

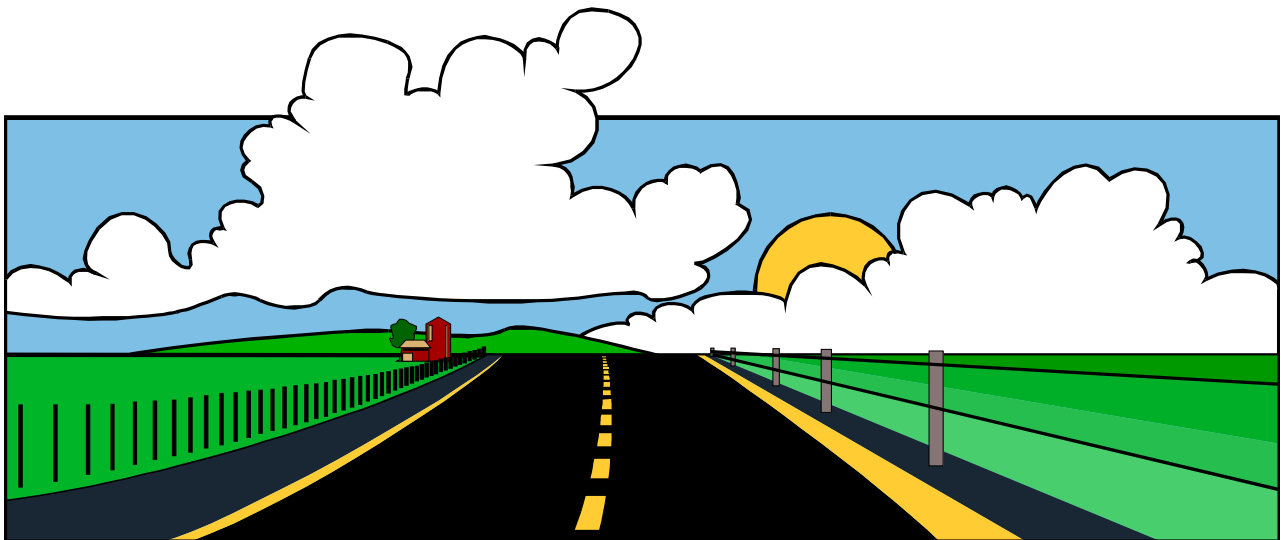
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Canadian Vehicle Survey

Quarter 2, 2001



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Transportation Division

Canadian Vehicle Survey

Quarter 2, 2001

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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.

Symbols

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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Transportation Division, Canadian Vehicle Survey Unit

Wendy Christoff, Mike Fahey, Sean Fagan, Ruth Powell, Linda Manolikakis

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Serge Robert, Mustapha Khan

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Ghislaine Desgagné

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HIGHLIGHTS

- Over 17.3 million vehicles were in-scope for the Canadian Vehicle Survey during this quarter.
- Between April 1 and June 30, 2001, these vehicles travelled an estimated 78.7 billion kilometres.
- Vehicles weighing less than 4 500 kilograms were driven an average of 4 325 kilometres while the largest of the trucks (trucks with gross weight 15 000 kilograms or more) were driven an average of 18 200 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 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 second quarter of 2001.

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 613-951-2486, e-mailing laroque@statcan.ca, or faxing: 613-951-0579.

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 below) 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 below) 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 January 2001. 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 January 2001 are not included.

The incoming lists underwent thorough preparation procedure:

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

The last set of processed lists, before the beginning of the reference period, consisted of the eleven lists provided in January 2001 to Statistics Canada for CVS and the most recent lists available for the Yukon, Nunavut and the Northwest Territories created in December, 2000. This set of prepared vehicle lists and the set of days within the second quarter of 2001 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 4,998 vehicles out of 17,614,652 from the survey population were drawn for the ten provinces. Another 2,550 vehicles out of 43,305 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-kilometers 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	39%	14%	25%	32%	5%	28%	4%	5%
Trucks 4.5t – 15t	29%	20%	9%	13%	4%	9%	7%	10%
Trucks 15t or more	36%	22%	14%	19%	5%	14%	8%	13%
Buses	39%	22%	17%	5%	0%	5%	5%	27%

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	14%	0%	13%	8%	8%
Trucks 4.5t – 15t	N/A	N/A	N/A	11%	1%	10%	14%	8%
Trucks 15t or more	N/A	N/A	N/A	8%	0%	8%	15%	8%
Buses	N/A	N/A	N/A	12%	0%	12%	10%	3%

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	55%	20%	35%	45%	7%	39%
Trucks 4.5t – 15t	69%	47%	22%	31%	9%	22%
Trucks 15t or more	65%	40%	25%	35%	9%	26%
Buses	89%	50%	39%	11%	0%	11%

TERRITORIES	Vehicle km reported			Vehicle km imputed		
	All	0 km	Non 0 km	All	0 km	Non 0 km
Light vehicles	100%	2%	98%	N/A	N/A	N/A
Trucks 4.5t – 15t	100%	11%	89%	N/A	N/A	N/A
Trucks 15t or more	100%	0%	100%	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
A	Less than 5%	Excellent
B	5% to 10%	Very good
C	10% to 15%	Good
D	15% to 20%	Acceptable
E	20% to 35%	Use with caution
F	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 1, 2001, the following changes were made and may affect comparability with previous quarters

