

# 1972 <br> census <br> OF TRansportation 

VOLUME II

## Truck Inventory and Use Survey

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## PREFACE

The census of transportation, together with the censuses of retail and wholesale trade, selected service industries, manufactures, mineral industries, and construction industries comprise the economic census program of the Bureau of the Census. This program is required by law under Title 13 of the United States Code, sections 131 and 224. The present economic census collects statistics for the year 1972. Future censuses are scheduled by law for 5 -year intervals.

A large segment of transportation data is available from regulatory and other government agencies, and private organizations. For that reason, the statutory provisions concerning the census of transportation directed the Bureau to collect the kinds of data that were not publicly available from other sources. The objective was to avoid duplication and fill important gaps in transportation information.

The census of transportation was undertaken for the first time on a national basis in 1963 and again in 1967. The 1972 census was taken under three separate surveys-National Travel, Truck Inventory and Use, and Commodity Transportation, each on a sample basis. The surveys are independent of each other and the results are published in three distinct series of reports.

## Publication and Computer Tape Program

## 1972 CENSUS OF TRANSPORTATION

Publications of the 1972 Census of Transportation present data on personal travel, the characteristics and use of trucks, and the nonlocal shipment of commodities by manufacturers.

## PUBLISHED REPORTS

## National Travel Survey (3 reports)

This survey includes a "Spring Report" covering travel during January through May 1972; a "Summer Report" covering travel during June through September 1972; and a report covering travel during the year 1972. Data cover number of persons taking trips, number of trips taken, person-trips, person-miles, person-nights, and accommodations used by such travel characteristics as means of transport, purpose of trip, duration, distance, size of party, vacation, weekend, and origin and destination. Also presented are data by such socioeconomic characteristics as residence, occupation, education, and family-income level. These reports will present travel data for the nation and to nine Travel Regions.

## Truck Inventory and Use Survey ( 52 reports)

This series includes a U.S. Summary and a separate report for each State and the District of Columbia. Data cover the characteristics and uses of the Nation's private and commercial truck resources; the number of vehicles and selected characteristics such as major use, annual vehicle miles, year model, body type and vehicle size class, single unit or combination and axle arrangement, type of fuel, range of operation, acquisition, and cab type.

## Commodity Transportation Survey (approx. 51 reports)

Data on the shipments of commodities by manufacturers will be presented in this series of reports. One report for the United States as a whole will present the flow of commodities at various transportation commodity classification (TCC) levels showing tons and ton-miles of shipments by means of transport, length of haul, weight of shipment, origin, and
destination. The geographic reports will give the flow of commodities from manufacturing plants located in each of the 27 production areas (each production area consists of one or a cluster of standard metropolitan statistical areas) and selected States shown for tons and ton-miles of commodities shipped classified by means of transport, length of haul, and area of destination of shipments. Also included in the series will be reports covering the "Printing, Publishing, and Allied Industries (Except Newspapers and Periodicals)" and the "Traffic Patterns of Small Manufacturing Plants." These provide national and regional data on means of transport and distance shipped by industry class in value of shipments.

## PUBLIC USE TAPES

For each of the three phases of the Census of Transportation, public-use computer tapes are made available.

## National Travel Survey

U.S. travel trip records are presented by State of origin, type of trip, means of transport used, States visited, traveling group size, type of traveler, and season. Data are given on socioeconomic status; age, color, and sex of travelers; and lodging.

## Truck Inventory and Use Survey

For each truck in the survey, complete detail is given except where individual operations would be revealed. Data include year of truck model, registered weight, state of registration, major use, principal products carried, annual and lifetime miles, vehicle body type and size, axle arrangement, maintenance, area of operation, size class, leasing arrangements, and allied items.

## Commodity Transportation Survey

Two tapes: One contains shipment record summaries of commodity flow from 27 major industrial areas to 59 destination areas. The other contains shipment record summaries from originating State to destination State. The data in each tape include aggregate tons and ton-miles.

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## INTRODUCTION

## GENERAL

This volume presents data based on the 1972 Truck Inventory and Use Survey and contains the data previously issued in the paperback reports for each of the 50 States, the District of Columbia, and the United States as a whole (U.S. Summary).

The Truck Inventory and Use Survey is one of the surveys included in the 1972 Census of Transportation. ${ }^{1}$ This census was also undertaken in 1963 and 1967. The next census is scheduled, by law, for the data year 1977.

## SCOPE AND PURPOSE

The primary purpose of this survey is to collect and publish data on the characteristics and use of the Nation's truck resources, other than vehicles owned by Federal, State, and local government agencies. The data presented in this report are based on a probability sample of private and commercial trucks registered (or licensed) in each State ${ }^{2}$ during 1972.

## "TRUCK" AS A UNIT OF MEASURE

The term "truck" in this report is used in its commonly accepted sense as being a property-carrying motor vehicle used on public highways and streets. In a technical sense, a truck may be a "single-unit truck" or it may be a "combination." The latter consists of a power unit (a "truck-tractor") and one or two trailing units (most commonly a "semitrailer"). The most frequently used combination is popularly referred to as a "tractor-semitrailer" or a "tractor-trailer."

## "TRUCK-MILES" AS A UNIT OF MEASURE

The owner of each truck in the sample was asked to report the total miles that the specified vehicle had been driven during the preceding 12 months. Column 2 of table A is based on those replies and shows aggregate truck-miles operated by the trucks shown in the first column. These estimated mileages are attributed to the State of registration, irrespective of the area in which the vehicle was actually operated. This assign-

[^0]ment of aggregate miles to State of registration, doubtless, is one of the major causes of State-to-State differences in average miles per truck shown in column 3 of table A .

## TOTAL TRUCK INVENTORY

The Federal Highway Administration collects and publishes data on the total number of trucks registered annually in each State. Those data are used in this report to be the total inventory. Following are the total inventory figures for the United States (rounded to thousands) of private and commercial trucks in scope to this survey.

```
1963-12,726 registrations
1967-15,360 registrations
1970-17,790 registrations
1971-18,850 registrations
1972-19,7453 registrations
```


## COMPARISONS WITH PREVIOUS SURVEYS

Although the basic purpose and scope of the 1963, 1967, and 1972 surveys were essentially identical, some changes were introduced both in 1967 and 1972.

Differences between 1967 and 1972 data can be classified as (1) changes that may affect all data or (2) changes that may affect a specific item, for example:

## 1. Changes that affect all data in this report

(a) A more effective method of sampling by size of truck within each State (second stratification) was employed making the sample design more efficient and reducing the sampling variability for many items. Although the U.S. sample size remained unchanged, the allocation among the States (first stratification) was slightly modified to improve the reliability of data for smaller States.
(b) A more extensive item-by-item computer edit program was used in conjunction with manual review of selected "must" items for questionnaires received.
(c) Data for body type, item 11, and subsequent items ${ }^{4}$ were not gathered for pickup and panel trucks in 1967. Pickups and panels are included in all data tables in 1972.

[^1]
## INTRODUCTION-Continued

Table A.-Trucks, Truck-Miles, and Average Miles by
Geographic Division and State: 1972

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Division and State \& Trucks

$(1,000)$ \& | Truckmiles |
| :--- |
| (millions) | \& Average miles per truck $(1,000)$ \& | Trucks |
| :--- |
| (percent) | \& | Truckmiles |
| :--- |
| (percent) | \& Division and State \& Trucks

(1,000) \& | Truckmiles |
| :--- |
| (millions) | \& Avarage miles per truck $(1,000)$ \& Trucks

