TRUCK INVENTORY AND USE SURVEY

1987 Census of Transportation

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Arizona

ECONOMIC CENSUSES CHART OUR NATION'S GROWTH

Since questions on manufacturing were first included in the 1810 Decennial Census, censuses have helped us measure our Nation's economic activities. As the economy has grown from agrarian to one increasingly based on services, the scope of what are now called the economic censuses has been expanded to include retail and wholesale trade, service and construction industries, mining, and transportation, as well as manufacturing.

The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks. New for 1987 will be publications reporting on business establishments engaged in several transportation industries, paralleling the data on establishments in other sectors. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

USES OF THE ECONOMIC CENSUSES

The economic censuses are the major source for facts about the structure and functioning of the Nation's economy and provide essential information for government, business, industry, and the general public. These data provide an important part of the framework for such composite measures as the gross national product, input-output measures, indexes of industrial production, and indexes measuring productivity and price levels. Information from the censuses is used to establish sampling frames and as benchmarks for current surveys of business activity, which are essential for measuring short-term economic conditions.

AUTHORITY AND SCOPE OF THE ECONOMIC CENSUSES

The economic censuses are required by law (under Title 13 of the United States Code, sections 131, 191, and 224), to be conducted at 5-year intervals for the years ending in 2 and 7. The 1987 Economic Censuses covered manufacturing, mining, construction industries, retail trade, wholesale trade, service industries, and selected transportation activities. Special programs also cover minority-owned and women-owned businesses. The next censuses are scheduled to be taken in 1993 for the year 1992.

AVAILABILITY OF THE DATA

The results of each of the economic censuses are available in printed reports, for sale by the U.S. Government Printing Office. Electronic data products and order forms are available on request from Customer Services, Bureau of the Census, Washington, DC 20233.

TRUCK INVENTORY AND USE SURVEY, 1987 CENSUS OF TRANSPORTATION

The Truck Inventory and Use Survey (TIUS) provides data on the physical and operational characteristics of the Nation's truck population. It is based on a probability sample of private and commercial trucks registered (or licensed) in each State during 1987.

The following types of vehicles were excluded from this survey prior to sampling: those owned by Federal, State, and local governments; ambulances; buses; and motor homes. A small number of the vehicles sampled were determined to be "out-of-scope" of the survey. These cases include: farm tractors, unpowered trailer units, and trucks reported to have been sold, junked, or wrecked prior to the registration year.

Many States allow pickups, small vans, and utility-type vehicles to be registered as cars or trucks. Therefore, the passenger car files were searched and any such trucks were included in the universe of trucks from which the sample was selected. Some vehicles such as "off-highway"

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trucks used exclusively on private property do not have to be registered. Therefore, they were not included in the universe and had no chance of being selected.

USES OF THE TRUCK INVENTORY AND USE SURVEY

TIUS information is of considerable value to State and Federal transportation agencies in the planning of such things as highway cost allocations, improvements in road conditions, energy consumption, and emergency preparedness. The private sector also needs these data to plan for future vehicle designs and improvements, market studies, and more efficient vehicle usage.

TRUCK CHARACTERISTICS

The estimated number of trucks that were within the scope of the TIUS and registered in the State as of July 1, 1987, was 758.6 thousand. These trucks were estimated to have been driven a total of 8,904.6 million miles during 1987, an increase of 44.6 percent from 1982 (±11.5).[1] The average annual miles traveled per truck was estimated at 11.7 thousand.

The Federal Highway Administration (FHWA) estimate of the number of private and commercial trucks registered in the State as of December 31, 1987, was 686.6 thousand. This estimate is based on a calendar year summary report from the State. It reflects differences in truck definitions used by the State for vehicle registration from those used in the TIUS.

COMPARABILITY WITH PREVIOUS SURVEYS

Although the basic purpose and scope of the previous Truck Inventory and Use Surveys were essentially identical to this one, some new items were introduced in 1987, as well as some changes that may affect specific items in this report.

New items introduced in 1987:

1. **Width of trailer**—Respondents were asked to report the width of the trailer most often attached to the vehicle.
2. **Piggyback or container**—Respondents who received the TC-9502 form and who reported that they operated a truck tractor (power unit) pulling trailer(s) were asked to report the percent of annual mileage they hauled—
   a. Railroad, ocean-going, or similar containers, and
   b. Piggyback trailers.
3. **Accidents**—Respondents were asked if the vehicle was involved in an accident during 1987 and if the accident involved a fatality, bodily injury, or property damage of $4,200 or more.

1987 changes affecting specific items:

1. **Base of operation**—Respondents were asked to report the home base of the vehicle on "July 1, 1987," instead of "for the last 12 months."
2. **Percentage of hazardous materials carried**—Because over 50 percent of the trucks carrying hazardous materials carried them less than 25 percent of their annual miles in 1982, the category "Below 25%" was broken down into two categories: "Below 10%" and "10-24%." The list of hazardous materials carried was expanded.
3. **Body type**—"Mini-vans" was made into a separate category instead of being included in the "Van" category.
4. **Major use**—"One-way rental" was made into a separate category instead of being included in the "Daily Rental" category.
5. **Products carried**—Four new categories were added to the list of products carried. They are: (1) glass products, (2) miscellaneous products of manufacturing, (3) industrial water, and (4) hazardous waste.
6. **Number of cylinders**—This item was deleted from the questionnaire, but the data were derived from an analysis of the vehicle identification numbers (VIN) and are included in the tables. "Not reported" indicates those trucks for which the cylinders are unknown.
7. **Transmission type**—This question was deleted from the questionnaire and data will not be made available for this item.
8. **Annual miles**—Respondents were asked how many miles the vehicle was driven in 1987. For those vehicles sold during 1987, a full year's annual miles were estimated. In previous surveys, owners were asked to report their annual miles for the past 12 months, and if driven less than 12 months, to estimate the mileage for a full year.

EXPLANATION OF TERMS

Major use—This is based on the business or the part of the business in which the vehicle was used. The 15 specific major use categories conform to the generally accepted meaning of the terms.

Responses in the "Other" category were recoded to one of the specific categories if possible.

[1] All comparisons are accompanied by a 90-percent confidence interval, so that a statement such as "an increase of 5.0 percent (±.5)" indicates a 90-percent confidence interval from 4.5 to 5.5. If the interval contains zero, it is uncertain whether there is an increase or decrease.

The category "Not in Use" in table 2 includes vehicles which, though licensed, were not used or were wrecked for more than 90 days.

Body type—This category includes 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.

Range of Operation—The area in which the vehicle usually operates is classified as one of the following:

1. **Local**—Less than a 50-mile radius of the home base (the farm, factory, mine, or other place where the vehicle is stationed).
2. **Short range**—Within a 50 to 200-mile radius from the home base.
3. **Long range**—More than 200 miles one way to the most distant stop from the home base.
4. **Off-the-road**—Minimal use of public roads (usually associated with construction and farming activities).

Vehicle size—This size classification is based on the average vehicle weight (empty weight of the vehicle plus the average weight of the load carried) at which the vehicle operated during the past year. The four size classes are:

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

Operator classification—This item consists of not for hire, for hire, daily rental, and mixed.

1. **Not for hire**—Includes a private owner or a company which transports its own materials or merchandise or uses the vehicle for personal transportation.
2. **For hire**—Includes the following:
   a. **Motor carrier**—Those vehicles operated by a company whose primary business is to provide transportation services carrying freight belonging to others.
   b. **Owner/Operator**—Vehicles operated by an independent trucker who drives the vehicle for himself or on lease to a company.
3. **Daily rental**—Vehicles rented or leased out under daily or short term rental or lease agreements (not motor carrier).
4. **Mixed**—A mixture of the operator classifications above with equal percentages of use for at least two of the three categories. If the percentages were not equal, the answer was recoded to the operator classification with the highest percentage.
5. **Type of carrier**—These categories are limited to for hire, interstate operators:
   a. **Contract**—Offers transportation services to certain shippers under contracts.
   b. **Common**—Offers transportation services to the general public over regular or irregular routes.
   c. **Exempt**—Transports commodities or provides types of services that are exempt from federal regulation. Could also operate within exempt commercial zones.

Products carried—This item includes broad classifications of agricultural, manufacturing, and mineral products, as well as special categories of materials carried by trucks. Responses to the "Other" category were recoded to one of the 25 specific categories if possible.

