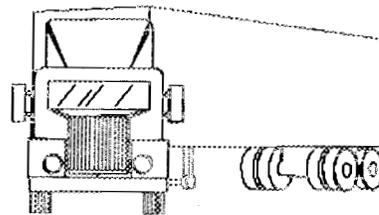




3 4456 0375601 3

ORNL/TM-12361

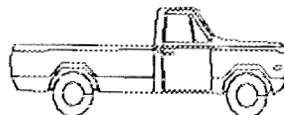


OAK RIDGE  
NATIONAL  
LABORATORY

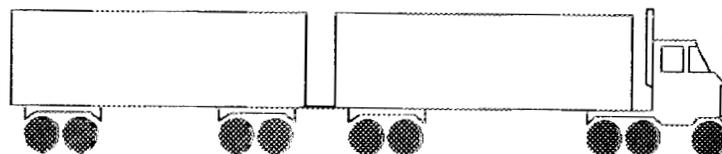
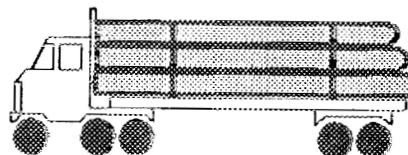
1990 NATIONWIDE TRUCK ACTIVITY  
AND COMMODITY SURVEY  
SUMMARY REPORT



OAK RIDGE NATIONAL LABORATORY  
CENTRAL RESEARCH LIBRARY  
CIRCULATION SECTION  
4500N ROOM 375  
**LIBRARY LOAN COPY**  
DO NOT TRANSFER TO ANOTHER PERSON  
If you wish someone else to see this  
report, send in name with report and  
the library will arrange a loan.  
604010019 470



Prepared by  
Statistics and Data Analysis Group  
Center for Transportation Analysis  
Energy Division



MANAGED BY  
MARTIN MARIETTA ENERGY SYSTEMS, INC.  
FOR THE UNITED STATES  
DEPARTMENT OF ENERGY



**1990 NATIONWIDE TRUCK ACTIVITY AND  
COMMODITY SURVEY  
SELECTED TABULATIONS**

June 1993

Prepared for  
Federal Highway Administration  
U.S. Department of Transportation  
Washington, D.C. 20590

Prepared by  
Statistics and Data Analysis Group  
Center for Transportation Analysis  
Energy Division  
Oak Ridge National Laboratory  
Oak Ridge, Tennessee 37831  
managed by  
MARTIN MARIETTA ENERGY SYSTEMS, INC.  
for the  
U.S. DEPARTMENT OF ENERGY  
under  
Contract No. DE-AC05-84OR21400





## TABLE OF CONTENTS

	PAGE
EXECUTIVE SUMMARY .....	v
ACKNOWLEDGMENTS .....	vii
LIST OF TABLES .....	ix
CHAPTER 1. INTRODUCTION AND OVERVIEW (Table 1.1) .....	1
- Background .....	2
- 1990 NTACS Universe Description of Four Year and Older Trucks .	3
- Estimated 1990 NTACS Universe Size of Four Year and Older Trucks .....	4
- 1990 NTACS Sample Size of Four Year and Older Trucks .....	4
- Estimated 1990 NTACS Sample Respondents Reporting Annual and General Data .....	4
- Estimated 1990 NTACS Sample Respondents Reporting Sample Day One Data .....	4
- Table Subject Matter Description/Definitions .....	6
CHAPTER 2. GENERAL DESCRIPTIONS AND ANNUAL ACTIVITIES OF THE 1990 NTACS TRUCK POPULATION (Tables 2.1-2.24b) .....	13
CHAPTER 3. DAILY DESCRIPTIONS AND ACTIVITIES OF THE 1990 NTACS TRUCK POPULATION (Tables 3.1-3.30) .....	39
CHAPTER 4. UNWEIGHTED NUMBERS ON TRIP-SEGMENTS (Tables 4.1-4.5) .....	77
CHAPTER 5. ADJUSTED ESTIMATES OF THE 1990 NTACS TRUCK POPULATION (Table 5.1) .....	85
APPENDIX A. DESIGN OF THE 1990 NATIONWIDE TRUCK ACTIVITY AND COMMODITY SURVEY .....	A-1
APPENDIX B. MAP OF FOUR CENSUS REGIONS AND NINE CENSUS DIVISIONS .....	B-1
APPENDIX C. THE 1990 NTACS-I QUESTIONNAIRE .....	C-1



## EXECUTIVE SUMMARY

The 1990 Nationwide Truck Activity and Commodity Survey (NTACS) provides detailed annual and daily activity data for a probability sample of trucks responding to the 1987 Truck Inventory and Use Survey (TIUS). The data were collected for days selected at random over a 12-month period ending in October of 1990. Selected results from the 1990 NTACS are presented in this summary report.

Unlike the 1987 TIUS sample which reported only annual data, the 1990 NTACS sample truck operators were asked to report daily as well as annual data in order to capture the temporal and geographic variation in truck use and to measure other detailed attributes of trucking that were beyond the scope of the TIUS. The 1990 NTACS sample of 44,002 trucks was a subsample of the approximately 105,000 sample truck respondents to the 1987 TIUS. Approximately 22,004 sample truck operators returned the 1990 NTACS questionnaire of which 9,794 operators reported some information on daily truck activity.

The reported data were used to produce estimates for the universe of all four year and older trucks operating in the United States during 1990 which is estimated to be approximately 41,768,000 trucks. This universe of trucks is referred to as the "1990 NTACS universe." No sample data were collected from trucks less than four years old.

As a first attempt to collect detailed trip characteristics and other information for a large sample of 1987 TIUS respondents, the 1990 NTACS was one of the most ambitious efforts undertaken to measure trucking activity and tackled measurement problems with little previous experience for guidance. *Not unlike the initial execution of comparable large-scale nationwide complex data collection efforts, the 1990 NTACS suffered from high nonresponse and data inconsistency problems. Where possible, the collected data were adjusted to compensate for and to decrease the extent of these problems. While these problems have increased the uncertainty of the 1990 NTACS data quality, it was felt that these data could be useful to analysts if used with caution and in conjunction with data of known reliability.* These data are available on request in the form of a public use file from Oak Ridge National Laboratory.

For easy reference, this report presents selected tables of trucking activity for the 1990 NTACS universe.

Selected highlights include:

- Estimated number of four year and older trucks operating in the United States in 1990 was 41,768,000 trucks (Chapter 2). This estimate adjusted to include trucks under four years old was 54,112,000 trucks ( Table 5.1).

- Estimate of annual vehicle miles traveled (VMT) for the four year and older trucks operating in the United States in 1990 was 440,174,000,000 miles (Chapter 2). This estimate adjusted to include trucks under four years old was 652,147,000,000 miles (Table 5.1).
- Estimate of daily vehicle miles traveled (DVMT) for the four year and older trucks operating in the United States in 1990 was 1,872,000,000 miles (Chapter 3).
- Distribution by "truck type" of these estimates for the four year and older trucks operating in the United States in 1990 was:

(Trucks in Thousands/Annual and Daily VMT in Millions)

Truck Type	Trucks	Annual VMT	Daily VMT
Pickup	24,537	217,420	893
Utility	12,290	123,617	493
Small	2,847	25,287	149
Large	1,044	20,650	103
Truck-Tractors	<u>1,050</u>	<u>53,200</u>	<u>233</u>
<b>TOTALS</b>	<b>41,768</b>	<b>440,174</b>	<b>1,872</b>

- Distribution by "1987 TIUS Commodity-Carrying Status" of these estimates for four year and older trucks operating in the United States in 1990 was:

(Trucks in Thousands/Annual and Daily VMT in Millions)

Commodity-Carrying Status	Trucks	Annual VMT	Daily VMT
<b>Commodity-Carrying</b>			
- Short Haul	7,365	98,354	457
- Long Haul	766	41,292	176
<b>Non-Commodity-Carrying</b>			
- Business Use	6,393	67,385	274
- Personal Use	27,125	232,733	963
- Not in Use	<u>119</u>	<u>410</u>	<u>3</u>
<b>TOTALS</b>	<b>41,768</b>	<b>440,174</b>	<b>1,872</b>

### **IMPORTANT NOTICE**

All estimates in every table of this report have been adjusted using the three stratifying variables: (i) commodity-carrying status, (ii) census division, and (iii) truck type to compensate for extremely high nonresponse rates. (See Tables G and H of Appendix A). As a result, preliminary comparisons with other data sources have revealed inconsistencies -especially when detailed estimates are presented using variables other than the three stratifying variables. Individual estimates are not highly reliable and should be used cautiously only to give impressions of broad trends, patterns, and distributions.

### **ACKNOWLEDGMENTS**

This report is the result of the efforts of many individuals including Stacy Davis and Pat Hu (both at Center for Transportation Analysis) and Tommy Wright (Mathematical Sciences Section), all of Oak Ridge National Laboratory (ORNL). They received valuable guidance and assistance from William Bostic, Jr., U.S. Bureau of the Census; general direction from Rolf Schmitt and review comments from Charlie Goodman, both at the U.S. Department of Transportation; and review comments from Michael Bronzini, David Greene, Bruce Peterson, and Frank Southworth, all of the Center for Transportation Analysis, ORNL. Finally, the production of this report would have been impossible without the valuable secretarial assistance and patience of Maggie Bruer.



## LIST OF TABLES

Table Number	Title/Content	Page
<b>NUMBER OF FOUR YEAR AND OLDER TRUCKS AND ASSOCIATED ANNUAL VEHICLE MILES TRAVELED (VMT)</b>		
1.1	- BY CENSUS REGION, COMMODITY-CARRYING STATUS, AND TRUCK TYPE .....	5
2.1	- BY TRUCK MODEL YEAR .....	14
2.2	- BY TRUCK MODEL YEAR AND COMMODITY-CARRYING STATUS .....	15
2.3	- BY TRUCK MODEL YEAR AND TRUCK TYPE .....	16
2.4	- BY COMMODITY-CARRYING STATUS AND TRUCK TYPE .....	17
2.5	- BY TRUCK DESCRIPTION AND COMMODITY-CARRYING STATUS .....	18
2.6	- BY TRUCK DESCRIPTION AND MAJOR USE .....	19
2.7	- BY TRUCK CONFIGURATION .....	20
2.8	- BY TRUCK BODY TYPE .....	21
2.9	- BY NUMBER OF STATES OPERATED IN AND CENSUS REGION	22
2.10	- BY NUMBER OF STATES OPERATED IN AND COMMODITY-CARRYING STATUS .....	23
2.11	- BY NUMBER OF STATES OPERATED IN AND TRUCK TYPE ...	24
2.12	- BY NUMBER OF STATES OPERATED IN AND MAJOR USE ....	25
2.13	- BY NUMBER OF WEEKS OPERATED AND COMMODITY-CARRYING STATUS .....	26
2.14	- BY NUMBER OF WEEKS OPERATED AND TRUCK TYPE .....	27
2.15	- BY NUMBER OF WEEKS OPERATED AND MAJOR USE .....	28
<b>NUMBER OF FOUR YEAR AND OLDER TRUCKS</b>		
2.16	- BY ANNUAL MILES TRAVELED AND TRUCK MODEL YEAR ..	29
2.17	- BY ANNUAL MILES TRAVELED AND CENSUS REGION .....	30
2.18	- BY ANNUAL MILES TRAVELED AND COMMODITY-CARRYING STATUS .....	31
2.19	- BY ANNUAL MILES TRAVELED AND TRUCK TYPE .....	32
2.20	- BY ANNUAL MILES TRAVELED AND MAJOR USE .....	33
2.21	- BY ANNUAL MILES TRAVELED AND TRUCK DESCRIPTION ...	34

**LIST OF TABLES (continued)**

Table Number	Title/Content	Page
--------------	---------------	------

**DISTRIBUTION OF FOUR YEAR AND OLDER TRUCKS  
THAT OPERATED IN CANADA**

2.22a	- BY COMMODITY-CARRYING STATUS .....	35
2.23a	- BY TRUCK TYPE .....	36
2.24a	- BY MAJOR USE .....	37

**DISTRIBUTION OF FOUR YEAR AND OLDER TRUCKS  
THAT OPERATED IN MEXICO**

2.22b	- BY COMMODITY-CARRYING STATUS .....	35
2.23b	- BY TRUCK TYPE .....	36
2.24b	- BY MAJOR USE .....	37

**NUMBER OF FOUR YEAR AND OLDER TRUCKS AND ASSOCIATED  
DAILY VEHICLE MILES TRAVELED (DVMT)**

3.1	- BY TRUCK MODEL YEAR .....	40
3.2	- BY COMMODITY-CARRYING STATUS .....	41
3.3	- BY TRUCK TYPE .....	42
3.4	- BY DAILY TRUCK DESCRIPTION AND DAILY MAJOR USE ....	43
3.5	- BY DAILY FUEL USE AND DAILY TRUCK DESCRIPTION .....	44
3.6	- BY DAILY MAXIMUM EMPTY WEIGHT AND COMMODITY- CARRYING STATUS .....	45
3.7	- BY DAILY MAXIMUM LOADED WEIGHT AND COMMODITY- CARRYING STATUS .....	46
3.8	- BY DAILY MAXIMUM PERCENT PAYLOAD SPACE AND COMMODITY-CARRYING STATUS .....	47
3.9a,b	- BY DAILY MAXIMUM EMPTY WEIGHT AND DAILY TRUCK DESCRIPTION .....	48, 49
3.10a,b	- BY DAILY MAXIMUM TRUCK LENGTH AND DAILY TRUCK DESCRIPTION .....	50, 51
3.11	- BY DAILY MAXIMUM TRUCK HEIGHT AND DAILY TRUCK DESCRIPTION .....	52
3.12	- BY DAILY MAXIMUM PERCENT PAYLOAD SPACE AND DAILY TRUCK DESCRIPTION .....	53
3.13a,b	- BY DAILY MAXIMUM EMPTY WEIGHT AND DAILY MAXIMUM LOADED WEIGHT .....	54, 55

**LIST OF TABLES (continued)**

Table Number	Title/Content	Page
3.14a,b	- BY DAILY MAXIMUM TRUCK LENGTH AND DAILY MAXIMUM LOADED WEIGHT .....	56, 57
3.15	- BY DAILY MAXIMUM TRUCK LENGTH AND DAILY MAXIMUM PERCENT PAYLOAD SPACE .....	58
3.16	- BY DAILY COMMODITY CARRIED .....	59
3.17	- BY DAILY MAJOR USE AND DAILY HAZARDOUS MATERIAL CARRYING STATUS .....	60
3.18	- BY DAILY TRUCK DESCRIPTION AND DAILY HAZARDOUS MATERIAL CARRYING STATUS .....	61
3.19	- BY DAILY PERCENT INTERSTATE, DAILY PERCENT FOUR LANE, DAILY PERCENT OFF ROAD AND DAILY HAZARDOUS MATERIAL CARRYING STATUS .....	62

**DISTRIBUTION OF FOUR YEAR AND OLDER TRUCKS OVER DAILY TRUCK DESCRIPTION**

3.20a	- BY DAY OF WEEK OPERATED .....	63
-------	---------------------------------	----

**DISTRIBUTION OF TOTAL ACTIVITY OF FOUR YEAR AND OLDER TRUCKS THAT OPERATED OVER DAY OF THE WEEK**

3.20b	- BY DAILY TRUCK DESCRIPTION .....	64
-------	------------------------------------	----

**DISTRIBUTION OF TOTAL ACTIVITY OF FOUR YEAR AND OLDER TRUCKS THAT OPERATED DURING A DAILY TIME PERIOD**

3.21	- BY TRUCK TYPE .....	65
3.22	- BY COMMODITY-CARRYING STATUS .....	66
3.23	- BY DAILY TRUCK DESCRIPTION .....	67

**DISTRIBUTION OF FOUR YEAR AND OLDER TRUCKS**

3.24	- BY DAILY PERCENT INTERSTATE, DAILY PERCENT FOUR LANE, DAILY PERCENT OFF ROAD, AND COMMODITY-CARRYING STATUS .....	68
3.25	- BY DAILY PERCENT INTERSTATE, DAILY PERCENT FOUR LANE, DAILY PERCENT OFF ROAD, AND DAILY MAJOR USE .	69

**LIST OF TABLES (continued)**

Table Number	Title/Content	Page
3.26	- BY DAILY PERCENT INTERSTATE, DAILY PERCENT FOUR LANE, DAILY PERCENT OFF ROAD, AND DAILY TRUCK DESCRIPTION .....	70
<b>DISTRIBUTION OF FOUR YEAR AND OLDER TRUCKS OVER TRUCK TYPE</b>		
3.27a	- BY NUMBER OF DAYS OPERATED DURING A WEEK .....	71
<b>DISTRIBUTION OF FOUR YEAR AND OLDER TRUCKS OVER TRUCK MODEL YEAR</b>		
3.28a	- BY NUMBER OF DAYS OPERATED DURING A WEEK .....	73
<b>DISTRIBUTION OF FOUR YEAR AND OLDER TRUCKS OVER NUMBER OF DAYS OPERATED DURING A WEEK</b>		
3.27b	- BY TRUCK TYPE .....	72
3.28b	- BY TRUCK MODEL YEAR .....	74
<b>NUMBER OF FOUR YEAR AND OLDER TRUCKS</b>		
3.29	- BY ANNUAL MAJOR USE AND DAILY MAJOR USE .....	75
3.30	- BY ANNUAL TRUCK DESCRIPTION AND DAILY TRUCK DESCRIPTION .....	76
<b>UNWEIGHTED NUMBER OF DAILY TRIP-SEGMENTS FOR FOUR YEAR AND OLDER TRUCKS</b>		
4.1	- BY TRIP-SEGMENT LENGTH AND COMMODITY-CARRYING STATUS .....	78
4.2	- BY TRIP-SEGMENT LENGTH AND TRUCK TYPE .....	79

**LIST OF TABLES (continued)**

<b>Table Number</b>	<b>Title/Content</b>	<b>Page</b>
<b>UNWEIGHTED SUMMARY STATISTICS FOR LENGTH OF TRIP SEGMENTS FOR FOUR YEAR AND OLDER TRUCKS</b>		
4.3	- BY TRUCK DESCRIPTION FROM 1990 NTACS AND MAJOR USE FROM 1987 TIUS .....	80
<b>UNWEIGHTED NUMBER OF DAILY OPERATING FOUR YEAR AND OLDER TRUCKS</b>		
4.4	- BY NUMBER OF DAILY PICKUP/DELIVERY STOPS AND COMMODITY-CARRYING STATUS .....	83
4.5	- BY NUMBER OF DAILY PICKUP/DELIVERY STOPS AND DAILY MAJOR USE .....	84
<b>NUMBER (ADJUSTED TO INCLUDE LESS THAN FOUR YEAR OLD) OF TRUCK AND (ADJUSTED) ASSOCIATED ANNUAL VEHICLE MILES TRAVELED (VMT)</b>		
5.1	- BY CENSUS REGION, COMMODITY-CARRYING STATUS, AND TRUCK TYPE .....	89



**CHAPTER 1**  
**INTRODUCTION AND OVERVIEW**

The Nationwide Truck Activity and Commodity Survey (NTACS) provides detailed activity data for a sample of trucks covered in the 1987 Truck Inventory and Use Survey (TIUS) for days selected at random over a 12-month period ending in 1990. The NTACS was conducted by the U.S. Bureau of the Census for the U.S. Department of Transportation (DOT). A Public Use File for the NTACS was developed by Oak Ridge National Laboratory (ORNL) under a reimbursable agreement with the DOT. The content of the Public Use File and the detailed design of the NTACS are described in the ORNL Report

*Technical Documentation for the 1990 Nationwide Truck Activity and Commodity Survey Public Use File.* (1992). ORNL Technical Report #TM-12188, Oak Ridge National Laboratory, Oak Ridge, TN 37831.

The main purpose of this summary report is to provide selected tables based on the public use file.

## **Background**

The Truck Inventory and Use Survey (TIUS) is the oldest national, vehicle-based survey of freight transportation. The TIUS is performed by the U.S. Bureau of the Census as part of its quinquennial Census of Transportation, and collects extensive information on the typical and year-long use of trucks, vans, and mini-vans. The TIUS sample is drawn from vehicle registration files, and represents all vehicles except buses, automobiles, mobile homes, motorcycles, and vehicles owned by governments. The 1987 TIUS sample includes information on approximately 105,000 vehicles.

While the TIUS provides critical information on the composition and typical use of the Nation's trucking fleet, it does not provide a detailed picture of the temporal and geographic variation in truck use. This variation has major implications for multimodal transportation policies involving highway investment requirements, equitable tax policy, effective safety programs, and similar issues. The Federal Highway Administration (FHWA), the Federal Railroad Administration (FRA), and the Office of the Secretary of Transportation (OST) decided to cosponsor a follow-on to the Census Bureau's TIUS in order to capture the temporal and geographic variation in truck use and to measure other detailed attributes of trucking that were beyond the scope of the TIUS. The follow-on became known as the NTACS, and was conducted by the U.S. Bureau of the Census over a 12-month period that ended in 1990.

The Nationwide Truck Activity and Commodity Survey (NTACS) collected one- and two- day snapshots of a vehicle's activity for a sample of TIUS respondents. The NTACS measured detailed trip characteristics and other information for a large sample of TIUS respondents on randomly sampled days over a 12-month period. The NTACS was designed to provide far more detailed information than is possible on the TIUS. This additional detail is central to understanding the variability in typical vehicle use, relationships between trucking and economic activity, and the role of trucking in intermodal transportation.

## 1990 NTACS Universe Description of Four Year and Older Trucks:

The universe for the Nationwide Truck Activity and Commodity Survey (NTACS) is the following:

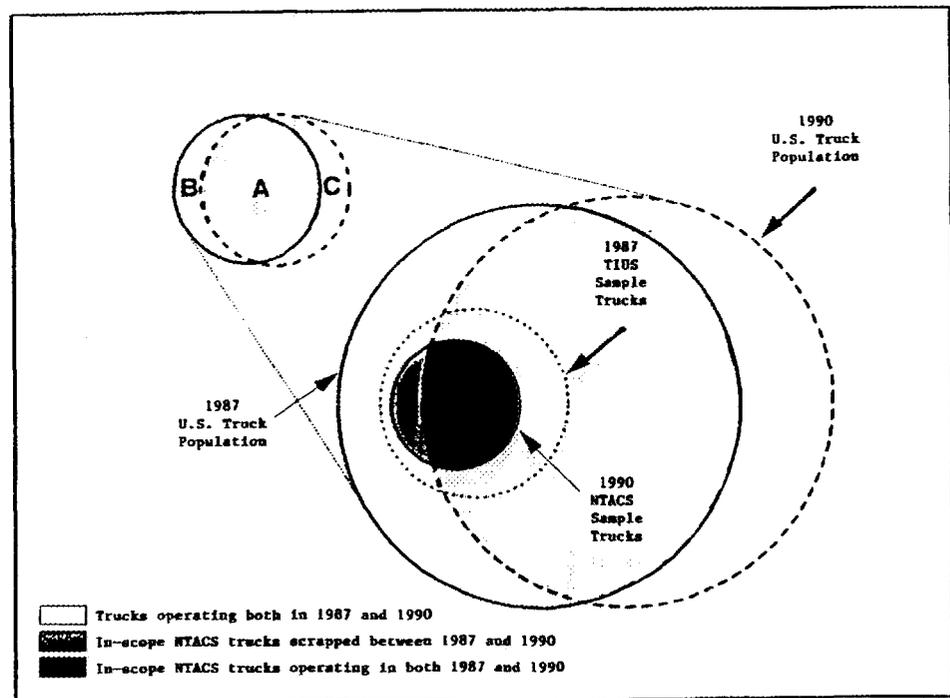
All trucks operating during the NTACS period (October 29, 1989-October 27, 1990) and registered in one of the 50 states or the District of Columbia on July 1, 1987, and operating in 1987 as estimated by the 1987 Truck Inventory and Use Survey (TIUS). Because the NTACS period covers most of 1990, we refer to this data collection effort as the "1990 NTACS."

A clear view of the NTACS universe can be obtained by referring to Figure 1.1 where:

- the 1987 and 1990 U.S. truck populations are represented, respectively, by two overlapping circles;
- the intersection, represented by "A," represents the group of trucks that were in operation in 1987 and that were still in operation in 1990;
- the area that is indicated by "B" represents the group of trucks that was operating in 1987 but which was no longer in operation in 1990, i.e. this group of trucks was scrapped between 1987 and 1990; and
- the area indicated by "C" represents the group of trucks that began operating after 1987 (more precisely July 1, 1987).

The 1987 truck population consists of trucks in groups A and B; and the 1990 truck population consists of trucks in groups A and C.

Figure 1.1.  
Sampling frames  
of TIUS AND NTACS



**Estimated 1990 NTACS Universe Size of Four Year and Older Trucks:**

41,768,000 trucks<sup>a</sup>

**1990 NTACS Sample Size of Four Year and Older Trucks:**

44,002 trucks (See Table E of Appendix A.)

**Estimated 1990 NTACS Sample Respondents Reporting Annual and General Data:**

22,044 trucks (See Table G of Appendix A.)

**Estimated 1990 NTACS Sample Respondents Reporting Sample Day One Data:**

9,794 trucks (See Table H of Appendix A.)

The trucks in group A represent what we refer to throughout this report as the "1990 NTACS Universe of Four Year and Older Trucks." All tables in Chapters 2, 3, and 4 are with reference to the 1990 NTACS Universe of Four Year and Older Trucks. Table 1.1 provides an overview of the estimates for the number of trucks and their associated annual vehicle miles traveled for the 1990 NTACS Universe of Four Year and Older Trucks.

In Chapter 5, an attempt is made in Table 5.1 to present "adjusted" estimates for the 1990 U.S. Truck population (A union C) that correspond to those estimates provided in Table 1.1.

***IMPORTANT NOTE ON 1990 NTACS DATA QUALITY***

A limited number of data elements from the Census Bureau's 1987 TIUS have been provided on the NTACS Public Use File to merge vehicle characteristics and annual use patterns with trip and shipment characteristics on sampled days. However, the resulting data in the NTACS Public Use File should be used with caution, both because of the file's complexity and because of response rate problems on the NTACS. The complexity of the NTACS contributed to low unit and item response rates. While some data checks, edits, and imputations were done by Census and ORNL, the current data base still includes known inconsistencies. The NTACS data should be only used in conjunction with other data of proven reliability. (For more details, see Section 4 and 5 of the technical documentation for the 1990 Public Use File.) All the tables presented in this report are based on the 1990 NTACS and should therefore be used with caution.

---

<sup>a</sup>This estimate is obtained by summing the variable XPF1 on the public use file.

**Table 1.1**  
**Number of Four Year and Older Trucks and Associated Annual Vehicle Miles Traveled (VMT)**  
**by Census-Region, Commodity-Carrying Status, and Truck Type: 1990 NTACS**  
(Trucks in Thousands/Annual VMT in Millions)

Commodity Carrying Status	Truck Type										TOTALS	
	Pickup		Utility		Small		Large		Truck-Tractor		Trucks	Annual VMT
	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT		
<b>Commodity-Carrying</b>												
-Short Haul	322	3,623	291	3,243	282	2,977	169	2,779	90	2,682	1,153	15,303
-Long Haul	3	15	16	580	7	81	12	513	46	2,928	84	4,118
<b>Non-Commodity-Carrying</b>												
-Business Use	441	5,403	423	6,319	106	592	24	275	7	102	1,001	12,691
-Personal Use	1,937	13,294	1,283	11,736	34	128	0	0	a	a	3,255	25,158
-Not in Use	0	0	0	0	0	0	1	a	0	0	1	a
<b>Northeast Totals</b>	<b>2,703</b>	<b>22,335</b>	<b>2,013</b>	<b>21,878</b>	<b>430</b>	<b>3,778</b>	<b>205</b>	<b>3,567</b>	<b>143</b>	<b>5,712</b>	<b>5,493</b>	<b>57,270</b>
<b>Commodity-Carrying</b>												
-Short Haul	848	8,310	316	4,604	608	4,146	279	4,886	150	5,745	2,201	27,691
-Long Haul	41	1,785	35	512	18	149	43	2,490	151	12,756	288	17,692
<b>Non-Commodity-Carrying</b>												
-Business Use	985	10,055	446	5,619	155	872	36	492	9	327	1,630	17,366
-Personal Use	4,001	39,687	2,230	19,252	110	451	15	31	1	2	6,357	59,423
-Not in Use	0	0	0	0	10	36	0	0	2	14	12	50
<b>Midwest Totals</b>	<b>5,875</b>	<b>59,838</b>	<b>3,026</b>	<b>29,987</b>	<b>901</b>	<b>5,655</b>	<b>373</b>	<b>7,899</b>	<b>313</b>	<b>18,844</b>	<b>10,489</b>	<b>122,222</b>
<b>Commodity-Carrying</b>												
-Short Haul	1,132	9,477	376	4,321	579	7,329	223	4,701	222	7,501	2,532	33,328
-Long Haul	43	199	50	337	19	350	35	1,601	127	10,932	275	13,419
<b>Non-Commodity-Carrying</b>												
-Business Use	1,271	15,561	704	5,469	250	1,503	32	466	29	588	2,287	23,587
-Personal Use	6,949	60,547	3,029	33,389	127	509	35	142	9	54	10,150	94,641
-Not in Use	24	17	2	15	18	72	4	17	3	19	51	140
<b>South Totals</b>	<b>9,420</b>	<b>85,800</b>	<b>4,162</b>	<b>43,532</b>	<b>993</b>	<b>9,764</b>	<b>330</b>	<b>6,926</b>	<b>390</b>	<b>19,095</b>	<b>15,295</b>	<b>165,116</b>
<b>Commodity-Carrying</b>												
-Short Haul	647	7,072	265	4,485	336	4,477	106	1,723	126	4,275	1,479	22,032
-Long Haul	28	517	2	5	13	61	15	434	60	5,045	119	6,063
<b>Non-Commodity-Carrying</b>												
-Business Use	966	9,091	393	3,202	87	1,134	13	97	16	217	1,475	13,741
-Personal Use	4,877	32,615	2,421	20,503	61	384	3	4	1	5	7,363	53,511
-Not in Use	21	153	7	26	26	34	0	0	1	7	55	220
<b>West Totals</b>	<b>6,539</b>	<b>49,447</b>	<b>3,089</b>	<b>28,220</b>	<b>523</b>	<b>6,091</b>	<b>137</b>	<b>2,258</b>	<b>204</b>	<b>9,549</b>	<b>10,491</b>	<b>95,566</b>
<b>Commodity-Carrying</b>												
-Short Haul	2,948	28,482	1,247	16,652	1,805	18,929	777	14,089	588	20,203	7,365	98,354
-Long Haul	115	2,516	103	1,435	58	642	105	5,038	385	31,662	766	41,292
<b>Non-Commodity-Carrying</b>												
-Business Use	3,664	40,111	1,966	20,609	599	4,102	104	1,329	60	1,234	6,393	67,385
-Personal Use	17,765	146,142	8,963	84,880	332	1,473	54	177	11	62	27,125	232,733
-Not in Use	45	170	10	41	53	142	5	17	6	39	119	410
<b>UNITED STATES TOTALS</b>	<b>24,537</b>	<b>217,420</b>	<b>12,290</b>	<b>123,617</b>	<b>2,847</b>	<b>25,287</b>	<b>1,044</b>	<b>20,650</b>	<b>1,050</b>	<b>53,199</b>	<b>41,768</b>	<b>440,174</b>

(a) Quantity rounded to zero.

**Table Subject Matter Description/Definitions:**

An overview of the content of the tables, how the contents are presented, and the corresponding table numbers are given below. All table values are estimates, and are subject to sampling and nonsampling errors.

<u>How Presented</u>	<u>Table Number</u>	<u>How Presented</u>	<u>Table Number</u>
<b>NUMBER OF FOUR YEAR AND OLDER TRUCKS AND ASSOCIATED ANNUAL VEHICLE MILES TRAVELED BY:</b>		<b>DISTRIBUTION OF TOTAL ACTIVITY OF FOUR YEAR AND OLDER TRUCKS THAT OPERATED DURING A DAILY TIME PERIOD BY:</b>	
-Census Region .....	1.1; 2.9	-Truck Type .....	3.21
-Commodity-Carrying Status .....	1.1; 2.2; 2.4	-Commodity-Carrying Status .....	3.22
	2.5; 2.10; 2.13	-Daily Truck Description .....	3.23
-Truck Type .....	1.1; 2.3; 2.4;	<b>DISTRIBUTION OF FOUR YEAR AND OLDER TRUCKS BY:</b>	
	2.11; 2.14	-Daily % Interstate .....	3.24; 3.25; 3.26
-Truck Model Year .....	2.1; 2.2; 2.3	-Daily % Four Lane .....	3.24; 3.25; 3.26
-Truck Description .....	2.5; 2.6	-Daily % Off Road .....	3.24; 3.25; 3.26
-Major Use .....	2.6; 2.12; 2.15	-Commodity-Carrying Status .....	3.24
-Truck Configuration .....	2.7	-Daily Major Use .....	3.25
-Truck Body Type .....	2.8	-Daily Truck Description .....	3.26
-Number of States Operated In .....	2.9; 2.10; 2.11; 2.12	<b>DISTRIBUTION OF FOUR YEAR AND OLDER TRUCKS OVER TRUCK TYPE BY:</b>	
-Number of Weeks Operated .....	2.13; 2.14; 2.15	-Number of Days Operated During a Week ...	3.27a
<b>NUMBER OF FOUR YEAR AND OLDER TRUCKS BY:</b>		<b>DISTRIBUTION OF FOUR YEAR AND OLDER TRUCKS OVER TRUCK MODEL YEAR BY:</b>	
-Annual Miles Traveled .....	2.16; 2.17; 2.18;	-Number of Days Operated During a Week ...	3.28a
	2.19; 2.20; 2.21	<b>DISTRIBUTION OF FOUR YEAR AND OLDER TRUCKS OVER NUMBER OF DAYS OPERATED DURING A WEEK BY:</b>	
-Truck Model Year .....	2.16	-Truck Type .....	3.27b
-Census Region .....	2.17	-Truck Model Year .....	3.28b
-Commodity-Carrying Status .....	2.18	<b>NUMBER OF FOUR YEAR AND OLDER TRUCKS BY:</b>	
-Truck Type .....	2.19	-(Annual) Major Use and Daily	
-Major Use .....	2.20	Major Use .....	3.29
-Truck Description .....	2.21	-(Annual) Truck Description and	
<b>DISTRIBUTION OF FOUR YEAR AND OLDER TRUCKS THAT OPERATED IN CANADA (MEXICO) BY:</b>		Daily Truck Description .....	3.30
-Commodity-Carrying Status .....	2.22a (2.22b)	<b>UNWEIGHTED NUMBER OF DAILY TRIP-SEGMENTS FOR FOUR YEAR AND OLDER TRUCKS BY:</b>	
-Truck Type .....	2.23a (2.23b)	-Trip-Segment Length .....	4.1; 4.2
-Major Use .....	2.24a (2.24b)	-Commodity-Carrying Status .....	4.1
<b>NUMBER OF FOUR YEAR AND OLDER TRUCKS AND ASSOCIATED DAILY VEHICLE MILES TRAVELED BY:</b>		-Truck Type .....	4.2
-Truck Model Year .....	3.1	<b>UNWEIGHTED SUMMARY STATISTICS FOR LENGTH OF TRIP SEGMENTS FOR FOUR YEAR AND OLDER TRUCKS BY:</b>	
-Commodity-Carrying Status .....	3.2; 3.6; 3.7; 3.8	-Truck Description .....	4.3
-Truck Type .....	3.3	-Major Use (from 1987 TIUS) .....	4.3
-Daily Truck Description .....	3.4; 3.5; 3.9; 3.10;	<b>UNWEIGHTED NUMBER OF DAILY OPERATING FOUR YEAR AND OLDER TRUCKS BY:</b>	
	3.11; 3.12; 3.18	-Number of Daily	
-Daily Major Use .....	3.4; 3.17	Pickup/Delivery Stops .....	4.4; 4.5
-Daily Fuel Use .....	3.5	-Commodity-Carrying Status .....	4.4
-Daily Max Empty Weight .....	3.6; 3.9; 3.13	-Daily Major Use .....	4.5
-Daily Max Loaded Weight .....	3.7; 3.13; 3.14	<b>NUMBER (ADJUSTED TO INCLUDE LESS THAN FOUR YEAR OLD) OF TRUCKS AND (ADJUSTED) ASSOCIATED ANNUAL VEHICLE MILES TRAVELED BY:</b>	
-Daily Max % Payload Space .....	3.8; 3.12; 3.15	-Census Region .....	5.1
-Daily Max Truck Length .....	3.10; 3.14; 3.15	-Commodity-Carrying Status .....	5.1
-Daily Max Truck Height .....	3.11	-Truck Type .....	5.1
-Daily Commodity Carried .....	3.16		
-Daily Hazardous Material			
Carrying Status .....	3.17; 3.18; 3.19		
-Daily % Interstate .....	3.19		
-Daily % Four Lane .....	3.19		
-Daily % Off Road .....	3.19		
<b>DISTRIBUTION OF FOUR YEAR AND OLDER TRUCKS OVER DAILY TRUCK DESCRIPTION BY:</b>			
-Day of Week Operated .....	3.20a		
<b>DISTRIBUTION OF TOTAL ACTIVITY OF FOUR YEAR AND OLDER TRUCKS THAT OPERATED OVER DAY OF WEEK BY:</b>			
-Daily Truck Description .....	3.20b		

### Content of Tables<sup>b</sup>

- Number of four year and older trucks and associated *annual* vehicle miles traveled:
  - The *number of four year and older trucks estimates* were generated using a daily sampling weight (XPFD1) which has been adjusted for unit nonresponse for daily activity.
  - The *associated annual vehicle miles traveled estimates* were generated using a daily sampling weight (XPFD1) and an annualized reported mileage (ARMIL) which was based on the reported sample day mileage (RMIL1).
  
- Distribution of four year and older trucks that operated in Canada (Mexico):
  - The *distribution percent estimates* are based on the number of four year and older trucks estimates.
  
- Number of four year and older trucks and associated *daily* vehicle miles traveled:
  - The *associated daily vehicle miles traveled estimates* were generated using a daily sampling weight (XPFD1) and the reported sample day mileage (RMIL1).
  
- Distribution of four year and older trucks that operated on a day of the week:
  - The *distribution percent estimates* are based on the number of four year and older trucks estimates. Each truck operator was asked to indicate all days of operation for the week containing the sample day.
  
- Distribution of total activity of four year and older trucks that operated during a daily time period:
  - The *distribution percent estimates* are based on the number of four year and older trucks estimates. Each truck operator was asked to indicate whether or not the sample truck operated during each of eight different time periods on the sample day.

---

<sup>b</sup> For more details, see the 1990 NTACS Public Use File Technical Documentation. The abbreviations (XPFD1, ARMIL, and RMIL1) refer to the data items on the 1990 NTACS Public Use File which were used to generate most of the data presented in the summary tables in the report.

- Distribution of four year and older trucks:
  - The *distribution percent estimates* are based on the number of four year and older trucks estimates.
- Unweighted number of daily trip-segments for four year and older trucks:
  - The *unweighted numbers* are counts of responding sample trucks only with sample day data. A daily *trip-segment* is the section of road traveled between one reported stop and the next reported stop on a truck's sample day.
- Unweighted summary statistics for length of trip-segments for four year and older trucks:
  - The *unweighted summary statistics* give number of trip-segments with some travel and associated mileage statistics by major use and truck description.
- Unweighted number of daily operating four year and older trucks:
  - The *unweighted numbers* are counts for responding sample trucks only with sample day data.
- Number (adjusted to include less than four year old) of trucks and (adjusted) associated annual vehicle miles traveled:
  - See discussion in Chapter 5.

