# LARGE-TRUCK POPULATION ESTIMATES BASED ON THE 1987 TRUCK INVENTORY AND USE SURVEY 

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## 1 Introduction

The Truck Inventory and Use Survey (TIUS) is conducted every five years by the Bureau of the Census as part of the Census of Transportation. Trucks are randomly selected from each state's motor vehicle registration files as maintained by R.L. Polk. Unlicensed and government-owned vehicles, as well as ambulances, motor homes, buses, farm tractors, and open utility vehicles are excluded from TIUS samples. The most recent TIUS survey was drawn from the July 1, 1987 version of the Polk files. Owners of 104,606 selected trucks responded to mailed survey forms asking them to characterize the typical physical configuration and use of their trucks over the previous year. Except for some data included with the Polk vehicle registration lists on which the sample was based, all of the TIUS information is selfreported.

This report concerns the TIUS data relating to medium- and heavy-duty trucks, those where the power unit has a gross vehicle weight rating (GVWR) over 10,000 pounds. The GVWR indicates what a truck would weigh if loaded to the rated capacity of its axles. Since TIUS collects data on trucks of all GVWR classes, the first task was to exclude light trucks from the analysis file. Unlike previous releases of TIUS, the 1987 version does not include a GVWR variable. The file does contain an "average" gross vehicle weight variable, which refers to the combined weight of the vehicle combination and the cargo when carrying a typical payload. The average GVW variable cannot reliably be used as a surrogate for GVWR, however. For example, many class 3 (GVWR of 10,001 to 14,000 pounds) straight trucks typically operate with a GVW under 10,000 pounds. Cross-tabulations of average GVW against other variables in the TIUS file suggested that if light trucks were defined as having an average GVW of 10,000 pounds or less, then many large trucks would be misclassified as light trucks.

Several substitute-GVWR classifications were tested on the data, but none was found that would confidently distinguish between light trucks and medium/heavy trucks for all cases in the file. The best choice seemed to be a conservative scheme for excluding vehicles thought to be light trucks. All cases identified as a pickup or van on the sample strata variable or as a pickup, van, minivan, station wagon on truck chassis, or utility vehicle on the body type variable were excluded. In addition, a vehicle was excluded if its empty combination weight was 6,000 pounds or less and if the power unit was coded as having only four tires. This classification should ensure that virtually all of the exclusions are class 1 and 2 vehicles. However, it is likely that not all of the light trucks in the file were excluded, which would inflate the population estimates for medium and heavy trucks. This is expected to affect the straight truck estimates much more than the tractor-trailer estimates.

TIUS travel data include off-road mileage, so a set of adjustments was made to restrict the analysis to travel on public roads. First, all vehicles coded as accumulating $100 \%$ of their mileage off-road were excluded from the analysis. Second, the number of off-road miles logged by each vehicle was subtracted from that vehicle's total annual mileage.

The objective of this report is to present a statistical profile of the truck population in Federal Highway Administration (FHWA) field region 5 and compare it with a similar profile of the national truck population. Region 5 comprises the six midwestern states shown in Figure 1.1. In the next section of this report, population estimates of large trucks are presented for all of the FHWA field regions. Figure 1.2 indicates which states are included in each region. The remainder of the report compares trucks registered in the Region 5 states with the national large truck population in terms of power unit type, cargo body style, average and maximum gross combination weight, carrier type, area of operation, out-of-state mileage, major use, and principal cargo.


Fig. 1.2 - Field Regions of the FHWA

## 2 Population Estimates

The first series of comparisons concerns population estimates of the total number of registered large trucks, their total annual mileage, and the average annual mileage per vehicle. Table 2.1 shows the total number of large trucks according to power unit type for each of the FHWA field regions. Region 5 contains more straight trucks and tractors than any other region. Overall, $21.4 \%$ of the nation's large trucks are registered in Region 5.

Table 2.1 - Number of Registered Large Trucks by
Power Unit Type and Region

|  | Straight |  | Tractor |  | TOTAL |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Number | Percent | Number | Percent | Number |  |
| Percent |  |  |  |  |  |  |
| Region 1 | 419,726 | 12.92 | 89,603 | 8.60 | 509,329 | 11.87 |
| Region 3 | 349,110 | 10.74 | 87,928 | 8.44 | 437,038 | 10.18 |
| Region 4 | 548,958 | 16.89 | 197,243 | 18.93 | 746,202 | 17.39 |
| Region 5 | $\mathbf{6 3 5 , 6 6 1}$ | $\mathbf{1 9 . 5 6}$ | $\mathbf{2 8 2 , 3 1 8}$ | $\mathbf{2 7 . 1 0}$ | $\mathbf{9 1 7 , 9 7 9}$ | $\mathbf{2 1 . 3 9}$ |
| Region 6 | 351,734 | 10.82 | 124,989 | 12.00 | 476,722 | 11.11 |
| Region 7 | 294,808 | 9.07 | 90,124 | 8.65 | 384,932 | 8.97 |
| Region 8 | 208,542 | 6.42 | 29,535 | 2.83 | 238,078 | 5.55 |
| Region 9 | 314,791 | 9.69 | 105,096 | 10.09 | 419,887 | 9.78 |
| Region 10 | 125,943 | 3.88 | 35,024 | 3.36 | 160,967 | 3.75 |
| NATION | $\mathbf{3 , 2 4 9 , 2 7 4}$ | $\mathbf{1 0 0 . 0 0}$ | $\mathbf{1 , 0 4 1 , 8 6 0}$ | $\mathbf{1 0 0 . 0 0}$ | $\mathbf{4 , 2 9 1 , 1 3 3}$ | $\mathbf{1 0 0 . 0 0}$ |

Table 2.2 indicates the annual mileage accumulated by all straight trucks and tractor combinations registered in each region. All of the mileage estimates describe overall travel, not travel within a particular region, since it is not possible to isolate regional travel in the TIUS data. Region 5 straight trucks account for $18 \%$ of the national straight truck mileage, second only to Region 4. Region 5 tractors account for more tractor mileage than any other region, with over $28 \%$ of the total. Nearly one-quarter of all large truck travel is logged by trucks registered in Region 5.

Table 2.2 - Total Annual Mileage (Millions) by
Power Unit Type and Region

|  | Straight |  | Tractor |  | TOTAL |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Number | Percent | Number | Percent | Number | Percent |
| Region 1 | 4,996 | 13.92 | 4,286 | 7.31 | 9,282 | 9.82 |
| Region 3 | 4,394 | 12.24 | 4,535 | 7.73 | 8,929 | 9.44 |
| Region 4 | 6,728 | 18.75 | 12,078 | 20.59 | 18,806 | 19.89 |
| Region 5 | $\mathbf{6 , 5 0 9}$ | $\mathbf{1 8 . 1 4}$ | $\mathbf{1 6 , 6 4 2}$ | $\mathbf{2 8 . 3 8}$ | $\mathbf{2 3 , 1 5 1}$ | $\mathbf{2 4 . 4 9}$ |
| Region 6 | 4,147 | 11.55 | 6,549 | 11.17 | 10,696 | 11.31 |
| Region 7 | 2,247 | 6.26 | 5,596 | 9.54 | 7,843 | 8.30 |
| Region 8 | 1,246 | 3.47 | 1,587 | 2.71 | 2,833 | 3.00 |
| Region 9 | 4,574 | 12.74 | 5,748 | 9.80 | 10,321 | 10.92 |
| Region 10 | 1,047 | 2.92 | 1,630 | 2.78 | 2,676 | 2.83 |
| NATION | $\mathbf{3 5 , 8 8 7}$ | $\mathbf{1 0 0 . 0 0}$ | $\mathbf{5 8 , 6 5 0}$ | $\mathbf{1 0 0 . 0 0}$ | $\mathbf{9 4 , 5 3 6}$ | $\mathbf{1 0 0 . 0 0}$ |

Region 5 vehicle counts and mileage estimates as a percentage of the national totals are summarized graphically in Figure 2.1. In terms of both the number of registered vehicles and annual travel, Region 5 tractors account for a higher percentage of the national total than do Region 5 straight trucks.


Fig. 2.1-TIUS Population Estimates: Region 5 vs. Rest of Nation

Figure 2.2 compares the breakdown of registered large trucks by power unit type between Region 5 and the nation as a whole. Region 5 has relatively more tractors and fewer straight trucks. About 31\% of the Region 5 large trucks are tractors compared to about $24 \%$ for the nation. Only $69 \%$ of Region 5's large trucks are straight trucks compared to $76 \%$ for the entire country.


Fig. 2.2 - Registered Trucks by Power Unit Type


The same pattern holds for total annual mileage. About $72 \%$ of Region 5's large truck travel is logged by tractors compared to just $62 \%$ of the national large truck travel. Straight trucks account for only $28 \%$ of the travel in Region 5 compared to $38 \%$ of the national travel.

Fig. 2.3-Total Annual Mileage by Power Unit Type

TABLE 2.3 - Average Annual Mileage by Power Unit Type and Region

|  | Straight | Tractor | TOTAL |
| :--- | ---: | ---: | ---: |
| Region 1 | 11,902 | 47,833 | 18,223 |
| Region 3 | 12,586 | 51,572 | 20,430 |
| Region 4 | 12,256 | 61,233 | 25,202 |
| Region 5 | $\mathbf{1 0 , 2 4 0}$ | $\mathbf{5 8 , 9 4 8}$ | $\mathbf{2 5 , 2 2 0}$ |
| Region 6 | 11,789 | 52,397 | 22,436 |
| Region 7 | 7,622 | 62,091 | 20,375 |
| Region 8 | 5,976 | 53,729 | 11,900 |
| Region 9 | 14,529 | 54,690 | 24,581 |
| Region 10 | 8,310 | 46,529 | 16,626 |
| NATION | $\mathbf{1 1 , 0 4 5}$ | $\mathbf{5 6 , 2 9 3}$ | $\mathbf{2 2 , 0 3 1}$ |



Fig. 2.4-Avg. Annual Mileage by Power Unit Type average annual mileage of 10,240 , which is about $7 \%$ below the national average of 11,045 . Region 5 tractors average 58,948 miles per year, which is almost $5 \%$ higher than the national average of 56,293 . All large trucks combined average 25,220 miles per year in Region 5, which is $14.5 \%$ higher than the national average of 22,031 .