- Duplicate records were previously removed from within and among registration lists. Starting in this quarter, duplicate records were removed from within each list only. This is likely to cause some overcoverage and consequently overestimation.
- Type of fuel used and body type are collected for the territories. Consequently, the four tables (pages: 27, 28, 34, 36) 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	236 799	3 896	2 750	1 208	244 653
Prince Edward Island	71 917	1 884	2 465	57	76 323
Nova Scotia	518 723	9 787	6 689	1 864	537 063
New Brunswick	432 356	9 829	3 934	2 705	448 824
Quebec	3 908 392	52 927	24 689	16 610	4 002 618
Ontario	6 422 816	79 621	101 650	22 100	6 626 187
Manitoba	590 272	9 775	12 139	3 505	615 691
Saskatchewan	601 693	46 596	23 969	3 789	676 047
Alberta	1 979 786	111 470	65 101	12 222	2 168 579
British Columbia	2 238 872	61 022	13 139	8 095	2 321 128
Yukon Territory	17 961	1 001	717	165	19 844
Northwest Territories	17 792	533	686	75	19 086
Nunavut	2 449	230	119	15	2 813
Total - Canada	17 039 828	388 571	258 047	72 410	17 758 856

DUE TO ROUNDING THE NUMBERS MAY NOT ADD UP AND MAY DIFFER SLIGHTLY AMONG THE TABLES.

Number of Vehicles on 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 1984	4 625	2 867	20 714	13 768	83 030	213 266	46 706	82 799	211 007	214 897	2 452	1 585	138	897 854
1984	1 692	1 209	6 734	5 961	35 621	66 253	12 965	17 837	44 684	50 625	497	349	46	244 473
1985	2 607	1 644	9 267	8 276	57 888	104 966	17 332	20 908	58 002	64 282	582	474	76	346 304
1986	3 990	2 152	13 328	11 480	89 318	160 029	24 156	27 785	80 004	93 453	880	571	68	507 214
1987	5 737	3 054	17 587	15 385	129 176	209 781	23 667	24 240	71 597	96 302	886	502	99	598 013
1988	11 246	4 629	25 837	23 245	196 428	311 224	29 912	29 587	94 213	115 968	1 115	788	132	844 324
1989	13 859	5 081	28 750	25 922	214 076	354 541	30 674	30 164	100 888	128 697	1 154	879	139	934 824
1990	13 933	5 460	30 722	26 931	231 782	367 286	33 690	31 720	107 562	140 978	1 193	889	140	992 286
1991	14 891	4 916	30 551	26 770	243 446	367 623	35 307	32 989	107 897	137 409	1 046	853	161	1 003 859
1992	15 818	5 500	33 574	29 752	275 848	400 516	36 322	33 354	105 144	138 991	1 049	748	148	1 076 764
1993	16 802	5 217	32 717	26 814	250 378	382 878	32 917	30 515	96 236	128 005	1 028	789	152	1 004 448
1994	16 845	5 155	33 679	27 075	238 397	382 675	32 131	32 396	100 521	121 851	1 007	932	166	992 830
1995	15 772	5 243	34 296	27 689	253 225	411 523	34 761	34 364	106 593	124 772	1 041	976	165	1 050 420
1996	12 003	4 165	28 610	22 446	202 445	341 367	30 205	28 485	89 663	98 486	769	786	128	859 558
1997	16 135	4 650	35 131	27 258	253 131	436 189	39 295	37 077	122 063	125 547	1 085	1 215	174	1 098 950
1998	19 106	3 862	37 935	30 893	284 478	472 603	39 287	35 901	134 428	124 366	952	1 289	165	1 185 265
1999	20 374	2 801	36 422	29 620	302 770	495 263	34 801	27 244	118 794	116 000	894	1 446	152	1 186 581
2000	23 364	3 050	41 282	35 804	359 329	596 618	37 133	29 485	135 737	132 477	328	1 719	118	1 396 444
2001	7 958	1 245	21 215	17 043	205 166	343 757	18 868	14 737	93 490	84 564	3	994	78	809 118
2002	24	17	374	218	2 418	4 457	143	107	1 263	1 205	0	8	3	10 237
Unknown	15	0	0	4	40	0	0	1	0	0	0	0	0	60
TOTAL	236 796	71 917	518 725	432 354	3 908 390	6 422 815	590 272	601 695	1 979 786	2 238 875	17 961	17 792	2 448	17 039 826

DUE TO ROUNDING THE NUMBERS MAY NOT ADD UP TO THE TOTALS AND MAY DIFFER SLIGHTLY AMONG TABLES.

