Vehicle Inventory and Use Survey

EC97TV-KS
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Kansas

The Vehicle Inventory and Use Survey (VIUS) provides data on the physical and operational characteristics of the Nation's truck population. This survey is conducted every 5 years as part of the economic census. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The 1997 VIUS is a probability sample of private and commercial trucks registered (or licensed) in the United States as of July 1, 1997. This survey excludes vehicles owned by Federal, state, or local governments; ambulances; buses; motor homes; farm tractors; unpowered trailer units; and trucks reported to have been sold, junked, or wrecked prior to July 1, 1996. A sample of about 131,000 trucks was surveyed to measure the characteristics of nearly 75 million trucks registered in the United States.

Since many states allow pickups, small vans, and sport utility vehicles to be registered as either cars or trucks, passenger car files were searched and any such vehicles were included in the sampling frame. Some vehicles, such as ''off-highway'' trucks used exclusively on private property, do not have to be registered. These vehicles were not included in the sampling frame and had no chance of being selected.

The annual vehicle registration date varies among the states. A few states use the calendar year for registering all vehicles. Most states require owners to register their vehicles on a staggered basis to permit a distribution of the renewal workload throughout all months. Most states also allow preregistration or permit ''grace periods'' to better distribute the annual registration workload.

Registration practices for commercial vehicles differ greatly among the states. Some states register a tractor-semitrailer combination as a single unit; others register the tractor and the semitrailer separately. For either method of registration, only the power units are included in the registered truck counts.

PURPOSE AND USE OF DATA

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

VIUS data are of considerable value to government, business, industry, academia, and the general public. Data on the number and types of vehicles and how they are used are important in studying the future growth of transportation and are needed in calculating fees and cost allocations among highway users. The data also are important in evaluating safety risks to highway travelers and in assessing the energy efficiency and environmental impact of the Nation's truck fleet. Businesses and others make use of these data in conducting market studies and evaluating market strategies; assessing the utility and cost of certain types of equipment; calculating the longevity of products; determining fuel demands; and linking to, and better utilizing, other data sets representing limited segments of the truck population.

COMPARABILITY WITH PREVIOUS SURVEYS

The results of the 1997 VIUS are comparable to the 1992 and prior Truck Inventory and Use Surveys (TIUS). We changed the survey name to account for areas of future expansion, including the addition of automobiles and buses. The following specific changes were made:

1. **Airbag(s).** Respondents were asked to report if the vehicle had any airbags.
2. **Carrying hazardous materials.** A data line was added to show the total number of trucks carrying any kind of hazardous materials.

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3. **Supplementary sample.** Trucks registered in a state other than the one listed on their mailing address were not included in previous TIUS sampling frames. To include these trucks in the 1997 VIUS, a supplementary sample was selected. These trucks make up approximately 1.5 percent of the total number of trucks registered in the United States. For more details, see the **SAMPLE DESIGN** section.

EXPLANATION OF TERMS

Major use. This item is based on the business or the part of the business in which the vehicle was used. The 15 specific major use categories are self explanatory. Responses in the ''Other'' category were recoded, if possible, to one of the specific categories. The category ''Not in use'' in Table 2 includes vehicles which, though licensed, were not operated or were wrecked or inoperative for more than 6 months during 1997.

Body type. This category describes the type of body that is either permanently attached to the power unit (i.e., straight or single-unit truck) or most frequently used with a truck tractor as a tractor-trailer combination.

Minivans. This category includes minivans that are manufactured on either a truck or passenger car chassis.

Home base. This is the location where the vehicle was usually parked when it was not on the road (a farm, terminal, factory, mine, or other place where the vehicle is stationed).

No home base. This category indicates that a vehicle (usually an over-the-road truck tractor or consumer one-way rental) did not operate from one specific home base location.

Range of operation. This category defines the usual trip length from the vehicle's home base. Vehicles with no home base are defined below based on the vehicle's average trip length.

1. **Local.** Trips of 50 miles or less.
2. **Short range.** Trips of 51 to 100 miles.
3. **Short range-medium.** Trips of 101 to 200 miles.
4. **Long range-medium.** Trips of 201 to 500 miles.
5. **Long range.** Trips of 501 miles or more.
6. **Off-the-road.** Trips with minimal use of public roads (usually associated with construction and farming activities).

Vehicle size. This classification is determined by the average vehicle weight (defined as the empty weight of the vehicle plus the average weight of the load carried) during 1997. The four size classes are:

1. **Light.** The average vehicle weight is 10,000 pounds or less.
2. **Medium.** The average vehicle weight is 10,001 to 19,500 pounds.
3. **Light-heavy.** The average vehicle weight is 19,501 to 26,000 pounds.
4. **Heavy-heavy.** The average vehicle weight is 26,001 pounds or more.

Operator classification. The primary operation of the vehicle, defined as follows:

1. **Business use.** This is a vehicle operated by a private owner or a company that transports its own materials or merchandise.
2. **Personal transportation.** This is a vehicle operated for personal use, such as pleasure driving, travel to work, carpool, etc.
3. **For hire.** Vehicles with this classification are defined by either of the following:
   a. **Motor carrier.** This is a vehicle operated by a company whose primary business is to provide transportation services carrying freight belonging to others.
   b. **Owner/operator.** This is a vehicle operated by an independent trucker who drives the vehicle for himself/herself, or is on lease to a company.
   c. **Daily rental.** This is a vehicle rented or leased out under daily or short-term rental or lease agreements (not a motor carrier).
4. **Mixed.** This is a vehicle being operated with a mixture of business use, personal transportation, and for hire classifications with equal percentages of primary use for at least 2 of the 3 categories. If the percentages were not equal, the answer was recoded to the operator classification with the highest percentage.

Type of carrier. This classification is limited to for hire, interstate operators and is defined as follows:

1. **Contract.** This is a vehicle that offers transportation services to certain shippers under contracts.
2. **Common.** This is a vehicle that offers transportation services to the general public over regular or irregular routes.
3. **Exempt.** This is a vehicle that transports commodities or provides types of services that are exempt from federal regulation (could also operate within exempt commercial zones).

Products carried. This item defines broad classifications of products and special categories of materials carried by trucks.

Hazardous materials. This item identifies those trucks that regularly transport hazardous materials in quantities large enough to require a placard under the Code of Federal Regulations, Title 49, (CFR.177.823) Transportation.

Truck fleet size. This is the number of trucks operated by a truck owner for his/her entire operation. The data shown in the "Truck Fleet Size" section of the tables are based on the number of trucks found in fleets of specified size and not the number of fleets.

SAMPLE DESIGN

The 1997 VIUS is a probability sample of about 131,000 trucks registered in the United States as of July 1, 1997. The total sample size for Kansas is 2,599 truck registrations. This survey consists of an initial and a supplementary sample of truck registrations. A description of each sample follows.

Initial sample. The sampling frame for the initial universe was constructed from files of active truck registrations for the 50 states and the District of Columbia. All registrations on the sampling frame were identified as being active as of July 1, 1997.

The frame was stratified by geography and truck characteristics. The 50 states and the District of Columbia made up the 51 geographic "state" strata for the initial sample. Body type and gross vehicle weight (GVW) determined the following five truck strata: (1) pickups; (2) vans, minivans, and panels; (3) light single-unit trucks (GVW < 26,000 lb); (4) heavy single-unit trucks (GVW ≥ 26,000 lb); and (5) truck-tractors. Therefore, the sampling frame for the initial sample was partitioned into 255 geographic-by-truck strata. Within each of these strata, a simple random sample of truck registrations was selected, resulting in an initial sample of approximately 128,000 truck registrations.

Supplementary sample. Each truck represented on the sampling frame for the initial universe had associated with it a state of registration and a state as part of its mailing address. In the 1997 VIUS initial sampling frame and in previous TIUS sampling frames, a truck registered in a state other than the one listed on its mailing address was excluded. (For example, a truck registered in Florida that had a mailing address in Wisconsin was excluded from the sampling frame.) Therefore, previous TIUS estimates did not include data from these trucks. In order to represent these trucks in the 1997 VIUS estimates, a supplementary sample was selected independently from the initial sample.

The sampling frame for the supplementary universe was also stratified by geography and truck characteristics. The truck characteristics were the same ones used to stratify the frame for the initial sample. However, the geographic strata were defined differently. The 50 states and the District of Columbia were partitioned into four mutually exclusive geographic strata. Each "state" was included in one, and only one, geographic stratum. These geographic strata were used instead of those used for the initial sample because of cost and processing constraints. Within each geographic-by-truck stratum, a simple random sample of truck registrations was selected. Thus, an additional 20 geographic-by-truck strata were used to stratify the sampling frame for the supplementary universe, resulting in a total of 275 geographic-by-truck strata from which to select truck registrations for the entire 1997 VIUS sample.

The size of the supplementary sample for the entire United States was approximately 3,000 truck registrations.