(percent) \& | Truck. miles |
| :--- |
| (percent) | <br>

\hline United States \& 19,745 \& 244,492 \& 12.4 \& 100.0 \& 100.0 \& S. Atlantic-Con. Virginia ..... \& 395 \& 4,955 \& 12.5 \& 2.1 \& 2.1 <br>
\hline Naw England .... \& 655 \& 8,423 \& 12.9 \& 3.4 \& 3.5 \& West Virginia .. \& 201 \& 2,105 \& 10.5 \& 1.1 \& . 9 <br>
\hline Maine . . . . . . . . \& 104 \& 1,269 \& 12.2 \& . 6 \& . 6 \& North Carolina . \& 600 \& 8,361 \& 13.9 \& 3.1 \& 3.5 <br>
\hline New Hampshire \& 57 \& 714 \& 12.5 \& . 3 \& . 3 \& South Carolina . \& 257 \& 3,289 \& 12.8 \& 1.4 \& 1.4 <br>
\hline Vermont ..... \& 43 \& 539 \& 12.5 \& . 3 \& . 3 \& Georgia .. \& 560 \& 7,158 \& 12.8 \& 2.9 \& 3.0 <br>
\hline Massachusetts \& 249 \& 3,332 \& 13.4 \& 1.3 \& 1.4 \& Fiorida . . . . . . \& 622 \& 9,288 \& 14.9 \& 3.2 \& 3.8 <br>
\hline Rhode Island . . \& 56 \& 743 \& 13.3 \& . 3 \& . 4 \& \& \& \& \& \& <br>
\hline Connecticut. \& 146 \& 1,827 \& 12.5 \& . 8 \& . 8 \& East South \& \& \& \& \& <br>
\hline \& \& \& \& \& \& Central. . . . . . . \& 1,587 \& 20,177 \& 12.7 \& 8.1 \& 8.3 <br>
\hline Middle Atlantic \& 1,759 \& 21,865 \& 12.4 \& 9.0 \& 9.0 \& Kentucky ..... \& 422 \& 4,798 \& 11.4 \& 2.2 \& 2.0 <br>
\hline New York \& 659 \& 7,489 \& 11.4 \& 3.4 \& 3.1 \& Tennessee .... \& 424 \& 5,410 \& 12.8 \& 2.2 \& 2.3 <br>
\hline New Jersey \& 335 \& 4,337 \& 12.9 \& 1.7 \& 1.8 \& Alabama \& 441 \& 5,875 \& 13.3 \& 2.3 \& 2.5 <br>
\hline Pennsylvania .. \& 765 \& 10,040 \& 13.1 \& 3.9 \& 4.2 \& Mississippi .... \& 300 \& 4,094 \& 13.6 \& 1.6 \& 1.7 <br>
\hline East North \& \& \& \& \& \& West South \& \& \& \& \& <br>
\hline Central. \& 2,928 \& 35,604 \& 12.2 \& 14.9 \& 14.6 \& Central. . \& 2,881 \& 40,166 \& 13.9 \& 14.6 \& 16.5 <br>
\hline Ohio \& 668 \& 8,887 \& 13.3 \& 3.4 \& 3.7 \& Arkansas \& 320 \& 3,975 \& 12.4 \& 1.7 \& 1.7 <br>
\hline Indiana \& 553 \& 6,253 \& 11.3 \& 2.9 \& 2.6 \& Louisiana . \& 390 \& 5,267 \& 13.5 \& 2.0 \& 2.2 <br>
\hline Illinois \& 695 \& 7,722 \& 11.1 \& 3.6 \& 3.2 \& Oklahoma \& 527 \& 7,386 \& 14.0 \& 2.7 \& 3.1 <br>
\hline Michigan ..... \& 677 \& 8,975 \& 13.3 \& 3.5 \& 3.7 \& Texas. \& 1,644 \& 23,538 \& 14.3 \& 8.4 \& 9.7 <br>
\hline Wisconsin \& 335 \& 3,768 \& 11.2 \& 1.7 \& 1.6 \& \& \& \& \& \& <br>
\hline \& \& \& \& \& \& Mountain . . . . . .
Montana \& 1,585
183 \& 17,511
1,531 \& 11.0
8.4 \& 8.1
1.0 \& 7.2
.7 <br>
\hline West North Central . . \& 2,462 \& 25,038 \& 10.2 \& 12.5 \& 10.3 \& Montana ...... \& 151 \& 1,514 \& 10.0 \& . 8 \& . 7 <br>
\hline Minnesota \& 466 \& 4,648 \& 10.0 \& 2.4 \& 2.0 \& Wyoming \& 92 \& 1,007 \& 10.9 \& . 5 \& . 5 <br>
\hline lowa \& 405 \& 4,476 \& 11.1 \& 2.1 \& 1.9 \& Colorado \& 374 \& 4,336 \& 11.6 \& 1.9 \& 1.8 <br>
\hline Missouri \& 560 \& 6,092 \& 10.9 \& 2.9 \& 2.5 \& New Mexico \& 196 \& 2,190 \& 11.2 \& 1.0 \& . 9 <br>
\hline North Daknta \& 165 \& 1,209 \& 7.3 \& . 9 \& . 5 \& Arizona \& 297 \& 3,775 \& 12.7 \& 1.6 \& 1.6 <br>
\hline South Dakota \& 139 \& 1,392 \& 10.0 \& . 8 \& . 6 \& Utah \& 203 \& 2,248 \& 11.1 \& 1.1 \& 1.0 <br>
\hline Nebraska \& 285 \& 2,987 \& 10.5 \& 1.5 \& 1.3 \& Nevada \& 89 \& 910 \& 10.2 \& . 5 \& . 4 <br>
\hline Kansas \& 442 \& 4,234 \& 9.6 \& 2.3 \& 1.8 \& \& \& \& \& \& <br>
\hline \& \& \& \& \& \& Pacific . . . . . . . \& 2,922 \& 35,947 \& 12.3 \& 14.9 \& 14.8 <br>
\hline South Atlantic ... \& 2,970 \& 39,818 \& 13.4 \& 15.1 \& 16.3 \& Washington ... \& 508 \& 5,028 \& 9.9 \& 2.6 \& 2.1 <br>
\hline Delaware ..... \& 51 \& 1,061 \& 20.8 \& . 3 \& . 5 \& Oregon ...... \& 253 \& 2,996 \& 11.8 \& 1.3 \& 1.3 <br>
\hline Maryland ..... \& 269 \& 3,425 \& 12.7 \& 1.4 \& 1.5 \& California..... \& 2,065 \& 27,014 \& 13.1 \& 10.5 \& 11.1 <br>
\hline District of \& \& \& \& \& \& Alaska \& 48 \& 447 \& 9.3 \& . 3 \& . 2 <br>
\hline Columbia .... \& 15 \& 178 \& 11.9 \& . 1 \& . 1 \& Hawaii \& 48 \& 463 \& 9.6 \& . 3 \& . 2 <br>
\hline
\end{tabular}

[^2]
## INTRODUCTION-Continued

2. Changes in $\mathbf{1 9 7 2}$ for specific items ${ }^{4}$
(a) Item 2, Ownership of vehicle-The 1967 survey form requested that the owner complete the questionnaire only if he was the owner of record as of a certain date. In 1972, the respondent was asked to complete the form even if he was no longer the owner, since he should still have knowledge of the truck's characteristics and use.
(b) Item 3, Acquisition of vehicle-The 1967 form did not obtain "year purchased" if purchased used. This information was obtained in the 1972 survey.
(c) Item 8, Principal products carried-This item has been expanded from 13 to 20 categories to permit more detail product information which is more readily related to the major industry groups ( 2 digit basis) of the Standard Industrial Classification (SIC).
(d) Item 9, Pickup, paneI, multistop, and walk-in-Multistop and walk-in were not included in this question in 1967.
(e) Item 15, Cab type-This is a new item in 1972.
(f) Item 11, Type and size of body; item 13, Axle arrangement; and item 19, Number of trucks in fleet-These items have been slightly expanded to provide additional information.

Preliminary analyses indicate that many of the differences between 1963, 1967, and 1972 may be attributable to technical factors of the type mentioned above, although most reflect significant actual changes. (See table 1) Some of the differences also may be explained by sampling variability, discussed below. Table 1 contains a summary of essentially comparable data for 1963, 1967, and 1972.

## DEFINITIONS OF MAJOR TERMS

Most of the characteristics shown in the tables are self explanatory; however, some terms require definition:

Size Class. Classification by gross vehicle weight; i.e., the empty weight of the vehicle plus the maximum anticipated load weight. In States where the registration was other than in gross vehicle weight, the size class was assigned based on the truck characteristics of body size and type and axle arrangement. ${ }^{5}$

[^3]The four size classes are defined as follows:

## Light--Gross vehicle weight of 10,000 pounds or less

Medium.-Gross vehicle weight of $\mathbf{1 0 , 0 0 1}$ to $\mathbf{2 0 , 0 0 0}$ pounds
Light-heavy.-Gross vehicle weight of 20,001 to 26,000 pounds

Heavy-heavy.-Gross vehicle weight of 26,001 pounds or more

Major Use is based on the answer to the question, "How was the vehicle mostly used during the past 12 months?" Each of the 11 use categories (see item 7 of the survey form, appendix A) conforms with the generally accepted meaning of the terms. "Personal transportation" and "for-hire transportation" were defined in detail, however.

Truck Fleet Size is based on the number of trucks (single-unit trucks plus truck-tractors) operated by a truck owner from a single "base of operation" as reported in item 4 of the survey form in appendix $A$. The fleet is an operational unit and is necessarily smaller than the total fleet that an owner has, if he operates from more than one base. The data shown in the fleet section of the tables are based on the number of trucks found in fleets of specified size and not the number of fleets.

## Area of Operation, classified into three categories:

Local.-Mostly in the local area (in or around the city and suburbs, or within a short distance of the farm, factory, mine, or place vehicle is stationed)

Short range.-Mostly over-the-road (beyond the local area) but usually not more than $\mathbf{2 0 0}$ miles one way to the most distant stop from the place vehicle is stationed

Long range.-Mostly over-the-road trips that usually are more than 200 miles one way to the most distant stop from the place vehicle is stationed

## SAMPLE DESIGN

The Truck Inventory and Use Survey at the national level was based on a stratified probability sample of about 114,000 trucks ${ }^{6}$ drawn from an estimated 19.7 million registrations on file with motor vehicle departments in the 50 States and the District of Columbia, at the time the sample was drawn.

[^4]
## INTRODUCTION-Continued

State Stratification.-The first stratification of the national sample was at the State level, and consisted of three strata based on the total number of trucks registered annually. A sample of about 2,000 truck licenses or registrations was drawn in the small States, 3,000 in the intermediate, and 4,000 in the largest States. Specific target sample sizes by State are in appendix B.

Size of Truck Stratification Within Each State.-The second stratification was based on vehicle size as shown by the motor vehicle registration record. Two vehicle size strata were used-"small" and "large."7 The dividing line between small and large trucks was 16,000 pounds gross vehicle weight or its equivalent if trucks were registered on another basis. About one-fifth of the registration records were from the small-truck stratum and four-fifths of the registration records were from the large-truck stratum. These were selected systematically from a random start.

## SURVEY METHOD

A copy of form TC-200 was mailed to the owner of each truck drawn in the sample. The vehicle was identified on the form, prior to mailing, by inserting in item 1 (vehicle identification) the vehicle make, year model, registered weight, and license number shown on the sampled motor vehicle registration record. The owner was requested to reply only for the identified truck or combination irrespective of other vehicles he may own or have owned. The sample was expanded back to State levels by weighting each truck by the reciprocal of the sampling rate (adjusted for nonresponse) used to select it from the State vehicle registration records, and adjusting to the Federal Highway Administration's estimated universe State total. The State data are then summed for U.S. totals.

## NON-SAMPLING ERRORS

Systematic quality control techniques were used to minimize processing errors. Replies were received from 92 percent of the respondents contacted and the response rate was high for most of the major questions. The general quality of response also was good, as judged by the consistency among answers to various items on the form and the apparent reasonableness of replies. Imputation was accomplished for annual vehicle miles and vehicle size class (see appendix C). An extensive clerical and computer edit program helped to identify incomplete and erroneous responses.

[^5]
## Response Table


${ }^{1}$ Postmaster returns or respondents not contacted.

## SAMPLING VARIABILITY

The figures shown in this report are based on a sample and are, therefore, subject to sampling variability, as shown for selected items in table 3. Sampling variability is presented here as one standard error of the estimate which is a percent (proportion). One standard error of the proportion is computed by the conventional method with necessary modifications to reflect the sample design. The term "sampling variability" refers to the differences that would be expected between results of a sample survey and the results that would have been obtained from a complete enumeration of all vehicles.

The chances are about 2 out of 3 that the reported figure (column 1) will not differ from the figure that would have been obtained from a complete count by more than one standard error shown in column 2 of table 3.

For example, say 77.6 percent of the total trucks are shown to be a particular type or have particular characteristics. This figure would be found in column 1 of table 3 and would be based on the sample. Also, say column 2 of table 3 shows that the estimated sampling variability for that item is about .8 percentage points. Therefore, if a complete count (rather than a sample) had been made, the chances are about 2 out of 3 that the figure would not have been larger than 78.4 or smaller than 76.8 (i.e., 77.6 plus or minus .8).

The chances are about 19 out of 20 that the results of a complete enumeration would not differ from the sample by more than two standard errors shown in column 2 of table 3. Again using the above example, the chances are 19 out of 20 that the figure (77.6) would not be more than 79.2 or less than $\mathbf{7 6 . 0}$ ( 77.6 plus or minus 1.6 ) in a complete enumeration.

