginning of each trip and the number of passengers at the end of each trip (see the *Trip* definition in section 3.4) plus the driver.

*Fuel purchased* is the amount of fuel purchased to operate vehicles. This includes purchases for the off-road operation of the vehicle. However, these purchases are considered negligible.

*The number of vehicles on the registration lists* is the average number of the registered vehicles in the registration lists at the beginning and at the end of the reference period.

*The number of vehicles in scope* is an estimate of the average number of vehicles registered during the quarter based on the lists from jurisdictions and the survey responses. This number slightly differs from the previous one because we incorporate into it all our findings from the survey. Note that this number includes vehicles used and not used on the roads during the reference period.

#### 3.3 Definitions of vehicle characteristics

*Vehicle type* is the classification created for CVS based on the information available on the vehicle registration lists. There are four vehicle types. *Buses* are identified first. The remaining vehicles are then divided into three weight types: *light vehicles* with gross vehicle weights below 4.5 tonnes, *trucks* with gross vehicle weights of *4.5 tonnes or more and less than 15 tonnes*, and *trucks* with gross vehicle weights of *15 tonnes or more*.

The respondent determines *vehicle body type*. The respondent is asked to choose among: car, station wagon, van, sport utility vehicle, pick-up, straight truck, truck-tractor, bus and other. Missing or unusual responses are verified against registration lists, if possible.

*Fuel type* is derived based on the information available on the registration lists. All vehicles are divided into three classes: vehicles powered by gasoline, vehicles powered by diesel fuel and vehicles powered by other energy source.

*Vehicle model year* is derived based on the information available on the registration lists.

### 3.4 Definitions of vehicle usage characteristics

The CVS definition of a *Trip* determines the trip characteristics. The definition of what delimits a trip depends on the *vehicle type*:

For *buses*, if any of the following events happened:

- a stop of more than 30 minutes
- a change of driver
- a change in the type of bus service
- all the passengers have been dropped off and another passenger trip begins (does not apply to scheduled urban buses)

For *light vehicle*, if any of the following events happened:

- a stop of more than 30 minutes
- a change of driver
- a change in the main trip purpose

For *vehicles (trucks) weighing 4.5 tonnes or more* if any of the following events happened:

- a stop of more than 30 minutes
- a change of driver
- a change of purpose or use
- a change in the truck configuration
- a change in the status of the load from loaded to unloaded or the reverse

For each trip the respondent provides the following information:

- Beginning and end times and dates of the trip that are used to determine the *time of day* and *day of week* the trip takes place.
- *Driver age group* and *driver sex*.
- The *trip purpose* determined by the respondent. If there were several purposes for the trip, the respondent is asked to indicate the main purpose of the trip. Multiple trip purposes are not allowed. The choice of purpose is specific to the vehicle type.
- If *dangerous goods* are carried (as defined by the Transportation of Dangerous Goods Act). Does not apply to buses.
- *Number of kilometres traveled on roads with posted speed limit of 80 km/h or more*
- *Age group (0 - 4, 5 - 14 and 15 years and over) of passengers and the number of passengers within each group*, to calculate passenger-km (urban buses are excluded). Passenger age information is collected only for light vehicles. See 3.2. For all other vehicles we collect only the total number of passengers.
- *Truck configuration* for vehicles (trucks) weighing 4.5 tonnes or more.
- Cost (for light vehicles and buses) or quantity (for trucks and buses) of *Fuel purchased*.

## 4. Methods

CVS has been designed as a quarterly survey. The survey design also allows the calculation of annual estimates based on the data collected during the four quarters.

### 4.1 Survey design

#### 4.1.1 Survey population

The survey population was derived from the 13 jurisdiction vehicle registration lists (ten Provincial and three Territorial Governments) created three months before the reference period. The sample for this quarter was drawn from lists of motor vehicles with valid registrations in any province or territory available in April 2003. Motorcycles, off-road vehicles (e.g., snowmobiles, dune buggies, amphibious vehicles) and special equipment (e.g., cranes, street cleaners, snowplows and backhoes) are excluded from the survey. This population differs from the population of interest; e.g., vehicles that were registered after April 2003 are not included.

The thirteen incoming lists underwent thorough preparation procedure:

- First, out-of-scope vehicles are removed (trailers, motorcycles, construction equipment, parade vehicles, motor homes, etc.) from each list.
- Second, vehicles with expired registration are removed from each list.
- Then, records with duplicate Vehicle Identification Numbers (VIN) within each list are removed leaving the one updated most recently.
- Last, records in each file with irregular data are verified.

The last set of processed lists, before the beginning of the reference period, consisted of the twelve lists provided in April 2003 to Statistics Canada for CVS and the most recent list available for Quebec created in January 2003. This set of prepared vehicle lists and the set of days within the third quarter of 2003 constitute the survey population.

#### 4.1.2 Sample design

All vehicles from the survey population were stratified (grouped) into 104 strata. First, the vehicles were stratified into four vehicle types (buses, light vehicles, and two groups of trucks, see 3.3) and 13 jurisdictions (ten provinces and three territories). Then, for efficiency of estimates, they were further divided into two vehicle-age strata of newer and older vehicles.

Next, a sample of vehicles (first stage sample) was selected from the survey population. A sample from each stratum was selected. To minimize respondent burden, no vehicle is selected more than once during any consecutive four quarters for provinces (two consecutive quarters for territories) and the three characters of the postal code were used to spread the sample over all regions.

Subsequently, seven consecutive days starting within the quarter were randomly assigned (second stage) to each vehicle selected at the first stage. Within each stratum, the first reporting day was evenly spread over the quarter to ensure a uniform number of responses over time and for each day of the week. This step was not applied to the vehicles registered in the three territories since only odometer readings are collected (see 2.).

Since the sample was selected in two stages, the sampling weight (see 6. for definition) was also calculated in two steps. The first-stage sampling weight was calculated for each vehicle in the first-stage sample. Then the second-stage sampling weight was calculated for each vehicle-day selected from all days within the reference period. Finally, these two weights were multiplied together to obtain the final weight for a vehicle-day. The weighted values are obtained by multiplying the final weights and the collected values. They were aggregated to produce the estimates.

### 4.1.3 Sample size

A total of 4,999 vehicles out of 18,146,701 from the survey population were drawn for the ten provinces. Another 2,598 vehicles out of 47,925 were included in the sample for the three territories.

## 4.2 Data collection and processing

### 4.2.1 Data collection

The data collection for the vehicles sampled in the ten provinces is different from the one for the vehicles sampled in the territories.

#### Provincial collection

The registered owners of the sampled vehicles were telephoned and interviewed (Computer Assisted Telephone Interview, or CATI). During the CATI interview the following information is collected about each sampled vehicle: vehicle type, fuel type used, distance driven last week, some information about anticipated vehicle usage during the following six weeks, current odometer reading, and passenger capacity for buses. Then the respondent was asked to complete a seven-day trip log. If the respondent agreed to complete a trip log, personal information such as name and address were obtained in order to mail out a trip log for the vehicle.

The log type depended on the type of vehicle. There were three types of logs: a bus log, a light vehicle log and a log for the two remaining vehicle types (trucks). In all cases, the respondents were requested to record information about all the trips made in the selected vehicle over the assigned seven-day period. The collected data included information about each trip: time and date of the beginning and the end, length, purpose, number and age group of passengers, sex and age group of the driver, fuel purchases, if dangerous goods were carried, number of kilometres traveled on roads with posted speed limit of 80km/h or more, and for trucks, their configuration.

If the respondent could not be contacted by phone, a trip log with a short additional questionnaire (to collect some of the information normally collected during the CATI) was mailed out.

To increase the number of responses, respondents were contacted a second time, either by phone or by mail. On the first or second day of the log, an attempt was made to phone each vehicle owner, who agreed during the CATI to fill out the log, to answer any questions the respondent might have. Later, an attempt was made to contact by phone or mail everyone who did not return logs. Some of the large fleets of vehicles with several vehicles in the sample had special arrangements to lower their response burden.

#### Territorial collection

The registered owners of the selected vehicles were mailed postcards and asked to provide two odometer readings, one at the beginning of the quarter and another at the beginning of the next quarter and information about the vehicle status (owned, sold, scrapped).

#### 4.2.2 Edit and imputation

Once all necessary information for the survey was collected, a series of verifications took place to ensure that the records were consistent and that collection and capture of the data did not introduce errors. Reported data were examined for completeness and consistency using automated edits coupled with manual review. Outliers, i.e., respondents reporting extremely large values, were processed manually.

Missing values and data found in error were imputed by another automated system. The system imputed the data using different imputation rules depending on the vehicle, available information and the type of data to be imputed. For example, the data can be imputed based on other responses for the same vehicle or by using data from a similar vehicle. The imputed data were then again examined for completeness and consistency. At the end of this process, every vehicle had seven days of trips.

A complete description of the procedures applied to the survey data is available upon request from the Transportation Division of Statistics Canada.

#### 4.2.3 Estimation

Since the survey population differs from the population of interest, several corrections were done to assure that the estimates correspond (as closely as possible) to the population of interest. The sampling weights derived from the sample design were adjusted and improved using updated registration lists. This was possible because, during the passage of time since the sample was selected, a set of prepared vehicle lists was obtained for the beginning and for the end of the reference quarter. To improve the estimates for the vehicles registered in the ten provinces: all the days were further stratified into working days and holidays (or non-working days, including weekends). Second stage sampling weights were adjusted so that every day of vehicle activity within the same stratum contributed with equal weight to the total estimate. The final set of weights reflected as closely as possible the characteristics of the vehicle population during the reference period.