Hazardous materials—This category was designed to identify those trucks which regularly transport hazardous materials in quantities large enough to require a placard under the Code of Federal Regulations, Title 49, Transportation.

Truck fleet size—The size of the truck fleet is based on the number of trucks operated by a truck owner from a single "base of operation." The fleet located at the "base of operation" usually is smaller than the total fleet that an owner has if he operates from more than one base. 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. (If this item on the survey form was unanswered, the vehicle was assumed to be in a fleet of one, classified in accordance with the reported vehicle type.)

SAMPLE DESIGN

A probability sample of 2,740 trucks was selected for the State. These trucks were selected to represent the universe of trucks registered in the State as of July 1, 1987. The universe excluded those trucks that were identified, from the registration information, as outside of the scope of TIUS.

The trucks were selected using a stratified, random sample design. The universe, or population, of trucks within the State was divided into five strata: pickup, van, single-unit light, single-unit heavy, and truck tractor. The pickup stratum consisted of all pickup trucks. The van stratum consisted of panel trucks, vans (including minivans), utility-type vehicles (including jeeps), and station wagons on truck chassis. The single-unit light stratum

consisted of all single-unit trucks (excluding those in the pickup and van strata) with a gross vehicle weight (GVW) of 26,000 pounds or less. The single-unit heavy stratum consisted of the remaining single-unit trucks. The truck tractor stratum consisted of only truck tractors. Within each of these strata, a predetermined number of trucks were selected for the sample. All trucks were selected at random with equal probabilities of selection within a stratum.

SURVEY METHOD

For each selected truck, a report form was mailed to the owner identified in the State's registration records as of July 1, 1987. The owner was asked to respond only for the truck identified by the vehicle registration information imprinted on the form, regardless of whether or not he still owned the vehicle. The information received on the returned questionnaires was processed through an extensive computer edit. Reports which contained questionable responses were reviewed and corrected if necessary. In each stratum, estimates of the number of trucks for each characteristic were developed by weighting up the observations from the respondents to represent all trucks in the stratum within the scope of the TIUS. The stratum estimates were then summed across strata to form the estimates published for the State. Truck miles were estimated in a similar way. For each line in table 2, truck miles is an estimate of the miles traveled during 1987 by all trucks having the specified characteristic. Estimates of average miles per truck were derived from the estimates of number of trucks and truck miles.

RELIABILITY OF THE ESTIMATES

The accuracy of the survey results is determined by the joint effects of sampling variability and nonsampling errors. These sources of error are discussed in the following paragraphs.

Sampling variability—The particular sample drawn in the State is one of a large number of all possible samples of the same size that could have been selected using the same design. Estimates derived from these different samples would differ from each other and from the unknown total that would be obtained if all trucks in the State were surveyed (the universe value). Ignoring the effects of nonsampling error, the average of these estimates would equal the universe value. The standard error of the estimate is a measure of the variability among the estimates from all possible samples of the same size and design. It measures how precisely we can expect to estimate the unknown universe value. The relative standard error (RSE), expressed as a percent, is the standard error of the estimate times 100 divided by the value being estimated. Note that the RSE's, given in table 2, are derived from the sample and are themselves subject to sampling variability.

An estimate and its standard error, developed from a particular sample, can be used to construct an interval estimate called a confidence interval. (The standard error referred to here is itself an estimate developed from the sample.) Associated with each interval is a percent of confidence (for example, 90 percent) which should be interpreted as follows. For each possible sample, assume that an estimate and its standard error were obtained. Then, for about 90 percent of all the samples, the interval from 1.65 standard errors below to 1.65 standard errors above the estimate would include the unknown value being estimated. The following is an example of a confidence interval calculation: Assume the number of basic platform trucks given in table 2 is 20.5 thousand with an RSE of 10.2 percent. Then the standard error of the estimate is 20.5 x .102 = 2.09 thousand trucks. Now, the 90 percent confidence interval (the estimate plus or minus 1.65 standard errors) is 20.5 plus or minus 3.4, or 17.1 to 23.9 thousand trucks. In table 2, some data cells have RSE's that are large, and the resulting confidence intervals could be quite wide. The user should use such estimates with caution.

Nonsampling errors—Nonsampling errors cover all sources of errors in the estimates that cannot be attributed to sampling variability. This includes errors in the reporting, collecting, and processing of data as well as the inability to obtain responses from some sampled units. Nonsampling errors lead to biases in the estimates. Bias exists if an estimate, averaged over all possible samples, does not equal the true value being estimated.

A major source of possible bias is nonresponse. There are two types of nonresponse. "Total nonresponse" occurs when no response to the questionnaire was received. In most cases, the form was never returned to the Census Bureau, after several attempts to elicit a response. For the State, approximately 76.8 percent of the questionnaires were returned with some response. "Item nonresponse" applies to an individual item or question which was unanswered, although some response to the questionnaire was received. Several follow-ups, by mail and telephone, were done to reduce both types of nonresponse. The details to account for total nonresponse and item nonresponse are given below.

For most sections in table 2, total nonresponse is handled, within the estimation procedure, by allocating characteristics to the total nonrespondents in proportion to the characteristics observed for the respondents. The amount of bias introduced in this way depends on the extent that the nonrespondents differ, characteristically, from the respondents.

For most sections in the table, item nonresponse is included as a separate line. For example, respondents who did not indicate the major uses of their trucks are included in the "not reported" category. This line shows the part of the total estimate (for that table section) which is missing from the estimates by major use. Users should exercise caution in allocating the not reported figure to the major uses, since the characteristics of item nonrespondents

may differ significantly from those of the respondents. For some questions, a response was generated if it could be derived from other data. For example, engine characteristics and body characteristics were frequently determined through analysis of the vehicle identification number and charts based on manufacturers' specifications. Missing annual miles data (excluding missing data due to total nonresponse) were imputed for each individual truck based on information available about the truck's lifetime miles, age, vehicle type, number of axles, engine type, area of operation, and major use.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

(NA)	Not available.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate, associated standard error, or a consistency review.
(Z)	Represents less than 50 trucks, 50,000 miles, 50 miles per truck, or .05 percent, as appropriate for the data column.
RSE	Relative standard error.

Table 1. Trucks—Comparative Summary: 1987 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	1987	1982	1977	1972
Total	**100.0**	**100.0**	**100.0**	**100.0**
MAJOR USE				
Agriculture	1.7	2.8	9.4	7.6
Forestry and lumbering	.2	.1	.1	(Z)
Mining and quarrying	.4	.6	.7	.5
Construction	8.4	8.5	5.1	8.1
Manufacturing	.8	1.6	.6	.9
Wholesale and retail trade	5.9	6.7	5.3	8.2
For-hire transportation	.9	.6	1.3	1.5
Utilities and service	3.6	4.2	9.5	6.3
Personal transportation	77.2	73.2	66.6	64.9
Other	.8	1.7	1.3	2.1
BODY TYPE				
Pickup, panel, or mini-van[1]	93.4	92.5	90.1	84.9
Platform and cattlerack	2.4	2.9	3.4	6.6
Van	.9	1.3	1.6	2.5
Public utility	.1	.2	.6	(Z)
Multistop or walk-in	1.3	.5	.7	1.0
Dump	.6	.7	1.4	1.4
Tank for liquids or dry bulk	.3	.4	.7	.8
Other	1.0	1.3	1.3	3.0
VEHICLE SIZE				
Light	95.8	95.6	90.1	82.4
Medium	1.6	1.4	4.8	11.9
Light-heavy	.7	.9	1.7	2.0
Heavy-heavy	1.9	2.1	3.4	3.6
ANNUAL MILES				
Less than 5,000	20.4	22.1	21.4	16.9
5,000 to 9,999	22.7	24.7	24.8	29.5
10,000 to 19,999	41.8	39.8	38.3	38.5
20,000 to 29,999	9.7	9.2	11.0	8.9
30,000 miles or more	5.3	4.1	4.4	6.1

Vehicular and operational characteristics	1987	1982	1977	1972
YEAR MODEL				
1 to 2 years old	15.8	8.1	11.1	15.4
3 to 4 years old	15.5	18.9	16.9	20.0
Over 4 years old	68.6	73.0	72.0	64.6
VEHICLE ACQUISITION				
Purchased new	44.3	43.8	44.2	47.1
Purchased used	54.3	53.8	54.4	50.4
Leased from someone and not reported	1.4	2.3	1.4	2.4
TRUCK FLEET SIZE				
1	71.3	85.1	76.1	74.3
2 to 5	22.2	7.8	12.8	13.6
6 to 19	3.1	3.5	5.6	5.7
20 or more	3.3	3.6	5.5	6.4
TRUCK TYPE				
Single-unit trucks	98.2	98.3	98.5	97.4
2 axles	97.7	97.8	97.0	95.7
3 axles or more	.5	.5	1.0	1.7
Combination	1.8	1.7	1.9	2.6
3 axles	.5	.6	.3	.4
4 axles	.6	.3	.3	.4
5 axles or more	.8	.8	1.3	1.9
Trailer not specified	(Z)	(Z)	(Z)	(Z)
RANGE OF OPERATION				
Local	76.2	75.9	84.3	78.9
Short-range	14.2	12.2	8.4	9.2
Long-range	5.0	3.6	1.9	3.6
Off-the-road and not reported	4.6	8.3	5.3	8.4
FUEL TYPE				
Gasoline	96.5	97.1	96.7	90.4
Diesel and LPG	3.4	2.9	3.2	3.0
Not reported	.1	(Z)	(Z)	6.6

[1]Vans similar to panel trucks are included in pickup, panel, and mini-vans.