Number of Vehicles on 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 1984	646	917	2 471	822	9 427	6 159	2 468	30 842	37 601	11 780	367	80	39	103 619
1984	112	65	254	114	1 341	1 052	231	605	1 878	1 002	31	21	4	6 710
1985	147	80	336	183	2 012	1 743	335	671	2 519	1 347	36	21	7	9 437
1986	177	89	379	218	2 255	2 379	427	786	3 044	1 883	33	18	11	11 699
1987	182	85	444	228	2 840	2 890	364	613	1 983	1 730	27	11	16	11 413
1988	278	90	508	286	3 645	3 901	409	693	3 597	2 457	47	20	18	15 949
1989	222	92	527	273	2 876	3 716	406	591	3 542	2 756	50	27	14	15 092
1990	235	71	494	285	2 964	4 025	506	706	3 895	3 052	50	35	15	16 333
1991	206	46	354	278	1 991	2 803	438	633	3 755	2 373	36	24	9	12 946
1992	170	37	324	348	1 769	2 871	382	618	3 436	2 418	36	22	8	12 439
1993	178	44	351	500	1 922	3 459	382	885	3 698	2 785	23	16	8	14 251
1994	202	47	348	559	2 344	4 316	396	886	4 617	3 140	45	24	11	16 935
1995	252	54	538	659	3 061	5 389	568	1 070	5 107	3 709	41	37	25	20 510
1996	137	23	333	564	1 916	3 864	411	679	3 837	2 636	30	18	9	14 457
1997	173	33	403	673	2 057	5 343	491	987	6 053	3 568	44	38	13	19 876
1998	127	18	472	893	2 584	5 558	425	1 025	5 685	3 078	31	20	11	19 927
1999	194	44	556	1 228	3 497	8 387	501	1 512	5 864	4 291	59	42	7	26 182
2000	175	30	454	960	2 734	7 208	355	1 622	5 856	3 832	14	36	4	23 280
2001	75	15	234	754	1 541	4 494	277	1 172	5 447	3 160	1	22	1	17 193
2002	2	0	6	4	148	65	5	1	57	21	0	0	0	309
Unknown	4	0	0	0	3	0	0	0	0	0	0	0	0	7
TOTAL	3 894	1 880	9 786	9 829	52 927	79 622	9 777	46 597	111 471	61 018	1 001	532	230	388 564

DUE TO ROUNDING THE NUMBERS MAY NOT ADD UP TO THE TOTALS AND MAY DIFFER SLIGHTLY AMONG TABLES.

Number of Vehicles on 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	Saskatche-wan	Alberta	British Columbia	Yukon Territory	Northwest Territor-ies	Nunavut	
Earlier than 1984	263	846	905	480	668	4 446	1 258	6 503	16 624	2 454	154	123	16	34 740
1984	73	136	131	134	217	1 110	215	474	961	252	7	20	2	3 732
1985	102	139	211	162	369	1 855	310	657	1 648	310	27	21	0	5 811
1986	107	176	205	185	438	2 601	366	760	1 885	435	19	14	1	7 192
1987	134	197	305	264	699	3 542	415	750	1 663	508	16	12	3	8 508
1988	174	170	327	241	909	3 832	419	827	2 284	573	28	15	1	9 800
1989	187	121	317	203	740	4 035	409	687	2 147	526	30	30	2	9 434
1990	113	105	217	236	702	3 793	363	696	2 346	899	32	25	3	9 530
1991	116	59	141	134	407	2 381	215	481	1 813	496	18	24	9	6 294
1992	93	33	165	98	582	2 428	275	450	1 498	664	37	24	6	6 353
1993	89	43	219	166	882	3 587	473	666	2 029	614	22	17	1	8 808
1994	145	62	337	186	1 567	5 212	702	868	3 115	721	27	38	5	12 985
1995	194	95	482	263	2 202	8 637	829	1 018	3 768	783	30	59	14	18 374
1996	148	55	361	180	1 507	6 187	785	779	2 913	689	49	37	8	13 698
1997	136	26	281	160	1 516	6 208	712	794	3 505	770	46	47	4	14 205
1998	200	51	508	198	2 772	10 250	1 158	1 548	4 957	714	67	49	11	22 483
1999	176	65	595	266	3 028	11 768	1 248	2 328	4 139	662	55	47	23	24 400
2000	210	63	672	238	3 451	12 924	1 333	2 578	4 224	595	51	50	6	26 395
2001	83	23	290	127	1 879	6 422	627	1 093	3 418	443	2	30	4	14 441
2002	4	0	18	11	149	431	27	11	164	29	0	2	0	846
Unknown	5	0	0	0	5	0	0	0	0	0	0	0	0	10
TOTAL	2 752	2 465	6 687	3 932	24 689	101 649	12 139	23 968	65 101	13 137	717	684	119	258 039

DUE TO ROUNDING THE NUMBERS MAY NOT ADD UP TO THE TOTALS AND MAY DIFFER SLIGHTLY AMONG TABLES.

Number of Vehicles on 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	Saskatche-wan	Alberta	British Columbia	Yukon Territory	Northwest Territor-ies	Nunavut	
Earlier than 1984	33	16	124	712	521	1 334	304	498	2 392	960	40	7	5	6 946
1984	2	0	25	139	177	164	68	144	226	124	7	4	0	1 080
1985	6	2	36	110	204	349	229	196	322	129	2	1	4	1 590
1986	19	3	65	124	218	367	159	207	362	182	3	0	0	1 709
1987	157	3	73	131	203	658	170	360	450	218	2	4	0	2 429
1988	175	2	112	158	431	949	248	228	557	310	11	3	1	3 185
1989	167	1	92	119	869	1 165	181	243	652	409	7	2	0	3 907
1990	121	1	133	186	1 072	1 502	141	276	679	436	10	2	1	4 560
1991	108	1	132	77	1 157	1 378	200	216	581	525	5	1	0	4 381
1992	105	2	75	83	1 139	1 296	191	172	590	406	4	0	0	4 063
1993	42	0	102	96	967	1 064	175	180	556	353	2	1	0	3 538
1994	24	0	52	38	1 467	955	247	114	404	408	10	1	0	3 720
1995	27	0	185	157	972	1 336	174	119	519	531	12	0	0	4 032
1996	24	2	71	19	1 213	1 573	170	142	433	574	14	1	0	4 236
1997	47	0	106	125	1 189	1 353	155	142	682	387	17	2	0	4 205
1998	35	0	190	188	1 098	1 650	194	168	713	634	7	2	0	4 879
1999	58	0	99	91	1 444	2 085	229	206	769	540	5	20	2	5 548
2000	50	18	174	96	1 286	2 009	200	128	786	629	7	9	1	5 393
2001	8	6	19	53	928	899	46	45	541	338	0	12	0	2 895
2002	0	0	0	0	53	12	21	6	8	1	0	0	0	101
Unknown	0	0	0	2	0	0	0	0	0	0	0	0	0	2
TOTAL	1 208	57	1 865	2 704	16 608	22 098	3 502	3 790	12 222	8 094	165	72	14	72 399