The following estimates of totals are available:

- vehicle counts by province and territory;
- vehicle-kilometres by province and territory;
- passenger-kilometres by province;
- fuel purchased, Canada level only;
- cross tabulations of vehicle-counts, vehicle-kilometers and passenger-kilometers by a number of variables (described in Concepts and Definitions), such as body type, truck configuration, driver characteristics, time of day, day of week, etc. by province.

## 5. Data quality

This section describes factors that affect the data quality and why they should be considered when using the CVS estimates.

### 5.1 Sources of errors

While considerable effort was made to ensure a high standard throughout all survey operations, the resulting estimates are inevitably subject to a certain degree of error. The total survey error is defined as the difference between the survey estimate and the true population value for which the survey estimate aims at. The total survey error consists of two types of errors: sampling and non-sampling errors.

### 5.2 Sampling error

When a sample is selected from a population, estimates based on the sample data may not be exactly the same as what would be obtained from a census of that population. The two results will likely differ since only data for sampled units are used. In the case of a census, there is no sampling error.

The difference between the estimates from a sample survey and a census conducted under the same conditions is referred to as the sampling error of a survey estimate. Factors such as the sample size, the sample design, the variability of the population characteristic under study and the estimation method affect the sampling error. If the population is very heterogeneous like the population of registered motor vehicles, a large sample size is needed to obtain reliable estimates.

The sampling error is measured by a statistical quantity called the standard error. This quantity reflects the expected variability of the survey estimate of a particular population characteristic if repeated sampling is carried out. The true value of the standard error is, of course, not known but can be estimated from the sample. The estimated standard error is used, in this publication, in terms of a relative measure called the coefficient of variation (or CV). This measure is simply the estimated standard error expressed as a percentage of the value of the survey estimate. Therefore, a smaller CV indicates better reliability of the estimate.

### 5.3 Non-sampling errors

The sampling error is only one component of the total survey error. All other errors arising from all phases of a survey are called non-sampling errors. As the sample size becomes closer to the population size, the sampling error component of the total survey error is expected to decrease. However, this is not necessarily true for the non-sampling error component. For example, this type of error can arise when a respondent provides incorrect information or does not answer certain questions, when a unit in the population of interest is omitted or covered more than once, when a unit that is out-of-scope for the survey is included by mistake or when errors occur in data processing, such as coding and capture errors.

Some non-sampling errors will cancel over a large number of observations, but systematically occurring errors (i.e. those that do not tend to cancel) will contribute to a bias in the estimates. For example, in the case of CVS, if individuals that use their vehicles more than an average person consistently tend not to respond to the survey, then the resulting estimate of the total vehicle-kilometres will be below the true population total. Any such biases are not reflected in the estimates of standard error.

The non-sampling error as a whole is only one part of the total survey error but its contribution may be important. To minimize the effect of this type of error, a quality assurance program is carried out for each survey. For instance,

follow-ups of nonrespondents are conducted to obtain information from the total nonrespondents or to complete partially unanswered questionnaires for questions that are deemed essential. Various quality assurance procedures are exercised at the data capture step. The data editing procedures identify some inconsistencies in the data structure and the imputation procedures correct the identified inconsistencies.

In general, non-sampling errors are difficult to quantify. Special studies must be conducted to estimate them. However, certain measures such as response and imputation rates are easily obtained and can be used as indicators of the non-sampling errors. Different types of non-sampling errors are discussed below.

### 5.3.1 Coverage errors

Coverage errors arise when the survey population does not adequately cover the population of interest. As a result, certain units belonging to the population of interest are either excluded (undercoverage), or counted more than once (overcoverage). In addition, out of scope units may be present in the survey population (overcoverage).

The following sources of coverage errors for CVS were observed:

- Errors in the classification variables of the survey may result in either under- or overcoverage of the registered vehicles.
- The sample is drawn from the list created three months prior to the beginning of the reference period. Thus the vehicles registered after the list was created and before the end of the reference period cannot be drawn into the sample.
- A vehicle list from any jurisdiction that was not created on time or did not arrive at all results in even larger undercoverage since an older list has to be used for sampling.
- A vehicle list created early causes overcoverage.
- A vehicle that has been scrapped or salvaged and remained on the list causes overcoverage.
- The survey population (see 4.1.1) can contain vehicles with the same Vehicle Identification Number (VIN) in more than one province. Since every vehicle has a unique VIN this is likely to cause some overcoverage and consequently overestimation.
- A vehicle that was registered and subsequently unregistered between two consecutive registration lists causes undercoverage.

Thus CVS is subject to some degree of under and over coverage. The estimation procedure is designed to compensate for the part of the under- and over coverage that has been determined. The rates of out-of-scope vehicles among all units sampled for the reference period is in the table in section 5.4.1.

Since we assume that the respondent is right (unless we have hard evidence to the contrary) the corrections at the estimation stage are mostly based on the respondent statements.

### 5.3.2 Response errors

Response errors occur when a respondent provides incorrect information due to a misinterpretation of the survey questions or lack of correct information, gives wrong information by mistake, or is reluctant to disclose the correct information. Large response errors are likely to be caught during editing. However, others may simply go through undetected.

Few response errors were discovered during editing of the data.

### 5.3.3 Nonresponse errors

Nonresponse errors can occur when a respondent does not respond at all (total nonresponse) or responds only to some questions (partial nonresponse). These errors can have a serious effect if the nonrespondents are systematically different in survey characteristics from the respondents and/or the nonresponse rate is high. See the response rate table in section 5.4.1.

### 5.3.4 Processing errors

Apart from coverage, response and nonresponse errors described above, errors that occur during the processing of the data constitute another component of the non-sampling error. Processing errors can arise in data capture, coding, transcription, editing, imputation, outlier detection and treatment, and other types of data handling.

A coding error occurs when a field is coded erroneously because of a misinterpretation of the coding procedures or a bad judgment (e.g. errors in commodity coding). A data capture error occurs when the data are misinterpreted or keyed incorrectly.

Once data are coded and captured, they are subject to editing and imputation of missing or erroneous values. The quality of the data used in the estimation depends on the amount of imputation and the difference between the imputed and the true, but unknown, values. The imputation system could result in bias of the estimates. This can happen due to wrong assumptions or due to inability to impute. For example, in CVS, it is impossible to detect, for vehicles that travel only a small distance during the reported week, fuel purchases that are missing or entered in error.

## 5.4 Measuring quality

This section presents some indicators of the data quality of the CVS estimates.

### 5.4.1 Response rates

The response rate is a function of the number of vehicles that responded to the survey. Several response rates are provided in the table below. This rate is defined as the number of vehicle-days for which respondents gave complete or partial (vehicle-kilometres only) answers to the survey divided by the total number of in-sample and in-scope vehicle-days.

PROVINCES	Vehicle-kilometres and trip characteristics reported			Only vehicle-kilometres reported (trip characteristics imputed)			Vehicles out of scope	Contact made but no data
	All	0 km	Non - 0 km	All	0 km	Non - 0 km		
Light vehicles	26%	11%	15%	32%	6%	26%	4%	5%
Trucks 4.5t – 15t	23%	17%	6%	19%	6%	13%	5%	12%
Trucks 15t or more	29%	19%	10%	23%	7%	16%	6%	16%
Buses	36%	29%	7%	1%	0%	1%	7%	21%

TERRITORIES	Vehicle-kilometres and trip characteristics reported			Vehicle-kilometres reported			Vehicles out of scope	Contact made but no data
	All	0 km	Non - 0 km	All	0 km	Non - 0 km		
Light vehicles	N/A	N/A	N/A	15%	1%	14%	6%	9%
Trucks 4.5t – 15t	N/A	N/A	N/A	11%	1%	9%	6%	13%
Trucks 15t or more	N/A	N/A	N/A	12%	1%	12%	17%	8%
Buses	N/A	N/A	N/A	7%	0%	7%	11%	12%

The low level of response may lead to biased results if the characteristics of interest of the nonrespondents are different than those of the respondents.



### 5.4.2 Relative imputation rates and percentage of vehicle days imputed

The relative imputation rate is defined as the proportion of the corresponding published estimate that is accounted for by imputed data. For example, if the total published estimate is 25 million, composed of 20 million from non-imputed data and 5 million from imputed data, then the relative imputation rate is .2 (5 million divided by 25 million) or 20%. The lower the relative imputation rates are, the more reliable the published estimates are.

With the data collected during the CATI interview (past vehicle usage), the relative imputation rate of the data coming out of the imputation process was lower for vehicle-km, and much higher for other vehicle usage characteristics.

The relative imputation rates were calculated for each of the estimates and used to establish a quality indicator for each estimate. The relative imputation rates for estimates could be obtained from the Transportation Division of Statistics Canada upon request.

The relative imputation rate is usually directly linked to the response rates and the quality of estimates. A high imputation rate usually leads to the underestimation of sampling error and may also cause a bias.