To summarize the basic profile of large trucks in Region 5 compared to the national population profile, TIUS estimates indicate that more straight trucks and more tractors are registered in Region 5 than any other FHWA field region. The total annual mileage accumulated by Region 5 tractors is the highest of any region, and the Region 5 straight truck mileage is the second highest among the regions. Large trucks registered in Region 5 include relatively more tractors than for the nation as a whole, although straight trucks greatly outnumber tractors in both Region 5 and the rest of the country. Many more miles are logged each year by tractors than straight trucks, however, and tractors account for an even greater share of the large truck travel in Region 5 than they do in the nation overall. Finally, the Region 5 tractors average more miles per vehicle each year than do tractors nationally, while the Region 5 straight trucks have a slightly lower average annual mileage than the national figure. Because the large truck population in Region 5 is so strongly dominated by tractors, Region 5 average annual mileage for straight trucks and tractors combined exceeds the corresponding national figure by a larger margin than does average annual mileage for tractors alone.

All of the comparisons in this section have been presented according to power unit type. Tables A. 1 - A. 3 in the appendix to this report indicate the number of registered large trucks, their total annual mileage, and their average annual mileage, all according to typical configuration. The typical configuration is how the truck was most often operated in 1987, according to the owner. Straight truck power units are split into single-unit straight trucks and straight trucks pulling one or more trailers. Truck-tractor power units are divided into tractors hauling a semitrailer (singles); tractors hauling a semi- and a full trailer (doubles); and tractors hauling a semi- and two full trailers (triples). An additional category records tractors hauling an unknown number of trailers. No estimates are available for bobtails (tractors operating without a trailer) because bobtails are not a "typical" configuration.

Table A. 1 indicates that about one-third of the tractors in the country typically operated as doubles are registered in Region 5. However, only $25.5 \%$ of the total annual mileage accumulated by doubles overall is produced by Region 5 doubles (Table A.2). This is because the average annual mileage of Region 5 doubles is only about 60,000 miles, while the national average exceeds 77,000 miles (Table A.3).

## 3 Physical Characteristics of Large Trucks

This section considers three variables related to the configuration of large trucks: cargo body style, average gross combination weight, and maximum gross combination weight. All three variables were coded based on the owner's characterization of how the truck was operated during the survey year. Distributions for trucks registered in Region 5 versus the national truck population were prepared for each of the variables according to power unit type.

Respondents to TIUS could choose from a long list the cargo body style most closely resembling their vehicle, or the trailer most often attached to it, if the power unit was a truck-tractor. To facilitate comparisons here between Region 5 and the national truck population, the various TIUS cargo body styles were combined into six groups for straight trucks: van, flatbed, tank, dump, refuse, and other. The same six groups were used for semitrailers hauled by tractors, except auto carrier was used in place of refuse truck.

## Distributions for

 Region 5 and the nation of the estimated number of straight trucks according to cargo body style are shown in Figure 3.1. The two distributions are strikingly similar. Tanks, dumps, and refuse trucks represent virtually identical proportions of the two populations. The national truck population is characterized by slightly higher percentages of vans and flatbeds, while Region 5 has relatively more "other" cargo body styles.


Fig. 3.2 - Cargo Body Style of Tractor
Combinations, Vehicle Counts

As shown in Figure 3.2, the situation is similar for tractor-trailer combinations. The Region 5 cargo body style distribution differs little from the national distribution. Region 5 is characterized by a slightly higher percentage of tractors hauling vans, and the nation has proportionately more tractors hauling "other" trailers.

The more interesting comparison is between the two power unit types. For both Region 5 and the nation, about half of all tractors haul van trailers, while just over $20 \%$ of straight trucks have van cargo bodies. There are proportionately about twice as many dump cargo bodies among straight trucks as among tractor combinations, $14 \%$ to $7 \%$. Straight trucks and tractor combinations are similar in their percentages of flatbed cargo bodies (26-29\%) and tank cargo bodies (4-6\%).

Cargo body style distributions were also prepared on the basis of total annual mileage and average annual mileage. In both instances the Region 5 profile was very similar to that of the nation. Strong differences in average annual mileage per vehicle were noted among the different cargo body styles. Among straight trucks, in both Region 5 and nationally, refuse and van cargo bodies had the highest average annual travel, in the range of $17,000-19,000$ miles. Flatbed and "other" cargo bodies averaged the lowest, with about 8,000 miles per year. Among tractor combinations, van trailers were associated with the highest average annual mileage, about $67,000-68,000$. Tanks were next with 60,000-65,000. Dumps, flatbeds, and "others" all had much lower average annual mileages, in the range of $43,000-47,000$ miles.

Tables A. 4 and A. 5 in the appendix contain vehicle counts, total miles, and average miles by power unit type for the nation and Region 5 according to the full list of cargo body styles used by TIUS. As those tables indicate, the main difference between the national and Region 5 straight truck populations is in the percentage of grain body trucks. These comprise $10.3 \%$ of Region 5 straight trucks compared to just $6.8 \%$ nationally. Among tractor combinations, enclosed vans are overrepresented in Region 5 compared to the nation, $38 \%$ to $33 \%$, while logging trucks are under-represented in Region 5, $0.3 \%$ to $2.3 \%$.

The next set of distributions concerns average gross combination weight. Average GCW refers to the combined weight of the power unit, any trailers typically hauled by that power unit, and the cargo when carrying a typical payload. The average GCW distributions shown here are based on total annual mileage. Figure 3.3 shows the average GCW distributions for straight trucks


Fig. 3.3 - Average GCW of Straight Trucks, Total Annual Mileage registered in Region 5 and those nationwide. The labels on the $x$-axis indicate the top weight for each GCW range, in thousands of pounds. Starting from the left, the categories are less than $6,001 \mathrm{lbs} ., 6,001-10,000 \mathrm{lbs} ., 10,001-14,000 \mathrm{lbs}$. , etc. The Region 5 and national distributions for straight trucks are similar. For both Region 5 and the nation, about $20-22 \%$ of straight truck mileage is conducted by trucks with an average GCW of $6,001-10,000$ lbs., and about $18-20 \%$ of the mileage is logged by trucks with an average GCW of $19,501-26,000$ pounds. Nearly $79 \%$ of the straight truck travel by Region 5 trucks is by trucks with an average GCW of 33,000 pounds or less and the same is true for $77 \%$ of the travel by straight trucks nationwide. The
main difference between the Region 5 and national travel distributions is in the $60,001-80,000$ pounds average GCW category. Only $3.6 \%$ of Region 5 straight truck travel is produced by trucks in this range, compared to $7.2 \%$ of national straight truck travel.


Fig. 3.4 - Average GCW of Tractor Combinations, Total Annual Mileage

Figure 3.4 presents average GCW mileage distributions for tractor combinations. The Region 5 and national distributions are virtually indistinguishable. Whereas the straight truck distributions had several peaks, the tractor distributions have only one peak, at the 60,001 - 80,000 pound average GCW range. Region 5 tractors with this average GCW account for $72.0 \%$ of the total mileage, as do $71.5 \%$ of tractors nationwide. Tables A. 6 and A. 7 in the appendix include more detailed data concerning average GCW distributions. One item of note is that Region 5 has $84 \%$ of all tractor combinations in the country with average GCW greater than 130,000 pounds and $85 \%$ of the mileage accumulated by such tractors. This is no doubt due to the higher allowable weight laws in Michigan.

Information on maximum GCW was also collected by the TIUS survey. Maximum GCW refers to the maximum gross operating weight reached by the vehicle combination and its cargo during the survey year. Figure 3.5 shows the maximum GCW total annual mileage distributions for straight trucks, excluding cases with unknown maximum GCW. The peak at the 6,001 -


Fig. 3.5 - Maximum GCW of Straight Trucks, Total Annual Mileage 10,000 pound range observed for average GCW has declined somewhat to about $15 \%$ for both the Region 5 and national distributions. Some of the heavier GCW ranges account for a higher share of travel according to maximum GCW than they did for average GCW. For example, $5.6 \%$ of Region 5 straight truck travel was produced by trucks with a maximum GCW in the $60,001 \cdot 80,000$ pound range, as was $9.7 \%$ of national straight truck travel.


Fig. 3.6-Maximum GCW of Tractor Combinations, Total Annual Mileage

As was the case for the average GCW distributions, the maximum GCW distributions for tractors in Region 5 and the nation are essentially the same (Figure 3.6). The main differences in these curves compared to the average GCW curves are a flattening in the portion from 19,500. 60,000 pounds and an increase at the peak from 60,001 - 80,000 pounds. About $87 \%$ of travel by Region 5 tractors was logged by tractors with a maximum GCW of $60,001-80,000$ lbs. as was $83 \%$ of the national tractor travel. Additional information on maximum GCW distributions is presented in Tables A. 8 and A. 9 in the appendix.