DUE TO ROUNDING THE NUMBERS MAY NOT ADD UP TO THE TOTALS AND MAY DIFFER SLIGHTLY AMONG 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	229 306	A	3 310	B	2 583	C	1 208	A	236 407	A
Prince Edward Island	70 896	A	1 535	C	2 193	B	57	A	74 681	A
Nova Scotia	510 425	A	6 396	C	6 264	B	1 765	A	524 850	A
New Brunswick	421 347	A	5 966	C	3 866	A	1 557	D	432 737	A
Quebec	3 850 868	A	48 572	A	23 443	A	16 237	A	3 939 119	A
Ontario	6 253 993	A	68 887	A	95 949	A	21 693	A	6 440 522	A
Manitoba	583 552	A	8 716	B	11 683	A	3 381	A	607 331	A
Saskatchewan	607 576	A	40 968	A	20 119	A	3 790	A	672 453	A
Alberta	1 988 325	A	61 360	C	59 373	B	11 870	A	2 120 927	A
British Columbia	2 213 584	A	46 647	B	12 273	B	6 827	B	2 279 331	A
Yukon Territory	17 959	A	745	B	717	A	205	E	19 626	A
Northwest Territories	18 113	A	480	B	1 184	B	75	A	19 852	A
Nunavut	2 390	A	259	C		F		F	2 708	A
Total - Canada	16 768 334	A	293 840	A	239 705	A	68 664	A	17 370 544	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 1998	3 263 176	A	39 708	C	56 108	B	9 462	C	3 368 455	A
1996 - 1998	3 016 149	A	50 486	B	47 629	B	15 760	C	3 130 024	A
1992 - 1995	4 351 317	A	30 533	C	52 006	B	17 889	B	4 451 746	A
1988 - 1991	3 757 367	A	46 462	C	32 408	D	17 302	B	3 853 539	A
Earlier than 1988	2 380 325	B	126 650	B	51 554	C	8 252	C	2 566 780	B
Total	16 768 334	A	293 840	A	239 705	A	68 664	A	17 370 544	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.
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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	10 509 262	A	...	...	...	...	...	...	10 509 262	A
Station wagon	407 009	D	...	...	...	...	...	...	407 009	D
Van	2 166 323	B	11 886	E	...	...	5 488	E	2 183 697	B
Sport utility vehicle	1 143 334	B	...	...	...	...	...	...	1 143 334	B
Pickup	2 426 886	B	60 312	C	...	F	...	...	2 490 366	B
Straight truck	...	F	198 503	B	92 175	B	...	...	380 271	C
Tractor trailer	...	F	11 243	E	143 740	A	...	F	155 441	A
Bus	...	F	...	F	63 023	A	77 336	C
Other	...	F	...	F	...	F	F
Total	16 768 334	A	293 840	A	239 705	A	68 664	A	17 370 544	A

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Estimates for Canada of the

Number of Vehicles in Scope 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	16 278 757	A	129 990	B	14 213	E	11 540	C	16 434 499	A
Diesel	438 680	D	161 490	A	224 720	A	53 853	A	878 743	B
Other		F		F		F	3 271	E	57 301	E
Total	16 768 334	A	293 840	A	239 705	A	68 664	A	17 370 544	A

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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	1 069.6	C		F	45.5	D	6.1	E	1 168.1	B
Prince Edward Island	297.9	C		F		F		F	308.8	C
Nova Scotia	2 195.8	B		F	138.0	E	20.3	C	2 384.8	B
New Brunswick	2 326.2	B	27.5	E	28.1	E	8.9	E	2 390.6	B
Quebec	16 578.0	B	293.3	D	720.5	B	108.0	C	17 699.7	B
Ontario	26 942.0	B	397.4	C	2 063.7	B	168.5	C	29 571.6	A
Manitoba	2 640.2	D	33.9	E	282.0	D	18.8	C	2 974.8	C
Saskatchewan	2 844.1	C	93.3	E	171.9	E	23.9	C	3 133.3	B
Alberta	8 407.0	B	205.3	E	819.4	C	83.0	C	9 514.8	B
British Columbia	9 114.5	B	174.5	C	46.5	D	37.8	C	9 373.3	B
Yukon Territory	74.9	B	1.7	D	14.9	E		F	93.2	B
Northwest Territories	78.8	D		F	26.8	E		F	108.5	C
Nunavut		F		F		F		F	13.3	E
Total - Canada	72 582.0	A	1 309.4	B	4 365.8	B	477.6	B	78 734.8	A