Table 2. **Trucks, Truck Miles, and Average Annual Miles: 1987**

[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	Trucks and truck miles			Trucks and truck miles, excluding pickups, panels, utilities, and station wagons			Relative standard error of estimate (percent) for column—					
	Trucks (thousands)	Truck miles (millions)	Average miles per truck (thousands)	Trucks (thousands)	Truck miles (millions)	Average miles per truck (thousands)						
	A	B	C	D	E	F	A	B	C	D	E	F
Total trucks	**758.6**	**8 904.6**	**11.7**	**50.4**	**874.7**	**17.3**	**.3**	**2.7**	**2.7**	**5.1**	**5.9**	**4.8**
MAJOR USE												
Agriculture	13.1	205.2	15.7	2.6	46.2	18.1	26.7	28.7	13.0	14.8	17.0	14.1
Forestry and lumbering	1.6	31.1	19.4	.4	19.4	44.3	73.1	42.1	38.9	29.5	30.7	30.6
Mining and quarrying	3.4	46.8	13.8	1.0	11.7	12.0	48.8	52.3	10.8	23.2	31.3	22.9
Construction	63.7	865.2	13.6	17.0	238.8	14.0	11.1	13.4	7.5	6.1	8.3	6.6
Manufacturing	5.7	97.2	17.0	2.1	46.0	21.7	35.7	31.8	10.7	16.0	15.1	14.4
Wholesale trade	16.5	288.1	17.4	6.0	121.9	20.5	22.3	24.3	14.8	21.5	14.8	12.6
Retail trade	28.4	482.0	16.9	3.7	81.5	22.0	18.5	21.9	12.7	14.8	15.1	9.5
For-hire transportation	5.1	191.8	37.5	5.1	191.8	37.5	9.2	9.8	8.1	9.2	9.8	8.1
Utilities	3.0	53.5	17.8	.6	2.4	3.7	55.3	67.8	17.0	34.9	37.9	23.0
Services	24.6	357.1	14.5	3.1	36.1	11.6	19.9	23.7	11.5	16.4	20.7	15.8
Daily rental	1.6	20.4	12.7	.5	3.1	6.7	72.6	85.1	17.1	42.6	46.9	46.2
One way rental	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Personal transportation	585.7	6 266.2	10.7	7.0	75.6	10.7	1.9	3.8	3.3	29.4	53.2	39.0
Other	(Z)	.2	5.0	(Z)	.2	5.0	98.5	98.5	(Z)	98.5	98.5	(Z)
Not in use	6.2	.1	(Z)	1.3	(Z)	(Z)	33.5	43.2	53.9	23.4	59.1	51.2
Not reported	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
BODY TYPE												
Pickup	511.4	5 961.6	11.7	(Z)	(Z)	(Z)	.9	3.7	3.6	(Z)	(Z)	(Z)
Mini-van	24.2	294.2	12.1	(Z)	(Z)	(Z)	20.7	23.6	11.4	(Z)	(Z)	(Z)
Panel or van	61.9	701.1	11.3	(Z)	(Z)	(Z)	11.4	14.8	9.4	(Z)	(Z)	(Z)
Utility	83.9	760.7	9.1	(Z)	(Z)	(Z)	9.0	12.0	7.6	(Z)	(Z)	(Z)
Station wagon	26.7	312.3	11.7	(Z)	(Z)	(Z)	19.4	21.7	9.7	(Z)	(Z)	(Z)
Multistop or walk-in	10.0	121.0	12.1	10.0	121.0	12.1	23.9	35.1	24.2	23.9	35.1	24.2
Platform with added devices	2.4	32.0	13.6	2.4	32.0	13.6	17.9	23.9	15.1	17.9	23.9	15.1
Low boy or depressed center	.7	12.6	18.4	.7	12.6	18.4	15.7	23.9	19.6	15.7	23.9	19.6
Basic platform	14.7	231.2	15.7	14.7	231.2	15.7	6.7	8.9	7.2	6.7	8.9	7.2
Livestock truck	.4	5.7	15.0	.4	5.7	15.0	33.5	38.7	39.6	33.5	38.7	39.6
Insulated nonrefrigerated van	.2	7.1	31.0	.2	7.1	31.0	65.9	71.2	57.7	65.9	71.2	57.7
Insulated refrigerated van	1.4	76.4	53.3	1.4	76.4	53.3	14.8	15.0	8.5	14.8	15.0	8.5
Drop-frame van	.4	20.3	46.3	.4	20.3	46.3	29.5	27.8	17.2	29.5	27.8	17.2
Open-top van	(Z)	6.4	136.2	(Z)	6.4	136.2	55.8	65.8	35.0	55.8	65.8	35.0
Basic enclosed van	4.3	103.6	24.0	4.3	103.6	24.0	11.9	13.0	11.5	11.9	13.0	11.5
Beverage	1.5	23.2	15.2	1.5	23.2	15.2	22.8	22.6	11.4	22.8	22.6	11.4
Public utility	.8	13.3	15.9	.8	13.3	15.9	34.1	43.6	24.5	34.1	43.6	24.5
Winch or crane	.8	11.2	13.9	.8	11.2	13.9	31.4	44.4	33.5	31.4	44.4	33.5
Wrecker	.3	1.4	4.1	.3	1.4	4.1	48.7	70.9	68.7	48.7	70.9	68.7
Pole or logging	.2	9.9	42.1	.2	9.9	42.1	24.7	27.6	12.4	24.7	27.6	12.4
Auto transport	(Z)	1.0	60.6	(Z)	1.0	60.6	96.8	96.8	(Z)	96.8	96.8	(Z)
Service truck	2.8	28.4	10.1	2.8	28.4	10.1	18.7	26.0	17.7	18.7	26.0	17.7
Yard tractor	.1	.1	.9	.1	.1	.9	43.1	92.4	81.5	43.1	92.4	81.5
Oilfield truck	.2	.4	2.1	.2	.4	2.1	61.5	67.2	29.2	61.5	67.2	29.2
Grain body	.2	6.7	28.2	.2	6.7	28.2	26.9	31.5	22.5	26.9	31.5	22.5
Garbage hauler	.7	7.7	11.6	.7	7.7	11.6	31.8	29.5	26.2	31.8	29.5	26.2
Dump truck	4.8	101.3	21.2	4.8	101.3	21.2	10.2	12.9	12.3	10.2	12.9	12.3
Tank truck (liquids or gases)	2.3	36.4	16.0	2.3	36.4	16.0	14.9	18.9	18.4	14.9	18.9	18.4
Tank truck (dry bulk)	.1	4.6	41.8	.1	4.6	41.8	36.4	57.4	44.6	36.4	57.4	44.6
Concrete mixer	.8	10.0	13.1	.8	10.0	13.1	19.4	21.2	8.6	19.4	21.2	8.6
Other	.2	2.7	11.5	.2	2.7	11.5	50.1	53.2	61.4	50.1	53.2	61.4
Not reported	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
ANNUAL MILES												
Less than 5,000	155.1	309.6	2.0	13.2	22.8	1.7	7.2	9.4	5.7	11.1	13.7	6.2
5,000 to 9,999	172.4	1 195.0	6.9	8.3	53.6	6.5	7.0	7.2	1.7	16.4	15.8	2.1
10,000 to 19,999	317.4	4 140.7	13.0	14.4	184.6	12.8	4.5	4.6	1.2	10.4	9.2	2.4
20,000 to 29,999	73.2	1 622.0	22.2	6.6	156.2	23.5	11.5	11.5	1.4	10.1	10.1	1.3
30,000 to 49,999	33.3	1 146.9	34.4	4.2	147.3	35.3	17.4	17.5	2.5	29.1	28.2	1.5
50,000 to 74,999	5.2	279.9	54.1	1.7	99.6	58.9	39.1	37.4	2.5	12.7	12.5	1.5
75,000 or more	2.1	210.6	101.8	2.1	210.6	101.8	10.9	11.2	4.7	10.9	11.2	4.7
RANGE OF OPERATION												
Local	578.1	6 567.0	11.4	30.6	416.4	13.6	2.1	3.7	3.1	5.4	5.8	4.1
Short-range	107.7	1 547.9	14.4	8.7	232.1	26.8	9.2	10.7	6.3	8.3	9.2	7.6
Long-range	38.1	605.8	15.9	6.6	192.9	29.1	16.2	17.5	11.3	30.7	22.6	22.7
Off-the-road	29.1	183.8	6.3	3.6	33.2	9.3	17.7	22.5	14.4	14.0	19.9	16.2
Not reported	5.7	(Z)	(Z)	1.0	(Z)	(Z)	36.1	93.8	(Z)	24.3	96.8	105.4
BASE OF OPERATION												
Percentage of miles traveled outside base-of-operation State:												
Less than 25 percent	610.9	7 070.2	11.6	39.1	618.2	15.8	1.9	3.6	3.1	4.3	4.9	4.1
25 to 49 percent	28.1	300.8	10.7	.9	35.5	41.3	19.5	19.9	9.1	24.1	22.2	19.7
50 to 74 percent	18.8	253.6	13.5	2.5	55.5	22.4	23.6	28.3	20.1	47.8	16.3	43.9
75 to 100 percent	23.7	277.5	11.7	2.5	69.3	28.2	21.0	20.3	10.7	48.3	21.4	39.4
Not reported	77.1	1 002.5	13.0	5.5	96.2	17.4	11.1	13.9	7.9	23.4	41.7	21.3