The percentage of vehicle-days imputed (reported) is defined as the proportion of vehicle-days that are imputed (reported) to total number of vehicle days:

PROVINCES	Vehicle days reported			Vehicle days imputed		
	All	0 km	Non - 0 km	All	0 km	Non - 0 km
Light vehicles	45%	19%	26%	55%	10%	45%
Trucks 4.5t – 15t	54%	41%	13%	46%	15%	31%
Trucks 15t or more	56%	38%	19%	44%	13%	31%
Buses	97%	79%	18%	3%	0%	3%

TERRITORIES	Vehicle km reported			Vehicle km imputed		
	All	0 km	Non - 0 km	All	0 km	Non - 0 km
Light vehicles	100%	5%	95%	N/A	N/A	N/A
Trucks 4.5t – 15t	100%	12%	88%	N/A	N/A	N/A
Trucks 15t or more	100%	6%	94%	N/A	N/A	N/A
Buses	100%	0%	100%	N/A	N/A	N/A

### 5.4.3 Coefficient of variation

As a measure of the sampling error of the estimates, the estimated coefficients of variation (CV) were calculated. CV's for estimates may be obtained from the Transportation Division of Statistics Canada upon request. Note that the calculated CV estimates compensate partially for the fact that some of the data were imputed.

#### 5.4.4 Quality indicator

The CV and the relative imputation rate should be considered simultaneously to make an assessment of the reliability of an estimate. To assist the user in evaluating the potential effect of nonresponse, imputation and sampling error, an all-embracing quality indicator accompanies every estimate. The quality indicator takes into account simultaneously the CV and the relative imputation rate.

Quality Symbol	C.V. equivalent	Explanation of estimate quality
<b>A</b>	Less than 5%	Excellent
<b>B</b>	5% to 10%	Very good
<b>C</b>	10% to 15%	Good
<b>D</b>	15% to 20%	Acceptable
<b>E</b>	20% to 35%	Use with caution
<b>F</b>	35% or more	Too unreliable to be published

The quality of counts (direct from registration lists) not accompanied by a quality symbol is good or better.

## 5.5 Notes for historical comparison

Beginning with Quarter 2, 2003, vehicles that were insured but not registered were removed from the registration lists for Manitoba. As a result, some estimates for Manitoba may be lower than the estimates from previous quarters.

Beginning with Quarter 4, 2001, vehicles that were registered but did not have license plates were removed from the registration lists for Quebec. As a result, some estimates for Quebec may be lower than the estimates from previous quarters.

Beginning with Quarter 1, 2001, the following changes were made and may affect comparability with previous quarters:

- Prior to this quarter, duplicate records found within the same list and duplicate records found in more than one list were removed. Starting in this quarter, duplicate records were removed from within each list only. This change may cause some overcoverage and consequently overestimation.
- Type of fuel used and body type are collected for the territories. Consequently, the four tables (pages: 28, 29, 34, 36) now include the territories.
- The truck logs were changed in 2001 in order to collect passenger information for trucks. This change means that passenger-kilometres are now estimated for all vehicles, except urban transit buses, for all the provinces (but not for territories).
- The truck logs were also changed in 2001 in order to collect distance travelled on roads with posted speeds of 80 kilometres per hour or more. This change means that this information is now estimated for all vehicle types in all provinces (but not for the territories).

The following change was made in the third quarter of 2000 and may affect comparability with previous quarterly results:

- Owners of buses and trucks registered in the territories are now sent two postcards to record odometer readings at the start and end of the quarter. This process was always used for light vehicles in the territories and replaces the previous method of sending only one postcard at the end of the quarter and requesting that bus and truck owners rely on maintenance records to provide odometer readings for the start of the quarter.

The following changes were made in the first quarter of 2000 to improve the quality of the survey by diminishing non-sampling errors.

- The changes that affect comparability with 1999 results:
  - The trip purpose choices (for all vehicle types) were changed. The purpose is now based on the destination of the trip. Thus the results from 2000 and 1999 are not comparable for this item.
  - Passenger-kilometers were not collected for trucks in 2000.
- The changes that may affect comparability with the 1999 results:
  - A new log was developed for survey year 2000 for all trucks. In 1999 trucks with gross vehicle weights of 4.5 tonnes or more and less than 15 tonnes had a different log than trucks with gross vehicle weights of 15 tonnes or more.
  - The fuel purchased question was attached to each trip for the 2000 survey year for trucks. Previously it was recorded separately from the trips.

## 6. Glossary

*Population of interest:* the collection of all units (e.g., vehicle-days) for which the information is required.

*Survey Population:* the collection of all units (e.g., vehicle-days) for which the information can be realistically provided to the survey. The survey population may differ from the population of interest due to the operational difficulty of identifying all the units that belong to the population of interest. A list of all units in the survey population with their classification information (e.g., geographical, vehicle characteristics, date) is used for sample design, selection and estimation.

*Stratification:* a non-overlapping partition of the survey population into relatively homogeneous groups with respect to certain characteristics such as geographical classification, size, etc. These groups are called strata and are used for sample allocation and selection.

*Sampling weight:* a raising factor is attached to each sampled unit (vehicle-day) to obtain estimates for the population from a sample. The basic concept of the sampling weight can be explained by using the representation rate. For example, if 2 units are selected out of 10 population units at random, then each selected unit represents 5 units in the population including itself, and is given the sampling weight of 5. A survey with a complex sample design like CVS requires a more complicated way of calculating the sampling weight. However, the sampling weight is still equal to the number of units in the registration lists the sampled unit represents.

*Editing:* the application of checks that identify missing, invalid or inconsistent entries or that point to data records that are potentially in error. Some of these checks involve logical relationships that follow directly from the concepts and definitions. Others are more empirical in nature or are obtained as a result of the application of statistical tests or procedures.

*Imputation:* the process used to resolve problems of missing, invalid or inconsistent responses identified during editing. This is done by changing some of the responses or missing values on the record being edited to ensure that a plausible, internally coherent record is created. Some problems are eliminated earlier through contact with the respondent or through manual study of the questionnaire. It is generally impossible to resolve all problems at these early stages due to concerns of response burden, cost and timeliness. Imputation is then used to handle remaining edit failures, since it is desirable to produce a complete and consistent file containing imputed data. Although, imputation can improve the quality of the final data by correcting for missing, invalid or inconsistent responses, some methods of imputation do not preserve the relationships between variables or can actually distort underlying distributions.

## Number of vehicles on the registration lists by type of vehicle and jurisdiction

	Vehicle type				
	Vehicles up to 4.5t	Trucks 4.5t - 15t	Trucks 15t or more	Buses	Total
Jurisdiction					
Newfoundland and Labrador	251 757	4 132	3 390	1 194	260 473
Prince Edward Island	74 982	1 826	2 825	69	79 702
Nova Scotia	530 840	9 376	8 027	1 885	550 128
New Brunswick	446 162	7 834	4 761	2 718	461 475
Quebec	4 175 719	60 532	37 236	17 173	4 290 660
Ontario	6 698 801	86 187	112 229	28 469	6 925 686
Manitoba	616 274	10 366	14 105	3 716	644 461
Saskatchewan	659 205	45 105	25 811	3 876	733 997
Alberta	2 113 451	95 704	69 278	12 773	2 291 206
British Columbia	2 317 800	75 692	14 550	8 270	2 416 312
Yukon Territory	24 806	1 580	1 279	287	27 952
Northwest territories	20 616	638	1 019	101	22 374
Nunavut	2 930	249	148	15	3 342
Total - Canada	17 933 343	399 221	294 658	80 546	18 707 768

Due to rounding, the numbers may not add up and may differ slightly among the tables.

Number of vehicles on the registration lists by jurisdiction and vehicle model year for

vehicles up to 4.5t

Vehicle Model Year	Jurisdiction													TOTAL
	Newfound-land and Labrador	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Yukon Territory	Northwest Territories	Nunavut	
Earlier than 1986	6 012	3 883	23 838	18 271	129 330	265 468	53 537	102 884	225 991	245 233	3 830	1 981	193	1 080 451
1986	2 181	1 240	7 118	6 143	50 751	80 714	15 853	22 028	56 060	69 795	860	454	54	313 251
1987	3 033	1 752	9 532	8 385	74 147	111 824	16 344	19 437	51 976	74 917	927	432	67	372 773
1988	6 239	2 816	14 809	13 828	120 919	180 452	21 596	24 996	73 012	94 135	1 144	682	119	554 747
1989	7 789	3 386	18 026	16 614	142 849	227 848	23 771	26 382	82 621	108 338	1 240	740	105	659 709
1990	8 614	4 030	21 390	19 142	173 901	263 955	27 802	28 822	92 884	124 492	1 247	814	103	767 196
1991	10 489	4 072	23 287	21 097	199 598	290 360	30 656	30 921	97 832	124 352	1 185	815	127	834 791
1992	12 611	4 952	28 103	25 788	241 338	339 137	33 208	32 139	98 210	128 790	1 114	768	163	946 321
1993	14 850	4 989	28 996	24 563	228 259	342 774	30 804	29 979	92 024	120 043	1 111	720	160	919 272
1994	15 852	5 106	31 140	26 113	223 366	355 014	31 021	32 389	97 727	115 706	1 147	854	176	935 611
1995	15 257	5 408	32 416	27 298	239 297	390 820	34 100	34 527	104 109	119 523	1 191	908	171	1 005 025
1996	11 766	4 422	27 627	22 674	193 459	329 989	30 132	28 753	88 757	95 463	916	766	129	834 853
1997	15 937	5 313	34 556	27 701	242 779	428 596	39 514	38 021	120 761	122 824	1 245	1 107	192	1 078 546
1998	18 271	5 444	38 299	31 049	266 536	470 384	41 437	38 697	135 424	122 670	1 103	1 228	191	1 170 733
1999	18 040	4 770	35 401	28 603	260 040	453 122	35 732	31 613	115 012	109 682	1 031	1 257	198	1 094 501
2000	21 807	4 829	40 578	34 646	320 956	546 422	38 135	34 705	129 088	125 900	1 068	1 611	198	1 299 943
2001	21 069	2 838	34 131	28 959	322 867	512 244	35 813	33 565	137 098	125 675	1 291	1 757	211	1 257 518
2002	24 261	3 313	42 669	34 753	388 300	580 694	43 130	38 617	162 811	154 367	1 537	1 973	247	1 476 672
2003	17 107	2 263	36 144	28 839	336 264	497 924	32 171	29 509	143 664	128 312	1 552	1 712	123	1 255 584
2004	550	156	2 779	1 691	18 662	31 058	1 516	1 218	8 390	7 584	67	36	0	73 707
Unknown	21	0	0	5	2 099	0	0	0	0	0	0	0	1	2 126
TOTAL	251 756	74 982	530 839	446 162	4 175 717	6 698 799	616 272	659 202	2 113 451	2 317 801	24 806	20 615	2 928	17 933 330