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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	1 707.1	C		F	46.5	E	135.1	E	1 970.4	C
Prince Edward Island		F		F		F		F		F
Nova Scotia	3 365.6	C		F		F	550.3	E	4 100.5	C
New Brunswick	3 301.6	C		F		F	126.4	E	3 492.6	C
Quebec		F	321.7	E	792.1	D	1 857.5	E	27 613.3	B
Ontario	46 085.8	B	552.9	E		F	2 233.7	E	50 980.1	B
Manitoba	4 307.4	E		F		F	208.6	D	4 862.5	E
Saskatchewan	4 766.8	D	127.2	E		F	305.3	E	5 376.8	C
Alberta	13 871.8	C		F	860.8	D	925.4	E	15 975.4	C
British Columbia	15 459.7	C	240.7	E	54.3	E	881.2	E	16 635.9	C
Total - Provinces	117 951.9	B	1 766.4	D	4 523.3	C	7 234.8	C	131 476.4	B

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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 1998	19 862.7	B	347.9	D	1 729.2	C	95.9	E	22 035.7	B
1996 - 1998	14 756.8	B	471.2	C	1 494.3	C	175.8	C	16 898.1	B
1992 - 1995	18 427.7	B	151.0	E	867.8	C	96.5	C	19 543.0	B
1988 - 1991	13 739.7	B	143.9	D	103.7	E	71.8	C	14 059.0	B
Earlier than 1988	5 795.1	C	195.4	E	170.8	E	37.7	E	6 199.0	C
Total	72 582.0	A	1 309.4	B	4 365.8	B	477.6	B	78 734.8	A

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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 1998	33 797.8	C	462.2	E	1 787.1	D	1 208.9	E	37 256.0	C
1996 - 1998	25 783.3	C	672.3	E	1 557.6	E	2 727.1	E	30 740.3	C
1992 - 1995	28 388.4	C	195.3	E	885.5	E	1 682.7	D	31 151.9	B
1988 - 1991	21 620.7	C		F		F	1 205.4	D	23 145.5	C
Earlier than 1988	8 361.7	E		F	178.2	E	410.7	E	9 182.6	E
Total	117 951.9	B	1 766.4	D	4 523.3	C	7 234.8	C	131 476.4	B

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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	43 714.5	A	...	...	...	...	...	...	43 714.5	A
Station wagon	1 658.9	E	...	...	...	...	...	...	1 658.9	E
Van	10 460.9	B		F	...	...		F	10 563.7	B
Sport utility vehicle	5 301.6	C		...	...	...		...	5 301.6	C
Pickup	11 217.0	C		259.4	D		F	...	11 478.3	B	
Straight truck		F		857.8	C		649.6	C	1 601.4	B	
Tractor trailer		F			F		3 712.9	B	3 789.6	B	
Bus		F			F		...	438.4	B	550.1	
Other		F			F		F	...		F	
Total	72 582.0	A		1 309.4	B		4 365.8	B	477.6	B	78 734.8

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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	68 601.1	B	...	...	...	...	...	...	68 601.1	B
Station wagon		F	...	...	...	...	...	...		F
Van	21 383.5	D	F	...	...	...	F	...	21 783.3	D
Sport utility vehicle	9 099.9	D	...	...	...	...	...	...	9 099.9	D
Pickup	15 708.8	D	F	F	F	F	...	...	16 146.9	D
Straight truck		F	F	F	686.2	E	...	...		F
Tractor trailer		F	F	F	3 833.9	C	F	...	3 916.3	C
Bus		F	F	F	6 907.5	C	7 087.9	E
Other		F	F	F	F	F		F
Total	117 951.9	B	1 766.4	D	4 523.3	C	7 234.8	C	131 476.4	B

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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	69 252.2	A	186.4	D		F	33.4	E	69 515.0	A
Diesel	3 253.0	E	1 111.7	B	4 322.6	B	425.4	B	9 112.7	B
Other		F		F		F	18.9	E		F
Total	72 582.0	A	1 309.4	B	4 365.8	B	477.6	B	78 734.8	A

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Estimates of the Provincial Total of

Passenger-km ('000 000) 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	113 417.8	B	262.8	E		F		F	114 238.9	B
Diesel		F	1 492.5	D	4 479.2	C	6 363.8	C	16 753.4	C
Other		F		F		F	356.6	E	484.1	E
Total	117 951.9	B	1 766.4	D	4 523.3	C	7 234.8	C	131 476.4	B

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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	8 198.2	B	30.3	E	269.9	D	13.4	E	8 511.8	B
Monday	10 628.1	B	240.6	E	730.3	D	82.7	B	11 681.7	B
Tuesday	10 022.8	A	243.0	C	751.6	B	95.8	B	11 113.1	A
Wednesday	10 692.8	B	242.9	C	766.7	C	96.9	B	11 799.3	A
Thursday	12 246.6	B	274.0	C	823.6	C	89.6	B	13 433.9	B
Friday	11 617.9	B	201.1	D	762.2	D	75.3	B	12 656.5	B
Saturday	9 008.9	B	72.6	D	219.8	E	22.1	E	9 323.4	B
Total	72 415.3	A	1 304.5	B	4 324.1	B	475.9	B	78 519.8	A

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Estimates of the Provincial Total of