## 4 Use of Large Trucks

This section considers several variables relating to trucking operations. Again the information comes from the truck owner's characterization of the typical use of the truck. As in the last section, large trucks registered in Region 5 will be compared with the national large truck population according to power unit type. For the variables considered, Region 5 straight trucks are more similar to the national population than are Region 5 tractors.

The first comparison concerns carrier type. Carriers can be split into private and for-hire companies. In the TIUS data, for-hire carriers can be further divided into interstate and intrastate carriers. Interstate for-hire carriers are subject to the Interstate Commerce Commission (ICC), and intrastate for-hire carriers are governed by state public service commission regulations. Interstate for-hire are also separated into authorized carriers-the common and contract carriers-and those hauling exempt commodities. TIUS cases of for-hire carriers that did not indicate whether they were interstate or intrastate are simply labeled "for-hire" in the graphs. An additional category is used by TIUS for daily rental vehicles because they are extremely difficult to classify since the carrier type may change with every new rental.

Figure 4.1 shows the carrier type distributions for straight trucks in Region 5 and the nation, based on vehicle counts. The two distributions are virtually indistinguishable. Close to $90 \%$ of straight trucks in both Region 5 and the nation are operated by private carriers.


Fig. 4.1-Straight Truck Carrier Type


Fig. 4.2 - Tractor Carrier Type

There are several differences in the tractor carrier type distributions between Region 5 and the nation (Figure 4.2). Nationally, $48 \%$ of tractors are operated by private carriers, compared to just $38 \%$ of Region 5 tractors. Conversely, $43 \%$ of Region 5 tractors are ICC-authorized carriers, compared to just $32 \%$ of tractors in the entire country. Proportionately, close to twice as many tractors in the nation are
intrastate for-hire as in Region 5, although this is a minor category of carrier type in both populations. Carrier type distributions are presented in tabular form in the Appendix (Tables A. 10 and A.11).

The next distributions characterize area of operation. TIUS respondents break down their mileage into the percent traveled off-road, within a 50 -mile radius of home base, within a $50-200$ mile radius, and beyond a 200 -mile radius. The sum of these four percentages totals $100 \%$ in each case. Figures 4.3 and 4.4 split the cases according to the category representing the greatest percentage of annual mileage. For example, if a truck accumulates $50 \%$ of its mileage on trips within a $50-200$ mile radius of home base, $25 \%$ of its mileage on trips within 50 miles of home base, and $25 \%$ on trips over 200 miles from home base, it would fall in the 50-200 mile category. As noted earlier, vehicles with all of their miles off-road were excluded from the analysis.

The area of operation distributions for straight trucks, based on vehicle counts, are shown in Figure 4.3. The Region 5 and national distributions are quite similar, although there is a slightly greater tendency for Region 5 straight trucks to be involved in short-haul operations. About $79 \%$ of Region 5 straight trucks travel mostly within a $50-$


Fig. 4.3 - Straight Truck Area of Operation mile radius of home base, compared to $74 \%$ of the national population. Conversely, $18 \%$ of straight trucks nationwide conduct most of their travel at a radius of at least 50 miles from home base, compared to $16 \%$ of the Region 5 straight trucks.


Fig. 4.4-Tractor Area of Operation

In contrast to straight trucks, Region 5 tractors show a greater tendency for long-haul operations than do tractors nationwide (Figure 4.4). $44.6 \%$ of Region 5 tractors conduct most of their travel beyond a 200 -mile radius of home base, compared to just $36.5 \%$ of tractors in the nation. Higher shares of tractors nationwide travel mostly within a 50 -mile radius or a 50-200 mile radius compared to Region 5 tractors.

Tables A. 12 and A. 13 in the appendix show area of operation distributions according to vehicle counts and mileage. All mileage estimates include only travel
on public roads, even for trucks that conducted most of their travel off-road. All the mileage estimates in the tables pertain to overall mileage, not just mileage appropriate to the particular area of operation category.

For the next comparison, trucks were classified according to the percentage of annual mileage outside their base state. The categories used were $0 \%$ (all travel in-state), 1 $20 \%, 21-50 \%, 51-80 \%$, and 81-100\%. Missing data were excluded. The straight truck distributions, based on vehicle counts, are shown in Figure 4.5. Region 5 straight trucks are


Fig. 4.5 - Percent Out-of-State
Mileage, Straight Trucks very similar to those in the nation overall in terms of out-of-state mileage. About $82 \%$ of straight trucks in Region 5 and in the whole country conducted all of their travel within their base state.


Fig. 4.6 - Percent Out-of-State Mileage, Tractors

The out-of-state mileage distributions for tractors are quite different from the straight truck distributions, and there is some variation between the Region 5 and national tractor distributions. A higher proportion of Region 5 tractors conducted more of their travel outside their base state compared to tractors nationwide. For example, $22.4 \%$ of Region 5 tractors put on $81-100 \%$ of their mileage outside their base state, compared to just $15.3 \%$ of tractors in the whole country. On the other hand, $39 \%$ of tractors nationwide conducted all of their travel in-state, compared to just $30 \%$ of Region 5 tractors. Table A. 14 in the appendix lists the out-of-state distributions, including unknown cases.

As mentioned before, TIUS does not include information on travel within particular states. However, since straight trucks accumulate most of their mileage instate, the total annual travel figure for straight trucks registered in Region 5 (discussed in Section 2) probably approximates the actual straight truck travel that occurs in Region 5. Because tractor combinations log much of their mileage out-ofstate, it is impossible to estimate the actual tractor travel that occurs within Region 5.

One question included in the TIUS survey concerns the major use of the vehicle, or the type of business in which the truck was used. The major use of Region 5 and national straight trucks is depicted in Figures 4.7 and 4.8. There are
only minor differences between the two distributions, and these are largely expected. For example, more Region 5 straight trucks ( $28 \%$ ) are involved in agricultural businesses compared to straight trucks nationwide ( $24 \%$ ). A smaller proportion of Region 5 straight trucks ( $2.9 \%$ ) are used in the forestry and mining industries compared to straight trucks in the whole country (3.9\%).


Fig. 4.7-Major Use of Vehicle Region 5 Straight Trucks


Fig. 4.8 - Major Use of Vehicle
National Straight Trucks

In sharp contrast to straight trucks, the bulk of tractors are used as for-hire transportation (Figures 4.9 and 4.10). Only $5 \%$ of straight trucks nationally and in Region 5 were coded for-hire under major use. This compares to $49 \%$ of tractors nationally and $58 \%$ of tractors in Region 5. Somewhat surprisingly, only $6.9 \%$ of Region 5 tractors are used in the agricultural industry compared to $8.5 \%$ of tractors nationwide. The pie graphs here have condensed some of the major use categories coded by TIUS. Full tables with all the code levels are included in the Appendix (Tables A. 15 and A.16).


Fig. 4.9-Major Use of Vehicle Region 5 Tractors


Fig. 4.10-Major Use of Vehicle
National Tractors

The final set of comparisons concerns the principal product carried by the vehicle. The straight truck distributions are shown in Figures 4.11 and 4.12. As was the case with the major use distributions, the principal product distributions are quite similar for Region 5 and national straight trucks. Farm products and live animals are carried by a higher proportion of Region 5 straight trucks ( $24.6 \%$ ) than straight trucks in the whole country ( $21.4 \%$ ). Processed food ( $7.1 \%$ ) and tools and parts ( $7.3 \%$ ) are the principal products for a higher percentage of national straight trucks than straight trucks in Region 5 (6.0\% for processed food and $6.5 \%$ for tools and parts).


Fig. 4.11 - Principal Product Carried Region 5 Straight Trucks


Fig. 4.12 - Principal Product Carried National Straight Trucks

Finally, the principal product distributions for tractors are shown in Figures 4.13 and 4.14. Some minor differences between Region 5 and the nation are apparent. More tractors in Region 5 haul machinery and transportation equipment ( $11.5 \%$ to $9.9 \%$ ) and metal ( $10.9 \%$ to $6.7 \%$ ) than tractors nationwide. Tractors in the country as a whole haul more logs and lumber ( $7.0 \%$ to $3.3 \%$ ) and farm products and live animals ( $11.6 \%$ to $9.2 \%$ ) than Region 5 tractors. Complete listings of principal product are included in the Appendix (Tables A. 17 and A.18).


Fig. 4.13 - Principal Product Carried Region 5 Tractors


Fig. 4.14 - Principal Product Carried National Tractors

The comparisons in this section on the use of large trucks have highlighted some differences in the operation of straight trucks compared to tractor combinations. Most straight trucks are run by private carriers and they travel primarily in-state, in short-haul operations. Region 5 and national straight trucks are quite similar in terms of these parameters. In contrast to straight trucks, many more tractor combinations are run by for-hire companies. Tractors conduct a great deal of their travel interstate, on long-haul operations. All three of these characteristics are more pronounced for Region 5 tractors than for tractors in the country as a whole. In terms of major use of vehicles and principal product carried, Region 5 again is more similar to the national profile for straight trucks than for tractors.