Due to rounding, the numbers may not add up to the totals and may differ slightly among the tables.

Number of vehicles on the registration lists by jurisdiction and vehicle model year for

trucks 4.5t - 15t

Vehicle Model Year	Jurisdiction													TOTAL
	Newfound-land and Labrador	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatche-wan	Alberta	British Columbia	Yukon Territory	Northwest Territor-ies	Nunavut	
Earlier than 1986	787	925	2 157	1 118	11 033	6 583	2 879	34 613	36 051	13 467	544	142	46	110 345
1986	156	86	286	188	2 196	1 822	385	698	2 346	1 848	34	20	9	10 074
1987	150	81	378	193	2 863	2 193	332	508	1 967	1 704	35	10	18	10 432
1988	238	88	427	247	3 659	3 018	394	521	2 723	2 488	59	23	14	13 899
1989	195	96	403	240	2 951	3 076	373	453	2 828	2 789	62	24	12	13 502
1990	215	65	433	239	2 988	3 394	504	580	2 933	3 121	57	36	8	14 573
1991	207	52	309	244	2 007	2 413	440	520	2 252	2 499	40	22	8	11 013
1992	150	39	304	288	1 878	2 500	371	475	2 187	2 528	46	19	10	10 795
1993	153	43	340	336	2 102	3 148	416	521	2 300	3 031	34	19	13	12 456
1994	205	58	344	415	2 662	3 938	412	552	2 707	3 352	53	24	11	14 733
1995	262	58	561	459	3 390	5 071	566	721	3 332	3 884	34	41	29	18 408
1996	146	25	335	353	2 162	3 634	401	445	2 307	2 726	35	21	6	12 596
1997	197	39	427	434	2 265	5 087	501	660	3 754	3 675	51	34	11	17 135
1998	160	21	481	435	2 808	5 231	403	626	3 527	3 157	49	25	12	16 935
1999	225	50	584	609	3 893	7 859	495	602	4 381	4 099	72	40	13	22 922
2000	199	29	474	411	3 244	6 922	352	512	3 896	3 778	68	41	11	19 937
2001	168	24	400	483	2 497	7 049	406	699	5 858	4 629	99	33	5	22 350
2002	201	22	377	461	2 315	6 763	377	701	5 081	5 234	87	31	6	21 656
2003	107	24	329	662	2 413	6 170	328	677	5 022	7 468	120	29	6	23 355
2004	4	0	27	19	495	316	32	22	251	218	1	4	0	1 389
Unknown	4	0	0	0	708	0	0	0	0	0	0	0	0	712
TOTAL	4 129	1 825	9 376	7 834	60 529	86 187	10 367	45 106	95 703	75 695	1 580	638	248	399 217

Due to rounding, the numbers may not add up to the totals and may differ slightly among the tables.

Number of vehicles on the registration lists by jurisdiction and vehicle model year for  
trucks 15t or more

Vehicle Model Year	Jurisdiction													TOTAL
	Newfound-land and Labrador	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Yukon Territory	Northwest Territories	Nunavut	
Earlier than 1986	447	1 059	935	1 001	1 007	6 607	1 690	9 136	17 549	2 820	261	161	21	42 694
1986	112	186	205	222	383	2 311	329	943	1 763	418	28	20	0	6 920
1987	142	223	293	355	607	3 222	401	972	1 487	482	19	14	5	8 222
1988	199	209	318	294	819	3 453	391	1 056	2 145	540	31	21	1	9 477
1989	207	162	320	264	697	3 625	380	895	1 952	525	28	37	3	9 095
1990	123	133	223	283	637	3 453	336	841	2 154	855	41	33	4	9 116
1991	120	85	143	150	386	2 094	218	580	1 606	482	24	33	9	5 930
1992	102	49	149	117	593	2 124	265	554	1 351	639	40	25	5	6 013
1993	103	60	235	192	908	3 125	469	875	1 824	592	32	24	2	8 441
1994	165	84	379	218	1 749	4 697	694	1 107	2 901	742	50	44	8	12 838
1995	233	142	556	296	2 701	7 843	816	1 461	3 695	814	53	65	14	18 689
1996	194	89	420	180	1 902	5 679	793	1 033	2 940	745	66	45	9	14 095
1997	165	36	346	157	1 996	5 839	713	1 020	3 548	802	50	62	5	14 739
1998	234	64	614	219	3 645	10 144	1 096	1 317	4 941	756	85	87	11	23 213
1999	217	75	686	238	4 179	11 715	1 234	1 009	4 034	725	80	75	23	24 290
2000	238	74	853	201	5 501	13 271	1 501	1 004	4 084	659	114	82	7	27 589
2001	129	35	449	119	3 182	8 118	903	766	4 008	662	109	72	7	18 559
2002	99	11	295	93	2 067	5 605	571	463	3 219	565	70	53	4	13 115
2003	125	33	457	133	3 425	7 346	948	607	3 101	573	73	57	10	16 888
2004	31	12	152	27	797	1 960	357	173	978	149	25	9	0	4 670
Unknown	3	0	0	0	54	0	0	0	0	0	0	0	0	57
TOTAL	3 388	2 821	8 028	4 759	37 235	112 231	14 105	25 812	69 280	14 545	1 279	1 019	148	294 650

Due to rounding, the numbers may not add up to the totals and may differ slightly among the tables.



## Number of vehicles on the registration lists by jurisdiction and vehicle model year for

## buses

Vehicle Model Year	Jurisdiction													TOTAL
	Newfound-land and Labrador	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Yukon Territory	Northwest Territories	Nunavut	
Earlier than 1986	34	22	142	904	482	1 614	369	579	2 134	874	42	10	5	7 211
1986	5	3	41	95	154	273	105	109	266	130	3	1	0	1 185
1987	15	2	45	67	117	437	129	271	369	163	1	1	1	1 618
1988	23	1	53	84	182	600	189	181	495	257	5	2	0	2 072
1989	58	2	56	79	325	755	151	210	585	365	4	2	0	2 592
1990	150	2	98	161	510	1 157	126	243	653	394	4	1	1	3 500
1991	181	1	117	75	823	1 389	189	203	569	487	4	0	0	4 038
1992	196	1	73	82	964	1 497	196	167	581	371	6	1	0	4 135
1993	92	0	100	99	847	1 350	180	178	548	327	6	1	0	3 728
1994	57	1	46	36	1 393	1 205	243	114	388	358	10	2	0	3 853
1995	36	1	174	166	897	1 788	176	125	521	451	15	3	1	4 354
1996	26	3	68	26	1 174	1 887	167	151	432	557	12	0	0	4 503
1997	55	0	116	131	1 111	1 542	161	165	671	361	28	2	1	4 344
1998	35	0	205	202	1 059	1 948	195	185	717	601	12	0	0	5 159
1999	71	0	107	95	1 388	2 344	232	225	749	527	6	22	0	5 766
2000	62	2	181	105	1 309	2 603	208	177	811	639	10	9	4	6 120
2001	50	2	82	115	1 452	2 306	134	216	838	591	61	12	1	5 860
2002	30	11	111	112	1 492	1 733	359	209	753	365	16	15	1	5 207
2003	15	1	36	36	994	1 674	174	129	560	376	42	13	0	4 050
2004	4	13	33	47	402	366	35	39	132	75	0	0	0	1 146
Unknown	0	0	0	1	99	0	0	0	0	0	0	0	0	100
TOTAL	1 195	68	1 884	2 718	17 174	28 468	3 718	3 876	12 772	8 269	287	97	15	80 541

Due to rounding, the numbers may not add up to the totals and may differ slightly among the tables.