Passenger-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	14 796.6	B		F	281.1	E		F	15 189.6	B
Monday	16 580.0	B	327.8	E	756.5	E	1 164.0	C	18 828.3	B
Tuesday	15 909.7	B	312.6	D	779.3	C	1 414.9	C	18 416.5	B
Wednesday	16 403.4	B	327.3	D	816.4	C	1 836.5	E	19 383.6	B
Thursday	19 642.5	B	350.0	D	881.6	C	1 200.7	C	22 074.8	B
Friday	18 784.3	B	285.3	E	781.6	D	1 359.8	D	21 211.0	B
Saturday	15 835.4	B		F	226.9	E		F	16 372.7	B
Total	117 951.9	B	1 766.4	D	4 523.3	C	7 234.8	C	131 476.4	B

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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		F		F		F		F		F
20 - 24 years	3 451.8	D		F		F		F	3 698.1	D
25 - 34 years	11 162.3	B	342.2	E	786.7	E	44.8	E	12 336.0	B
35 - 44 years	20 053.3	B	350.8	D	1 568.4	D	143.8	C	22 116.3	B
45 - 54 years	18 574.0	B	382.1	E	1 293.8	E	161.9	D	20 411.8	B
55 - 64 years	10 417.3	C		F	513.7	E	91.0	C	11 091.5	C
65 years and over	7 339.2	C		F		F		F	7 389.2	C
Total	72 415.3	A	1 304.5	B	4 324.1	B	475.9	B	78 519.8	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		F		F		F		F		F
20 - 24 years		F		F		F		F		F
25 - 34 years	17 280.8	C	504.8	E	816.0	E		F	18 952.3	B
35 - 44 years	31 131.0	B	505.3	E	1 694.4	D	2 285.7	D	35 616.4	B
45 - 54 years	31 819.1	C	480.8	E	1 318.5	E	2 238.2	E	35 856.5	C
55 - 64 years	16 390.4	C		F	531.4	E	1 521.8	E	18 537.7	C
65 years and over	13 344.5	C		F		F		F	14 204.1	C
Total	117 951.9	B	1 766.4	D	4 523.3	C	7 234.8	C	131 476.4	B

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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	47 646.3	B	1 284.5	D	4 271.5	C	301.4	C	53 503.6	B
Female	24 769.0	B		F		F	174.6	C	25 016.2	B
Total	72 415.3	A	1 304.5	B	4 324.1	B	475.9	B	78 519.8	A

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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	79 873.0	B	1 740.1	D	4 451.5	C	4 527.7	D	90 592.3	B
Female	38 078.9	B		F		F	2 707.1	D	40 884.1	B
Total	117 951.9	B	1 766.4	D	4 523.3	C	7 234.8	C	131 476.4	B

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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		F		F	407.3	D	9.9	E	3 305.3	C
06:00 - 11:59	22 464.1	B	565.2	D	1 493.0	C	215.0	B	24 737.3	A
12:00 - 17:59	30 753.8	B	582.0	D	1 603.1	C	212.9	B	33 151.8	A
18:00 - 23:59	16 366.2	B	100.4	E	820.7	C	38.1	D	17 325.4	B
Total	72 415.3	A	1 304.5	B	4 324.1	B	475.9	B	78 519.8	A

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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		F		F	418.7	D		F		F
06:00 - 11:59	34 367.8	B	735.3	D	1 556.0	C	3 253.7	C	39 912.9	B
12:00 - 17:59	50 660.2	B	807.4	D	1 687.3	C	3 358.0	C	56 512.9	B
18:00 - 23:59	28 715.6	B	151.9	E	861.3	D		F	30 175.3	B
Total	117 951.9	B	1 766.4	D	4 523.3	C	7 234.8	C	131 476.4	B

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 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		F	272.4	E		...	371.3	D
Declared - no	72 372.9	A	1 247.9	D	4 051.7	C	475.9	B	78 148.5	A
Total	72 415.3	A	1 304.5	B	4 324.1	B	475.9	B	78 519.8	A

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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		F	293.0	E	...		435.7	E
Declared - no	117 882.7	B	1 692.9	D	4 230.3	C	7 234.8	C	131 040.7	B
Total	117 951.9	B	1 766.4	D	4 523.3	C	7 234.8	C	131 476.4	B

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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	19 713.0	A	140.8	D	591.0	D	40.2	E	20 485.0	A
Weekdays	52 702.3	A	1 163.8	C	3 733.0	B	435.7	B	58 034.8	A
Total	72 415.3	A	1 304.5	B	4 324.1	B	475.9	B	78 519.8	A

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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	35 126.9	B	239.7	E	610.1	D		F	36 341.8	B
Weekdays	82 825.0	B	1 526.8	D	3 913.2	C	6 869.6	C	95 134.6	B
Total	117 951.9	B	1 766.4	D	4 523.3	C	7 234.8	C	131 476.4	B

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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	37 343.4	B	647.5	D	2 412.9	C	165.7	C	40 569.4	B
Other roads	35 071.9	A	657.0	D	1 911.1	C	310.3	B	37 950.4	A
Total	72 415.3	A	1 304.5	B	4 324.1	B	475.9	B	78 519.8	A

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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	61 818.6	B	856.8	E	2 542.4	C	3 414.5	E	68 632.2	B
Other roads	56 133.3	B	909.7	D		F	3 820.2	C	62 844.1	B
Total	117 951.9	B	1 766.4	D	4 523.3	C	7 234.8	C	131 476.4	B