## APPENDIX



Table A. 1
Number of Registered Large Trucks by Typical Configuration and Region

| Region | Straight |  | Straight + Trailer |  | Single |  | Double |  | Triple |  | Unknown Tractor |  | TOTAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Region 1 | 397,664 | 13.13\% | 22,062 | 9.96\% | 89,008 | 8.84\% | 497 | 1.46\% | 57 | 11.95\% | 41 | 3.98\% | 509,329 | 11.87\% |
| Region 3 | 333,006 | 11.00 | 16,104 | 7.27 | 87,333 | 8.68 | 595 | 1.75 | 0 | 0.00 | 0 | 0.00 | 437,038 | 10.18 |
| Region 4 | 511,875 | 16.91 | 37,083 | 16.74 | 194,649 | 19.34 | 2,317 | 6.81 | 0 | 0.00 | 278 | 27.00 | 746,202 | 17.39 |
| Region 5 | 598,008 | 19.75 | 37,653 | 17.00 | 270,834 | 26.91 | 11,201 | 32.90 | 0 | 0.00 | 283 | 27.48 | 917,979 | 21.39 |
| Region 6 | 307,999 | 10.17 | 43,735 | 19.74 | 124,006 | 12.32 | 973 | 2.86 | 5 | 1.05 | 5 | 0.49 | 476,722 | 11.11 |
| Region 7 | 283,417 | 9.36 | 11,391 | 5.14 | 88,751 | 8.82 | 1,343 | 3.94 | 0 | 0.00 | 30 | 2.90 | 384,932 | 8.97 |
| Region 8 | 197,065 | 6.51 | 11,477 | 5.18 | 28,856 | 2.87 | 644 | 1.89 | 35 | 7.32 | 0 | 0.00 | 238,078 | 5.55 |
| Region 9 | 286,404 | 9.46 | 28,387 | 12.82 | 90,278 | 8.97 | 14,747 | 43.32 | 21 | 4.42 | 50 | 4.89 | 419,887 | 9.78 |
| Region 10 | 112,328 | 3.71 | 13,615 | 6.15 | 32,597 | 3.24 | 1,724 | 5.07 | 360 | 75.26 | 342 | 33.25 | 160,967 | 3.75 |
| NATION | 3,027,766 | 100.00\% | 221,507 | 100.00\% | 1,006,312 | 100.00\% | 34,040 | 100.00\% | 479 | 100.00\% | 1,030 | 100.00\% | 4,291,133 | 100.00\% |

Table A. 2
Total Annual Mileage (Millions) by Typical Configuration and Region

| Region | Straight |  | Straight + Trailer |  | Single |  | Double |  | Triple |  | Unknown Tractor |  | TOTAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Region 1 | 4,770 | 14.66\% | 226 | $6.73 \%$ | 4,256 | 7.61\% | 25 | 0.97\% | 1 | 3.34\% | 3 | 9.03\% | 9,282 | 9.82\% |
| Region 3 | 4,250 | 13.06 | 143 | 4.28 | 4,475 | 8.00 | 59 | 2.26 | 0 | 0.00 | 0 | 0.00 | 8,929 | 9.44 |
| Region 4 | 6,177 | 18.98 | 551 | 16.45 | 11,859 | 21.20 | 215 | 8.16 | 0 | 0.00 | 4 | 10.54 | 18,806 | 19.89 |
| Region 5 | 6,058 | 18.62 | 451 | 13.46 | 15,958 | 28.53 | 669 | 25.47 | 0 | 0.00 | 14 | 37.65 | 23,151 | 24.49 |
| Region 6 | 3,495 | 10.74 | 652 | 19.46 | 6,437 | 11.51 | 111 | 4.24 | 0 | 0.59 | 0 | 0.34 | 10,696 | 11.31 |
| Region 7 | 2,071 | 6.37 | 176 | 5.26 | 5,450 | 9.74 | 146 | 5.56 | 0 | 0.00 | 0 | 0.31 | 7,843 | 8.30 |
| Region 8 | 1,091 | 3.35 | 155 | 4.62 | 1,530 | 2.73 | 56 | 2.14 | 1 | 2.93 | 0 | 0.00 | 2,833 | 3.00 |
| Region 9 | 3,842 | 11.81 | 731 | 21.83 | 4,516 | 8.07 | 1,228 | 46.72 | 2 | 5.24 | 2 | 5.13 | 10,321 | 10.92 |
| Region 10 | 781 | 2.40 | 265 | 7.91 | 1,464 | 2.62 | 118 | 4.49 | 34 | 87.89 | 14 | 37.00 | 2,676 | 2.83 |
| NATION | 32,536 | 100.00\% | 3,351 | $\mathbf{1 0 0 . 0 0 \%}$ | 55,945 | 100.00\% | 2,628 | 100.00\% | 38 | 100.00\% | 38 | 100.00\% | 94,536 | 100.00\% |

Table A. 3
Average Annual Mileage By Typical Configuration and Region

| Region | Straight | Straight + Trailer | Single | Double | Triple | Unknown Tractor | TOTAL |
| :--- | ---: | :---: | ---: | ---: | ---: | ---: | ---: |
| Region 1 | 11,995 | 10,227 | 47,813 | 51,229 | 22,331 | 84,705 | 18,223 |
| Region 3 | 12,764 | 8,908 | 51,244 | 99,675 | 0 | 0 | 20,430 |
| Region 4 | 12,067 | 14,859 | 60,926 | 92,596 | 0 | 14,569 | 25,202 |
| Region 5 | $\mathbf{1 0 , 1 3 0}$ | 11,982 | $\mathbf{5 8 , 9 2 3}$ | 59,750 | 0 | $\mathbf{5 1 , 1 5 6}$ | $\mathbf{2 5 , 2 2 0}$ |
| Region 6 | 11,346 | 14,908 | 51,911 | 114,530 | 45,000 | 26,000 | 22,436 |
| Region 7 | 7,307 | 15,463 | 61,403 | 108,827 | 0 | 4,000 | 20,375 |
| Region 8 | $\mathbf{5 , 5 3 9}$ | 13,494 | 53,006 | 87,254 | 31,995 | 0 | 11,900 |
| Region 9 | 13,415 | 25,764 | 50,025 | 83,244 | 94,777 | 39,197 | 24,581 |
| Region 10 | 6,957 | 19,470 | 44,908 | 68,384 | 93,301 | 41,552 | 16,626 |
|  |  |  |  |  |  |  |  |
| NATION | $\mathbf{1 0 , 7 4 6}$ | $\mathbf{1 5 , 1 2 7}$ | $\mathbf{5 5 , 5 9 4}$ | $\mathbf{7 7 , 1 9 6}$ | $\mathbf{7 9 , 8 9 2}$ | $\mathbf{3 7 , 3 4 3}$ | $\mathbf{2 2 , 0 3 1}$ |

Table A. 4
Cargo Body Style by Power Unit Type, National Estimates

| CARGO BODY STYLE | STRAIGHT |  |  |  | TRACTOR |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Vehicles | Column Percent | Total Miles (Millions) | Average Miles | Number of Vehicles | Column <br> Percent | Total Miles (Millions) | Average Miles |
| Step van | 281,892 | 8.68\% | 4,107.5 | 14,571 | 2,299 | 0.22\% | 163.0 | 70,888 |
| Platform with devices | 217,945 | 6.71 | 1,843.7 | 8,459 | 11,024 | 1.06 | 384.2 | 34,854 |
| Low boy | 19,026 | 0.59 | 229.5 | 12,062 | 71,556 | 6.87 | 1,525.9 | 21,324 |
| Basic platform | 913,275 | 28.11 | 7,476.5 | 8,186 | 195,300 | 18.75 | 10,219.0 | 52,324 |
| Livestock truck | 39,729 | 1.22 | 278.9 | 7,020 | 14,880 | 1.43 | 894.8 | 60,138 |
| Insulated, non-refrig van | 12,057 | 0.37 | 218.8 | 18,144 | 15,646 | 1.50 | 1,095.5 | 70,016 |
| Insulated, refrig van | 66,012 | 2.03 | 1,512.8 | 22,916 | 88,043 | 8.45 | 7,163.0 | 81,359 |
| Drop frame van | 28,201 | 0.87 | 467.1 | 16,562 | 36,276 | 3.48 | 1,964.0 | 54,139 |
| Open top van | 7,490 | 0.23 | 59.1 | 7,896 | 7,669 | 0.74 | 470.3 | 61,329 |
| Enclosed van | 300,639 | 9.25 | 5,808.7 | 19,321 | 343,738 | 32.99 | 22,774.2 | 66,255 |
| Beverage truck | 52,298 | 1.61 | 630.2 | 12,050 | 14,718 | 1.41 | 289.6 | 19,676 |
| Utility truck | 100,538 | 3.09 | 827.3 | 8,229 | 959 | 0.09 | 12.7 | 13,228 |
| Winch or crane truck | 43,900 | 1.35 | 516.5 | 11,764 | 2,341 | 0.22 | 84.5 | 36,092 |
| Wrecker | 96,317 | 2.96 | 1,108.1 | 11,504 | 803 | 0.08 | 10.9 | 13,615 |
| Logging truck | 26,641 | 0.82 | 401.2 | 15,059 | 23,717 | 2.28 | 1,008.3 | 42,515 |
| Auto carrier | 5,409 | 0.17 | 78.5 | 14,520 | 13,859 | 1.33 | 773.8 | 55,830 |
| Service truck | 75,583 | 2.33 | 954.1 | 12,624 | 76 | 0.01 | 0.5 | 6,663 |
| Yard tractor | 576 | 0.02 | 3.6 | 6,339 | 2,607 | 0.25 | 11.4 | 4,389 |
| Oilfield truck | 19,678 | 0.61 | 158.6 | 8,058 | 3,456 | 0.33 | 42.4 | 12,260 |
| Grain body | 221,183 | 6.81 | 647.1 | 2,926 | 29,586 | 2.84 | 1,161.7 | 39,265 |
| Garbage truck | 47,610 | 1.47 | 913.1 | 19,178 | 1,563 | 0.15 | 65.0 | 41,568 |
| Dump truck | 457,579 | 14.08 | 4,795.5 | 10,480 | 73,364 | 7.04 | 3,261.4 | 44,455 |
| Tank - liquid/gas | 139,348 | 4.29 | 1,821.1 | 13,068 | 64,386 | 6.18 | 3,865.7 | 60,040 |
| Tank - dry bulk | 13,203 | 0.41 | 148.8 | 11,272 | 17,501 | 1.68 | 1,185.6 | 67,741 |
| Concrete mixer | 54,277 | 1.67 | 703.0 | 12,953 | 365 | 0.04 | 10.6 | 28,918 |
| Other | 8,868 | 0.27 | 177.6 | 20,026 | 6,129 | 0.59 | 211.7 | 34,538 |
| TOTAL | 3,249,274 | 100.00\% | 35,886.8 | 11,045 | 1,041,860 | 100.00\% | 58,649.6 | 56,293 |