#### *Data Items Used to Present Table Content*

##### I. Data Items Reflecting *Annual* Truck Characteristics and Activity

- *Annual Miles Traveled*: Annual miles traveled categories as displayed in the first column of Tables 2.16, 2.17, 2.18, 2.19, 2.20, and 2.21 are based on reported annual miles during the annual period as reported in the 1990 NTACS. Because the data item "Annual Miles Traveled" (RANMI) was available only in categories, it was necessary to produce the "annualized reported mileage (ARMIL) as noted above under *Content of Tables*. The annual mileage estimates presented "in" the tables are all based on ARMIL, and the only use of the reported annual mileage categories is that in dividing column one of Tables 2.16, 2.17, 2.18, 2.19, 2.20, and 2.21. A contingency table analysis indicated an extremely high correlation between the data items ARMIL and RANMI.
- *Census Region*: A map of the 4 census regions is given in Appendix B. A truck's census region designation is based on its state of registration as reported in the 1987 TIUS.

- *Commodity-Carrying Status:* Commodity-carrying status is used to distinguish between commodity-carrying and non-commodity-carrying trucks as identified in the 1987 TIUS. Commodity-carrying trucks are subclassified as short haul or long haul while non-commodity-carrying trucks are subclassified as personal transportation, business use, or not in use. Not in use means a truck was idle, wrecked or otherwise not in use for more than 90 days during 1987. The categories as provided on the public use file are:
  1. commodity-carrying, short haul;
  2. commodity-carrying, long haul;
  3. non-commodity-carrying, personal transportation;
  4. non-commodity-carrying, business use; and
  5. non-commodity-carrying, idle.
  
- *Major Use:* Major use describes how (personal, contract, common, other) the truck was most frequently operated during the annual period as reported in the 1990 NTACS. In Tables 3.29 and 3.30, this is the same as Annual Major Use.
  
- *Number of States Operated In:* Number of states operated in indicates the number of states in which the vehicle operated during the annual period as reported in the 1990 NTACS.
  
- *Number of Weeks Operated:* Number of weeks operated indicates the number of weeks that the vehicle was operated during the annual period as reported in the 1990 NTACS.
  
- *Truck Body Type:* Truck body type indicates the body type that most closely resembles the vehicle during the annual period as reported in the 1990 NTACS.
  
- *Truck Configuration:* Truck configuration indicates the kind(s) of trailer(s) pulled by the truck during the annual period as reported in the 1990 NTACS.
  
- *Truck Description:* Truck description describes the truck as most frequently operated during the annual period as reported in the 1990 NTACS. In Tables 3.29 and 3.30, this is the same as Annual Truck Description.
  
- *Truck Model Year:* Truck model year is as reported in the 1987 TIUS.
  
- *Truck Type:* Truck type refers to the five 1987 TIUS sample strata. The categories as provided on the file are:
  1. Pickup trucks.
  2. Utility trucks include vans, panel trucks, utilities, jeeps, and station wagons.
  3. Small trucks (GVW less than or equal to 26,000 pounds) not classified above.
  4. Large trucks (GVW greater than 26,000 pounds) excluding truck-tractors.
  5. Truck-tractors.

II. Data Items Reflecting *Daily* Truck Characteristics and Activity as Reported on Each Truck's Sample Day One.

- *(Annual) Major Use:* (Annual) Major Use is the same as Major Use.
- *(Annual) Truck Description:* (Annual) Truck description is the same as Truck Description.
- *Daily Commodity Carried:* Daily commodity carried gives the commodity carried with the greatest ton miles by the truck on its sample day one.
- *Daily Fuel Use:* Daily fuel use gives the reported amount of fuel used by the truck during its sample day one.
- *Daily Hazardous Material Carrying Status:* Daily hazardous material carrying status indicates whether or not the vehicle was used to carry hazardous materials in quantities large enough to require a special placard under the code of federal regulations, Title 49, Transportation, on its sample day one.
- *Daily Major Use:* Daily major use describes how (personal, contract, common, other) the truck was most frequently operated during its sample day one.
- *Daily Maximum Empty Weight:* Daily maximum empty weight gives the maximum tare (empty) weight of the truck on its sample day one.
- *Daily Maximum Loaded Weight:* Daily maximum loaded weight gives the maximum loaded weight of the vehicle (weight of truck and cargo) on its sample day one.
- *Daily Maximum Percent Payload Space:* Daily maximum percent payload space gives the maximum space utilized when the vehicle was at its maximum weight on its sample day one.
- *Daily Maximum Truck Height:* Daily maximum truck height gives the maximum height of the vehicle when the vehicle was at its maximum weight on its sample day one.
- *Daily Maximum Truck Length:* Daily maximum truck length gives the maximum length of the vehicle, from the front bumper to the end of the last trailer when the vehicle was at its maximum weight on its sample day one.
- *Daily Percent Four Lane:* Daily percent four lane gives, by categories, the percent of the mileage driven on roads which had four or more lanes but were not on the interstate highway systems by the trucks on its sample day one.

- *Daily Percent Interstate:* Daily percent interstate gives, by categories, the percent of the mileage driven on the interstate highway systems by the truck on its sample day one.
- *Daily Percent Off Road:* Daily percent off road gives, by categories, the percent of the mileage driven on off roads (little travel on public roads) by the truck on its sample day one.
- *Daily Truck Description:* Daily truck description describes the truck as most frequently operated during its sample day one.
- *Number of Daily Pickup/Delivery Stops:* Number of daily pickup/delivery stops is the total number of stops for which the truck's purpose was to pick up or deliver items on its sample day one.
- *Number of Days Operated a Week:* Number of days operated a week indicates the number of days of operation for the week containing the truck's sample day one.
- *Trip-Segment Length:* Trip-segment length is the distance traveled on a trip segment.



## CHAPTER 2

# GENERAL DESCRIPTIONS AND ANNUAL ACTIVITIES OF THE 1990 NTACS TRUCK POPULATION

All of the annual VMT estimates in Chapter 2 are based on daily VMT data which have been "annualized." For details on the precise annualization methodology, refer to Section 4 of the *Technical Documentation for the 1990 Nationwide Truck Activity and Commodity Survey Public Use File*.

$$\left( \begin{array}{c} \textit{The} \\ \textit{Truck's} \\ \textit{Annual} \\ \textit{VMT} \end{array} \right) = \left( \begin{array}{c} \textit{The Truck's Reported} \\ \textit{Number of Days Operated} \\ \textit{During the Week of} \\ \textit{Its Sample Day} \end{array} \right) \times \left( \begin{array}{c} \textit{The Truck's} \\ \textit{Reported Number of} \\ \textit{Weeks Operated} \\ \textit{During the Year} \end{array} \right) \times \left( \begin{array}{c} \textit{The Truck's} \\ \textit{Sample Day} \\ \textit{VMT} \end{array} \right).$$

The key annual VMT estimates throughout Chapter 2 are obtained by expanding the sample values

$$\left( \begin{array}{c} \textit{The} \\ \textit{Truck's} \\ \textit{Annual} \\ \textit{VMT} \end{array} \right).$$

The key daily VMT estimates throughout Chapter 3 are obtained by expanding the sample values

$$\left( \begin{array}{c} \textit{The Truck's} \\ \textit{Sample Day} \\ \textit{VMT} \end{array} \right).$$

### IMPORTANT NOTICE

All estimates in every table of this report have been adjusted using the three stratifying variables: (i) commodity-carrying status, (ii) census division, and (iii) truck type to compensate for extremely high nonresponse rates. (See Tables G and H of Appendix A). As a result, preliminary comparisons with other data sources have revealed inconsistencies -especially when detailed estimates are presented using variables other than the three stratifying variables. Individual estimates are not highly reliable and should be used cautiously only to give impressions of broad trends, patterns, and distributions.

**Table 2.1**  
**Number of Four Year and Older Trucks and Associated Annual Vehicle Miles Traveled (VMT)**  
**by Truck Model Year: 1990 NTACS**

(Trucks in Thousands/Annual VMT in Millions)

Truck Model Year	Trucks	Annual VMT
1987(a)	3,815 (9.1%)	57,507 (13.1%)
1986	5,601 (13.4%)	87,914 (20.0%)
1985	4,163 (10.0%)	52,098 (11.8%)
1984	3,667 (8.8%)	47,033 (10.7%)
1983	3,210 (7.7%)	33,749 (7.7%)
1982	2,411 (5.8%)	22,575 (5.1%)
1981	1,807 (4.3%)	16,978 (3.9%)
1980	1,217 (2.9%)	12,435 (2.8%)
1979	3,205 (7.7%)	22,403 (5.1%)
1978	2,475 (5.9%)	22,159 (5.0%)
PRE-1978	10,194 (24.4%)	65,285 (14.8%)
Unknown	3 (b)	37 (b)
<b>TOTALS</b>	<b>41,768 (100.0%)</b>	<b>440,174 (100.0%)</b>

(a) Includes some 1988 models.

(b) Quantity rounded to zero.

**Table 2.2**  
**Number of Four Year and Older Trucks and Associated Annual Vehicle Miles Traveled (VMT)**  
**by Truck Model Year and Commodity-Carrying Status: 1990 NTACS**

(Trucks in Thousands/Annual VMT in Millions)

Truck Model Year	Commodity-Carrying Status										TOTALS	
	Commodity-Carrying				Non-Commodity-Carrying							
	Short Haul		Long Haul		Business Use		Personal Use		Not In Use		Trucks	Annual VMT
	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT		
1987(a)	558 (7.6%)	13,771 (14.0%)	100 (13.0%)	6,516 (15.8%)	574 (9.0%)	11,892 (17.6%)	2,583 (9.5%)	25,327 (10.9%)	0 (0.0%)	0 (0.0%)	3,815 (9.1%)	57,507 (13.1%)
1986	788 (10.7%)	14,640 (14.9%)	101 (13.2%)	6,976 (16.9%)	1,098 (17.2%)	14,941 (22.2%)	3,614 (13.3%)	51,357 (22.1%)	0 (0.0%)	0 (0.0%)	5,601 (13.4%)	87,914 (20.0%)
1985	660 (9.0%)	13,446 (13.7%)	103 (13.5%)	6,790 (16.4%)	686 (10.7%)	7,122 (10.6%)	2,713 (10.0%)	24,740 (10.6%)	0 (0.0%)	0 (0.0%)	4,163 (10.0%)	52,098 (11.8%)
1984	496 (6.7%)	8,085 (8.2%)	107 (14.0%)	6,434 (15.6%)	584 (9.1%)	6,633 (9.8%)	2,479 (9.1%)	25,881 (11.1%)	0 (0.0%)	0 (0.0%)	3,667 (8.8%)	47,033 (10.7%)
1983	344 (4.7%)	4,092 (4.2%)	39 (5.1%)	1,944 (4.7%)	388 (6.1%)	3,467 (5.1%)	2,437 (9.0%)	24,230 (10.4%)	2 (1.9%)	15 (3.7%)	3,210 (7.7%)	33,749 (7.7%)
1982	487 (6.6%)	7,199 (7.3%)	29 (3.8%)	1,463 (3.5%)	423 (6.6%)	3,277 (4.9%)	1,472 (5.4%)	10,637 (4.6%)	0 (0.0%)	0 (0.0%)	2,411 (5.8%)	22,575 (5.1%)
1981	296 (4.0%)	3,852 (3.9%)	38 (4.9%)	2,065 (5.0%)	357 (5.6%)	2,121 (3.1%)	1,114 (4.1%)	8,939 (3.8%)	2 (2.0%)	1 (0.3%)	1,807 (4.3%)	16,978 (3.9%)
1980	330 (4.5%)	3,913 (4.0%)	45 (5.9%)	1,965 (4.8%)	132 (2.1%)	1,009 (1.5%)	706 (2.6%)	5,538 (2.4%)	3 (2.9%)	10 (2.4%)	1,217 (2.9%)	12,435 (2.8%)
1979	624 (8.5%)	6,638 (6.7%)	51 (6.6%)	2,091 (5.1%)	506 (7.9%)	4,201 (6.2%)	2,017 (7.4%)	9,437 (4.1%)	7 (6.0%)	35 (8.6%)	3,205 (7.7%)	22,403 (5.1%)
1978	469 (6.4%)	5,012 (5.1%)	44 (5.7%)	1,539 (3.7%)	192 (3.0%)	2,425 (3.6%)	1,748 (6.4%)	13,030 (5.6%)	22 (18.3%)	153 (37.3%)	2,475 (5.9%)	22,159 (5.0%)
Pre-1978	2,310 (31.4%)	17,670 (18.0%)	108 (14.2%)	3,507 (8.5%)	1,454 (22.7%)	10,297 (15.3%)	6,240 (23.0%)	33,617 (14.4%)	82 (68.8%)	195 (47.6%)	10,194 (24.4%)	65,285 (14.8%)
Unknown	3 (b)	37 (b)	0 (0.0%)	0 (0.0%)	b (b)	b (b)	b (b)	b (b)	0 (0.0%)	0 (0.0%)	3 (b)	37 (b)
<b>TOTALS</b>	<b>7,365</b> (100.0%)	<b>98,354</b> (100.0%)	<b>766</b> (100.0%)	<b>41,292</b> (100.0%)	<b>6,393</b> (100.0%)	<b>67,385</b> (100.0%)	<b>27,125</b> (100.0%)	<b>232,733</b> (100.0%)	<b>119</b> (100.0%)	<b>410</b> (100.0%)	<b>41,768</b> (100.0%)	<b>440,174</b> (100.0%)

- (a) Includes some 1988 models.
- (b) Quantity rounded to zero.

**Table 2.3**  
**Number of Four Year and Older Trucks and Associated Annual Vehicle Miles Traveled (VMT)**  
**by Truck Model Year and Truck Type: 1990 NTACS**  
(Trucks in Thousands/Annual VMT in Millions)

Truck Model Year	Truck Type										TOTALS	
	Pickup		Utility		Small		Large		Truck-Tractor			
	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT
1987(a)	2,168 (8.8%)	26,767 (12.3%)	1,362 (11.1%)	18,396 (14.9%)	127 (4.5%)	2,190 (8.7%)	76 (7.3%)	3,077 (14.9%)	82 (7.8%)	7,076 (13.3%)	3,815 (9.1%)	57,507 (13.1%)
1986	2,710 (11.0%)	42,334 (19.5%)	2,464 (20.0%)	31,196 (25.2%)	230 (8.1%)	3,281 (13.0%)	83 (7.9%)	2,301 (11.1%)	115 (10.9%)	8,802 (16.5%)	5,601 (13.4%)	87,914 (20.0%)
1985	1,941 (7.9%)	16,460 (7.6%)	1,870 (15.2%)	22,549 (18.2%)	153 (5.4%)	2,228 (8.8%)	79 (7.6%)	2,034 (9.9%)	120 (11.5%)	8,827 (16.6%)	4,163 (10.0%)	52,098 (11.8%)
1984	2,176 (8.9%)	25,058 (11.5%)	1,221 (9.9%)	12,762 (10.3%)	108 (3.8%)	1,714 (6.8%)	75 (7.2%)	2,008 (9.7%)	86 (8.2%)	5,491 (10.3%)	3,667 (8.8%)	47,033 (10.7%)
1983	2,331 (9.5%)	21,977 (10.1%)	704 (5.7%)	6,946 (5.6%)	107 (3.7%)	1,789 (7.1%)	35 (3.3%)	921 (4.5%)	33 (3.2%)	2,116 (4.0%)	3,210 (7.7%)	33,749 (7.7%)
1982	1,770 (7.2%)	13,533 (6.2%)	423 (3.4%)	3,705 (3.0%)	127 (4.5%)	2,017 (8.0%)	39 (3.8%)	862 (4.2%)	51 (4.9%)	2,457 (4.6%)	2,411 (5.8%)	22,575 (5.1%)
1981	1,246 (5.1%)	8,572 (3.9%)	310 (2.5%)	2,848 (2.3%)	114 (4.0%)	1,005 (4.0%)	68 (6.5%)	1,225 (5.9%)	70 (6.6%)	3,330 (6.3%)	1,807 (4.3%)	16,978 (3.9%)
1980	761 (3.1%)	5,558 (2.6%)	205 (1.7%)	1,597 (1.3%)	103 (3.6%)	1,129 (4.5%)	68 (6.6%)	1,077 (5.2%)	79 (7.5%)	3,073 (5.8%)	1,217 (2.9%)	12,435 (2.8%)
1979	1,813 (7.4%)	10,890 (5.0%)	1,006 (8.2%)	5,091 (4.1%)	224 (7.9%)	1,657 (6.6%)	82 (7.9%)	1,584 (7.7%)	80 (7.6%)	3,181 (6.0%)	3,205 (7.7%)	22,403 (5.1%)
1978	1,644 (6.7%)	12,008 (5.5%)	567 (4.6%)	5,455 (4.4%)	138 (4.9%)	1,093 (4.3%)	66 (6.4%)	1,425 (6.9%)	59 (5.6%)	2,179 (4.1%)	2,475 (5.9%)	22,159 (5.0%)
Pre-1978	5,978 (24.4%)	34,265 (15.8%)	2,158 (17.6%)	13,071 (10.6%)	1,415 (49.7%)	7,184 (28.4%)	369 (35.3%)	4,101 (19.9%)	275 (26.2%)	6,665 (12.5%)	10,194 (24.4%)	65,285 (14.8%)
Unknown	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	b (b)	1 (b)	3 (0.3%)	35 (0.2%)	b (b)	2 (b)	3 (b)	37 (b)
<b>TOTALS</b>	<b>24,537</b> <b>(100.0%)</b>	<b>217,420</b> <b>(100.0%)</b>	<b>12,290</b> <b>(100.0%)</b>	<b>123,617</b> <b>(100.0%)</b>	<b>2,847</b> <b>(100.0%)</b>	<b>25,287</b> <b>(100.0%)</b>	<b>1,044</b> <b>(100.0%)</b>	<b>20,650</b> <b>(100.0%)</b>	<b>1,050</b> <b>(100.0%)</b>	<b>53,199</b> <b>(100.0%)</b>	<b>41,768</b> <b>(100.0%)</b>	<b>440,174</b> <b>(100.0%)</b>

(a) Includes some 1988 models.  
(b) Quantity rounded to zero.

**Table 24**  
**Number of Four Year and Older Trucks and Associated Annual Vehicle Miles Traveled (VMT)**  
**by Commodity-Carrying Status and Truck Type: 1990 NTACS**

(Trucks in Thousands/Annual VMT in Millions)

Commodity-Carrying Status	Truck Type										TOTALS	
	Pickup		Utility		Small		Large		Truck-Tractor		Trucks	Annual VMT
	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT		
Commodity-Carrying												
-Short Haul	2,948 (12.0%)	28,482 (13.1%)	1,247 (10.1%)	16,652 (13.5%)	1,805 (63.4%)	18,929 (74.9%)	777 (74.4%)	14,089 (68.2%)	588 (56.0%)	20,203 (38.0%)	7,365 (17.6%)	98,354 (22.3%)
-Long Haul	115 (0.5%)	2,516 (1.2%)	103 (0.8%)	1,435 (1.2%)	58 (2.0%)	642 (2.5%)	105 (10.0%)	5,038 (24.4%)	385 (366%)	31,662 (59.5%)	766 (1.8%)	41,292 (9.4%)
Non-Commodity-Carrying												
-Business Use	3,664 (14.9%)	40,111 (18.4%)	1,966 (16.0%)	20,609 (147%)	599 (21.0%)	4,102 (162%)	104 (10.0%)	1,329 (64%)	60 (5.8%)	1,234 (23%)	6,393 (15.3%)	67,385 (15.3%)
-Personal Use	17,765 (724%)	146,142 (67.2%)	8,963 (72.9%)	84,880 (68.7%)	332 (11.7%)	1,473 (5.8%)	54 (5.1%)	177 (0.9%)	11 (1.1%)	62 (0.1%)	27,125 (64.9%)	232,733 (52.9%)
-Not In Use	45 (0.2%)	170 (0.2%)	10 (0.1%)	41 (a)	53 (1.9%)	142 (0.6%)	5 (0.5%)	17 (0.1%)	6 (0.5%)	39 (0.1%)	119 (0.3%)	410 (0.1%)
<b>TOTALS</b>	<b>24,537</b> (100.0%)	<b>217,420</b> (100.0%)	<b>12,290</b> (100.0%)	<b>123,617</b> (100.0%)	<b>2,847</b> (100.0%)	<b>25,287</b> (100.0%)	<b>1,044</b> (100.0%)	<b>20,650</b> (100.0%)	<b>1,050</b> (100.0%)	<b>53,199</b> (100.0%)	<b>41,768</b> (100.0%)	<b>440,174</b> (100.0%)

(a) Quantity rounded to zero.

**Table 2.5**  
**Number of Four Year and Older Trucks and Associated Annual Vehicle Miles Traveled (VMT)**  
**by Truck Description and Commodity-Carrying Status: 1990 NTACS**

(Trucks in Thousands/Annual VMT in Millions)

Truck Description	Commodity-Carrying Status										TOTALS	
	Commodity-Carrying				Non-Commodity-Carrying							
	Short Haul		Long Haul		Business Use		Personal Use		Not In Use		Trucks	Annual VMT
Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	
<b>Straight Truck</b>												
-With 4 Tires Without Trailer	4,000 (54.3%)	44,451 (45.2%)	197 (25.7%)	3,937 (9.5%)	5,356 (83.8%)	56,499 (83.8%)	25,471 (93.9%)	220,104 (94.6%)	73 (61.7%)	275 (67.1%)	35,097 (84%)	325,266 (73.9%)
-With 4 Tires With Trailer(s)	123 (1.7%)	2,425 (2.5%)	8 (1.0%)	236 (0.6%)	201 (3.1%)	1,222 (1.8%)	832 (3.1%)	6,146 (2.6%)	0 (0.0%)	0 (0.0%)	1,163 (2.8%)	10,029 (2.3%)
-With 6 or More Tires Without Trailer	2,246 (30.5%)	26,760 (27.2%)	79 (10.4%)	1,848 (4.5%)	518 (8.1%)	4,084 (6.1%)	170 (0.6%)	821 (0.4%)	35 (29.7%)	92 (22.4%)	3,050 (7.3%)	33,605 (7.6%)
-With 6 or More Tires With Trailer(s)	208 (2.8%)	2,843 (2.9%)	34 (4.5%)	868 (2.1%)	102 (1.6%)	1,628 (2.4%)	10 (a)	80 (a)	1 (0.6%)	a (a)	355 (0.9%)	5,419 (1.2%)
<b>Truck-Tractor</b>												
-With Trailer(s)	508 (6.9%)	19,136 (19.5%)	418 (54.6%)	34,061 (82.5%)	35 (0.5%)	2,172 (3.2%)	a (a)	1 (a)	5 (4.2%)	38 (9.2%)	966 (2.3%)	55,408 (12.6%)
-Without Trailer	14 (0.2%)	396 (0.4%)	3 (0.4%)	120 (0.3%)	1 (a)	4 (a)	0 (0.0%)	0 (0.0%)	a (0.3%)	a (a)	18 (a)	520 (0.1%)
Other	128 (1.7%)	1,346 (1.4%)	17 (2.3%)	105 (0.3%)	137 (2.1%)	1,358 (2.0%)	325 (1.2%)	3,379 (1.5%)	3 (2.3%)	5 (1.2%)	610 (1.5%)	6,194 (1.4%)
Unknown	138 (1.9%)	998 (1.0%)	9 (1.1%)	117 (0.3%)	43 (0.7%)	418 (0.6%)	317 (1.2%)	2,200 (0.9%)	1 (1.2%)	a (a)	508 (1.2%)	3,733 (0.8%)
<b>TOTALS</b>	<b>7,365</b> (100.0%)	<b>98,354</b> (100.0%)	<b>766</b> (100.0%)	<b>41,292</b> (100.0%)	<b>6,393</b> (100.0%)	<b>67,385</b> (100.0%)	<b>27,125</b> (100.0%)	<b>232,733</b> (100.0%)	<b>119</b> (100.0%)	<b>410</b> (100.0%)	<b>41,768</b> (100.0%)	<b>440,174</b> (100.0%)

(a) Quantity rounded to zero.

**Table 2.6**  
**Number of Four Year and Older Trucks and Associated Annual Vehicle Miles Traveled (VMT)**  
**by Truck Description and Major Use: 1990 NTACS**

(Trucks in Thousands/Annual VMT in Millions)

Truck Description	Major Use										TOTALS	
	Personal Transportation		Contract Carrier		Common Carrier		Other Business Use		Unknown		Trucks	Annual VMT
	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT		
Straight Truck												
-With 4 Tires Without Trailer	29,909 (94.6%)	262,736 (95.7%)	228 (34.7%)	2,773 (12.7%)	470 (33.1%)	7,754 (18.3%)	4,171 (56.8%)	51,576 (52.8%)	319 (43.1%)	427 (11.0%)	35,097 (84.0%)	325,266 (73.9%)
-With 4 Tires With Trailer(s)	882 (2.8%)	5,334 (1.9%)	1 (0.2%)	48 (0.2%)	17 (1.2%)	847 (2.0%)	262 (3.6%)	3,774 (3.9%)	1 (0.1%)	26 (0.7%)	1,163 (2.8%)	10,029 (2.3%)
-With 6 or More Tires Without Trailer	279 (0.9%)	1,581 (0.6%)	157 (23.9%)	2,913 (13.3%)	467 (32.9%)	7,069 (16.7%)	2,115 (28.8%)	21,815 (22.3%)	32 (4.3%)	227 (5.8%)	3,050 (7.3%)	33,605 (7.6%)
-With 6 or More Tires With Trailer(s)	33 (0.1%)	167 (0.1%)	20 (3.1%)	1,005 (4.6%)	63 (4.5%)	1,400 (3.3%)	237 (3.2%)	2,814 (2.9%)	2 (0.2%)	33 (0.8%)	355 (0.9%)	5,419 (1.2%)
Truck-Tractor												
-With Trailer(s)	0 (0.0%)	0 (0.0%)	210 (32.0%)	14,396 (65.9%)	384 (27.0%)	24,773 (58.6%)	364 (5.0%)	15,757 (16.1%)	8 (1.1%)	482 (12.4%)	966 (2.3%)	55,408 (12.6%)
-Without Trailer	a (a)	1 (a)	3 (0.5%)	57 (0.3%)	7 (0.5%)	297 (0.7%)	7 (0.1%)	135 (0.1%)	a (0.1%)	29 (0.8%)	18 (a)	520 (0.1%)
Other	407 (1.3%)	4,143 (1.5%)	13 (2.0%)	196 (0.9%)	11 (0.8%)	99 (0.2%)	180 (2.4%)	1,753 (1.8%)	1 (0.1%)	4 (0.1%)	610 (1.5%)	6,194 (1.4%)
Unknown	95 (0.3%)	553 (0.2%)	24 (3.7%)	470 (2.2%)	1 (a)	28 (0.1%)	10 (0.1%)	20 (a)	377 (50.9%)	2,662 (68.4%)	508 (1.2%)	3,733 (0.8%)
<b>TOTALS</b>	<b>31,605 (100.0%)</b>	<b>274,515 (100.0%)</b>	<b>656 (100.0%)</b>	<b>21,859 (100.0%)</b>	<b>1,419 (100.0%)</b>	<b>42,267 (100.0%)</b>	<b>7,347 (100.0%)</b>	<b>97,645 (100.0%)</b>	<b>741 (100.0%)</b>	<b>3,890 (100.0%)</b>	<b>41,768 (100.0%)</b>	<b>440,174 (100.0%)</b>

(a) Quantity rounded to zero.

**Table 2.7**  
**Number of Four Year and Older Trucks and Associated Annual Vehicle Miles Traveled (VMT)**  
**by Truck Configuration: 1990 NTACS**  
(Trucks in Thousands/Annual VMT in Millions)

Truck Configuration	Trucks		Annual VMT	
No Trailers Pulled .....	35,925	(86.0%)	336,180	(76.4%)
<b>Straight Truck Only, Utility Trailer or Trailer Less Than 20 Feet Long</b>				
- One Axle on Trailer Pulled .....	1,670	(4.0%)	23,661	(5.4%)
- Two Axles on Trailer Pulled .....	1,370	(3.3%)	10,938	(2.5%)
- Three Axles on Trailer Pulled .....	56	(0.1%)	1,374	(0.3%)
<b>Straight Truck Only, Full Trailer</b>				
- Two Axles on Trailer Pulled .....	188	(0.5%)	2,585	(0.6%)
- Three Axles on Trailer Pulled .....	8	(a)	101	(a)
- Four Axles on Trailer Pulled .....	1	(a)	125	(a)
<b>Semi-Trailer</b>				
- One Axle on Trailer Pulled .....	84	(0.2%)	2,311	(0.5%)
- Two Axles on Trailer Pulled .....	754	(1.8%)	42,575	(9.7%)
- Three Axles on Trailer Pulled .....	43	(0.1%)	2,262	(0.5%)
<b>Two Trailers, One Semi- and One Full</b>				
- Total of Three Axles on Two Trailers Pulled .....	35	(0.1%)	3,652	(0.8%)
- Total of Four Axles on Two Trailers Pulled .....	7	(a)	521	(0.1%)
<b>Two or Three Trailers, One Semi- and One Full or One Semi- and Two Full</b>				
- Five Axles on Two or Three Trailers Pulled .....	6	(a)	623	(0.1%)
- Six or More Axles on All Trailers Pulled .....	6	(a)	299	(0.1%)
Unkown .....	1,614	(3.9%)	12,966	(2.9%)
<b>TOTALS</b>	<b>41,768</b>	<b>(100.0%)</b>	<b>440,174</b>	<b>(100.0%)</b>

(a) Quantity rounded to zero.

**Table 2.8**  
**Number of Four Year and Older Trucks and Associated Annual Vehicle Miles Traveled (VMT)**  
**by Truck Body Type: 1990 NTACS**

(Trucks in Thousands/Annual VMT in Millions)

Truck Body Type	Trucks		Annual VMT	
Platform Types - Flatbeds, Stakes, Flatbeds with Added Devices, and Low Boys (Goosenecks) .....	1,379	(3.3%)	18,213	(4.1%)
Pickup .....	23,186	(55.5%)	213,311	(48.5%)
Panel or Compact Van .....	2,907	(7.0%)	35,240	(8.0%)
Mini-Van, Utility, Station Wagon (Bronco, Blazer, Jeep, Etc.) .....	6,191	(14.8%)	58,447	(13.3%)
Van Types - Enclosed Vans, Open Top Vans, Drop Frame Vans, Refrigerated, Nonrefrigerated, Multistop, and High Cubes .....	2,687	(6.4%)	53,347	(12.1%)
<b>SPECIALIZED USE TRUCKS</b>				
Automobile or Boat Transport .....	682	(1.6%)	6,981	(1.6%)
Beverage Truck .....	127	(0.3%)	2,425	(0.6%)
Removable Dry Container on Trailer Chassis .....	23	(0.1%)	810	(0.2%)
Removable Liquid Container on Trailer Chassis .....	4	(a)	60	(a)
Other Cargo Container Chassis .....	165	(0.4%)	2,540	(0.6%)
Concrete Mixer .....	85	(0.2%)	1,066	(0.2%)
Dump Truck .....	699	(1.7%)	9,279	(2.1%)
Grain Bodies (Including Hoppers, Grain Boxes) .....	355	(0.8%)	2,707	(0.6%)
Garbage Truck .....	56	(0.1%)	1,149	(0.3%)
Livestock Truck, Including Livestock Drop Frame .....	198	(0.5%)	3,316	(0.8%)
Pole, Logging, or Pipe Truck .....	73	(0.2%)	1,961	(0.4%)
Tank Truck for Dry Bulk .....	43	(0.1%)	1,923	(0.4%)
Tank Truck for Liquids or Gases				
- Nonhazardous Materials .....	115	(0.3%)	3,332	(0.8%)
- Hazardous Materials .....	131	(0.3%)	4,235	(1.0%)
Utility Truck .....	700	(1.7%)	5,394	(1.2%)
Other .....	902	(2.2%)	7,829	(1.8%)
Unkown .....	1,059	(2.5%)	6,611	(1.5%)
<b>TOTALS</b>	<b>41,768</b>	<b>(100.0%)</b>	<b>440,174</b>	<b>(100.0%)</b>

(a) Quantity rounded to zero.

**Table 2.9**  
**Number of Four Year and Older Trucks and Associated Annual Vehicle Miles Traveled (VMT)**  
**by Number of States Operated In and Census Region: 1990 NTACS**  
(Trucks in Thousands/Annual VMT in Millions)

Number of States Operated In	Census Regions								TOTALS	
	Northeast		Midwest		South		West			
	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT
Less Than 3	4,171 (75.9%)	34,656 (60.5%)	8,140 (77.6%)	77,854 (63.7%)	12,354 (80.8%)	114,079 (69.1%)	9,283 (88.5%)	78,071 (81.7%)	33,947 (81.3%)	304,660 (69.2%)
3 - 5	856 (15.6%)	10,304 (18.0%)	1,611 (15.4%)	26,593 (21.8%)	2,213 (14.5%)	33,957 (20.6%)	765 (7.3%)	10,291 (10.8%)	5,444 (13.0%)	81,145 (18.4%)
6 - 9	308 (5.6%)	7,510 (13.1%)	239 (2.3%)	5,178 (4.2%)	523 (3.4%)	10,290 (6.2%)	304 (2.9%)	4,633 (4.8%)	1,375 (3.3%)	27,612 (6.3%)
10 - 24	114 (2.1%)	4,136 (7.2%)	232 (2.2%)	6,623 (5.4%)	157 (1.0%)	3,972 (2.4%)	20 (0.2%)	649 (0.7%)	523 (1.3%)	15,380 (3.5%)
25 - 40	3 (a)	229 (0.4%)	33 (0.3%)	4,029 (3.3%)	17 (0.1%)	1,940 (1.2%)	2 (a)	233 (0.2%)	55 (0.1%)	6,431 (1.5%)
41 or More	1 (a)	149 (0.3%)	11 (0.1%)	1,191 (1.0%)	5 (a)	547 (0.3%)	6 (0.1%)	990 (1.0%)	24 (0.1%)	2,877 (0.7%)
Unknown	40 (0.7%)	286 (0.5%)	222 (2.1%)	754 (0.6%)	26 (0.2%)	331 (0.2%)	111 (1.1%)	699 (0.7%)	398 (1.0%)	2,070 (0.5%)
<b>TOTALS</b>	<b>5,493</b> <b>(100.0%)</b>	<b>57,270</b> <b>(100.0%)</b>	<b>10,489</b> <b>(100.0%)</b>	<b>122,222</b> <b>(100.0%)</b>	<b>15,295</b> <b>(100.0%)</b>	<b>165,116</b> <b>(100.0%)</b>	<b>10,491</b> <b>(100.0%)</b>	<b>95,566</b> <b>(100.0%)</b>	<b>41,768</b> <b>(100.0%)</b>	<b>440,174</b> <b>(100.0%)</b>

(a) Quantity rounded to zero.

**Table 2.10**  
**Number of Four Year and Older Trucks and Associated Annual Vehicle Miles Traveled (VMT)**  
**by Number of States Operated In and Commodity-Carrying Status: 1990 NTACS**  
 (Trucks in Thousands/Annual VMT in Millions)

Number of States Operated In	Commodity-Carrying Status										TOTALS	
	Commodity-Carrying				Non-Commodity-Carrying							
	Short Haul		Long Haul		Business Use		Personal Use		Not In Use		Trucks	Annual VMT
	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT		
Less Than 3	6,744 (91.6%)	81,997 (83.4%)	286 (37.4%)	8,015 (19.4%)	5,511 (86.2%)	53,496 (79.4%)	21,295 (78.5%)	160,767 (69.1%)	111 (93.8%)	384 (93.8%)	33,947 (81.3%)	304,660 (69.2%)
3 - 5	481 (6.5%)	12,456 (12.7%)	190 (24.8%)	9,322 (22.6%)	682 (10.7%)	10,454 (15.5%)	4,092 (15.1%)	48,912 (21.0%)	0 (0.0%)	0 (0.0%)	5,444 (13.0%)	81,145 (18.4%)
6 - 9	54 (0.7%)	1,595 (1.6%)	109 (14.2%)	6,621 (16.0%)	95 (1.5%)	2,060 (3.1%)	1,117 (4.1%)	17,335 (7.4%)	0 (0.0%)	0 (0.0%)	1,375 (3.3%)	27,612 (6.3%)
10 - 24	24 (0.3%)	1,063 (1.1%)	99 (13.0%)	8,212 (19.9%)	67 (1.1%)	1,035 (1.5%)	333 (1.2%)	5,070 (2.2%)	0 (0.0%)	0 (0.0%)	523 (1.3%)	15,380 (3.5%)
25 - 40	4 (0.1%)	514 (0.5%)	51 (6.7%)	5,917 (14.3%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	55 (0.1%)	6,431 (1.5%)
41 or More	a (a)	40 (a)	23 (3.0%)	2,837 (6.9%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	24 (0.1%)	2,877 (0.7%)
Unknown	58 (0.8%)	689 (0.7%)	7 (0.9%)	366 (0.9%)	38 (0.6%)	340 (0.5%)	288 (1.1%)	648 (0.3%)	7 (6.2%)	26 (6.2%)	398 (1.0%)	2,070 (0.5%)
<b>TOTALS</b>	<b>7,365</b> (100.0%)	<b>98,354</b> (100.0%)	<b>766</b> (100.0%)	<b>41,292</b> (100.0%)	<b>6,393</b> (100.0%)	<b>67,385</b> (100.0%)	<b>27,125</b> (100.0%)	<b>232,733</b> (100.0%)	<b>119</b> (100.0%)	<b>410</b> (100.0%)	<b>41,768</b> (100.0%)	<b>440,174</b> (100.0%)

(a) Quantity rounded to zero.