See footnotes at end of table.

Table 2. **Trucks, Truck Miles, and Average Annual Miles: 1987**—Con.

[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	Trucks and truck miles			Trucks and truck miles, excluding pickups, panels, utilities, and station wagons			Relative standard error of estimate (percent) for column—					
	Trucks (thousands)	Truck miles (millions)	Average miles per truck (thousands)	Trucks (thousands)	Truck miles (millions)	Average miles per truck (thousands)						
	A	B	C	D	E	F	A	B	C	D	E	F
VEHICLE SIZE												
Light	726.7	8 226.3	11.3	18.7	198.1	10.6	.4	2.9	2.9	13.4	22.2	15.7
Medium	11.8	135.8	11.5	11.6	134.1	11.6	8.1	12.9	10.0	8.2	13.1	10.1
Light-heavy	5.6	86.2	15.5	5.6	86.2	15.5	11.5	14.2	9.7	11.5	14.2	9.7
Heavy-heavy	14.5	456.3	31.4	14.5	456.3	31.4	3.7	4.9	4.6	3.7	4.9	4.6
AVERAGE WEIGHT (POUNDS)												
Less than 6,001	670.1	7 537.8	11.2	6.1	81.1	13.3	1.1	3.2	3.0	28.3	50.8	30.4
6,001 to 10,000	56.6	688.5	12.2	12.6	116.9	9.3	12.5	16.2	9.8	14.8	13.5	11.6
10,001 to 14,000	6.4	82.7	13.0	6.1	80.9	13.2	11.9	18.4	13.9	12.1	18.8	14.1
14,001 to 16,000	2.1	26.5	12.9	2.1	26.5	12.9	20.1	29.9	21.4	20.1	29.9	21.4
16,001 to 19,500	3.4	26.6	7.9	3.4	26.6	7.9	16.3	20.2	13.0	16.3	20.2	13.0
19,501 to 26,000	5.6	86.0	15.5	5.6	86.0	15.5	11.5	14.3	9.8	11.5	14.3	9.8
26,001 to 33,000	2.8	44.8	15.8	2.8	44.8	15.8	14.2	16.2	11.7	14.2	16.2	11.7
33,001 to 40,000	1.9	33.9	18.1	1.9	33.9	18.1	12.9	14.7	11.4	12.9	14.7	11.4
40,001 to 50,000	2.7	62.5	23.0	2.7	62.5	23.0	10.0	11.9	7.9	10.0	11.9	7.9
50,001 to 60,000	1.5	37.4	24.8	1.5	37.4	24.8	12.1	15.5	10.9	12.1	15.5	10.9
60,001 to 80,000	5.5	274.9	49.9	5.5	274.9	49.9	4.8	7.6	5.6	4.8	7.6	5.6
80,001 to 100,000	.1	1.8	18.2	.1	1.8	18.2	52.5	57.9	33.9	52.5	57.9	33.9
100,001 to 130,000	(Z)	.2	10.3	(Z)	.2	10.3	96.8	96.8	(Z)	96.8	96.8	(Z)
130,001 or more	(Z)	1.2	75.3	(Z)	1.2	75.3	96.8	96.8	(Z)	96.8	96.8	(Z)
Not reported	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
TOTAL LENGTH (FEET)												
Less than 13.0	62.4	725.6	11.6	.2	.3	1.3	12.8	15.2	7.4	62.1	93.2	63.3
13.0 to 15.9	249.3	2 904.3	11.7	1.1	28.0	24.5	5.4	7.4	5.1	29.6	38.7	26.3
16.0 to 19.9	406.2	4 555.4	11.2	10.7	135.5	12.6	3.5	5.2	3.9	19.9	31.7	21.7
20.0 to 27.9	22.9	245.6	10.7	21.6	237.2	11.0	8.7	8.5	6.0	7.4	8.1	6.0
28.0 to 35.9	6.8	90.8	13.4	6.8	90.8	13.4	9.7	12.0	8.9	9.7	12.0	8.9
36.0 to 40.9	1.1	23.5	21.2	1.1	23.5	21.2	17.7	17.4	10.5	17.7	17.4	10.5
41.0 to 44.9	1.4	3.2	2.3	.2	3.1	14.9	84.8	34.1	88.4	31.4	34.6	25.4
45.0 or more	8.6	356.3	41.3	8.6	356.3	41.3	4.2	6.0	5.2	4.2	6.0	5.2
Not reported	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
YEAR MODEL												
1988	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
1987	31.9	491.2	15.4	1.7	67.5	39.0	18.4	21.6	12.4	67.6	60.4	13.7
1986	88.3	1 400.7	15.9	2.0	73.3	37.0	10.6	12.3	6.7	18.9	20.0	13.1
1985	74.5	1 160.9	15.6	3.3	83.8	25.7	11.6	13.4	7.2	15.4	15.4	9.9
1984	43.3	617.2	14.3	2.3	59.5	26.0	15.4	16.1	6.5	18.5	17.1	14.2
1983	29.4	421.2	14.3	1.2	25.3	21.3	19.0	20.3	8.1	25.9	27.9	19.3
1982	38.8	473.2	12.2	1.6	31.7	19.9	16.5	17.9	7.7	21.4	19.0	16.7
1981	31.2	353.2	11.3	2.0	37.7	18.6	18.3	20.8	11.1	18.5	19.4	12.3
1980	29.2	365.7	12.5	2.2	48.3	21.6	18.8	20.9	11.1	16.6	17.0	12.2
1979	40.1	440.7	11.0	5.0	93.4	18.8	15.6	16.3	8.5	11.8	11.9	9.6
1978	54.6	565.7	10.4	4.4	70.0	15.8	13.6	16.2	9.7	28.2	20.9	12.5
Pre-1978	297.4	2 614.8	8.8	24.7	284.3	11.5	4.6	7.2	5.5	7.9	7.1	7.3
Not reported	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
VEHICLE ACQUISITION												
Purchased new	336.0	4 625.5	13.8	20.4	444.1	21.8	4.2	5.5	3.7	7.7	10.7	5.8
Purchased used	411.9	4 120.9	10.0	29.1	407.1	14.0	3.5	5.1	3.8	7.8	6.2	6.3
Leased from someone else	5.2	122.6	23.6	.5	16.8	31.3	44.9	46.5	17.4	31.7	26.0	28.2
Not reported	5.5	35.5	6.4	.4	6.7	16.1	42.2	52.1	37.6	32.6	31.3	23.0
LEASE CHARACTERISTICS[1] [2]												
Leased without driver	12.3	279.9	22.7	1.9	50.5	26.8	28.2	30.3	13.2	17.8	17.7	16.3
Leased with driver	.7	15.6	22.6	.6	15.5	26.6	26.7	24.2	21.6	25.8	24.4	17.1
Leased with owner-operator	3.0	78.5	26.4	.5	15.5	28.6	55.7	58.8	16.3	32.1	27.6	23.9
Not reported	1.2	18.6	15.3	.1	2.3	46.0	95.9	88.0	10.0	74.3	69.2	22.7
Provisions of lease:												
Financing	1.8	68.8	37.9	.7	24.5	37.6	64.9	64.9	8.6	27.3	22.0	24.0
Full maintenance	6.3	188.2	30.1	.4	16.6	38.0	41.5	43.0	14.0	37.4	28.8	25.2
Maintenance on specific parts	.2	2.1	13.7	.2	2.1	13.7	71.3	77.2	7.8	71.3	77.2	7.8
Payment of taxes	2.8	86.2	30.4	.5	21.6	43.0	58.4	58.5	24.7	33.4	31.9	20.4
Obtaining licenses and permits	2.9	108.8	38.1	.5	22.1	42.5	58.1	56.8	6.1	32.5	31.5	20.6
Record keeping for leased trucks	.3	14.9	47.5	.3	14.9	47.5	39.1	41.6	14.6	39.1	41.6	14.6
Other	1.2	23.6	19.7	(Z)	2.6	83.3	97.4	89.3	10.1	68.4	68.6	6.2