Table A. 5
Cargo Body Style by Power Unit Type, Region 5 Estimates

| CARGO BODYSTYLE | STRAIGHT |  |  |  | TRACTOR |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Vehicles | Column Percent | Total Miles (Millions) | Average Miles | Number of Vehicles | Column Percent | Total Miles (Millions) | Average Miles |
| Step van | 47,670 | 7.50\% | 716.9 | 15,039 | 531 | 0.19\% | 36.5 | 68,672 |
| Platform with devices | 41,753 | 6.57 | - 350.4 | 8,392 | 1,643 | 0.58 | 52.4 | 31,889 |
| Low boy | 1,938 | 0.30 | 22.2 | 11,480 | 18,325 | 6.49 | 433.4 | 23,648 |
| Basic platform | 174,237 | 27.41 | 1,352.7 | 7,764 | 56,651 | 20.07 | 3,105.2 | 54,813 |
| Livestock truck | 6,696 | 1.05 | 52.0 | 7,772 | 2,462 | 0.87 | 159.0 | 64,594 |
| Insulated, non-refrig van | 2,095 | 0.33 | 47.8 | 22,835 | 4,711 | 1.67 | 310.6 | 65,936 |
| Insulated, refrig van | 8,958 | 1.41 | 207.4 | 23,157 | 21,309 | 7.55 | 1,815.9 | 85,218 |
| Drop frame van | 4,372 | 0.69 | 63.3 | 14,472 | 9,598 | 3.40 | 600.6 | 62,581 |
| Open top van | 307 | 0.05 | 3.7 | 12,135 | 542 | 0.19 | 27.0 | 49,899 |
| Enclosed van | 57,122 | 8.99 | 1,121.3 | 19,630 | 107,778 | 38.18 | 7,293.2 | 67,669 |
| Beverage truck | 10,462 | 1.65 | 118.3 | 11,308 | 4,248 | 1.50 | 62.7 | 14,770 |
| Utility truck | 22,240 | 3.50 | 188.6 | 8,479 | 26 | 0.01 | 1.2 | 45,000 |
| Winch or crane truck | 6,384 | 1.00 | 100.5 | 15,741 | 506 | 0.18 | 9.7 | 19,283 |
| Wrecker | 20,901 | 3.29 | 218.1 | 10,435 | 70 | 0.02 | 0.2 | 2,922 |
| Logging truck | 1,453 | 0.23 | 17.4 | 11,962 | 757 | 0.27 | 30.0 | 39,575 |
| Auto carrier | 1,592 | 0.25 | 18.1 | 11,348 | 5,601 | 1.98 | 305.0 | 54,448 |
| Service truck | 13,873 | 2.18 | 181.2 | 13,064 | 0 | 0.00 | 0.0 | 0 |
| Yard tractor | 88 | 0.01 | 1.0 | 11,400 | 406 | 0.14 | 0.9 | 2,157 |
| Oilfield truck | 2,167 | 0.34 | 31.4 | 14,478 | 88 | 0.03 | 1.1 | 12,097 |
| Grain body | 65,477 | 10.30 | 185.6 | 2,834 | 7,040 | 2.49 | 236.5 | 33,596 |
| Garbage truck | 10,581 | 1.66 | 191.9 | 18,131 | 438 | 0.16 | 27.3 | 62,399 |
| Dump truck | 90,131 | 14.18 | 749.1 | 8,311 | 19,758 | 7.00 | 856.8 | 43,364 |
| Tank - liquid/gas | 28,140 | 4.43 | 362.8 | 12,893 | 14,287 | 5.06 | 935.0 | 65,447 |
| Tank - dry bulk | 4,277 | 0.67 | 57.3 | 13,396 | 4,346 | 1.54 | 287.3 | 66,110 |
| Concrete mixer | 11,847 | 1.86 | 136.7 | 11,541 | 175 | 0.06 | 6.2 | 35,350 |
| Other | 900 | 0.14 | 13.3 | 14,749 | 1,021 | 0.36 | 48.3 | 47,334 |
| TOTAL | 635,661 | 100.00\% | 6,509.1 | 10,240 | 282,318 | 100.00\% | 16,642.1 | 58,948 |

Table A. 6
Average Gross Combination Weight by Power Unit Type, National Estimates

| $\begin{gathered} \text { AVERAGE } \\ \text { GCW RANGE } \end{gathered}$ | STRAIGHT |  |  |  | TRACTOR |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Vehicles | Column <br> Percent | Total Miles (Millions) | Average Miles | Number of Vehicles | Column Percent | Total Miles (Millions) | Average Miles |
| < 6,001 | 203,377 | 6.26\% | 1,691.2 | 8,316 | 925 | 0.09\% | 23.1 | 24,998 |
| 6,001-10,000 | 716,465 | 22.05 | 7,270.7 | 10,148 | 1,746 | 0.17 | 57.2 | 32,740 |
| 10,001-14,000 | 403,373 | 12.41 | 4,001.0 | 9,919 | 3,496 | 0.34 | 61.6 | 17,630 |
| 14,001-16,000 | 213,320 | 6.57 | 2,343.3 | 10,985 | 3,278 | 0.31 | 106.2 | 32,411 |
| 16,001-19,500 | 233,022 | 7.17 | 2,262.1 | 9,708 | 4,725 | 0.45 | 93.3 | 19,752 |
| 19,501-26,000 | 688,457 | 21.19 | 6,391.4 | 9,284 | 32,206 | 3.09 | 674.8 | 20,952 |
| 26,001-33,000 | 313,084 | 9.64 | 3,523.5 | 11,254 | 48,899 | 4.69 | 1,596.0 | 32,638 |
| 33,001-40,000 | 127,510 | 3.92 | 1,476.1 | 11,576 | 73,119 | 7.02 | 2,459.1 | 33,631 |
| 40,001-50,000 | 174,614 | 5.37 | 2,537.9 | 14,534 | 109,566 | 10.52 | 4,753.0 | 43,380 |
| 50,001-60,000 | 82,439 | 2.54 | 1,595.2 | 19,350 | 101,725 | 9.76 | 5,342.8 | 52,522 |
| 60,001-80,000 | 85,676 | 2.64 | 2,588.8 | 30,216 | 630,107 | 60.48 | 41,911.7 | 66,515 |
| 80,001-100,000 | 5,836 | 0.18 | 148.7 | 25,482 | 22,087 | 2.12 | 1,034.5 | 46,839 |
| 100,001-130,000 | 1,091 | 0.03 | 36.0 | 32,962 | 6,736 | 0.65 | 379.5 | 56,341 |
| > 130,000 | 1,009 | 0.03 | 21.0 | 20,830 | 3,245 | 0.31 | 156.9 | 48,340 |
| TOTAL | 3,249,274 | 100.00\% | 35,886.8 | 11,045 | 1,041,860 | 100.00\% | 58,649.6 | 56,293 |

Table A. 7
Average Gross Combination Weight by Power Unit Type, Region 5 Estimates

| $\begin{aligned} & \text { AVERAGE } \\ & \text { GCW RANGE } \end{aligned}$ | STRAIGHT |  |  |  | TRACTOR |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Vehicles | Column <br> Percent | Total Miles (Millions) | Average Miles | Number of Vehicles | Column <br> Percent | Total Miles (Millions) | Average Miles |
| < 6,001 | 34,997 | 5.51\% | 319.3 | 9,123 | 231 | 0.08\% | 5.7 | 24,453 |
| 6,001-10,000 | 138,731 | 21.82 | 1,407.6 | 10,146 | 455 | 0.16 | 2.8 | 6,187 |
| 10,001-14,000 | 77,442 | 12.18 | 680.9 | 8,793 | 757 | 0.27 | 17.8 | 23,466 |
| 14,001-16,000 | 39,812 | 6.26 | 418.1 | 10,502 | 644 | 0.23 | 38.4 | 59,621 |
| 16,001-19,500 | 40,277 | 6.34 | 437.2 | 10,854 | 1,205 | 0.43 | 42.4 | 35,166 |
| 19,501-26,000 | 148,334 | 23.34 | 1,294.4 | 8,726 | 8,855 | 3.14 | 200.3 | 22,618 |
| 26,001-33,000 | 60,197 | 9.47 | 575.2 | 9,556 | 12,918 | 4.58 | 523.1 | 40,493 |
| 33,001-40,000 | 24,985 | 3.93 | 274.7 | 10,994 | 18,409 | 6.52 | 691.4 | 37,557 |
| 40,001-50,000 | 44,916 | 7.07 | 558.3 | 12,430 | 25,523 | 9.04 | 1,183.2 | 46,358 |
| 50,001-60,000 | 15,122 | 2.38 | 263.3 | 17,411 | 27,113 | 9.60 | 1,653.7 | 60,992 |
| 60,001-80,000 | 9,465 | 1.49 | 236.0 | 24,936 | 179,177 | 63.47 | 11,975.2 | 66,835 |
| 80,001-100,000 | 563 | 0.09 | 12.3 | 21,893 | 3,257 | 1.15 | 136.6 | 41,956 |
| 100,001-130,000 | 282 | 0.04 | 11.2 | 39,753 | 1,045 | 0.37 | 38.7 | 36,993 |
| > 130,000 | 539 | 0.08 | 20.5 | 38,154 | 2,730 | 0.97 | 133.0 | 48,728 |
| TOTAL | 635,661 | 100.00\% | 6,509.1 | 10,240 | 282,318 | 100.00\% | 16,642.1 | 58,948 |