Difference Between Two Items.-The question sometimes arises about the sampling variability of the difference between

## INTRODUCTION-Continued

two specified percentages. The variability of the difference, for most pairs of percentages, will be close to the square root of the sum of squares of the sampling variability of the two items. (When the two percentages are negatively correlated, the variability of the difference will be larger; and when positively correlated, will be smallerl.

To Illustrate by a simple example: Assume that item "A" is 10.2 percent and item " $B$ " is 7.1 percent of the total, and the question is raised as to what the difference would have been if a complete count had been taken; assume that the sampling variability for item " $A$ " was 0.4 and for item " $B$ " was 0.8 . The square root of the sum of the squared standard error of the two items would be $\sqrt{(0.4)^{2}+(0.8)^{2}}$ which is plus or minus 0.9 .

As indicated in the example, the difference shown by the sample was 3.1 percent and the one standard error was 0.9 . This would be interpreted to mean that the chances are about. 2 out of 3 that the difference between "A" and " $B$ " as shown by a complete enumeration would be between 2.2 percent and 4.0 percent ( 3.1 plus or minus 0.9 ); and the chances are 19 out of 20 that the difference would be between 1.3 percent and 4.9 percent ( 3.1 plus or minus 1.8).

This procedure applies equally to differences between items within a single State as well as to differences between similar items in different States.

As derived, the estimated standard errors include part of the effect of the errors. The total error, which depends upon the joint effect of the sampling and nonsampling errors, is usually of the order of size indicated by the standard error, or only moderately higher. For particular estimates, however, the total error may considerably exceed the standard errors shown.

Variability for Items Not Shown in the Table-Table 3 is confined to selected major items covered in the survey. The sampling variability of subitems tends to be substantially larger than for the major items with which they are associated.

Minimum Reliability.-Data are shown in proportions only when total of the line or column distributed contains 100 or more actual observations.

## SUMMARY OF FINDINGS

It should be emphasized that all comparisons of data are in terms of the point estimates generated from the respective sample-survey data. Since each estimate is subject to sampling and non-sampling errors, difference between estimates may not be statistically significant at a specified sigma level (level of confidence). See preceding section on Sampling Variability,
especially the section entitled "Difference Between Two Items" for a discussion of the effect of potential error in the data, and table 3 for specific estimates of sampling variability.

About 19.7 milion private and commercial trucks were registered in the United States during 1972. They were driven about 244 billon truck-miles during the year, and averaged 12.4 thousand miles per truck, as shown by table A. California and Texas were the leading States, having 10.5 and 8.4 percent. of the national total number of vehicles and 11.1 and 9.7 percent of the total truck-miles, respectively.

About 41 percent of all trucks were used mainly for "personal transportation," defined as being used in place of an automobile to go from home to work, for outdoor recreation, camping, etc. 8 This represents an increase of 8 percent over 1967 and 16 percent over 1963. Siightly more than 8 million trucks were used mainly for this purpose, and were driven about 79 billion miles, as shown by table 2. Agricultural use and wholesale and retail trade ranked second and third with 4.3 and 1.9 million trucks, respectively. However, their relative positions were reversed in terms of truck miles, because the annual average mileage per wholesale-retail truck was about twice the average for agricultural trucks. The relative use of trucks in agriculture has declined from 28 percent in 1963 and 24 percent in 1967 to 22 percent in 1972.

Seventy-three percent of all private and commercial trucks in the Nation are pickup and panel. These are small general-purpose vehicles. They are used almost exclusively for personal transportation and represent a substantial amount of the total trucks used in agriculture, construction, utilities, and services. They also are found in large numbers in all other major use classes, even in for-hire trucking, as shown by table 4.

Intensity of use, as implied by annual miles per vehicle, was greatest for "for-hire" trucks (table 2). For-hire trucks averaged 38.4 thousand miles per year, as compared with 12.4 thousand for all trucks combined, and 8.7 thousand for agricultural trucks. Newer trucks tend to be operated longer mileages, than older vehicles, ranging from 18.8 thousand miles per vehicle for the 1971-72 models down to 6.7 thousand miles for the pre-1963 models. The light, medium, and light-heavy size trucks each average about 10 thousand miles per year as compared with 34.7 thousand for the heavy-heavy size class.

Since the operational and use characteristics of pickup and panel trucks differ substantially from other vehicle types, two sets of data are shown in table 2. The first set is based on total trucks as discussed in the preceding paragraphs. The second set is based on total trucks excluding pickup and panel, and presents summary profiles of the total truck inventory exclusive of those two specific vehicle types. The effect of

[^6]Figure 1. Distribution of Commercial and Private Motor Truck Registration: 1972


Figure 2. Average Annual Miles per Truck for Each State: 1972


INTRODUCTION-Continued
excluding pickup and panel trucks was to reduce the total truck inventory from 19.7 million to an estimated 5.3 million and reduce the total truck-miles from 244 billion to 89 billion. In that universe of larger trucks, for-hire trucking generated the most truck-miles ( 28.3 billion) followed by wholesaleretail trade with 18.6 billion truck-miles. Together, these two use classes account for more than half of the truck-miles.

Increase in Numbers of Trucks.-Truck use since 1963 (the year of the first Truck Inventory and Use Survey), has increased significantly. The number of States with over 500,000 trucks registered has increased from 4 in 1963, to 6 in 1967, and to 14 in 1972. Conversely, the number of States with less than 100,000 trucks registered has decreased from 11 in 1963, to 10 in 1967, and to 9 in 1972.

| Number of registrations | Number of States |  |  |
| :---: | :---: | :---: | :---: |
|  | 1963 | 1967 | 1972 |
| 500,000 or more | 4 | 6 | 14 |
| 300,000 to 499,999 | 10 | 15 | 13 |
| 200,000 to 299,999 | 12 | 8 | 8 |
| 100,000 to 199,999 | 14 | 12 | 7 |
| Less than 100,000. | 11 | 10 | 9 |

Intensity of Use-Total truck-miles has also undergone a considerable increase. This increase in total miles driven since 1963 is greater than the increase in total trucks registered, indicating more intensive usage as measured by average annual miles per truck. Only 15 States had a truck population which averaged 12,000 miles or more per truck in 1967, while in 1972, it is estimated that 26 of the States had truck populations that exceeded a 12,000 annual mile average. Conversely, the number of States with average truck annual miles of 10,000 or less decreased from 16 in 1967, to only 6 in 1972.

| Average annual miles per truck | Number of States |  |
| :---: | :---: | :---: |
|  | 1967 | 1972 |
| 12,000 miles and over | 15 | 26 |
| 10,000 to 11,999 miles | 20 | 19 |
| Under 10,000 miles | 16 | 6 |

Type of Fuel Used.-Overall, 88 percent of the trucks in the United States use gasoline as a power medium, and 4 percent use diesel or L.PG. No answers were obtained for 8 percent of
the sampled trucks. A different distribution is obtained when appraising combinations (mostly truck tractors and trailers), as opposed to single-unit trucks. Only 9 percent of the 5 -axle combinations use gasoline while 87 percent use diesel as fuel. Conversely, it is estimated that only 2 percent of the single-unit trucks use diesel fuel or LPG.

Percent Distribution of Trucks and Truck-Miles by Fuel Used (1972)

| Truck type | Total | Gas | Diesel or LPG | No answer |
| :---: | :---: | :---: | :---: | :---: |
| TRUCKS |  |  |  |  |
| Total trucks | 100 | 88 | 4 | 8 |
| Single-unit (2 and 3 axie) .... | 100 | 91 | 2 | 8 |
| Combination: |  |  |  |  |
| 3 axle | 100 | 68 | 28 | 4 |
| 4 axle | 100 | 46 | 49 | 5 |
| 5 axle | 100 | 9 | 87 | 4 |
| TRUCK-MILES |  |  |  |  |
| Total truck-miles ...... | 100 | 77 | 17 | 7 |
| Single-unit (2 and 3 axie) . . . . | 100 | 90 | 3 | 8 |
| Combination: |  |  |  |  |
| 3 axle . . . . . . . . . . . . . . | 100 | 50 | 47 | 3 |
| 4 axle | 100 | 28 | 68 | 4 |
| 5 axle . . . . . . . . . . . . . . | 100 | 4 | 93 | 4 |

An even greater percentage of the truck-miles was contributed by trucks using diesel fuel particularly when comparing combinations. Forty-seven percent of the 3 axle, 68 percent of the 4 axle, and 93 percent of the 5 axle combinations used diesel fuel while the respective totals for the percent of trucks was 28,49 , and 87 percent. The larger the unit, the greater the tendency toward diesel fuel use, and also the greater the miles driven. Although only 4 percent of the total U.S. truck inventory uses diesel or LPG fuel, these trucks account for 17 percent of the miles.

The percentages of trucks and truck-miles of vehicles used primarily for local, short, and long hauls (range of operation) ${ }^{9}$ also reflect the tendency for longer-haul vehicles to use diesel fuel. It is apparent that an even greater percentage of vehicle miles accrues to trucks using diesel fuel the longer the range of operation. Whereas 95 percent of the trucks used locally consumed gasoline and only 2 percent used diesel/LPG, an almost equal number of the long-haul vehicles was found in each fuel use classification.
${ }^{9}$ See definition on page IX.

## INTRODUCTION-Continued

Percent Distribution of Range of Operation for Trucks and Truck-Miles by Fuel Used (1972)


Trucks which were operated mostly in the local area using gasoline accounted for 93 percent of that group's truck-miles.

However, 80 percent of the truck-miles of long haul trucks (those driven mostly over the road to destinations over 200 miles) were operated on diesel fuel.

## ARRANGEMENT OF TABLES

The tabular presentation has been arranged into three broad sections. The first section deals with various crossclassifications mostly at the National level. It also is divided into three subsections, based on number of trucks (tables 4 to 10), truck-miles (tables 11 to 15), and a special group of tables on pickup and panel trucks (tables 16 to 18).

The second section presents comparative data on the number of trucks, truck-miles, and average miles per truck in each of the 50 States and the Nation as a whole. That section is further divided into three subsections based on size of truck (tables 19 to 22), major occupational use (tables 23 to 30), and range of operation (tables 31 to 33).

The third section presents tabulations for each of the 50 States and the District of Columbia. Data include trucks, truck-miles, and average miles per truck for each State and cross classifications by vehicle and operational characteristics based on the total truck registrations for each State.

Figure 3. - Comparison of Relative Shares of Total Trucks by Major Use: 1963, 1967, and 1972
(Percent of total truck inventory for year)


Source: Table 1.

Figure 4. - Percent Distribution of Size of Truck for Major Uses: 1972
(Percents based upan total trucks in category)


Source: Table 4.