Estimation. An estimate of the number of trucks for any particular state was computed in the following manner. For the initial and supplementary samples, weighted estimates of the number of trucks for the state were computed for each of the five truck strata. The weight for a given truck was the product of two factors: the reciprocal of the truck's probability of selection and a nonresponse adjustment factor. (See the **Nonsampling error** section for a description of the nonresponse adjustment procedure.) The truck stratum estimates from the initial and supplementary samples were summed to form a state-level estimate.

DATA COLLECTION

For each selected truck, a questionnaire was mailed to the registered owner. The registered owner was requested to provide data about the truck identified by the vehicle registration information imprinted on the questionnaire, regardless of whether or not the truck was still in his or her possession. The information provided by each respondent was subjected to extensive computer edits. Questionable responses were reviewed and corrected if necessary.

RELIABILITY OF THE ESTIMATES

An estimate based on a sample survey potentially contains two types of errors: sampling and nonsampling. Sampling error occurs because characteristics differ among sampling units and because only a subset of the entire population is measured in a sample survey. Nonsampling error encompasses all other factors that contribute to the total error of a sample survey estimate. The accuracy of a survey result may be affected by these two types of errors.

Sampling and nonsampling errors are often measured by the quantities, bias and variance. The bias of an estimator of an unknown population value is the difference, averaged over all possible samples of the same size and design, between the estimator and the unknown population value. Any systematic error or inaccuracy that affects the reported data from all sampling units in a similar way will cause the resulting estimates to be biased. Variance is the squared difference, averaged over all possible samples of the same size and design, between an estimator and its average value.

Descriptions of sampling and nonsampling errors for the 1997 VIUS are provided in the following sections.

Sampling error. Because the estimates are based on a sample, the Census Bureau does not expect exact agreement with the results that would be obtained from a complete enumeration of the truck registrations included in the sampling frame. However, because each truck represented on the sampling frame has a known probability of selection into the sample, it is possible to estimate the sampling variability of the survey estimates.

The particular sample used in this survey is one of a large number of samples of the same size that could have been selected using the same design. If all possible samples had been surveyed, under the same conditions, an estimate of an unknown population value could have been obtained from each sample. These samples give rise to a distribution of estimates for the unknown population value. A statistical measure of the variability among these estimates is the standard error, which can be approximated from any one sample. The standard error is defined as the square root of the variance. The coefficient of variation (or relative standard error) of an estimate is the standard error of the estimate divided by the estimate. Note that measures of sampling variability, such as the standard error or coefficient of variation, are estimated from the sample and are also subject to sampling variability. (Technically, we should refer to the estimated standard error or the estimated coefficient of variation of an estimator.) It is important to note that the standard error and coefficient of variation only measure sampling variability. They do not capture any systematic biases in the estimates. Columns C and F in Table 2 show standard errors, while columns A, B, D, and E show coefficients of variation of their corresponding estimates. (All coefficients of variation are expressed as percentages.)

The estimate from a particular sample and the approximate standard error associated with the estimate can be used to construct a confidence interval. A confidence interval is a range about a given estimator that has a specified probability of containing its corresponding, unknown population value. If, for each possible sample, an estimate of an unknown population value and its approximate standard error were obtained, then:

1. For approximately 90 percent of the possible samples, the interval from 1.65 standard errors below to 1.65 standard errors above the estimate would include the unknown population value.

2. For approximately 95 percent of the possible samples, the interval from two standard errors below to two standard errors above the estimate would include the unknown population value.

Nonsampling error. Nonsampling error encompasses all other factors that contribute to the total error of a sample survey estimate and may also occur in censuses. It is often helpful to think of nonsampling error as arising from deficiencies or mistakes in the survey process. In the 1997 VIUS, nonsampling error can be attributed to many sources: (1) inability to obtain information about all trucks in the sample; (2) response errors; (3) differences in the interpretation of the questions; (4) mistakes in coding or keying the data obtained; and (5) other errors of collection, response, coverage, and processing. Although no direct measurement of the potential biases because of nonsampling error has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize its influence.

A potential source of bias in the estimates is nonresponse. Nonresponse is defined as the inability to obtain all the intended measurements or responses about all the selected trucks. Two types of nonresponse are often distinguished. Unit nonresponse is used to describe the inability to obtain any of the substantive measurements about a sampled truck. In most cases of unit nonresponse, the questionnaire was never returned to the Census Bureau after several attempts to elicit a response. For Kansas, approximately 84.9 percent of the questionnaires were returned with substantive data. Item nonresponse occurs either when a question is unanswered or the response to the question fails computer edits. The procedures used to account for unit and item nonresponse are discussed below.

Unit nonresponse is handled in the estimation procedure by reweighting. To apply this method of nonresponse adjustment, we make the assumption that the population of trucks can be divided into a finite number of mutually exclusive adjustment cells so that within each cell, all the population elements possess similar characteristics and share a similar probability of responding, if selected in the sample. The adjustment cells for the 1997 VIUS are identical to the sampling strata. A nonresponse adjustment factor is computed for each adjustment cell and is equal to the ratio of the number of truck registrations selected into the sample to the number of responses received within each adjustment cell. In this sense, reweighting allocates characteristics to the nonrespondents in proportion to the characteristics observed for the respondents within each adjustment cell. The amount of bias introduced by this nonresponse adjustment procedure depends on the extent to which the nonrespondents differ, characteristically, from the respondents in each adjustment cell.

For item nonresponse, a missing value is replaced by a predicted value obtained from an appropriate model for nonresponse. This procedure is called imputation. To impute annual miles and lifetime miles, we divide the sample into a finite number of mutually exclusive cells based on state of registration, truck type, and model year. For each cell, estimates of average annual miles and average lifetime miles are computed based on those trucks in the cell for which annual miles and lifetime miles have been reported. Missing values are then replaced with the appropriate average values. A slightly different imputation procedure is used for length and average weight (empty weight plus cargo weight). For these data items, we replace a missing

value with data from a truck with similar characteristics for which length and average weight have been reported.

For all other data items, no imputation is performed. Instead, separate estimates are published in a "Not reported" category. For example, a respondent who did not indicate the major use of his or her truck would be included in the estimate for the "Not reported" category. Users of the estimates should exercise caution when allocating the estimate for the "Not reported" category to the estimates for the reported categories in the proportions observed for the reported categories. This is because the characteristics of the trucks for which we obtained information may differ significantly from those trucks for which we obtained no information.

SYMBOLS

The following symbols are used in this publication:

N	Not available or not comparable.
S	Withheld because estimate did not meet publication standards.
V	Represents less than 50 vehicles or .05 percent.

AVAILABILITY OF ADDITIONAL DATA

Users of transportation data may be especially interested in the following reports:

Economic Census: Transportation Sector covers establishments that provide passenger and freight transportation to the general public, government, or other businesses. Published data include kind of business, geographic location, total operating revenue, annual and first quarter payroll, and number of employees for pay period including March 12.

Commodity Flow Survey provides data on shipments by domestic establishments classified in mining, manufacturing, wholesale, and selected retail industries. Published, aggregate data feature shipment characteristics, such as value, tons, ton-miles, and average miles per shipment by mode of transportation, commodities shipped, and destinations. Geographic levels will include National, census regions, census divisions, state, and substate areas.

Transportation Annual Survey covers firms with paid employees that provide commercial motor freight transportation and public warehousing services. Data collected include operating revenue and operating revenue by source, total expenses and expenses by type, percentage of motor carrier freight revenue by commodity type, size of shipments handled, length of haul, and vehicle fleet inventory.

All results of the 1997 Economic Census are available on the Census Bureau Internet site— www.census.gov—and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports.

For more information on any Census Bureau product, including a description of electronic and printed reports being issued, see the web site or call Customer Services at 301-457-4100.

Table 1a. **Trucks—Comparative Summary: 1997 and Earlier Years**

[Percent. Data relate to state of registration. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text]