**Table 2.11**  
**Number of Four Year and Older Trucks and Associated Annual Vehicle Miles Traveled (VMT)**  
**by Number of States Operated In and Truck Type: 1990 NTACS**  
(Trucks in Thousands/Annual VMT in Millions)

Number of States Operated In	Truck Type										TOTALS	
	Pickup		Utility		Small		Large		Truck-Tractor		Trucks	Annual VMT
	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT		
Less Than 3	20,910 (85.2%)	168,120 (77.3%)	8,808 (71.7%)	79,196 (64.1%)	2,673 (93.9%)	22,898 (90.5%)	912 (87.4%)	14,809 (71.7%)	644 (61.4%)	19,637 (36.9%)	33,947 (81.3%)	304,660 (69.2%)
3 - 5	2,766 (11.3%)	35,778 (16.5%)	2,284 (18.6%)	28,846 (23.3%)	131 (4.6%)	2,125 (8.4%)	91 (8.7%)	3,173 (15.4%)	172 (16.4%)	11,224 (21.1%)	5,444 (13.0%)	81,145 (18.4%)
6 - 9	569 (2.3%)	12,345 (5.7%)	715 (5.8%)	9,223 (7.5%)	13 (0.4%)	118 (0.5%)	18 (1.8%)	1,397 (6.8%)	60 (5.8%)	4,529 (8.5%)	1,375 (3.3%)	27,612 (6.3%)
10 - 24	7 (0.0%)	31 (0.0%)	407 (3.3%)	5,933 (4.8%)	4 (0.1%)	51 (0.2%)	11 (1.0%)	572 (2.8%)	94 (9.0%)	8,794 (16.5%)	523 (1.3%)	15,380 (3.5%)
25 - 40	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	5 (0.4%)	493 (2.4%)	51 (4.8%)	5,939 (11.2%)	55 (0.1%)	6,431 (1.5%)
41 or More	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (0.1%)	123 (0.6%)	22 (2.1%)	2,755 (5.2%)	24 (0.1%)	2,877 (0.7%)
Unknown	285 (1.2%)	1,147 (0.5%)	77 (0.6%)	419 (0.3%)	25 (0.9%)	97 (0.4%)	6 (0.5%)	85 (0.4%)	6 (0.6%)	322 (0.6%)	398 (1.0%)	2,070 (0.5%)
<b>TOTALS</b>	<b>24,537</b> <b>(100.0%)</b>	<b>217,420</b> <b>(100.0%)</b>	<b>12,290</b> <b>(100.0%)</b>	<b>123,617</b> <b>(100.0%)</b>	<b>2,847</b> <b>(100.0%)</b>	<b>25,287</b> <b>(100.0%)</b>	<b>1,044</b> <b>(100.0%)</b>	<b>20,650</b> <b>(100.0%)</b>	<b>1,050</b> <b>(100.0%)</b>	<b>53,199</b> <b>(100.0%)</b>	<b>41,768</b> <b>(100.0%)</b>	<b>440,174</b> <b>(100.0%)</b>

**Table 2.12**  
**Number of Four Year and Older Trucks and Associated Annual Vehicle Miles Traveled (VMT)**  
**by Number of States Operated In and Major Use: 1990 NTACS**  
(Trucks in Thousands/Annual VMT in Millions)

Number of States Operated In	Major Use										TOTALS	
	Personal Transportation		Contract Carrier		Common Carrier		Other Business Use		Unknown		Trucks	Annual VMT
	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT		
Less Than 3	25,157 (79.6%)	193,308 (70.4%)	467 (71.2%)	11,193 (51.2%)	1,121 (79.0%)	21,257 (50.3%)	6,650 (90.5%)	76,917 (78.8%)	553 (74.7%)	1,985 (51.0%)	33,947 (81.3%)	304,660 (69.2%)
3 - 5	4,601 (14.6%)	54,961 (20.0%)	54 (8.2%)	3,017 (13.8%)	160 (11.3%)	7,236 (17.1%)	542 (7.4%)	14,378 (14.7%)	88 (11.8%)	1,553 (39.9%)	5,444 (13.0%)	81,145 (18.4%)
6 - 9	1,173 (3.7%)	19,360 (7.1%)	56 (8.6%)	1,602 (7.3%)	36 (2.6%)	2,912 (6.9%)	102 (1.4%)	3,718 (3.8%)	8 (1.0%)	19 (0.5%)	1,375 (3.3%)	27,612 (6.3%)
10 - 24	408 (1.3%)	5,913 (2.2%)	37 (5.6%)	3,444 (15.8%)	42 (3.0%)	3,973 (9.4%)	34 (0.5%)	1,986 (2.0%)	3 (0.4%)	65 (1.7%)	523 (1.3%)	15,380 (3.5%)
25 - 40	0 (0.0%)	0 (0.0%)	11 (1.7%)	1,488 (6.8%)	41 (2.9%)	4,652 (11.0%)	2 (a)	268 (0.3%)	a (a)	24 (0.6%)	55 (0.1%)	6,431 (1.5%)
41 or More	0 (0.0%)	0 (0.0%)	5 (0.8%)	570 (2.6%)	16 (1.2%)	2,118 (5.0%)	2 (a)	174 (0.2%)	a (a)	16 (0.4%)	24 (0.1%)	2,877 (0.7%)
Unknown	266 (0.8%)	973 (0.4%)	26 (3.9%)	545 (2.5%)	2 (0.1%)	119 (0.3%)	15 (0.2%)	204 (0.2%)	89 (12.0%)	228 (5.9%)	398 (1.0%)	2,070 (0.5%)
<b>TOTALS</b>	<b>31,605</b> (100.0%)	<b>274,515</b> (100.0%)	<b>656</b> (100.0%)	<b>21,859</b> (100.0%)	<b>1,419</b> (100.0%)	<b>42,267</b> (100.0%)	<b>7,347</b> (100.0%)	<b>97,645</b> (100.0%)	<b>741</b> (100.0%)	<b>3,890</b> (100.0%)	<b>41,768</b> (100.0%)	<b>440,174</b> (100.0%)

(a) Quantity rounded to zero.

**Table 2.13**  
**Number of Four Year and Older Trucks and Associated Annual Vehicle Miles Traveled (VMT)**  
**by Number of Weeks Operated and Commodity-Carrying Status: 1990 NTACS**  
**(Trucks in Thousands/Annual VMT in Millions)**

Number of Weeks Operated	Commodity-Carrying Status										TOTALS	
	Commodity-Carrying				Non-Commodity-Carrying							
	Short Haul		Long Haul		Business Use		Personal Use		Not In Use		Trucks	Annual VMT
	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT		
0	26 (0.4%)	a (a)	2 (0.3%)	a (a)	4 (0.1%)	a (a)	133 (0.5%)	a (a)	0 (0.0%)	0 (0.0%)	165 (0.4%)	a (a)
1 - 4	358 (4.9%)	130 (0.1%)	9 (1.2%)	11 (a)	188 (2.9%)	72 (0.1%)	1,306 (4.8%)	470 (0.2%)	6 (5.1%)	a (a)	1,866 (4.5%)	682 (0.2%)
5 - 8	198 (2.7%)	239 (0.2%)	11 (1.5%)	60 (0.1%)	78 (1.2%)	43 (0.1%)	458 (1.7%)	235 (0.1%)	13 (10.8%)	5 (1.2%)	758 (1.8%)	582 (0.1%)
9 - 12	261 (3.5%)	653 (0.7%)	8 (1.0%)	60 (0.1%)	220 (3.4%)	323 (0.5%)	631 (2.3%)	1,805 (0.8%)	0 (0.0%)	0 (0.0%)	1,119 (2.7%)	2,841 (0.6%)
13 - 16	115 (1.6%)	264 (0.3%)	15 (2.0%)	79 (0.2%)	47 (0.7%)	169 (0.3%)	213 (0.8%)	1,249 (0.5%)	13 (10.8%)	7 (1.7%)	403 (1.0%)	1,767 (0.4%)
17 - 20	183 (2.5%)	604 (0.6%)	11 (1.4%)	120 (0.3%)	66 (1.0%)	341 (0.5%)	754 (2.8%)	2,164 (0.9%)	a (0.3%)	0 (0.0%)	1,015 (2.4%)	3,229 (0.7%)
21 - 24	92 (1.2%)	411 (0.4%)	6 (0.8%)	104 (0.3%)	56 (0.9%)	302 (0.4%)	129 (0.5%)	2,263 (1.0%)	0 (0.0%)	0 (0.0%)	283 (0.7%)	3,079 (0.7%)
25 - 28	163 (2.2%)	956 (1.0%)	22 (2.8%)	316 (0.8%)	60 (0.9%)	205 (0.3%)	828 (3.1%)	2,543 (1.1%)	1 (0.5%)	9 (2.2%)	1,074 (2.6%)	4,029 (0.9%)
29 - 32	200 (2.7%)	1,484 (1.5%)	16 (2.1%)	543 (1.3%)	217 (3.4%)	1,044 (1.5%)	359 (1.3%)	2,647 (1.1%)	2 (1.5%)	14 (3.3%)	794 (1.9%)	5,731 (1.3%)
33 - 36	164 (2.2%)	1,272 (1.3%)	20 (2.6%)	403 (1.0%)	251 (3.9%)	1,529 (2.3%)	76 (0.3%)	360 (0.2%)	10 (8.1%)	17 (4.2%)	521 (1.2%)	3,581 (0.8%)
37 - 40	318 (4.3%)	3,466 (3.5%)	56 (7.3%)	1,457 (3.5%)	288 (4.5%)	2,415 (3.6%)	403 (1.5%)	2,355 (1.0%)	a (0.3%)	5 (1.3%)	1,065 (2.6%)	9,697 (2.2%)
41 - 44	123 (1.7%)	2,526 (2.6%)	12 (1.5%)	630 (1.5%)	64 (1.0%)	791 (1.2%)	509 (1.9%)	4,013 (1.7%)	1 (1.0%)	1 (0.4%)	708 (1.7%)	7,961 (1.8%)
45 - 48	348 (4.7%)	6,051 (6.2%)	56 (7.3%)	3,709 (9.0%)	322 (5.0%)	4,690 (7.0%)	1,167 (4.3%)	15,106 (6.5%)	10 (8.3%)	55 (13.4%)	1,903 (4.6%)	29,610 (6.7%)
49 - 50	612 (8.3%)	10,001 (10.2%)	116 (15.2%)	7,469 (18.1%)	731 (11.4%)	8,083 (12.0%)	1,525 (5.6%)	13,888 (6.0%)	9 (7.3%)	52 (12.8%)	2,993 (7.2%)	39,493 (9.0%)
51	120 (1.6%)	2,672 (2.7%)	15 (2.0%)	1,448 (3.5%)	63 (1.0%)	1,021 (1.5%)	138 (0.5%)	2,617 (1.1%)	0 (0.0%)	0 (0.0%)	336 (0.8%)	7,759 (1.8%)
52	4,084 (55.5%)	67,627 (68.8%)	390 (51.0%)	24,884 (60.3%)	3,740 (58.5%)	46,359 (68.8%)	18,495 (68.2%)	181,020 (77.8%)	54 (45.8%)	244 (59.5%)	26,764 (64.1%)	320,133 (72.7%)
<b>TOTALS</b>	<b>7,365</b> <b>(100.0%)</b>	<b>98,354</b> <b>(100.0%)</b>	<b>766</b> <b>(100.0%)</b>	<b>41,292</b> <b>(100.0%)</b>	<b>6,393</b> <b>(100.0%)</b>	<b>67,385</b> <b>(100.0%)</b>	<b>27,125</b> <b>(100.0%)</b>	<b>232,733</b> <b>(100.0%)</b>	<b>119</b> <b>(100.0%)</b>	<b>410</b> <b>(100.0%)</b>	<b>41,768</b> <b>(100.0%)</b>	<b>440,174</b> <b>(100.0%)</b>

(a) Quantity rounded to zero.

**Table 2.14**  
**Number of Four Year and Older Trucks and Associated Annual Vehicle Miles Traveled (VMT)**  
**by Number of Weeks Operated and Truck Type: 1990 NTACS**  
(Trucks in Thousands/Annual VMT in Millions)

Number of Weeks Operated	Truck Type										TOTALS	
	Pickup		Utility		Small		Large		Truck-Tractor			
	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT
0	65 (0.3%)	a (a)	82 (0.7%)	a (a)	8 (0.3%)	a (a)	8 (0.8%)	a (a)	2 (0.2%)	a (a)	165 (0.4%)	a (a)
1 - 4	1,223 (5.0%)	337 (0.2%)	328 (2.7%)	201 (0.2%)	251 (8.8%)	93 (0.4%)	48 (4.6%)	20 (0.1%)	17 (1.6%)	31 (0.1%)	1,866 (4.5%)	682 (0.2%)
5 - 8	433 (1.8%)	170 (0.1%)	75 (0.6%)	131 (0.1%)	180 (6.3%)	153 (0.6%)	41 (4.0%)	52 (0.2%)	29 (2.8%)	77 (0.1%)	758 (1.8%)	582 (0.1%)
9 - 12	701 (2.9%)	1,709 (0.8%)	178 (1.4%)	478 (0.4%)	176 (6.2%)	320 (1.3%)	34 (3.2%)	96 (0.5%)	31 (3.0%)	237 (0.4%)	1,119 (2.7%)	2,841 (0.6%)
13 - 16	137 (0.6%)	802 (0.4%)	168 (1.4%)	624 (0.5%)	64 (2.2%)	169 (0.7%)	25 (2.4%)	77 (0.4%)	9 (0.8%)	95 (0.2%)	403 (1.0%)	1,767 (0.4%)
17 - 20	756 (3.1%)	2,099 (1.0%)	130 (1.1%)	491 (0.4%)	81 (2.8%)	167 (0.7%)	28 (2.6%)	256 (1.2%)	20 (1.9%)	215 (0.4%)	1,015 (2.4%)	3,229 (0.7%)
21 - 24	124 (0.5%)	2,197 (1.0%)	91 (0.7%)	351 (0.3%)	42 (1.5%)	246 (1.0%)	14 (1.3%)	112 (0.5%)	12 (1.2%)	174 (0.3%)	283 (0.7%)	3,079 (0.7%)
25 - 28	568 (2.3%)	1,566 (0.7%)	337 (2.7%)	1,294 (1.0%)	105 (3.7%)	389 (1.5%)	35 (3.4%)	292 (1.4%)	29 (2.7%)	488 (0.9%)	1,074 (2.6%)	4,029 (0.9%)
29 - 32	510 (2.1%)	1,890 (0.9%)	119 (1.0%)	2,003 (1.6%)	85 (3.0%)	454 (1.8%)	45 (4.3%)	660 (3.2%)	36 (3.4%)	724 (1.4%)	794 (1.9%)	5,731 (1.3%)
33 - 36	203 (0.8%)	798 (0.4%)	188 (1.5%)	1,132 (0.9%)	80 (2.8%)	558 (2.2%)	29 (2.7%)	405 (2.0%)	21 (2.0%)	688 (1.3%)	521 (1.2%)	3,581 (0.8%)
37 - 40	601 (2.4%)	3,713 (1.7%)	193 (1.6%)	1,524 (1.2%)	152 (5.3%)	1,379 (5.5%)	63 (6.0%)	993 (4.8%)	57 (5.4%)	2,088 (3.9%)	1,065 (2.6%)	9,697 (2.2%)
41 - 44	572 (2.3%)	4,798 (2.2%)	61 (0.5%)	960 (0.8%)	34 (1.2%)	885 (3.5%)	21 (2.0%)	388 (1.9%)	20 (1.9%)	929 (1.7%)	708 (1.7%)	7,961 (1.8%)
45 - 48	1,229 (5.0%)	16,950 (7.8%)	379 (3.1%)	4,090 (3.3%)	136 (4.8%)	1,313 (5.2%)	69 (6.7%)	1,597 (7.7%)	90 (8.5%)	5,660 (10.6%)	1,903 (4.6%)	29,610 (6.7%)
49 - 50	1,504 (6.1%)	16,348 (7.5%)	1,027 (8.4%)	8,677 (7.0%)	235 (8.2%)	2,547 (10.1%)	89 (8.6%)	2,640 (12.8%)	138 (13.2%)	9,281 (17.4%)	2,993 (7.2%)	39,493 (9.0%)
51	161 (0.7%)	3,447 (1.6%)	78 (0.6%)	467 (0.4%)	50 (1.7%)	1,056 (4.2%)	23 (2.2%)	886 (4.3%)	24 (2.3%)	1,902 (3.6%)	336 (0.8%)	7,759 (1.8%)
52	15,751 (64.2%)	160,597 (73.9%)	8,857 (72.1%)	101,193 (81.9%)	1,169 (41.1%)	15,559 (61.5%)	473 (45.3%)	12,174 (59.0%)	515 (49.0%)	30,611 (57.5%)	26,764 (64.1%)	320,133 (72.7%)
<b>TOTALS</b>	<b>24,537</b> (100.0%)	<b>217,420</b> (100.0%)	<b>12,290</b> (100.0%)	<b>123,617</b> (100.0%)	<b>2,847</b> (100.0%)	<b>25,287</b> (100.0%)	<b>1,044</b> (100.0%)	<b>20,650</b> (100.0%)	<b>1,050</b> (100.0%)	<b>53,199</b> (100.0%)	<b>41,768</b> (100.0%)	<b>440,174</b> (100.0%)

(a) Quantity rounded to zero.

**Table 2.15**  
**Number of Four Year and Older Trucks and Associated Annual Vehicle Miles Traveled (VMT)**  
**by Number of Weeks Operated and Major Use: 1990 NTACS**  
 (Trucks in Thousands/Annual VMT in Millions)

Number of Weeks Operated	Major Use										TOTALS	
	Personal Transportation		Contract Carrier		Common Carrier		Other Business Use		Unknown			
	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT
0	68 (0.2%)	a (a)	4 (0.6%)	a (a)	0 (0.0%)	0 (0.0%)	9 (0.1%)	a (a)	84 (11.4%)	a (a)	165 (0.4%)	a (a)
1 - 4	1,240 (3.9%)	448 (0.2%)	6 (0.9%)	12 (0.1%)	48 (3.4%)	42 (0.1%)	289 (3.9%)	110 (0.1%)	284 (38.3%)	70 (1.8%)	1,866 (4.5%)	682 (0.2%)
5 - 8	436 (1.4%)	277 (0.1%)	5 (0.7%)	11 (a)	39 (2.7%)	49 (0.1%)	274 (3.7%)	238 (0.2%)	4 (0.5%)	7 (0.2%)	758 (1.8%)	582 (0.1%)
9 - 12	822 (2.6%)	2,153 (0.8%)	11 (1.7%)	65 (0.3%)	24 (1.7%)	145 (0.3%)	258 (3.5%)	456 (0.5%)	5 (0.7%)	23 (0.6%)	1,119 (2.7%)	2,841 (0.6%)
13 - 16	278 (0.9%)	1,358 (0.5%)	7 (1.1%)	36 (0.2%)	7 (0.5%)	30 (0.1%)	108 (1.5%)	335 (0.3%)	3 (0.4%)	8 (0.2%)	403 (1.0%)	1,767 (0.4%)
17 - 20	714 (2.3%)	1,424 (0.5%)	8 (1.1%)	64 (0.3%)	86 (6.1%)	678 (1.6%)	196 (2.7%)	833 (0.9%)	11 (1.5%)	229 (5.9%)	1,015 (2.4%)	3,229 (0.7%)
21 - 24	194 (0.6%)	2,546 (0.9%)	3 (0.5%)	51 (0.2%)	12 (0.8%)	167 (0.4%)	73 (1.0%)	310 (0.3%)	1 (0.1%)	5 (0.1%)	283 (0.7%)	3,079 (0.7%)
25 - 28	868 (2.7%)	2,660 (1.0%)	13 (2.0%)	213 (1.0%)	41 (2.9%)	451 (1.1%)	146 (2.0%)	649 (0.7%)	5 (0.6%)	57 (1.5%)	1,074 (2.6%)	4,029 (0.9%)
29 - 32	478 (1.5%)	3,071 (1.1%)	17 (2.6%)	465 (2.1%)	29 (2.1%)	442 (1.0%)	264 (3.6%)	1,694 (1.7%)	5 (0.7%)	58 (1.5%)	794 (1.9%)	5,731 (1.3%)
33 - 36	318 (1.0%)	1,745 (0.6%)	15 (2.2%)	375 (1.7%)	22 (1.5%)	423 (1.0%)	148 (2.0%)	998 (1.0%)	18 (2.5%)	40 (1.0%)	521 (1.2%)	3,581 (0.8%)
37 - 40	645 (2.0%)	3,838 (1.4%)	35 (5.3%)	1,059 (4.8%)	70 (4.9%)	1,336 (3.2%)	311 (4.2%)	3,376 (3.5%)	5 (0.6%)	88 (2.3%)	1,065 (2.6%)	9,697 (2.2%)
41 - 44	605 (1.9%)	5,535 (2.0%)	6 (0.9%)	301 (1.4%)	18 (1.3%)	1,036 (2.5%)	76 (1.0%)	1,036 (1.1%)	3 (0.4%)	52 (1.3%)	708 (1.7%)	7,961 (1.8%)
45 - 48	1,413 (4.5%)	17,252 (6.3%)	49 (7.4%)	2,589 (11.8%)	127 (9.0%)	4,980 (11.8%)	288 (3.9%)	4,531 (4.6%)	27 (3.6%)	258 (6.6%)	1,903 (4.6%)	29,610 (6.7%)
49 - 50	2,070 (6.6%)	19,657 (7.2%)	99 (15.0%)	3,301 (15.1%)	129 (9.1%)	5,793 (13.7%)	678 (9.2%)	10,606 (10.9%)	17 (2.3%)	137 (3.5%)	2,993 (7.2%)	39,493 (9.0%)
51	179 (0.6%)	2,901 (1.1%)	12 (1.8%)	987 (4.5%)	47 (3.3%)	1,837 (4.3%)	98 (1.3%)	2,024 (2.1%)	a (a)	10 (0.3%)	336 (0.8%)	7,759 (1.8%)
52	21,277 (67.3%)	209,651 (76.4%)	369 (56.2%)	12,331 (56.4%)	718 (50.6%)	24,857 (58.8%)	4,131 (56.2%)	70,448 (72.1%)	269 (36.4%)	2,846 (73.2%)	26,764 (64.1%)	320,133 (72.7%)
<b>TOTALS</b>	<b>31,605</b> (100.0%)	<b>274,515</b> (100.0%)	<b>656</b> (100.0%)	<b>21,859</b> (100.0%)	<b>1,419</b> (100.0%)	<b>42,267</b> (100.0%)	<b>7,347</b> (100.0%)	<b>97,645</b> (100.0%)	<b>741</b> (100.0%)	<b>3,890</b> (100.0%)	<b>41,768</b> (100.0%)	<b>440,174</b> (100.0%)

(a) Quantity rounded to zero.

**Table 2.16**  
**Number of Four Year and Older Trucks**  
**by Annual Miles Traveled and Truck Model Year: 1990 NTACS**  
**(Trucks in Thousands)**

Annual Miles Traveled	Truck Model Year												TOTALS Trucks
	1987(a) Trucks	1986 Trucks	1985 Trucks	1984 Trucks	1983 Trucks	1982 Trucks	1981 Trucks	1980 Trucks	1979 Trucks	1978 Trucks	Pre-1978 Trucks	Unknown Trucks	
Less Than 5,000	452 (11.8%)	788 (14.1%)	743 (17.8%)	588 (16.1%)	418 (13.0%)	697 (28.9%)	501 (27.7%)	367 (30.2%)	1,176 (36.7%)	652 (26.4%)	5,697 (55.9%)	b (13.2%)	12,079 (28.9%)
5,000-9,999	701 (18.4%)	984 (17.6%)	1,116 (26.8%)	977 (26.6%)	703 (21.9%)	594 (24.7%)	500 (27.7%)	239 (19.7%)	910 (28.4%)	860 (34.8%)	2,204 (21.6%)	b (2.9%)	9,789 (23.4%)
10,000-14,999	801 (21.0%)	1,972 (35.2%)	990 (23.8%)	917 (25.0%)	1,323 (41.2%)	484 (20.1%)	493 (27.3%)	337 (27.7%)	618 (19.3%)	681 (27.5%)	1,630 (16.0%)	3 (81.0%)	10,249 (24.5%)
15,000-19,999	714 (18.7%)	654 (11.7%)	633 (15.2%)	394 (10.7%)	415 (12.9%)	127 (5.3%)	96 (5.3%)	130 (10.7%)	225 (7.0%)	79 (3.2%)	290 (2.8%)	0 (0.0%)	3,757 (9.0%)
20,000-24,999	419 (11.0%)	700 (12.5%)	448 (10.8%)	383 (10.4%)	231 (7.2%)	34 (1.4%)	20 (1.1%)	27 (2.2%)	60 (1.9%)	40 (1.6%)	102 (1.0%)	b (2.9%)	2,462 (5.9%)
25,000-29,999	206 (5.4%)	249 (4.4%)	53 (1.3%)	225 (6.1%)	36 (1.1%)	209 (8.7%)	35 (1.9%)	45 (3.7%)	11 (0.3%)	59 (2.4%)	32 (0.3%)	0 (0.0%)	1,158 (2.8%)
30,000-39,999	280 (7.3%)	90 (1.6%)	42 (1.0%)	82 (2.2%)	29 (0.9%)	45 (1.9%)	83 (4.6%)	14 (1.2%)	12 (0.4%)	73 (2.9%)	69 (0.7%)	0 (0.0%)	819 (2.0%)
40,000-49,999	88 (2.3%)	43 (0.8%)	41 (1.0%)	35 (1.0%)	9 (0.3%)	61 (2.5%)	40 (2.2%)	15 (1.2%)	21 (0.7%)	7 (0.3%)	103 (1.0%)	0 (0.0%)	463 (1.1%)
50,000-74,999	92 (2.4%)	56 (1.0%)	38 (0.9%)	23 (0.6%)	27 (0.8%)	135 (5.6%)	22 (1.2%)	19 (1.6%)	21 (0.6%)	14 (0.6%)	36 (0.3%)	0 (0.0%)	481 (1.2%)
75,000-99,999	26 (0.7%)	23 (0.4%)	20 (0.5%)	25 (0.7%)	6 (0.2%)	9 (0.4%)	12 (0.7%)	7 (0.6%)	105 (3.3%)	8 (0.3%)	18 (0.2%)	0 (0.0%)	259 (0.6%)
100,000-124,999	20 (0.5%)	27 (0.5%)	23 (0.6%)	14 (0.4%)	12 (0.4%)	16 (0.7%)	6 (0.3%)	2 (0.2%)	4 (0.1%)	1 (0.1%)	12 (0.1%)	0 (0.0%)	137 (0.3%)
125,000-149,999	9 (0.2%)	6 (0.1%)	7 (0.2%)	2 (0.1%)	b (b)	b (b)	b (b)	12 (1.0%)	b (b)	b (b)	b (b)	0 (0.0%)	37 (0.1%)
150,000-199,999	6 (0.2%)	9 (0.2%)	6 (0.1%)	2 (b)	1 (b)	0 (0.0%)	0 (0.0%)	b (b)	b (b)	0 (0.0%)	1 (b)	0 (0.0%)	27 (0.1%)
200,000 and Over	1 (b)	1 (b)	3 (0.1%)	0 (0.0%)	b (b)	1 (b)	b (b)	1 (0.1%)	42 (1.3%)	0 (0.0%)	2 (b)	0 (0.0%)	51 (0.1%)
<b>TOTALS</b>	<b>3,815</b> (100.0%)	<b>5,601</b> (100.0%)	<b>4,163</b> (100.0%)	<b>3,667</b> (100.0%)	<b>3,210</b> (100.0%)	<b>2,411</b> (100.0%)	<b>1,807</b> (100.0%)	<b>1,217</b> (100.0%)	<b>3,205</b> (100.0%)	<b>2,475</b> (100.0%)	<b>10,194</b> (100.0%)	<b>3</b> (100.0%)	<b>41,768</b> (100.0%)

(a) Includes some 1988 models.  
(b) Quantity rounded to zero.

**Table 2.17**  
**Number of Four Year and Older Trucks**  
**by Annual Miles Traveled and Census Region: 1990 NTACS**  
(Trucks in Thousands)

Annual Miles Traveled	Census Regions				TOTALS Trucks
	Northeast Trucks	Midwest Trucks	South Trucks	West Trucks	
Less than 5,000	1,222 (22.2%)	2,960 (28.2%)	4,180 (27.3%)	3,718 (35.4%)	12,079 (28.9%)
5,000-9,999	1,651 (30.1%)	2,261 (21.6%)	3,430 (22.4%)	2,447 (23.3%)	9,789 (23.4%)
10,000-14,999	1,389 (25.3%)	2,678 (25.5%)	3,635 (23.8%)	2,547 (24.3%)	10,249 (24.5%)
15,000-19,999	627 (11.4%)	1,015 (9.7%)	1,483 (9.7%)	632 (6.0%)	3,757 (9.0%)
20,000-24,999	181 (3.3%)	662 (6.3%)	1,006 (6.6%)	613 (5.8%)	2,462 (5.9%)
25,000-29,999	194 (3.5%)	146 (1.4%)	688 (4.5%)	130 (1.2%)	1,158 (2.8%)
30,000-39,999	71 (1.3%)	282 (2.7%)	342 (2.2%)	124 (1.2%)	819 (2.0%)
40,000-49,999	29 (0.5%)	72 (0.7%)	174 (1.1%)	188 (1.8%)	463 (1.1%)
50,000-74,999	41 (0.7%)	233 (2.2%)	167 (1.1%)	40 (0.4%)	481 (1.2%)
75,000-99,999	77 (1.4%)	61 (0.6%)	99 (0.6%)	22 (0.2%)	259 (0.6%)
100,000-124,999	9 (0.2%)	55 (0.5%)	56 (0.4%)	17 (0.2%)	137 (0.3%)
125,000-149,999	1 (a)	8 (0.1%)	22 (0.1%)	6 (0.1%)	37 (0.1%)
150,000-199,999	1 (a)	15 (0.1%)	6 (a)	5 (0.1%)	27 (0.1%)
200,000 and over	1 (a)	40 (0.4%)	8 (0.1%)	1 (a)	51 (0.1%)
<b>TOTALS</b>	<b>5,493</b> (100.0%)	<b>10,489</b> (100.0%)	<b>15,295</b> (100.0%)	<b>10,491</b> (100.0%)	<b>41,768</b> (100.0%)

(a) Quantity rounded to zero.

**Table 2.18**  
**Number of Four Year and Older Trucks**  
**by Annual Miles Traveled and Commodity-Carrying Status: 1990 NTACS**  
(Trucks in Thousands)

Annual Miles Traveled	Commodity-Carrying Status					TOTALS Trucks
	Commodity-Carrying		Non-Commodity-Carrying			
	Short Haul Trucks	Long Haul Trucks	Business Use Trucks	Personal Use Trucks	Not In Use Trucks	
Less than 5,000	2,175 (29.5%)	63 (8.2%)	1,577 (24.7%)	8,200 (30.2%)	64 (54.3%)	12,079 (28.9%)
5,000-9,999	1,596 (21.7%)	69 (9.0%)	1,477 (23.1%)	6,598 (24.3%)	49 (41.3%)	9,789 (23.4%)
10,000-14,999	1,318 (17.9%)	83 (10.8%)	1,718 (26.9%)	7,127 (26.3%)	3 (2.8%)	10,249 (24.5%)
15,000-19,999	713 (9.7%)	53 (6.9%)	483 (7.5%)	2,508 (9.2%)	0 (0.0%)	3,757 (9.0%)
20,000-24,999	530 (7.2%)	37 (4.8%)	402 (6.3%)	1,492 (5.5%)	1 (1.2%)	2,462 (5.9%)
25,000-29,999	243 (3.3%)	36 (4.7%)	141 (2.2%)	738 (2.7%)	0 (0.0%)	1,158 (2.8%)
30,000-39,999	343 (4.7%)	38 (4.9%)	250 (3.9%)	189 (0.7%)	0 (0.0%)	819 (2.0%)
40,000-49,999	162 (2.2%)	68 (8.9%)	128 (2.0%)	103 (0.4%)	1 (0.5%)	463 (1.1%)
50,000-74,999	169 (2.3%)	90 (11.7%)	98 (1.5%)	125 (0.5%)	0 (0.0%)	481 (1.2%)
75,000-99,999	55 (0.7%)	97 (12.6%)	62 (1.0%)	45 (0.2%)	0 (0.0%)	259 (0.6%)
100,000-124,999	42 (0.6%)	86 (11.2%)	9 (0.1%)	0 (0.0%)	0 (0.0%)	137 (0.3%)
125,000-149,999	4 (0.1%)	22 (2.9%)	12 (0.2%)	0 (0.0%)	0 (0.0%)	37 (0.1%)
150,000-199,999	5 (0.1%)	22 (2.9%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	27 (0.1%)
200,000 and over	9 (0.1%)	4 (0.5%)	38 (0.6%)	0 (0.0%)	0 (0.0%)	51 (0.1%)
<b>TOTALS</b>	<b>7,365</b> (100.0%)	<b>766</b> (100.0%)	<b>6,393</b> (100.0%)	<b>27,125</b> (100.0%)	<b>119</b> (100.0%)	<b>41,768</b> (100.0%)

**Table 2.19**  
**Number of Four Year and Older Trucks**  
**by Annual Miles Traveled and Truck Type: 1990 NTACS**  
(Trucks in Thousands)

Annual Miles Traveled	Truck Type					TOTALS Trucks
	Pickup Trucks	Utility Trucks	Small Trucks	Large Trucks	Truck-Tractor Trucks	
Less than 5,000	7,758 (31.6%)	2,593 (21.1%)	1,296 (45.5%)	282 (27.0%)	151 (14.4%)	12,079 (28.9%)
5,000-9,999	6,437 (26.2%)	2,549 (20.7%)	555 (19.5%)	163 (15.6%)	85 (8.1%)	9,789 (23.4%)
10,000-14,999	5,581 (22.7%)	4,022 (32.7%)	413 (14.5%)	163 (15.6%)	70 (6.7%)	10,249 (24.5%)
15,000-19,999	1,962 (8.0%)	1,440 (11.7%)	220 (7.7%)	84 (8.0%)	51 (4.8%)	3,757 (9.0%)
20,000-24,999	1,253 (5.1%)	954 (7.8%)	120 (4.2%)	85 (8.1%)	50 (4.8%)	2,462 (5.9%)
25,000-29,999	665 (2.7%)	342 (2.8%)	66 (2.3%)	41 (4.0%)	44 (4.2%)	1,158 (2.8%)
30,000-39,999	373 (1.5%)	209 (1.7%)	65 (2.3%)	87 (8.4%)	85 (8.1%)	819 (2.0%)
40,000-49,999	138 (0.6%)	147 (1.2%)	56 (2.0%)	47 (4.5%)	74 (7.0%)	463 (1.1%)
50,000-74,999	212 (0.9%)	24 (0.2%)	34 (1.2%)	56 (5.4%)	155 (14.7%)	481 (1.2%)
75,000-99,999	106 (0.4%)	2 (a)	4 (0.2%)	22 (2.1%)	125 (11.9%)	259 (0.6%)
100,000-124,999	14 (0.1%)	7 (0.1%)	2 (0.1%)	10 (0.9%)	104 (9.9%)	137 (0.3%)
125,000-149,999	0 (0.0%)	0 (0.0%)	12 (0.4%)	3 (0.3%)	23 (2.2%)	37 (0.1%)
150,000-199,999	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (0.1%)	26 (2.5%)	27 (0.1%)
200,000 and over	38 (0.2%)	0 (0.0%)	4 (0.1%)	a (a)	8 (0.8%)	51 (0.1%)
<b>TOTALS</b>	<b>24,537</b> <b>(100.0%)</b>	<b>12,290</b> <b>(100.0%)</b>	<b>2,847</b> <b>(100.0%)</b>	<b>1,044</b> <b>(100.0%)</b>	<b>1,050</b> <b>(100.0%)</b>	<b>41,768</b> <b>(100.0%)</b>

(a) Quantity rounded to zero.

**Table 2.20**  
**Number of Four Year and Older Trucks**  
**by Annual Miles Traveled and Major Use: 1990 NTACS**  
(Trucks in Thousands)

Annual Miles Traveled	Major Use					TOTALS Trucks
	Personal Transportation Trucks	Contract Carrier Trucks	Common Carrier Trucks	Other Business Use Trucks	Unknown Trucks	
Less than 5,000	9,232 (29.2%)	69 (10.6%)	250 (17.6%)	2,105 (28.6%)	423 (57.1%)	12,079 (28.9%)
5,000-9,999	7,779 (24.6%)	91 (13.9%)	246 (17.4%)	1,520 (20.7%)	152 (20.6%)	9,789 (23.4%)
10,000-14,999	8,296 (26.2%)	131 (19.9%)	196 (13.8%)	1,578 (21.5%)	49 (6.6%)	10,249 (24.5%)
15,000-19,999	3,038 (9.6%)	25 (3.8%)	90 (6.3%)	590 (8.0%)	14 (1.9%)	3,757 (9.0%)
20,000-24,999	1,580 (5.0%)	81 (12.3%)	133 (9.4%)	579 (7.9%)	90 (12.1%)	2,462 (5.9%)
25,000-29,999	837 (2.6%)	27 (4.1%)	95 (6.7%)	197 (2.7%)	2 (0.2%)	1,158 (2.8%)
30,000-39,999	380 (1.2%)	39 (6.0%)	73 (5.1%)	323 (4.4%)	5 (0.6%)	819 (2.0%)
40,000-49,999	224 (0.7%)	32 (4.8%)	88 (6.2%)	116 (1.6%)	2 (0.3%)	463 (1.1%)
50,000-74,999	139 (0.4%)	55 (8.4%)	87 (6.1%)	198 (2.7%)	2 (0.2%)	481 (1.2%)
75,000-99,999	51 (0.2%)	48 (7.3%)	64 (4.5%)	95 (1.3%)	2 (0.2%)	259 (0.6%)
100,000-124,999	10 (a)	43 (6.5%)	58 (4.1%)	26 (0.3%)	a (a)	137 (0.3%)
125,000-149,999	0 (0.0%)	8 (1.2%)	15 (1.1%)	14 (0.2%)	a (a)	37 (0.1%)
150,000-199,999	0 (0.0%)	6 (0.9%)	19 (1.3%)	2 (a)	0 (0.0%)	27 (0.1%)
200,000 and over	38 (0.1%)	3 (0.4%)	5 (0.4%)	5 (0.1%)	0 (0.0%)	51 (0.1%)
<b>TOTALS</b>	<b>31,605</b> (100.0%)	<b>656</b> (100.0%)	<b>1,419</b> (100.0%)	<b>7,347</b> (100.0%)	<b>741</b> (100.0%)	<b>41,768</b> (100.0%)

(a) Quantity rounded to zero.

**Table 2.21**  
**Number of Four Year and Older Trucks**  
**by Annual Miles Traveled and Truck Description: 1990 NTACS**  
(Trucks in Thousands)

Annual Miles Traveled	Truck Description								TOTALS Trucks
	Straight Truck				Truck-Tractor				
	4 Tires		6 or More Tires		Truck-Tractor		Other Trucks	Unknown Trucks	
	Without Trailer Trucks	With Trailer(s) Trucks	Without Trailer Trucks	With Trailer(s) Trucks	With Trailer(s) Trucks	Without Trailer Trucks			
Less than 5,000	9,696 (27.6%)	572 (49.1%)	1,344 (44.1%)	98 (27.5%)	86 (8.9%)	5 (27.2%)	86 (14.2%)	192 (37.8%)	12,079 (28.9%)
5,000-9,999	8,360 (23.8%)	408 (35.1%)	566 (18.6%)	94 (26.4%)	55 (5.7%)	4 (19.9%)	161 (26.4%)	141 (27.8%)	9,789 (23.4%)
10,000-14,999	9,340 (26.6%)	130 (11.2%)	423 (13.9%)	52 (14.6%)	54 (5.6%)	3 (17.2%)	214 (35.1%)	32 (6.3%)	10,249 (24.5%)
15,000-19,999	3,416 (9.7%)	22 (1.9%)	202 (6.6%)	20 (5.6%)	50 (5.2%)	a (1.2%)	4 (0.7%)	42 (8.3%)	3,757 (9.0%)
20,000-24,999	2,102 (6.0%)	5 (0.4%)	190 (6.2%)	9 (2.5%)	46 (4.7%)	a (1.2%)	21 (3.5%)	88 (17.4%)	2,462 (5.9%)
25,000-29,999	987 (2.8%)	5 (0.4%)	91 (3.0%)	9 (2.4%)	38 (3.9%)	0 (0.0%)	29 (4.8%)	0 (0.0%)	1,158 (2.8%)
30,000-39,999	511 (1.5%)	13 (1.1%)	94 (3.1%)	22 (6.1%)	86 (8.9%)	2 (9.6%)	91 (14.9%)	1 (0.2%)	819 (2.0%)
40,000-49,999	284 (0.8%)	1 (0.1%)	57 (1.9%)	31 (8.8%)	75 (7.7%)	2 (8.1%)	3 (0.4%)	11 (2.1%)	463 (1.1%)
50,000-74,999	245 (0.7%)	4 (0.4%)	58 (1.9%)	13 (3.6%)	160 (16.5%)	1 (6.3%)	a (0.1%)	a (a)	481 (1.2%)
75,000-99,999	93 (0.3%)	4 (0.3%)	8 (0.3%)	5 (1.3%)	148 (15.3%)	1 (3.0%)	0 (0.0%)	1 (0.2%)	259 (0.6%)
100,000-124,999	22 (0.1%)	0 (0.0%)	2 (0.1%)	2 (0.4%)	110 (11.4%)	1 (5.0%)	0 (0.0%)	a (a)	137 (0.3%)
125,000-149,999	0 (0.0%)	0 (0.0%)	12 (0.4%)	1 (0.3%)	24 (2.5%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	37 (0.1%)
150,000-199,999	0 (0.0%)	0 (0.0%)	1 (a)	a (a)	26 (2.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	27 (0.1%)
200,000 and over	40 (0.1%)	0 (0.0%)	2 (0.1%)	1 (0.3%)	7 (0.8%)	a (1.3%)	0 (0.0%)	0 (0.0%)	51 (0.1%)
<b>TOTALS</b>	<b>35,097</b> <b>(100.0%)</b>	<b>1,163</b> <b>(100.0%)</b>	<b>3,050</b> <b>(100.0%)</b>	<b>355</b> <b>(100.0%)</b>	<b>966</b> <b>(100.0%)</b>	<b>18</b> <b>(100.0%)</b>	<b>610</b> <b>(100.0%)</b>	<b>508</b> <b>(100.0%)</b>	<b>41,768</b> <b>(100.0%)</b>

(a) Quantity rounded to zero.