Figure 5.- Percent Distribution of Major Uses for Truck Types: 1972
(Percents based upon total trucks in category)


[^7]Figure 6. - Distribution of Truck-Miles by Type of Fuel for Ranges of Operation: 1972
(Percents based upon total truck-miles in category)


Source: Table 14

Figure 7. - Number of Trucks, Truck-Miles, and Average Miles, by Truck Size: 1972


Source: Table 2.

TABLE 1. Comparative Summary: 1963, 1967, and 1972


Note: Percents may not add to total due to rounding. * Indicates no data was obtained. A dash (-) indicates that there were not a significant number of trucks with this characteristic to display.
${ }^{1}$ For the 1967 and 1972 surveys, annual miles were imputed if not reported.
${ }^{2}$ For the 1967 survey, data were presented for "Less than 6,000 miles" ( 36.1 percent) and " 6,000 to 9,999 miles" ( 16.9 percent).
${ }^{3}$ Data for 1967 do not include pickups and panels.

TABLE 2. Trucks, Truck-Miles, and Average Miles, by Vehicle and Operational Characteristics: 1972


See footnotes at end of table.

## TABLE 2. Trucks, Truck-Miles, and Average Miles, by Vehicle and Operational Characteristics: 1972 -Continued

| Vehicle and operational characteristics | Number of trucks and truck-miles |  |  | Number of trucks and truck-miles excluding pickups and panels |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Trucks <br> (thousands) | Truck-miles (millions) | Average miles per truck <br> (thousands) | Trucks (thousands) | Truck-miles <br> (millions) | Average miles per truck <br> (thousands) |
| MAINTENANCE |  |  |  |  |  |  |
| Self or own repair shop.............. | 127 | 1,451. | 11.5 | 41 | 695 | 16.8 |
| Dealer or factory branch. ............ | 50 | 775 | 15.4 | 15 | 281 | 18.5 |
| radependent garage...................... | 70 | 901 | 12.9 | 16 | 191 | 12.1 |
| All other and not reported............ | 22 | 297 | 13.5 | 4 | 44 | 10.1 |
| SIZE CLASS |  |  |  |  |  |  |
| Light..................................... . | 194 | 2,229 | 11.5 | 11 | 131 | 12.2 |
| Medium. . . . . . . . . . . . . . . . . . . . . . . . . . . | 29 | 310 | 10.7 | 21 | 211 | 10.0 |
| Light-heavy............................. | 15 | 150 | 10.3 | 14 | 139 | 10.1 |
| Heavy-heavy.............................. | 32 | 735 | 23.2 | 31 | -731 | 23.4 |
| TRUCK Fleet Size |  |  |  |  |  |  |
| 1 truck................................. | 160 | 1,795 | 11.2 | 14 | 169 | 12.4 |
| 2 to 5 trucks........................... . | 52 | 623 | 11.9 | 30 | 357 | 11.9 |
| 6 to 19 trucks. | 27 | 428 | 15.8 | 15 | 249 | 16.2 |
| 20 trucks or more....................... . | 29 | 578 | 19.7 | 18 | 437 | 24.4 |
| Not reported........................... . | - | - | - | - | - | - |
| \% YEAR MODEL ${ }^{1}$ |  |  |  |  |  |  |
| 1971 and 1972. | 47 | 910 | 19.2 | 12 | 340 | 27.2 |
| 1969 and 1970. | 42 | 818 | 19.3 | 12 | 246 | 20.1 |
| 1967 and 1968. | 42 | 539 | 12.9 | 9 | 216 | 23.1 |
| 1965 and 1966. | 38 | 401 | 10.7 | 10 | 147 | 14.4 |
| 1963 and 1964. . . . . . . . . . . . . . . . . . . . . . | 27 | 219 | 8.2 | 8 | 87 | 10.3 |
| Pre-1963............................... . . | 73 | 538 | 7.4 | 24 | 175 | 7.3 |
| vehicle type and axle arrangement |  |  |  |  |  |  |
| Single-unit trucks. | 256 | 2,961 | 11.6 | 64 | 748 | 11.8 |
| 2-axle. | 248 | 2,822 | 11.4 | 56 | 610 | 10.9 |
| 3-axle................................. . | 8 | 140 | 18.2 | 8 | 138 | 18.4 |
| Combinations............................ . | 13 | 463 | 35.0 | 13 | 463 | 35.0 |
| 3-axle............... . . . . . . . . . . . . . . | 2 | 51 | 20.8 | 2 | 51 | 20.8 |
| 4 -axle. | 5 | 139 | 30.4 | 5 | 139 | 30.4 |
| 5-axle............................... | 6 | 269 | 46.0 | 6 | 269 | 46.0 |
| All other............................. | - | - | - | - | - | - |
| PICKUP, PANEL, MULTISTOP, OR WALK-IN² |  |  |  |  |  |  |
| Total (all trucks).......................... | 269 | 3,425 | 12.7 | - | - | - |
| Total pickup, pane1, multistop, or walk-in. | 189 | 2,188 | 11.6 | - | - | - |
| pickup trucks........................ | 141 | 1,645 | 11.7 | - | - | - |
| Panel trucks........................ | 40 | 458 | 11.4 | - | - | - |
| Multistop or walk-in trucks........ | 8 | -84 | 10.1 | - | - | - |
| All other truck types.................. | 80 | 1,237 | 15.5 | - | - | - |
| Wheel drive and campers |  |  |  |  |  |  |
| Total.................................... | 269 | 3,425 | 12.7 | - | - | - |
| Number of driving wheels: |  |  |  |  |  |  |
| Two. . . . . . . . . . . . . . . . . . . . . . . . . . . . | 175 | 2,112 | 12.1 | - | - | - |
| Four. . . . . . . . . . . . . . . . . . . . . . . . . Not . | 13 81 |  | 7.0 15.1 | - | - | $\because$ |
| Camper body or special camping equipment: | 81 | 1,222 | 15.1 |  |  |  |
| With camper body.................... | 17 | 180 | 10.4 | - | - | - |
| Not with camper body............... | 169 | 1,990 | 11.8 | - | - | - |
| Not reported......................... . | 83 | 1,255 | 15.2 | - | - | - |

See footnotes at end of table.

## TABLE 2. Trucks, Truck-Miles, and Average Miles, by Vehicle and Operational Characteristics: 1972-Continued

| Vehicle and operational characteristics | Number of trucks and truck-miles |  |  | Number of trucks and truck-miles excluding pickups and panels |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Trucks <br> (thousands) | Truck-miles (millions) | Average miles per truck <br> (thousands) | Trucks <br> (thousands) | Truck-miles (millions) | Average miles per truck <br> (thousands) |
| CAB TYPE |  |  |  |  |  |  |
| Talt cab. | 8 | 247 | 32.8 | 8 | 247 | 32.8 |
| Not tilt cab. | 242 | 2,919 | 12.1 | 67 | 937 | 14.1 |
| Not reported................. | 19 | 259 | 13.3 | 3 | 27 | 10.4 |
| Leased, long term.. | 4 | 120 | 33.6 | 3 | 115 | 34.9 |
| Leased, short term.. | 2 | 30 | 16.4 | 1 | 26 | 17.7 |
| Not leased and not reported..... | 264 | 3,274 | 12.4 | 72 | 1,070 | 14.9 |
| Princtipal products carried |  |  |  |  |  |  |
| Farm products.. | 32 | 264 | 8.3 | 15 | 146 | 9.7 |
| Mining products. | 1 | 10 | 14.5 | 1 | 10 | 15.1 |
| Forest products. | 2 | 35 | 19.4 | 2 | 35 | 19.4 |
| Processed foods. | 9 | 178 | 19.3 | 4 | 110 | 26.2 |
| Textile products.... | 1 | 19 | 18.3 | - | - | 17 |
| Building materials.. | 29 | 583 | 20.2 | 14 | 243 | 17.1 |
| Household goods.......... . . . . . . . . | 4 | 55 | 14.2 | 3 | 42 | 15.7 |
| Furniture. | 4 | 50 | 12.9 | 1 | 28 | 20.1 |
| Paper products. | 2 | 23 | 15.6 | 1 | 16 | 13.4 |
| Chemicals...... | 3 | 51 | 18.4 | 1 | 34 | 22.8 |
| Petroleum............ | 5 | 90 | 17.8 | 4 | 78 | 17.5 |
| Primary metal products..... | 2 | 29 | 15.2 | 1 | 11 | 17.9 |
| Fabricated metal products.......... | 1 | 25 | 18.8 | 1 | 15 | 19.4 |
| Machinery (except electrical)...... | 3 | 31 | 12.1 | 1 | 14 | 17.0 |
| Electrical machinery. | 7 | 101 | 15.4 | 1 | 23 | 17.4 |
| Transportation equipment. | 5 | 112 | 23.4 | 2 | 63 | 31.7 |
| Scrap, refuse or garbage. | 11 | 64 | 5.8 | 3 | 27 | 8.8 |
| Mixed cargo............. | 11 | 175 | 15.8 | 4 | 107 | 24.8 |
| Personal transport.. | 102 | 1,069 | 10.5 | 6 | 46 | 8.1 |
| Other........ | 32 | 404 | 12.7 | 9 | 124 | 13.5 |
| Not reported. . . . . . . . . . . . . . . . . . . | 5 | 57 | 10.9 | 2 | 33 | 18.8 |

Note: Total number of trucks registered in 1972 represents the total registrations during 1971 compiled by the Federal Highway Administration projected for 1972 by the Census Bureau. For reports issued prior to June 1973, this is a projected total. All other data are proportion estimates derived from the Truck Inventory and Use Survey.

Data relate to the State of registration which is, in most cases, the base of operations. However, some trucks that are registered in a given State are actually based in another State and/or operate interstate.

A dash (-) indicates that there were not a significant number of trucks with this characteristic to display; i.e., less than 100 total observations in sample or less than . 05 percent of the total in any one cell.

Data are subject to sampling variability, estimates of which may be found in table 3 .
${ }^{1}$ Vehicles for which "year model" was not obtained are not included in the distribution.
${ }^{2}$ The total of the body type class "pickup, panel, multistop, or walk-in" is 192,000 . However, 3,000 trucks in this group were not subclassified by the respondent and were accumulated in the "all other truck types" within the pickup, panel, multistop, or walk-in classification. This difference is also reflected in the percentage distributions.

## TABLE 3. Sampling Variability of Data



Note: Data relate to the State of registration which is, in most cases, the base of operations. However, some trucks that are registered in a given State are actually based in another State and/or operate interstate. The absolute number of trucks, truckmiles, and average miles per truck for each characteristic may be found in table 2 . A dash ( - ) indicates that there were not a significant number of trucks with this characteristic to display; i.e., less than 100 total observations in sample or less than .05 percent of the total in any one cell.
${ }^{1}$ As estimated from the sample. ${ }^{2}$ One standard error which is a percent. See discussion in text for proper use and interpretation. ${ }^{3}$ Vehicles for which "year model" was not obtained are not included in the aistribution.