Vehicular and operational characteristics	1997	1992	1987	1982
Total	**100.0**	**100.0**	**100.0**	**100.0**
MAJOR USE				
Agriculture	12.9	18.6	21.3	27.1
Forestry and lumbering	V	.1	.2	.5
Mining and quarrying	.8	1.0	1.8	1.6
Construction	6.1	7.2	6.7	10.5
Manufacturing	1.2	1.7	.9	2.2
Wholesale and retail trade	4.1	4.1	3.9	5.3
For-hire transportation	1.3	1.6	2.2	2.3
Utilities and service	4.5	4.0	3.8	8.4
Personal transportation	65.7	58.0	58.8	41.7
Other and not reported[1]	3.3	3.8	.5	.2
BODY TYPE				
Pickup, panel, minivan, and sport utility[2]	88.4	85.5	82.7	79.1
Platform and cattlerack	4.0	5.1	7.1	10.3
Van[3]	.9	1.2	1.6	2.9
Public utility	.2	.3	.1	.6
Multistop or stepvans	.9	.5	.5	.2
Dump	.9	1.2	.7	1.4
Tank for liquids or dry bulk	.4	.8	1.1	1.0
Other and not reported[1]	4.2	5.5	6.2	4.4
VEHICLE SIZE				
Light	90.4	87.3	85.5	84.2
Medium	2.9	4.2	4.2	4.8
Light-heavy	2.0	3.2	4.6	5.2
Heavy-heavy	4.7	5.3	5.7	5.8
ANNUAL MILES				
Less than 5,000	26.0	27.5	33.0	37.0
5,000 to 9,999	18.2	24.2	26.4	24.6
10,000 to 19,999	36.8	34.5	29.8	24.6
20,000 to 29,999	12.8	9.4	6.3	8.3
ANNUAL MILES—Con.				
30,000 or more	6.2	4.5	4.6	5.5
YEAR MODEL				
1 to 2 years old	12.6	9.6	10.1	8.8
3 to 4 years old	13.4	9.7	14.4	16.1
Over 4 years old	74.0	80.7	75.5	75.1
VEHICLE ACQUISITION				
Purchased new	32.5	33.5	39.3	42.3
Purchased used	63.1	64.0	58.3	54.8
Leased from someone and not reported[1]	4.4	2.5	2.4	2.9
TRUCK TYPE				
Single-unit trucks	97.6	95.7	96.5	95.2
2 axles	96.1	93.9	94.9	93.3
3 axles or more	1.5	1.8	1.6	1.8
Combination	2.4	4.3	3.5	4.8
3 axles	.2	1.0	.6	1.7
4 axles	.5	1.3	.9	.9
5 axles or more	1.8	2.0	1.9	2.2
Trailer not specified	.2	V	V	V
RANGE OF OPERATION				
Local	72.6	71.0	74.9	76.6
Short-range	13.8	11.5	13.1	7.0
Long-range	4.5	6.3	3.7	2.3
Off-the-road and not reported	9.1	11.2	8.2	14.0
FUEL TYPE				
Gasoline	93.6	92.1	93.5	93.9
Diesel, liquefied gas, and other	6.0	7.3	6.4	4.6
Not reported	.3	.7	.1	1.5

[1]New category or modified data line from 1992.
[2]Includes station wagons and vans similar to panel trucks.
[3]Includes insulated, refrigerated and nonrefrigerated vans; drop frame vans; open top vans; and basic enclosed vans.

Table 1b. **Trucks—Comparative Summary for Trucks, Excluding Pickups, Panels, Minivans, Sport Utilities, and Station Wagons: 1997 and 1992**

[Percent. Data relate to state of registration. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text]

Vehicular and operational characteristics	1997	1992
Total	**100.0**	**100.0**
MAJOR USE		
Agriculture	44.8	49.3
Forestry and lumbering	.4	.3
Mining and quarrying	1.5	2.3
Construction	14.5	11.6
Manufacturing	2.4	2.1
Wholesale and retail trade	8.7	6.5
For-hire transportation	10.2	9.8
Utilities and service	8.3	6.2
Personal transportation	3.4	3.4
Other and not reported	5.8	8.4
BODY TYPE		
Platform and cattlerack	34.4	31.7
Van[1]	8.0	5.7
Public utility	1.8	2.2
Multistop or stepvans	7.7	3.4
Dump	7.8	8.1
Tank for liquids or dry bulk	3.8	5.3
Other and not reported	36.5	43.6
VEHICLE SIZE		
Light	20.0	18.9
Medium	22.0	22.6
Light-heavy	17.4	22.2
Heavy-heavy	40.6	36.3
ANNUAL MILES		
Less than 5,000	53.9	58.6
5,000 to 9,999	12.0	11.7
10,000 to 19,999	14.2	10.7
20,000 to 29,999	5.0	4.4
30,000 or more	15.0	14.6
YEAR MODEL		
1 to 2 years old	6.6	5.3
3 to 4 years old	5.3	3.8
Over 4 years old and not reported	88.1	90.9
VEHICLE ACQUISITION		
Purchased new	24.5	27.9
Purchased used	69.2	66.6
Leased from someone and not reported	6.3	5.4
TRUCK TYPE		
Single-unit trucks	79.4	81.6
2 axles	66.1	69.2
3 axles or more	13.3	12.4
Combination	20.6	18.4
3 axles	1.3	1.5
4 axles	4.1	3.5
5 axles or more	15.2	13.5
Trailer not specified	V	V
RANGE OF OPERATION		
Local	60.5	59.3
Short-range	13.9	10.7
Long-range	6.5	8.3
Off-the-road and not reported	19.1	21.7
FUEL TYPE		
Gasoline	60.2	64.1
Diesel, liquefied gas, and other	37.0	32.6
Not reported	2.7	3.3

[1]Includes insulated, refrigerated and nonrefrigerated vans; drop frame vans; open top vans; and basic enclosed vans.

Table 2. Trucks—Comparative Vehicular and Operational Characteristics: 1997 and 1992

[Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text]

Vehicular and operational characteristics	All trucks			Trucks, excluding pickups, panels, vans, sport utilities, and station wagons			Measures of variability (columns A, B, D, E—relative standard error of estimate, columns C, F—standard error of estimate)					
	1997 trucks[1] (thousands)	1992 trucks (thousands)	Percent change	1997 trucks[1] (thousands)	1992 trucks (thousands)	Percent change						
	A	B	C	D	E	F	A	B	C	D	E	F
Total trucks	**1 082.6**	**1 001.7**	**8.1**	**125.2**	**145.3**	**–13.8**	**.6**	**1.1**	**1.3**	**2.7**	**1.6**	**2.7**
MAJOR USE												
Agriculture	139.5	186.1	–25.0	56.1	71.7	–21.8	8.0	6.7	7.8	4.1	3.9	4.4
Forestry and lumbering	S	S	S	S	S	S	S	S	S	S	S	S
Mining and quarrying	S	9.5	S	1.9	3.3	–42.4	S	33.4	S	20.3	19.9	15.9
Construction	65.7	71.7	–8.4	18.1	16.8	7.7	13.3	12.7	16.8	12.2	10.1	17.1
Manufacturing	13.2	17.2	–23.3	3.1	3.0	3.3	30.8	27.2	31.6	19.6	19.8	28.5
Wholesale trade	14.1	10.5	34.3	4.1	5.6	–26.8	29.3	27.3	53.8	19.4	17.5	19.3
Retail trade	30.6	30.8	–.6	6.8	3.9	74.4	20.4	20.7	28.9	15.7	20.7	45.1
For-hire transportation	14.5	15.7	–7.6	12.8	14.2	–9.9	13.0	11.4	15.9	7.0	6.5	8.6
Utilities	12.7	8.0	58.8	2.8	3.3	–15.2	32.2	35.3	76.1	25.6	26.0	31.1
Services	36.3	32.1	13.1	7.6	5.7	33.3	19.2	19.9	31.3	24.9	18.3	41.0
Daily rental	S	5.9	S	S	1.2	S	S	46.3	S	S	38.9	S
One-way rental	S	S	S	S	S	S	S	S	S	S	S	S
Personal transportation	710.7	581.2	22.3	4.2	5.0	–16.0	2.5	3.2	5.0	42.1	19.5	39.1
Other	S	V	S	S	V	S	S	N	S	S	N	S
Not in use	29.9	32.2	–7.1	6.0	10.8	–44.4	20.7	17.9	25.4	14.3	12.6	10.6
Not reported	V	V	N	V	V	N	N	N	N	N	N	N
BODY TYPE												
Pickup	595.5	598.9	–.6	N	N	N	1.0	1.7	2.0	N	N	N
Minivan	123.3	75.4	63.5	N	N	N	9.5	12.2	25.3	N	N	N
Panel or van	64.1	83.2	–23.0	N	N	N	14.6	11.5	14.3	N	N	N
Sport utility	145.7	78.8	84.9	N	N	N	8.4	12.0	27.0	N	N	N
Station wagon	28.8	20.0	44.0	N	N	N	23.0	26.8	50.9	N	N	N
Multistop or stepvan	9.6	4.9	95.9	9.6	4.9	95.9	21.4	20.9	58.8	21.4	20.9	58.8
Platform with added devices	13.0	15.0	–13.3	13.0	15.0	–13.3	10.8	11.1	13.5	10.8	11.1	13.5
Low boy or depressed center	2.8	2.9	–3.4	2.8	2.9	–3.4	18.8	19.3	26.3	18.8	19.3	26.3
Basic platform	24.6	31.1	–20.9	24.6	31.1	–20.9	7.5	7.1	8.2	7.5	7.1	8.2
Livestock truck	2.6	2.1	23.8	2.6	2.1	23.8	23.0	24.6	40.9	23.0	24.6	40.9
Insulated nonrefrigerated van	S	.3	S	S	.3	S	S	29.4	S	S	29.4	S
Insulated refrigerated van	2.7	3.6	–25.0	2.7	3.6	–25.0	13.6	14.6	14.7	13.6	14.6	14.7
Drop-frame van	S	.7	S	S	.7	S	S	36.6	S	S	36.6	S
Open-top van	S	.2	S	S	.2	S	S	36.9	S	S	36.9	S
Basic enclosed van	6.5	7.4	–12.2	6.5	7.4	–12.2	12.1	12.6	15.3	12.1	12.6	15.3
Beverage	S	1.5	S	S	1.5	S	S	36.0	S	S	36.0	S
Public utility	2.3	3.2	–28.1	2.3	3.2	–28.1	28.8	25.9	27.8	28.8	25.9	27.8
Winch or crane	1.9	3.6	–47.2	1.9	3.6	–47.2	27.6	22.7	18.9	27.6	22.7	18.9
Wrecker	S	.9	S	S	.9	S	S	45.3	S	S	45.3	S
Pole or logging	S	S	S	S	S	S	S	S	S	S	S	S
Auto transport	S	S	S	S	S	S	S	S	S	S	S	S
Service truck	2.1	3.8	–44.7	2.1	3.8	–44.7	29.6	24.3	21.4	29.6	24.3	21.4
Yard tractor	.2	S	S	.2	S	S	49.3	S	S	49.3	S	S
Oilfield truck	1.3	1.1	18.2	1.3	1.1	18.2	31.2	30.7	50.3	31.2	30.7	50.3
Grain body	31.2	40.7	–23.3	31.2	40.7	–23.3	6.2	5.9	6.5	6.2	5.9	6.5
Garbage hauler	2.6	1.4	85.7	2.6	1.4	85.7	19.9	35.0	75.7	19.9	35.0	75.7
Dump truck	9.8	11.7	–16.2	9.8	11.7	–16.2	10.5	11.6	13.1	10.5	11.6	13.1
Tank truck (liquids or gases)	4.0	7.1	–43.7	4.0	7.1	–43.7	16.8	13.7	12.3	16.8	13.7	12.3
Tank truck (dry bulk)	S	.6	S	S	.6	S	S	35.4	S	S	35.4	S
Concrete mixer	1.2	.9	33.3	1.2	.9	33.3	17.4	33.8	51.5	17.4	33.8	51.5
Other	S	S	S	S	S	S	S	S	S	S	S	S
Not reported	V	V	N	V	V	N	N	N	N	N	N	N
ANNUAL MILES												
Less than 5,000	281.1	275.0	2.2	67.5	85.2	–20.8	5.9	5.6	8.3	5.5	3.3	5.1
5,000 to 9,999	196.9	242.7	–18.9	15.0	17.0	–11.8	8.0	6.8	8.5	9.7	9.9	12.3
10,000 to 19,999	398.6	345.6	15.3	17.7	15.5	14.2	4.9	5.2	8.3	8.9	10.9	16.1
20,000 to 29,999	138.3	93.8	47.4	6.2	6.4	–3.1	9.9	11.9	22.8	14.5	16.3	21.2
30,000 to 49,999	53.1	27.6	92.4	5.9	7.3	–19.2	16.2	20.5	50.3	13.5	13.6	15.5
50,000 to 74,999	3.7	7.6	–51.3	3.7	4.4	–15.9	15.8	30.1	16.4	15.8	12.5	16.8
75,000 or more	10.8	9.5	13.7	9.2	9.5	–3.2	16.0	5.7	19.4	5.7	5.7	7.8
PRIMARY RANGE OF OPERATION												
Local	785.5	710.8	10.5	75.8	86.1	–12.0	2.3	2.6	3.8	4.3	3.3	4.8
Short-range	105.2	90.7	16.0	11.4	10.9	4.6	11.3	11.8	18.9	11.0	11.9	16.9
Short-range medium	44.6	25.0	78.4	6.0	4.7	27.7	17.6	22.4	50.8	13.2	13.6	24.2
Long-range medium	22.6	29.2	–22.6	3.4	6.0	–43.3	24.3	20.4	24.5	14.1	11.4	10.2
Long-range	26.3	34.0	–22.6	4.7	6.1	–23.0	22.5	18.8	22.7	9.3	8.9	9.9
Off-the-road	72.7	96.6	–24.7	18.9	26.6	–28.9	12.9	10.5	12.5	11.9	7.7	10.1
Not reported	25.7	15.4	66.9	5.1	5.0	2.0	22.3	25.7	56.8	15.3	18.5	24.4