Table A. 8
Maximum Gross Combination Weight by Power Unit Type, National Estimates

| MAXIMUM GCW RANGE | STRAIGHT |  |  |  | TRACTOR |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Vehicles | Column <br> Percent | $\begin{gathered} \text { Total } \\ \text { Miles } \\ \text { (Millions) } \end{gathered}$ | Average Miles | Number of Vehicles | Column <br> Percent | Total Miles (Millions) | Average Miles |
| <6,001 | 100,632 | 3.10\% | 852.9 | 8,476 | 164 | 0.02\% | 4.7 | 28,901 |
| 6,001-10,000 | 477,753 | 14.70 | 5,066.5 | 10,605 | 1,582 | 0.15 | 64.3 | 40,672 |
| 10,001-14,000 | 342,701 | 10.55 | 3,661.7 | 10,685 | 958 | 0.09 | 7.3 | 7,639 |
| 14,001-16,000 | 171,283 | 5.27 | 1,676.4 | 9,787 | 1,027 | 0.10 | 8.9 | 8,646 |
| 16,001-19,500 | 219,681 | 6.76 | 2,236.0 | 10,178 | 2,640 | 0.25 | 31.9 | 12,099 |
| 19,501-26,000 | 640,785 | 19.72 | 5,532.9 | 8,635 | 11,945 | 1.15 | 161.0 | 13,482 |
| 26,001-33,000 | 446,296 | 13.74 | 5,109.0 | 11,447 | 18,682 | 1.79 | 390.0 | 20,874 |
| 33,001-40,000 | 145,966 | 4.49 | 1,601.8 | 10,974 | 40,619 | 3.90 | 881.0 | 21,689 |
| 40,001-50,000 | 185,566 | 5.71 | 2,330.6 | 12,559 | 64,584 | 6.20 | 1,857.2 | 28,757 |
| 50,001-60,000 | 114,493 | 3.52 | 2,084.2 | 18,204 | 82,660 | 7.93 | 2,977.2 | 36,017 |
| 60,001-80,000 | 119,445 | 3.68 | 3,299.7 | 27,625 | 728,794 | 69.95 | 48,274.6 | 66,239 |
| 80,001-100,000 | 13,803 | 0.42 | 326.3 | 23,639 | 41,675 | 4.00 | 2,017.1 | 48,400 |
| 100,001-130,000 | 2,275 | 0.07 | 57.7 | 25,348 | 18,352 | 1.76 | 928.9 | 50,616 |
| > 130,000 | 2,911 | 0.09 | 58.0 | 19,928 | 6,834 | 0.66 | 293.6 | 42,953 |
| Unknown | 265,684 | 8.18 | 1,993.2 | 7,502 | 21,344 | 2.05 | 751.9 | 35,226 |
| TOTAL | 3,249,274 | 100.00\% | 35,886.8 | 11,045 | 1,041,860 | 100.00\% | 58,649.6 | 56,293 |

Table A. 9
Maximum Gross Combination Weight by Power Unit Type, Region 5 Estimates

| MAXIMUM GCW RANGE | STRAIGHT |  |  |  | TRACTOR |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Vehicles | Column Percent | $\begin{gathered} \text { Total } \\ \text { Miles } \\ \text { (Millions) } \end{gathered}$ | Average Miles | Number of Vehicles | Column Percent | Total Miles (Millions) | Average Miles |
| < 6,001 | 17,059 | 2.68\% | 142.1 | 8,330 | 0 | 0.00\% | 0.0 | 0 |
| 6,001-10,000 | 89,144 | 14.02 | 953.6 | 10,697 | 328 | 0.12 | 5.7 | 17,237 |
| 10,001-14,000 | 73,534 | 11.57 | 731.9 | 9,953 | 53 | 0.02 | 0.0 | 750 |
| 14,001-16,000 | 35,179 | 5.53 | 296.3 | 8,422 | 143 | 0.05 | 2.9 | 20,101 |
| 16,001-19,500 | 29,363 | 4.62 | 345.7 | 11,772 | 555 | 0.20 | 0.0 | 72 |
| 19,501-26,000 | 142,012 | 22.34 | 1,229.9 | 8,660 | 2,779 | 0.98 | 36.4 | 13,092 |
| 26,001-33,000 | 97,056 | 15.27 | 974.8 | 10,043 | 4,424 | 1.57 | 95.2 | 21,507 |
| 33,001-40,000 | 22,879 | 3.60 | 230.1 | 10,057 | 10,160 | 3.60 | 217.3 | 21,384 |
| 40,001-50,000 | 50,528 | 7.95 | 579.2 | 11,462 | 14,926 | 5.29 | 465.4 | 31,181 |
| 50,001-60,000 | 21,539 | 3.39 | 348.8 | 16,192 | 20,242 | 7.17 | 790.3 | 39,044 |
| 60,001-80,000 | 15,645 | 2.46 | 348.5 | 22,275 | 208,620 | 73.90 | 14,227.8 | 68,200 |
| 80,001-100,000 | 1,249 | 0.20 | 27.3 | 21,889 | 7,314 | 2.59 | 310.0 | 42,385 |
| 100,001-130,000 | 670 | 0.11 | 16.8 | 25,032 | 3,141 | 1.11 | 116.0 | 36,938 |
| > 130,000 | 539 | 0.08 | 20.5 | 38,154 | 3,630 | 1.29 | 148.7 | 40,968 |
| Unknown | 39,266 | 6.18 | 263.8 | 6,719 | 6,004 | 2.13 | 226.5 | 37,723 |
| TOTAL | 635,661 | 100.00\% | 6,509.1 | 10,240 | 282,318 | 100.00\% | 16,642.1 | 58,948 |

Table A. 10
Carrier Type by Power Unit Type, National Estimates

| $\begin{aligned} & \text { CARRIER } \\ & \text { TYPE } \end{aligned}$ | STRAIGHT |  |  |  | TRACTOR |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Vehicles | Column Percent | Total Miles (Millions) | Average Miles | Number of Vehicles | Column <br> Percent | Total Miles (Millions) | Average Miles |
| Private | 2,888,904 | 88.91\% | 30,262.2 | 10,475 | 499,908 | 47.98\% | 20,752.0 | 41,512 |
| ICC-Authorized | 54,596 | 1.68 | 1,340.3 | 24,549 | 333,499 | 32.01 | 24,998.7 | 74,959 |
| ICC-Exempt | 1,889 | 0.06 | 75.8 | 40,109 | 11,000 | 1.06 | 795.2 | 72,289 |
| Intrastate For-Hire | 50,038 | 1.54 | 1,266.8 | 25,317 | 54,305 | 5.21 | 2,994.3 | 55,139 |
| Daily Rental | 46,048 | 1.42 | 983.5 | 21,358 | 22,821 | 2.19 | 1,512.6 | 66,283 |
| For-Hire | 63,156 | 1.94 | 1,374.5 | 21,763 | 118,672 | 11.39 | 7,574.7 | 63,829 |
| Unknown | 144,644 | 4.45 | 583.8 | 4,036 | 1,655 | 0.16 | 22.1 | 13,370 |
| TOTAL | 3,249,274 | 100.00\% | 35,886.8 | 11,045 | 1,041,860 | 100.00\% | 58,649.6 | 56,293 |

Table A. 11
Carrier Type by Power Unit Type, Region 5 Estimates

| $\begin{aligned} & \text { CARRIER } \\ & \text { TYPE } \end{aligned}$ | STRAIGHT |  |  |  | TRACTOR |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Vehicles | Column Percent | Total Miles (Millions) | Average Miles | Number of Vehicles | Column Percent | Total <br> Miles <br> (Millions) | Average Miles |
| Private | 568,317 | 89.41\% | 5,519.0 | 9,711 | 108,504 | 38.43\% | 4,375.9 | 40,329 |
| ICC-Authorized | 12,402 | 1.95 | 245.5 | 19,797 | 120,449 | 42.66 | 8,837.6 | 73,373 |
| ICC-Exempt | 0 | 0.00 | 0.0 | 0 | 2,934 | 1.04 | 211.4 | 72,075 |
| Intrastate For-Hire | 8,425 | 1.33 | 208.8 | 24,785 | 7,960 | 2.82 | 395.5 | 49,680 |
| Daily Rental | 10,567 | 1.66 | 241.7 | 22,873 | 7,866 | 2.79 | 576.7 | 73,316 |
| For-Hire | 8,973 | 1.41 | 186.1 | 20,740 | 34,293 | 12.15 | 2,239.4 | 65,300 |
| Unknown | 26,978 | 4.24 | 108.0 | 4,002 | 311 | 0.11 | 5.6 | 18,099 |
| TOTAL | 635,661 | 100.00\% | 6,509.1 | 10,240 | 282,318 | 100.00\% | 16,642.1 | 58,948 |