## Estimates of the

number of vehicles in scope by type of vehicle and jurisdiction

Jurisdiction	Vehicle type									
	Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total	
Newfoundland and Labrador	248 408	A	3 524	B	2 922	B	1 194	A	256 048	A
Prince Edward Island	74 328	A	1 584	B	2 612	B	70	A	78 594	A
Nova Scotia	520 993	A	8 403	B	8 027	A	1 826	A	539 249	A
New Brunswick	438 414	A	5 359	C	4 761	A	1 789	C	450 322	A
Quebec	4 127 619	A	51 071	B	36 526	A	16 025	B	4 231 241	A
Ontario	6 575 119	A	65 820	B	109 179	A	28 033	A	6 778 152	A
Manitoba	587 218	A	8 569	B	13 854	A	3 399	B	613 041	A
Saskatchewan	641 574	A	39 403	B	25 568	A	3 595	B	710 140	A
Alberta	2 070 787	A	82 645	B	68 858	A	11 819	B	2 234 109	A
British Columbia	2 334 989	A	59 876	B	13 759	A	7 558	B	2 416 182	A
Yukon Territory	24 502	A	1 051	B	1 296	A	317	B	27 166	A
Northwest territories	20 514	A	501	B	1 668	A	101	A	22 784	A
Nunavut	2 894	A		F		F		F	2 894	A
Total - Canada	17 667 360	A	327 806	A	289 032	A	75 725	A	18 359 923	A

The symbol beside each estimate classifies its quality: A - excellent, B - very good, C - good, D - acceptable, E - use with caution, F - too unreliable to be published, ... - not applicable, . - not available for any reference period. Due to rounding, the numbers may not add up and may differ slightly among the tables.

## Estimates for Canada of the

number of vehicles in scope by type of vehicle and vehicle model year

Vehicle model year	Vehicle type									
	Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total	
Later than 2000	3 474 171	A	39 048	C	47 277	B	14 080	C	3 574 576	A
1998 - 2000	3 872 276	A	59 100	B	79 220	B	16 586	C	4 027 182	A
1994 - 1997	4 107 855	A	60 144	C	51 411	C	16 828	C	4 236 239	A
1990 - 1993	3 332 144	A	40 954	D	37 052	D	17 664	C	3 427 814	A
Earlier than 1990	2 880 914	B	128 560	B	74 071	B	10 567	D	3 094 112	B
Total	17 667 360	A	327 806	A	289 032	A	75 725	A	18 359 923	A

The symbol beside each estimate classifies its quality: A - excellent, B - very good, C - good, D - acceptable, E - use with caution, F - too unreliable to be published, ... - not applicable, . - not available for any reference period. Due to rounding, the numbers may not add up and may differ slightly among the tables.

## Estimates for Canada of the

number of vehicles in scope by type of vehicle and vehicle body type

Vehicle body type	Vehicle type								
	Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total
Car	10 452 399	A	...	...	...	...	...	10 452 399	A
Station wagon	376 743	D	...	...	...	...	...	376 743	D
Van	2 495 483	B	15 169	E	...	...	F	2 515 009	B
Sport utility vehicle	1 529 034	B	...	...	...	...	...	1 529 034	B
Pickup	2 748 653	B	27 178	E	...	...	...	2 775 830	B
Straight truck		F	272 804	A	120 216	B	...	457 405	B
Tractor trailer		...		F	167 549	A	...	176 731	A
Bus		...		...		...	71 367	A	71 367
Other		F		F		F	...		F
Total	17 667 360	A	327 806	A	289 032	A	75 725	A	18 359 923

The symbol beside each estimate classifies its quality: A - excellent, B - very good, C - good, D - acceptable, E - use with caution, F - too unreliable to be published, ... - not applicable, . - not available for any reference period. Due to rounding, the numbers may not add up and may differ slightly among the tables.

Estimates for Canada of the

number of vehicles in scope by type of vehicle and type of fuel

Fuel type	Vehicle type									
	Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total	
Gasoline	17 287 157	A	129 358	B	28 543	D	11 959	C	17 457 018	A
Diesel	325 895	D	190 123	A	260 446	A	59 941	A	836 406	B
Other		F		F		F	3 825	E	66 499	E
Total	17 667 360	A	327 806	A	289 032	A	75 725	A	18 359 923	A

The symbol beside each estimate classifies its quality: A - excellent, B - very good, C - good, D - acceptable, E - use with caution, F - too unreliable to be published, ... - not applicable, . - not available for any reference period. Due to rounding, the numbers may not add up and may differ slightly among the tables.

## Estimates of

vehicle-km ('000 000) by type of vehicle and jurisdiction

	Vehicle type									
	Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total	
Jurisdiction										
Newfoundland and Labrador	1 000.2	B	14.7	E	38.7	E		F	1 055.7	B
Prince Edward Island	297.5	D	3.7	E	11.2	E		F	312.5	D
Nova Scotia	2 570.2	C	46.6	E	140.6	D		F	2 757.7	C
New Brunswick	1 776.5	B	26.3	E	31.3	E		F	1 837.3	B
Quebec	21 757.7	C	341.9	C	952.7	B	83.8	E	23 136.1	B
Ontario	31 641.7	B	418.5	C	2 059.2	C	54.7	E	34 174.2	B
Manitoba	3 012.1	D	42.1	E	338.4	D	10.4	E	3 402.9	C
Saskatchewan	3 124.7	C	108.1	E	289.5	D		F	3 527.5	B
Alberta	9 384.3	B	538.2	E	869.6	D		F	10 840.3	B
British Columbia	9 384.5	C	260.6	D	71.6	D		F	9 746.3	C
Yukon Territory	119.6	B	3.8	E	30.9	D		F	158.4	B
Northwest territories	75.0	C	1.1	E	33.1	C		F	111.0	B
Nunavut	5.0	C		F		F		F	5.0	C
Total - Canada	84 149.0	A	1 805.5	B	4 866.8	B	243.6	C	91 064.8	A

The symbol beside each estimate classifies its quality: A - excellent, B - very good, C - good, D - acceptable, E - use with caution, F - too unreliable to be published, ... - not applicable, . - not available for any reference period. Due to rounding, the numbers may not add up and may differ slightly among the tables.

## Estimates of

passenger-km ('000 000) by type of vehicle and jurisdiction

	Vehicle type									
	Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total	
Jurisdiction										
Newfoundland and Labrador	1 873.6	C		F		F		F	1 966.7	C
Prince Edward Island	510.2	E		F		F		F	527.4	E
Nova Scotia	4 733.3	E		F		F		F	4 938.8	E
New Brunswick	3 271.3	E		F		F		F	3 385.0	E
Quebec	35 184.3	E	434.0	D	992.8	D		F	37 761.0	E
Ontario	51 340.3	E	716.3	E	2 221.0	E		F	54 729.9	E
Manitoba	6 066.5	E		F	409.9	E		F	6 671.8	E
Saskatchewan	5 769.6	D		F	298.3	E		F	6 240.6	D
Alberta	16 617.4	C	801.2	E	902.3	E		F	18 938.4	C
British Columbia	15 997.9	E	352.7	E		F		F	17 201.5	E
Total - Provinces	141 364.5	E	2 621.0	D	5 131.2	E	3 244.5	E	152 361.2	E

The symbol beside each estimate classifies its quality: A - excellent, B - very good, C - good, D - acceptable, E - use with caution, F - too unreliable to be published, ... - not applicable, . - not available for any reference period. Due to rounding, the numbers may not add up and may differ slightly among the tables. All passenger-km estimates exclude urban transit buses and the territories.

## Estimates for Canada of

vehicle-km ('000 000) by type of vehicle and vehicle model year

Vehicle model year	Vehicle type									
	Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total	
Later than 2000	21 207.8	B	531.8	D	1 109.3	C	61.3	E	22 910.2	B
1998 - 2000	24 068.2	B	513.7	C	2 103.9	B	66.5	E	26 752.2	B
1994 - 1997	17 766.7	B	411.3	D	1 156.9	E	73.0	E	19 408.0	B
1990 - 1993	12 755.5	C	102.4	E	301.8	E	31.9	E	13 191.6	C
Earlier than 1990	8 350.8	C	246.3	E	194.9	E		F	8 802.8	C
Total	84 149.0	A	1 805.5	B	4 866.8	B	243.6	C	91 064.8	A

The symbol beside each estimate classifies its quality: A - excellent, B - very good, C - good, D - acceptable, E - use with caution, F - too unreliable to be published, ... - not applicable, . - not available for any reference period. Due to rounding, the numbers may not add up and may differ slightly among the tables.



Estimates of the provincial total of

passenger-km ('000 000) by type of vehicle and vehicle model year

Vehicle model year	Vehicle type									
	Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total	
Later than 2000	35 917.3	E		F	1 239.8	E		F	38 358.2	E
1998 - 2000	41 333.1	E	721.7	E	2 209.5	E		F	45 954.1	E
1994 - 1997	31 243.6	C	612.5	E		F		F	33 848.2	C
1990 - 1993	20 349.8	E		F		F		F	21 047.7	E
Earlier than 1990	12 520.7	D		F		F		F	13 153.0	D
Total	141 364.5	E	2 621.0	D	5 131.2	E	3 244.5	E	152 361.2	E

The symbol beside each estimate classifies its quality: A - excellent, B - very good, C - good, D - acceptable, E - use with caution, F - too unreliable to be published, ... - not applicable, . - not available for any reference period. Due to rounding, the numbers may not add up and may differ slightly among the tables. All passenger-km estimates exclude urban transit buses and the territories.