See footnotes at end of table.

Table 2. **Trucks—Comparative Vehicular and Operational Characteristics: 1997 and 1992**—Con.

[Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text]

Vehicular and operational characteristics	All trucks			Trucks, excluding pickups, panels, vans, sport utilities, and station wagons			Measures of variability (columns A, B, D, E—relative standard error of estimate, columns C, F—standard error of estimate)					
	1997 trucks[1] (thousands)	1992 trucks (thousands)	Percent change	1997 trucks[1] (thousands)	1992 trucks (thousands)	Percent change						
	A	B	C	D	E	F	A	B	C	D	E	F
WEEKS OPERATED												
Less than 1	45.1	46.8	–3.6	10.9	18.5	–41.1	16.4	14.1	20.8	11.0	9.4	8.5
1 to 4	60.8	70.4	–13.6	21.8	29.5	–26.1	13.1	11.5	15.1	8.0	7.5	8.1
5 to 8	57.2	50.2	13.9	17.8	15.2	17.1	14.2	14.7	23.3	12.8	10.7	19.5
9 to 12	41.3	37.5	10.1	5.6	9.3	–39.8	18.3	17.6	27.9	16.2	14.0	12.9
13 to 16	23.2	27.3	–15.0	4.4	5.3	–17.0	23.9	21.5	27.2	18.3	18.8	21.8
17 to 20	24.1	29.3	–17.7	3.8	4.3	–11.6	23.8	21.2	26.2	20.3	18.9	24.5
21 to 24	32.3	26.0	24.2	4.3	5.7	–24.6	20.7	21.8	37.3	19.2	17.6	19.7
25 to 28	46.2	37.4	23.5	4.4	4.8	–8.3	17.6	18.9	32.0	18.0	18.8	23.6
29 to 32	19.7	32.7	–39.8	4.5	4.2	7.1	26.6	20.2	20.1	39.2	20.9	48.0
33 to 36	27.4	35.8	–23.5	2.5	3.0	–16.7	23.3	19.7	23.4	23.4	22.4	27.0
37 to 40	32.8	30.0	9.3	3.9	3.5	11.4	20.7	21.3	32.5	16.5	20.2	29.2
41 to 44	25.9	34.2	–24.3	3.4	2.7	25.9	23.0	20.2	23.2	18.0	19.5	33.0
45 to 48	57.9	44.7	29.5	5.1	5.8	–12.1	15.7	17.2	30.1	14.0	15.2	18.1
49 to 52	577.7	495.0	16.7	30.5	31.9	–4.4	3.5	3.9	6.1	8.0	6.4	9.8
Not reported	S	4.6	S	2.4	1.5	60.0	S	48.5	S	25.1	34.5	69.3
BASE OF OPERATION												
Percentage of miles traveled outside base-of-operation state:												
Less than 25 percent	867.0	803.6	7.9	91.8	112.6	–18.5	1.9	2.1	3.0	3.5	2.4	3.5
25 to 49 percent	64.6	52.7	22.6	4.9	4.6	6.5	14.9	15.9	26.7	15.7	16.2	24.3
50 to 74 percent	29.6	19.6	51.0	3.6	4.0	–10.0	21.6	24.9	49.8	16.2	15.8	20.5
75 to 100 percent	30.4	23.1	31.6	5.2	6.0	–13.3	20.9	22.3	40.2	11.5	9.8	13.1
No home base	.9	28.9	–96.9	.9	12.3	–92.7	34.9	17.7	1.3	34.9	11.5	2.8
Not reported	84.5	73.8	14.5	16.9	5.8	191.4	12.1	13.4	20.7	12.7	17.5	62.9
VEHICLE SIZE												
Light	979.1	874.2	12.0	25.0	27.5	–9.1	.7	1.3	1.7	13.4	7.9	14.2
Medium	30.9	42.4	–27.1	27.6	32.8	–15.9	9.9	10.5	10.5	7.2	7.0	8.4
Light-heavy	21.7	32.2	–32.6	21.7	32.2	–32.6	8.3	7.2	7.4	8.3	7.2	7.4
Heavy-heavy	50.8	52.7	–3.6	50.8	52.7	–3.6	3.6	4.1	5.3	3.6	4.1	5.3
AVERAGE WEIGHT (POUNDS)												
Less than 6,001	901.8	773.1	16.6	9.0	5.4	66.7	1.3	1.9	2.7	28.3	18.2	56.2
6,001 to 10,000	77.3	101.2	–23.6	16.0	22.1	–27.6	12.8	10.6	12.7	14.0	9.1	12.1
10,001 to 14,000	15.1	23.7	–36.3	11.8	15.7	–24.8	18.0	16.4	15.5	11.8	11.0	12.1
14,001 to 16,000	6.2	9.3	–33.3	6.2	9.3	–33.3	17.0	14.6	14.9	17.0	14.6	14.9
16,001 to 19,500	9.6	9.4	2.1	9.6	7.8	23.1	13.3	21.1	25.6	13.3	15.5	25.2
19,501 to 26,000	21.7	32.2	–32.6	21.7	32.2	–32.6	8.3	7.2	7.4	8.3	7.2	7.4
26,001 to 33,000	14.1	13.7	2.9	14.1	13.7	2.9	10.7	11.7	16.3	10.7	11.7	16.3
33,001 to 40,000	4.3	7.1	–39.4	4.3	7.1	–39.4	16.5	14.1	13.2	16.5	14.1	13.2
40,001 to 50,000	10.6	10.7	–.9	10.6	10.7	–.9	8.5	10.4	13.3	8.5	10.4	13.3
50,001 to 60,000	7.0	6.3	11.1	7.0	6.3	11.1	8.9	11.6	16.1	8.9	11.6	16.1
60,001 to 80,000	13.7	13.9	–1.4	13.7	13.9	–1.4	4.6	4.6	6.4	4.6	4.6	6.4
80,001 to 100,000	1.2	1.0	20.0	1.2	1.0	20.0	24.2	26.5	41.9	24.2	26.5	41.9
100,001 to 130,000	S	S	S	S	S	S	S	S	S	S	S	S
130,001 or more	V	V	N	V	V	N	N	N	N	N	N	N
Not reported	V	V	N	V	V	N	N	N	N	N	N	N
TOTAL LENGTH (FEET)												
Less than 20.0	991.8	868.9	14.1	37.6	29.9	25.8	.7	1.4	1.8	9.4	7.4	15.1
20.0 to 27.9	49.7	78.2	–36.4	48.3	75.1	–35.7	4.6	4.1	3.9	4.7	3.7	3.8
28.0 to 35.9	14.9	27.3	–45.4	14.9	14.5	2.8	9.3	17.1	10.6	9.3	10.6	14.4
36.0 to 40.9	2.2	2.2	V	2.2	2.2	V	21.3	22.6	31.5	21.3	22.6	31.5
41.0 to 44.9	S	S	S	1.5	1.0	50.0	S	S	S	20.4	31.2	55.4
45.0 or more	20.9	22.6	–7.5	20.7	22.6	–8.4	4.4	4.7	5.9	4.3	4.7	5.8
Not reported	V	V	N	V	V	N	N	N	N	N	N	N
YEAR MODEL												
1998	10.4	N	N	S	N	N	36.1	N	N	S	N	N
1997	67.2	N	N	3.8	N	N	14.3	N	N	18.6	N	N
1996	58.9	N	N	4.0	N	N	15.7	N	N	15.6	N	N
1995	72.8	N	N	3.8	N	N	14.1	N	N	18.2	N	N
1994	72.0	N	N	2.8	N	N	14.3	N	N	20.0	N	N
1993	61.5	S	S	2.9	S	S	15.5	S	S	19.6	S	S
1992	67.3	47.4	42.0	2.3	2.4	–4.2	14.9	17.2	32.3	24.2	21.4	30.4
1991	66.8	46.4	44.0	2.5	4.5	–44.4	14.9	17.0	32.5	23.3	18.5	16.6
1990	50.0	45.1	10.9	3.4	2.9	17.2	17.2	17.5	27.2	19.8	22.2	34.5
1989	54.8	52.4	4.6	3.9	2.6	50.0	16.3	16.4	24.2	18.1	20.0	40.4
1988	48.4	64.2	–24.6	3.6	3.5	2.9	17.5	14.7	17.2	18.8	19.5	27.6
Pre-1988	452.4	743.7	–39.2	91.9	128.6	–28.5	4.2	2.4	3.0	4.0	2.0	3.2
Not reported	V	V	N	V	V	N	N	N	N	N	N	N