See footnotes at end of table.

Table 2. **Trucks, Truck Miles, and Average Annual Miles: 1987**—Con.

[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	Trucks and truck miles			Trucks and truck miles, excluding pickups, panels, utilities, and station wagons			Relative standard error of estimate (percent) for column—					
	Trucks (thousands)	Truck miles (millions)	Average miles per truck (thousands)	Trucks (thousands)	Truck miles (millions)	Average miles per truck (thousands)						
	A	B	C	D	E	F	A	B	C	D	E	F
OPERATOR CLASSIFICATION												
Not for hire	751.9	8 692.4	11.6	44.8	679.8	15.2	.4	2.8	2.7	5.8	7.3	5.6
Business use	150.9	2 249.9	14.9	37.5	604.2	16.1	6.9	8.4	4.9	4.4	5.0	4.1
Personal transportation	588.2	6 266.2	10.7	7.4	75.6	10.3	1.9	3.8	3.3	28.1	53.2	39.3
Mixed—business use/personal transportation	12.8	176.3	13.8	(Z)	(Z)	(Z)	29.8	34.9	17.9	(Z)	(Z)	(Z)
For hire	5.1	191.8	37.3	5.1	191.8	37.3	9.1	9.8	8.1	9.1	9.8	8.1
Motor carrier	4.2	152.2	36.5	4.2	152.2	36.5	10.8	11.8	9.4	10.8	11.8	9.4
Owner/operator	1.0	39.6	40.8	1.0	39.6	40.8	15.9	16.5	14.6	15.9	16.5	14.6
Independent	.8	26.8	34.3	.8	26.8	34.3	18.4	17.9	17.4	18.4	17.9	17.4
Leased to a company	.2	12.8	66.9	.2	12.8	66.9	30.6	35.4	14.9	30.6	35.4	14.9
Not reported	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Daily rental	1.6	20.4	12.7	.5	3.1	6.7	72.6	85.1	17.1	42.6	46.9	46.2
Mixed—not for hire/for hire	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
For-hire jurisdiction:												
Interstate	2.1	95.5	45.1	2.1	95.5	45.1	16.9	15.8	14.4	16.9	15.8	14.4
Intrastate	1.4	59.5	41.4	1.4	59.5	41.4	15.5	18.6	11.4	15.5	18.6	11.4
Local	1.6	36.9	23.1	1.6	36.9	23.1	14.7	14.4	10.8	14.7	14.4	10.8
Not reported	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Type of carrier (interstate only):												
Contract	.3	19.6	63.0	.3	19.6	63.0	38.5	31.4	39.2	38.5	31.4	39.2
Common	1.6	62.1	38.4	1.6	62.1	38.4	20.7	21.4	17.7	20.7	21.4	17.7
Exempt	.2	13.8	73.3	.2	13.8	73.3	27.7	28.9	8.3	27.7	28.9	8.3
Not reported	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
PRODUCTS CARRIED												
Farm products	4.4	92.6	20.9	2.1	65.3	30.9	37.7	23.9	19.0	15.2	14.8	12.9
Live animals	1.8	30.3	16.9	.6	11.2	17.8	65.7	64.1	10.1	27.6	29.8	27.4
Mining products	.5	14.0	27.9	.4	12.5	31.7	33.4	26.3	22.7	32.8	27.0	24.4
Logs and other forest products	.3	13.4	53.6	.3	13.4	53.6	23.9	26.5	11.5	23.9	26.5	11.5
Lumber and fabricated wood products	1.2	35.6	30.9	1.2	35.6	30.9	24.5	27.1	21.7	24.5	27.1	21.7
Processed foods	10.0	224.6	22.5	5.2	120.2	23.3	26.3	29.4	18.6	24.6	14.7	15.0
Textile mill products	.4	7.1	15.9	.4	7.1	15.9	48.0	55.3	27.5	48.0	55.3	27.5
Building materials	21.3	353.3	16.6	9.4	169.2	18.1	17.5	18.8	9.5	8.1	9.6	8.1
Household goods	.6	13.7	23.6	.6	13.7	23.6	29.5	29.7	27.5	29.5	29.7	27.5
Furniture or hardware	1.5	18.6	12.7	.3	7.0	23.5	80.4	65.6	19.5	53.0	52.7	8.6
Paper products	6.2	90.8	14.6	.4	9.7	25.8	42.0	43.4	17.2	42.9	34.9	23.7
Chemicals	2.2	45.9	20.9	.9	21.1	22.8	54.5	54.4	8.6	27.5	25.4	17.5
Petroleum	1.7	28.3	16.8	1.7	28.3	16.8	19.6	21.7	21.5	19.6	21.7	21.5
Plastics and/or rubber	1.9	33.9	17.7	.8	10.9	14.3	61.8	69.2	12.6	35.0	41.9	28.6
Primary metal products	1.9	36.8	19.9	.7	7.6	11.7	64.4	79.7	19.0	37.4	42.5	32.9
Fabricated metal products	2.5	22.5	9.2	1.3	21.4	16.6	49.3	28.1	45.7	25.4	29.1	14.2
Machinery	5.5	81.5	14.9	2.0	36.6	18.7	37.5	35.8	15.7	18.5	21.6	14.4
Transportation equipment	3.4	50.1	14.9	.9	14.7	16.1	49.9	50.5	8.2	29.4	33.7	24.3
Glass products	.1	.5	5.0	.1	.5	5.0	99.5	99.5	(Z)	99.5	99.5	(Z)
Miscellaneous products of manufacturing	5.0	45.3	9.0	.4	7.4	17.6	45.8	51.2	29.5	45.4	60.5	35.4
Industrial water	1.2	9.9	8.6	1.2	9.9	8.6	22.1	28.8	23.8	22.1	28.8	23.8
Scrap, refuse, or garbage	2.4	22.5	9.4	2.2	21.3	9.8	18.1	23.1	20.6	18.8	23.9	21.6
Hazardous waste	(Z)	1.4	85.3	(Z)	1.4	85.3	96.8	96.8	(Z)	96.8	96.8	(Z)
Mixed cargoes	8.2	163.3	19.9	3.5	100.2	28.9	28.8	23.0	14.1	13.9	16.8	12.7
Craftsman's equipment	25.5	337.6	13.2	3.9	35.2	9.1	19.2	26.3	16.5	15.7	21.1	14.0
Personal transportation	585.7	6 266.2	10.7	7.0	75.6	10.7	1.9	3.8	3.3	29.4	53.2	39.0
No load carried	51.5	799.6	15.5	2.1	17.8	8.7	14.1	16.7	8.4	18.8	30.7	24.3
Not in use	7.2	4.7	.7	1.2	(Z)	(Z)	32.9	98.7	87.4	24.5	63.7	54.1
Other	4.7	60.5	12.8	.1	.1	.5	48.7	52.3	16.2	99.5	99.5	(Z)
Not reported	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
HAZARDOUS MATERIALS CARRIED												
Hazardous materials carried	2.5	64.4	25.4	2.5	64.4	25.4	14.1	13.5	11.5	14.1	13.5	11.5
Less than 10 percent of time	1.4	30.4	22.4	1.4	30.4	22.4	19.4	17.2	13.7	19.4	17.2	13.7
10 to 25 percent of time	.1	1.6	31.1	.1	1.6	31.1	74.3	69.3	33.3	74.3	69.3	33.3
26 to 49 percent of the time	(Z)	2.6	74.3	(Z)	2.6	74.3	98.5	98.5	(Z)	98.5	98.5	(Z)
50 to 74 percent of the time	.3	12.8	48.0	.3	12.8	48.0	44.9	40.9	32.4	44.9	40.9	32.4
75 to 100 percent of the time	.7	13.9	20.1	.7	13.9	20.1	29.4	26.2	23.8	29.4	26.2	23.8
No percent reported	.1	3.1	24.0	.1	3.1	24.0	39.1	44.6	30.5	39.1	44.6	30.5
Types of hazardous materials[2]:												
Flammable liquids	2.0	49.0	24.0	2.0	49.0	24.0	16.3	15.4	12.8	16.3	15.4	12.8
Combustible liquids	1.1	29.4	27.5	1.1	29.4	27.5	20.2	19.9	14.5	20.2	19.9	14.5
Corrosive liquids	.8	24.2	30.5	.8	24.2	30.5	22.1	20.3	16.6	22.1	20.3	16.6
Poison B solids	.5	16.1	31.3	.5	16.1	31.3	25.5	25.2	11.6	25.5	25.2	11.6
Poison B liquids	.5	15.7	31.5	.5	15.7	31.5	26.1	25.7	12.0	26.1	25.7	12.0
Flammable solids	.4	10.7	27.5	.4	10.7	27.5	31.9	33.3	14.4	31.9	33.3	14.4
Oxidizers	.3	8.0	28.4	.3	8.0	28.4	22.5	29.4	18.9	22.5	29.4	18.9
Flammable gas	.3	6.6	24.8	.3	6.6	24.8	23.2	29.2	17.8	23.2	29.2	17.8
Nonflammable gas	.3	6.6	24.8	.3	6.6	24.8	23.2	29.2	17.8	23.2	29.2	17.8
Poison A	.2	5.7	26.2	.2	5.7	26.2	25.6	32.6	20.1	25.6	32.6	20.1