TABLE 4. TRUCKS-Percent Distribution of Major Use Classes, by Vehicle and Operational Characteristics: 1972


Note: Data relate to the state of registration which is, in most cases, the base of operations. However, some trucks that are registered in a given State are actually based in another state and/or operate interstate. The absolute number of trucks, truckmiles, and average miles per truck for each characteristic may be found in table 2 . A dash ( ) indicates that there were not a significant number of trucks with this characteristic to display; i. e., less than 100 total observations in sample or less than . O5 percent of the total in any one cell. Data are subject to sampling variability, estimates of which may be found in table 3 . Percents may not add to total due to rounding.
${ }^{1}$ Vehicles for which "year model" was not obtained are not included in the distribution.

TABLE 5. TRUCKS-Percent Distribution of Size Classes, by Vehicle and Operational Characteristics: 1972


Note: Data relate to the state of registration which is, in most cases, the base of operations. However, some trucks that are egistered in a given State are actually based in another State andor operate interstate. The absolute number of trucks, truckiles, and average miles per truck for each characteristic may be found in table 2 . A dash ( - ) indicates that there were not a ignificant number of trucks with this characteristic to display; i.e., less than 100 total observations in sample or less than 05 percent of the total in any one cell. Data are subject to sampling variability, estimates of which may be found in table 3 . ercents may not add to total due to rounding.
${ }^{1}$ Vehicles for which "year model" was not obtained are not included in the distribution.

TABLE 6. TRUCKS-Percent Distribution of Annual Mileage Classes, by Vehicle and Operational Characteristics: 1972

| Vehicle and operational characteristics | Total | Annual mileage class |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Less than 5,000 miles | $\begin{aligned} & 5,900 \text { to } \\ & 9,999 \text { miles } \end{aligned}$ | $\begin{aligned} & 10,000 \text { to } \\ & 19,999 \text { miles } \end{aligned}$ | $\begin{aligned} & 20,000 \text { to } \\ & 29,999 \text { miles } \end{aligned}$ | $\begin{aligned} & 30,000 \text { to } \\ & 49,999 \text { miles } \end{aligned}$ | $\begin{aligned} & 50,000 \text { to } \\ & 74,999 \text { miles } \end{aligned}$ | 75,000 miles or more |
| Total trucks . | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Agricul ture............................. | 12.7 | 29.4 | 12.2 | 9.2 | 1.3 | 10.3 | 2.3 | 2.0 |
| Forestry and 1 umbering.................. | . 6 | . 4 | . 7 | . 3 | . 5 | 1.4 | 2.3 | 4.0 |
| Mining. . . . . . . . . . . . . . . . . . . . . . . . . . . | . 5 | - | . 2 | . 3 | 1.1 | 4.4 | 2.3 | - |
| Construction.............................. | 11.8 | 7.8 | 10.7 | 11.3 | 24.0 | 13.7 | 15.5 | 23.1 |
| Manufacturing........................... | 1.6 | 1.2 | 1.1 | 1.9 | . 8 | 4.2 | 5.7 | 4.0 |
| Wholesale and retail trade............. | 10.4 | 7.5 | 6.5 | 11.3 | 15.9 | 25.8 | 34.4 | 4.0 |
| For hire................................. | 4.9 | 1.3 | 2.1 | 4.9 | 8.0 | 12.9 | 33.0 | 43.8 |
| Personal transportation.................. | 42.7 | 40.9 | 49.9 | 44.6 | 31.3 | 22.7 | 2.3 | 19.1 |
| Utilities................................ | 2.3 | 1.9 | 3.5 | 1.6 | 3.4 | - | - | - |
| Services. | 9.6 | 8.7 | 7.8 | 12.9 | 13.4 | 3.2 | - | - |
| All other. | 2.8 | .9 | 5.5 | 1.8 | . 3 | 1.4 | 2.3 | - |
| Pickup, panel, multistop, or walk-in... | 71.4 | 63.1 | 76.8 | 75.6 | 72.9 | 53.5 | 25.3 | 38.3 |
| Platform................................ | 8.2 | 14.6 | 8.4 | 6.2 | 3.7 | 5.5 | 8.0 | 6.0 |
| Platform with added device............. | 2.1 | 3.6 | 2.6 | 1.1 | 2.1 | 2.8 | - | - |
| Cattlerack................................ . | .9 | 2.2 | . 9 | . 1 | .3 | 4.4 | - | - |
| Insulated nonrefrigerated van.......... | .7 | .1 | . 7 | . 3 | . 8 | . 9 | 15.5 | - |
| Insulated refrigerated van.............. | . 8 | - | . 4 | . 9 | 1.9 | 1.4 | 5.7 | 2.0 |
| Furniture van............................ | 1.4 | . 7 | . 8 | 2.1 | 1.6 | 2.3 | 2.3 | - |
| Open top van............................. | . 2 | . 5 | . 2 | . 1 | .3 | . 5 | - | - |
| All other vans........................... | 3.4 | 1.6 | 1.3 | 3.1 | 8.2 | 10.6 | 10.2 | 23.9 |
| Beverage truck........................... | . 5 | . 8 | . 4 | . 6 | - | . 9 | - | - |
| Utility truck............................ | 2.4 | 4.1 | . 9 | 3.7 | 1.3 | . 5 | - | - |
| Garbage and refuse collector........... | . 5 | .1 | . 6 | . 5 | . 8 | . 5 | - | - |
| Winch or crane......................... | - | - | - | - | - | - | - | - |
| Wrecker................................... | . 6 | 1.4 | . 4 | . 4 | . 3 | .5 | - | $-$ |
| Pole and logging. . . . . . . . . . . . . . . . . . . . | - | - | - | - | - | - | - | - |
| Auto transport............................ | . 3 | - | - | . 1 | . 5 | . 5 | 6.8 | 6.0 |
| Dump truck....... | 3.8 | 4.1 | 3.4 | 2.9 | 2.9 | 9.2 | 12.5 | 6.0 |
| Tank truck for liquids.................. | 2.0 | 2.7 | 1.8 | 1.2 | 1.6 | 3.2 | 6.8 | 13.9 |
| Tank truck for dry bulk................. | . 2 | - | - | . 1 | . 3 | 1.8 | 4.6 | 2.0 |
| Concrete mixer............................ | . 3 | - | . 1 | . 8 | - | - | - | - |
| All other................................ | . 4 | . 3 | . 4 | . 2 | . 6 | . 9 | 2.2 | 2.0 |
| ACQUISITION |  |  |  |  |  |  |  |  |
| Purchased new. | 50.4 | 29.0 | 31.9 | 65.7 | 81.3 | 84.2 | 84.1 | 68.9 |
| Purchased used.. | 48.1 | 70.3 | 67.1 | 31.5 | 17.6 | 15.4 | 14.8 | 31.1 |
| Leased and not reported................. | 1.5 | . 7 | 1.1 | 2.8 | 1.1 | . 5 | 1.1 | - |
| Stze class |  |  |  |  |  |  |  |  |
| Light................................... | 72.1 | 67.5 | 76.1 | 76.0 | 71.7 | 53.3 | 34.0 | 38.3 |
| Medium.................................... . | 10.8 | 13.3 | 10.8 | 10.7 | 8.5 | 11.1 | 3.4 | 2.0 |
| Light-heavy. | 5.4 | 8.2 | 5.6 | 4.2 | 5.6 | 4.6 | 3.4 | - |
| Heavy-heavy . . . . . . . . . . . . . . . . . . . . . . . . | 11.8 | 11.0 | 7.5 | 9.2 | 14.1 | 31.0 | 59.2 | 59.7 |
| YEAR MODEL ${ }^{1}$ |  |  |  |  |  |  |  |  |
| 1971 and 1972.......................... | 17.6 | 7.7 | 6.1 | 23.1 | 42.9 | 45.4 | 40.1 | 25.9 |
| 1969 and 1970........................... . | 15.8 | 6.5 | 9.9 | 21.3 | 28.0 | 24.4 | 24.6 | 33.1 |
| 1967 and 1968........................... | 15.6 | 11.8 | 11.8 | 22.5 | 14.2 | 7.9 | 20.5 | 17.9 |
| 1965 and 1966........................... | 14.0 | 16.5 | 9.0 | 20.8 | 10.1 | 6.9 | 8.0 | - |
| 1963 and 1964. | 9.9 | 13.2 | 15.5 | 5.5 | 3.2 | 3.7 | 2.3 | 2.0 |
| Pre-1963..... | 27.2 | 44.2 | 47.8 | 6.9 | 1.6 | 11.7 | 4.6 | 21.1 |

Note: Data relate to the State of registration which is, in most cases, the base of operations. However, some trucks that are registered in a given State are actually based in another State and/or operate interstate. The absolute number of trucks, truckmiles, and average miles per truck for each characteristic may be found in table 2. A dash (-) indicates that there were not a significant number of trucks with this characteristic to display; i.e., less than 100 total observations in sample or less than . 05 percent of the total in any one cell. Data are subject to sampling variability, estimates of which may be found in table 3 . Percents may not add to total due to rounding.
${ }^{1}$ Vehicles for which "year model" was not obtained are not included in the distribution.