**Table 2.22a**  
**Distribution of Four Year and Older Trucks That Operated in Canada**  
**by Commodity-Carrying Status: 1990 NTACS**

Commodity-Carrying Status				
Commodity-Carrying		Non-Commodity-Carrying		TOTALS Trucks
Short Haul Trucks	Long Haul Trucks	Business Use Trucks	Personal Use Trucks	
48,384	43,776	38,592	445,250	576,003
(8.4%)	(7.6%)	(6.7%)	(77.3%)	(100.0%)

**Table 2.22b**  
**Distribution of Four Year and Older Trucks That Operated in Mexico**  
**by Commodity-Carrying Status: 1990 NTACS**

Commodity-Carrying Status				
Commodity-Carrying		Non-Commodity-Carrying		TOTALS Trucks
Short Haul Trucks	Long Haul Trucks	Business Use Trucks	Personal Use Trucks	
71,834	3,087	0	131,524	205,828
(34.9%)	(1.5%)	(0.0%)	(63.9%)	(100.0%)

**Table 2.23a**  
**Distribution of Four Year and Older Trucks That Operated in Canada**  
**by Truck Type: 1990 NTACS**

Truck Type					<u>TOTALS</u> Trucks
<u>Pickup</u> Trucks	<u>Utility</u> Trucks	<u>Small</u> Trucks	<u>Large</u> Trucks	<u>Truck-Tractor</u> Trucks	
281,089 (48.8%)	235,585 (40.9%)	14,400 (2.5%)	5,184 (0.9%)	39,744 (6.9%)	576,003 (100.0%)

**Table 2.23b**  
**Distribution of Four Year and Older Trucks That Operated in Mexico**  
**by Truck Type: 1990 NTACS**

Truck Type					<u>TOTALS</u> Trucks
<u>Pickup</u> Trucks	<u>Utility</u> Trucks	<u>Small</u> Trucks	<u>Large</u> Trucks	<u>Truck-Tractor</u> Trucks	
164,662 (80.0%)	36,432 (17.7%)	1,441 (0.7%)	1,235 (0.6%)	2,058 (1.0%)	205,828 (100.0%)

**Table 2.24a**  
**Distribution of Four Year and Older Trucks That Operated in Canada**  
**by Major Use: 1990 NTACS**

Major Use					
<u>Personal Transportation Trucks</u>	<u>Contract Carrier Trucks</u>	<u>Common Carrier Trucks</u>	<u>Other Business Use Trucks</u>	<u>Unknown Trucks</u>	<u>TOTALS Trucks</u>
496,515	13,248	24,768	33,984	8,064	576,003
(86.2%)	(2.3%)	(4.3%)	(5.9%)	(1.4%)	(100.0%)

**Table 2.24b**  
**Distribution of Four Year and Older Trucks That Operated in Mexico**  
**by Major Use: 1990 NTACS**

Major Use				
<u>Personal Transportation Trucks</u>	<u>Contract Carrier Trucks</u>	<u>Common Carrier Trucks</u>	<u>Other Business Use Trucks</u>	<u>TOTALS Trucks</u>
172,896	412	5,146	27,581	205,828
(84.0%)	(0.2%)	(2.5%)	(13.4%)	(100.0%)



## CHAPTER 3

# DAILY DESCRIPTIONS AND ACTIVITIES OF THE 1990 NTACS TRUCK POPULATION

### IMPORTANT NOTICE

All estimates in every table of this report have been adjusted using the three stratifying variables: (i) commodity-carrying status, (ii) census division, and (iii) truck type to compensate for extremely high nonresponse rates. (See Tables G and H of Appendix A). As a result, preliminary comparisons with other data sources have revealed inconsistencies -especially when detailed estimates are presented using variables other than the three stratifying variables. Individual estimates are not highly reliable and should be used cautiously only to give impressions of broad trends, patterns, and distributions.

**Table 3.1**  
**Number of Four Year and Older Trucks and Associated Daily Vehicle Miles Traveled (DVMT)**  
**by Truck Model Year: 1990 NTACS**

(Trucks in Thousands/Daily VMT in Millions)

Truck Model Year	Trucks		Daily VMT	
1987(a)	3,815	(9.1%)	200	(10.7%)
1986	5,601	(13.4%)	318	(17.0%)
1985	4,163	(10.0%)	204	(10.9%)
1984	3,667	(8.8%)	191	(10.2%)
1983	3,210	(7.7%)	139	(7.4%)
1982	2,411	(5.8%)	100	(5.3%)
1981	1,807	(4.3%)	73	(3.9%)
1980	1,217	(2.9%)	54	(2.9%)
1979	3,205	(7.7%)	106	(5.7%)
1978	2,475	(5.9%)	116	(6.2%)
Pre-1978	10,194	(24.4%)	371	(19.8%)
Unknown	3	(b)	b	(b)
<b>TOTALS</b>	<b>41,768</b>	<b>(100.0%)</b>	<b>1,872</b>	<b>(100.0%)</b>

(a) Includes some 1988 models.

(b) Quantity rounded to zero.

**Table 3.2**  
**Number of Four Year and Older Trucks and Associated Daily Vehicle Miles Traveled (DVMT)**  
**by Commodity-Carrying Status: 1990 NTACS**  
(Trucks in Thousands/Daily VMT in Millions)

Commodity Carrying Status	Trucks		Daily VMT	
<b>Commodity-Carrying</b>				
- Short Haul	7,365	(17.6%)	457	(24.4%)
- Long Haul	766	(1.8%)	176	(9.4%)
<b>Non-Commodity-Carrying</b>				
- Business Use	6,393	(15.3%)	274	(14.6%)
- Personal Use	27,125	(64.9%)	963	(51.4%)
- Not In Use	119	(0.3%)	3	(0.2%)
<b>TOTALS</b>	<b>41,768</b>	<b>(100.0%)</b>	<b>1,872</b>	<b>(100.0%)</b>

**Table 3.3**  
**Number of Four Year and Older Trucks and Associated Daily Vehicle Miles Traveled (DVMT)**  
**by Truck Type: 1990 NTACS**  
 (Trucks in Thousands/Daily VMT in Millions)

Truck Type	Trucks		Daily VMT	
Pickup	24,537	<i>(58.7%)</i>	893	<i>(47.7%)</i>
Utility	12,290	<i>(29.4%)</i>	493	<i>(26.3%)</i>
Small	2,847	<i>(6.8%)</i>	149	<i>(8.0%)</i>
Large	1,044	<i>(2.5%)</i>	103	<i>(5.5%)</i>
Truck-Tractor	1,050	<i>(2.5%)</i>	233	<i>(12.5%)</i>
<b>TOTALS</b>	<b>41,768</b>	<b><i>(100.0%)</i></b>	<b>1,872</b>	<b><i>(100.0%)</i></b>

**Table 3.4**  
**Number of Four Year and Older Trucks and Associated Daily Vehicle Miles Traveled (DVMT)**  
**by Daily Truck Description and Daily Major Use: 1990 NTACS**  
(Trucks in Thousands/Daily VMT in Millions)

Daily Truck Description	Daily Major Use										TOTALS	
	Personal Transportation		Contract Carrier		Common Carrier		Other Business Use		Unknown			
	Trucks	Daily VMT	Trucks	Daily VMT	Trucks	Daily VMT	Trucks	Daily VMT	Trucks	Daily VMT	Trucks	Daily VMT
<b>Straight Truck</b>												
-With 4 Tires Without Trailer	28,389 (95.4%)	969 (94.8%)	251 (38.9%)	12 (12.6%)	413 (31.4%)	34 (18.9%)	4,042 (57.8%)	212 (47.9%)	84 (2.8%)	3 (2.5%)	33,179 (79.4%)	1,230 (65.7%)
-With 4 Tires With Trailer(s)	508 (1.7%)	19 (1.9%)	a (0.1%)	a (0.2%)	14 (1.0%)	1 (0.4%)	171 (2.4%)	10 (2.3%)	1 (a)	a (0.1%)	694 (1.7%)	31 (1.6%)
-With 6 or More Tires Without Trailer	239 (0.8%)	11 (1.0%)	153 (23.7%)	14 (15.3%)	440 (33.5%)	36 (20.0%)	1,987 (28.4%)	119 (26.9%)	43 (1.4%)	3 (2.0%)	2,862 (6.9%)	182 (9.7%)
-With 6 or More Tires With Trailer(s)	15 (0.1%)	1 (0.1%)	20 (3.2%)	6 (6.1%)	56 (4.2%)	7 (3.9%)	230 (3.3%)	16 (3.6%)	7 (0.2%)	a (0.3%)	329 (0.8%)	30 (1.6%)
<b>Truck-Tractor</b>												
-With Trailer(s)	0 (0.0%)	0 (0.0%)	204 (31.6%)	59 (64.1%)	372 (28.3%)	100 (55.4%)	358 (5.1%)	72 (16.3%)	12 (0.4%)	3 (2.0%)	946 (2.3%)	234 (12.5%)
-Without Trailer	0 (0.0%)	0 (0.0%)	3 (0.5%)	a (0.3%)	8 (0.6%)	2 (0.9%)	7 (0.1%)	1 (0.2%)	a (a)	a (a)	18 (a)	3 (0.1%)
<b>Other</b>												
	428 (1.4%)	18 (1.8%)	9 (1.4%)	1 (1.3%)	12 (0.9%)	1 (0.5%)	162 (2.3%)	10 (2.3%)	1 (a)	a (a)	612 (1.5%)	30 (1.6%)
<b>Unknown</b>												
	182 (0.6%)	4 (0.4%)	4 (0.6%)	a (0.1%)	a (a)	a (a)	40 (0.6%)	3 (0.7%)	2,902 (95.1%)	125 (93.0%)	3,128 (7.5%)	133 (7.1%)
<b>TOTALS</b>	<b>29,760</b> (100.0%)	<b>1,022</b> (100.0%)	<b>645</b> (100.0%)	<b>93</b> (100.0%)	<b>1,314</b> (100.0%)	<b>180</b> (100.0%)	<b>6,996</b> (100.0%)	<b>443</b> (100.0%)	<b>3,051</b> (100.0%)	<b>135</b> (100.0%)	<b>41,768</b> (100.0%)	<b>1,872</b> (100.0%)

(a) Quantity rounded to zero.

**Table 3.5**  
**Number of Four Year and Older Trucks and Associated Daily Vehicle Miles Traveled (DVMT)**  
**by Daily Fuel Use and Daily Truck Description: 1990 NTACS**

(Trucks in Thousands/Daily VMT in Millions)

Daily Fuel Use (Gallons)	Daily Truck Description								
	Straight Truck				Truck-Tractor		Other Trucks	Unknown Trucks	TOTALS Trucks
	4 Tires		6 or More Tires		With Trailer(s)	Without Trailer			
	Without Trailer Trucks	With Trailer(s) Trucks	Without Trailer Trucks	With Trailer(s) Trucks	Trucks	Trucks			
Less Than 20	32,598 (98.2%)	676 (97.5%)	2,360 (82.5%)	230 (69.9%)	240 (25.4%)	10 (52.4%)	576 (94.1%)	2,951 (94.3%)	39,641 (94.9%)
20-39	457 (1.4%)	14 (2.0%)	346 (12.1%)	65 (19.7%)	205 (21.6%)	6 (34.1%)	32 (5.2%)	154 (4.9%)	1,279 (3.1%)
40-59	92 (0.3%)	3 (0.4%)	96 (3.4%)	11 (3.4%)	165 (17.5%)	a (1.2%)	4 (0.6%)	11 (0.3%)	383 (0.9%)
60-79	1 (a)	a (a)	18 (0.6%)	10 (3.0%)	142 (15.0%)	1 (6.6%)	a (0.1%)	4 (0.1%)	176 (0.4%)
80-99	23 (0.1%)	0 (0.0%)	32 (1.1%)	9 (2.6%)	106 (11.2%)	a (0.7%)	0 (0.0%)	4 (0.1%)	174 (0.4%)
100-119	0 (0.0%)	a (a)	5 (0.2%)	3 (0.8%)	51 (5.4%)	1 (4.3%)	0 (0.0%)	3 (0.1%)	63 (0.2%)
120 and Over	9 (a)	0 (0.0%)	4 (0.1%)	2 (0.5%)	37 (3.9%)	a (0.7%)	0 (0.0%)	a (a)	51 (0.1%)
<b>TOTALS</b>	<b>33,179</b> (100.0%)	<b>694</b> (100.0%)	<b>2,862</b> (100.0%)	<b>329</b> (100.0%)	<b>946</b> (100.0%)	<b>18</b> (100.0%)	<b>612</b> (100.0%)	<b>3,128</b> (100.0%)	<b>41,768</b> (100.0%)
(Gallons)	Daily VMT	Daily VMT	Daily VMT	Daily VMT	Daily VMT	Daily VMT	Daily VMT	Daily VMT	Daily VMT
Less Than 20	1,106 (89.9%)	27 (87.3%)	106 (57.9%)	9 (31.7%)	17 (7.5%)	a (18.6%)	25 (82.0%)	108 (81.8%)	1,399 (74.7%)
20-39	105 (8.5%)	3 (10.2%)	45 (24.8%)	10 (32.5%)	31 (13.4%)	1 (48.1%)	5 (15.3%)	16 (12.0%)	216 (11.5%)
40-59	18 (1.5%)	1 (2.4%)	20 (11.1%)	3 (9.7%)	41 (17.7%)	a (1.8%)	1 (2.2%)	4 (2.7%)	88 (4.7%)
60-79	a (a)	a (a)	5 (2.8%)	3 (10.7%)	49 (20.9%)	a (17.6%)	a (0.4%)	1 (1.0%)	59 (3.2%)
80-99	1 (a)	0 (0.0%)	5 (2.9%)	2 (8.2%)	47 (20.0%)	a (2.2%)	0 (0.0%)	2 (1.3%)	57 (3.0%)
100-119	0 (0.0%)	a (a)	1 (0.3%)	1 (3.1%)	25 (10.7%)	a (11.6%)	0 (0.0%)	1 (1.1%)	28 (1.5%)
120 and Over	a (a)	0 (0.0%)	1 (0.3%)	1 (4.2%)	23 (9.9%)	a (0.1%)	0 (0.0%)	a (a)	25 (1.4%)
<b>TOTALS</b>	<b>1,230</b> (100.0%)	<b>31</b> (100.0%)	<b>182</b> (100.0%)	<b>30</b> (100.0%)	<b>234</b> (100.0%)	<b>3</b> (100.0%)	<b>30</b> (100.0%)	<b>133</b> (100.0%)	<b>1,872</b> (100.0%)

(a) Quantity rounded to zero.

**Table 3.6**  
**Number of Four Year and Older Trucks and Associated Daily Vehicle Miles Traveled (DVMT)**  
**by Daily Maximum Empty Weight and Commodity-Carrying Status: 1990 NTACS**

(Trucks in Thousands/Daily VMT in Millions)

Daily Maximum Empty Weight (Pounds)	Commodity-Carrying Status										TOTALS		
	Commodity-Carrying				Non-Commodity-Carrying								
	Short Haul		Long Haul		Business Use		Personal Use		Not In Use		Trucks	Daily VMT	
Trucks	Daily VMT	Trucks	Daily VMT	Trucks	Daily VMT	Trucks	Daily VMT	Trucks	Daily VMT	Trucks	Daily VMT	Trucks	Daily VMT
Less than 10,000	5,229 (71.0%)	244 (53.4%)	254 (33.2%)	21 (11.9%)	5,791 (90.6%)	238 (86.8%)	27,002 (99.5%)	958 (99.5%)	97 (81.7%)	1 (50.2%)	38,373 (91.9%)	1,462 (78.1%)	
10,000-19,999	1,240 (16.8%)	88 (19.3%)	87 (11.3%)	16 (9.3%)	468 (7.3%)	18 (6.6%)	109 (0.4%)	4 (0.4%)	16 (13.3%)	1 (34.6%)	1,919 (4.6%)	128 (6.8%)	
20,000-29,999	621 (8.4%)	78 (17.0%)	194 (25.3%)	61 (34.8%)	85 (1.3%)	6 (2.3%)	14 (0.1%)	a (a)	1 (1.1%)	a (5.1%)	914 (2.2%)	146 (7.8%)	
30,000-39,999	212 (2.9%)	36 (7.9%)	202 (26.3%)	68 (38.4%)	39 (0.6%)	10 (3.8%)	a (a)	a (a)	3 (2.6%)	a (6.8%)	456 (1.1%)	114 (6.1%)	
40,000-49,999	34 (0.5%)	6 (1.3%)	13 (1.7%)	5 (2.6%)	6 (0.1%)	1 (0.2%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	54 (0.1%)	11 (0.6%)	
50,000-59,999	10 (0.1%)	1 (0.3%)	5 (0.7%)	1 (0.8%)	3 (a)	1 (0.2%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	18 (a)	3 (0.2%)	
60,000-69,999	1 (0.0%)	a (a)	2 (0.2%)	1 (0.3%)	1 (a)	a (a)	0 (0.0%)	0 (0.0%)	1 (1.2%)	a (3.3%)	5 (a)	1 (a)	
70,000-79,999	6 (0.1%)	1 (0.2%)	7 (0.9%)	3 (1.4%)	2 (a)	1 (0.2%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	15 (a)	4 (0.2%)	
80,000-89,999	9 (0.1%)	2 (0.5%)	3 (0.3%)	1 (0.4%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	12 (a)	3 (0.2%)	
90,000-99,999	2 (a)	a (a)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (a)	a (a)	
<b>TOTALS</b>	<b>7,365</b> (100.0%)	<b>457</b> (100.0%)	<b>766</b> (100.0%)	<b>176</b> (100.0%)	<b>6,393</b> (100.0%)	<b>274</b> (100.0%)	<b>27,125</b> (100.0%)	<b>963</b> (100.0%)	<b>119</b> (100.0%)	<b>3</b> (100.0%)	<b>41,768</b> (100.0%)	<b>1,872</b> (100.0%)	

(a) Quantity rounded to zero.

**Table 3.7**  
**Number of Four Year and Older Trucks and Associated Daily Vehicle Miles Traveled (DVMT)**  
**by Daily Maximum Loaded Weight and Commodity-Carrying Status: 1990 NTACS**

(Trucks in Thousands/Daily VMT in Millions)

Daily Maximum Loaded Weight (Pounds)	Commodity-Carrying Status										TOTALS	
	Commodity-Carrying				Non-Commodity-Carrying							
	Short Haul		Long Haul		Business Use		Personal Use		Not In Use		Trucks	Daily VMT
	Trucks	Daily VMT	Trucks	Daily VMT	Trucks	Daily VMT	Trucks	Daily VMT	Trucks	Daily VMT	Trucks	Daily VMT
Less than 10,000	4,095 (55.6%)	180 (39.5%)	224 (29.2%)	18 (10.3%)	5,578 (87.2%)	230 (84.1%)	25,142 (92.7%)	878 (91.2%)	79 (66.9%)	1 (41.7%)	35,118 (84.1%)	1,308 (69.9%)
10,000-19,999	1,413 (19.2%)	81 (17.7%)	51 (6.7%)	5 (2.6%)	511 (8.0%)	19 (6.9%)	1,882 (6.9%)	82 (8.5%)	20 (16.7%)	1 (17.4%)	3,878 (9.3%)	187 (10.0%)
20,000-29,999	699 (9.5%)	46 (10.1%)	43 (5.6%)	6 (3.6%)	64 (1.0%)	2 (0.8%)	51 (0.2%)	2 (0.2%)	5 (4.1%)	a (6.0%)	861 (2.1%)	57 (3.1%)
30,000-39,999	283 (3.8%)	23 (5.0%)	41 (5.3%)	9 (5.2%)	134 (2.1%)	7 (2.6%)	38 (0.1%)	1 (0.1%)	10 (8.4%)	1 (24.7%)	506 (1.2%)	41 (2.2%)
40,000-49,999	272 (3.7%)	27 (6.0%)	45 (5.8%)	13 (7.3%)	32 (0.5%)	7 (2.5%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	349 (0.8%)	47 (2.5%)
50,000-59,999	164 (2.2%)	17 (3.7%)	49 (6.4%)	16 (9.1%)	27 (0.4%)	2 (0.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	240 (0.6%)	35 (1.9%)
60,000-69,999	118 (1.6%)	17 (3.7%)	65 (8.5%)	22 (12.2%)	22 (0.3%)	2 (0.6%)	12 (a)	a (a)	1 (1.2%)	a (3.3%)	218 (0.5%)	41 (2.2%)
70,000-79,999	178 (2.4%)	33 (7.3%)	170 (22.2%)	59 (33.4%)	12 (0.2%)	4 (1.4%)	0 (0.0%)	0 (0.0%)	3 (2.6%)	a (6.8%)	362 (0.9%)	96 (5.1%)
80,000-89,999	112 (1.5%)	25 (5.6%)	69 (9.0%)	25 (14.4%)	2 (a)	1 (0.2%)	1 (a)	a (a)	0 (0.0%)	0 (0.0%)	184 (0.4%)	51 (2.7%)
90,000-99,999	8 (0.1%)	2 (0.4%)	4 (0.5%)	1 (0.7%)	8 (0.1%)	a (0.1%)	a (a)	a (a)	0 (0.0%)	0 (0.0%)	19 (a)	3 (0.2%)
100,000 and over	24 (0.3%)	4 (1.0%)	6 (0.7%)	2 (1.1%)	4 (0.1%)	a (0.1%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	33 (0.1%)	7 (0.4%)
<b>TOTALS</b>	<b>7,365</b> <b>(100.0%)</b>	<b>457</b> <b>(100.0%)</b>	<b>766</b> <b>(100.0%)</b>	<b>176</b> <b>(100.0%)</b>	<b>6,393</b> <b>(100.0%)</b>	<b>274</b> <b>(100.0%)</b>	<b>27,125</b> <b>(100.0%)</b>	<b>963</b> <b>(100.0%)</b>	<b>119</b> <b>(100.0%)</b>	<b>3</b> <b>(100.0%)</b>	<b>41,768</b> <b>(100.0%)</b>	<b>1,872</b> <b>(100.0%)</b>

(a) Quantity rounded to zero.

**Table 3.8**  
**Number of Four Year and Older Trucks and Associated Daily Vehicle Miles Traveled (DVMT)**  
**by Daily Maximum Percent Payload Space and Commodity-Carrying Status: 1990 NTACS**

(Trucks in Thousands/Daily VMT in Millions)

Daily Maximum Percent Payload Space	Commodity-Carrying Status										TOTALS	
	Commodity-Carrying				Non-Commodity-Carrying							
	Short Haul		Long Haul		Business Use		Personal Use		Not In Use		Trucks	Daily VMT
	Trucks	Daily VMT	Trucks	Daily VMT	Trucks	Daily VMT	Trucks	Daily VMT	Trucks	Daily VMT	Trucks	Daily VMT
Less than 10%	650 (8.8%)	31 (6.7%)	40 (5.2%)	4 (2.3%)	1,493 (23.4%)	53 (19.4%)	6,911 (25.5%)	243 (25.2%)	4 (3.3%)	a (10.9%)	9,098 (21.8%)	331 (17.7%)
10 - 24%	535 (7.3%)	27 (5.8%)	45 (5.9%)	2 (1.1%)	1,462 (22.9%)	65 (23.6%)	9,983 (36.8%)	334 (34.7%)	3 (2.4%)	a (3.0%)	12,028 (28.8%)	427 (22.8%)
25 - 49%	1,840 (25.0%)	75 (16.4%)	40 (5.3%)	6 (3.7%)	1,190 (18.6%)	56 (20.5%)	4,374 (16.1%)	164 (17.0%)	11 (9.1%)	a (4.6%)	7,455 (17.8%)	302 (16.1%)
50 - 74%	1,700 (23.1%)	103 (22.5%)	113 (14.8%)	25 (14.3%)	1,021 (16.0%)	40 (14.6%)	2,473 (9.1%)	99 (10.3%)	35 (29.8%)	a (8.2%)	5,342 (12.8%)	267 (14.3%)
75 - 100%	2,640 (35.8%)	222 (48.5%)	528 (68.9%)	138 (78.6%)	1,227 (19.2%)	60 (22.9%)	3,384 (12.5%)	122 (12.7%)	66 (55.4%)	2 (73.4%)	7,845 (18.8%)	545 (29.1%)
<b>TOTALS</b>	<b>7,365</b> <b>(100.0%)</b>	<b>457</b> <b>(100.0%)</b>	<b>766</b> <b>(100.0%)</b>	<b>176</b> <b>(100.0%)</b>	<b>6,393</b> <b>(100.0%)</b>	<b>274</b> <b>(100.0%)</b>	<b>27,125</b> <b>(100.0%)</b>	<b>963</b> <b>(100.0%)</b>	<b>119</b> <b>(100.0%)</b>	<b>3</b> <b>(100.0%)</b>	<b>41,768</b> <b>(100.0%)</b>	<b>1,872</b> <b>(100.0%)</b>

(a) Quantity rounded to zero.

**Table 3.9a**  
**Number of Four Year and Older Trucks**  
**by Daily Maximum Empty Weight and Daily Truck Description: 1990 NTACS**  
(Trucks in Thousands)

Daily Maximum Empty Weight (Pounds)	Daily Truck Description									
	Straight Truck						Truck-Tractor	Other Trucks	Unknown Trucks	TOTALS Trucks
	4 Tires		6 or More Tires		With Tractor(s) Trucks	Without Tractor Trucks				
	Without Tractor Trucks	With Tractor(s) Trucks	Without Tractor Trucks	With Tractor(s) Trucks						
Less than 10,000	32,688 (98.5%)	663 (95.7%)	1,371 (47.9%)	144 (43.9%)	23 (2.5%)	3 (13.7%)	556 (90.8%)	2,925 (93.5%)	38,373 (91.9%)	
10,000-19,999	445 (1.3%)	24 (3.5%)	1,069 (37.3%)	105 (31.9%)	113 (11.9%)	5 (29.9%)	29 (4.7%)	130 (4.1%)	1,919 (4.6%)	
20,000-29,999	41 (0.1%)	5 (0.7%)	328 (11.4%)	60 (18.2%)	401 (42.4%)	8 (46.1%)	22 (3.6%)	50 (1.6%)	914 (2.2%)	
30,000-39,999	3 (a)	1 (0.1%)	74 (2.6%)	17 (5.1%)	339 (35.9%)	2 (10.3%)	4 (0.6%)	16 (0.5%)	456 (1.1%)	
40,000-49,999	a (a)	0 (0.0%)	14 (0.5%)	1 (0.3%)	35 (3.7%)	0 (0.0%)	0 (0.0%)	3 (0.1%)	54 (0.1%)	
50,000-59,999	a (a)	0 (0.0%)	4 (0.1%)	2 (0.5%)	10 (1.1%)	0 (0.0%)	1 (0.1%)	2 (0.1%)	18 (a)	
60,000-69,999	a (a)	0 (0.0%)	a (a)	0 (0.0%)	3 (0.3%)	0 (0.0%)	1 (0.2%)	0 (0.0%)	5 (a)	
70,000-79,999	0 (0.0%)	0 (0.0%)	a (a)	1 (0.2%)	12 (1.2%)	0 (0.0%)	0 (0.0%)	2 (0.1%)	15 (a)	
80,000-89,999	0 (0.0%)	0 (0.0%)	1 (a)	0 (0.0%)	10 (1.1%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	12 (a)	
90,000-99,999	2 (a)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (a)	
<b>TOTALS</b>	<b>33,179</b> (100.0%)	<b>694</b> (100.0%)	<b>2,862</b> (100.0%)	<b>329</b> (100.0%)	<b>946</b> (100.0%)	<b>18</b> (100.0%)	<b>612</b> (100.0%)	<b>3,128</b> (100.0%)	<b>41,768</b> (100.0%)	

(a) Quantity rounded to zero.

**Table 3.9b**  
**Associated Daily Vehicle Miles Traveled (DVMT) for Four Year and Older Trucks**  
**by Daily Maximum Empty Weight and Daily Truck Description: 1990 NTACS**  
(Daily VMT in Millions)

Daily Maximum Empty Weight (Pounds)	Daily Truck Description								TOTALS Daily VMT
	Straight Truck				Truck-Tractor				
	4 Tires		6 or More Tires		Truck-Tractor		Other Daily VMT	Unknown Daily VMT	
	Without Tractor Daily VMT	With Tractor(s) Daily VMT	Without Tractor Daily VMT	With Tractor(s) Daily VMT	With Tractor(s) Daily VMT	Without Tractor Daily VMT			
Less than 10,000	1,210 (98.4%)	27 (88.0%)	74 (40.7%)	10 (32.7%)	2 (0.7%)	a (5.0%)	26 (86.0%)	113 (85.6%)	1,462 (78.1%)
10,000-19,999	18 (1.5%)	3 (11.0%)	69 (38.1%)	9 (28.6%)	19 (8.1%)	1 (44.6%)	2 (6.0%)	6 (4.9%)	128 (6.8%)
20,000-29,999	2 (0.1%)	a (0.8%)	30 (16.4%)	7 (24.2%)	% (41.2%)	1 (34.7%)	2 (6.6%)	7 (5.5%)	146 (7.8%)
30,000-39,999	a (a)	a (0.1%)	6 (3.5%)	4 (12.2%)	99 (42.3%)	a (15.7%)	a (0.9%)	4 (3.3%)	114 (6.1%)
40,000-49,999	a (a)	0 (0.0%)	2 (1.0%)	a (1.3%)	8 (3.6%)	0 (0.0%)	0 (0.0%)	a (0.3%)	11 (0.6%)
50,000-59,999	a (a)	0 (0.0%)	a (0.2%)	a (0.8%)	2 (0.9%)	0 (0.0%)	a (0.1%)	a (0.3%)	3 (0.2%)
60,000-69,999	a (a)	0 (0.0%)	a (a)	0 (0.0%)	1 (0.3%)	0 (0.0%)	a (0.3%)	0 (0.0%)	1 (a)
70,000-79,999	0 (0.0%)	0 (0.0%)	a (a)	a (0.3%)	4 (1.6%)	0 (0.0%)	0 (0.0%)	a (0.2%)	4 (0.2%)
80,000-89,999	0 (0.0%)	0 (0.0%)	a (0.1%)	0 (0.0%)	3 (1.3%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	3 (0.2%)
90,000-99,999	a (a)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	a (a)
<b>TOTALS</b>	<b>1,230</b> <b>(100.0%)</b>	<b>31</b> <b>(100.0%)</b>	<b>182</b> <b>(100.0%)</b>	<b>30</b> <b>(100.0%)</b>	<b>234</b> <b>(100.0%)</b>	<b>3</b> <b>(100.0%)</b>	<b>30</b> <b>(100.0%)</b>	<b>133</b> <b>(100.0%)</b>	<b>1,872</b> <b>(100.0%)</b>

(a) Quantity rounded to zero.

**Table 3.10a**  
**Number of Four Year and Older Trucks**  
**by Daily Maximum Truck Length and Daily Truck Description: 1990 NTACS**  
(Trucks in Thousands)

Daily Maximum Truck Length (Feet)	Daily Truck Description								<b>TOTALS</b> Trucks
	Straight Truck				Truck-Tractor				
	4 Tires		6 or More Tires		Truck-Tractor		Other Trucks	Unknown Trucks	
	Without Trailer Trucks	With Trailer(s) Trucks	Without Trailer Trucks	With Trailer(s) Trucks	With Trailer(s) Trucks	Without Trailer Trucks			
Less Than 13	3,876 (11.7%)	1 (0.2%)	38 (1.3%)	a (a)	1 (0.1%)	0 (0.0%)	88 (14.3%)	318 (10.2%)	4,322 (10.3%)
13 - 15	6,528 (19.7%)	241 (34.8%)	190 (6.7%)	3 (0.8%)	a (a)	1 (4.4%)	238 (39.0%)	460 (14.7%)	7,662 (18.3%)
16 - 19	18,794 (56.6%)	323 (46.6%)	553 (19.3%)	27 (8.2%)	10 (1.1%)	2 (9.0%)	153 (25.1%)	1,797 (57.5%)	21,659 (51.9%)
20 - 27	3,767 (11.4%)	76 (11.0%)	1,520 (53.1%)	58 (17.6%)	9 (0.9%)	6 (32.2%)	98 (16.1%)	412 (13.2%)	5,946 (14.2%)
28 - 35	69 (0.2%)	36 (5.2%)	465 (16.2%)	43 (13.0%)	27 (2.9%)	2 (10.9%)	20 (3.3%)	59 (1.9%)	722 (1.7%)
36 - 40	69 (0.2%)	6 (0.9%)	59 (2.1%)	73 (22.2%)	62 (6.6%)	2 (10.7%)	3 (0.4%)	45 (1.4%)	319 (0.8%)
41 - 44	62 (0.2%)	5 (0.7%)	13 (0.5%)	51 (15.4%)	37 (3.9%)	1 (3.6%)	2 (0.3%)	11 (0.4%)	182 (0.4%)
45 - 49	1 (a)	1 (0.2%)	6 (0.2%)	20 (6.2%)	52 (5.5%)	1 (6.7%)	7 (1.1%)	7 (0.2%)	95 (0.2%)
50 - 55	3 (a)	1 (0.2%)	10 (0.3%)	24 (7.2%)	251 (26.6%)	1 (4.5%)	a (0.1%)	7 (0.2%)	297 (0.7%)
56 - 66	8 (a)	1 (0.2%)	8 (0.3%)	28 (8.4%)	440 (46.5%)	2 (10.5%)	2 (0.4%)	12 (0.4%)	502 (1.2%)
67 - 74	a (a)	0 (0.0%)	a (a)	1 (0.4%)	35 (3.7%)	0 (0.0%)	0 (0.0%)	a (a)	37 (0.1%)
75 and Over	0 (0.0%)	a (0.1%)	0 (0.0%)	2 (0.5%)	21 (2.2%)	1 (7.5%)	0 (0.0%)	0 (0.0%)	24 (0.1%)
<b>TOTALS</b>	<b>33,179</b> (100.0%)	<b>694</b> (100.0%)	<b>2,862</b> (100.0%)	<b>329</b> (100.0%)	<b>946</b> (100.0%)	<b>18</b> (100.0%)	<b>612</b> (100.0%)	<b>3,128</b> (100.0%)	<b>41,768</b> (100.0%)

(a) Quantity rounded to zero.

**Table 3.10b**  
**Associated Daily Vehicle Miles Traveled (DVMT) for Four Year and Older Trucks**  
**by Daily Maximum Truck Length and Daily Truck Description: 1990 NTACS**  
(Daily VMT in Millions)

Daily Maximum Truck Length (Feet)	Daily Truck Description									<u>TOTALS</u> Daily VMT
	Straight Truck				Truck-Tractor		Other Daily VMT	Unknown Daily VMT		
	4 Tires		6 or More Tires		With Tractor(s) Daily VMT	Without Tractor Daily VMT				
	Without Tractor Daily VMT	With Tractor(s) Daily VMT	Without Tractor Daily VMT	With Tractor(s) Daily VMT						
Less Than 13	154 (12.6%)	a (0.6%)	2 (1.1%)	a (a)	a (a)	0 (0.0%)	1 (3.5%)	7 (5.4%)	165 (8.8%)	
13 - 15	252 (20.5%)	7 (23.0%)	7 (3.9%)	a (0.7%)	a (a)	a (0.1%)	12 (40.2%)	19 (14.4%)	298 (15.9%)	
16 - 19	672 (54.6%)	16 (52.2%)	28 (15.1%)	1 (3.2%)	1 (0.4%)	a (2.2%)	9 (31.5%)	71 (53.8%)	798 (42.6%)	
20 - 27	137 (11.2%)	2 (7.6%)	98 (53.5%)	3 (10.7%)	1 (0.6%)	1 (26.1%)	6 (18.3%)	20 (15.2%)	268 (14.3%)	
28 - 35	3 (0.2%)	4 (13.4%)	40 (21.8%)	4 (13.1%)	3 (1.4%)	a (4.8%)	1 (3.6%)	5 (3.8%)	60 (3.2%)	
36 - 40	2 (0.2%)	a (1.3%)	5 (2.5%)	3 (11.5%)	8 (3.3%)	a (2.5%)	a (0.6%)	2 (1.8%)	21 (1.1%)	
41 - 44	9 (0.7%)	a (0.6%)	1 (0.5%)	6 (19.1%)	5 (2.2%)	a (2.6%)	a (0.2%)	1 (1.0%)	22 (1.2%)	
45 - 49	a (a)	a (0.4%)	a (0.2%)	3 (9.6%)	9 (3.7%)	a (2.6%)	a (1.4%)	1 (0.8%)	14 (0.7%)	
50 - 55	a (a)	a (0.3%)	1 (0.6%)	3 (10.1%)	57 (24.2%)	a (5.4%)	a (0.2%)	2 (1.1%)	63 (3.3%)	
56 - 66	a (a)	a (a)	1 (0.7%)	6 (18.7%)	131 (56.2%)	1 (24.5%)	a (0.5%)	3 (2.6%)	143 (7.6%)	
67 - 74	a (a)	0 (0.0%)	a (a)	a (1.2%)	11 (4.7%)	0 (0.0%)	0 (0.0%)	a (a)	11 (0.6%)	
75 and Over	0 (0.0%)	a (0.5%)	0 (0.0%)	1 (2.2%)	7 (3.2%)	1 (29.2%)	0 (0.0%)	0 (0.0%)	9 (0.5%)	
<b>TOTALS</b>	<b>1,230</b> <b>(100.0%)</b>	<b>31</b> <b>(100.0%)</b>	<b>182</b> <b>(100.0%)</b>	<b>30</b> <b>(100.0%)</b>	<b>234</b> <b>(100.0%)</b>	<b>3</b> <b>(100.0%)</b>	<b>30</b> <b>(100.0%)</b>	<b>133</b> <b>(100.0%)</b>	<b>1,872</b> <b>(100.0%)</b>	

(a) Quantity rounded to zero.