## Estimates for Canada of

vehicle-km ('000 000) by type of vehicle and vehicle body type

Vehicle body type	Vehicle type									
	Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total	
Car	47 862.4	B	...	...	...	...	...	...	47 862.4	B
Station wagon	1 565.2	E	...	...	...	...	...	...	1 565.2	E
Van	12 887.2	C	F	...	...	...	F	...	12 953.1	C
Sport utility vehicle	6 919.3	C	...	...	...	...	...	...	6 919.3	C
Pickup	14 621.9	C	F	...	...	...	...	...	14 774.5	C
Straight truck		F	1 524.5	B	1 020.1	E	...	...	2 835.9	C
Tractor trailer		...	F	...	3 846.5	B	...	...	3 929.0	B
Bus		...	...	...	...	...	222.6	C	222.6	C
Other		F	F	...	F	...	...	...	F	F
Total	84 149.0	A	1 805.5	B	4 866.8	B	243.6	C	91 064.8	A

The symbol beside each estimate classifies its quality: A - excellent, B - very good, C - good, D - acceptable, E - use with caution, F - too unreliable to be published, ... - not applicable, . - not available for any reference period. Due to rounding, the numbers may not add up and may differ slightly among the tables.

Estimates of the provincial total of  
passenger-km ('000 000) by type of vehicle and vehicle body type

Vehicle body type	Vehicle type									
	Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total	
Car	77 724.1	E	...	...	...	...	...	...	77 724.1	E
Station wagon	2 898.1	E	...	...	...	...	...	...	2 898.1	E
Van	25 045.7	C	83.7	E	...	...	F	...	25 239.1	C
Sport utility vehicle	10 672.8	E	...	...	...	...	...	...	10 672.8	E
Pickup	24 658.2	E	...	F	...	...	...	...	24 996.1	E
Straight truck	...	F	2 114.5	E	...	F	...	...	3 597.7	E
Tractor trailer	...	...	...	F	4 011.2	E	...	...	4 094.8	E
Bus	...	...	...	...	...	...	3 134.8	E	3 134.8	E
Other	...	F	...	F	...	F	...	...	...	F
Total	141 364.5	E	2 621.0	D	5 131.2	E	3 244.5	E	152 361.2	E

The symbol beside each estimate classifies its quality: A - excellent, B - very good, C - good, D - acceptable, E - use with caution,  
F - too unreliable to be published, ... - not applicable, . - not available for any reference period.  
Due to rounding, the numbers may not add up and may differ slightly among the tables.  
All passenger-km estimates exclude urban transit buses and the territories.

## Estimates for Canada of

vehicle-km ('000 000) by type of vehicle and type of fuel

	Vehicle type									
	Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total	
Fuel type										
Gasoline	81 859.5	A	351.5	E		F	22.3	E	82 557.9	A
Diesel	2 006.1	E	1 434.8	B	4 541.0	B	214.6	C	8 196.5	B
Other		F		F		F		F		F
Total	84 149.0	A	1 805.5	B	4 866.8	B	243.6	C	91 064.8	A

The symbol beside each estimate classifies its quality: A - excellent, B - very good, C - good, D - acceptable, E - use with caution,  
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 Due to rounding, the numbers may not add up and may differ slightly among the tables.

Estimates of the provincial total of

passenger-km ('000 000) by type of vehicle and type of fuel

	Vehicle type									
	Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total	
Fuel type										
Gasoline	137 652.9	E		F		F		F	138 711.1	E
Diesel		F	2 009.4	D	4 804.1	C	2 950.3	E	13 094.2	C
Other		F		F		...		F		F
Total	141 364.5	E	2 621.0	D	5 131.2	E	3 244.5	E	152 361.2	E

The symbol beside each estimate classifies its quality: A - excellent, B - very good, C - good, D - acceptable, E - use with caution,  
 F - too unreliable to be published, ... - not applicable, . - not available for any reference period.  
 Due to rounding, the numbers may not add up and may differ slightly among the tables.  
 All passenger-km estimates exclude urban transit buses and the territories.

## Estimates of the provincial total of

vehicle-km ('000 000) by type of vehicle and day of week

Day of the week	Vehicle type									
	Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total	
Sunday	9 989.8	B	31.3	E	194.9	D	17.8	E	10 233.7	B
Monday	12 190.0	B	309.1	D	684.5	C	45.2	D	13 228.6	B
Tuesday	13 950.0	C	301.3	C	1 114.6	E	46.2	D	15 412.0	C
Wednesday	12 362.9	B	367.0	D	968.5	C	28.0	D	13 726.4	B
Thursday	12 250.0	B	357.4	C	793.3	D	43.1	D	13 443.8	B
Friday	12 474.7	B	331.4	D	793.8	D	39.0	C	13 638.8	B
Saturday	10 732.1	B		F	253.3	D	18.4	E	11 107.1	B
Total	83 949.4	A	1 800.7	B	4 802.8	B	237.6	C	90 790.5	A

The symbol beside each estimate classifies its quality: A - excellent, B - very good, C - good, D - acceptable, E - use with caution, F - too unreliable to be published, ... - not applicable, . - not available for any reference period. Due to rounding, the numbers may not add up and may differ slightly among the tables.

## Estimates of the provincial total of

passenger-km ('000 000) by type of vehicle and day of week

	Vehicle type									
	Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total	
Day of the week										
Sunday	17 800.4	B		F	207.9	E		F	18 355.6	B
Monday	21 576.7	E	418.3	E	710.7	C		F	23 325.3	E
Tuesday	22 520.5	E	442.1	D	1 187.9	E	573.4	E	24 723.8	E
Wednesday	20 585.2	E	544.4	D	1 078.4	D		F	22 590.8	E
Thursday	19 912.7	E	518.6	D	855.4	D	537.3	E	21 823.9	B
Friday	20 353.2	E	470.3	D	830.3	D	593.7	E	22 247.5	E
Saturday	18 615.8	E		F	260.7	D		F	19 294.4	E
Total	141 364.5	E	2 621.0	D	5 131.2	E	3 244.5	E	152 361.2	E

The symbol beside each estimate classifies its quality: A - excellent, B - very good, C - good, D - acceptable, E - use with caution, F - too unreliable to be published, ... - not applicable, . - not available for any reference period. Due to rounding, the numbers may not add up and may differ slightly among the tables. All passenger-km estimates exclude urban transit buses and the territories.

## Estimates of the provincial total of

vehicle-km ('000 000) by type of vehicle and driver age group

	Vehicle type									
	Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total	
Age of driver										
Under 20 years	1 396.1	E		F		F		F	1 539.4	E
20 - 24 years	3 269.9	D		F		F		F	3 525.6	D
25 - 34 years	10 911.2	E	204.9	E	1 234.6	E	14.6	E	12 365.4	E
35 - 44 years	21 702.7	E	352.5	E	1 205.8	D	75.4	E	23 336.3	E
45 - 54 years	21 902.9	B	448.0	D	1 522.6	E	104.3	E	23 977.7	B
55 - 64 years	15 081.5	E	476.6	E	713.3	E	39.4	E	16 310.8	E
65 years and over	9 685.1	C		F		F		F	9 735.3	C
Total	83 949.4	A	1 800.7	B	4 802.8	B	237.6	C	90 790.5	A

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Estimates of the provincial total of  
passenger-km ('000 000) by type of vehicle and driver age group

	Vehicle type									
	Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total	
Age of driver										
Under 20 years	2 550.6	E		F		F		F	2 838.5	E
20 - 24 years	4 501.5	E		F		F		F	4 866.9	E
25 - 34 years	17 389.2	E		F	1 278.1	E		F	19 208.7	E
35 - 44 years	40 098.3	E	454.4	E	1 394.9	D		F	42 711.1	E
45 - 54 years	36 008.8	E	686.3	D	1 572.0	E		F	40 050.0	E
55 - 64 years	24 005.4	E	513.6	E	759.3	E		F	25 765.5	E
65 years and over	16 810.6	C		F		F		F	16 920.5	C
Total	141 364.5	E	2 621.0	D	5 131.2	E	3 244.5	E	152 361.2	E

The symbol beside each estimate classifies its quality: A - excellent, B - very good, C - good, D - acceptable, E - use with caution,  
F - too unreliable to be published, ... - not applicable, . - not available for any reference period.  
Due to rounding, the numbers may not add up and may differ slightly among the tables.  
All passenger-km estimates exclude urban transit buses and the territories.

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 Estimates of the provincial total of

vehicle-km ('000 000) by type of vehicle and sex of driver

	Vehicle type									
	Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total	
Sex of driver										
Male	58 269.1	E	1 777.6	D	4 762.8	C	182.5	D	64 992.0	E
Female	25 680.3	B		F		F	55.0	D	25 798.4	B
Total	83 949.4	A	1 800.7	B	4 802.8	B	237.6	C	90 790.5	A

The symbol beside each estimate classifies its quality: A - excellent, B - very good, C - good, D - acceptable, E - use with caution,  
 F - too unreliable to be published, ... - not applicable, . - not available for any reference period.  
 Due to rounding, the numbers may not add up and may differ slightly among the tables.