# TABLE 7. TRUCKS-Percent Distribution of Ranges of Operation, by Vehicle and Operational Characteristics: 1972 

| Vehicle and operational characteristics | Total | Range of operation |  |  | Vehicle and operational characteristics | Total | Range of operation |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Local | Short range | $\begin{aligned} & \text { Long } \\ & \text { range } \end{aligned}$ |  |  | Local | Short range | Long range |
| Total trucks . . . . . . . . . . . . . . . | 100.0 | 100.0 | 100.0 | 100.0 | AcQuisition |  |  |  |  |
| MAJOR USE |  |  |  |  | Purchased new. | 50.4 | 48.2 | 66.1 | 74.4 |
| Agricul ture. . . . . . . . . . . . . . . . . . | 12.7 | 13.4 | 7.7 | 2.3 | Purchased used. | 48.1 | 50.3 | 33.1 | 25.6 |
| Forestry and lumbering. . . . . . . . . . . . | . 6 | .5 | 1.4 | 4.7 | Leased and not reported. | 1.5 | 1.5 | . 8 | - - |
| Mining. . . . . . . . . . . . . . . . . . . . . . . | . 5 | 6 | .2 | - |  |  |  |  |  |
| Construction. | 11.8 | 12.6 | 10.9 | - |  |  |  |  |  |
| Manufacturing. | 1.6 | 1.4 | 3.2 | 11.6 | TYPE OF FUEL |  |  |  |  |
| Wholesale and retail trade. | 10.4 | 10.5 | 14.6 |  |  |  |  |  |  |
| For hire... | 4.9 | 3.6 | 10.4 | 74.4 | Gasoline....... | 89.0 | 94.8 | 81.7 | 27.9 |
| Personal transportation. | 42.7 | 41.5 | 42.3 | - | Diesel and LPG. | 5.0 | 3.1 | 15.4 | 72.1 |
| Utilities.. | 2.3 | 2.7 | , 8 | - | Not reported.. | 6.0 | 2.1 | 2.9 |  |
| Services. | 9.6 | 10.2 | 7.3 | - |  |  |  |  |  |
| All other............................. | 2.8 | 3.0 | 1.2 | 7.0 | MAINTENANCE |  |  |  |  |
| BODY TYPE |  |  |  |  | Self or own repair shop. | 47.1 | 49.8 | 41.3 | 62.8 |
| Pickup, panel, multistop, or walk-in | 71.4 | 73.1 | 59.9 | - | Dealer or factory branch. | 18.7 | 17.3 | 36.3 | 20.9 |
| Platform, ........................... | 8.2 | 8.2 | 7.1 | 11.6 | Independent garage. | 26.0 | 28.4 | 19.2 | 14.0 |
| Platform with added device | 2.1 | 2.3 | 1.8 | 11.6 | A11 other and not reported. | 8.2 | 4.5 | 3.3 | 2.3 |
| Cattlerack. | . 9 | 1.0 | . 6 | - |  |  |  |  |  |
| Insulated nonrefrigerated van. | . 7 | . 4 | 3.5 | - | YEAR MODEL ${ }^{1}$ |  |  |  |  |
| Insulated refrigerated van. | . 8 | . 5 | 3.4 | - |  |  |  |  |  |
| Furniture van | 1.4 | 1.3 | 1.0 | 23.3 | 1971 and 1972. | 17.6 | 16.0 | 28.8 | 18.6 |
| Open top van. | . 2 | . 2 | .4 | - | 1969 and 1970. | 15.8 | 14.3 | 20.8 | 25.6 |
| All other vans. | 3.4 | 2.3 | 8.5 | 51.2 | 1967 and 1968. | 15.6 | 16.2 | 12.8 | 37.2 |
| Beverage truck. | . 5 | . 5 | . 6 | - | 1965 and 1966. | 14.0 | 14.7 | 13.6 | 14.0 |
| Utility truck. | 2.4 | 2.2 | 3.1 | - | 1963 and 1964. | 9.9 | 10.1 | 6.0 | 2.3 |
| Garbage and refuse collecto | .5 | . 5 | . 2 | - | Pre-1963 | 27.2 | 28.8 | 18.0 | 2.3 |
| Winch or crane | - | $\cdots$ | - | - |  |  |  |  |  |
| Wrecker... | . 6 | .6 | - | - | VEHICLE TYPE AND AXLE |  |  |  |  |
| Pole and logging. | - | - | - | - | ARRANGEMENT |  |  |  |  |
| Auto transport. | . 3 | - | 2.0 | 4.7 |  |  |  |  |  |
| Dump truck. | 3.8 | 4.1 | 2.6 | - | Single-unit trucks. | 95.1 | 97.3 | 82.7 | 23.3 |
| Tank truck for liquids. | 2.0 | 1.9 | 3.2 | 4.7 | 2-axle | 92.2 | 94.4 | 79.1 | 20.9 |
| Tank truck for dry bulk. | . 2 | - | 1.8 | - | 3-axle | 2.9 | 2.9 | 3.5 | 2.3 |
| Concrete mixer. | . 3 | . 4 | - | - | Combinations | 4.9 | 2.7 | 17.3 | 76.7 |
| All other. | . 4 | .3 | . 6 | 4.6 | 3-axle | . 9 | . 7 | 2.4 | 9.3 |
| annual miles |  |  |  |  | 4-axie | 1.7 | 1.1 | 4.3 | 30.2 |
| ANNUAL MILES |  |  |  |  | 5-axle. | 2.2 | . 8 | 10.3 | 37.2 |
| Less than 5,000 miles. | 16.3 | 17.2 | 12.2 | 4.7 | All othe | .1 | . 1 | . 4 | - |
| 5,000 to 9,999 miles.. | 35.0 | 38.2 | 20.2 | 2.3 |  |  |  |  |  |
| 10,000 to 19,999 miles. | 33.0 | 33.7 | 22.5 | 16.3 | CAB TYPE |  |  |  |  |
| 20,000 to 29,999 miles. | 8.1 | 6.9 | 17.7 | 2.3 |  |  |  |  |  |
| 30,000 to 49,999 miles. | 4.7 | 2.6 | 17.4 | 16.3 | Tilt cab. | 2.8 | 2.1 | 5.5 | 51.2 |
| 50,000 to 74,999 miles. | 1.9 | . 9 | 7.2 | 32.6 | Not tilt cab. | 90.0 | 95.5 | 88.2 | 46.5 |
| 75,000 miles or more. | 1.1 | . 4 | 2.8 | 25.6 | Not reported. | 7.2 | 2.4 | 6.3 | 2.3 |

Note: Data relate to the State of registration which is, in most cases, the base of operations. However, some trucks that are registered in a given State are actually based in another State and/or operate interstate. The absolute number of trucks, truckmiles, and average miles per truck for each characteristic may be found in table 2. A dash (-) indicates that there were not a significant number of trucks with this characteristic to display; i.e., less than 100 total observations in sample or less than . 05 percent of the total in any one cell. Data are subject to sampling variability, estimates of which may be found in table 3 . Percents may not add to total due to rounding.
${ }^{1}$ Vehicles for which "year model" was not obtained are not included in the distribution.

## TABLE 8. TRUCKS-Percent Distribution of Truck Types and Axle Arrangements, by Vehicle and Operational Characteristics: 1972

| Vehicle and operational characteristics | Total | Truck type and axle arrangement |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Single-unit trucks |  |  | Combinations |  |  |  |
|  |  | Total | 2-axle | 3-axle | Total | 3-axle | 4-axle | 5-axle |
| Total trucks | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Agriculture....................... | 12.7 | 13.0 | 13.2 | 9.0 | 7.0 | 22.6 | 5.1 | 2.0 |
| Forestry and lumbering. | . 6 | . 4 | . 4 | 2.3 | 4.0 | 2.3 | 2.5 | 5.9 |
| Mining........ | . 5 | . 5 | . 3 | 5.3 | . 9 | - | 1.3 | 1.0 |
| Construction. | 11.8 | 12.0 | 11.2 | 38.3 | 8.5 | 9.4 | 8.9 | 7.9 |
| Manufacturing. | 1.6 | 1.2 | 1.1 | 5.3 | 9.0 | 14.1 | 11.4 | 5.0 |

## TABLE 8. TRUCKS-Percent Distribution of Truck Types and Axle Arrangements, by Vehicle and Operational Characteristics: 1972-Continued