See footnotes at end of table.

Table 2. **Trucks—Comparative Vehicular and Operational Characteristics: 1997 and 1992**—Con.

[Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text]

Vehicular and operational characteristics	All trucks			Trucks, excluding pickups, panels, vans, sport utilities, and station wagons			Measures of variability (columns A, B, D, E—relative standard error of estimate, columns C, F—standard error of estimate)					
	1997 trucks[1] (thousands)	1992 trucks (thousands)	Percent change	1997 trucks[1] (thousands)	1992 trucks (thousands)	Percent change						
	A	B	C	D	E	F	A	B	C	D	E	F
VEHICLE ACQUISITION												
Purchased new	351.5	335.5	4.8	30.7	40.6	–24.4	5.4	5.3	7.9	6.3	5.8	6.5
Purchased used	683.6	640.7	6.7	86.6	96.8	–10.5	2.9	2.9	4.4	4.2	2.9	4.6
Leased from someone else	41.6	23.8	74.8	7.0	6.5	7.7	17.6	21.6	48.7	11.5	10.9	17.2
Not reported	S	1.6	S	S	1.4	S	S	34.3	S	S	36.4	S
LEASE CHARACTERISTICS[2 3]												
Leased without driver	7.0	5.5	27.3	7.0	5.5	27.3	13.4	14.6	25.1	13.4	14.6	25.1
Leased with driver other than owner-operator	1.4	1.2	16.7	1.4	1.2	16.7	24.4	24.8	40.2	24.4	24.8	40.2
Leased with owner-operator	3.6	3.5	2.9	3.6	3.5	2.9	16.4	15.3	22.9	16.4	15.3	22.9
Provisions of lease:												
Financing	2.6	1.9	36.8	2.6	1.9	36.8	23.7	26.4	48.5	23.7	26.4	48.5
Full maintenance	1.3	1.5	–13.3	1.3	1.5	–13.3	22.1	21.4	27.2	22.1	21.4	27.2
Maintenance on specific parts	S	.1	S	S	.1	S	S	43.7	S	S	43.7	S
Payment of taxes	1.4	1.5	–6.7	1.4	1.5	–6.7	16.3	15.4	20.9	16.3	15.4	20.9
Obtaining licenses and permits	2.0	2.8	–28.6	2.0	2.8	–28.6	13.3	11.4	12.8	13.3	11.4	12.8
Record keeping for leased trucks	1.2	2.6	–53.8	1.2	2.6	–53.8	17.4	14.4	10.8	17.4	14.4	10.8
Other	S	S	S	S	S	S	S	S	S	S	S	S
PRIMARY OPERATOR CLASSIFICATION												
Not for hire	1 064.0	979.9	8.6	111.6	129.7	–14.0	.7	1.1	1.4	3.1	1.9	3.1
Business use	307.2	359.6	–14.6	105.7	122.5	–13.7	5.3	4.6	6.0	3.0	2.1	3.1
Personal transportation	734.1	599.8	22.4	5.6	7.1	–21.1	2.4	3.0	4.7	32.5	16.0	28.5
Mixed—business use/personal transportation	22.7	20.5	10.7	S	S	S	26.2	27.2	41.8	S	S	S
For hire	14.5	15.9	–8.8	12.8	14.4	–11.1	13.0	11.4	15.7	7.0	6.6	8.6
Motor carrier	9.0	9.3	–3.2	9.0	9.3	–3.2	9.1	7.5	11.4	9.1	7.5	11.4
Owner/operator	3.2	3.4	–5.9	3.2	3.4	–5.9	13.4	17.1	20.6	13.4	17.1	20.6
Independent	1.7	2.2	–22.7	1.7	2.2	–22.7	21.7	24.7	25.4	21.7	24.7	25.4
Leased to a company	1.5	1.2	25.0	1.5	1.2	25.0	15.5	16.3	28.6	15.5	16.3	28.6
Not reported	S	.9	S	S	.9	S	S	39.9	S	S	39.9	S
Daily rental	S	5.9	S	S	1.2	S	S	46.3	S	S	38.9	S
Mixed—not for hire/for hire	S	V	S	S	V	S	S	N	S	S	N	S
For-hire jurisdiction:												
Interstate	6.9	6.8	1.5	6.9	6.8	1.5	7.0	7.4	10.4	7.0	7.4	10.4
Intrastate	2.5	3.0	–16.7	2.5	3.0	–16.7	17.6	17.9	21.3	17.6	17.9	21.3
Local	2.6	1.6	62.5	2.6	1.6	62.5	24.4	28.8	62.4	24.4	28.8	62.4
Not reported	.7	2.1	–66.7	.7	2.1	–66.7	23.7	20.6	10.2	23.7	20.6	10.2
Type of carrier (interstate only):												
Contract	4.2	3.2	31.3	4.2	3.2	31.3	8.8	7.9	15.4	8.8	7.9	15.4
Common	2.0	3.0	–33.3	2.0	3.0	–33.3	16.4	14.5	14.7	16.4	14.5	14.7
Exempt	.6	.5	20.0	.6	.5	20.0	24.4	20.7	41.0	24.4	20.7	41.0
Not reported	S	S	S	S	S	S	S	S	S	S	S	S
Kind of service:												
Truckload	9.3	8.8	5.7	9.3	8.8	5.7	7.2	7.2	10.7	7.2	7.2	10.7
Less than truckload	2.5	2.5	V	2.5	2.5	V	23.3	23.2	33.0	23.3	23.2	33.0
Not reported	1.0	2.2	–54.5	1.0	2.2	–54.5	26.2	19.9	15.7	26.2	19.9	15.7
PRIMARY PRODUCTS CARRIED												
Farm products	56.8	76.5	–25.8	41.9	49.2	–14.8	9.5	9.0	9.7	5.2	5.2	6.2
Live animals	11.7	29.0	–59.7	4.9	8.6	–43.0	29.1	19.7	14.2	17.8	14.2	13.0
Animal feed	15.3	18.0	–15.0	4.9	6.7	–26.9	27.0	23.6	30.4	17.5	15.9	17.3
Mining products	S	S	S	.6	.8	–25.0	S	S	S	24.5	21.2	25.8
Logs and other forest products	S	S	S	S	S	S	S	S	S	S	S	S
Lumber and fabricated wood products	S	S	S	2.1	1.0	110.0	S	S	S	26.2	41.5	101.0
Processed foods	13.2	9.1	45.1	4.9	7.6	–35.5	28.5	20.4	51.0	14.7	13.2	12.9
Textile mill products	S	S	S	S	1.0	S	S	S	S	S	47.5	S
Building materials	12.6	20.3	–37.9	10.7	12.5	–14.4	15.4	18.5	14.9	9.3	11.1	12.4
Household goods	S	S	S	S	S	S	S	S	S	S	S	S
Furniture or hardware	S	S	S	S	S	S	S	S	S	S	S	S
Paper products	1.5	7.7	–80.5	1.5	1.5	V	23.8	40.3	9.1	23.8	24.1	33.9
Chemicals	S	7.6	S	2.2	2.6	–15.4	S	36.7	S	24.6	22.9	28.6
Petroleum	2.6	13.6	–80.9	2.6	5.5	–52.7	22.4	26.7	6.7	22.4	17.9	13.7
Plastics and/or rubber	S	.9	S	S	.9	S	S	47.3	S	S	47.3	S
Primary metal products	S	S	S	1.5	.9	66.7	S	S	S	31.8	30.5	74.7
Fabricated metal products	S	6.7	S	S	S	S	S	47.0	S	S	S	S
Machinery	11.7	7.2	62.5	5.1	4.1	24.4	29.2	31.9	70.5	16.9	17.9	30.6
Transportation equipment	S	6.9	S	S	2.0	S	S	40.2	S	S	30.1	S
Glass products	S	S	S	S	S	S	S	S	S	S	S	S
Miscellaneous products of manufacturing	S	S	S	.3	.2	50.0	S	S	S	34.8	30.8	74.2
Industrial "waste" water	S	S	S	S	S	S	S	S	S	S	S	S
Scrap, refuse, or garbage	6.2	6.9	–10.1	4.5	3.8	18.4	29.6	34.2	40.3	17.0	21.5	32.5
Mixed cargoes	S	13.9	S	2.5	3.0	–16.7	S	29.8	S	24.7	21.5	27.1
Craftsman's equipment	51.5	39.6	30.1	6.1	6.2	–1.6	16.7	18.0	32.0	31.2	18.5	35.5