**Table 3.11**  
**Number of Four Year and Older Trucks and Associated Daily Miles Traveled (DVMT)**  
**by Daily Maximum Truck Height and Daily Truck Description: 1990 NTACS**

(Trucks in Thousands/Daily VMT in Millions)

Daily Maximum Truck Height (Feet)	Daily Truck Description								
	Straight Truck								TOTALS Trucks
	4 Tires		6 or More Tires		Truck-Tractor		Other Trucks	Unknown Trucks	
	Without Trailer Trucks	With Trailer(s) Trucks	Without Trailer Trucks	With Trailer(s) Trucks	With Trailer(s) Trucks	Without Trailer Trucks			
5 and under	1,010 (3.0%)	5 (0.7%)	29 (1.0%)	1 (0.2%)	4 (0.4%)	0 (0.0%)	10 (1.6%)	68 (2.2%)	1,127 (2.7%)
6 - 10	30,885 (93.1%)	684 (98.6%)	2,121 (74.1%)	255 (77.5%)	156 (16.5%)	9 (49.0%)	557 (91.0%)	2,943 (94.1%)	37,609 (90.0%)
11 - 15	1,283 (3.9%)	4 (0.6%)	697 (24.4%)	69 (20.8%)	782 (82.6%)	9 (51.0%)	45 (7.4%)	117 (3.7%)	3,006 (7.2%)
Over 15	1 (a)	0 (0.0%)	15 (0.5%)	5 (1.4%)	5 (0.5%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	26 (0.1%)
<b>TOTALS</b>	<b>33,179</b> (100.0%)	<b>694</b> (100.0%)	<b>2,862</b> (100.0%)	<b>329</b> (100.0%)	<b>946</b> (100.0%)	<b>18</b> (100.0%)	<b>612</b> (100.0%)	<b>3,128</b> (100.0%)	<b>41,768</b> (100.0%)
(Feet)	Daily VMT	Daily VMT	Daily VMT	Daily VMT	Daily VMT	Daily VMT	Daily VMT	Daily VMT	Daily VMT
5 and under	42 (3.4%)	a (0.3%)	2 (0.9%)	a (0.2%)	1 (0.3%)	0 (0.0%)	a (0.6%)	4 (3.3%)	49 (2.6%)
6 - 10	1,130 (91.9%)	30 (98.2%)	118 (64.6%)	20 (68.0%)	30 (12.9%)	1 (32.2%)	28 (93.1%)	117 (88.1%)	1,474 (78.8%)
11 - 15	58 (4.7%)	a (1.5%)	61 (33.6%)	9 (29.0%)	202 (86.5%)	2 (67.8%)	2 (6.3%)	11 (8.5%)	346 (18.5%)
Over 15	a (a)	0 (0.0%)	2 (0.9%)	1 (2.8%)	1 (0.3%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	3 (0.2%)
<b>TOTALS</b>	<b>1,230</b> (100.0%)	<b>31</b> (100.0%)	<b>182</b> (100.0%)	<b>30</b> (100.0%)	<b>234</b> (100.0%)	<b>3</b> (100.0%)	<b>30</b> (100.0%)	<b>133</b> (100.0%)	<b>1,872</b> (100.0%)

(a) Quantity rounded to zero.

**Table 3.12**  
**Number of Four Year and Older Trucks and Associated Daily Miles Traveled (DVMT)**  
**by Daily Maximum Percent Payload Space and Daily Truck Description: 1990 NTACS**

(Trucks in Thousands/Daily VMT in Millions)

Daily Maximum Percent Payload Space	Daily Truck Description									
	Straight Truck						Truck-Tractor	Other Trucks	Unknown Trucks	TOTALS Trucks
	4 Tires		6 or More Tires		With Trailer(s) Trucks	Without Trailer Trucks				
	Without Trailer Trucks	With Trailer(s) Trucks	Without Trailer Trucks	With Trailer(s) Trucks						
Less Than 10%	8,047 (24.3%)	52 (7.5%)	177 (6.2%)	25 (7.5%)	19 (2.0%)	1 (6.2%)	132 (21.5%)	645 (20.6%)	9,098 (21.8%)	
10 - 24%	10,874 (32.8%)	133 (19.1%)	207 (7.2%)	18 (5.4%)	11 (1.2%)	0 (0.0%)	72 (11.7%)	714 (22.8%)	12,028 (28.8%)	
25 - 49%	6,223 (18.8%)	340 (49.0%)	258 (9.0%)	16 (4.8%)	39 (4.1%)	0 (0.0%)	211 (34.5%)	368 (11.8%)	7,455 (17.8%)	
50 - 74%	3,729 (11.2%)	41 (5.9%)	752 (26.3%)	65 (19.9%)	139 (14.7%)	3 (17.9%)	118 (19.4%)	494 (15.8%)	5,342 (12.8%)	
75 - 100%	4,307 (13.0%)	128 (18.5%)	1,468 (51.3%)	205 (62.4%)	738 (78.0%)	14 (75.9%)	79 (12.8%)	907 (29.0%)	7,845 (18.8%)	
<b>TOTALS</b>	<b>33,179</b> <b>(100.0%)</b>	<b>694</b> <b>(100.0%)</b>	<b>2,862</b> <b>(100.0%)</b>	<b>329</b> <b>(100.0%)</b>	<b>946</b> <b>(100.0%)</b>	<b>18</b> <b>(100.0%)</b>	<b>612</b> <b>(100.0%)</b>	<b>3,128</b> <b>(100.0%)</b>	<b>41,768</b> <b>(100.0%)</b>	
	Daily VMT	Daily VMT	Daily VMT	Daily VMT	Daily VMT	Daily VMT	Daily VMT	Daily VMT	Daily VMT	
Less Than 10%	291 (23.6%)	1 (3.4%)	9 (5.0%)	1 (4.8%)	4 (1.8%)	a (2.5%)	4 (14.4%)	20 (15.4%)	331 (17.7%)	
10 - 24%	375 (30.5%)	3 (10.1%)	9 (4.9%)	1 (1.8%)	2 (0.9%)	0 (0.0%)	5 (17.6%)	32 (24.5%)	427 (22.8%)	
25 - 49%	246 (20.0%)	11 (37.0%)	14 (7.6%)	1 (2.8%)	8 (3.2%)	0 (0.0%)	10 (32.4%)	12 (9.0%)	302 (16.1%)	
50 - 74%	160 (13.0%)	5 (14.7%)	43 (23.8%)	5 (16.6%)	27 (11.6%)	a (18.7%)	7 (23.4%)	20 (15.3%)	267 (14.3%)	
75 - 100%	159 (12.9%)	11 (34.8%)	107 (58.7%)	22 (74.0%)	193 (82.5%)	2 (78.8%)	4 (12.1%)	48 (35.9%)	545 (29.1%)	
<b>TOTALS</b>	<b>1,230</b> <b>(100.0%)</b>	<b>31</b> <b>(100.0%)</b>	<b>182</b> <b>(100.0%)</b>	<b>30</b> <b>(100.0%)</b>	<b>234</b> <b>(100.0%)</b>	<b>3</b> <b>(100.0%)</b>	<b>30</b> <b>(100.0%)</b>	<b>133</b> <b>(100.0%)</b>	<b>1,872</b> <b>(100.0%)</b>	

(a) Quantity rounded to zero.

**Table 3.13a**  
**Number of Four Year and Older Trucks**  
**by Daily Maximum Empty Weight and Daily Maximum Loaded Weight: 1990 NTACS**  
**(Trucks in Thousands)**

Daily Maximum Empty Weight (Pounds)	Daily Maximum Loaded Weight (Pounds)											TOTALS Trucks
	Less Than 10,000 Trucks	10,000 - 19,999 Trucks	20,000 - 29,999 Trucks	30,000 - 39,999 Trucks	40,000 - 49,999 Trucks	50,000 - 59,999 Trucks	60,000 - 69,999 Trucks	70,000 - 79,999 Trucks	80,000 - 89,999 Trucks	90,000 - 99,999 Trucks	100,000 and over Trucks	
Less Than 10,000	35,096 (99.9%)	3,062 (79.0%)	184 (21.3%)	14 (2.8%)	2 (0.5%)	a (a)	a (0.1%)	4 (1.0%)	0 (0.0%)	7 (36.9%)	5 (15.8%)	38,373 (91.9%)
10,000 - 19,999	7 (a)	814 (21.0%)	566 (65.8%)	317 (62.5%)	112 (32.0%)	50 (21.0%)	31 (14.4%)	8 (2.2%)	12 (6.6%)	1 (6.3%)	1 (3.0%)	1,919 (4.6%)
20,000 - 29,999	14 (a)	a (a)	111 (12.8%)	124 (24.5%)	172 (49.4%)	138 (57.6%)	118 (54.1%)	150 (41.4%)	79 (43.0%)	2 (11.9%)	6 (17.6%)	914 (2.2%)
30,000 - 39,999	0 (0.0%)	1 (a)	a (a)	49 (9.7%)	50 (14.4%)	39 (16.2%)	56 (25.9%)	173 (47.8%)	73 (39.5%)	6 (33.3%)	8 (23.4%)	456 (1.1%)
40,000 - 49,999	0 (0.0%)	1 (a)	0 (0.0%)	2 (0.5%)	13 (3.6%)	3 (1.4%)	7 (3.4%)	11 (3.0%)	8 (4.1%)	2 (8.6%)	7 (20.4%)	54 (0.1%)
50,000 - 59,999	0 (0.0%)	0 (0.0%)	a (a)	0 (0.0%)	0 (0.0%)	9 (3.6%)	1 (0.3%)	3 (0.8%)	1 (0.7%)	1 (3.1%)	4 (11.9%)	18 (a)
60,000 - 69,999	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	4 (1.7%)	a (a)	0 (0.0%)	0 (0.0%)	1 (3.0%)	5 (a)
70,000 - 79,999	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	a (0.1%)	a (0.1%)	a (0.1%)	13 (3.7%)	a (0.1%)	0 (0.0%)	1 (1.5%)	15 (a)
80,000 - 89,999	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	a (0.1%)	0 (0.0%)	0 (0.0%)	a (0.1%)	11 (6.0%)	0 (0.0%)	a (1.3%)	12 (a)
90,000 - 99,999	1 (a)	0 (0.0%)	1 (2.1%)	2 (a)								
TOTALS	35,118 (100.0%)	3,878 (100.0%)	861 (100.0%)	506 (100.0%)	349 (100.0%)	240 (100.0%)	218 (100.0%)	362 (100.0%)	184 (100.0%)	19 (100.0%)	33 (100.0%)	41,768 (100.0%)

(a) Quantitly rounded to zero.

**Table 3.13b**  
**Associated Daily Vehicle Miles Traveled (DVMT) for Four Year and Older Trucks**  
**by Daily Maximum Empty Weight and Daily Maximum Loaded Weight: 1990 NTACS**

(Daily VMT in Millions)

Daily Maximum Empty Weight (Pounds)	Daily Maximum Loaded Weight (Pounds)											TOTALS Daily VMT
	Less Than 10,000 Daily VMT	10,000 - 19,999 Daily VMT	20,000 - 29,999 Daily VMT	30,000 - 39,999 Daily VMT	40,000 - 49,999 Daily VMT	50,000 - 59,999 Daily VMT	60,000 - 69,999 Daily VMT	70,000 - 79,999 Daily VMT	80,000 - 89,999 Daily VMT	90,000 - 99,999 Daily VMT	100,000 and over Daily VMT	
Less Than 10,000	1,307 (99.9%)	143 (76.4%)	9 (15.3%)	4 (8.7%)	a (0.4%)	a (a)	a (a)	a (0.1%)	0 (0.0%)	a (2.5%)	a (3.5%)	1,462 (78.1%)
10,000 - 19,999	a (a)	44 (23.6%)	40 (70.6%)	19 (45.8%)	9 (20.1%)	5 (15.3%)	4 (10.2%)	2 (2.0%)	3 (6.3%)	a (10.1%)	a (0.9%)	128 (6.8%)
20,000 - 29,999	1 (a)	a (a)	8 (13.9%)	12 (29.3%)	23 (48.2%)	19 (54.1%)	21 (52.3%)	39 (40.5%)	22 (43.6%)	1 (18.5%)	a (7.5%)	146 (7.8%)
30,000 - 39,999	0 (0.0%)	a (a)	a (a)	6 (14.3%)	13 (27.0%)	9 (25.9%)	13 (33.1%)	48 (50.3%)	21 (40.5%)	2 (58.8%)	2 (35.6%)	114 (6.1%)
40,000 - 49,999	0 (0.0%)	a (a)	0 (0.0%)	1 (2.1%)	2 (3.9%)	a (1.2%)	1 (2.6%)	3 (2.7%)	2 (3.6%)	a (4.7%)	2 (30.7%)	11 (0.6%)
50,000 - 59,999	0 (0.0%)	0 (0.0%)	a (0.2%)	0 (0.0%)	0 (0.0%)	1 (3.5%)	a (0.4%)	a (0.5%)	a (0.4%)	a (5.4%)	1 (12.0%)	3 (0.2%)
60,000 - 69,999	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (1.3%)	a (a)	0 (0.0%)	0 (0.0%)	a (4.1%)	1 (a)
70,000 - 79,999	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	a (0.3%)	a (a)	a (0.1%)	4 (3.8%)	a (0.2%)	0 (0.0%)	a (2.5%)	4 (0.2%)
80,000 - 89,999	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	a (0.2%)	0 (0.0%)	0 (0.0%)	a (0.1%)	3 (5.4%)	0 (0.0%)	a (3.1%)	3 (0.2%)
90,000 - 99,999	a (a)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	a (0.3%)	a (a)
<b>TOTALS</b>	<b>1,308</b> <b>(100.0%)</b>	<b>187</b> <b>(100.0%)</b>	<b>57</b> <b>(100.0%)</b>	<b>41</b> <b>(100.0%)</b>	<b>47</b> <b>(100.0%)</b>	<b>35</b> <b>(100.0%)</b>	<b>41</b> <b>(100.0%)</b>	<b>96</b> <b>(100.0%)</b>	<b>51</b> <b>(100.0%)</b>	<b>3</b> <b>(100.0%)</b>	<b>7</b> <b>(100.0%)</b>	<b>1,872</b> <b>(100.0%)</b>

(a) Quantity rounded to zero.

**Table 3.14a**  
**Number of Four Year and Older Trucks**  
**by Daily Maximum Truck Length and Daily Maximum Loaded Weight: 1990 NTACS**  
**(Trucks in Thousands)**

Daily Maximum Truck Length (Feet)	Daily Maximum Loaded Weight (Pounds)											TOTALS Trucks
	Less Than 10,000 Trucks	10,000 - 19,999 Trucks	20,000 - 29,999 Trucks	30,000 - 39,999 Trucks	40,000 - 49,999 Trucks	50,000 - 59,999 Trucks	60,000 - 69,999 Trucks	70,000 - 79,999 Trucks	80,000 - 89,999 Trucks	90,000 - 99,999 Trucks	100,000 and Over Trucks	
Less Than 13	2,543 (7.2%)	1,775 (45.8%)	1 (0.2%)	1 (0.3%)	0 (0.0%)	1 (0.4%)	0 (0.0%)	0 (0.0%)	a (0.2%)	0 (0.0%)	0 (0.0%)	4,322 (10.3%)
13 - 15	7,490 (21.3%)	129 (3.3%)	22 (2.5%)	4 (0.7%)	4 (1.1%)	3 (1.3%)	a (0.1%)	a (a)	0 (0.0%)	7 (36.9%)	3 (10.1%)	7,662 (18.3%)
16 - 19	21,017 (59.8%)	481 (12.4%)	113 (13.1%)	23 (4.6%)	13 (3.8%)	4 (1.6%)	1 (0.4%)	7 (2.0%)	a (0.2%)	0 (0.0%)	0 (0.0%)	21,659 (51.9%)
20 - 27	3,936 (11.2%)	1,079 (27.8%)	482 (56.0%)	256 (50.5%)	70 (20.0%)	61 (25.5%)	41 (18.8%)	17 (4.7%)	2 (1.0%)	a (1.2%)	2 (6.5%)	5,946 (14.2%)
28 - 35	95 (0.3%)	170 (4.4%)	138 (16.0%)	92 (18.3%)	123 (35.1%)	47 (19.7%)	33 (15.2%)	19 (5.3%)	2 (1.1%)	1 (2.9%)	1 (4.2%)	722 (1.7%)
36 - 40	9 (a)	164 (4.2%)	38 (4.4%)	31 (6.2%)	29 (8.2%)	16 (6.7%)	14 (6.4%)	13 (3.7%)	5 (2.5%)	0 (0.0%)	a (1.0%)	319 (0.8%)
41 - 44	26 (0.1%)	58 (1.5%)	20 (2.3%)	24 (4.7%)	14 (4.1%)	18 (7.5%)	7 (3.2%)	12 (3.4%)	2 (1.2%)	0 (0.0%)	a (0.2%)	182 (0.4%)
45 - 49	a (a)	9 (0.2%)	12 (1.3%)	14 (2.8%)	8 (2.3%)	11 (4.6%)	11 (5.1%)	12 (3.4%)	12 (6.7%)	1 (2.8%)	4 (13.0%)	95 (0.2%)
50 - 55	1 (a)	4 (0.1%)	25 (2.9%)	30 (6.0%)	37 (10.7%)	24 (10.2%)	36 (16.4%)	90 (24.8%)	46 (25.2%)	1 (4.6%)	2 (5.7%)	297 (0.7%)
56 - 66	a (a)	7 (0.2%)	9 (1.1%)	28 (5.6%)	46 (13.0%)	48 (20.0%)	68 (31.2%)	178 (49.2%)	103 (55.9%)	6 (29.3%)	9 (27.8%)	502 (1.2%)
67 - 74	0 (0.0%)	0 (0.0%)	2 (0.2%)	1 (0.2%)	5 (1.6%)	3 (1.3%)	4 (1.8%)	10 (2.7%)	8 (4.5%)	1 (5.7%)	3 (9.0%)	37 (0.1%)
75 and Over	a (a)	0 (0.0%)	a (a)	1 (0.2%)	a (0.1%)	3 (1.2%)	3 (1.4%)	3 (0.8%)	3 (1.5%)	3 (16.4%)	7 (22.5%)	24 (0.1%)
<b>TOTALS</b>	<b>35,118</b> <b>(100.0%)</b>	<b>3,878</b> <b>(100.0%)</b>	<b>861</b> <b>(100.0%)</b>	<b>506</b> <b>(100.0%)</b>	<b>349</b> <b>(100.0%)</b>	<b>240</b> <b>(100.0%)</b>	<b>218</b> <b>(100.0%)</b>	<b>362</b> <b>(100.0%)</b>	<b>184</b> <b>(100.0%)</b>	<b>19</b> <b>(100.0%)</b>	<b>33</b> <b>(100.0%)</b>	<b>41,768</b> <b>(100.0%)</b>

(a) Quantity rounded to zero.

**Table 3.14b**  
**Associated Daily Vehicle Miles Traveled (DVMT) for Four Year and Older Trucks**  
**by Daily Maximum Truck Length and Daily Maximum Loaded Weight: 1990 NTACS**

(Daily VMT in Millions)

Daily Maximum Truck Length (Feet)	Daily Maximum Loaded Weight (Pounds)											TOTALS Daily VMT
	Less Than 10,000 Daily VMT	10,000 to 19,999 Daily VMT	20,000 to 29,999 Daily VMT	30,000 to 39,999 Daily VMT	40,000 to 49,999 Daily VMT	50,000 to 59,999 Daily VMT	60,000 to 69,999 Daily VMT	70,000 to 79,999 Daily VMT	80,000 to 89,999 Daily VMT	90,000 to 99,999 Daily VMT	100,000 and Over Daily VMT	
Less Than 13	91 (6.9%)	74 (39.7%)	a (0.1%)	a (0.1%)	0 (0.0%)	a (0.1%)	0 (0.0%)	0 (0.0%)	a (0.1%)	0 (0.0%)	0 (0.0%)	165 (8.8%)
13 - 15	290 (22.2%)	6 (3.0%)	1 (1.4%)	a (0.4%)	a (0.6%)	a (0.5%)	a (a)	a (a)	0 (0.0%)	a (2.5%)	a (3.4%)	298 (15.9%)
16 - 19	764 (58.4%)	24 (13.0%)	6 (10.4%)	1 (3.2%)	1 (2.2%)	a (1.2%)	a (0.4%)	1 (0.6%)	a (0.2%)	0 (0.0%)	0 (0.0%)	798 (42.6%)
20 - 27	155 (11.9%)	53 (28.7%)	26 (44.7%)	17 (40.8%)	5 (11.0%)	5 (13.6%)	5 (11.1%)	3 (38%)	a (0.6%)	a (1.8%)	a (0.5%)	268 (14.3%)
28 - 35	3 (0.2%)	13 (67%)	14 (23.9%)	8 (20.5%)	13 (26.9%)	4 (12.5%)	3 (8.3%)	2 (2.2%)	a (0.7%)	a (3.31)	a (0.9%)	60 (3.2%)
36 - 40	a (a)	6 (3.2%)	3 (4.8%)	3 (6.6%)	3 (6.0%)	2 (5.1%)	1 (3.6%)	2 (2.2%)	1 (1.9%)	0 (0.0%)	a (1.2%)	21 (1.1%)
41 - 44	4 (0.3%)	7 (3.8%)	2 (3.8%)	1 (26%)	2 (4.7%)	2 (5.6%)	1 (2.5%)	2 (1.8%)	1 (1.3%)	0 (0.0%)	a (0.2%)	22 (1.2%)
45 - 49	a (a)	2 (0.9%)	1 (2.5%)	2 (3.8%)	a (1.0%)	1 (4.1%)	2 (4.1%)	2 (25%)	3 (4.9%)	a (6.1%)	a (3.6%)	14 (0.7%)
50 - 55	a (a)	1 (0.4%)	3 (4.9%)	3 (8.6%)	10 (21.4%)	4 (11.8%)	8 (18.6%)	23 (23.6%)	11 (21.1%)	a (3.4%)	a (3.8%)	63 (3.3%)
56 - 66	a (a)	1 (0.6%)	2 (2.8%)	5 (11.8%)	11 (23.6%)	13 (38.6%)	18 (43.9%)	58 (59.8%)	32 (61.8%)	1 (38.2%)	2 (364%)	143 (7.6%)
67 - 74	0 (0.0%)	0 (0.0%)	a (0.5%)	a (0.5%)	1 (2.3%)	1 (3.1%)	2 (3.7%)	3 (3.6%)	3 (5.5%)	a (12.0%)	1 (9.4%)	11 (0.6%)
75 and Over	a (a)	0 (0.0%)	a (a)	a (1.0%)	a (0.2%)	1 (3.9%)	2 (3.8%)	1 (0.9%)	1 (1.3%)	1 (327%)	3 (40.6%)	9 (0.5%)
<b>TOTALS</b>	<b>1,308</b> <b>(100.0%)</b>	<b>187</b> <b>(100.0%)</b>	<b>57</b> <b>(100.0%)</b>	<b>41</b> <b>(100.0%)</b>	<b>47</b> <b>(100.0%)</b>	<b>35</b> <b>(100.0%)</b>	<b>41</b> <b>(100.0%)</b>	<b>96</b> <b>(100.0%)</b>	<b>51</b> <b>(100.0%)</b>	<b>3</b> <b>(100.0%)</b>	<b>7</b> <b>(100.0%)</b>	<b>1,872</b> <b>(100.0%)</b>

57

(a) Quantity rounded to zero.

**Table 3.15**  
**Number of Four Year and Older Trucks and Associated Daily Vehicle Miles Traveled (DVMT)**  
**by Daily Maximum Truck Length and Daily Maximum Percent Payload Space: 1990 NTACS**

(Trucks in Thousands/Daily VMT in Millions)

Daily Maximum Truck Length (Feet)	Daily Maximum Percent Payload Space										TOTALS	
	Less Than 10%		10 - 24%		25 - 49%		50 - 74%		75 - 100%		Trucks	Daily VMT
	Trucks	Daily VMT	Trucks	Daily VMT	Trucks	Daily VMT	Trucks	Daily VMT	Trucks	Daily VMT		
Less Than 13	1,017 (11.2%)	41 (12.4%)	637 (5.3%)	14 (3.3%)	381 (5.1%)	13 (4.4%)	2,035 (38.1%)	88 (33.1%)	252 (3.2%)	8 (1.4%)	4,322 (10.3%)	165 (8.8%)
13 - 15	899 (9.9%)	37 (11.3%)	2,960 (24.6%)	96 (22.4%)	2,568 (34.4%)	111 (37.0%)	900 (16.8%)	39 (14.5%)	336 (4.3%)	14 (2.7%)	7,662 (18.3%)	298 (15.9%)
16 - 19	6,924 (76.1%)	236 (71.3%)	5,644 (46.9%)	209 (49.0%)	4,019 (53.9%)	148 (49.1%)	935 (17.5%)	45 (16.7%)	4,137 (52.7%)	160 (29.4%)	21,659 (51.9%)	798 (42.6%)
20 - 27	207 (2.3%)	10 (3.1%)	2,676 (22.2%)	98 (22.9%)	373 (5.0%)	17 (5.7%)	1,147 (21.5%)	54 (20.0%)	1,543 (19.7%)	90 (16.5%)	5,946 (14.2%)	268 (14.3%)
28 - 35	16 (0.2%)	1 (0.4%)	36 (0.3%)	1 (0.3%)	54 (0.7%)	3 (1.1%)	127 (2.4%)	8 (3.2%)	489 (6.2%)	46 (8.5%)	722 (1.7%)	60 (3.2%)
36 - 40	4 (a)	a (a)	12 (0.1%)	1 (0.2%)	13 (0.2%)	1 (0.3%)	48 (0.9%)	4 (1.5%)	241 (3.1%)	16 (2.9%)	319 (0.8%)	21 (1.1%)
41 - 44	2 (a)	a (a)	53 (0.4%)	7 (1.6%)	2 (a)	a (a)	24 (0.5%)	3 (1.1%)	101 (1.3%)	12 (2.2%)	182 (0.4%)	22 (1.2%)
45 - 49	6 (0.1%)	1 (0.2%)	0 (0.0%)	0 (0.0%)	2 (a)	a (0.1%)	25 (0.5%)	4 (1.4%)	62 (0.8%)	9 (1.6%)	95 (0.2%)	14 (0.7%)
50 - 55	8 (0.1%)	2 (0.5%)	5 (a)	a (0.1%)	15 (0.2%)	2 (0.5%)	36 (0.7%)	7 (2.4%)	233 (3.0%)	52 (9.6%)	297 (0.7%)	63 (3.3%)
56 - 66	11 (0.1%)	2 (0.7%)	5 (a)	1 (0.3%)	25 (0.3%)	4 (1.4%)	60 (1.1%)	14 (5.3%)	400 (5.1%)	121 (22.1%)	502 (1.2%)	143 (7.6%)
67 - 74	a (a)	a (a)	1 (a)	a (0.1%)	3 (a)	1 (0.3%)	2 (a)	1 (0.2%)	31 (0.4%)	10 (1.7%)	37 (0.1%)	11 (0.6%)
75 and Over	a (a)	a (a)	a (a)	a (a)	1 (a)	a (a)	3 (0.1%)	1 (0.5%)	21 (0.3%)	8 (1.4%)	24 (0.1%)	9 (0.5%)
<b>TOTALS</b>	<b>9,098</b> (100.0%)	<b>331</b> (100.0%)	<b>12,028</b> (100.0%)	<b>427</b> (100.0%)	<b>7,455</b> (100.0%)	<b>302</b> (100.0%)	<b>5,342</b> (100.0%)	<b>267</b> (100.0%)	<b>7,845</b> (100.0%)	<b>545</b> (100.0%)	<b>41,768</b> (100.0%)	<b>1,872</b> (100.0%)

(a) Quantity rounded to zero.

**Table 3.16**  
**Number of Four Year and Older Trucks and Associated Daily Vehicle Miles Traveled (DVMT)**  
**by Daily Commodity Carried: 1990 NTACS**  
(Trucks in Thousands/Daily VMT in Millions)

Daily Commodity Carried	Trucks		Daily VMT	
<b>Agricultural and Food Products</b>				
- Live Animals .....	158	(0.4%)	6	(0.3%)
- Fresh Farm Products .....	261	(0.6%)	14	(0.7%)
- Processed Foods .....	779	(1.9%)	63	(3.4%)
Mining Products, Unrefined - Crude Oil, Coal, and Metal Ores .....	109	(0.3%)	8	(0.4%)
Building Materials - Gravel, Sand, Concrete, Glass, and Stone, etc. ...	180	(0.4%)	17	(0.9%)
<b>Forestry, Wood, and Paper Products</b>				
- Logs and Forest Products .....	61	(0.1%)	6	(0.3%)
- Lumber and Fabricated Wood Products - Except Furniture .....	125	(0.3%)	11	(0.6%)
- Paper, Printed Matter, and Paper Products .....	99	(0.2%)	13	(0.7%)
<b>Chemicals, Petroleum, and Allied Products</b>				
- Chemicals and/or Drugs .....	330	(0.8%)	25	(1.4%)
- Petroleum, Petroleum Products, Paving, and Asphalt or Tar Cements	518	(1.2%)	32	(1.7%)
- Plastics and/or Rubber Products .....	215	(0.5%)	32	(1.7%)
<b>Metals and Metal Products</b>				
- Primary Metal Products .....	642	(1.5%)	38	(2.0%)
- Fabricated Metal Products and Bolts and Nuts .....	425	(1.0%)	37	(2.0%)
- Machinery .....	330	(0.8%)	39	(2.1%)
- Transportation Equipment and Parts .....	598	(1.4%)	36	(1.9%)
<b>Other Manufactured Products</b>				
- Furniture (Wood and Non-wood) and/or Fixtures .....	286	(0.7%)	24	(1.3%)
- Textiles and Apparels .....	410	(1.0%)	37	(2.0%)
- Miscellaneous Products of Manufacturing .....	298	(0.7%)	24	(1.3%)
<b>Miscellaneous</b>				
- Moving of Household and Office Furniture, Including Exhibits .....	198	(0.5%)	16	(0.9%)
- Mixed Cargo, General Freight, Mail and Express Traffic, etc. ....	990	(2.4%)	63	(3.4%)
- Tools/Parts for Specialized Use as in Craftsman's Vehicle .....	2,165	(5.2%)	82	(4.4%)
- Scrap, Garbage, Trash .....	1,383	(3.3%)	49	(2.6%)
- Industrial Water .....	314	(0.8%)	12	(0.7%)
Other .....	21,204	(50.8%)	745	(39.7%)
No Load Carried/Vehicle Empty .....	9,690	(23.2%)	440	(23.5%)
<b>TOTALS</b>	<b>41,768</b>	<b>(100.0%)</b>	<b>1,872</b>	<b>(100.0%)</b>

**Table 3.17**  
**Number of Four Year and Older Trucks and Associated Daily Vehicle Miles Traveled (DVMT)**  
**by Daily Major Use and Daily Hazardous Material Carrying Status: 1990 NTACS**  
 (Trucks in Thousands/Daily VMT in Millions)

Daily Major Use	Daily Hazardous Material Carrying Status						TOTALS	
	Yes		No		Unknown		Trucks	Daily VMT
	Trucks	Daily VMT	Trucks	Daily VMT	Trucks	Daily VMT		
Personal Transportation	1 (0.6%)	a (a)	1,898 (18.3%)	72 (9.8%)	27,862 (89.2%)	950 (85.7%)	29,760 (71.3%)	1,022 (54.6%)
Contract Carrier	25 (13.2%)	5 (19.6%)	518 (5.0%)	83 (11.3%)	103 (0.3%)	5 (0.4%)	645 (1.5%)	93 (5.0%)
Common Carrier	51 (27.0%)	9 (34.8%)	1,220 (11.8%)	167 (22.7%)	44 (0.1%)	3 (0.3%)	1,314 (3.1%)	180 (9.6%)
Other Business Use	103 (55.0%)	11 (43.3%)	6,073 (58.7%)	379 (51.4%)	820 (2.6%)	53 (4.8%)	6,996 (16.8%)	443 (23.6%)
Unknown	8 (4.2%)	1 (2.3%)	633 (6.1%)	36 (4.9%)	2,410 (7.7%)	98 (8.8%)	3,051 (7.3%)	135 (7.2%)
<b>TOTALS</b>	<b>187</b> <b>(100.0%)</b>	<b>26</b> <b>(100.0%)</b>	<b>10,342</b> <b>(100.0%)</b>	<b>737</b> <b>(100.0%)</b>	<b>31,239</b> <b>(100.0%)</b>	<b>1,109</b> <b>(100.0%)</b>	<b>41,768</b> <b>(100.0%)</b>	<b>1,872</b> <b>(100.0%)</b>

(a) Quantity rounded to zero.

**Table 3.18**  
**Number of Four Year and Older Trucks and Associated Daily Vehicle Miles Traveled (DVMT)**  
**by Daily Truck Description and Daily Hazardous Material Carrying Status: 1990 NTACS**

(Trucks in Thousands/Daily VMT in Millions)

Daily Truck Description	Daily Hazardous Material Carrying Status						TOTALS	
	Yes		No		Unknown		Trucks	Daily VMT
	Trucks	Daily VMT	Trucks	Daily VMT	Trucks	Daily VMT		
<b>Straight Truck</b>								
- With 4 Tires Without Trailer	8 (4.3%)	1 (2.8%)	5,922 (57.3%)	290 (39.3%)	27,250 (87.2%)	940 (84.7%)	33,179 (79.4%)	1,234 (65.7%)
- With 4 Tires With Trailer(s)	a (a)	a (a)	150 (1.5%)	8 (1.1%)	543 (1.7%)	23 (2.0%)	694 (1.7%)	31 (1.6%)
- With 6 or More Tires Without Trailer	102 (54.4%)	8 (29.3%)	2,332 (22.6%)	155 (21.0%)	428 (1.4%)	20 (1.8%)	2,862 (6.9%)	181 (9.7%)
- With 6 or More Tires With Trailer(s)	4 (2.1%)	1 (3.5%)	295 (2.9%)	27 (3.7%)	30 (0.1%)	2 (0.2%)	329 (0.8%)	30 (1.6%)
<b>Truck-Tractor</b>								
- With Trailer(s)	62 (33.2%)	15 (59.7%)	838 (8.1%)	210 (28.5%)	45 (0.1%)	8 (0.7%)	946 (2.3%)	234 (12.5%)
- Without Trailer	a (0.2%)	a (0.1%)	16 (0.2%)	2 (0.3%)	3 (a)	a (a)	18 (a)	3 (0.1%)
<b>Other</b>								
	4 (2.3%)	1 (2.4%)	198 (1.9%)	13 (1.8%)	410 (1.3%)	16 (1.5%)	612 (1.5%)	30 (1.6%)
<b>Unknown</b>								
	7 (3.5%)	1 (2.3%)	591 (5.7%)	32 (4.4%)	2,530 (8.1%)	100 (9.0%)	3,128 (7.5%)	133 (7.1%)
<b>TOTALS</b>	<b>187</b> <b>(100.0%)</b>	<b>26</b> <b>(100.0%)</b>	<b>10,342</b> <b>(100.0%)</b>	<b>737</b> <b>(100.0%)</b>	<b>31,239</b> <b>(100.0%)</b>	<b>1,109</b> <b>(100.0%)</b>	<b>41,768</b> <b>(100.0%)</b>	<b>1,872</b> <b>(100.0%)</b>

(a) Quantity rounded to zero.

**Table 3.19**  
**Number of Four Year and Older Trucks and Associated Daily Vehicle Miles Traveled (DVMT)**  
**by Daily Percent Interstate, Daily Percent Four Lane, Daily Percent Off Road and**  
**Daily Hazardous Material Carrying Status: 1990 NTACS**  
(Trucks in Thousands/Daily VMT in Millions)

	Daily Hazardous Material Carrying Status						TOTALS	
	Yes		No		Unknown			
	Trucks	Daily VMT	Trucks	Daily VMT	Trucks	Daily VMT	Trucks	Daily VMT
<b>Daily Percent Interstate</b>								
Under 10%	102 (54.3%)	7 (28.8%)	6,007 (58.1%)	268 (36.3%)	15,927 (51.0%)	403 (36.4%)	22,035 (52.8%)	679 (36.3%)
10 - 24%	15 (7.8%)	4 (14.7%)	875 (8.5%)	67 (9.1%)	1,566 (5.0%)	74 (6.7%)	2,455 (5.9%)	145 (7.7%)
25 - 49%	19 (10.1%)	3 (11.1%)	441 (4.3%)	49 (6.7%)	1,593 (5.1%)	100 (9.1%)	2,053 (4.9%)	153 (8.1%)
50 - 74%	12 (6.2%)	2 (9.2%)	964 (9.3%)	109 (14.7%)	1,909 (6.1%)	117 (10.5%)	2,885 (6.9%)	228 (12.2%)
75 - 100%	37 (19.9%)	9 (34.6%)	1,252 (12.1%)	207 (28.0%)	3,307 (10.6%)	163 (14.7%)	4,596 (11.0%)	379 (20.2%)
Unknown	3 (1.6%)	a (1.7%)	804 (7.8%)	38 (5.2%)	6,937 (22.2%)	251 (22.6%)	7,743 (18.5%)	289 (15.5%)
<b>TOTALS</b>	<b>187</b> <b>(100.0%)</b>	<b>26</b> <b>(100.0%)</b>	<b>10,342</b> <b>(100.0%)</b>	<b>737</b> <b>(100.0%)</b>	<b>31,239</b> <b>(100.0%)</b>	<b>1,109</b> <b>(100.0%)</b>	<b>41,768</b> <b>(100.0%)</b>	<b>1,872</b> <b>(100.0%)</b>
<b>Daily Percent Four Lane</b>								
Under 10%	114 (60.7%)	14 (53.0%)	4,999 (48.3%)	341 (46.3%)	15,367 (49.2%)	470 (42.4%)	20,480 (49.0%)	825 (44.1%)
10 - 24%	24 (12.7%)	5 (18.1%)	1,741 (16.8%)	151 (20.4%)	2,316 (7.4%)	109 (9.8%)	4,081 (9.8%)	265 (14.1%)
25 - 49%	15 (8.3%)	3 (11.6%)	970 (9.4%)	79 (10.7%)	1,221 (3.9%)	55 (4.9%)	2,207 (5.3%)	137 (7.3%)
50 - 74%	15 (8.2%)	2 (8.7%)	1,054 (10.2%)	68 (9.2%)	2,393 (7.7%)	110 (9.9%)	3,462 (8.3%)	179 (9.6%)
75 - 100%	13 (6.8%)	1 (4.1%)	713 (6.9%)	48 (6.5%)	2,909 (9.3%)	100 (9.0%)	3,635 (8.7%)	149 (8.0%)
Unknown	6 (3.3%)	1 (4.4%)	865 (8.4%)	51 (6.9%)	7,032 (22.5%)	266 (24.0%)	7,904 (18.9%)	318 (17.0%)
<b>TOTALS</b>	<b>187</b> <b>(100.0%)</b>	<b>26</b> <b>(100.0%)</b>	<b>10,342</b> <b>(100.0%)</b>	<b>737</b> <b>(100.0%)</b>	<b>31,239</b> <b>(100.0%)</b>	<b>1,109</b> <b>(100.0%)</b>	<b>41,768</b> <b>(100.0%)</b>	<b>1,872</b> <b>(100.0%)</b>
<b>Daily Percent Off Road</b>								
Under 10%	98 (52.4%)	15 (58.0%)	5,198 (50.3%)	392 (53.2%)	13,389 (42.9%)	467 (42.1%)	18,684 (44.7%)	874 (46.7%)
10 - 24%	21 (11.3%)	3 (11.2%)	1,372 (13.3%)	126 (17.1%)	2,791 (8.9%)	141 (12.7%)	4,185 (10.0%)	270 (14.4%)
25 - 49%	9 (4.6%)	1 (4.9%)	410 (4.0%)	40 (5.4%)	1,157 (3.7%)	65 (5.9%)	1,576 (3.8%)	106 (5.7%)
50 - 74%	10 (5.5%)	1 (4.0%)	503 (4.9%)	39 (5.2%)	1,298 (4.2%)	56 (5.0%)	1,811 (4.3%)	96 (5.1%)
75 - 100%	37 (19.5%)	4 (14.7%)	1,867 (18.0%)	75 (10.2%)	5,672 (18.2%)	135 (12.2%)	7,575 (18.1%)	214 (11.4%)
Unknown	12 (6.6%)	2 (7.1%)	992 (9.6%)	65 (8.9%)	6,932 (22.2%)	245 (22.1%)	7,936 (19.0%)	312 (16.7%)
<b>TOTALS</b>	<b>187</b> <b>(100.0%)</b>	<b>26</b> <b>(100.0%)</b>	<b>10,342</b> <b>(100.0%)</b>	<b>737</b> <b>(100.0%)</b>	<b>31,239</b> <b>(100.0%)</b>	<b>1,109</b> <b>(100.0%)</b>	<b>41,768</b> <b>(100.0%)</b>	<b>1,872</b> <b>(100.0%)</b>

(a) Quantity rounded to zero.