| Vehicle and operational characteristics | Total | Truck type and axle arrangement |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Single-unit truck |  |  | Combination |  |  |  |
|  |  | Total | 2 -axle | 3-axle | Total | 3-axle | 4-axle | 5-axle |
| MAJOR USE--Continued |  |  |  |  |  |  |  |  |
| Wholesale and retall trade........ | 10.4 | 10.3 | 10.1 | 16.5 | 12.6 | 7.0 | 12.7 | 14.9 |
| For hire......... ................ | 4.9 | 2.6 | 2.4 | 9.0 | 51.2 | 37.5 | 49.4 | 58.4 |
| Personal transportation. | 42.7 | 44.9 | 46.2 | .8 | . 4 | - | 1.3 | - |
| Utill ties............... | 2.3 | 2.4 | 2.5 | $\stackrel{8}{8}$ | .4 | - | 1.3 | - |
| services.............................................. | 9.6 | 10.1 | 10.2 | 7.5 | $\cdot 4$ | 7. | 1.3 | - |
| All other........................... | 2,8 | 2.7 | 2.6 | 5.3 | 5.4 | 7.0 | 5.1 | 5.0 |
|  | 71.4 | 75.1 | 77.4 | 2.3 | - - | - | - | - |
| Pickup, panel, multistop, or walk-in Platform. | 8.2 | 7.3 | 7.3 | 9.0 | 24.5 | 43.7 | 20.3 | 19.8 |
| Platform with added device........... | 2.1 | 2.1 | 2.0 | 5.3 | 3.1 | 2.3 | 1.3 | 5.0 |
| Cattlerack........................... | .9 | 1.0 | .9 | 3.0 | - | - | - | - |
| Insulated nonrefrigerated van....... | .7 | . 6 | . 7 | 1 | 2.7 | 2 | 3.8 | 3.0 |
| Insulated refrigerated van.......... | . 8 | .$^{6}$ | . 6 | 1.5 | 4.5 | 2.3 | 5.1 | 5.0 |
| Furniture van...................... | 1.4 | 1.4 | 1.3 | 3.0 | 1.3 | 2.3 | 2.5 | - |
| Open top van......................... | .2 | .1 | . 1 | . 8 | 2.7 | 7.0 | 2.5 | 1.0 |
| A11 other vans. . . . . . . . . . . . . . . . . | 3.4 | 1.8 | 1.6 | 7.5 | 35.0 | 25.8 | 53.2 | 24,8 |
| Beverage truck........................ | .5 | - 5 | . 4 | 4.5 | - | - | - | - |
| Utility truck......................... | 2.4 | 2.5 | 2.5 | 1.5 | $\therefore-$ | - | - | $-$ |
| Garbage and refuse collector....... | .5 | . 5 | . 4 | 4.5 | - | - | - | - |
| Winch or crane. ..................... | 6 | 6 |  | 8 | - | - | - | - |
| Wrecker............................... | . 6 | .6 | - 6 | . 8 | - | - | - | - |
| Pole and logging. . . . . . . . . . . . . . . . | 3 | - | - - | - | 5.4 | 11.7 | 1.3 | 5.9 |
| Auto transport....................... | .3 3.8 | 3.7 | 2.5 | 41.4 | 5.4 4.5 | 11.7 2.3 | 3.8 | 5.9 |
| Dump truck............................ | 3.8 2.0 | 3.7 | 2.5 1.6 | 41.4 2.3 | 4.5 | 2.3 2.3 | 3.8 5.1 | 15.8 |
| Tank truck for liquids............... | 2.0 .2 | 1.6 | 1.6 | 2.3 .8 | 9.4 4.5 | 2.3 | 5.1 | 15.8 9.9 |
| Tank truck for dry buik.............. | . 2 | . $\overline{3}$ | - | .8 9.8 | 4.5 .4 | - | - | 1.0 |
| Concrete mixer <br> All other. | . 4 | . 3 | . 2 | 2.3 | 1.7 | - | 1.3 | 3.0 |
| ANNUAL MILES |  |  |  |  |  |  |  |  |
| Less than 5,000 miles,............. . | 16.3 | 16.7 | 16.9 | 12.0 | 6.3 | 9.4 | 10.1 | 2.0 |
| 5,000 to 9,999 miles................ | 35.0 | 36.2 | 36.7 | 20.3 | 13.0 | 14.1 | 16.5 | 9.9 |
| 10,000 to 19,999 miles............. . | 33.0 | 33.5 | 33.4 | 39.1 | 22.7 | 43.7 | 22.8 | 13.9 |
| 20,000 to 29,999 miles............. . . | 8.1 | 7.9 | 7.9 | 8.3 | 12.1 | 11.7 | 11.4 | 12.9 |
| 30,000 to 49,999 miles............. . | 4.7 | 4.1 | 3.8 | 13.5 | 15.7 | 9.4 | 13.9 | 19.8 |
| 50,000 to 74,999 miles............... | 1.9 | 1.0 | .9 | 4.5 | 18.9 | 4.7 | 17.7 | 25.7 |
| 75,000 miles or more. . . . . . . . . . . . . . | 1.1 | .6 | .5 | 2.3 | 11.2 | 7.0 | 7.6 | 15.8 |
| ACQUISITION |  |  |  |  |  |  |  |  |
| Purchased new. | 50.4 | 49.8 | 49.2 | 68.4 | 63.3 | 42.2 | 64.6 | 71.3 |
| Purchased used. | 48.1 | 48.7 | 49.3 | 30.8 | 34.9 | 53.1 | 34.2 | 27.7 |
| Leased and not reported............. | 1.5 | 1.5 | 1.6 | . 8 | 1.8 | 4.7 | 1.3 | 1.0 |
| TYPE OF FUEL |  |  |  |  |  |  |  |  |
| Gasoline...... | 89.0 | 91.9 | 93.0 | 55.6 | 31.3 | 69.5 | 43.0 | 5.9 |
| Diesel and LPG. ....................... | 5.0 | 1.9 | . 7 | 38.3 | 66.9 | 28.2 | 55.7 | 92.1 |
| Not reported.......................... | 6.0 | 6.3 | 6.3 | 6.0 | 1.8 | 2.3 | 1.3 | 2.0 |
| maintenance |  |  |  |  |  |  |  |  |
| Self or own repair shop............. | 47.1 | 46.4 | 46.1 | 57.1 | 60.6 | 44.6 | 64.6 | 64.4 |
| Dealer or factory branch............ | 18.7 | 18.5 | 18.4 | 21.8 | 21.4 | 36.6 | 20.3 | 15.8 |
| Independent garage................... | 26.0 | 26.7 | 27.0 | 16.5 | 13.5 | 14.1 | 13.9 | 12.9 |
| All other and not reported.......... | 8.2 | 8.4 | 8.5 | 4.5 | 4.5 | 4.7 | 1.3 | 6.9 |
| YEAR MODEL ${ }^{1}$ |  |  |  |  |  |  |  |  |
| 1971 and 1972........................ | 17.6 | 17.6 | 17.5 | 21.1 | 18.0 | 7.0 | 13.9 | 25.7 |
| 1969 and 1970......................... | 15.8 | 15.5 | 15.5 | 17.3 | 20.5 | 43.7 | 11.4 | 17.8 |
| 1967 and 1968. | 15.6 | 15.5 | 15.5 | 17.3 | 17.1 | 7.0 | 16.5 | 21.8 |
| 1965 and 1966........................ | 14.0 | 13.9 | 13.8 | 18.0 | 16.2 | 16.4 | 15.2 | 16.8 |
| 1963 and 1964. | 9.9 | 9.7 | 9.7 | 11.3 | 11.7 | 7.0 | 19.0 | 7.9 |
| Pre-1963. | 27.2 | 27.7 | 28.1 | 15.0 | 16.6 | 18.8 | 24.1 | 9.9 |
| CAB TYPE |  |  |  |  |  |  |  |  |
| Tilt cab............................ | 2.8 | 1.3 | 1.1 | 6.0 | 33.2 | 21.1 | 27.8 | 42.6 |
| Not tilt cab......................... | 90.0 | 91.2 | 91.2 | 91.0 | 65.4 | 76.5 | 69.6 | 57.4 |
| Not reported........................... | 7.2 | 7.5 | 7.7 | 3.0 | 1.3 | 2.3 | 2.5 | - |

Note: Data relate to the State of registration which is, in most cases, the base of operations. However, some trucks that are registered in a given State are actually based in another State and/or operate interstate. The absolute number of trucks, truckmiles, and average miles per truck for each characteristic may be found in table 2. A dash ( - ) indicates that there were not a significant number of trucks with this characteristic to display; i.e., less than 100 total observations in sample or less than . 05 percent of the total in any one cell. Data are subject to sampling variability, estimates of which may be found in table 3 . Percents may not add to total due to rounding.
${ }^{1}$ Vehicles for which "year model" was not obtained are not included in the distribution.

## APPENDIX A. Facsimile of Questionnaire

O.M.B. No. 41-S71078; Approval Expires December 31, 1973

| FORM TC-200 U.S. DEPARTMENTOF COMMERCE |
| :---: | :---: |
| BUREAU OF THE CENSUS |
| $(0-29-7 i)$ |
| 1972 CENSUS OF TRANSPORTATION |
| TRUCK INVENTORY AND USE SURVEY |

NOTICE- Response to this inquiry is required by law (Title 13, U.S. Code). By the same law, your report to the Census Bureau is confidential. It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are immune from legal process.
INSTRUCTIONS
In correspondence pertaining to this
report, please include State and
license number.
Return the form in the enclosed pre-
addressed postage-paid envelope not
later than 15 days after receipt to:
Bureau of the Census
ATT: Transportation Division
Washington, D.C. 20233

| 1 (Please correct any error in name and address including Z1P code) | 2 |
| :--- | :--- | :--- |

Item 1 - VEHICLE IDENTIFICATION
Please correct any errors or omissions in the identification of the vehicle.

| Make | $\begin{aligned} & \text { Year } \\ & \text { model } \end{aligned}$ | Registered weight or capacity | State | License No. |
| :---: | :---: | :---: | :---: | :---: |
| 3 | 4 | 5 |  |  |

NOTE: Please complete this form whether or not you are still the owner of the vehicle identified in item 1.

Item 2 - OWNERSHIP OF VEHICLE
Are you still the owner (or license holder) or lessee of this vehicle?Yes
$2 \square$ No LWhen did you sell, trade, or otherwise dispose of it? $\qquad$
$\qquad$
$\square$


Item 3 - ACQUISITION OF VEHICLE7

How did you acquire this vehicle?
1 ■ Purchased newPurchased used - Specify year purchased $\longrightarrow$Leased from someone else

## Item 4 - BASE OF OPERATION

a. What was the principal place from which the vehicle was operated?
City or town

lo. Was this vehicle operated almost entirely in the State named in 4a?Yes 2 No

## Item 5 - VEHICLE MILES

ANNUAL MILES
a. What are the total miles this vehicle was driven during the past 12 months?. . .
If vehicle was idle for the year enter "None." If less than 12 months, estimate probable miles for a yoar.

LIFE TIME MILES
b. What are the total miles this vehicle has been driven since new? . . . . . . . .
Give speedometer (odometer) readink or if not indicated by speedometer, give your best estimate.

Item 6 - LEASED TO OTHERS WITHOUT DRIVER
During the past 12 months, did you use
this vehicle MOSTLY for leasing or renting (without driver) to others?
$1 \square$ No - Go to item 7 on page 2
$2 \square$ Yes - Was this vehicie usuaily leased or rented for:
$\square$ Less than 30 days? - Go to item 9
 30 days or longer? - Go to item 7

How was the vehicle mostly used during the past 12 months? (Mark ( $X$ ) one box)
If the wehiclo was leased to someone else (without driver) for periode of 30 daye or more, mark (X) ONE box that describes the business of the person or company to whom you leased the vehicle the longest time.Own farm or ranch or other agricultural activity
02In forestry or lumbering
03 In mining or quarrying
04
05In construction, buildings or roads 05 $\qquad$ In wholesale and/or retail 07 $\qquad$ For-hire transportation Includes trucking services known as drayage, local cartage, household goods movers, common or contract carriers, leased with driver, "owner-

## $08 \square$ For personal transportation Used in place of an antomobile to go from home to work; for outdoor recreation; camping; fishing; etc. <br> In utilities - telephone, electric, gas, etc. <br> $10 \square$ In services - hotel, automobile repair, laundry, funeral services, advertising, plumbing repair, etc. 

$11 \square$ Other - If none of the above applies to the use you make of the vehicle, describe the main use of the vehicle here. operators" under lease or contract.
Item 8 - PRINCIPAL PRODUCTS CARRIED
Mark (X) ONE box which indicates product usually carried by this vehicle.


Farm products (fruit, grain, livestock, poultry, dairy producte, florist and nursery products, etc.)
02 Mining productsLogs and other forest products Processed foods (dressed meat, beverages, tobacco, etc.)Textile mill products, including apparel and leather goods, etc:Building materials (lumber, millwork, sand, gravel, glass, concrete, etc.)
07 Household goods (moving)Furniture or hardware (not including household goods moving)Paper products, including printing and publishing products
$10 \square$ Chemicals or related products (including drugs, paints, fertilizers, etc.)Petroleum or petroleum productsPrimary metal products (ingot, billets, pipes, sheets, etc.)
$13 \square$ Fabricated metal products except machinery and transportation equipment
$14 \square$ Machinery except electrical


Electrical machinery, equipment, and supplies, including household appliances
$16 \square$ Transportation equipment (motor vehicles, trailers, boats, motorcycles, etc.)
$17 \square$ Scrap, refuse, and garbage
$18 \square$ Mixed cargosUsed mainly for personal transportation or as a service vehicle such as a "traveling workshop" or is equipped with a crane, compressor, etc.)
20Other - Describe $>$

Item 9 - PICKUP, PANEL, MULTI-STOP OR WALK-IN
a. Does this truck have a pickup, panel, multi-stop or walk-in body?No Yes - Mark (X) the box in front of illustration of type and answet " $b$ " and " $c$ "Pickup truck


2
$\square$ Panel truck


3 -
Multi-stop or walk-in

b. Does this pickup, panel, multi-stop or walk-in truck hove 4 -wheel drive?
c. Is this pickup, panel, multi-stop or walk-in truck equipped with a comper body or other special camping equipment?