See footnotes at end of table.

Table 2. **Trucks, Truck Miles, and Average Annual Miles: 1987**—Con.

[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	Trucks and truck miles			Trucks and truck miles, excluding pickups, panels, utilities, and station wagons			Relative standard error of estimate (percent) for column—					
	Trucks (thousands)	Truck miles (millions)	Average miles per truck (thousands)	Trucks (thousands)	Truck miles (millions)	Average miles per truck (thousands)						
	A	B	C	D	E	F	A	B	C	D	E	F
HAZARDOUS MATERIALS CARRIED—Con.												
Types of hazardous materials[2]—Con.												
Corrosive solids	.2	7.1	30.4	.2	7.1	30.4	24.7	32.3	20.8	24.7	32.3	20.8
Explosives, A or B	.2	3.3	20.9	.2	3.3	20.9	30.4	34.0	15.2	30.4	34.0	15.2
Blasting agents	.1	1.6	14.6	.1	1.6	14.6	36.4	38.7	13.3	36.4	38.7	13.3
Radioactive materials	.1	1.6	14.6	.1	1.6	14.6	36.4	38.7	13.3	36.4	38.7	13.3
ORM-A, B, or C	.1	1.6	14.6	.1	1.6	14.6	36.4	38.7	13.3	36.4	38.7	13.3
ORM E	.1	1.6	14.6	.1	1.6	14.6	36.4	38.7	13.3	36.4	38.7	13.3
Hazardous materials not listed	.1	.8	13.4	.1	.8	13.4	48.3	48.6	6.0	48.3	48.6	6.0
Not reported	.5	15.4	31.2	.5	15.4	31.2	27.9	29.3	24.6	27.9	29.3	24.6
No hazardous materials carried	749.5	8 759.7	11.7	45.6	774.2	17.0	.4	2.8	2.7	5.7	6.7	5.3
Not reported	6.6	80.5	12.1	2.3	36.1	15.9	31.1	39.7	24.0	17.5	20.3	17.7
TRUCK FLEET SIZE[3]												
1	541.0	6 122.5	11.3	15.2	216.5	14.2	2.3	4.0	3.2	14.3	20.4	14.3
2 to 5	168.6	1 953.1	11.6	12.9	181.2	14.1	7.0	9.6	6.6	11.4	10.0	8.7
6 to 19	23.7	349.3	14.7	9.3	176.8	19.0	17.1	17.0	10.1	7.9	10.0	8.1
20 or more	25.3	479.8	19.0	13.1	300.2	23.0	14.8	13.5	7.6	6.5	7.0	5.9
MILES PER GALLON												
Less than 5	6.5	175.9	26.9	6.5	175.9	26.9	7.4	7.4	7.1	7.4	7.4	7.1
5 to 6.9	13.2	287.2	21.8	12.9	286.8	22.2	6.2	6.9	6.6	6.2	6.9	6.5
7 to 8.9	33.8	339.7	10.1	14.0	181.9	13.0	14.7	15.4	10.1	13.4	11.6	8.1
9 to 11.9	165.8	1 572.2	9.5	11.1	137.1	12.3	7.1	9.1	5.8	13.1	12.6	12.7
12 to 14.9	172.7	2 063.5	12.0	3.8	74.8	19.5	7.0	9.9	6.9	32.9	54.1	24.7
15 to 19.9	173.5	2 021.1	11.6	1.2	16.2	13.3	7.0	8.9	5.4	28.2	55.5	46.7
20 or more	191.7	2 445.0	12.8	.1	2.1	19.9	6.6	8.2	4.9	99.5	99.5	(Z)
Not reported	1.6	(Z)	(Z)	.8	(Z)	(Z)	22.0	(Z)	(Z)	27.9	(Z)	(Z)
EQUIPMENT TYPE[4]												
Braking system	50.4	874.7	17.3	50.4	874.7	17.3	5.1	5.9	4.8	5.1	5.9	4.8
Hydraulic	10.5	97.4	9.2	10.5	97.4	9.2	8.6	14.8	12.2	8.6	14.8	12.2
Hydraulic (power)	19.0	241.3	12.7	19.0	241.3	12.7	5.8	8.3	5.9	5.8	8.3	5.9
Air	13.1	436.9	33.5	13.1	436.9	33.5	3.1	5.0	4.5	3.1	5.0	4.5
Not reported	7.8	99.1	12.6	7.8	99.1	12.6	29.9	42.4	29.4	29.9	42.4	29.4
Power steering[2]	326.5	4 447.0	13.6	1.2	40.6	33.3	4.3	5.7	3.7	94.6	96.6	2.3
Air conditioning[2]	295.1	3 986.3	13.5	1.3	42.0	31.7	4.7	6.1	3.9	87.3	93.3	9.7
Engine retarder[2]	.1	1.3	26.0	.1	1.3	26.0	74.3	74.5	.6	74.3	74.5	.6
Reflective materials[2]	.3	12.6	47.2	.3	12.6	47.2	44.9	38.5	40.1	44.9	38.5	40.1
Electronic vehicle management system[2]	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Electronic vehicle identification device (transponder, etc.)[2]	(Z)	.4	24.9	(Z)	.4	24.9	96.8	96.8	(Z)	96.8	96.8	(Z)
Trip recorders[2]	(Z)	.4	24.9	(Z)	.4	24.9	96.8	96.8	(Z)	96.8	96.8	(Z)
Navigational systems[2]	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
FUEL CONSERVATION EQUIPMENT[2 4]												
Aerodynamic features	2.3	89.0	38.5	2.3	89.0	38.5	16.3	13.5	11.3	16.3	13.5	11.3
Axle or drive ratio	1.4	59.1	41.6	1.4	59.1	41.6	20.0	16.5	15.3	20.0	16.5	15.3
Fuel economy engine	.8	47.6	56.9	.8	47.6	56.9	18.3	17.7	15.6	18.3	17.7	15.6
Radial tires	436.1	5 643.6	12.9	1.4	49.9	35.1	3.1	4.7	3.5	81.6	79.1	10.2
Road speed governor	.2	4.3	19.7	.2	4.3	19.7	53.2	44.8	49.0	53.2	44.8	49.0
Variable fan drives	.1	2.6	38.7	.1	2.6	38.7	61.1	60.8	30.9	61.1	60.8	30.9
Other fuel conservation devices	(Z)	.4	24.9	(Z)	.4	24.9	96.8	96.8	(Z)	96.8	96.8	(Z)
MAINTENANCE[2]												
General maintenance:												
Owner	471.7	5 225.2	11.1	19.6	277.8	14.1	2.9	4.6	3.6	11.3	8.3	8.2
Company's maintenance facilities	52.7	955.2	18.1	21.4	439.3	20.6	11.2	11.8	6.0	4.8	6.1	5.3
Dealership's service department	99.5	1 421.2	14.3	3.1	67.3	21.6	9.8	11.8	6.7	16.3	16.6	11.1
Leasing company	1.4	25.7	18.8	.2	7.8	39.5	85.6	70.5	18.3	35.2	37.4	30.5
Independent garage	228.0	2 882.4	12.6	11.1	214.7	19.3	5.8	7.7	5.1	12.8	19.9	9.9
Component distributorship	12.5	247.3	19.7	.9	22.4	24.6	29.2	35.8	21.5	31.4	32.7	16.0
No one	8.9	51.7	5.8	.1	.1	.9	34.6	46.3	29.6	78.6	67.5	89.5
Other	6.1	67.7	11.2	.2	1.1	7.1	42.7	55.6	34.0	71.8	95.6	35.7
Not reported	36.6	367.3	10.0	1.9	18.3	9.8	16.5	21.2	12.5	20.6	24.2	19.1
Major overhauls:												
Owner	110.8	1 055.0	9.5	5.7	80.9	14.2	9.0	12.2	8.1	11.4	12.0	9.9
Company's maintenance facilities	34.3	619.9	18.1	12.6	270.5	21.5	14.4	15.3	8.4	6.7	8.0	7.1
Dealership's service department	79.7	1 211.8	15.2	3.9	106.7	27.2	11.1	12.8	7.0	12.8	14.1	10.2
Leasing company	1.4	23.2	16.5	.2	5.3	22.5	83.6	77.8	10.3	50.1	45.3	41.4
Independent garage	152.1	1 786.2	11.7	11.8	213.7	18.1	7.5	9.0	5.3	12.0	10.1	8.0
Component distributorship	18.9	301.0	15.9	2.3	74.1	31.7	22.9	26.5	17.8	14.9	16.7	7.9
No one	41.3	389.8	9.4	1.9	15.2	8.1	16.0	18.6	9.2	62.5	50.2	21.9
Other	4.9	51.4	10.5	.2	1.1	7.1	47.3	66.0	44.3	71.8	95.6	35.7
Not reported	341.0	3 900.6	11.4	15.0	196.7	13.1	4.2	6.0	4.3	12.5	21.3	15.0