**Table 3.20a**  
**Distribution of Four Year and Older Trucks Over Daily Truck Description**  
**by Day of Week Operated: 1990 NTACS**

Daily Truck Description	Day of Week						
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<b>Straight Truck</b>							
- With 4 Tires Without Trailer	90.1%	82.0%	81.9%	82.5%	82.3%	82.5%	87.0%
- With 4 Tires With Trailer(s)	1.5%	1.5%	1.9%	1.7%	1.7%	1.7%	1.7%
- With 6 or More Tires Without Trailer	1.3%	6.1%	6.3%	6.2%	6.2%	6.0%	2.9%
- With 6 or More Tires With Trailer(s)	0.2%	0.7%	0.7%	0.8%	0.6%	0.6%	0.3%
<b>Truck-Tractor</b>							
- With Trailer(s)	0.8%	2.2%	2.3%	2.3%	2.3%	2.2%	0.9%
- Without Trailer	(a)						
<b>Other</b>	1.8%	1.4%	1.4%	1.2%	1.2%	1.5%	1.5%
<b>Unknown</b>	4.3%	6.0%	5.5%	5.3%	5.6%	5.5%	5.7%
<b>TOTALS</b>	<b>100.0%</b>						

(a) Quantity rounded to zero.

**Table 3.20b**  
**Distribution of Total Activity of Four Year and Older Trucks That Operated Over**  
**Day of Week by Daily Truck Description: 1990 NTACS**

Daily Truck Description	Day of Week							TOTALS
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
<b>Straight Truck</b>								
- With 4 Tires Without Trailer	10.5%	15.1%	15.3%	15.4%	15.2%	15.4%	13.0%	100.0%
- With 4 Tires With Trailer(s)	9.0%	13.9%	17.7%	15.5%	15.8%	15.5%	12.7%	100.0%
- With 6 or More Tires Without Trailer	2.5%	17.7%	18.6%	18.3%	18.1%	17.8%	6.9%	100.0%
- With 6 or More Tires With Trailer(s)	2.5%	19.5%	18.4%	20.4%	16.7%	15.9%	6.6%	100.0%
<b>Truck-Tractor</b>								
- With Trailer(s)	4.1%	17.7%	18.5%	18.5%	18.1%	17.7%	5.5%	100.0%
- Without Trailer	1.2%	16.1%	18.6%	21.1%	18.6%	17.3%	7.1%	100.0%
<b>Other</b>	12.4%	15.8%	15.7%	13.4%	12.8%	16.3%	13.6%	100.0%
<b>Unknown</b>	7.7%	16.8%	15.8%	15.2%	15.8%	15.6%	13.1%	100.0%
<b>TOTALS</b>	<b>9.8%</b>	<b>15.4%</b>	<b>15.7%</b>	<b>15.6%</b>	<b>15.4%</b>	<b>15.6%</b>	<b>12.5%</b>	<b>100.0%</b>

**Table 3.21**  
**Distribution of Total Activity of Four Year and Older Trucks That Operated During a Daily Time Period**  
**by Truck Type: 1990 NTACS**

(Trucks in Thousands)

Truck Type	Daily Time Period								TOTAL
	12:01 to 4:00 AM	4:01 to 6:00 AM	6:01 to 8:00 AM	8:01 to 10:00 AM	10:01 AM to 4:00 PM	4:01 to 6:00 PM	6:01 to 8:00 PM	8:01 PM to 12:00 AM	
Pickup	978 (2.0%)	1,434 (2.9%)	8,600 (17.5%)	9,172 (18.7%)	10,855 (22.1%)	12,182 (24.8%)	4,404 (9.0%)	1,452 (3.0%)	- (100%)
Utility	456 (1.7%)	392 (1.5%)	3,805 (14.3%)	4,961 (18.6%)	5,629 (21.1%)	7,463 (28.0%)	2,950 (11.1%)	1,037 (3.9%)	- (100%)
Small	75 (1.3%)	145 (2.6%)	760 (13.6%)	1,581 (28.3%)	866 (15.5%)	1,853 (33.2%)	227 (4.1%)	70 (1.3%)	- (100%)
Large	40 (1.6%)	81 (3.3%)	415 (16.8%)	722 (29.2%)	338 (13.7%)	777 (31.5%)	71 (2.9%)	26 (1.1%)	- (100%)
Truck-Tractor	152 (4.8%)	245 (7.7%)	535 (16.7%)	720 (22.5%)	441 (13.8%)	777 (24.3%)	193 (6.0%)	133 (4.2%)	- (100%)
<b>TOTALS</b>	<b>1,700</b> (2.0%)	<b>2,298</b> (2.6%)	<b>14,115</b> (16.2%)	<b>17,155</b> (19.7%)	<b>18,129</b> (20.8%)	<b>23,053</b> (26.5%)	<b>7,844</b> (9.0%)	<b>2,719</b> (3.1%)	<b>-</b> (100%)

Note: Each table entry gives an estimate of the number of trucks operating during the indicated time period on a sample day.

**Table 3.22**  
**Distribution of Total Activity of Four Year and Older Trucks That Operated During a Daily Time Period**  
**by Commodity-Carrying Status: 1990 NTACS**

(Trucks in Thousands)

Commodity-Carrying Status	Daily Time Period								TOTAL
	12:01 to 4:00 AM	4:01 to 6:00 AM	6:01 to 8:00 AM	8:01 to 10:00 AM	10:01 to 4:00 PM	4:01 to 6:00 PM	6:01 to 8:00 PM	8:01 to 12:00 AM	
Commodity-Carrying									
- Short Haul	232 (1.5%)	401 (2.5%)	2,279 (14.3%)	4,374 (27.4%)	2,727 (17.1%)	4,650 (29.2%)	921 (5.8%)	360 (2.3%)	- (100%)
- Long Haul	115 (5.2%)	177 (8.0%)	345 (15.6%)	446 (20.2%)	355 (16.0%)	503 (22.7%)	158 (7.1%)	114 (5.2%)	- (100%)
Non-Commodity-Carrying									
- Business Use	133 (0.9%)	182 (1.2%)	2,104 (14.4%)	3,589 (24.6%)	3,127 (21.4%)	4,064 (27.8%)	1,090 (7.5%)	322 (2.2%)	- (100%)
- Personal Use	1,220 (2.3%)	1,538 (2.8%)	9,341 (17.3%)	8,683 (16.1%)	11,871 (22.0%)	13,746 (25.5%)	5,674 (10.5%)	1,920 (3.6%)	- (100%)
- Not in Use	0 (0.0%)	0 (0.0%)	46 (18.3%)	63 (25.1%)	49 (19.5%)	91 (36.3%)	a (a)	2 (0.8%)	- (100%)
<b>TOTALS</b>	<b>1,700 (2.0%)</b>	<b>2,298 (2.6%)</b>	<b>14,115 (16.2%)</b>	<b>17,155 (19.7%)</b>	<b>18,129 (20.8%)</b>	<b>23,053 (26.5%)</b>	<b>7,844 (9.0%)</b>	<b>2,719 (3.1%)</b>	<b>- (100%)</b>

(a) Quantity rounded to zero.

Note: Each table entry gives an estimate of the number of trucks operating during the indicated time period on a sample day.

**Table 3.23**  
**Distribution of Total Activity of Four Year and Older Trucks That Operated During a Daily Time Period**  
**by Daily Truck Description: 1990 NTACS**

(Trucks in Thousands)

Daily Truck Description	Daily Time Period								TOTAL
	12:01 to 4:00 AM	4:01 to 6:00 AM	6:01 to 8:00 AM	8:01 to 10:00 AM	10:01 AM to 4:00 PM	4:01 to 6:00 PM	6:01 to 8:00 PM	8:01 PM to 12:00 AM	
<b>Straight Truck</b>									
- With 4 Tires Without Trailer	1,403 (2.0%)	1,523 (2.1%)	11,847 (16.7%)	13,097 (18.5%)	15,260 (21.5%)	18,755 (26.4%)	6,731 (9.5%)	2,334 (3.3%)	- (100%)
- With 4 Tires With Trailer(s)	3 (0.2%)	54 (3.2%)	221 (13.2%)	302 (18.0%)	454 (27.1%)	342 (20.4%)	272 (16.2%)	28 (1.7%)	- (100%)
- With 6 or More Tires Without Trailer	73 (1.2%)	178 (2.9%)	821 (13.2%)	1,861 (30.0%)	840 (13.5%)	2,127 (34.3%)	236 (3.8%)	64 (1.0%)	- (100%)
- With 6 or More Tires With Trailer(s)	10 (1.4%)	10 (1.4%)	118 (16.1%)	203 (27.8%)	141 (19.3%)	215 (29.4%)	30 (4.1%)	4 (0.5%)	- (100%)
<b>Truck-Tractor</b>									
- With Trailer(s)	153 (5.0%)	250 (8.2%)	520 (17.0%)	670 (21.9%)	427 (13.9%)	721 (23.5%)	188 (6.1%)	133 (4.3%)	- (100%)
- Without Trailer	4 (8.0%)	5 (10.0%)	8 (16.0%)	13 (26.0%)	8 (16.0%)	9 (18.0%)	1 (2.0%)	2 (4.0%)	- (100%)
<b>Other</b>	25 (1.8%)	41 (3.0%)	102 (7.3%)	329 (23.7%)	251 (18.1%)	412 (29.7%)	221 (15.9%)	8 (0.6%)	- (100%)
<b>Unknown</b>	30 (1.0%)	237 (8.0%)	478 (16.2%)	680 (23.0%)	748 (25.3%)	471 (15.9%)	164 (5.6%)	146 (4.9%)	- (100%)
<b>TOTALS</b>	<b>1,700 (2.0%)</b>	<b>2,298 (2.6%)</b>	<b>14,115 (16.2%)</b>	<b>17,155 (19.7%)</b>	<b>18,129 (20.8%)</b>	<b>23,053 (26.5%)</b>	<b>7,844 (9.0%)</b>	<b>2,719 (3.1%)</b>	<b>- (100%)</b>

(a) Quantity rounded to Zero.

Note: Each table entry gives an estimate of the number of trucks operating during the indicated time period on a sample day.

**Table 3.24**  
**Distribution of Four Year and Older Trucks**  
**by Daily Percent Interstate, Daily Percent Four Lane, Daily Percent Off Road,**  
**and Commodity-Carrying Status: 1990 NTACS**

	Commodity-Carrying Status					TOTALS
	Commodity-Carrying		Non-Commodity-Carrying			
	Short Haul	Long Haul	Business Use	Personal Use	Not in Use	
<b>Daily Percent Interstate</b>						
Under 10%	58.0%	30.2%	59.2%	50.4%	72.1%	52.8%
10 - 24%	6.5%	3.3%	6.2%	5.7%	0.0%	5.9%
25 - 49%	4.7%	5.8%	3.6%	5.3%	0.0%	4.9%
50 - 74%	7.2%	11.6%	7.4%	6.6%	1.2%	6.9%
75 - 100%	9.0%	37.9%	8.5%	11.4%	4.9%	11.0%
Unknown	14.5%	11.1%	15.1%	20.6%	21.8%	18.5%
<b>TOTALS</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
<b>Daily Percent Four Lane</b>						
Under 10%	52.9%	48.6%	49.9%	47.9%	35.8%	49.0%
10 - 24%	9.6%	16.8%	10.1%	9.5%	21.8%	9.8%
25 - 49%	6.3%	8.1%	7.8%	4.3%	14.1%	5.3%
50 - 74%	8.0%	6.7%	9.4%	8.2%	9.6%	8.3%
75 - 100%	8.0%	6.5%	7.0%	9.4%	5.3%	8.7%
Unknown	15.3%	13.2%	15.8%	20.8%	13.4%	18.9%
<b>TOTALS</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
<b>Daily Percent Off Road</b>						
Under 10%	41.1%	58.8%	43.2%	45.8%	32.3%	44.7%
10 - 24%	10.1%	9.7%	11.5%	9.6%	14.9%	10.0%
25 - 49%	4.6%	4.1%	5.9%	3.0%	9.6%	3.8%
50 - 74%	5.6%	4.1%	4.0%	4.1%	0.0%	4.3%
75 - 100%	22.1%	7.9%	19.5%	17.0%	30.6%	18.1%
Unknown	16.5%	15.4%	15.9%	20.5%	12.5%	19.0%
<b>TOTALS</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**Table 3.25**  
**Distribution of Four Year and Older Trucks**  
**by Daily Percent Interstate, Daily Percent Four Lane, Daily Percent Off Road,**  
**and Daily Major Use: 1990 NTACS**

	Daily Major Use					TOTALS
	Personal Transportation	Contract Carrier	Common Carrier	Other Business Use	Unknown	
<b>Daily Percent Interstate</b>						
Under 10%	55.3%	31.8%	42.2%	58.8%	22.9%	52.8%
10 - 24%	5.7%	11.9%	6.2%	8.1%	0.8%	5.9%
25 - 49%	5.2%	5.8%	6.4%	5.1%	0.5%	4.9%
50 - 74%	6.6%	9.1%	12.3%	9.2%	1.7%	6.9%
75 - 100%	11.5%	21.5%	27.6%	9.1%	1.2%	11.0%
Unknown	15.6%	20.0%	5.3%	9.6%	72.9%	18.5%
<b>TOTALS</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
<b>Daily Percent Four Lane</b>						
Under 10%	52.6%	41.4%	48.4%	49.4%	15.7%	49.0%
10 - 24%	9.2%	10.5%	21.4%	13.5%	1.7%	9.8%
25 - 49%	4.3%	11.6%	8.0%	10.2%	1.3%	5.3%
50 - 74%	8.6%	10.9%	7.7%	9.6%	2.1%	8.3%
75 - 100%	9.7%	4.4%	7.1%	6.8%	5.0%	8.7%
Unknown	15.7%	21.2%	7.2%	10.5%	74.2%	18.9%
<b>TOTALS</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
<b>Daily Percent Off Road</b>						
Under 10%	47.4%	45.4%	43.8%	47.2%	13.6%	44.7%
10 - 24%	10.0%	14.1%	20.4%	11.9%	0.7%	10.0%
25 - 49%	3.7%	5.4%	5.3%	4.3%	1.7%	3.8%
50 - 74%	4.2%	3.9%	8.3%	5.1%	2.6%	4.3%
75 - 100%	19.3%	8.6%	12.6%	20.6%	5.7%	18.1%
Unknown	15.5%	22.5%	9.6%	10.8%	75.7%	19.0%
<b>TOTALS</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**Table 3.26**  
**Distribution of Four Year and Older Trucks**  
**by Daily Percent Interstate, Daily Percent Four Lane, Daily Percent Off Road,**  
**and Daily Truck Description: 1990 NTACS**

	Daily Truck Description								TOTALS
	Straight Truck				Truck-Tractor				
	4 Tires		6 or More Tires		Truck-Tractor		Other	Unknown	
	Without Trailer	With Trailer(s)	Without Trailer	With Trailer(s)	With Trailer(s)	Without Trailer			
<b>Daily Percent Interstate</b>									
Under 10%	55.5%	44.9%	63.2%	48.3%	29.8%	53.9%	58.0%	22.2%	<b>52.8%</b>
10 - 24%	6.0%	13.0%	6.7%	5.3%	6.7%	12.4%	11.1%	0.5%	<b>5.9%</b>
25 - 49%	4.9%	12.5%	5.0%	5.1%	8.1%	1.5%	14.3%	0.3%	<b>4.9%</b>
50 - 74%	7.1%	10.8%	7.6%	7.4%	15.5%	12.9%	3.1%	1.6%	<b>6.9%</b>
75 - 100%	11.8%	1.2%	7.4%	26.5%	34.6%	10.9%	1.9%	1.0%	<b>11.0%</b>
Unknown	14.6%	17.6%	10.2%	7.5%	5.4%	8.5%	11.6%	74.3%	<b>18.5%</b>
<b>TOTALS</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
<b>Daily Percent Four Lane</b>									
Under 10%	51.7%	46.7%	54.7%	60.6%	49.0%	44.6%	44.4%	15.3%	<b>49.0%</b>
10 - 24%	9.9%	13.0%	12.4%	12.1%	17.5%	21.4%	13.1%	1.6%	<b>9.8%</b>
25 - 49%	5.5%	8.1%	5.4%	6.8%	10.8%	7.0%	3.9%	0.9%	<b>5.3%</b>
50 - 74%	8.3%	13.0%	10.0%	8.1%	7.8%	11.5%	25.8%	1.9%	<b>8.3%</b>
75 - 100%	9.6%	0.8%	6.7%	4.5%	7.4%	1.9%	0.9%	5.3%	<b>8.7%</b>
Unknown	14.9%	18.4%	10.8%	7.9%	7.5%	13.6%	11.8%	75.1%	<b>18.9%</b>
<b>TOTALS</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
<b>Daily Percent Off Road</b>									
Under 10%	47.8%	36.3%	40.0%	36.5%	60.0%	36.8%	50.5%	13.1%	<b>44.7%</b>
10 - 24%	10.3%	15.9%	12.8%	19.9%	10.8%	9.7%	16.8%	0.8%	<b>10.0%</b>
25 - 49%	3.8%	8.4%	4.7%	5.3%	6.1%	13.2%	1.5%	1.4%	<b>3.8%</b>
50 - 74%	4.5%	1.8%	5.2%	5.0%	4.3%	12.1%	3.0%	2.5%	<b>4.3%</b>
75 - 100%	19.1%	19.4%	24.9%	14.0%	9.2%	20.0%	14.3%	5.4%	<b>18.1%</b>
Unknown	14.5%	18.3%	12.4%	19.3%	9.6%	8.2%	13.9%	76.9%	<b>19.0%</b>
<b>TOTALS</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**Table 3.27a**  
**Distribution of Four Year and Older Trucks Over Truck Type**  
**by Number of Days Operated During a Week: 1990 NTACS**

Truck Type	Number of Days Operated During a Week								TOTALS
	Zero	One	Two	Three	Four	Five	Six	Seven	
Pickup	61.4%	43.5%	68.3%	56.9%	53.2%	51.0%	68.2%	59.9%	58.7%
Utility	22.4%	25.8%	15.1%	23.3%	28.9%	25.3%	23.2%	37.4%	29.4%
Small	11.8%	22.4%	11.0%	11.5%	9.2%	12.4%	4.5%	1.7%	6.8%
Large	2.6%	4.6%	2.8%	4.0%	4.4%	5.8%	1.8%	0.5%	2.5%
Truck-Tractor	1.8%	3.7%	2.7%	4.3%	4.3%	5.6%	2.2%	0.5%	2.5%
<b>TOTALS</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Table 3.27b  
 Distribution of Four Year and Older Trucks Over Number of Days  
 Operated During a Week by Truck Type: 1990 NTACS

Truck Type	Number of Days Operated During a Week								TOTALS
	Zero	One	Two	Three	Four	Five	Six	Seven	
Pickup	2.4%	2.9%	6.6%	5.3%	5.5%	17.2%	18.1%	42.0%	100.0%
Utility	1.8%	3.4%	2.9%	4.3%	6.0%	17.0%	12.3%	52.2%	100.0%
Small	4.0%	12.7%	9.2%	9.2%	8.2%	36.1%	10.3%	10.4%	100.0%
Large	2.4%	7.1%	6.3%	8.6%	10.7%	45.7%	11.5%	7.7%	100.0%
Truck-Tractor	1.6%	5.6%	6.2%	9.3%	10.5%	44.4%	13.8%	8.6%	100.0%
<b>TOTALS</b>	<b>2.3%</b>	<b>3.9%</b>	<b>5.7%</b>	<b>5.4%</b>	<b>6.1%</b>	<b>19.8%</b>	<b>15.6%</b>	<b>41.1%</b>	<b>100.0%</b>

**Table 3.28a**  
**Distribution of Four Year and Older Trucks Over Truck Model Year**  
**by Number of Days Operated During a Week: 1990 NTACS**

Truck Model Year	Number of Days Operated During a Week								TOTALS
	Zero	One	Two	Three	Four	Five	Six	Seven	
1987(a)	0.1%	3.9%	1.7%	2.5%	3.7%	10.2%	9.7%	12.1%	9.1%
1986	3.6%	8.7%	6.8%	9.9%	8.1%	16.5%	10.5%	16.2%	13.4%
1985	5.4%	6.7%	10.3%	18.5%	8.0%	9.7%	7.6%	10.6%	10.0%
1984	0.7%	5.9%	2.0%	4.7%	8.8%	9.0%	10.1%	10.4%	8.8%
1983	2.7%	0.4%	5.4%	5.4%	5.6%	6.4%	8.6%	9.8%	7.7%
1982	1.6%	5.3%	2.4%	6.6%	12.8%	8.5%	3.5%	4.9%	5.8%
1981	13.5%	5.7%	3.4%	2.3%	2.5%	2.7%	7.1%	4.1%	4.3%
1980	0.3%	2.6%	0.7%	5.2%	4.7%	3.9%	2.4%	2.5%	2.9%
1979	5.4%	14.1%	22.0%	4.6%	5.9%	5.2%	10.1%	6.2%	7.7%
1978	3.4%	9.1%	17.5%	11.0%	8.1%	5.0%	3.0%	4.7%	5.9%
Pre-1978	63.3%	37.6%	27.8%	29.2%	31.9%	22.9%	27.4%	18.4%	24.4%
Unknown	0.0%	(b)	(b)	(b)	0.0%	(b)	0.0%	0.0%	(b)
<b>TOTALS</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

(a) Includes some 1988 models.  
(b) Quantity rounded to zero.

**Table 3.28b**  
**Distribution of Four Year and Older Trucks Over Number of Days**  
**Operated During a Week by Truck Model Year: 1990 NTACS**

Truck Model Year	Number of Days Operated During a Week								TOTALS
	Zero	One	Two	Three	Four	Five	Six	Seven	
1987(a)	(b)	1.6%	1.1%	1.5%	2.5%	22.1%	16.1%	54.5%	100.0%
1986	0.6%	2.5%	2.9%	4.0%	3.7%	24.4%	12.2%	49.7%	100.0%
1985	1.2%	2.6%	5.9%	10.1%	4.9%	19.4%	12.0%	43.9%	100.0%
1984	0.2%	2.6%	1.3%	2.9%	6.1%	20.4%	17.9%	48.7%	100.0%
1983	0.8%	0.2%	4.0%	3.9%	4.4%	16.6%	17.4%	52.7%	100.0%
1982	0.6%	3.5%	2.4%	6.2%	13.5%	29.1%	9.6%	35.1%	100.0%
1981	7.2%	5.1%	4.4%	2.9%	3.5%	12.4%	25.5%	39.0%	100.0%
1980	0.2%	3.4%	1.4%	9.8%	9.9%	26.4%	13.0%	36.0%	100.0%
1979	1.6%	7.1%	16.3%	3.3%	4.7%	13.3%	20.6%	33.1%	100.0%
1978	1.3%	5.9%	16.8%	10.1%	8.4%	16.8%	8.0%	32.6%	100.0%
Pre-1978	6.0%	5.9%	6.5%	6.5%	8.0%	18.6%	17.5%	31.0%	100.0%
Unknown	0.0%	(b)	(b)	(b)	0.0%	100.0%	0.0%	0.0%	100.0%
<b>TOTALS</b>	<b>2.3%</b>	<b>3.9%</b>	<b>5.7%</b>	<b>5.4%</b>	<b>6.1%</b>	<b>19.8%</b>	<b>15.6%</b>	<b>41.1%</b>	<b>100.0%</b>

(a) Includes some 1988 models.  
(b) Quantity rounded to zero.

**Table 3.29**  
**Number of Four Year and Older Trucks**  
**by Annual Major Use and Daily Major Use: 1990 NTACS**  
(Trucks in Thousands)

Annual Major Use	Daily Major Use					TOTALS Trucks
	Personal Transportation Trucks	Contract Carrier Trucks	Common Carrier Trucks	Other Business Use Trucks	Unknown Trucks	
Personal Transportation	29,389 (98.8%)	0 (0.0%)	0 (0.0%)	70 (1.0%)	2,146 (70.3%)	31,605 (75.7%)
Contract Carrier	0 (0.0%)	634 (98.2%)	2 (0.1%)	2 (a)	19 (0.6%)	656 (1.6%)
Common Carrier	16 (0.1%)	6 (0.9%)	1,305 (99.3%)	14 (0.2%)	77 (2.5%)	1,419 (3.4%)
Other Business Use	112 (0.4%)	3 (0.5%)	2 (0.2%)	6,859 (98.0%)	371 (12.2%)	7,347 (17.6%)
Unknown	244 (0.8%)	3 (0.4%)	6 (0.4%)	51 (0.7%)	438 (14.3%)	741 (1.8%)
<b>TOTALS</b>	<b>29,760</b> <b>(100.0%)</b>	<b>645</b> <b>(100.0%)</b>	<b>1,314</b> <b>(100.0%)</b>	<b>6,996</b> <b>(100.0%)</b>	<b>3,051</b> <b>(100.0%)</b>	<b>41,768</b> <b>(100.0%)</b>

(a) Quantity rounded to zero.

**Table 3.30**  
**Number of Four Year and Older Trucks**  
**by Annual Truck Description and Daily Truck Description: 1990 NTACS**  
(Trucks in Thousands)

Annual Truck Description	Daily Truck Description								
	Straight Truck				Truck-Tractor		Other Trucks	Unknown Trucks	TOTALS Trucks
	4 Tires		6 or More Tires		With Trailer(s) Trucks	Without Trailer Trucks			
	Without Trailer Trucks	With Trailer(s) Trucks	Without Trailer Trucks	With Trailer(s) Trucks					
<b>Straight Truck</b>									
- With 4 Tires Without Trailer	32,341 (97.5%)	80 (11.5%)	1 (a)	0 (0.0%)	0 (0.0%)	0 (0.0%)	4 (0.7%)	2,671 (85.4%)	35,097 (84.0%)
- With 4 Tires With Trailer(s)	575 (1.7%)	519 (74.8%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	69 (2.2%)	1,163 (2.8%)
- With 6 or More Tires Without Trailer	2 (a)	0 (0.0%)	2,810 (98.2%)	9 (2.8%)	0 (0.0%)	0 (0.0%)	18 (3.0%)	210 (6.7%)	3,050 (7.3%)
- With 6 or More Tires With Trailer(s)	0 (0.0%)	0 (0.0%)	18 (0.6%)	319 (96.8%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	19 (0.6%)	355 (0.9%)
<b>Truck-Tractor</b>									
- With Trailer(s)	0 (0.0%)	0 (0.0%)	a (a)	0 (0.0%)	942 (99.5%)	1 (7.6%)	0 (0.0%)	23 (0.7%)	966 (2.3%)
- Without Trailer	0 (0.0%)	0 (0.0%)	0 (0.0%)	a (0.1%)	0 (0.0%)	17 (90.1%)	0 (0.0%)	1 (a)	18 (a)
<b>Other</b>	4 (a)	0 (0.0%)	0 (0.0%)	0 (0.0%)	a (a)	0 (0.0%)	583 (95.2%)	23 (0.7%)	610 (1.5%)
<b>Unknown</b>	257 (0.8%)	95 (13.6%)	33 (1.1%)	1 (0.3%)	4 (0.4%)	a (2.3%)	7 (1.2%)	111 (3.5%)	508 (1.2%)
<b>TOTALS</b>	<b>33,179</b> (100.0%)	<b>694</b> (100.0%)	<b>2,862</b> (100.0%)	<b>329</b> (100.0%)	<b>946</b> (100.0%)	<b>18</b> (100.0%)	<b>612</b> (100.0%)	<b>3,128</b> (100.0%)	<b>41,768</b> (100.0%)

(a) Quantity rounded to zero.

## CHAPTER 4

### UNWEIGHTED NUMBERS ON TRIP-SEGMENTS

- Only 9,974 sample truck operators reported sample day data; the unweighted numbers are counts obtained from that data.
- A daily trip-segment is the section of road traveled between one reported stop and the next reported stop on a truck's sample day.
- Because some of the 9,794 trucks failed to report stop data, there is additional nonresponse and it was decided to present unweighted data in this chapter.

**Table 4.1**  
**Unweighted Number of Daily Trip Segments for Four Year and Older Trucks**  
**by Trip-Segment Length and Commodity-Carrying Status: 1990 NTACS**

Trip-Segment Length (Miles)	Commodity-Carrying Status					TOTALS Trip-Segments
	Commodity-Carrying		Non-Commodity-Carrying			
	Short Haul Trip-Segments	Long Haul Trip-Segments	Business Use Trip-Segments	Personal Use Trip-Segments	Not In Use Trip-Segments	
Less Than 10	10,454 (59.5%)	1,549 (21.8%)	417 (53.0%)	43 (41.0%)	28 (75.7%)	12,491 (48.8%)
10 - 19	2,537 (14.4%)	614 (8.6%)	176 (22.4%)	22 (21.0%)	1 (2.7%)	3,350 (13.1%)
20 - 29	1,614 (9.2%)	565 (7.9%)	81 (10.3%)	24 (22.9%)	4 (10.8%)	2,288 (8.9%)
30 - 39	874 (5.0%)	513 (7.2%)	33 (4.2%)	4 (3.8%)	1 (2.7%)	1,425 (5.6%)
40 - 49	554 (3.2%)	327 (4.6%)	18 (2.3%)	4 (3.8%)	0 (0.0%)	903 (3.5%)
50 - 99	1,066 (6.1%)	1,120 (15.8%)	41 (5.2%)	6 (5.7%)	1 (2.7%)	2,234 (8.7%)
100 - 149	268 (1.5%)	701 (9.9%)	5 (0.6%)	1 (1.0%)	0 (0.0%)	975 (3.8%)
150 - 199	100 (0.6%)	510 (7.2%)	11 (1.4%)	0 (0.0%)	2 (5.4%)	623 (2.4%)
200 - 399	82 (0.5%)	832 (11.7%)	5 (0.6%)	1 (1.0%)	0 (0.0%)	920 (3.6%)
400 - 599	11 (0.1%)	300 (4.2%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	311 (1.2%)
600 - 799	3 (a)	48 (0.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	51 (0.2%)
800 - 999	0 (0.0%)	18 (0.3%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	18 (0.1%)
1000 and Over	0 (0.0%)	10 (0.1%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	10 (a)
<b>TOTALS</b>	<b>17,563</b> <b>(100.0%)</b>	<b>7,107</b> <b>(100.0%)</b>	<b>787</b> <b>(100.0%)</b>	<b>105</b> <b>(100.0%)</b>	<b>37</b> <b>(100.0%)</b>	<b>25,599</b> <b>(100.0%)</b>

(a) Quantity rounded to zero.

**Table 4.2**  
**Unweighted Number of Daily Trip Segments for Four Year and Older Trucks**  
**by Trip-Segment Length and Truck Type: 1990 NTACS**

Trip-Segment Length (Miles)	Truck Type					TOTALS Trip-Segments
	Pickup Trip-Segments	Utility Trip-Segments	Small Trip-Segments	Large Trip-Segments	Truck-Tractor Trip-Segments	
Less Than 10	540 (62.6%)	403 (61.6%)	3,602 (71.2%)	3,833 (56.6%)	4,113 (33.6%)	12,491 (48.8%)
10 - 19	131 (15.2%)	113 (17.3%)	572 (11.3%)	1,123 (16.6%)	1,411 (11.5%)	3,350 (13.1%)
20 - 29	79 (9.2%)	60 (9.2%)	375 (7.4%)	612 (9.0%)	1,162 (9.5%)	2,288 (8.9%)
30 - 39	43 (5.0%)	33 (5.0%)	171 (3.4%)	364 (5.4%)	814 (6.6%)	1,425 (5.6%)
40 - 49	24 (2.8%)	18 (2.8%)	91 (1.8%)	219 (3.2%)	551 (4.5%)	903 (3.5%)
50 - 99	36 (4.2%)	22 (3.4%)	183 (3.6%)	377 (5.6%)	1,616 (13.2%)	2,234 (8.7%)
100 - 149	4 (0.5%)	2 (0.3%)	37 (0.7%)	111 (1.6%)	821 (6.7%)	975 (3.8%)
150 - 199	3 (0.3%)	1 (0.2%)	19 (0.4%)	42 (0.6%)	558 (4.6%)	623 (2.4%)
200 - 399	2 (0.2%)	2 (0.3%)	9 (0.2%)	79 (1.2%)	828 (6.8%)	920 (3.6%)
400 - 599	0 (0.0%)	0 (0.0%)	1 (a)	17 (0.3%)	293 (2.4%)	311 (1.2%)
600 - 799	0 (0.0%)	0 (0.0%)	1 (a)	1 (a)	49 (0.4%)	51 (0.2%)
800 - 999	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	18 (0.1%)	18 (0.1%)
1000 and Over	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	10 (0.1%)	10 (a)
<b>TOTALS</b>	<b>862</b> (100.0%)	<b>654</b> (100.0%)	<b>5,061</b> (100.0%)	<b>6,778</b> (100.0%)	<b>12,244</b> (100.0%)	<b>25,599</b> (100.0%)

(a) Quantity rounded to zero.