See footnotes at end of table.

Table 2. **Trucks—Comparative Vehicular and Operational Characteristics: 1997 and 1992**—Con.

[Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text]

Vehicular and operational characteristics	All trucks			Trucks, excluding pickups, panels, vans, sport utilities, and station wagons			Measures of variability (columns A, B, D, E—relative standard error of estimate, columns C, F—standard error of estimate)					
	1997 trucks[1] (thousands)	1992 trucks (thousands)	Percent change	1997 trucks[1] (thousands)	1992 trucks (thousands)	Percent change						
	A	B	C	D	E	F	A	B	C	D	E	F
PRIMARY PRODUCTS CARRIED—Con.												
Recyclable products	S	S	S	S	S	S	S	S	S	S	S	S
Hazardous waste (EPA manifest)	V	S	S	V	S	S	N	S	S	N	S	S
Hazardous waste (non-EPA manifest)	V	V	N	V	V	N	N	N	N	N	N	N
Personal transportation	710.7	581.2	22.3	4.2	5.0	–16.0	2.5	3.2	5.0	42.1	19.5	39.1
Passengers	11.8	37.6	–68.6	S	S	S	35.5	19.9	12.7	S	S	S
No load carried	98.4	66.1	48.9	5.7	6.7	–14.9	11.9	14.2	27.5	17.4	17.3	20.8
Not in use	29.9	32.2	–7.1	6.0	10.8	–44.4	20.7	17.9	25.4	14.3	12.6	10.6
Other	S	4.1	S	2.4	2.6	–7.7	S	40.9	S	26.2	26.5	35.0
Not reported	V	V	N	V	V	N	N	N	N	N	N	N
HAZARDOUS MATERIALS CARRIED[3]												
Carrying hazardous materials[4]	5.3	N	N	5.3	N	N	12.3	N	N	12.3	N	N
Hazmat placard names:												
Explosives 1.1 (formerly explosive A)	.2	S	S	.2	S	S	49.2	S	S	49.2	S	S
Explosives 1.2 (formerly explosive A)	.2	S	S	.2	S	S	44.0	S	S	44.0	S	S
Explosives 1.3 (formerly explosive B)	.2	S	S	.2	S	S	49.2	S	S	49.2	S	S
Explosives 1.4 (formerly dangerous)	S	S	S	S	S	S	S	S	S	S	S	S
Explosives 1.5 (formerly blasting agents)	S	.1	S	S	.1	S	S	43.7	S	S	43.7	S
Explosives 1.6 (formerly dangerous)	S	S	S	S	S	S	S	S	S	S	S	S
Flammable gas	1.0	1.6	–37.5	1.0	1.6	–37.5	33.7	27.8	26.8	33.7	27.8	26.8
Nonflammable gas	.6	.9	–33.3	.6	.9	–33.3	24.4	22.9	23.8	24.4	22.9	23.8
Poisonous gas	S	.3	S	S	.3	S	S	41.3	S	S	41.3	S
Flammable	3.5	3.0	16.7	3.5	3.0	16.7	15.9	21.5	30.8	15.9	21.5	30.8
Combustible	2.3	1.6	43.8	2.3	1.6	43.8	15.0	22.8	39.1	15.0	22.8	39.1
Flammable solid	S	S	S	S	S	S	S	S	S	S	S	S
Spontaneously combustible (formerly flammable solid)	S	.1	S	S	.1	S	S	43.7	S	S	43.7	S
Dangerous when wet (formerly flammable solid W)	.4	.4	V	.4	.4	V	31.0	37.2	48.5	31.0	37.2	48.5
Oxidizer	1.3	.7	85.7	1.3	.7	85.7	17.0	23.8	53.6	17.0	23.8	53.6
Oxygen	S	S	S	S	S	S	S	S	S	S	S	S
Organic peroxide	1.0	.5	100.0	1.0	.5	100.0	19.0	31.3	76.2	19.0	31.3	76.2
Poison (formerly poisons A and B, solids, and liquids)	.5	.7	–28.6	.5	.7	–28.6	28.2	23.2	25.1	28.2	23.2	25.1
Keep away from food	S	.3	S	S	.3	S	S	46.8	S	S	46.8	S
Radioactive	S	S	S	S	S	S	S	S	S	S	S	S
Corrosive	2.0	1.9	5.3	2.0	1.9	5.3	16.6	17.0	24.7	16.6	17.0	24.7
Class 9	S	.4	S	S	.4	S	S	35.5	S	S	35.5	S
No hazardous materials carried	1 049.9	974.7	7.7	107.4	125.7	–14.6	.6	1.1	1.4	3.3	2.1	3.4
Not reported	S	.2	S	S	.2	S	S	34.5	S	S	34.5	S
TRUCK FLEET SIZE												
1	258.4	235.1	9.9	15.4	17.6	–12.5	6.7	6.9	10.6	14.1	9.8	15.0
2 to 5	182.7	224.5	–18.6	49.2	60.0	–18.0	7.6	6.6	8.2	4.6	4.5	5.3
6 to 9	34.0	50.6	–32.8	15.4	18.7	–17.6	17.2	14.0	14.9	13.9	9.4	13.9
10 to 24	26.0	32.8	–20.7	12.8	13.9	–7.9	18.9	16.9	20.1	16.0	10.0	17.3
25 to 99	18.1	20.4	–11.3	9.4	9.5	–1.1	21.2	20.9	26.4	10.6	11.7	15.6
100 or more	28.7	21.0	36.7	11.9	13.2	–9.8	18.6	17.6	35.0	9.8	9.7	12.5
Not reported	534.7	417.3	28.1	11.1	12.5	–11.2	3.7	4.5	7.5	10.3	11.7	13.8
MILES PER GALLON												
Less than 5	14.2	16.6	–14.5	14.2	16.6	–14.5	8.9	8.3	10.4	8.9	8.3	10.4
5 to 6.9	36.9	48.6	–24.1	36.5	46.7	–21.8	5.0	5.8	5.8	5.0	5.1	5.6
7 to 8.9	28.8	49.5	–41.8	23.3	33.0	–29.4	11.8	10.9	9.4	7.8	7.0	7.4
9 to 10.9	106.0	105.3	.7	18.7	20.3	–7.9	10.9	10.5	15.3	12.5	9.4	14.4
11 to 12.9	109.1	128.8	–15.3	7.0	6.0	16.7	11.3	10.0	12.8	27.4	18.3	38.6
13 to 14.9	139.6	153.2	–8.9	4.2	3.2	31.3	9.9	9.2	12.3	42.4	25.0	65.2
15 or more	627.4	481.6	30.3	3.5	6.2	–43.5	3.0	3.9	6.4	22.3	18.1	16.2
15 to 20.9	490.0	378.4	29.5	3.5	6.0	–41.7	4.1	4.9	8.2	22.5	18.4	16.8
21 to 24.9	112.4	81.1	38.6	V	V	N	11.3	13.2	24.1	N	N	N
25 or more	25.1	22.1	13.6	S	S	S	25.2	26.1	41.2	S	S	S
Not reported	20.5	18.2	12.6	17.7	13.4	32.1	10.9	15.0	20.9	8.3	11.3	18.6
EQUIPMENT TYPE[3 5]												
Braking system	135.1	152.7	–11.5	120.2	145.3	–17.3	.8	1.3	1.3	1.5	1.6	1.8
Hydraulic	37.2	49.2	–24.4	37.2	49.2	–24.4	5.8	5.4	6.0	5.8	5.4	6.0
Hydraulic (power)	36.0	46.9	–23.2	36.0	46.9	–23.2	6.0	5.5	6.2	6.0	5.5	6.2
Air	38.5	41.2	–6.6	38.5	41.2	–6.6	3.6	4.2	5.2	3.6	4.2	5.2
Other	1.3	2.0	–35.0	1.3	2.0	–35.0	34.3	31.8	29.8	34.3	31.8	29.8
Not reported	22.0	13.4	64.2	7.2	6.1	18.0	8.1	11.3	22.8	13.6	17.0	25.5
Antilock brakes	404.6	144.1	180.8	9.4	3.9	141.0	4.7	9.4	29.5	11.3	16.0	47.5
Power steering	916.2	769.6	19.0	83.0	87.8	–5.5	1.6	2.2	3.2	4.5	3.2	5.2
Vehicle control aids for handicapped drivers	S	S	S	V	V	N	S	S	S	N	N	N
Air-conditioning	764.4	617.1	23.9	37.8	32.0	18.1	2.2	2.9	4.5	6.4	5.4	9.9
Wheelchair lift	S	S	S	V	V	N	S	S	S	N	N	N