Table A. 12
Area of Operation by Power Unit Type, National Estimates

| AREA OFOPERATION | STRAIGHT |  |  |  | TRACTOR |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Vehicles | Column <br> Percent | $\begin{gathered} \text { Total } \\ \text { Miles } \\ \text { (Millions) } \end{gathered}$ | Average Miles | Number of Vehicles | Column Percent | Total <br> Miles <br> (Millions) | Average Miles |
| Off road | 162,157 | 4.99\% | 275.3 | 1,698 | 14,148 | 1.36\% | 75.7 | 5,352 |
| < 50 mile radius | 2,414,255 | 74.30 | 23,154.8 | 9,591 | 300,969 | 28.89 | 7,557.7 | 25,111 |
| 50-200 mile radius | 509,713 | 15.69 | 9,947.7 | 19,516 | 337,062 | 32.35 | 17,783.4 | 52,760 |
| > 200 mile radius | 80,363 | 2.47 | 2,027.8 | 25,234 | 380,709 | 36.54 | 33,172.8 | 87,134 |
| Unknown | 82,787 | 2.55 | 481.2 | 5,813 | 8,972 | 0.86 | 60.0 | 6,690 |
| TOTAL | 3,249,274 | 100.00\% | 35,886.8 | 11,045 | 1,041,860 | 100.00\% | 58,649.6 | 56,293 |

Table A. 13
Area of Operation by Power Unit Type, Region 5 Estimates

| AREA OF OPERATION | STRAIGHT |  |  |  | TRACTOR |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Vehicles | Column Percent | Total <br> Miles (Millions) | Average Miles | Number of Vehicles | Column <br> Percent | Total <br> Miles (Millions) | Average Miles |
| Off road | 20,689 | 3.25\% | 28.1 | 1,359 | 1,409 | 0.50\% | 6.9 | 4,932 |
| < 50 mile radius | 502,865 | 79.11 | 4,428.6 | 8,807 | 75,122 | 26.61 | 1,894.2 | 25,215 |
| 50-200 mile radius | 89,710 | 14.11 | 1,708.4 | 19,044 | 78,380 | 27.76 | 4,175.1 | 53,267 |
| > 200 mile radius | 13,472 | 2.12 | 319.0 | 23,676 | 125,835 | 44.57 | 10,565.8 | 83,966 |
| Unknown | 8,925 | 1.40 | 25.0 | 2,798 | 1,572 | 0.56 | 0.0 | 9 |
| TOTAL | 635,661 | 100.00\% | 6,509.1 | 10,240 | 282,318 | 100.00\% | 16,642.1 | 58,948 |

Table A. 14
Percent Out-of-State Mileage by Power Unit Type

| PERCENT OF ANNUAL <br> MILEAGE OUT OF <br> BASE STATE | NATIONAL ESTIMATES |  |  | REGION 5 ESTIMATES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Straight | Tractor | TOTAL | Straight | Tractor | TOTAL |
| $0 \%$ | $75.13 \%$ | $35.67 \%$ | $65.55 \%$ | $76.16 \%$ | $27.77 \%$ | $61.28 \%$ |
| $1-20 \%$ | 10.44 | 14.30 | 11.38 | 10.97 | 14.19 | 11.96 |
| $21-50 \%$ | 3.55 | 13.23 | 5.90 | 3.23 | 14.04 | 6.56 |
| $51-80 \%$ | 1.46 | 14.74 | 4.68 | 1.63 | 15.86 | 6.00 |
| $81-100 \%$ | 0.98 | 14.07 | 4.16 | 0.95 | 20.76 | 7.04 |
| Unknown | 8.45 | 7.99 | 8.33 | 7.06 | 7.39 | 7.16 |
| TOTAL | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ |

Table A. 15
Major Use of Vehicle by Power Unit Type, National Estimates

| MAJOR USE OF VEHICLE | STRAIGHT |  |  |  | TRACTOR |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Vehicles | Column <br> Percent | $\begin{gathered} \text { Total } \\ \text { Miles } \\ \text { (Millions) } \end{gathered}$ | Average Miles | Number of Vehicles | Column <br> Percent | Total Miles (Millions) | Average Miles |
| Agriculture | 790,671 | 24.33\% | 3,591.6 | 4,542 | 88,530 | 8.50\% | 3,077.3 | 34,760 |
| Forestry/Lumbering | 67,858 | 2.09 | 782.3 | 11,528 | 37,477 | 3.60 | 1,737.2 | 46,354 |
| Construction work | 479,001 | 14.74 | 5,464.9 | 11,409 | 84,598 | 8.12 | 2,231.9 | 26,383 |
| Contractor activities | 293,215 | 9.02 | 3,002.4 | 10,240 | 14,726 | 1.41 | 419.7 | 28,504 |
| Manufacturing | 134,069 | 4.13 | 2,098.0 | 15,648 | 87,148 | 8.36 | 5,038.9 | 57,820 |
| Wholesale trade | 307,365 | 9.46 | 5,714.7 | 18,593 | 93,922 | 9.01 | 4,789.6 | 50,996 |
| Retail trade | 304,631 | 9.38 | 4,171.1 | 13,692 | 39,547 | 3.80 | 1,914.8 | 48,420 |
| Business/Pers. services | 235,132 | 7.24 | 3,119.1 | 13,265 | 23,575 | 2.26 | 821.9 | 34,864 |
| Utilities | 135,112 | 4.16 | 1,185.6 | 8,775 | 4,620 | 0.44 | 100.1 | 21,663 |
| Mining/Quarrying . | 59,012 | 1.82 | 669.6 | 11,346 | 20,369 | 1.96 | 636.8 | 31,265 |
| Daily rental | 46,056 | 1.42 | 984.2 | 21,370 | 22,558 | 2.17 | 1,497.4 | 66,381 |
| Government | 74 | 0.00 | 0.6 | 8,000 | 0 | 0.00 | 0.0 | 0 |
| Not in use | 59,045 | 1.82 | 11.0 | 186 | 8,449 | 0.81 | 5.8 | 689 |
| For-hire transportation | 168,678 | 5.19 | 4,052.5 | 24,025 | 514,210 | 49.35 | 36,320.6 | 70,634 |
| Other | 136 | 0.00 | 1.4 | 10,123 | 60 | 0.01 | 3.1 | 52,611 |
| One-way rental | 31,630 | 0.97 | 469.5 | 14,845 | 645 | 0.06 | 37.9 | 58,732 |
| Personal transportation | 137,590 | 4.23 | 568.4 | 4,131 | 1,427 | 0.14 | 16.4 | 11,496 |
| TOTAL | 3,249,274 | 100.00\% | 35,886.8 | 11,045 | 1,041,860 | 100.00\% | 58,649.6 | 56,293 |

Table A. 16
Major Use of Vehicle by Power Unit Type, Region 5 Estimates

| MAJOR USE OF VEHICLE | STRAIGHT |  |  |  | TRACTOR |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Vehicles | Column <br> Percent | $\begin{gathered} \text { Total } \\ \text { Miles } \\ \text { (Millions) } \end{gathered}$ | Average Miles | Number of Vehicles | Column Percent |  | Average Miles |
| Agriculture | 179,471 | 28.23\% | 837.3 | 4,665 | 19,430 | 6.88\% | 588.7 | 30,301 |
| Forestry/Lumbering | 11,239 | 1.77 | 95.8 | 8,522 | 3,073 | 1.09 | 94.8 | 30,842 |
| Construction work | 90,641 | 14.26 | 861.6 | 9,506 | 20,862 | 7.39 | 493.6 | 23,661 |
| Contractor activities | 50,427 | 7.93 | 500.9 | 9,933 | 2,640 | 0.94 | 60.2 | 22,807 |
| Manufacturing | 30,684 | 4.83 | 515.1 | 16,788 | 24,571 | 8.70 | 1,393.0 | 56,693 |
| Wholesale trade | 56,287 | 8.85 | 982.7 | 17,458 | 22,643 | 8.02 | 1,231.3 | 54,380 |
| Retail trade | 50,912 | 8.01 | 639.1 | 12,554 | 6,474 | 2.29 | 266.6 | 41,186 |
| Business/Pers. services | 53,301 | 8.39 | 706.7 | 13,259 | 5,780 | 2.05 | 186.4 | 32,257 |
| Utilities | 28,608 | 4.50 | 249.4 | 8,717 | 722 | 0.26 | 15.6 | 21,577 |
| Mining/Quarrying | 7,089 | 1.12 | 102.5 | 14,457 | 1,856 | 0.66 | 72.7 | 39,175 |
| Daily rental | 10,567 | 1.66 | 241.7 | 22,873 | 7,866 | 2.79 | 576.7 | 73,316 |
| Government | 0 | 0.00 | 0.0 | 0 | 0 | 0.00 | 0.0 | 0 |
| Not in use | 8,333 | 1.31 | 0.5 | 57 | 1,623 | 0.57 | 0.0 | 10 |
| For-hire transportation | 29,836 | 4.69 | 640.6 | 21,471 | 164,466 | 58.26 | 11,656.7 | 70,876 |
| Other | 0 | 0.00 | 0.0 | 0 | 0 | 0.00 | 0.0 | 0 |
| One-way rental | 2,433 | 0.38 | 27.8 | 11,426 | 0 | 0.00 | 0.0 | 0 |
| Personal transportation | 25,831 | 4.06 | 107.4 | 4,158 | 311 | 0.11 | 5.6 | 18,099 |
| TOTAL | 635,661 | 100.00\% | 6,509.1 | 10,240 | 282,318 | 100.00\% | 16,642.1 | 58,948 |