**Table 4.3**  
**Unweighted Summary Statistics for Length of Trip Segments for Four Year and Older Trucks**  
**by Truck Description from 1990 NTACS and Major Use from 1987 TIUS**

	Truck Description								Total
	Straight Truck with 4 Tires		Straight Truck with 6 Tires		Truck-Tractor		Other	Unknown	
	without trailer	with trailer(s)	without trailer	with trailer(s)	with trailer(s)	without trailer			
<b>Agricultural Services</b>									
No. of Trip Segments	319.00	41.00	1,519.00	116.00	700.00	7.00	7.00	18.00	2,727.00
Average (miles)	11.46	20.44	15.91	36.35	78.35	50.00	15.00	10.17	32.40
Minimum (miles)	1.00	1.00	1.00	1.00	1.00	5.00	7.00	1.00	1.00
Maximum (miles)	120.00	168.00	300.00	275.00	850.00	200.00	30.00	41.00	850.00
<b>Forestry or Lumbering Activities</b>									
No. of Trip Segments	12.00	2.00	219.00	54.00	566.00	5.00	5.00	0	863.00
Average (miles)	13.92	14.50	21.31	49.13	53.42	52.80	94.40	-	44.60
Minimum (miles)	1.00	14.00	1.00	1.00	1.00	5.00	6.00	-	1.00
Maximum (miles)	33.00	15.00	183.00	170.00	500.00	105.00	200.00	-	500.00
<b>Construction Work</b>									
No. of Trip Segments	175.00	16.00	1,676.00	252.00	992.00	19.00	72.00	19.00	3,221.00
Average (miles)	14.78	19.94	13.58	22.29	38.54	10.05	12.11	21.00	22.04
Minimum (miles)	1.00	2.00	1.00	1.00	1.00	1.00	1.00	5.00	1.00
Maximum (miles)	60.00	60.00	325.00	243.00	943.00	22.00	48.00	115.00	943.00
<b>Contractor Activities or Special Trades</b>									
No. of Trip Segments	388.00	1.00	489.00	41.00	116.00	4.00	6.00	4.00	1,049.00
Average (miles)	12.99	10.00	15.82	24.39	56.71	112.50	39.67	14.00	20.12
Minimum (miles)	1.00	10.00	1.00	1.00	2.00	35.00	10.00	3.00	1.00
Maximum (miles)	95.00	10.00	650.00	350.00	1,400.00	300.00	66.00	25.00	1,400.00
<b>Manufacturing, Refining, or Processing Activities</b>									
No. of Trip Segments	145.00	9.00	721.00	59.00	990.00	0	13.00	2.00	1,939.00
Average (miles)	18.46	38.89	13.82	39.71	89.81	-	10.23	3.00	53.83
Minimum (miles)	1.00	1.00	1.00	1.00	1.00	-	1.00	3.00	1.00
Maximum (miles)	215.00	175.00	420.00	450.00	1,488.00	-	50.00	3.00	1,488.00
<b>Wholesale Trade</b>									
No. of Trip Segments	443.00	12.00	2,360.00	87.00	1,616.00	2.00	27.00	14.00	4,561.00
Average (miles)	9.13	10.83	12.49	56.86	49.55	18.00	13.81	17.21	26.16
Minimum (miles)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Maximum (miles)	115.00	31.00	400.00	435.00	700.00	35.00	35.00	100.00	700.00

**Table 4.3**  
**Unweighted Summary Statistics for Length of Trip Segments for Four Year and Older Trucks**  
**by Truck Description from 1990 NTACS and Major Use from 1987 TIUS (Continued)**

	Truck Description								Total
	Straight Truck with 4 Tires		Straight Truck with 6 Tires		Truck-Tractor		Other	Unknown	
	without trailer	with trailer(s)	without trailer	with trailer(s)	with trailer(s)	without trailer			
<b>Retail Trade</b>									
No. of Trip Segments	480.00	7.00	1,310.00	46.00	457.00	2.00	44.00	15.00	2,361.00
Average (miles)	10.30	19.14	13.27	66.09	60.06	80.00	3.73	11.13	22.63
Minimum (miles)	1.00	1.00	1.00	4.00	1.00	80.00	1.00	1.00	1.00
Maximum (miles)	125.00	90.00	383.00	500.00	662.00	80.00	40.00	40.00	662.00
<b>Business and Personal Services</b>									
No. of Trip Segments	264.00	10.00	672.00	19.00	157.00	3.00	15.00	1.00	1,141.00
Average (miles)	10.46	24.20	14.13	14.89	43.76	8.33	11.07	5.00	17.40
Minimum (miles)	1.00	3.00	1.00	2.00	1.00	5.00	1.00	5.00	1.00
Maximum (miles)	150.00	60.00	475.00	50.00	423.00	10.00	38.00	5.00	475.00
<b>Utilities</b>									
No. of Trip Segments	31.00	0	182.00	53.00	45.00	25.00	0	1.00	337.00
Average (miles)	14.39	-	12.25	20.60	51.24	3.12	-	2.00	18.26
Minimum (miles)	1.00	-	1.00	1.00	1.00	1.00	-	2.00	1.00
Maximum (miles)	60.00	-	75.00	90.00	229.00	28.00	-	2.00	229.00
<b>Mining or Quarry Activities</b>									
No. of Trip Segments	22.00	0	192.00	25.00	180.00	2.00	10.00	0	431.00
Average (miles)	8.00	-	25.94	72.72	49.42	10.00	6.60	-	37.02
Minimum (miles)	1.00	-	1.00	11.00	3.00	10.00	1.00	-	1.00
Maximum (miles)	19.00	-	246.00	863.00	373.00	10.00	25.00	-	863.00
<b>Daily Rental</b>									
No. of Trip Segments	12.00	0	149.00	10.00	121.00	0	0	2.00	294.00
Average (miles)	8.50	-	18.19	19.70	81.02	-	-	178.50	44.80
Minimum (miles)	1.00	-	1.00	8.00	1.00	-	-	119.00	1.00
Maximum (miles)	17.00	-	131.00	33.00	834.00	-	-	238.00	834.00
<b>Not in Use</b>									
No. of Trip Segments	7.00	0	18.00	2.00	16.00	0	1.00	0	44.00
Average (miles)	9.43	-	8.50	20.00	34.00	-	65.00	-	19.73
Minimum (miles)	2.00	-	2.00	20.00	2.00	-	65.00	-	2.00
Maximum (miles)	20.00	-	35.00	20.00	160.00	-	65.00	-	160.00

**Table 4.3**  
**Unweighted Summary Statistics for Length of Trip Segments for Four Year and Older Trucks**  
**by Truck Description from 1990 NTACS and Major Use from 1987 TIUS (Continued)**

	Truck Description								Total
	Straight Truck with 4 Tires		Straight Truck with 6 Tires		Truck-Tractor		Other	Unknown	
	without trailer	with trailer(s)	without trailer	with trailer(s)	with trailer(s)	without trailer			
<b>For Hire Transportation</b>									
No. of Trip Segments	88.00	5.00	796.00	232.00	5,200.00	19.00	42.00	15.00	<b>6,397.00</b>
Average (miles)	13.45	57.80	17.38	40.24	91.19	113.84	23.64	59.93	<b>78.61</b>
Minimum (miles)	1.00	7.00	1.00	1.00	1.00	10.00	1.00	1.00	<b>1.00</b>
Maximum (miles)	241.00	100.00	420.00	725.00	1,300.00	600.00	556.00	350.00	<b>1,300.00</b>
<b>One Way Rental</b>									
No. of Trip Segments	0	0	10.00	0	0	0	0	0	<b>10.00</b>
Average (miles)	-	-	20.80	-	-	-	-	-	<b>20.80</b>
Minimum (miles)	-	-	5.00	-	-	-	-	-	<b>5.00</b>
Maximum (miles)	-	-	50.00	-	-	-	-	-	<b>50.00</b>
<b>Personal Transportation</b>									
No. of Trip Segments	78.00	2.00	10.00	5.00	0	0	2.00	0	<b>97.00</b>
Average (miles)	18.58	45.00	32.50	27.60	-	-	10.00	-	<b>20.85</b>
Minimum (miles)	1.00	45.00	18.00	26.00	-	-	10.00	-	<b>1.00</b>
Maximum (miles)	241.00	45.00	129.00	30.00	-	-	10.00	-	<b>241.00</b>
<b>Unknown</b>									
No. of Trip Segments	12.00	0	45.00	13.00	57.00	0	0	0	<b>127.00</b>
Average (miles)	13.83	-	19.87	150.31	88.05	-	-	-	<b>63.25</b>
Minimum (miles)	5.00	-	2.00	9.00	1.00	-	-	-	<b>1.00</b>
Maximum (miles)	17.00	-	150.00	795.00	500.00	-	-	-	<b>795.00</b>
<b>Total</b>									
No. of Trip Segments	<b>2,476.00</b>	<b>105.00</b>	<b>10,368.00</b>	<b>1,014.00</b>	<b>11,213.00</b>	<b>88.00</b>	<b>244.00</b>	<b>91.00</b>	<b>25,599.00</b>
Average (miles)	<b>11.90</b>	<b>23.15</b>	<b>14.56</b>	<b>38.14</b>	<b>74.38</b>	<b>42.47</b>	<b>15.03</b>	<b>25.44</b>	<b>41.61</b>
Minimum (miles)	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>
Maximum (miles)	<b>241.00</b>	<b>175.00</b>	<b>650.00</b>	<b>863.00</b>	<b>1,488.00</b>	<b>600.00</b>	<b>556.00</b>	<b>350.00</b>	<b>1,488.00</b>

**Table 4.4**  
**Unweighted Number of Daily Four Year and Older Trucks**  
**by Number of Daily Pickup/Delivery Stops and Commodity-Carrying Status: 1990 NTACS**

Number of Daily Pickup/Delivery Stops	Commodity-Carrying Status					TOTALS Trucks
	Commodity-Carrying		Non-Commodity-Carrying			
	Short Haul Trucks	Long Haul Trucks	Business Use Trucks	Personal Use Trucks	Not In Use Trucks	
0	539 (9.9%)	541 (19.2%)	289 (45.6%)	166 (19.6%)	6 (20.7%)	1,541 (15.7%)
1	1,257 (23.0%)	846 (30.1%)	172 (27.1%)	394 (46.5%)	8 (27.6%)	2,677 (27.3%)
2	1,256 (23.0%)	663 (23.6%)	108 (17.0%)	204 (24.1%)	7 (24.1%)	2,238 (22.9%)
3	652 (11.9%)	253 (9.0%)	16 (2.5%)	37 (4.4%)	6 (20.7%)	964 (9.8%)
4	468 (8.6%)	207 (7.4%)	28 (4.4%)	46 (5.4%)	1 (3.4%)	750 (7.7%)
5	299 (5.5%)	131 (4.7%)	8 (1.3%)	0 (0.0%)	0 (0.0%)	438 (4.5%)
6	250 (4.6%)	69 (2.5%)	6 (0.9%)	0 (0.0%)	0 (0.0%)	325 (3.3%)
7	120 (2.2%)	21 (0.7%)	0 (0.0%)	0 (0.0%)	1 (3.4%)	142 (1.4%)
8	105 (1.9%)	27 (1.0%)	6 (0.9%)	0 (0.0%)	0 (0.0%)	138 (1.4%)
9	57 (1.0%)	11 (0.4%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	68 (0.7%)
10	98 (1.8%)	10 (0.4%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	108 (1.1%)
11 - 15	190 (3.5%)	19 (0.7%)	1 (0.2%)	0 (0.0%)	0 (0.0%)	210 (2.1%)
16 - 20	105 (1.9%)	11 (0.4%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	116 (1.2%)
21 - 25	48 (0.9%)	3 (0.1%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	51 (0.5%)
25 and Over	27 (0.5%)	1 (a)	0 (0.0%)	0 (0.0%)	0 (0.0%)	28 (0.3%)
<b>TOTALS</b>	<b>5,471</b> <b>(100.0%)</b>	<b>2,813</b> <b>(100.0%)</b>	<b>634</b> <b>(100.0%)</b>	<b>847</b> <b>(100.0%)</b>	<b>29</b> <b>(100.0%)</b>	<b>9,794</b> <b>(100.0%)</b>

(a) Quantity rounded to zero.

**Table 4.5**  
**Unweighted Number of Daily Four Year and Older Trucks**  
**by Number of Daily Pickup/Delivery Stops and Daily Major Use: 1990 NTACS**

Number of Daily Pickup/Delivery Stops	Daily Major Use					<b>TOTALS</b> Trucks
	<u>Personal Transportation</u> Trucks	<u>Contract Carrier</u> Trucks	<u>Common Carrier</u> Trucks	<u>Other Business Use</u> Trucks	<u>Unknown</u> Trucks	
0	301 (17.8%)	171 (14.3%)	347 (15.7%)	664 (16.4%)	58 (9.1%)	<b>1,541</b> <b>(15.7%)</b>
1	629 (37.2%)	300 (25.0%)	556 (25.2%)	1,065 (26.2%)	127 (20.0%)	<b>2,677</b> <b>(27.3%)</b>
2	450 (26.6%)	276 (23.0%)	478 (21.6%)	863 (21.3%)	171 (27.0%)	<b>2,238</b> <b>(22.9%)</b>
3	151 (8.9%)	99 (8.3%)	172 (7.8%)	389 (9.6%)	153 (24.1%)	<b>964</b> <b>(9.8%)</b>
4	78 (4.6%)	128 (10.7%)	185 (8.4%)	295 (7.3%)	64 (10.1%)	<b>750</b> <b>(7.7%)</b>
5	41 (2.4%)	52 (4.3%)	113 (5.1%)	205 (5.0%)	27 (4.3%)	<b>438</b> <b>(4.5%)</b>
6	15 (0.9%)	55 (4.6%)	91 (4.1%)	150 (3.7%)	14 (2.2%)	<b>325</b> <b>(3.3%)</b>
7	12 (0.7%)	21 (1.7%)	34 (1.5%)	71 (1.7%)	4 (0.6%)	<b>142</b> <b>(1.4%)</b>
8	7 (0.4%)	32 (2.7%)	33 (1.5%)	62 (1.5%)	4 (0.6%)	<b>138</b> <b>(1.4%)</b>
9	0 (0.0%)	6 (0.5%)	24 (1.1%)	37 (0.9%)	1 (0.2%)	<b>68</b> <b>(0.7%)</b>
10	0 (0.0%)	12 (1.0%)	35 (1.6%)	61 (1.5%)	0 (0.0%)	<b>108</b> <b>(1.1%)</b>
11 - 15	4 (0.2%)	27 (2.3%)	66 (3.0%)	108 (2.7%)	5 (0.8%)	<b>210</b> <b>(2.1%)</b>
16 - 20	1 (0.1%)	11 (0.9%)	49 (2.2%)	51 (1.3%)	4 (0.6%)	<b>116</b> <b>(1.2%)</b>
21 - 25	1 (0.1%)	3 (0.3%)	20 (0.9%)	25 (0.6%)	2 (0.3%)	<b>51</b> <b>(0.5%)</b>
25 and Over	0 (0.0%)	7 (0.6%)	7 (0.3%)	14 (0.3%)	0 (0.0%)	<b>28</b> <b>(0.3%)</b>
<b>TOTALS</b>	<b>1,690</b> <b>(100.0%)</b>	<b>1,200</b> <b>(100.0%)</b>	<b>2,210</b> <b>(100.0%)</b>	<b>4,060</b> <b>(100.0%)</b>	<b>634</b> <b>(100.0%)</b>	<b>9,794</b> <b>(100.0%)</b>

## CHAPTER 5

# ADJUSTED ESTIMATES OF THE 1990 NTACS TRUCK POPULATION

- ORNL adjusted the 1990 NTACS population to include estimates of the post-NTACS trucks (less than four years old).

To provide estimates for the U.S. 1990 population of trucks (regions A and C of Figure 1.1), ORNL investigated several variations of an adjustment technique. The best of those variations, as judged by statistical methods used by ORNL research staff members, produced the estimates presented in Table 5.1, which is to be viewed relative to Table 1.1.

What follows is a brief outline of steps taken to produce the adjusted estimates by producing two adjusted data items:

XPFD1(adj) and ARMIL (adj).

The variation used makes it easy to produce adjusted tables and provides consistent adjusted totals among adjusted tables. The adjustment methodology makes use of

- (1) the data items XPFD1 and ARMIL included on the 1990 NTACS Public Use File,
- (2) selected data items included on the 1987 TIUS User's Tape, and
- (3) R. L. Polk truck population data for 1987 and 1990.

**Production of XPFD1(adj)**

Step 1. For either the 1987 TIUS sample (or the 1990 NTACS sample), trucks were stratified into nine strata according to commodity-carrying status and truck type as follows:

Truck Type	Commodity-Carrying Status		
	Commodity-Carrying		Non-Commodity Carrying
	Short-Haul	Long-Haul	
Pickup Utility Small Truck	Stratum 1	Stratum 2	Stratum 3
Large Truck	Stratum 4	Stratum 5	Stratum 6
Truck-Tractor	Stratum 7	Stratum 8	Stratum 9

The age of a truck was represented by t=1, 2, 3, 4, 5, 6, 7, 8, 9, 10. Trucks with t>10 were not considered in this step but were considered in steps 7-9.

- Step 2. Using the 1987 TIUS Tape and for each value of t(=1, 2, 3, 4, 5, 6, 7, 8, 9, 10), the weighted distribution of the trucks over the nine strata was determined. There were ten different distributions.
- Step 3. Using the 1990 NTACS Public Use File and for each value of t(=4, 5, 6, 7, 8, 9, 10), the weighted distribution of the trucks over the nine strata was determined. There were seven different distributions.
- Step 4. For each t(=4, 5, 6, 7, 8, 9, 10), the distribution from the 1987 TIUS was compared with the corresponding distribution from the 1990 NTACS. There were seven different comparisons.
- Step 5. Using 1987 TIUS data and 1987 and 1990 Polk data to adjust for trucks excluded from TIUS, estimates of the number of 1 year old, 2 year old, and 3 year old trucks operating in 1990 were produced as follows:

$$1990 \text{ Estimate } (t \text{ yr old}) = \frac{\text{TIUS 1987 Estimate } (t)}{\text{Polk 1987 Estimate } (t)} \text{ Polk 1990 Estimate } (t)$$

yielding

t	1990 Estimate (t yr old)
1 year olds	2,853,162 trucks
2 year olds	4,861,769 trucks
3 year olds	4,629,739 trucks

- Step 6. Using the 1987 TIUS distribution of t year old trucks, the 1990 estimate was allocated among the nine strata. This was done three separate times.
- Step 7. For each stratum, the estimated number of trucks was obtained as  

$$\text{NTACS (all yrs)} = \text{NTACS (4+ yrs)} + (1 \text{ yr alloc}) + (2 \text{ yr alloc}) + (3 \text{ yr alloc}).$$
- Step 8. For each NTACS sample truck in a given stratum, its adjusted expansion factor was obtained as

$$\text{XPFD1(adj)} = \frac{\text{NTACS (all yrs)}}{\text{NTACS (4+ yrs)}} \text{XPFD1}.$$

- Step 9. The variable XPFD1(adj) was used to produce all adjusted estimates of the number of trucks in Table 5.1.

**Production of ARMIL(adj)**

- Step 10. Using the 1987 TIUS Tape for each stratum and for each value of t (=1, 2, 3, 4, 5, 6, 7, 8, 9, 10) the (weighted) average VMT per truck was determined. Within each stratum, 10 (weighted) average VMTs were obtained.
- Step 11. Using the 1990 NTACS File for each stratum and for each value of t (= 4, 5, 6, 7, 8, 9, 10), the (weighted) average VMT per truck was determined. Within each stratum, 7 (weighted) average VMTs were obtained. Note that for NTACS, we did not have the (weighted) averages for t=1,2, nor 3.
- Step 12. Within each stratum and using the averages from steps 10 and 11 for t= 5, 6, 7, 8, 9, 10, a regression model to predict the 3 unknown averages for NTACS for t=1,2, and 3 was used.
- Step 13. Within each stratum, an average VMT per truck was predicted separately for 1 year olds, for 2 year olds, and for 3 year olds.
- Step 14. Within each stratum, a total adjusted estimate of VMT was produced as:

$$VMT(NTACS,all) = VMT(NTACS,4+ yrs) + VMT(NTACS,1 yr) + VMT(NTACS,2 yr) + VMT(NTACS,3 yr)$$

- Step 15. For each NTACS sample truck in a given stratum, its adjusted ARMIL was obtained as:

$$ARMIL(adj) = \frac{VMT(NTACS,all)}{VMT(NTACS,4+)} ARMIL.$$

Thus each NTACS sample truck's annual reported mileage was adjusted to include its own mileage plus a share of the estimated mileage of similar trucks' ages t=1, 2, and 3 years old.

- Step 16. The variable ARMIL(adj) along with the variable XPF1 was used to produce all adjusted estimates of the annual truck miles in Table 5.1.

In summary, we have

Estimate	Trucks	VMT (miles)
Four Year and Older Trucks in 1990	41,768,000	440,174,000,000
All Trucks in 1990 (adjusted)	54,112,000	652,147,000,000

**Table 5.1**  
**Number (Adjusted to Include Less than Four Year Old) of Trucks and (Adjusted) Associated**  
**Annual Vehicle Miles Traveled (VMT)**  
**by Census-Region, Commodity-Carrying Status, and Truck Type: 1990 NTACS**  
(Trucks in Thousands/Annual VMT in Millions)

Commodity Carrying Status	Truck Type										TOTALS	
	Pickup		Utility		Small		Large		Truck-Tractor			
	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT	Trucks	Annual VMT
<b>Commodity-Carrying</b>												
-Short Haul	411	5,558	372	4,975	360	4,566	200	3,780	104	3,344	1,446	22,224
-Long Haul	5	28	24	1,042	11	145	15	725	66	4,660	120	6,600
<b>Non-Commodity-Carrying</b>												
-Business Use	575	7,990	551	9,343	139	876	28	346	7	129	1,299	18,683
-Personal Use	2,522	19,656	1,670	17,354	45	189	0	0	a	a	4,237	37,199
-Not in Use	0	0	0	0	0	0	1	a	0	0	1	a
<b>Northeast Totals</b>	3,512	33,232	2,616	32,714	554	5,776	243	4,851	177	8,133	7,102	84,706
<b>Commodity-Carrying</b>												
-Short Haul	1,083	12,748	403	7,063	777	6,360	330	6,646	174	7,164	2,767	39,981
-Long Haul	62	3,208	54	921	27	268	54	3,516	214	20,302	412	28,215
<b>Non-Commodity-Carrying</b>												
-Business Use	1,283	14,868	580	8,308	202	1,290	42	620	9	415	2,116	25,501
-Personal Use	5,208	58,683	2,902	28,466	143	667	18	39	1	3	8,274	87,858
-Not in Use	0	0	0	0	13	53	0	0	2	17	15	71
<b>Midwest Totals</b>	7,636	89,507	3,940	44,758	1,162	8,639	444	10,821	401	27,901	13,583	181,626
<b>Commodity-Carrying</b>												
-Short Haul	1,446	14,537	480	6,628	740	11,243	264	6,395	257	9,354	3,187	48,158
-Long Haul	66	357	76	606	30	629	44	2,260	180	17,400	395	21,253
<b>Non-Commodity-Carrying</b>												
-Business Use	1,655	23,009	917	8,087	325	2,223	38	586	32	745	2,967	34,650
-Personal Use	9,046	89,526	3,943	49,370	166	753	41	178	10	69	13,206	139,897
-Not in Use	31	25	3	23	23	106	5	21	3	24	66	200
<b>South Totals</b>	12,244	127,455	5,420	64,715	1,283	14,955	393	9,441	481	27,592	19,821	244,157
<b>Commodity-Carrying</b>												
-Short Haul	826	10,848	338	6,880	429	6,867	125	2,344	146	5,332	1,865	32,271
-Long Haul	42	929	3	9	20	110	19	613	86	8,030	170	9,692
<b>Non-Commodity-Carrying</b>												
-Business Use	1,258	13,443	512	4,735	114	1,677	15	122	17	275	1,915	20,251
-Personal Use	6,349	48,225	3,152	30,316	79	568	4	5	1	7	9,584	79,121
-Not in Use	27	226	10	38	34	51	0	0	1	8	71	323
<b>West Totals</b>	8,503	73,671	4,014	41,977	675	9,274	163	3,085	251	13,651	13,606	141,658
<b>Commodity-Carrying</b>												
-Short Haul	3,766	43,692	1,593	25,545	2,306	29,037	919	19,165	682	25,194	9,265	142,633
-Long Haul	175	4,521	157	2,579	88	1,153	132	7,115	545	50,391	1,097	65,760
<b>Non-Commodity-Carrying</b>												
-Business Use	4,770	59,309	2,560	30,473	779	6,066	123	1,674	66	1,563	8,297	99,085
-Personal Use	23,125	216,091	11,668	125,506	433	2,177	63	223	12	79	35,301	344,075
-Not in Use	59	252	12	61	69	210	6	22	6	50	152	594
<b>UNITED STATES TOTALS</b>	31,895	323,865	15,990	184,164	3,674	38,644	1,242	28,198	1,311	77,277	54,112	652,147

(a) Quantity rounded to zero.



## APPENDIX A

### DESIGN OF THE 1990 NATIONWIDE TRUCK ACTIVITY AND COMMODITY SURVEY

#### I. Purpose of Survey

The NTACS was designed by the Census Bureau with DOT consultation and involvement to provide detailed information on daily activity patterns of trucks and on the relationships of trucking to commodity movements and economic activity. The NTACS measures the 1990 activity of trucks registered on July 1, 1987, and in the scope of the Census Bureau's 1987 Truck Inventory and Use Survey (TIUS).

#### II. Universe

The universe for the 1990 NTACS includes the following: All trucks during the NTACS period (October 29, 1989--October 27, 1990) registered in one of the 50 states or the District of Columbia on July 1, 1987, and operating in 1987 as estimated by the 1987 TIUS.

A. A "truck" is a vehicle registered in a state as a truck, or a vehicle with a "truck" chassis registered as a car. Vehicles excluded from the 1987 TIUS and subsequently excluded from the 1990 NTACS universe were:

1. Vehicles owned by Federal, state, or local governments
2. Ambulances
3. Buses
4. Mobile homes
5. Trucks
  - Sold prior to 1987 (NTACS only)
  - Disposed of prior to July 1, 1986 (TIUS and NTACS)
6. Farm tractors
7. Unpowered trailers
8. Trucks reported scrapped or wrecked prior to registration year.

### III. Survey Frame

The 1990 NTACS sample was selected from commodity-carrying trucks and non-commodity carrying business, personal transportation and idle trucks which responded to the 1987 TIUS. Thus the NTACS sample is a subsample of the 1987 TIUS sample respondents.

The 1987 TIUS frame is described below.

#### A. Description

The 1987 TIUS was based on a sample survey of approximately 135,321 trucks (Table B) selected from the TIUS universe of approximately 45,393,671 trucks (Table A). R.L. Polk and Company, as directed by the Census Bureau, selected a stratified random sample from vehicle registration files for each of the 50 states and the District of Columbia. Five vehicle type strata were selected:

STRATUM	VEHICLE TYPE
1	Pickup trucks
2	Vans, panels and utilities
3	Single-unit, small (GVW <sup>1</sup> ≤ 26,000 lbs.)
4	Single-unit, large (GVW > 26,000 lbs.)
5	Truck-tractors

The truck (unit) response rate for the 1987 TIUS at the U.S. level was approximately 77.9 percent, i.e. approximately 104,601 trucks responded (Table C).

The 1987 TIUS forms were mailed to registered owners of each sample truck to determine the 1987 operational and physical characteristics. Based on the 1987 TIUS, the NTACS frame contained the following information:

1. State of registration
2. Vehicle type (stratum)
3. 1987 TIUS expansion factor

<sup>1</sup> Gross Vehicle Weight rating (GVW) is the weight of a vehicle when loaded to its capacity.

4. Response characteristics
5. 1987 TIUS characteristics.

Trucks identified as idled (i.e., wrecked, awaiting repair, etc.) from the 1987 TIUS were given a chance for selection in the NTACS because these trucks could have been operational at the time the NTACS survey was conducted. Trucks scrapped or not in use in 1987 were excluded from the survey. *No attempt was made to follow up "deaths" or to include newly registered trucks that were registered since July 1, 1987.* If a vehicle changed ownership, however, an attempt was made to find the new owner of the truck.

#### **B. Preparation of the Frame**

The 103,737 trucks (Table D) in the sampling frame were stratified into one of 225 strata defined by geographic division, types of haul, and truck classification. Type of haul was either long or short for commodity-carrying trucks, or business use only, personal use only, or idled non-commodity-carrying trucks. A long-haul commodity-carrying truck is a truck with 30 percent of its annual mileage on trips of 200 miles or more; or at least 50 percent of its annual mileage on trips of 50 to 200 miles and at least 10 percent of annual mileage on trips of 200 miles or more.

Prior to sample selection, trucks within each stratum were sorted by body type and ZIP.

#### **IV. Sample Size**

Using the 1982 TIUS as a basis of study and later adjusted by results from the 1987 TIUS, the NTACS sample was determined to be approximately 44,002 trucks (Table E). Of those, approximately 14,000 were long-haul commodity-carrying, approximately 24,000 were short-haul commodity-carrying, and the balance were non-commodity-carrying. Sample sizes were determined to provide reliable estimates of annual miles at the division level for commodity-carrying large trucks plus tractor-trailer trucks, commodity-carrying pick-ups plus vans, all commodity-carrying trucks, all large plus tractor-trailer trucks, all pick-ups plus vans, and all trucks.

Approximately 42 percent of all trucks responding in the 1987 TIUS were included in the 1990 NTACS sample.

The estimated 1990 NTACS universe size (using XPFD1) is approximately 41,768,000 (see Table 1.1).

## V. Sample Selection

The survey collected information on the activities of trucks on one or two sample days. The sample was selected in two steps: (1) a sample of trucks was identified from the in-scope list of trucks in the 1987 TIUS, and (2) one or two sample days for each specific truck was selected.

A respondent was asked to provide data on a specific day within a specific week(s). In addition, within the specific week(s), the truck reported which day(s) it operated. For the selected day(s), the owner of a truck reported detailed information on its characteristics and activities for a day and/or for the trips started and continuing on the sample day.

### A. Selection of Trucks

A stratified systematic random sample of trucks from the 1987 TIUS was included in the 1990 NTACS.

Selected into the 1990 NTACS were the following groups of trucks responding to the 1987 TIUS:

- All commodity-carrying long-haul trucks
- All commodity-carrying short-haul pickups and vans
- A subsample of commodity-carrying short-haul tractor-trailers; single-unit, large; and single-unit small trucks
- A subsample of non-commodity-carrying trucks.

ORNL's current understanding of the number of NTACS respondents (22,044) and NTACS nonrespondents (21,808) is given in Table G. It should be noted that 150 trucks (= 44,002-22,044 - 21,808) in the original NTACS sample were eventually determined to be out of scope for NTACS.

### B. Selection of Weeks

Each long-haul commodity-carrying truck was enumerated for two selected one-week periods. The year was divided into 13 blocks (periods) of four-weeks each beginning October 29, 1989, and ending October 27, 1990. Each truck was randomly assigned to a four-week block (period).

The first week was randomly selected from the first two-weeks in the block; the second week was two-weeks later. The sample of trucks for a block was evenly divided between the first and second week. For each day in the two-weeks

selected, the owner of the truck was asked to report whether the truck operated some time during the day.

Each selected local haul commodity-carrying and non-commodity-carrying truck was enumerated for one selected one-week period during the four-week block.

C. Selection of Days

For each selected week, each truck was randomly assigned a day to report daily characteristics. One substitute day was provided on the questionnaire. If commodities were carried during the week, but not on either the selected or a substitute day, the respondent was provided a telephone number to call to obtain a new sample day within the sampled week. For long-haul trucks, each day of the week had an equal probability of selection.

D. Definition of Trip

A trip is defined as travel starting when a truck left the base or location of a pickup or delivery and ended when it arrived at the base or location of the next pickup or delivery (this includes traveling empty).

E. Selection of Trip

For long-haul trucks, a trip in which any part of the travel occurred on the sample day was selected into the survey. This allowed information on any trip beginning before the sample day, continuing into the sample day, and ending after the sample day to be collected.

VI. NTACS Questionnaire Content

See Appendix C.

VII. How Conducted

A. General

The 1990 NTACS was conducted by mail. The registration information was computer imprinted on the questionnaires identifying the specific vehicle selected as well as the week(s) and day(s) selected.

**B. Mailout**

Selected sampled cases were assigned to one of 13 periods. Each respondent received one of two questionnaires requesting the activities of the selected vehicle for a selected day in a four-week period of the year or activities for two selected days in different weeks of the same four-week period.

The mailing package consisted of the original questionnaire, instruction sheet, cover letter, and return envelope.

**C. Receipt and Check-in**

Questionnaires were mailed from the Census Bureau's Jeffersonville, Indiana facility. Respondents were requested to return these report forms to that facility immediately after the sample day where an automated check-in occurred. Respondents with delinquent reports were followed up.

**D. Follow-up**

In an attempt to improve the response rate for the survey, two mail follow-ups were conducted. In addition, a telephone follow-up was initially conducted for the first five (5) periods. Due to the high cost in conducting telephone follow-up to obtain a completed response, the use of certified mail was implemented for the remaining eight (8) periods. Certified mail proved to be cost effective and improved not only overall response, but item non-response as well.

**E. Data Editing**

Responses were edited for reasonableness and consistency through clerical screening and a computer edit. The physical characteristics of the selected vehicles were compared with those attributes reported in the 1987 TIUS. The operational characteristics of the sampled vehicles were edited against parameters developed from industry standards and from knowledge of the operations of various carrier types.

It was recognized during the design and development stages and from the results of the pretest that this data collection would be an exploratory process which would attempt to study new and changing conditions in truck operation and activity characteristics that had not been measured in any previous program.

During the edit process, a number of important observations were made that will help improve response and data quality for the 1994 program. In preparation for the 1994 program, additional contacts with trade groups, TIUS participants, and DOT specialists will improve questionnaire design and respondent reportability. The evaluation of the 1990 data collection will

improve data item definitions and instructions and therefore improve response rates. These steps will be part of a process to balance data user needs and respondent ability to report quality data on a timely basis.

TABLE A. 1987 TIUS NUMBER OF TRUCKS IN UNIVERSE BY STATE BY TRUCK TYPE (9/2/88)

STATE	TRUCK TYPE				
	1 PU	2 VAN	3 LT TRK	4 HVY TRK	5 TRACTOR
AL	638,613	173,339	51,492	26,700	24,942
AK	107,061	52,685	7,485	3,419	2,172
AZ	492,522	206,317	49,082	13,493	10,295
AR	427,842	96,058	3,097	930	6,022
CA	3,114,535	1,295,855	262,097	52,980	112,338
CO	591,910	309,619	57,336	21,496	4,692
CT	237,758	161,962	35,245	12,614	7,141
DE	63,762	38,851	10,400	5,511	3,694
DC	6,868	12,387	1,980	589	93
FL	1,079,807	697,569	97,195	27,192	45,273
GA	808,816	280,598	86,289	27,734	32,895
HI	109,845	40,725	10,726	3,538	1,612
ID	225,104	68,335	20,055	6,038	5,830
IL	775,257	547,659	137,478	73,488	98,863
IN	623,625	288,552	97,405	39,010	43,743
IA	414,034	147,030	65,749	42,663	18,675
KS	468,723	148,444	82,097	30,477	15,926
KY	552,570	167,666	70,020	19,028	15,610
LA	662,206	203,953	52,191	19,955	16,887
ME	170,586	61,024	17,425	10,595	6,144
MD	341,399	227,197	59,194	31,332	14,553
MA	315,869	267,985	58,170	38,502	11,569
MI	862,631	568,562	78,971	21,405	44,079
MN	514,359	235,517	61,950	37,574	16,886
MS	399,959	83,261	18,734	7,364	8,762
MO	718,109	184,820	78,035	24,299	24,792
MT	221,409	63,818	22,815	6,283	8,098
NE	272,796	79,949	62,859	19,971	19,833
NV	171,537	65,615	9,500	1,955	3,545
NH	137,873	71,245	17,462	7,337	5,585
NJ	330,317	349,862	77,012	41,693	26,235
NM	333,941	107,392	23,401	4,053	5,301
NY	693,191	651,353	137,931	49,282	33,201
NC	858,052	311,547	126,308	36,738	43,951
ND	147,705	42,202	67,000	10,383	6,153
OH	927,108	581,907	134,423	87,165	35,001
OK	644,308	167,477	67,030	18,395	24,770
OR	571,409	208,582	34,726	9,987	22,746
PA	869,677	611,082	121,812	55,690	52,873
RI	61,736	43,657	10,594	3,451	2,746
SC	407,583	132,578	44,075	12,206	9,629
SD	158,308	46,806	25,249	12,141	6,459
TN	708,475	217,247	57,914	20,551	29,773
TX	2,703,736	997,144	196,460	44,588	98,999
UT	240,582	112,077	20,544	5,691	7,075
VT	79,227	38,120	9,187	4,509	1,957
VA	696,407	319,065	84,383	30,306	23,335
WA	739,707	289,801	56,688	11,731	19,223
WV	270,632	110,659	33,218	9,512	4,135
WI	480,254	202,196	68,387	40,078	23,769
WY	145,669	57,020	14,834	3,438	7,245
US	27,595,406	12,444,370	3,093,709	1,145,062	1,115,124
<b>GRAND TOTAL</b>					<b>45,393,671</b>

Source: September 12, 1988 Census Bureau Memo, Truck Inventory and Use Survey, #87EAG-T-1, Chapter 15, Subchapter D, Document #2.

TABLE B. 1987 TIUS PRELIMINARY SAMPLE SIZES BY STATE BY TRUCK TYPE

STATE	TRUCK TYPE				
	1	2	3	4	5
AL	626	122	553	765	598
AK	575	231	456	255	874
AZ	615	202	687	77	1,179
AR	689	108	502	267	1,069
CA	596	205	577	229	1,164
CO	531	269	662	111	1,202
CT	408	327	596	27	1,258
DE	471	245	475	568	616
DC	247	479	526	258	200
FL	501	291	612	98	1,259
GA	608	163	563	114	1,252
HI	493	293	599	872	191
ID	623	150	569	774	511
IL	473	269	615	464	918
IN	510	192	630	24	1,350
IA	539	156	640	60	1,296
KS	574	135	687	129	1,215
KY	602	155	622	612	734
LA	653	155	579	268	1,066
ME	565	208	522	648	587
MD	433	299	642	94	1,234
MA	385	331	624	870	467
MI	509	302	545	98	1,267
MN	541	192	575	428	939
MS	667	99	531	542	788
MO	582	187	604	618	742
MT	613	157	636	576	657
NE	518	147	676	358	973
NV	589	231	595	643	444
NH	507	245	521	167	1,058
NJ	337	354	504	247	1,126
NM	631	167	519	83	1,212
NY	393	354	593	174	1,204
NC	539	167	695	812	556
ND	476	92	747	632	648
OH	473	279	616	752	626
OK	646	136	631	123	1,221
OR	616	177	509	182	1,166
PA	437	293	615	239	1,143
RI	408	322	577	263	798
SC	642	161	619	316	970
SD	580	134	646	117	1,131
TN	628	153	632	107	1,236
TX	644	161	525	366	1,025
UT	576	196	613	341	918
VT	520	247	558	466	574
VA	535	221	645	301	1,051
WA	590	218	630	167	1,168
WV	553	225	659	537	713
WI	479	257	634	116	1,240
WY	579	197	509	127	1,127
US	27,527	11,056	30,298	17,480	47,960
<b>GRAND TOTAL</b>					<b>134,321</b>

Source: Appendix D of July 29, 1988 Census Bureau Memo, 1987 Truck Inventory and Use Survey-Sample Design, #87EAG-T-1, Chapter 19, Subchapter A, Document #1.

TABLE C. 1987 TIUS NUMBER OF SAMPLE RESPONDENTS BY STATE BY TRUCK TYPE

STATE	TRUCK TYPE				
	1	2	3	4	5
AL	448	119	325	368	663
AK	349	191	333	292	487
AZ	418	179	427	244	649
AR	514	121	215	41	1,187
CA	417	167	408	244	977
CO	397	210	453	612	418
CT	330	245	459	522	634
DE	313	197	324	348	521
DC	140	299	319	233	73
FL	353	237	381	177	909
GA	423	153	418	211	857
HI	396	139	412	764	166
ID	508	157	459	402	658
IL	349	246	329	373	691
IN	404	195	419	218	949
IA	447	152	421	433	734
KS	434	130	494	367	834
KY	482	149	486	386	707
LA	452	154	377	401	664
ME	456	167	380	542	582
MD	363	234	401	571	621
MA	335	259	361	724	401
MI	402	264	407	201	981
MN	431	202	393	448	669
MS	494	107	328	401	607
MO	492	132	456	374	814
MT	484	140	412	244	729
NE	426	120	419	284	774
NV	449	178	430	255	749
NH	376	192	358	360	655
NJ	270	293	355	496	827
NM	456	154	456	121	2
NY	326	282	425	426	696
NC	458	160	421	553	605
ND	410	116	591	463	633
OH	375	233	373	596	474
OK	479	125	392	367	664
OR	479	164	377	174	949
PA	396	265	393	331	900
RI	349	246	414	460	449
SC	472	147	457	390	660
SD	442	132	413	294	746
TN	472	140	389	159	927
TX	375	159	353	237	739
UT	462	215	410	234	820
VT	441	211	382	496	452
VA	426	200	437	344	781
WA	466	190	427	347	742
WV	466	192	496	688	414
WI	448	189	400	423	889
WY	428	164	383	205	788
US	21,178	9,412	20,548	18,844	34,619
<b>GRAND TOTAL 104,601</b>					

Source: Appendix C of the 1987 TIUS-Technical Documentation, U. S. Bureau of the Census

**TABLE D. RESTRATIFICATION OF 1987 TIUS NUMBER OF SAMPLE RESPONDENTS BY DIVISION BY COMMODITY-CARRYING STATUS BY TRUCK TYPE FOR NTACS SAMPLING (FRMWT TRUCK COUNT)**

CENSUS DIVISION	COMMODITY-CARRYING STATUS	TRUCK TYPE					TOTAL
		1	2	3	4	5	
1 New England (ME VT RI NH MA CT)	1	302	173	1,452	2,389	2,036	12,025
	2	11	11	54	232	855	
	3	361	231	488	308	164	
	4	1,560	872	274	98	40	
	5	7	5	39	36	27	
2 Middle Atlantic (NY NJ PA)	1	114	107	741	970	1,322	6,370
	2	2	7	18	61	738	
	3	149	156	282	133	98	
	4	705	550	91	61	9	
	5	0	1	20	12	23	
3 East North Central (OH IN IL MI WI)	1	228	129	1,173	1,107	1,989	10,643
	2	16	12	43	173	1,726	
	3	287	141	413	175	150	
	4	1,407	825	252	293	23	
	5	4	2	22	26	27	
4 West North Central (MN IA MO ND SD NE KS)	1	513	90	2,303	1,930	2,592	14,954
	2	19	12	46	266	2,266	
	3	584	167	435	188	199	
	4	1,913	704	317	195	55	
	5	14	4	55	50	37	
5 South Atlantic (DE MD DC VA WV NC SC GA FL)	1	355	181	2,112	2,432	3,165	17,515
	2	17	17	68	250	1,758	
	3	449	315	822	385	272	
	4	2,528	1,273	520	348	87	
	5	14	5	48	47	47	
6 East South Central (KY TN AL MS)	1	205	54	870	823	1,384	8,004
	2	7	14	27	239	1,152	
	3	224	66	359	106	174	
	4	1,430	376	221	92	88	
	5	3	2	26	20	42	
7 West South Central (AR LA OK TX)	1	182	39	811	733	1,723	7,872
	2	11	7	36	96	1,145	
	3	312	97	306	143	231	
	4	1,276	406	128	25	23	
	5	14	2	39	32	55	
8 Mountain (MT ID WY CO NM AZ UT NV)	1	383	107	1,953	1,636	2,973	16,452
	2	34	5	107	434	2,168	
	3	558	174	732	252	335	
	4	2,569	1,091	515	88	64	
	5	18	5	106	48	97	
9 Pacific (WA OR CA AK HI)	1	201	90	1,168	1,540	2,284	9,902
	2	8	8	25	54	755	
	3	281	131	381	159	189	
	4	1,586	608	305	16	23	
	5	6	6	31	18	29	
<b>GRAND TOTAL</b>							<b>103,737</b>

Source: 1989 Sample Selection Tabulations, U. S. Bureau of the Census.  
Date: 10/13/89

**TABLE E. NUMBER OF TRUCKS SELECTED FOR 1989 NTACS SAMPLE BY DIVISION BY COMMODITY-CARRYING BY TRUCK TYPE (TRUCK COUNT)**

CENSUS DIVISION	COMMODITY-CARRYING STATUS	TRUCK TYPE					TOTAL
		1	2	3	4	5	
1	1	283	168	640	922	717	4,291
	2	11	11	54	219	814	
	3	36	60	40	20	11	
	4	120	60	40	5	5	
	5	4	5	18	15	13	
2	1	114	102	712	951	609	3,894
	2	2	7	18	60	710	
	3	8	80	121	38	23	
	4	94	84	61	2	1	
	5	0	1	10	5	9	
3	1	217	126	762	355	452	4,226
	2	16	12	41	164	1,598	
	3	50	50	50	40	25	
	4	75	75	75	1	2	
	5	2	2	11	13	12	
4	1	503	90	1,200	1,556	397	6,971
	2	19	12	46	241	2,097	
	3	80	80	75	35	12	
	4	150	150	100	35	15	
	5	7	4	27	23	17	
5	1	341	175	741	564	750	5,552
	2	17	17	66	240	1,674	
	3	80	80	121	50	50	
	4	150	150	83	75	50	
	5	7	3	24	22	22	
6	1	199	53	813	286	448	3,752
	2	7	14	25	220	1,067	
	3	80	62	50	9	16	
	4	150	150	50	4	3	
	5	3	1	13	10	19	
7	1	177	39	772	384	912	4,184
	2	11	7	34	92	1,102	
	3	50	26	52	50	79	
	4	160	70	50	25	23	
	5	7	1	19	15	27	
8	1	375	105	1,311	538	872	6,556
	2	34	5	103	392	1,936	
	3	80	80	65	84	79	
	4	150	150	80	10	10	
	5	8	5	30	24	30	
9	1	200	84	1,124	500	1,109	4,576
	2	8	8	24	54	726	
	3	80	80	50	50	50	
	4	150	150	50	16	23	
	5	2	5	13	8	12	
<b>GRAND TOTAL</b>							<b>44,002</b>

Source: 1989 Sample Selection Tabulations, U. S. Bureau of the Census  
Date: 10/13/89

TABLE F. ESTIMATED 1987 TIUS UNIVERSE SIZE\* BASED ON  
1987 TIUS SAMPLE (Compare with Table A.)