See footnotes at end of table.

Table 2. **Trucks—Comparative Vehicular and Operational Characteristics: 1997 and 1992**—Con.

[Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text]

Vehicular and operational characteristics	All trucks			Trucks, excluding pickups, panels, vans, sport utilities, and station wagons			Measures of variability (columns A, B, D, E—relative standard error of estimate, columns C, F—standard error of estimate)					
	1997 trucks[1] (thousands)	1992 trucks (thousands)	Percent change	1997 trucks[1] (thousands)	1992 trucks (thousands)	Percent change						
	A	B	C	D	E	F	A	B	C	D	E	F
EQUIPMENT TYPE[3 5]—Con.												
Engine retarder	10.3	9.1	13.2	10.3	9.1	13.2	5.7	8.4	11.5	5.7	8.4	11.5
Reflective materials	16.3	16.1	1.2	16.3	16.1	1.2	8.0	9.4	12.5	8.0	9.4	12.5
Electronic vehicle management system	196.0	103.9	88.6	4.9	2.8	75.0	8.0	11.4	26.3	12.1	22.0	43.5
Electronic vehicle identification device (transponder, etc.)	S	S	S	S	S	S	S	S	S	S	S	S
Trip recorders/on board computer system	3.4	3.1	9.7	3.4	3.1	9.7	14.1	18.3	25.3	14.1	18.3	25.3
Navigational systems	S	.4	S	S	.4	S	S	44.1	S	S	44.1	S
Airbag(s)[4]	236.1	N	N	9.2	N	N	6.8	N	N	9.9	N	N
FUEL CONSERVATION EQUIPMENT[3 5]												
Aerodynamic features	10.3	9.6	7.3	10.3	9.6	7.3	7.7	9.3	12.9	7.7	9.3	12.9
Axle or drive ratio	19.6	26.9	–27.1	19.6	26.9	–27.1	7.2	7.0	7.3	7.2	7.0	7.3
Fuel economy engine	18.8	19.4	–3.1	18.8	19.4	–3.1	5.9	7.0	8.9	5.9	7.0	8.9
Radial tires	835.3	729.4	14.5	62.1	63.6	–2.4	2.0	2.4	3.6	4.4	4.1	5.9
Road speed governors	22.6	25.6	–11.7	22.6	25.6	–11.7	6.3	7.2	8.5	6.3	7.2	8.5
Variable fan drives	16.8	17.2	–2.3	16.8	17.2	–2.3	6.1	7.3	9.3	6.1	7.3	9.3
Other fuel conservation devices	5.4	4.9	10.2	5.4	4.9	10.2	12.3	15.3	21.4	12.3	15.3	21.4
MAINTENANCE[3]												
General maintenance performed by—												
Owner	594.6	634.5	–6.3	62.3	86.2	–27.7	3.3	3.0	4.2	4.6	3.3	4.1
Company's maintenance facilities	62.3	85.5	–27.1	34.4	36.5	–5.8	11.2	10.2	11.1	7.2	5.8	8.7
Dealership's service department	243.7	119.1	104.6	10.1	8.8	14.8	6.9	10.2	25.2	11.3	12.6	19.4
Leasing company	S	S	S	1.1	1.3	–15.4	S	S	S	30.7	21.8	31.8
Independent garage	312.1	264.6	18.0	25.3	24.1	5.0	5.9	6.3	10.2	9.6	8.2	13.2
Component distributorship	S	10.5	S	1.8	1.1	63.6	S	36.4	S	20.6	33.5	65.0
No one	16.6	18.1	–8.3	3.1	2.4	29.2	28.4	27.3	36.1	22.1	28.6	46.6
Other	13.6	15.1	–9.9	S	.9	S	34.3	30.9	41.6	S	22.9	S
Not reported	41.7	29.9	39.5	7.1	6.5	9.2	17.6	19.7	36.9	13.2	16.7	23.3
Major overhauls performed by—												
Owner	119.0	149.2	–20.2	14.2	18.2	–22.0	10.4	8.9	10.9	15.1	9.6	14.0
Company's maintenance facilities	26.8	30.0	–10.7	14.9	17.3	–13.9	18.1	15.5	21.3	14.0	9.0	14.4
Dealership's service department	112.2	82.1	36.7	13.5	14.8	–8.8	10.6	12.1	22.0	8.2	9.4	11.3
Leasing company	S	S	S	S	.8	S	S	S	S	S	33.7	S
Independent garage	138.8	173.2	–19.9	22.4	26.8	–16.4	9.4	8.1	10.0	7.7	7.5	9.0
Component distributorship	20.5	25.6	–19.9	3.9	6.7	–41.8	25.5	21.3	26.6	13.6	14.9	11.8
No one	72.7	81.0	–10.2	7.2	8.9	–19.1	13.9	12.6	16.8	14.0	14.2	16.1
Other	S	7.1	S	S	.8	S	S	44.2	S	S	34.4	S
Not reported	614.8	490.1	25.4	54.9	60.2	–8.8	3.3	3.9	6.4	5.1	4.5	6.2
ENGINE TYPE AND SIZE												
Engine	1 082.6	1 001.7	8.1	125.2	145.3	–13.8	.6	1.1	1.3	2.7	1.6	2.7
Gasoline	1 013.3	922.2	9.9	75.4	93.1	–19.0	.8	1.3	1.7	4.8	2.9	4.5
Diesel	61.2	64.8	–5.6	45.7	45.8	–.2	8.5	8.8	11.6	3.6	4.3	5.6
Liquefied gas or other	S	7.9	S	S	1.6	S	S	40.0	S	S	32.8	S
Not reported	3.8	6.8	–44.1	3.4	4.8	–29.2	19.8	27.3	18.7	21.6	20.0	21.0
Cylinders[6]	1 080.7	1 001.7	7.9	125.2	145.3	–13.8	.6	1.1	1.4	2.7	1.6	2.7
4	123.6	128.9	–4.1	S	.8	S	10.7	10.2	14.2	S	47.3	S
6	410.1	253.6	61.7	31.5	24.8	27.0	4.5	6.3	12.5	4.6	6.0	9.6
8	476.9	482.6	–1.2	42.7	40.1	6.5	4.1	4.0	5.6	8.5	6.2	11.2
Other	V	V	N	V	V	N	N	N	N	N	N	N
Not reported	70.1	136.5	–48.6	50.0	79.6	–37.2	8.4	6.8	5.5	4.4	3.5	3.5
Cubic inch displacement[7]	1 078.8	994.9	8.4	121.8	140.6	–13.4	.6	1.1	1.4	2.8	1.7	2.9
Gasoline engines	1 013.3	922.2	9.9	75.4	93.1	–19.0	.8	1.3	1.7	4.8	2.9	4.5
Less than 200	223.0	201.0	10.9	S	V	S	7.6	7.7	12.0	S	N	S
200 to 299	226.7	106.4	113.1	S	.8	S	7.0	11.2	28.1	S	50.0	S
300 to 349	186.0	165.1	12.7	5.2	1.4	271.4	8.3	8.8	13.7	35.4	30.3	173.0
350 to 399	218.4	247.8	–11.9	12.7	14.6	–13.0	7.5	6.7	8.9	17.2	11.8	18.2
400 or more	60.5	57.2	5.8	8.1	7.5	8.0	15.1	14.9	22.5	24.7	16.8	32.1
Not reported	98.7	144.7	–31.8	47.7	68.8	–30.7	9.1	7.3	8.0	4.7	4.1	4.3
Diesel engines	61.2	64.8	–5.6	45.7	45.8	–.2	8.5	8.8	11.6	3.6	4.3	5.6
Less than 400	11.4	12.5	–8.8	4.4	3.2	37.5	30.0	31.1	39.5	19.3	25.6	43.9
400 to 599	18.9	16.5	14.5	10.5	6.9	52.2	20.6	24.0	36.3	12.2	16.1	30.6
600 to 799	6.9	4.6	50.0	6.9	4.6	50.0	7.9	13.5	23.4	7.9	13.5	23.4
800 or more	12.4	11.7	6.0	12.4	11.7	6.0	4.2	4.6	6.7	4.2	4.6	6.7
Not reported	11.5	19.5	–41.0	11.5	19.5	–41.0	7.0	7.2	5.9	7.0	7.2	5.9
Other engines	S	7.9	S	S	1.6	S	S	40.0	S	S	32.8	S
Less than 400	S	S	S	V	S	S	S	S	S	N	S	S
400 or more	S	S	S	S	S	S	S	S	S	S	S	S
Not reported	S	S	S	S	.8	S	S	S	S	S	43.0	S
REFUELING LOCATION												
Central company-owned fueling facility	27.0	35.8	–24.6	27.0	35.8	–24.6	6.6	6.2	6.8	6.6	6.2	6.8
Single contract fueling facility located off-site	3.5	4.0	–12.5	3.5	4.0	–12.5	18.5	19.1	23.1	18.5	19.1	23.1
Public fueling stations	70.6	80.4	–12.2	70.6	80.4	–12.2	3.3	3.5	4.2	3.3	3.5	4.2
Other	8.1	14.3	–43.4	8.1	14.3	–43.4	13.8	11.3	10.0	13.8	11.3	10.0
Not reported	26.0	18.3	42.1	11.1	10.9	1.8	7.3	9.7	17.2	11.1	12.9	17.4