See footnotes at end of table.

Table 2. **Trucks, Truck Miles, and Average Annual Miles: 1987**—Con.

[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	Trucks and truck miles			Trucks and truck miles, excluding pickups, panels, utilities, and station wagons			Relative standard error of estimate (percent) for column—					
	Trucks (thousands)	Truck miles (millions)	Average miles per truck (thousands)	Trucks (thousands)	Truck miles (millions)	Average miles per truck (thousands)						
	A	B	C	D	E	F	A	B	C	D	E	F
ENGINE TYPE AND SIZE												
Engine	758.6	8 904.6	11.7	50.4	874.7	17.3	.3	2.7	2.7	5.1	5.9	4.8
Gasoline	732.3	8 186.9	11.2	35.1	363.0	10.4	.6	2.9	2.9	7.3	12.6	9.1
Diesel	25.9	715.3	27.6	15.3	510.5	33.3	13.5	11.0	6.5	3.8	5.2	4.1
LPG or other	(Z)	1.0	29.7	(Z)	1.0	29.7	98.5	98.5	(Z)	98.5	98.5	(Z)
Not reported	.4	1.3	3.2	(Z)	.1	4.1	40.8	55.2	41.7	98.5	98.5	(Z)
Cylinders[5]	758.6	8 904.6	11.7	50.4	874.7	17.3	.3	2.7	2.7	5.1	5.9	4.8
4	192.2	2 458.6	12.8	.4	17.5	46.9	6.5	8.2	5.1	50.6	63.0	29.4
6	117.5	1 534.1	13.1	7.3	234.9	32.4	8.8	9.8	5.7	7.6	7.9	7.4
8	375.0	4 321.7	11.5	28.3	356.3	12.6	3.8	5.5	4.0	9.0	12.9	9.0
Other	1.2	21.1	17.6	(Z)	.1	3.3	97.4	99.5	2.6	68.4	77.7	36.5
Not reported	72.8	569.1	7.8	14.4	265.9	18.4	9.9	11.6	9.7	5.6	7.1	6.8
Cubic inch displacement	758.2	8 903.2	11.7	50.4	874.6	17.3	.3	2.7	2.7	5.1	5.9	4.8
Gasoline engines	732.3	8 186.9	11.2	35.1	363.0	10.4	.6	2.9	2.9	7.3	12.6	9.1
Less than 200	238.0	2 860.5	12.0	(Z)	(Z)	(Z)	5.6	7.3	4.6	(Z)	(Z)	(Z)
200 to 299	65.2	672.6	10.3	2.0	12.9	6.5	12.1	16.6	10.6	21.4	28.7	20.8
300 to 349	133.9	1 761.3	13.2	5.4	74.4	13.9	8.3	10.7	6.6	24.3	53.5	32.0
350 to 399	210.3	2 122.5	10.1	20.3	211.9	10.4	6.0	7.9	5.2	11.1	10.3	7.7
400 or more	50.0	546.7	10.9	4.2	47.4	11.3	14.1	17.1	9.7	14.1	19.4	12.5
Not reported[6]	34.9	223.4	6.4	3.2	16.4	5.1	15.9	27.8	21.6	15.9	27.3	21.3
Diesel engines	25.9	715.3	27.6	15.3	510.5	33.3	13.5	11.0	6.5	3.8	5.2	4.1
Less than 400	9.8	188.3	19.3	2.7	88.6	32.5	29.1	24.5	12.6	12.5	16.9	9.4
400 to 599	5.8	145.8	25.2	3.5	76.6	22.2	29.3	34.6	8.3	11.4	12.7	7.2
600 to 799	2.8	82.9	29.5	2.8	82.2	29.6	9.8	15.1	13.1	9.8	15.2	13.2
800 or more	4.4	210.1	48.3	4.4	210.1	48.3	6.0	8.5	5.6	6.0	8.5	5.6
Not reported[6]	3.2	88.1	27.6	2.0	53.1	26.4	37.1	40.7	7.6	10.9	14.5	11.3
Other engines	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Less than 400	(Z)	1.0	29.7	(Z)	1.0	29.7	98.5	98.5	(Z)	98.5	98.5	(Z)
400 or more	(Z)	1.0	29.7	(Z)	1.0	29.7	98.5	98.5	(Z)	98.5	98.5	(Z)
Not reported[6]	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Horsepower	758.2	8 903.2	11.7	50.4	874.6	17.3	.3	2.7	2.7	5.1	5.9	4.8
Gasoline engines	732.3	8 186.9	11.2	35.1	363.0	10.4	.6	2.9	2.9	7.3	12.6	9.1
Less than 100	127.9	1 401.7	11.0	(Z)	(Z)	1.0	8.6	11.7	7.9	98.5	98.5	(Z)
100 to 199	489.8	5 702.0	11.6	22.6	255.2	11.3	2.8	4.3	3.3	11.2	17.6	12.4
200 to 249	45.2	538.2	11.9	5.9	59.5	10.1	14.5	17.7	9.4	12.0	15.8	10.3
250 or more	12.5	76.0	6.1	1.9	19.1	10.3	26.6	32.5	22.2	21.2	28.2	16.9
Not reported[6]	56.9	469.1	8.3	4.7	29.2	6.3	12.6	18.5	12.5	13.1	21.8	17.0
Diesel engines	25.9	715.3	27.6	15.3	510.5	33.3	13.5	11.0	6.5	3.8	5.2	4.1
Less than 250	12.8	265.0	20.7	5.7	141.7	24.9	22.5	22.5	11.7	8.8	13.3	8.7
250 to 349	4.1	126.5	31.0	4.1	126.5	31.0	6.7	8.3	6.0	6.7	8.3	6.0
350 to 449	3.3	181.7	54.9	3.3	181.7	54.9	6.3	9.5	7.4	6.3	9.5	7.4
450 or more	.1	5.8	41.1	.1	5.8	41.1	32.1	41.1	25.7	32.1	41.1	25.7
Not reported[6]	5.6	136.3	24.4	2.1	54.8	26.2	36.4	36.3	10.2	13.3	16.3	10.3
Other engines	(Z)	1.0	29.7	(Z)	1.0	29.7	98.5	98.5	(Z)	98.5	98.5	(Z)
Less than 250	(Z)	1.0	29.7	(Z)	1.0	29.7	98.5	98.5	(Z)	98.5	98.5	(Z)
250 or more	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Not reported[6]	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
TRUCK TYPE AND AXLE ARRANGEMENT												
Single-unit trucks	744.8	8 491.4	11.4	39.0	469.7	12.1	.4	2.8	2.8	6.6	10.2	7.4
2 axles	741.2	8 428.7	11.4	35.3	407.1	11.5	.4	2.9	2.8	7.3	11.7	8.5
3 axles	3.3	56.2	17.0	3.3	56.2	17.0	9.4	12.4	9.1	9.4	12.4	9.1
4 axles or more	.4	6.4	18.0	.4	6.4	18.0	28.6	31.7	18.2	28.6	31.7	18.2
Combinations	13.8	413.2	29.9	11.5	405.0	35.2	12.5	5.7	11.6	4.5	5.5	5.1
Single-unit truck with trailer	1.3	28.7	21.6	1.3	28.7	21.6	21.7	21.8	14.7	21.7	21.8	14.7
4 axles	.6	8.1	13.1	.6	8.1	13.1	36.6	49.4	31.6	36.6	49.4	31.6
5 axles or more	.7	20.6	28.8	.7	20.6	28.8	25.4	23.4	15.3	25.4	23.4	15.3
Single-unit truck with utility trailer	4.4	40.0	9.2	2.0	31.8	15.7	38.8	26.8	29.8	18.7	21.9	13.7
3 axles	1.8	21.8	11.8	.7	13.6	20.0	64.3	44.8	30.2	33.6	39.4	22.3
4 axles	2.0	8.4	4.2	.9	8.4	9.7	59.1	36.1	62.9	31.5	36.3	22.6
5 axles or more	.5	9.8	20.1	.5	9.8	20.1	29.6	34.0	11.7	29.6	34.0	11.7
Truck-tractor with single trailer	7.7	322.2	41.9	7.7	322.2	41.9	3.3	6.3	5.2	3.3	6.3	5.2
3 axles	1.7	44.6	26.0	1.7	44.6	26.0	8.9	12.2	8.4	8.9	12.2	8.4
4 axles	1.6	55.3	34.6	1.6	55.3	34.6	11.0	21.0	13.7	11.0	21.0	13.7
5 axles or more	4.4	222.3	50.8	4.4	222.3	50.8	5.3	7.9	6.5	5.3	7.9	6.5
Truck-tractor with double trailers	.4	22.3	50.9	.4	22.3	50.9	17.9	24.4	16.6	17.9	24.4	16.6
5 axles	.4	21.7	51.5	.4	21.7	51.5	18.2	24.9	17.0	18.2	24.9	17.0
6 axles	(Z)	.5	33.3	(Z)	.5	33.3	96.8	96.8	(Z)	96.8	96.8	(Z)
7 axles or more	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Truck-tractor with triple trailers	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
7 axles	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
8 axles or more	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Trailer not specified	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Powered axles	758.6	8 904.6	11.7	50.4	874.7	17.3	.3	2.7	2.7	5.1	5.9	4.8
1	568.7	6 504.4	11.4	40.8	562.1	13.8	2.2	3.8	3.1	6.3	8.8	6.5
2	189.8	2 396.8	12.6	9.4	309.3	32.8	6.4	8.1	5.4	4.8	6.1	5.8
3 or more	.2	3.4	18.0	.2	3.4	18.0	39.3	54.5	37.7	39.3	54.5	37.7
Not reported	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)