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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	3 835.0	D
5-14 years	6 693.8	C
15 years and over	107 423.1	B
Total	117 951.9	B

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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	.		105.3	E
Scheduled intercity		F		F
School	5 403.0	C	290.4	B
Charter		F		F
Other	310.4	E	38.8	E
Total	7 234.8	C	475.9	B

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Estimates of Provincial Total for

Vehicles up to 4.5t: Vehicle-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	13 381.9	B	6 320.7	C	19 702.6	B
To go to work or school	8 183.7	B	3 234.3	C	11 418.0	B
To do shopping or errands	8 947.7	B	4 523.4	C	13 471.1	B
To go to a recreational or social activity	6 778.5	C	3 397.6	C	10 176.2	B
To go somewhere else	6 072.8	D	4 608.7	D	10 681.5	C
(Job) picking up or delivering goods		F		F		F
(Job) to or from service call		F	1 310.7	E	1 765.6	D
(Job) other work purpose		F	1 751.7	E	2 538.7	E
Total	45 333.4	A	27 081.9	B	72 415.3	A

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Estimates of 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	20 308.0	B	11 498.3	D	31 806.4	B
To go to work or school	10 097.3	B	4 406.7	C	14 504.0	B
To do shopping or errands	15 207.8	B	7 952.8	C	23 160.6	B
To go to a recreational or social activity		F	8 111.1	D	21 076.0	C
To go somewhere else	10 511.9	D	8 511.4	D	19 023.3	C
(Job) picking up or delivering goods		F		F	2 998.8	E
(Job) to or from service call		F	1 443.8	E	1 898.8	D
(Job) other work purpose		F		F		F
Total	71 420.9	B	46 531.1	B	117 951.9	B

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Estimates of 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		F		F
	Carrying goods or equipment	641.0	E	359.7	D
	Empty		F		F
	Other work purpose		F		F
	Non work purpose	244.1	E		F
	Total	1 235.4	B	639.4	C
Other over 4.5t	Driving to or from service call		F		F
	Carrying goods or equipment		F	2 402.6	C
	Empty		F		F
	Other work purpose		F		F
	Non work purpose		F		F
	Total		F	3 684.6	B
Total	Driving to or from service call	174.8	E	189.8	E
	Carrying goods or equipment	688.8	D	2 762.3	C
	Empty		F		F
	Other work purpose	72.0	E		F
	Non work purpose	258.6	E		F
	Total	1 304.5	B	4 324.1	B

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Estimates of 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		F		F
	Carrying goods or equipment		F	392.8	E
	Empty		F		F
	Other work purpose		F		F
	Non work purpose	403.4	E		F
	Total		F	688.1	E
Other over 4.5t	Driving to or from service call		F		F
	Carrying goods or equipment		F	2 502.3	D
	Empty		F		F
	Other work purpose		F		F
	Non work purpose		F		F
	Total		F	3 835.2	C
Total	Driving to or from service call	252.0	E		F
	Carrying goods or equipment	840.8	E	2 895.1	C
	Empty		F		F
	Other work purpose		F		F
	Non work purpose	421.7	E		F
	Total	1 766.4	D	4 523.3	C

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Estimates of 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	573.6	D		F	46.8	E		F	627.9	D
	06:00 - 11:59	5 859.8	B	54.1	D	190.7	D	15.5	E	6 120.1	B
	12:00 - 17:59	8 700.1	B	72.3	E	219.1	D	14.6	E	9 006.2	B
	18:00 - 23:59	4 579.5	B		F	134.5	E	8.2	E	4 730.9	B
	Total	19 713.0	A	140.8	D	591.0	D	40.2	E	20 485.0	A
Weekdays	00:00 - 05:59	2 257.7	D		F	360.5	D	8.0	E	2 677.4	C
	06:00 - 11:59	16 604.3	A	511.2	C	1 302.3	B	199.5	B	18 617.3	A
	12:00 - 17:59	22 053.7	A	509.7	C	1 384.0	C	198.3	B	24 145.7	A
	18:00 - 23:59	11 786.6	B	91.7	E	686.2	C	29.9	E	12 594.4	A
	Total	52 702.3	A	1 163.8	C	3 733.0	B	435.7	B	58 034.8	A
Total	00:00 - 05:59		F		F	407.3	D	9.9	E	3 305.3	C
	06:00 - 11:59	22 464.1	B	565.2	D	1 493.0	C	215.0	B	24 737.3	A
	12:00 - 17:59	30 753.8	B	582.0	D	1 603.1	C	212.9	B	33 151.8	A
	18:00 - 23:59	16 366.2	B	100.4	E	820.7	C	38.1	D	17 325.4	B
	Total	72 415.3	A	1 304.5	B	4 324.1	B	475.9	B	78 519.8	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	806.8	E		F		F		F	905.0	D
	06:00 - 11:59	10 128.9	B		F	197.0	D		F	10 540.9	B
	12:00 - 17:59	15 896.0	B		F	227.0	D		F	16 393.4	B
	18:00 - 23:59	8 295.2	C		F	138.2	E		F	8 502.5	C
	Total	35 126.9	B	239.7	E	610.1	D		F	36 341.8	B
Weekdays	00:00 - 05:59		F		F	370.8	D		F		F
	06:00 - 11:59	24 239.0	B	650.0	D	1 359.0	C	3 124.1	C	29 372.0	B
	12:00 - 17:59	34 764.2	B	676.0	D	1 460.3	C	3 219.0	C	40 119.4	B
	18:00 - 23:59	20 420.5	B	135.6	E	723.1	D		F	21 672.8	B
	Total	82 825.0	B	1 526.8	D	3 913.2	C	6 869.6	C	95 134.6	B
Total	00:00 - 05:59		F		F	418.7	D		F		F
	06:00 - 11:59	34 367.8	B	735.3	D	1 556.0	C	3 253.7	C	39 912.9	B
	12:00 - 17:59	50 660.2	B	807.4	D	1 687.3	C	3 358.0	C	56 512.9	B
	18:00 - 23:59	28 715.6	B	151.9	E	861.3	D		F	30 175.3	B
	Total	117 951.9	B	1 766.4	D	4 523.3	C	7 234.8	C	131 476.4	B