See footnotes at end of table.

Table 2. **Trucks—Comparative Vehicular and Operational Characteristics: 1997 and 1992**—Con.

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	1997 trucks[1] (thousands)	1992 trucks (thousands)	Percent change	1997 trucks[1] (thousands)	1992 trucks (thousands)	Percent change						
	A	B	C	D	E	F	A	B	C	D	E	F
TRUCK TYPE AND AXLE ARRANGEMENT												
Single-unit trucks	1 056.6	959.0	10.2	99.4	118.5	–16.1	.6	1.2	1.5	3.5	2.1	3.4
2 axles	1 039.9	941.0	10.5	82.7	100.5	–17.7	.6	1.3	1.6	4.3	2.5	4.1
3 axles	15.2	17.3	–12.1	15.2	17.3	–12.1	7.5	8.4	9.9	7.5	8.4	9.9
4 axles or more	1.5	.7	114.3	1.5	.7	114.3	20.4	38.1	91.0	20.4	38.1	91.0
Combinations	26.0	42.7	–39.1	25.8	26.8	–3.7	4.4	11.9	7.7	4.4	4.7	6.2
Single-unit truck with trailer	2.4	2.3	4.3	2.2	2.3	–4.3	25.5	27.1	38.8	26.3	27.1	35.9
4 axles	S	1.4	S	S	1.4	S	S	39.4	S	S	39.4	S
5 axles or more	.8	.9	–11.1	.8	.9	–11.1	30.8	33.3	42.7	30.8	33.3	42.7
Single-unit truck with utility trailer	1.8	17.7	–89.8	1.8	1.9	–5.3	31.4	27.9	4.2	31.4	33.9	43.5
3 axles	S	8.5	S	S	S	S	S	41.1	S	S	S	S
4 axles	S	8.8	S	S	1.0	S	S	39.8	S	S	46.5	S
5 axles or more	S	S	S	S	S	S	S	S	S	S	S	S
Truck-tractor with single trailer	21.6	22.1	–2.3	21.6	22.1	–2.3	3.9	4.2	5.6	3.9	4.2	5.6
3 axles	1.4	1.7	–17.6	1.4	1.7	–17.6	28.8	26.8	32.1	28.8	26.8	32.1
4 axles	2.4	2.7	–11.1	2.4	2.7	–11.1	18.3	16.8	22.3	18.3	16.8	22.3
5 axles or more	17.7	17.8	–.6	17.7	17.8	–.6	3.8	4.2	5.7	3.8	4.2	5.7
Truck-tractor with double trailers	S	.6	S	S	.6	S	S	19.8	S	S	19.8	S
5 axles	.2	.4	–50.0	.2	.4	–50.0	44.1	22.9	24.8	44.1	22.9	24.8
6 axles	S	.1	S	S	.1	S	S	48.8	S	S	48.8	S
7 axles or more	V	S	S	V	S	S	N	S	S	N	S	S
Truck-tractor with triple trailers	V	V	N	V	V	N	N	N	N	N	N	N
7 axles	V	V	N	V	V	N	N	N	N	N	N	N
8 axles or more	V	V	N	V	V	N	N	N	N	N	N	N
Trailer not specified	S	V	S	V	V	N	S	N	S	N	N	N
Powered axles	1 082.6	1 001.7	8.1	125.2	145.3	–13.8	.6	1.1	1.3	2.7	1.6	2.7
1	776.8	777.3	–.1	92.0	112.4	–18.1	2.3	2.2	3.2	3.4	2.2	3.3
2	305.3	224.1	36.2	32.8	32.7	.3	5.7	6.7	12.0	6.1	4.2	7.4
3 or more	S	S	S	S	S	S	S	S	S	S	S	S
Not reported	V	V	N	V	V	N	N	N	N	N	N	N
CAB TYPE[8]												
Cab forward of engine	2.7	2.5	8.0	2.7	2.5	8.0	25.0	27.7	40.2	25.0	27.7	40.2
Cab over engine	10.7	12.7	–15.7	10.7	12.7	–15.7	10.2	9.3	11.6	10.2	9.3	11.6
Conventional cab	96.6	123.6	–21.8	96.6	123.6	–21.8	2.3	2.1	2.4	2.3	2.1	2.4
Cab beside engine	S	1.3	S	S	1.3	S	S	41.4	S	S	41.4	S
Other	S	S	S	S	S	S	S	S	S	S	S	S
Not reported	21.2	11.9	78.2	6.3	4.6	37.0	8.3	12.3	26.4	14.3	20.7	34.6
PICKUPS, PANELS, VANS, SPORT UTILITIES, AND STATION WAGONS												
Total	957.4	856.3	11.8	N	N	N	.7	1.3	1.7	N	N	N
Pickups	595.5	598.9	–.6	N	N	N	1.0	1.7	2.0	N	N	N
Minivans	123.3	75.4	63.5	N	N	N	9.5	12.2	25.3	N	N	N
Panels or vans	64.1	83.2	–23.0	N	N	N	14.6	11.5	14.3	N	N	N
Sport utilities	145.7	78.8	84.9	N	N	N	8.4	12.0	27.0	N	N	N
Station wagons	28.8	20.0	44.0	N	N	N	23.0	26.8	50.9	N	N	N
Driving wheels	957.4	856.3	11.8	N	N	N	.7	1.3	1.7	N	N	N
4-wheel drive	272.5	191.4	42.4	N	N	N	6.4	7.9	14.4	N	N	N
2-wheel drive	684.9	664.9	3.0	N	N	N	2.6	2.6	3.8	N	N	N
Front-wheel drive	154.9	119.4	29.7	N	N	N	8.9	10.4	17.7	N	N	N
Not reported	V	V	N	N	N	N	N	N	N	N	N	N

[1]Includes trucks registered in this state with a mailing address of another state. These trucks were excluded from the 1992 survey.
[2]Lease characteristics include both "leased from" and "leased to" vehicles. Lease provisions apply to a period of 1 year or more.
[3]Detail does not add to total because items were not applicable or multiple responses were possible.
[4]New or modified data line from 1992.
[5]Pickups, panels, vans, minivans, and sport utilities were not requested to report the information shown in the Equipment Type section, except for power steering, antilock brakes, wheelchair lift, vehicle control aids for handicapped drivers, electronic vehicle management system, air-conditioning, and airbag(s). In the Fuel Conservation Equipment section, they reported only radial tires.
[6]Data were derived from administrative records. "Not reported" indicates those trucks for which the cylinders are unknown.
[7]Data were derived from administrative records. "Not reported" indicates those trucks for which the cubic inch displacement is unknown.
[8]Pickups, panels, vans, minivans, and sport utilities are not included.