See footnotes at end of table.

Table 2. **Trucks, Truck Miles, and Average Annual Miles: 1987**—Con.

[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	Trucks and truck miles			Trucks and truck miles, excluding pickups, panels, utilities, and station wagons			Relative standard error of estimate (percent) for column—					
	Trucks (thousands)	Truck miles (millions)	Average miles per truck (thousands)	Trucks (thousands)	Truck miles (millions)	Average miles per truck (thousands)						
	A	B	C	D	E	F	A	B	C	D	E	F
CAB TYPE[7]												
Cab forward of engine	.8	8.3	10.3	.8	8.3	10.3	30.8	30.2	19.9	30.8	30.2	19.9
Cab over engine	7.6	215.8	28.3	7.6	215.8	28.3	8.0	9.6	7.9	8.0	9.6	7.9
Conventional cab	33.1	533.8	16.1	33.1	533.8	16.1	3.6	4.8	4.2	3.6	4.8	4.2
Cab beside engine	.5	9.1	17.7	.5	9.1	17.7	42.6	55.2	34.1	42.6	55.2	34.1
Other	1.4	20.3	15.0	1.4	20.3	15.0	25.8	36.4	23.6	25.8	36.4	23.6
Not reported	7.1	87.4	12.3	7.1	87.4	12.3	33.0	47.9	33.4	33.0	47.9	33.4
PICKUPS, PANELS, VANS, UTILITIES, AND STATION WAGONS												
Total	708.2	8 029.9	11.3	(Z)	(Z)	(Z)	.5	3.0	2.9	(Z)	(Z)	(Z)
Pickups	511.4	5 961.6	11.7	(Z)	(Z)	(Z)	.9	3.7	3.6	(Z)	(Z)	(Z)
Mini-vans	24.2	294.2	12.1	(Z)	(Z)	(Z)	20.7	23.6	11.4	(Z)	(Z)	(Z)
Panels or vans	61.9	701.1	11.3	(Z)	(Z)	(Z)	11.4	14.8	9.4	(Z)	(Z)	(Z)
Utilities	83.9	760.7	9.1	(Z)	(Z)	(Z)	9.0	12.0	7.6	(Z)	(Z)	(Z)
Station wagons	26.7	312.3	11.7	(Z)	(Z)	(Z)	19.4	21.7	9.7	(Z)	(Z)	(Z)
Driving wheels	708.2	8 029.9	11.3	(Z)	(Z)	(Z)	.5	3.0	2.9	(Z)	(Z)	(Z)
4-wheel drive	180.4	2 087.6	11.6	(Z)	(Z)	(Z)	6.7	9.3	6.2	(Z)	(Z)	(Z)
2-wheel drive	527.8	5 942.3	11.3	(Z)	(Z)	(Z)	2.3	4.1	3.3	(Z)	(Z)	(Z)
Front-wheel drive	29.0	435.6	15.0	(Z)	(Z)	(Z)	19.6	22.5	10.9	(Z)	(Z)	(Z)
Not reported	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)

[1]Lease characteristics include both "Leased from" and "Leased to" vehicles. Lease provisions apply to a period of one year or more.
[2]Detail does not add to total because items were not applicable or multiple responses were possible.
[3]When no response was obtained, a fleet size of one truck was assumed.
[4]Pickups, panels, vans, and mini-vans were not requested to report the information shown in the Equipment Type section, except for power steering and air conditioning; and in the Fuel Conservation Equipment section, except for radial tires.
[5]Data were derived from the vehicle identification numbers (VIN). "Not reported" indicates those trucks for which the cylinders are unknown.
[6]"Not reported" includes survey respondents who did not report horsepower and/or cubic inch displacement (CID), or reported unreasonable values compared to the truck's other characteristics. In either case, an attempt was made to assign a value based on the vehicle identification number (VIN). If this was successful, the respondent was removed from the not reported category and included under the assigned value.
[7]Pickups, panels, vans, and mini-vans are not included.