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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		F		F		F		F		F
	Female	1 827.5	E		F		F		F	1 832.3	E
	Total		F		F		F		F		F
25 - 55 years	Male	30 935.9	B	1 060.4	D	3 596.3	C	199.0	C	35 791.7	B
	Female	18 853.7	B		F		F	151.6	C	19 072.5	B
	Total	49 789.6	B	1 075.0	D	3 648.9	C	350.6	B	54 864.1	B
55 years and over	Male	13 668.6	C	84.9	E	514.0	E	101.8	D	14 369.2	C
	Female	4 087.9	C		F		F		F	4 111.5	C
	Total	17 756.5	B	85.5	E	514.0	E	124.7	C	18 480.7	B
Total	Male	47 646.3	B	1 284.5	D	4 271.5	C	301.4	C	53 503.6	B
	Female	24 769.0	B		F		F	174.6	C	25 016.2	B
	Total	72 415.3	A	1 304.5	B	4 324.1	B	475.9	B	78 519.8	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		F		F		F		F		F
	Female	2 512.4	E		F		F		F	2 517.4	E
	Total		F		F		F		F		F
25 - 55 years	Male	50 804.1	B	1 470.2	D	3 757.2	C	2 422.3	E	58 453.8	B
	Female	29 426.8	B		F		F	2 452.3	D	31 971.5	B
	Total	80 230.9	B	1 490.8	D	3 829.0	C	4 874.6	C	90 425.3	B
55 years and over	Male	23 595.1	C		F	531.6	E	2 105.4	E	26 346.5	C
	Female	6 139.8	D		F		F		F	6 395.2	C
	Total	29 734.9	C		F	531.6	E	2 360.2	E	32 741.7	B
Total	Male	79 873.0	B	1 740.1	D	4 451.5	C	4 527.7	D	90 592.3	B
	Female	38 078.9	B		F		F	2 707.1	D	40 884.1	B
	Total	117 951.9	B	1 766.4	D	4 523.3	C	7 234.8	C	131 476.4	B

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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	7 293.5	A	49.4	E		F	11.6	E	7 368.6	A
Diesel		F	238.5	D	1 456.6	C	139.9	B	2 149.7	C

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FOR FURTHER READING

Selected Publications from Statistics Canada

Catalogue

- 53-223-XIE **Canadian Vehicle Survey – Annual.** English.
- 53-223-XIF **Canadian Vehicle Survey – Annual.** French.
- 50-002-XIB **Surface and Marine Transport - Service Bulletin.** Bilingual.
- 51-004-XIB **Aviation - Service Bulletin - Monthly.** Bilingual.
- 51-203-XIB **Air Carrier Traffic at Canadian Airports - Annual.** Bilingual.
- 51-204-XIE **Air Passenger Origin and Destination: Domestic Report - Annual.** English.
- 51-204-XIF **Air Passenger Origin and Destination: Domestic Report - Annual.** French.
- 51-206-XIB **Canadian Civil Aviation - Annual.** Bilingual.
- 51-207-XIB **Air Charter Statistics - Annual.** Bilingual.
- 52-001-XIE **Railway Carloadings – Monthly.** English.
- 52-001-XIF **Railway Carloadings – Monthly.** French.
- 52-216-XIB **Rail in Canada - Annual.** Bilingual.
- 53-215-XIB **Passenger Bus and Urban Transit Statistics - Annual.** Bilingual.
- 53-218-XIB **Road Motor Vehicles - Fuel Sales - Annual.** Bilingual.
- 53-222-XIB **Trucking in Canada - Annual.** Bilingual.
- 54-205-XIB **Shipping in Canada - Annual.** Bilingual.
- 66-001-PPB **International Travel, Advance Information (Touriscope) - Monthly.** Bilingual.
- 66-201-XIB **International Travel - Annual.** Bilingual.
- 87-003-XIB **Travel Log - Quarterly.** Bilingual.

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Gord Baldwin, Director
Transportation Division
Statistics Canada
Main Building, Room 1506
Tunney's Pasture
Ottawa, Ontario
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Telephone: (613) 951-0407
Facsimile: (613) 951-0009
Internet: Gord.Baldwin@statcan.ca

John Ross
Chief
Trucking Section
Telephone: (613) 951-1922
Facsimile: (613) 951-0579
Internet: John.Ross@statcan.ca

Doug O'Keefe
Chief
Multimodal Transport Section
Telephone: (613) 951-0291
Facsimile: (613) 951-0009
Internet: Doug.O'Keefe@statcan.ca

Chief
Aviation Statistics Centre
Telephone: (613) 951-8699
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