Estimates of the provincial total of

passenger-km ('000 000) by type of vehicle and sex of driver

	Vehicle type									
	Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total	
Sex of driver										
Male	100 424.7	E	2 526.5	D	5 061.2	E		F	110 553.2	E
Female	40 939.7	E		F		F	703.7	E	41 808.0	E
Total	141 364.5	E	2 621.0	D	5 131.2	E	3 244.5	E	152 361.2	E

The symbol beside each estimate classifies its quality: A - excellent, B - very good, C - good, D - acceptable, E - use with caution, F - too unreliable to be published, ... - not applicable, . - not available for any reference period. Due to rounding, the numbers may not add up and may differ slightly among the tables. All passenger-km estimates exclude urban transit buses and the territories.

## Estimates of the provincial total of

vehicle-km ('000 000) by type of vehicle and time of day

Time of day	Vehicle type									
	Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total	
00:00 - 05:59	3 305.7	E		F	575.9	E		F	3 972.8	E
06:00 - 11:59	26 257.3	B	820.2	C	1 775.0	C	105.8	C	28 958.3	B
12:00 - 17:59	36 321.9	E	754.0	C	1 614.9	C	98.6	C	38 789.6	B
18:00 - 23:59	18 064.5	E	143.5	E	837.0	E	24.9	E	19 069.8	E
Total	83 949.4	A	1 800.7	B	4 802.8	B	237.6	C	90 790.5	A

The symbol beside each estimate classifies its quality: A - excellent, B - very good, C - good, D - acceptable, E - use with caution, F - too unreliable to be published, ... - not applicable, . - not available for any reference period. Due to rounding, the numbers may not add up and may differ slightly among the tables.

## Estimates of the provincial total of

passenger-km ('000 000) by type of vehicle and time of day

Time of day	Vehicle type									
	Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total	
00:00 - 05:59	5 849.9	E	93.6	E	610.8	E		F	6 683.1	E
06:00 - 11:59	40 424.8	E	1 162.8	D	1 875.3	C	1 524.3	E	44 987.2	E
12:00 - 17:59	60 444.2	E	1 161.2	D	1 719.5	C	1 323.3	E	64 648.1	E
18:00 - 23:59	34 645.7	E	203.4	E	925.7	E		F	36 042.8	E
Total	141 364.5	E	2 621.0	D	5 131.2	E	3 244.5	E	152 361.2	E

The symbol beside each estimate classifies its quality: A - excellent, B - very good, C - good, D - acceptable, E - use with caution, F - too unreliable to be published, ... - not applicable, . - not available for any reference period. Due to rounding, the numbers may not add up and may differ slightly among the tables. All passenger-km estimates exclude urban transit buses and the territories.

Estimates of the provincial total of

vehicle-km ('000 000) by type of vehicle and carrying dangerous goods

	Vehicle type									
	Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total	
Carrying dangerous goods										
Declared - yes		F	152.9	E	403.4	E	...		616.8	E
Declared - no	83 888.9	E	1 647.7	D	4 399.4	D	237.6	C	90 173.7	E
Total	83 949.4	A	1 800.7	B	4 802.8	B	237.6	C	90 790.5	A

The symbol beside each estimate classifies its quality: A - excellent, B - very good, C - good, D - acceptable, E - use with caution,  
 F - too unreliable to be published, ... - not applicable, . - not available for any reference period.  
 Due to rounding, the numbers may not add up and may differ slightly among the tables.

## Estimates of the provincial total of

passenger-km ('000 000) by type of vehicle and carrying dangerous goods

	Vehicle type									
	Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total	
Carrying dangerous goods										
Declared - yes		F	184.4	E	436.9	E	...		681.8	E
Declared - no	141 304.0	E	2 436.7	D	4 694.3	E	3 244.5	E	151 679.4	E
Total	141 364.5	E	2 621.0	D	5 131.2	E	3 244.5	E	152 361.2	E

The symbol beside each estimate classifies its quality: A - excellent, B - very good, C - good, D - acceptable, E - use with caution,  
 F - too unreliable to be published, ... - not applicable, . - not available for any reference period.  
 Due to rounding, the numbers may not add up and may differ slightly among the tables.  
 All passenger-km estimates exclude urban transit buses and the territories.

Estimates of the provincial total of

vehicle-km ('000 000) by type of vehicle and type of day

Type of day	Vehicle type									
	Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total	
Weekends and holidays	24 706.4	B	153.5	E	622.2	E	42.5	E	25 524.6	B
Weekdays	59 243.0	B	1 647.2	C	4 180.6	C	195.1	C	65 265.9	B
Total	83 949.4	A	1 800.7	B	4 802.8	B	237.6	C	90 790.5	A

The symbol beside each estimate classifies its quality: A - excellent, B - very good, C - good, D - acceptable, E - use with caution,  
 F - too unreliable to be published, ... - not applicable, . - not available for any reference period.  
 Due to rounding, the numbers may not add up and may differ slightly among the tables.



## Estimates of the provincial total of

passenger-km ('000 000) by type of vehicle and type of day

Type of day	Vehicle type									
	Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total	
Weekends and holidays	43 903.8	E		F	642.3	E		F	45 379.8	E
Weekdays	97 460.7	E	2 379.4	D	4 488.9	E	2 652.4	E	106 981.4	E
Total	141 364.5	E	2 621.0	D	5 131.2	E	3 244.5	E	152 361.2	E

The symbol beside each estimate classifies its quality: A - excellent, B - very good, C - good, D - acceptable, E - use with caution, F - too unreliable to be published, ... - not applicable, . - not available for any reference period. Due to rounding, the numbers may not add up and may differ slightly among the tables. All passenger-km estimates exclude urban transit buses and the territories.

Estimates of the provincial total of

vehicle-km ('000 000) by type of vehicle and road type

Road type	Vehicle type									
	Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total	
Road with posted maximum speed of 80km/h or more	48 746.1	E	916.2	E	3 013.3	D	85.5	E	52 761.1	E
Other roads	35 203.3	A	884.5	C	1 789.5	D	152.1	C	38 029.4	A
<b>Total</b>	<b>83 949.4</b>	<b>A</b>	<b>1 800.7</b>	<b>B</b>	<b>4 802.8</b>	<b>B</b>	<b>237.6</b>	<b>C</b>	<b>90 790.5</b>	<b>A</b>

The symbol beside each estimate classifies its quality: A - excellent, B - very good, C - good, D - acceptable, E - use with caution, F - too unreliable to be published, ... - not applicable, . - not available for any reference period. Due to rounding, the numbers may not add up and may differ slightly among the tables.

Estimates of the provincial total of

passenger-km ('000 000) by type of vehicle and road type

Road type	Vehicle type									
	Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total	
Road with posted maximum speed of 80km/h or more	85 882.2	E	1 292.9	E	3 179.8	E		F	92 333.4	E
Other roads	55 482.2	E	1 328.2	D	1 951.4	D	1 266.1	E	60 027.8	A
<b>Total</b>	<b>141 364.5</b>	<b>E</b>	<b>2 621.0</b>	<b>D</b>	<b>5 131.2</b>	<b>E</b>	<b>3 244.5</b>	<b>E</b>	<b>152 361.2</b>	<b>E</b>

The symbol beside each estimate classifies its quality: A - excellent, B - very good, C - good, D - acceptable, E - use with caution, F - too unreliable to be published, ... - not applicable, . - not available for any reference period. Due to rounding, the numbers may not add up and may differ slightly among the tables. All passenger-km estimates exclude urban transit buses and the territories.

## Estimates of provincial total for

vehicles up to 4.5t: passenger-km ('000 000) by passenger age group

	Estimates for	
	Vehicles up to 4.5t	
Passenger age		
Under 5 years	2 501.8	C
5-14 years	8 616.9	E
15 years and over	130 245.8	E
Total	141 364.5	E

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## Estimates of the provincial total of

passenger-km and vehicle-km for buses by trip purpose

Trip purpose	Estimates of			
	passenger-km ('000 000)		vehicle-km ('000 000)	
Scheduled urban	.		81.3	E
Scheduled intercity		F		F
School	1 293.0	E	79.7	D
Charter		F		F
Other		F	17.2	E
Total	3 244.5	E	237.6	C

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Estimates of the provincial total for

vehicles up to 4.5t: vehicle-km ('000 000) by vehicle group and trip purpose

	Vehicle group					
	Car and station wagon		Other below 4.5t		Total	
Trip purpose						
To go home	13 890.1	B	7 623.8	B	21 513.9	B
To go to work or school	7 077.7	B	5 118.8	C	12 196.4	B
To do shopping or errands	9 476.5	B	5 135.4	B	14 611.9	B
To go to a recreational or social activity	6 552.9	B	5 221.2	D	11 774.0	B
To go somewhere else	7 321.2	E	5 951.6	E	13 272.7	E
(Job) picking up or delivering goods		F		F		F
(Job) to or from service call		F	1 084.2	E	1 373.4	E
(Job) other work purpose		F	2 483.7	E	5 422.3	E
Total	49 378.8	B	34 570.6	B	83 949.4	A