## APPENDIX B. Expected Sample Size and Distributions

Expected State Sample by Number of Truck Registrations

| Sample <br> size | State truck <br> registrations |
| ---: | :--- |
| 4,000 | $1,000,000$ or more |
| 3,000 | 500,000 to 999,999 |
| 2,000 | Less than 500,000 <br> 800 |
| District of Columbia |  |

Expected Distribution of State Sample by Truck Size

| Sample <br> size | Small <br> trucks | Large <br> trucks |
| ---: | ---: | ---: |
| 4,000 | 800 | 3,200 |
| 3,000 | 600 | 2,400 |
| 2,000 | 400 | 1,600 |
| 800 | 200 | 600 |

Expected Sample by State

| Sample <br> per <br> State | No. of <br> States | Total | States |
| ---: | ---: | ---: | :--- |
| 4,000 | 2 | 8,000 | Calif., Tex. <br> 3,000 |

## APPENDIX C. Size Classification of Vehicles

The standard size classes in gross vehicle weight are as fullows:

| Vehicle size class | Gross vehicle weight |
| :---: | :---: |
| Light | 10,000 or less |
| Medium | 10,001 to 20,000 |
| Light-heavy | 20,001 to 26,000 |
| Heavy-heavy | . 26,001 and over |

Gross vehicle weight is shown on the registration records for all trucks in 31 States and used directly for classifying vehicles into the four vehicle size classes. In the remaining States, ${ }^{1}$ trucks are registered in terms of tons-rated capacity, empty vehicle weight, and other bases. For those States, the method used to classify trucks in terms of the four standard size classes is based upon the characteristics of the trucks as reported by the truck owners in this survey. The following table shows the basis for classifying the major classes of trucks in those States.

## VEHICLE CHARACTERISTICS AND SIZE CLASS

All combinations (i.e., truck-tractor-semitrailer, and all other combinations) . . . . . . . . . . . . . . Heavy-heavy

| Three-axie single-unit trucks |  |
| :---: | :---: |
| Pickup, panel, multistop, walk-in, plattorm, cattle rack, van, beverage, utility |  |
| Under 10 feet of load space | Light |
| 10 to 19 feet of load space | Medium |
| 20 to 27 feet of load space | Light-heavy |
| 28 feet of load space or more | Heavy heavy |


| 1 |  |  |
| :--- | :--- | :--- |
| Non-gross vehicle weight States include- |  |  |
| Alabama | Florida | Ohio |
| Alaska | Hawail | Oklahoma |
| Arizona | Louisiana | Oregon |
| California | Michigan | South Carolina |
| Colorado | Nebraska | South Dakota |
| District of | Nevada | Wyoming |
| Columbia | New Mexico | Washington |

Garbage, wrecker, other . . . . . . . . . . . . . . . . . . Light-heavy
Winch or crane, pole or logging . . . . . . . . . . . . . Heavy-heavy
Dump truck
a. Capacity 6.9 cubic yards or less . . . . . . . Light-heavy
b. Capacity 7.0 cubic yards or more . . . . . . Heavy heavy

Tank truck (for liquids)
a. Liquid capacity less than 1,000 gallons . . Light-heavy
b. Liquid capacity 1,000 gallons or more . . Heavy-heavy

Tank truck (for dry bulk)
a. Capacity less than 300 cubic feet . . . . . . Light-heavy
b. Capacity 300 cubic feet or more . . . . . . Heavy-heavy

## Two-axle single-unit trucks

Pickup, panel, multi-stop, walk-in, platform, cattle rack, van, beverage, utility

Under 10 feet of load space . ......... . . . . . Light
10 to 19 feet of load space . . . . . . . . . . . . . Medium
20 to 40 feet of load space . . . . . . . . . . . . . . Light-heavy
41 feet of load space or more . . . . . . . . . . . Heavy heavy
Garbage, wrecker, other ...................... . Medium
Winch or crane, pole or logging . . . . . . . . . . . . . Light-heavy
Dump truck
Capacity 6.9 cubic yards or less . . . . . . . . . Light-heavy
Capacity 7.0 cubic yards or more . . . . . . . . . Heavy-heavy
Tank truck for liquids
Liquid capacity less than 1,000 gallons .... Medium
Liquid capacity 1,000 to 1,999 gallons .... Light-heavy
Liquid capacity 2,000 galions or more . . . . . Heavy heavy
Tank truck for dry bulk
Capacity less than 300 cubic feet . . . . . . . . Medium
Capacity 300 to 599 cubic feet . . . . . . . . . . Light-heavy
Capacity 600 cubic feet or more . . . . . . . . . Heavy-heavy

## APPENDIX D. Revised Federal Highway Administration (FHWA) Total Truck Inventory by State

| State | FHWA total truck inventory of private and commercial trucks |  | State | FHWA total truck inventory of private and commercial trucks |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Estimated 1972 (Table V. Oct. 1972) ${ }^{1}$ <br> (thousands) | Revised 1972 (Table MV-1, June 1973) ${ }^{2}$ <br> (thousands) |  | Estimated 1972 <br> (Table V, <br> Oct. 1972) ${ }^{1}$ <br> (thousands) | Revised 1972 (Tabla MV-1, June 1973) ${ }^{2}$ <br> (thousands) |
| UNITED STATES | 19,745 | 20,250 | Missouri . . . . . . . . . . . . . | 560 | 568 |
|  |  |  | Montana | 183 | 200 |
| Alabama | 441 | 455 | Nebraska | 285 | 290 |
| Alaska | 48 | 43 | Nevada | 89 | 93 |
| Arizona . . | 297 | 314 |  |  |  |
| Arkansas | 320 | 326 | New Hampshire . . . . . . | 57 | 62 |
| California | 2,065 | 2,158 | New Jersey . . . . . . . . . . . | 335 | 339 |
|  |  |  | New Mexico . . . . . . . . . . | 196 | 198 |
| Colorano . . . . . | 374 | 387 | New York ${ }^{4}$ | 659 | 672 |
| Connecticut . . . | 146 | 143 |  |  |  |
| Delaware. | 51 | 49 | North Carolina . . . . . . . . | 600 | 618 |
| Dist. of Columbia . | 15 | 14 | North Dakota | 165 | 166 |
| Florida | 622 | 653 | Ohio | 668 | 687 |
|  |  |  | Oklahoma . . . . . . . | 527 | 536 |
| Georgia | 560 | 554 |  |  |  |
| Hawaii | 48 | 50 | Oregon . . . . . . . . . . . . . | 253 | 247 |
| Idaho | 151 | 155 | Pennsylvania . . . . . . . . . . | 765 | 804 |
| Illinois | 695 | 688 | Rhode Island . . . . . . . . . | 56 | 57 |
| Indiana ${ }^{3}$. . . . . . . . . | 553 | 577 | South Carolina . . . . . . . . | 257 | 273 |
| Inwa | 405 | 438 | South Dakota | 139 | 141 |
| Kansas | 442 | 450 | Tennessee . . . . . . . . . . . . | 424 | 446 |
| Kentucky . . . . . . . . | 422 | 430 | Texas .................. | 1,644 | 1,660 |
| Louisiana | 390 | 401 | Utah . . . . . . . . . . . . . . . | 203 | 192 |
| Maine . . . . . . . | 104 | 108 | Vermont . . . . . . . . . . . . . | 43 | 43 |
| Maryland | 269 | 276 | Virginia . . . . . . . . . . . . . . | 395 | 406 |
| Massachusetts ${ }^{4}$ | 249 | 248 | Washington . . . . . . . . . . . | 508 | 504 |
| Michigan . . | 677 | 693 | West Virginia . . . . . . . . . | 201 | 194 |
| Minnesota | 466 | 467 | Wisconsin . . . . . . . . . . . . | 335 | 375 |
| Mississippi . . . . . . . . . | 300 | 309 | Wyoming . ${ }^{\text {a }}$. ........ | 92 | 94 |

${ }^{1}$ Department of Transportation news (FHWA) release dated October 28, 1972. Estimated trucks and buses 1972 less public trucks and all buses reported in 1971. These totals were used to ratio adjust the sample data from the 1972 Truck Inventory and Use Survey published in this report. Since the revised total truck inventory for most States is higher than orlginally estimated, the reader may wish to further adjust total truck data in this report upward proportionally to reflect the revised totals glven in column 2 .
${ }^{2}$ Department of Transportation news (FHWA) release dated July 6, 1973. The following farm trucks, registered at a nominal fee and
restricted to use in the vicinity of the owner's farm are not included in this table but in some cases were in the Truck Inventory and Use Survey universe prior to sampling: Connecticut, 4,557; New Hampshire, 3,504; New Jersey. 4, 088; New York, 16,000; and Rhode Island, 1,473.
${ }^{3}$ Final motor-vehicle registration data for 1972 ware unavailable at the ${ }_{4}$ time of publication. The figures shown are estimates by the State, 4 The State was unable to provide motor-vehicle registration data for 1972. The figures shown are estimates by the Federal Highway Administration.


[^0]:    ${ }^{1}$ The 1972 Census of Transportation consists of 3 major phases: (1) Truck Inventory and Use Survey, (2) National Travel Survey, and (3) Commodity Transportation Survey. In a broader context, the Census of Transportation is a part of the 1972 Economic Censuses, which also includes the censuses of manufactures, mineral industries, wholesale and retail trade, service industries, and construction.
    ${ }^{2}$ Some privately or commercially owned vehicles are not required to be licensed, such as "off-highway" vehicles and trucks used exclusively on private property. Since they had no chance of being drawn in the sample, they are not represented.

[^1]:    ${ }^{3}$ Estimated number used to produce more timely reports. See appendix $D$ for revised FHWA total truck inventory data.
    ${ }^{4}$ See copy of Census Form TC-200, "Truck Inventory and Use Survey," in appendix A for specific information requested for each truck in the sample.

[^2]:    NOTE: Detail may not add to totais due to rounding.

[^3]:    ${ }^{4}$ See footnote on page VII.
    ${ }^{5}$ See appendix C.

[^4]:    ${ }^{6}$ Technically, the licenses or registrations sampled were those for single-unit trucks and for truck-tractors. Registrations for trailers or other nonpowered property-carrying highway vehicles were either not sampled, or (if not recognized in advance) were treated as "out of scope" in the subsequent processing.

[^5]:    7 The terms "small" and "large" were used only in connection with stratification, and should not be confused with the vehicle size classes shown in the tabulations. See appendix B.

[^6]:    ${ }^{8}$ See copy of Census Form TC-200, "Truck Inventory and Use Survey," in appendix A for specific information requested for each truck in the sample.

[^7]:    Source: Table 8. ("All other" major use category not displayed)