Table A. 17
Principal Product Carried by Power Unit Type, National Estimates

| PRINCIPAL PRODUCT CARRIED | STRAIGHT |  |  |  | TRACTOR |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Vehicles | Column <br> Percent | Total <br> Miles <br> (Millions) | Average Miles | Number of Vehicles | Column Percent | Total Miles (Millions) | Average Miles |
| Fresh farm products | 591,078 | 18.19\% | 2,825.6 | 4,780 | 96,709 | 9.28\% | 4,941.6 | 51,098 |
| Live animals | 103,314 | 3.18 | 727.8 | 7,045 | 24,393 | 2.34 | 1,363.4 | 55,896 |
| Processed food | 229,909 | 7.08 | 4,000.3 | 17,400 | 128,911 | 12.37 | 8,537.3 | 66,226 |
| Mining products | 18,422 | 0.57 | 355.1 | 19,277 | 15,678 | 1.50 | 867.8 | 55,349 |
| Building materials | 495,744 | 15.26 | 6,119.9 | 12,345 | 96,241 | 9.24 | 4,691.5 | 48,748 |
| Logs/Forest products | 64,007 | 1.97 | 690.9 | 10,795 | 38,295 | 3.68 | 1,816.6 | 47,437 |
| Lumber | 83,121 | 2.56 | 1,067.4 | 12,841 | 34,766 | 3.34 | 1,946.3 | 55,984 |
| Paper | 33,524 | 1.03 | 674.7 | 20,126 | 29,605 | 2.84 | 1,969.9 | 66,540 |
| Chemicals/Drugs | 71,402 | 2.20 | 780.9 | 10,937 | 30,977 | 2.97 | 1,888.8 | 60,974 |
| Petroleum | 127,276 | 3.92 | 1,715.3 | 13,477 | 38,936 | 3.74 | 2,385.6 | 61,268 |
| Plastics/Rubber | 19,218 | 0.59 | 338.7 | 17,622 | 13,486 | 1.29 | 982.6 | 72,859 |
| Primary metal | 32,879 | 1.01 | 460.2 | 13,997 | 42,761 | 4.10 | 2,586.9 | 60,497 |
| Fabricated metal | 67,333 | 2.07 | 904.0 | 13,425 | 26,560 | 2.55 | 1,639.1 | 61,714 |
| Machinery | 93,078 | 2.86 | 997.2 | 10,713 | 66,521 | 6.38 | 1,633.6 | 24,558 |
| Transportation equip. | 125,687 | 3.87 | 1,729.9 | 13,764 | 36,968 | 3.55 | 1,756.7 | 47,519 |
| Furniture/Hardware | 50,189 | 1.54 | 909.4 | 18,119 | 17,309 | 1.66 | 1,150.3 | 66,459 |
| Textiles/Apparels | 38,755 | 1.19 | 655.9 | 16,923 | 13,267 | 1.27 | 1,023.0 | 77,110 |
| Household goods | 70,873 | 2.18 | 1,102.2 | 15,551 | 27,801 | 2.67 | 1,323.4 | 47,601 |
| Tools and parts | 237,502 | 7.31 | 2,477.8 | 10,433 | 5,025 | 0.48 | 134.1 | 26,681 |
| General freight | 114,426 | 3.52 | 2,432.2 | 21,256 | 194,370 | 18.66 | 12,962.6 | 66,690 |
| Refuse, scrap | 137,024 | 4.22 | 1,826.2 | 13,328 | 12,223 | 1.17 | 455.3 | 37,251 |
| Other | 17,780 | 0.55 | 372.7 | 20,960 | 6,177 | 0.59 | 566.3 | 91,677 |
| No load carried | 168,031 | 5.17 | 1,183.1 | 7,041 | 10,736 | 1.03 | 434.3 | 40,456 |
| Personal trans. | 137,881 | 4.24 | 568.4 | 4,123 | 1,427 | 0.14 | 16.4 | 11,496 |
| Not in use | 57,194 | 1.76 | 14.2 | 248 | 8,304 | 0.80 | 5.6 | 671 |
| Glass products | 6,865 | 0.21 | 151.8 | 22,109 | 3,948 | 0.38 | 299.1 | 75,773 |
| Misc. manu. products | 33,501 | 1.03 | 614.8 | 18,352 | 13,611 | 1.31 | 935.1 | 68,700 |
| Industrial water | 21,664 | 0.67 | 157.7 | 7,279 | 3,524 | 0.34 | 94.6 | 26,827 |
| Hazardous waste | 1,445 | 0.04 | 32.3 | 22,349 | 3,313 | 0.32 | 241.6 | 72,911 |
| Not reported | 153 | 0.00 | 0.2 | 1,500 | 17 | 0.00 | 0.2 | 13,846 |
| TOTAL | 3,249,274 | 100.00\% | 35,886.8 | 11,045 | 1,041,860 | 100.00\% | 58,649.6 | 56,293 |

Table A. 18
Principal Product Carried by Power Unit Type, Region 5 Estimates

| $\begin{aligned} & \text { PRINCIPAL } \\ & \text { PRODUCT } \\ & \text { CARRIED } \end{aligned}$ | STRAIGHT |  |  |  | TRACTOR |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Vehicles | Column Percent | Total Miles (Millions) | Average Miles | Number of Vehicles | Column Percent | $\begin{aligned} & \text { Total } \\ & \text { Miles } \\ & \text { (Millions) } \end{aligned}$ | Average Miles |
| Fresh farm products | 140,515 | 22.11\% | 635.6 | 4,523 | 21,957 | 7.78\% | 989.1 | 45,045 |
| Live animals | 16,015 | 2.52 | 101.0 | 6,306 | 3,890 | 1.38 | 226.2 | 58,158 |
| Processed food | 38,020 | 5.98 | 641.6 | 16,875 | 33,697 | 11.94 | 2,349.6 | 69,727 |
| Mining products | 2,243 | 0.35 | 41.0 | 18,284 | 4,377 | 1.55 | 276.6 | 63,205 |
| Building materials | 92,715 | 14.59 | 952.4 | 10,272 | 23,933 | 8.48 | 1,134.0 | 47,381 |
| Logs/Forest products | 9,799 | 1.54 | 79.3 | 8,095 | 3,167 | 1.12 | 115.3 | 36,405 |
| Lumber | 17,977 | 2.83 | 180.0 | 10,012 | 6,076 | 2.15 | 300.8 | 49,508 |
| Paper | 7,899 | 1.24 | 182.0 | 23,039 | 12,257 | 4.34 | 914.4 | 74,604 |
| Chemicals/Drugs | 18,662 | 2.94 | 165.9 | 8,891 | 7,000 | 2.48 | 471.7 | 67,389 |
| Petroleum | 25,034 | 3.94 | 273.8 | 10,938 | 7,929 | 2.81 | 479.4 | 60,458 |
| Plastics/Rubber | 2,153 | 0.34 | 36.9 | 17,114 | 4,811 | 1.70 | 388.9 | 80,839 |
| Primary metal | 7,467 | 1.17 | 104.7 | 14,025 | 20,299 | 7.19 | 1,225.1 | 60,355 |
| Fabricated metal | 17,000 | 2.67 | 232.0 | 13,648 | 10,355 | 3.67 | 723.0 | 69,818 |
| Machinery | 14,472 | 2.28 | 177.7 | 12,280 | 18,624 | 6.60 | 566.0 | 30,391 |
| Transportation equip. | 27,526 | 4.33 | 327.9 | 11,912 | 13,969 | 4.95 | 772.4 | 55,292 |
| Furniture/Hardware | 8,012 | 1.26 | 164.2 | 20,501 | 3,582 | 1.27 | 254.4 | 71,045 |
| Textiles/Apparels | 3,090 | 0.49 | 52.7 | 17,066 | 591 | 0.21 | 32.8 | 55,511 |
| Household goods | 10,104 | 1.59 | 167.9 | 16,622 | 8,301 | 2.94 | 495.2 | 59,656 |
| Tools and parts | 41,147 | 6.47 | 410.7 | 9,981 | 589 | 0.21 | 13.1 | 22,302 |
| General freight | 27,828 | 4.38 | 552.4 | 19,851 | 61,352 | 21.73 | 4,126.3 | 67,256 |
| Refuse, scrap | 27,113 | 4.27 | 379.0 | 13,978 | 3,485 | 1.23 | 150.5 | 43,186 |
| Other | 3,142 | 0.49 | 74.0 | 23,549 | 1,668 | 0.59 | 127.6 | 76,505 |
| No load carried | 30,467 | 4.79 | 237.8 | 7,805 | 2,718 | 0.96 | 147.6 | 54,289 |
| Personal trans. | 25,831 | 4.06 | 107.4 | 4,158 | 311 | 0.11 | 5.6 | 18,099 |
| Not in use | 8,109 | 1.28 | 0.5 | 59 | 1,596 | 0.57 | 0.0 | 10 |
| Glass products | 648 | 0.10 | 12.4 | 19,211 | 1,090 | 0.39 | 62.4 | 57,228 |
| Misc. manu. products | 8,599 | 1.35 | 179.1 | 20,825 | 3,552 | 1.26 | 219.0 | 61,666 |
| Industrial water | 4,075 | 0.64 | 39.1 | 9,589 | 205 | 0.07 | 6.8 | 33,402 |
| Hazardous waste | 0 | 0.00 | 0.0 | 0 | 937 | 0.33 | 68.1 | 72,716 |
| Not reported | 0 | 0.00 | 0.0 | 0 | 0 | 0.00 | 0.0 | 0 |
| TOTAL | 635,661 | 100.00\% | 6,509.1 | 10,240 | 282,318 | 100.00\% | 16,642.1 | 58,948 |