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Estimates of the provincial total for

vehicles up to 4.5t: passenger-km ('000 000) by vehicle group and trip purpose

Trip purpose	Vehicle group					
	Car and station wagon		Other below 4.5t		Total	
To go home	23 378.9	E	13 894.8	E	37 273.7	E
To go to work or school	8 331.0	E	6 201.7	C	14 532.8	B
To do shopping or errands	15 177.9	B	9 047.6	B	24 225.4	B
To go to a recreational or social activity	12 419.6	E	11 093.2	D	23 512.9	B
To go somewhere else	15 995.7	E	13 889.3	E	29 885.0	E
(Job) picking up or delivering goods		F		F		F
(Job) to or from service call		F		F		F
(Job) other work purpose		F	2 698.8	E	5 787.1	E
Total	80 622.2	E	60 742.3	E	141 364.5	E

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Estimates of the provincial total for

trucks 4.5t or more: vehicle-km ('000 000) by vehicle group and trip purpose

		Vehicle type			
		Trucks 4.5t - 15t		Trucks 15t or more	
Vehicle group	Trip purpose				
Straight truck	Driving to or from service call	164.9	E		F
	Carrying goods or equipment	1 240.6	E		F
	Empty		F		F
	Other work purpose		F		F
	Non work purpose	177.9	E		F
	Total	1 718.1	B	1 020.1	E
Other over 4.5t	Driving to or from service call		F		F
	Carrying goods or equipment		F	3 170.3	E
	Empty		...	472.6	E
	Other work purpose		F		F
	Non work purpose		F		F
	Total		F	3 782.7	B
Total	Driving to or from service call	166.7	D	72.3	E
	Carrying goods or equipment	1 319.4	D	4 028.0	D
	Empty		F	540.6	E
	Other work purpose		F		F
	Non work purpose	179.3	E	90.0	E
	Total	1 800.7	B	4 802.8	B

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## Estimates of the provincial total for

trucks 4.5t or more: passenger-km ('000 000) by vehicle group and trip purpose

		Vehicle type			
		Trucks 4.5t - 15t		Trucks 15t or more	
Vehicle group	Trip purpose				
Straight truck	Driving to or from service call	311.8	E		F
	Carrying goods or equipment	1 712.8	E		F
	Empty		F		F
	Other work purpose		F		F
	Non work purpose	343.8	E		F
	Total	2 537.4	E		F
Other over 4.5t	Driving to or from service call		F		F
	Carrying goods or equipment		F	3 367.0	E
	Empty		...	493.0	E
	Other work purpose		F		F
	Non work purpose		F		F
	Total		F	4 011.4	E
Total	Driving to or from service call	314.7	E	79.8	E
	Carrying goods or equipment	1 791.6	D	4 274.6	E
	Empty		F	566.8	E
	Other work purpose		F		F
	Non work purpose	345.2	E	114.3	E
	Total	2 621.0	D	5 131.2	E

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Estimates of the provincial total for

vehicle-km ('000 000) by type of vehicle, type of day and time of day

		Vehicle type										
		Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total		
Type of day	Time of day											
Weekends and holidays	00:00 - 05:59	821.4	E		F		F		F		901.9	E
	06:00 - 11:59	7 493.5	B	71.7	E	221.4	D	16.1	E		7 802.7	B
	12:00 - 17:59	10 649.1	B	65.2	E	196.1	E	16.3	E		10 926.7	B
	18:00 - 23:59	5 742.5	D		F	131.3	E	9.6	E		5 893.3	D
	Total	24 706.4	B	153.5	E	622.2	E	42.5	E		25 524.6	B
Weekdays	00:00 - 05:59	2 484.3	E	76.3	E	502.6	E		F		3 070.9	E
	06:00 - 11:59	18 763.8	B	748.5	C	1 553.6	C	89.7	C		21 155.6	B
	12:00 - 17:59	25 672.9	B	688.8	C	1 418.8	C	82.4	C		27 862.9	B
	18:00 - 23:59	12 322.0	B	133.5	E	705.6	D	15.3	E		13 176.4	B
	Total	59 243.0	B	1 647.2	C	4 180.6	C	195.1	C		65 265.9	B
Total	00:00 - 05:59	3 305.7	E		F	575.9	E		F		3 972.8	E
	06:00 - 11:59	26 257.3	B	820.2	C	1 775.0	C	105.8	C		28 958.3	B
	12:00 - 17:59	36 321.9	E	754.0	C	1 614.9	C	98.6	C		38 789.6	B
	18:00 - 23:59	18 064.5	E	143.5	E	837.0	E	24.9	E		19 069.8	E
	Total	83 949.4	A	1 800.7	B	4 802.8	B	237.6	C		90 790.5	A

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Estimates of the provincial total of  
passenger-km ('000 000) by type of vehicle, type of day and time of day

		Vehicle type									
		Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total	
Type of day	Time of day										
Weekends and holidays	00:00 - 05:59		F		F		F		F		F
	06:00 - 11:59	11 894.7	E		F	229.5	E		F	12 457.0	B
	12:00 - 17:59	19 070.4	B		F	202.0	E		F	19 633.2	B
	18:00 - 23:59	11 464.8	E		F		F		F	11 732.8	E
	Total	43 903.8	E		F	642.3	E		F	45 379.8	E
Weekdays	00:00 - 05:59	4 376.0	E	87.0	E	537.4	E		F	5 126.5	E
	06:00 - 11:59	28 530.1	E	1 053.9	D	1 645.8	C	1 300.4	E	32 530.2	E
	12:00 - 17:59	41 373.8	E	1 050.0	D	1 517.4	C	1 073.6	E	45 014.8	E
	18:00 - 23:59	23 180.8	E	188.5	E	788.3	E		F	24 309.9	E
	Total	97 460.7	E	2 379.4	D	4 488.9	E	2 652.4	E	106 981.4	E
Total	00:00 - 05:59	5 849.9	E	93.6	E	610.8	E		F	6 683.1	E
	06:00 - 11:59	40 424.8	E	1 162.8	D	1 875.3	C	1 524.3	E	44 987.2	E
	12:00 - 17:59	60 444.2	E	1 161.2	D	1 719.5	C	1 323.3	E	64 648.1	E
	18:00 - 23:59	34 645.7	E	203.4	E	925.7	E		F	36 042.8	E
	Total	141 364.5	E	2 621.0	D	5 131.2	E	3 244.5	E	152 361.2	E

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## Estimates of the provincial total of

vehicle-km ('000 000) by type of vehicle, driver age group and sex of driver

		Vehicle type										
		Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total		
Age of driver	Sex of driver											
Under 25 years	Male	2 972.3	E		F		F		F		3 368.8	E
	Female	1 693.7	E		F		F		F		1 696.2	E
	Total	4 666.0	E		F		F		F		5 065.0	E
25 - 55 years	Male	37 936.9	E	984.2	C	3 923.0	E	145.7	E		42 989.9	E
	Female	16 579.9	B		F		F	48.6	D		16 689.6	B
	Total	54 516.8	E	1 005.3	C	3 963.0	E	194.3	D		59 679.5	E
55 years and over	Male	17 359.9	B	494.5	E	742.7	E	36.3	E		18 633.3	B
	Female	7 406.7	D		F		F		F		7 412.7	D
	Total	24 766.6	B	494.5	E	742.7	E	42.3	E		26 046.1	B
Total	Male	58 269.1	E	1 777.6	D	4 762.8	C	182.5	D		64 992.0	E
	Female	25 680.3	B		F		F	55.0	D		25 798.4	B
	Total	83 949.4	A	1 800.7	B	4 802.8	B	237.6	C		90 790.5	A

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Estimates of the provincial total of  
passenger-km ('000 000) by type of vehicle, driver age group and sex of driver

		Vehicle type										
		Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total		
Age of driver	Sex of driver											
Under 25 years	Male	4 538.2	E		F		F		F		5 181.4	E
	Female	2 513.9	E		F		F		F		2 524.0	E
	Total	7 052.1	E		F		F		F		7 705.4	E
25 - 55 years	Male	66 595.3	E	1 455.4	C	4 175.0	E		F		74 288.9	E
	Female	26 901.0	E		F		F	617.4	E		27 680.9	E
	Total	93 496.3	E	1 547.9	D	4 245.0	E	2 680.6	E		101 969.8	E
55 years and over	Male	29 291.2	E	535.7	E	788.7	E		F		31 082.9	E
	Female	11 524.8	E		F		F		F		11 603.1	E
	Total	40 816.0	E	535.7	E	788.7	E		F		42 686.0	E
Total	Male	100 424.7	E	2 526.5	D	5 061.2	E		F		110 553.2	E
	Female	40 939.7	E		F		F	703.7	E		41 808.0	E
	Total	141 364.5	E	2 621.0	D	5 131.2	E	3 244.5	E		152 361.2	E

The symbol beside each estimate classifies its quality: A - excellent, B - very good, C - good, D - acceptable, E - use with caution,  
F - too unreliable to be published, ... - not applicable, . - not available for any reference period.  
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All passenger-km estimates exclude urban transit buses and the territories.

Estimates of the provincial total of

fuel ('000 000 litres) purchased by type of vehicle and type of fuel

Fuel type	Vehicle type									
	Vehicles up to 4.5t		Trucks 4.5t - 15t		Trucks 15t or more		Buses		Total	
Gasoline	8 910.7	E		F		F	6.3	E	9 171.8	E
Diesel		F	351.8	D	1 789.8	C	80.6	E	2 443.4	B

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### Selected Publications from Statistics Canada

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