STATE	TRUCK TYPE					TOTAL
	1	2	3	4	5	
AL	627,411	166,350	49,806	25,856	24,319	893,742
AK	105,848	51,870	7,226	3,361	2,128	170,433
AZ	487,852	206,317	45,860	8,464	10,157	758,650
AR	420,478	90,804	2,541	930	5,971	520,724
CA	3,084,945	1,243,722	253,401	52,126	110,088	4,744,282
CO	587,473	306,699	52,897	21,187	4,594	972,850
CT	231,446	153,208	34,058	12,444	6,923	438,079
DE	63,157	38,269	9,824	5,401	3,652	120,303
DC	6,304	12,178	1,940	596	129	21,147
FL	1,050,059	694,638	94,953	26,591	42,914	1,909,155
GA	788,315	278,775	83,299	27,474	32,215	1,210,078
HI	106,092	39,586	10,110	3,438	1,584	160,810
ID	219,908	67,475	19,260	5,950	5,751	318,344
IL	773,042	536,750	133,817	70,284	89,650	1,603,543
IN	614,500	287,079	94,036	38,135	42,885	1,076,635
IA	409,452	146,069	64,224	41,512	18,181	679,438
KS	459,202	144,013	80,152	29,668	15,479	728,514
KY	541,339	165,445	67,384	18,783	15,179	808,130
LA	639,566	202,638	48,825	19,328	16,487	926,844
ME	166,568	59,250	16,937	10,309	6,099	259,163
MD	339,528	218,783	57,896	30,686	14,507	661,400
MA	312,143	259,956	54,121	36,012	11,400	673,632
MI	847,866	560,076	76,166	21,300	43,282	1,548,690
MN	503,839	233,209	59,673	36,436	16,564	849,721
MS	388,170	79,544	17,358	6,965	8,522	500,559
MO	706,620	183,430	75,874	23,854	24,314	1,014,092
MT	217,369	63,365	20,345	6,083	7,778	314,940
NE	270,889	77,370	57,382	18,900	19,528	444,069
NV	170,023	64,886	8,617	1,854	3,468	248,848
NH	133,954	69,790	16,715	7,218	5,548	233,225
NJ	326,687	340,563	72,136	40,870	25,906	806,162
NM	331,038	106,699	22,946	3,660	4,857	469,200
NY	688,965	642,244	128,554	48,709	32,643	1,541,115
NC	858,054	309,611	123,951	36,277	43,306	1,371,199
ND	145,927	41,841	63,863	10,205	6,083	267,919
OH	914,910	569,683	131,255	86,009	34,635	1,736,492
OK	635,029	164,840	62,861	17,007	23,904	903,641
OR	560,871	203,616	33,915	9,393	22,558	830,353
PA	863,137	601,995	115,353	54,536	52,236	1,687,257
RI	60,866	43,306	10,321	3,376	2,658	120,527
SC	401,625	131,683	42,675	12,082	9,497	597,562
SD	155,496	46,453	24,194	11,513	6,348	244,004
TN	698,121	215,706	54,157	20,296	28,718	1,016,998
TX	2,647,260	978,678	185,925	43,847	96,388	3,952,098
UT	237,496	110,534	18,676	5,525	7,019	379,250
VT	78,339	37,940	8,087	4,290	1,921	130,577
VA	692,322	310,720	82,597	29,350	22,891	1,137,880
WA	730,306	288,283	52,735	11,434	19,017	1,101,775
WV	268,327	108,401	31,932	9,419	4,107	422,186
WI	477,057	202,196	66,076	37,842	23,425	806,596
WY	143,324	56,675	14,029	3,247	7,084	224,359
<b>GRAND TOTAL</b>						<b>44,557,190</b>

\* Estimates in a given stratum were obtained by multiplying the 1987 TIUS Expansion Factor for that stratum by the 1987 TIUS Sample Respondents for that stratum.

Sources: Appendices B and C of the 1987 TIUS - Technical Documentation  
U. S. Bureau of the Census

TABLE G. NUMBER OF SAMPLE RESPONDENTS\* (NONRESPONDENTS) TO THE 1990 NTACS

CENSUS DIVISION	COMMODITY-CARRYING STATUS	TRUCK TYPE					TOTAL
		1	2	3	4	5	
1	1	143(138)	74(94)	312(323)	413(505)	340(377)	1,983(2,290)
	2	8( 3)	7( 4)	20( 33)	95(124)	321(491)	
	3	23( 13)	32(28)	19( 20)	13( 7)	4( 7)	
	4	68( 50)	38(22)	20( 20)	1( 4)	3( 1)	
	5	2( 2)	2( 3)	9( 9)	10( 5)	6( 7)	
2	1	61( 52)	43(57)	357(352)	443(508)	322(284)	1,934(1,950)
	2	1( 1)	5( 2)	9( 9)	30( 30)	351(359)	
	3	50( 30)	33(47)	56( 65)	17( 21)	10( 13)	
	4	59( 35)	46(38)	29( 31)	0( 2)	1( 0)	
	5	0( 0)	1( 0)	5( 5)	1( 4)	4( 5)	
3	1	108(109)	57(68)	418(340)	180(174)	223(229)	2,068(2,142)
	2	7( 9)	5( 7)	21( 20)	72( 91)	694(897)	
	3	22( 28)	31(19)	27( 23)	21( 18)	9( 16)	
	4	43( 32)	49(25)	50( 25)	0( 1)	1( 1)	
	5	1( 1)	2( 0)	10( 1)	8( 5)	9( 3)	
4	1	287(215)	46(43)	662(536)	861(690)	229(167)	3,834(3,119)
	2	9( 10)	7( 5)	20( 26)	139(101)	1,108(986)	
	3	42( 38)	41(39)	42( 32)	26( 8)	6( 6)	
	4	93( 57)	84(65)	50( 50)	24( 11)	8( 7)	
	5	6( 1)	2( 2)	18( 8)	17( 6)	7( 10)	
5	1	174(167)	79(95)	404(334)	262(300)	357(388)	2,789(2,743)
	2	6( 11)	9( 8)	41( 25)	123(117)	850(820)	
	3	42( 37)	34(46)	59( 62)	29( 20)	22( 28)	
	4	80( 70)	71(78)	50( 33)	40( 35)	23( 27)	
	5	3( 4)	1( 2)	9( 13)	12( 10)	9( 13)	
6	1	104( 94)	26(27)	438(373)	138(147)	214(233)	1,815(1,926)
	2	3( 4)	7( 7)	16( 9)	99(119)	454(610)	
	3	45( 35)	29(33)	20( 30)	2( 7)	9( 7)	
	4	72( 78)	86(64)	27( 23)	1( 3)	1( 2)	
	5	2( 0)	1( 0)	5( 8)	7( 3)	9( 10)	
7	1	93( 84)	18(21)	408(364)	177(205)	422(490)	2,007(2,167)
	2	6( 5)	4( 3)	12( 22)	37( 55)	524(573)	
	3	18( 31)	12(14)	28( 24)	29( 21)	33( 46)	
	4	75( 85)	33(37)	25( 25)	13( 11)	9( 14)	
	5	3( 4)	1( 0)	10( 8)	7( 8)	10( 17)	
8	1	208(166)	58(46)	738(568)	272(265)	452(417)	3,392(3,135)
	2	18( 16)	4( 1)	56( 47)	187(201)	941(984)	
	3	35( 45)	37(43)	31( 33)	41( 42)	47( 32)	
	4	74( 76)	80(70)	37( 43)	7( 3)	4( 6)	
	5	6( 2)	5( 0)	19( 11)	17( 7)	18( 11)	
9	1	107( 92)	43(41)	584(536)	231(268)	552(550)	2,222(2,336)
	2	6( 2)	1( 7)	13( 11)	28( 26)	306(419)	
	3	44( 35)	37(43)	20( 30)	21( 29)	27( 23)	
	4	69( 81)	68(81)	23( 27)	9( 7)	8( 13)	
	5	2( 0)	3( 2)	9( 4)	5( 3)	6( 6)	
<b>TOTALS -- 22,044(21,806)</b>							
<b>GRAND TOTAL = 22,044 + 21,806 = 43,852</b>							

\* RESPONDENT is any truck which returned the NTACS Questionnaire with response to at least one new data item other than what was already known for the truck from the 1987 TIUS.

Source: 1990 NTACS tape from U. S. Bureau of the Census to Oak Ridge National Laboratory (July 1991).

TABLE H. NUMBER OF SAMPLE DAY ONE RESPONDENTS (NONRESPONDENTS)  
TO THE 1990 NTACS

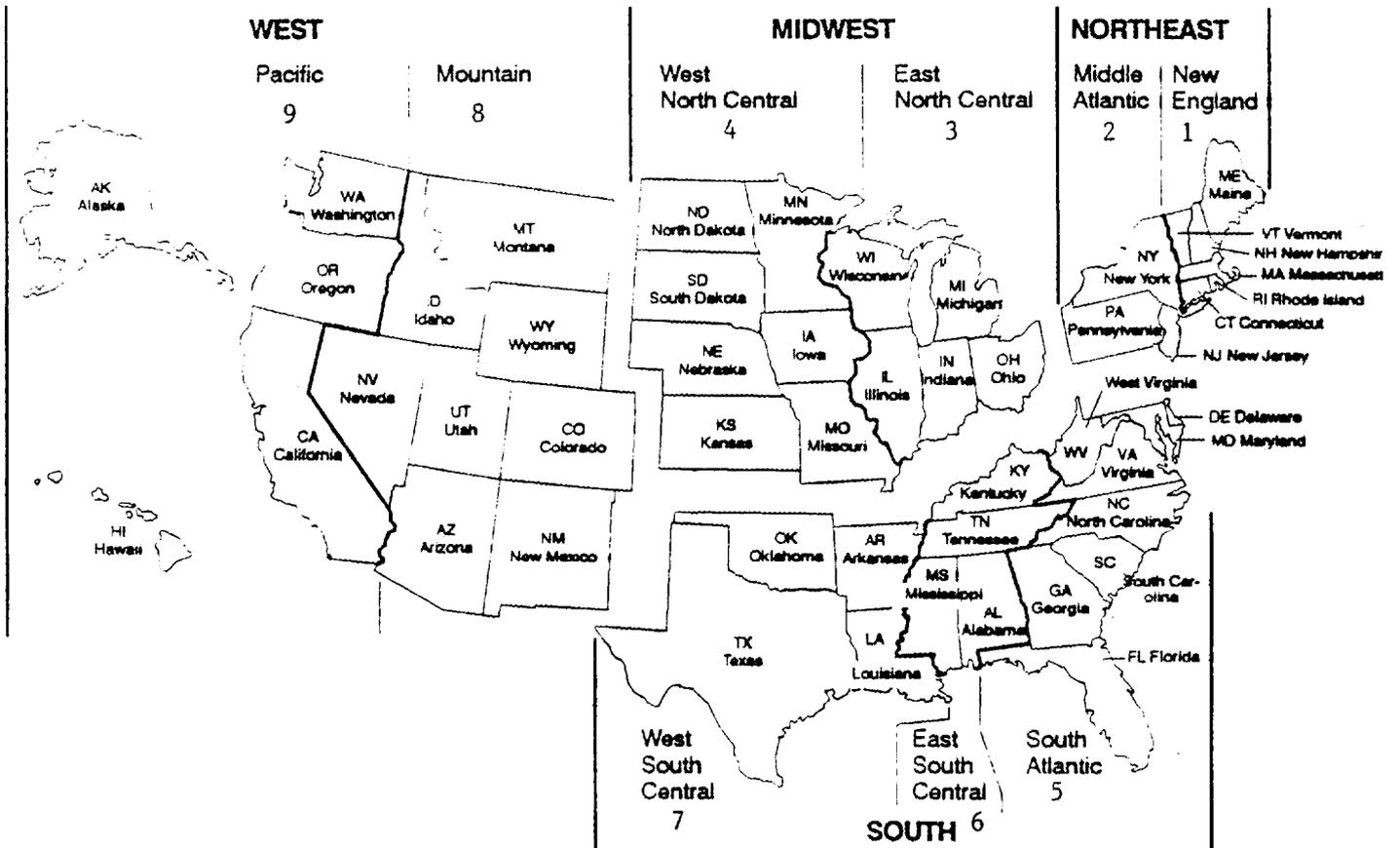
CENSUS DIVISION	COMMODITY- CARRYING STATUS	TRUCK TYPE					TOTAL
		1	2	3	4	5	
1	1	75(206)	35(133)	124(511)	203(715)	169(548)	925(3,348)
	2	4(7)	3(8)	5(48)	46(173)	151(661)	
	3	10(26)	19(41)	6(33)	5(15)	3(8)	
	4	37(81)	22(38)	6(34)	0(5)	1(3)	
	5	0(4)	0(5)	0(18)	1(14)	0(13)	
2	1	32(81)	18(82)	162(547)	225(726)	155(451)	932(2,952)
	2	0(2)	4(3)	1(17)	18(42)	157(553)	
	3	28(52)	21(59)	28(93)	10(28)	3(20)	
	4	33(61)	28(56)	9(51)	0(2)	0(1)	
	5	0(0)	0(1)	0(10)	0(5)	0(9)	
3	1	62(155)	28(97)	164(594)	95(259)	115(337)	919(3,291)
	2	4(12)	4(8)	9(32)	30(133)	282(1309)	
	3	16(34)	17(33)	13(37)	8(31)	2(23)	
	4	25(50)	26(48)	14(61)	0(1)	0(2)	
	5	0(2)	0(2)	3(8)	0(13)	2(10)	
4	1	152(350)	21(68)	198(1000)	311(1240)	102(294)	1,476(5,477)
	2	2(17)	4(8)	9(37)	54(186)	426(1668)	
	3	23(57)	27(53)	15(59)	11(23)	2(10)	
	4	52(98)	42(107)	17(83)	6(29)	1(14)	
	5	0(7)	0(4)	1(25)	0(23)	0(17)	
5	1	84(257)	45(129)	184(554)	148(414)	164(581)	1,343(4,189)
	2	3(14)	3(14)	13(53)	50(190)	416(1254)	
	3	20(59)	17(63)	27(94)	15(34)	12(38)	
	4	44(106)	44(105)	21(62)	17(58)	11(39)	
	5	1(6)	0(3)	1(21)	2(20)	1(21)	
6	1	58(140)	14(39)	173(638)	70(215)	98(349)	816(2,925)
	2	3(4)	3(11)	5(20)	37(181)	199(865)	
	3	23(57)	14(48)	7(43)	0(9)	4(12)	
	4	40(110)	55(95)	7(43)	1(3)	1(2)	
	5	1(1)	1(0)	1(12)	0(10)	1(18)	
7	1	39(138)	9(30)	133(639)	87(295)	198(714)	886(3,288)
	2	2(9)	2(5)	5(29)	18(74)	247(850)	
	3	11(38)	7(19)	14(38)	16(34)	15(64)	
	4	46(114)	17(53)	8(42)	5(19)	3(20)	
	5	1(6)	0(1)	2(16)	1(14)	0(27)	
8	1	109(265)	36(68)	276(1030)	121(416)	197(672)	1,371(5,156)
	2	9(25)	1(4)	19(84)	53(335)	346(1579)	
	3	18(62)	18(62)	13(51)	21(62)	16(63)	
	4	45(105)	48(102)	12(68)	2(8)	3(7)	
	5	1(7)	1(4)	4(26)	0(24)	2(27)	
9	1	61(138)	34(50)	287(833)	125(374)	275(827)	1,126(3,432)
	2	3(5)	0(8)	3(21)	12(42)	148(577)	
	3	31(48)	19(61)	9(41)	12(38)	8(42)	
	4	43(107)	40(109)	12(38)	1(15)	2(19)	
	5	0(2)	0(5)	1(12)	0(8)	0(12)	
TOTALS - 9,794(34,058)							
GRAND TOTAL = 9,794 + 34,058 = 43,852							

Source: 1990 NTACS tape from U. S. Bureau of the Census to Oak Ridge National Laboratory (July 1991).



# APPENDIX B

## MAP OF FOUR CENSUS REGIONS AND NINE CENSUS DIVISIONS





# APPENDIX C

## THE 1990 NTACS-1 QUESTIONNAIRE

This section contains a copy of the 1990 NTACS-1 questionnaire. Not all NTACS reported data are included in the NTACS Public Use File mainly due to high item nonresponse rates.

Some other data items such as "current home base state" have been suppressed or aggregated for confidentiality reasons.

OMB No. 2125-0540; Approval Expires 12/31/91

<p><b>Form NTACS-1</b> 10-14-88</p> <p style="text-align: center;">U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS</p> <h3 style="text-align: center;">NATIONWIDE TRUCK ACTIVITY AND COMMODITY SURVEY</h3> <p style="text-align: center; font-size: small;">REGISTRATION INFORMATION</p> <table style="width: 100%; border: none;"> <tr> <td style="border: none;">100</td> <td style="border: none;">Vehicle Identification Number (VIN)</td> <td style="border: none;">101</td> <td style="border: none;">Make of vehicle</td> <td style="border: none;">102</td> <td style="border: none;">Year</td> <td style="border: none;">103</td> <td style="border: none;">State</td> </tr> <tr> <td style="border: none;">104</td> <td style="border: none;">Sample week</td> <td style="border: none;">105</td> <td style="border: none;">Sample day</td> <td style="border: none;">106</td> <td colspan="3" style="border: none;">Substitute day</td> </tr> </table> <p style="font-size: small;">This questionnaire is a part of the 1990 Census of Transportation. It is being prepared by the Bureau of the Census, U.S. Department of Commerce. For more information, contact the Bureau of the Census, 1201 East Tenth Street, Jeffersonville, IN 47134.</p> <p><b>BE A PART OF AMERICA'S TRANSPORTATION PLANS FOR THE 1990's AND BEYOND!</b></p> <ul style="list-style-type: none"> <li>• We need your help in this Nationwide Truck Activity and Commodity Survey. The information you report on this questionnaire will be used by the government and others planning for future transportation needs such as:             <ul style="list-style-type: none"> <li>- New highways</li> <li>- Terminal facilities</li> <li>- Highway maintenance and repair</li> </ul> </li> <li>• Your vehicle identified in the Registration Information Section above was selected in a scientific sample of vehicles to represent the country's truck population.</li> <li>• Please take some of your valuable time to complete this form for the sample day indicated in the box above.</li> <li>• We suggest that you take this questionnaire with you in the sampled vehicle on the Sample Day, and complete Section C as you perform your day's activities.</li> <li>• Please return this questionnaire immediately after your Sample Day.</li> </ul> <p style="text-align: center; font-size: small;"><b>Please read before completing this form</b></p> <p style="font-size: x-small;">This questionnaire covers the activities of the vehicle specified in the Registration Information Section above, for the specific sample day indicated. The questionnaire is divided into 3 sections, A, B, and C. Sections A and B request general information on the vehicle's characteristics and use. Section C, beginning on page 5, refers to the vehicle's use on the sample day. Section C contains a diary type listing to report the activities of the vehicle during the sample day.</p> <p style="font-size: x-small;">If the vehicle did not operate on the sample day specified, use the substitute day. If the vehicle did not operate on either the sample day or the substitute day specified, but was active during the sample week, call us collect on (202) 763-1744. Do not substitute another day unless told to do so. The sample day was selected scientifically, and we want to know what the vehicle did on that particular day, even though it may not seem typical to you.</p>	100	Vehicle Identification Number (VIN)	101	Make of vehicle	102	Year	103	State	104	Sample week	105	Sample day	106	Substitute day			<p><b>NOTICE</b> — Your report to the Census Bureau is confidential by law (Title 13, U.S. Code). It may be seen only by sworn Census Bureau employees and may be used only for statistical purposes. The law also provides that copies retained in your files are immune from legal process.</p> <p>In correspondence pertaining to this report, please refer to this Census File Number (CFN).</p> <p style="text-align: center; font-size: x-small;">(Please correct any error in name and address including ZIP Code)</p> <p><b>a. Is the vehicle still in your possession?</b> <sup>110</sup> <input type="checkbox"/> YES — Are you the <sup>111</sup> <input type="checkbox"/> Owner? <sup>112</sup> <input type="checkbox"/> NO — Continue with items b-d <sup>111</sup> <input type="checkbox"/> Lessee? } <i>SKIP to Section A on page 2 and continue with questionnaire</i></p> <p><b>b. When did you dispose of this vehicle?</b> Enter figures only <sup>112</sup> Month   Year</p> <p><b>c. How did you dispose of this vehicle?</b> <sup>113</sup> <input type="checkbox"/> Sold it for gave it away <sup>114</sup> <input type="checkbox"/> Junked, scrapped, or otherwise destroyed <sup>115</sup> <input type="checkbox"/> Returned to leasing company <sup>116</sup> <input type="checkbox"/> Other — Specify _____</p> <p><b>d. Who is the current owner of this vehicle?</b> <sup>114</sup> <input type="checkbox"/> Unknown</p> <table style="width: 100%; border: none;"> <tr> <td style="border: none;"><sup>116</sup> Name</td> <td style="border: none;"><sup>118</sup> Address (Number and Street)</td> </tr> <tr> <td style="border: none;"><sup>117</sup> City</td> <td style="border: none;"><sup>119</sup> State   <sup>119</sup> ZIP Code</td> </tr> </table> <p style="font-size: x-small;"><b>If this vehicle is no longer in your possession, please sign on page 11 and return the questionnaire immediately.</b></p>	<sup>116</sup> Name	<sup>118</sup> Address (Number and Street)	<sup>117</sup> City	<sup>119</sup> State   <sup>119</sup> ZIP Code
100	Vehicle Identification Number (VIN)	101	Make of vehicle	102	Year	103	State														
104	Sample week	105	Sample day	106	Substitute day																
<sup>116</sup> Name	<sup>118</sup> Address (Number and Street)																				
<sup>117</sup> City	<sup>119</sup> State   <sup>119</sup> ZIP Code																				

**Section A - Vehicle Information**

**1a. Do you currently operate this vehicle?**  
If "No" indicate present status

1  YES  
2  NO

121  Idle      3  Dismantled  
2  Wrecked      4  Other - Specify \_\_\_\_\_

**b. How many weeks during the past 12 months did you operate this vehicle?**

\_\_\_\_\_ Weeks

**2a. Where is the current home base of this vehicle?**  
("Home Base" refers to where the vehicle is usually parked or stationed)

123 City \_\_\_\_\_  
124 County \_\_\_\_\_ 125 State \_\_\_\_\_ 126 ZIP Code \_\_\_\_\_

**b. How many miles was this vehicle driven during the past 12 months?**

\_\_\_\_\_ Miles (Estimates are acceptable)

**c. In how many states did this vehicle operate during the past 12 months?**

\_\_\_\_\_ States

**d. List the three States with the highest mileage during the past 12 months -**

(1) \_\_\_\_\_  
(2) \_\_\_\_\_  
(3) \_\_\_\_\_

**e. Did this vehicle operate in Canada during the past 12 months?**

1  YES - Mark (X) the provinces and territories

133  Newfoundland      139  Manitoba  
134  Prince Edward Island      140  Saskatchewan  
135  Nova Scotia      141  Alberta  
136  New Brunswick      142  British Columbia  
137  Quebec      143  Yukon Territory  
138  Ontario      144  Northwest Territories

2  NO

**f. Did this vehicle operate in Mexico during the past 12 months?**

1  YES      2  NO

**3. What percent of this vehicle's fuel during the past 12 months was obtained from -**

**a. Private fuel dump?** \_\_\_\_\_ %

**b. Gas station (truck stop, etc.)?** \_\_\_\_\_ %

**4. SAMPLE WEEK**

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
148	149	150	151	152	153	154	
1 <input type="checkbox"/> YES							
2 <input type="checkbox"/> NO							

For each day of the sample week (shown in the Registration information on page 1) check "Yes" if the vehicle operated on that day; otherwise check "No."  
(Operating includes traveling empty)

**Section B - Vehicle Description**

The following questions relate to this vehicle's use during the sample day and the past 12 months. If the vehicle did not operate on the sample day, use the substitute day. If the vehicle did not operate on the sample day or substitute day, call (301) 783-1744 collect.

**1. This truck was MOST FREQUENTLY operated as -**  
Mark (X) only one box in each column

	Sample day	Past 12 months
a. Personal transportation	162 <input type="checkbox"/>	164 <input type="checkbox"/>
b. Contract carrier	165 <input type="checkbox"/>	167 <input type="checkbox"/>
c. Common carrier	168 <input type="checkbox"/>	170 <input type="checkbox"/>
d. Other business use	171 <input type="checkbox"/>	173 <input type="checkbox"/>

**2. How would you best describe this vehicle as it was MOST FREQUENTLY operated during each period?**  
Mark (X) only one box in each column

	Sample day	Past 12 months
a. Straight truck with 4 tires without trailer	174 <input type="checkbox"/>	176 <input type="checkbox"/>
b. Straight truck with 4 tires pulling trailer(s)	177 <input type="checkbox"/>	178 <input type="checkbox"/>
c. Straight truck with 6 or more tires without trailer	180 <input type="checkbox"/>	182 <input type="checkbox"/>
d. Straight truck with 6 or more tires pulling trailer(s)	183 <input type="checkbox"/>	185 <input type="checkbox"/>
e. Truck-tractor (power unit) pulling trailer(s)	186 <input type="checkbox"/>	188 <input type="checkbox"/>
f. Truck-tractor without trailer	189 <input type="checkbox"/>	191 <input type="checkbox"/>
g. Other - Specify in the columns →	192 <input type="checkbox"/>	194 <input type="checkbox"/>

**3. Indicate the kind(s) of trailer(s) pulled during each period.**

	Mark (X) all that apply	Mark (X) only one
a. No trailer pulled	195 <input type="checkbox"/>	197 <input type="checkbox"/>
b. Utility and other trailers less than 20 feet used with straight truck		
(1) One axle on trailer	198 <input type="checkbox"/>	200 <input type="checkbox"/>
(2) Two axles on trailer	201 <input type="checkbox"/>	203 <input type="checkbox"/>
(3) Three or more axles on trailer	204 <input type="checkbox"/>	206 <input type="checkbox"/>
c. One full trailer used with straight truck		
(1) Two axles on trailer	207 <input type="checkbox"/>	209 <input type="checkbox"/>
(2) Three axles on trailer	210 <input type="checkbox"/>	212 <input type="checkbox"/>
(3) Four or more axles on trailer	213 <input type="checkbox"/>	215 <input type="checkbox"/>
d. One semi-trailer		
(1) One axle on trailer	216 <input type="checkbox"/>	218 <input type="checkbox"/>
(2) Two axles on trailer	219 <input type="checkbox"/>	221 <input type="checkbox"/>
(3) Three or more axles on trailer	222 <input type="checkbox"/>	224 <input type="checkbox"/>
e. Two trailers, one semi- and one full		
(1) Three axles on two trailers	225 <input type="checkbox"/>	227 <input type="checkbox"/>
(2) Four axles on two trailers	228 <input type="checkbox"/>	230 <input type="checkbox"/>
(3) Five axles on two trailers	231 <input type="checkbox"/>	233 <input type="checkbox"/>
(4) Six or more axles on two trailers	234 <input type="checkbox"/>	236 <input type="checkbox"/>
f. Three trailers, one semi- and two full		
(1) Five axles on three trailers	237 <input type="checkbox"/>	239 <input type="checkbox"/>
(2) Six axles on three trailers	240 <input type="checkbox"/>	242 <input type="checkbox"/>
(3) Seven axles on three trailers	243 <input type="checkbox"/>	245 <input type="checkbox"/>
(4) Eight or more axles on three trailers	246 <input type="checkbox"/>	248 <input type="checkbox"/>
g. Other - Please describe in detail the number of trailers and axles on those trailers. Specify in the columns →	249 <input type="checkbox"/>	251 <input type="checkbox"/>

C-2

C-3

**Section B - Vehicle Description - Continued**

4. Indicate the body type that most closely resembles this vehicle during the sample period. If the power unit is a truck-tractor indicate the body type of the trailer(s) attached.

Mark (X) only one box in each column.

	Sample day	Part 12 months
<b>A. PLATFORM TYPES</b> , includes flatbeds, stakes, and flatbeds with added devices, and low boys (goosenecks)	252 <input type="checkbox"/>	254 <input type="checkbox"/>
<b>B. PICKUP</b>	255 <input type="checkbox"/>	267 <input type="checkbox"/>
<b>C. PANEL OR COMPACT VAN</b>	258 <input type="checkbox"/>	260 <input type="checkbox"/>
<b>D. MINI-VAN, UTILITY, STATION WAGON</b> (Bronco, Blazer, Jeep, etc.)	261 <input type="checkbox"/>	263 <input type="checkbox"/>
<b>E. VAN TYPES</b> , includes enclosed vans, open top vans, drop frame vans, refrigerated, nonrefrigerated, and multistop and high cubes	254 <input type="checkbox"/>	268 <input type="checkbox"/>
<b>F. SPECIALIZED USE TRUCKS</b>		
1. Automobile or boat transport	267 <input type="checkbox"/>	268 <input type="checkbox"/>
2. Beverage truck	270 <input type="checkbox"/>	272 <input type="checkbox"/>
3. Removable dry container on trailer chassis	273 <input type="checkbox"/>	275 <input type="checkbox"/>
4. Removable liquid container on trailer chassis	276 <input type="checkbox"/>	278 <input type="checkbox"/>
5. Other cargo container chassis	278 <input type="checkbox"/>	281 <input type="checkbox"/>
6. Concrete mixer	282 <input type="checkbox"/>	284 <input type="checkbox"/>
7. Dump truck	285 <input type="checkbox"/>	287 <input type="checkbox"/>
8. Grain bodies (including hoppers, grain boxes)	288 <input type="checkbox"/>	290 <input type="checkbox"/>
9. Garbage truck	291 <input type="checkbox"/>	293 <input type="checkbox"/>
10. Livestock truck, including livestock drop frame	294 <input type="checkbox"/>	296 <input type="checkbox"/>
11. Pole, logging, or pipe truck	297 <input type="checkbox"/>	299 <input type="checkbox"/>
12. Tank truck for dry bulk	300 <input type="checkbox"/>	302 <input type="checkbox"/>
13. Tank truck for liquids or gases (nonhazardous materials)	303 <input type="checkbox"/>	305 <input type="checkbox"/>
14. Tank truck for liquids or gases (hazardous materials) - indicate type (from placard on tank)	308 <input type="checkbox"/>	308 <input type="checkbox"/>
a. MC-307	309 <input type="checkbox"/>	311 <input type="checkbox"/>
b. MC-331	312 <input type="checkbox"/>	314 <input type="checkbox"/>
c. MC-312	315 <input type="checkbox"/>	317 <input type="checkbox"/>
d. MC-337	318 <input type="checkbox"/>	320 <input type="checkbox"/>
e. MC-306	321 <input type="checkbox"/>	323 <input type="checkbox"/>
15. Utility truck	324 <input type="checkbox"/>	328 <input type="checkbox"/>
<b>Note</b> - If none of the above descriptions match the body type of this vehicle or the trailer usually attached to it, mark the "Other" box and describe the vehicle.		
<b>G. Other</b> - Specify in the column	327 <input type="checkbox"/>	329 <input type="checkbox"/>

**Section C - Vehicle Use**

The following questions relate to the vehicle's use DURING THE SAMPLE DAY. If the vehicle did not operate on the sample day, use the substitute day. If the vehicle did not operate on either day given, call (301) 763-1744 collect.

1. Enter date used (Enter figures only)	1401 _____ / _____ / _____ Month Day Year	
2. What was the odometer reading of the vehicle at 12:01 a.m. on the sample day?	402 _____ Miles (Estimates are acceptable)	
3a. How many miles did the vehicle travel during the sample day?	403 _____ Miles (Estimates are acceptable)	
b. What percent of those miles were on the INTERSTATE HIGHWAY SYSTEM?	404 _____ %	
c. What percent of those miles were on roads which had four or more lanes but were NOT on the INTERSTATE HIGHWAY SYSTEM?	405 _____ %	
d. What percent of those miles were off-road (little travel on public roads)?	406 _____ %	
4a. How much fuel was used during the sample day?	407 _____ U.S. gallons (Estimates are acceptable)	
b. How much was paid in highway tolls during the sample day?	408 _____	
5a. What was the size of the vehicle -	As it left the starting place on the sample day?	During the sample day when vehicle was at its maximum weight?
	(1)	(2)
Length (ft.) (Front bumper to end of last trailer)	409 _____ ft.	410 _____ ft.
Height (ft.)	411 _____ ft.	412 _____ ft.
Tare weight (empty)	413 _____ lbs.	414 _____ lbs.
Loaded vehicle weight (weight of truck and cargo)	415 _____ lbs.	416 _____ lbs.
Percent of payload space utilized	417 _____ %	418 _____ %
b. How would you best describe the vehicle's loads during the sample day? (If the vehicle was empty the entire day, mark the box that typically applies)	419 1 <input type="checkbox"/> Single shipments (Truck-load) 2 <input type="checkbox"/> Several shipments in a truck or trailer(s) (Less-than-truck-load), including shipments consolidated by others	
6. Was the vehicle used to haul hazardous materials in quantities large enough to require a special placard due to the Code of Federal Regulations, title 49, Transportation, during the sample day?	420 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	
7a. How many employees, including owner/operators, were on board the vehicle as it left the starting place on the sample day?	421 _____ Employees on board	
b. How many of these employees drove the vehicle sometime during the sample day?	422 _____ Employees who drove	
8. Mark all boxes that include the hours during which you operated the vehicle during the sample day.	423	
	01 <input type="checkbox"/> 12:01 a.m. - 4:00 a.m. 06 <input type="checkbox"/> 10:01 a.m. - 4:00 p.m. 02 <input type="checkbox"/> 4:01 a.m. - 8:00 a.m. 05 <input type="checkbox"/> 4:01 p.m. - 8:00 p.m. 03 <input type="checkbox"/> 8:01 a.m. - 8:00 a.m. 07 <input type="checkbox"/> 8:01 p.m. - 8:00 p.m. 04 <input type="checkbox"/> 8:01 a.m. - 10:00 a.m. 08 <input type="checkbox"/> 8:01 p.m. - 12:00 a.m.	



**ADDITIONAL SAMPLE DAY STOPS**

ADDITIONAL SAMPLE DAY STOPS				Type of place code Enter the type of place code from p. 8 (b)	Will this provision stop?	What was the purpose of the stop? Mark (X) all that apply	From the reference list of commodities, on page 6 enter the code and weight for the items picked up and/or delivered at each stop (if any). (File instructions above)					
(a)				(b)	(c)	(d)	Items delivered (e)			Items picked up (f)		
Step	Date	Time of arrival	Departure time				Commodity code	Hazmat code	Weight (lbs.)	Commodity code	Hazmat code	Weight (lbs.)
Step 1		a.m. p.m.	a.m. p.m.			<input type="checkbox"/> Return to base <input type="checkbox"/> Pick up items <input type="checkbox"/> Pick up trailer						
	City	County	State			<input type="checkbox"/> Delivery <input type="checkbox"/> Drop off trailer <input type="checkbox"/> Other - Specify						
	Loaded vehicle wt. at departure		No. of trailers attached									
Step 2		a.m. p.m.	a.m. p.m.			<input type="checkbox"/> Return to base <input type="checkbox"/> Pick up items <input type="checkbox"/> Pick up trailer						
	City	County	State			<input type="checkbox"/> Delivery <input type="checkbox"/> Drop off trailer <input type="checkbox"/> Other - Specify						
	Loaded vehicle wt. at departure		No. of trailers attached									
Step 3		a.m. p.m.	a.m. p.m.			<input type="checkbox"/> Return to base <input type="checkbox"/> Pick up items <input type="checkbox"/> Pick up trailer						
	City	County	State			<input type="checkbox"/> Delivery <input type="checkbox"/> Drop off trailer <input type="checkbox"/> Other - Specify						
	Loaded vehicle wt. at departure		No. of trailers attached									
Step 4		a.m. p.m.	a.m. p.m.			<input type="checkbox"/> Return to base <input type="checkbox"/> Pick up items <input type="checkbox"/> Pick up trailer						
	City	County	State			<input type="checkbox"/> Delivery <input type="checkbox"/> Drop off trailer <input type="checkbox"/> Other - Specify						
	Loaded vehicle wt. at departure		No. of trailers attached									
Step 10		a.m. p.m.	a.m. p.m.			<input type="checkbox"/> Return to base <input type="checkbox"/> Pick up items <input type="checkbox"/> Pick up trailer						
	City	County	State			<input type="checkbox"/> Delivery <input type="checkbox"/> Drop off trailer <input type="checkbox"/> Other - Specify						
	Loaded vehicle wt. at departure		No. of trailers attached									
Step 11		a.m. p.m.	a.m. p.m.			<input type="checkbox"/> Return to base <input type="checkbox"/> Pick up items <input type="checkbox"/> Pick up trailer						
	City	County	State			<input type="checkbox"/> Delivery <input type="checkbox"/> Drop off trailer <input type="checkbox"/> Other - Specify						
	Loaded vehicle wt. at departure		No. of trailers attached									

**ADDITIONAL SAMPLE DAY STOPS**

ADDITIONAL SAMPLE DAY STOPS				Type of place code Enter the type of place code from p. 8 (b)	Will this provision stop?	What was the purpose of the stop? Mark (X) all that apply	From the reference list of commodities, on page 6 enter the code and weight for the items picked up and/or delivered at each stop (if any). (File instructions above)					
(a)				(b)	(c)	(d)	Items delivered (e)			Items picked up (f)		
Step	Date	Time of arrival	Departure time				Commodity code	Hazmat code	Weight (lbs.)	Commodity code	Hazmat code	Weight (lbs.)
Step 12		a.m. p.m.	a.m. p.m.			<input type="checkbox"/> Return to base <input type="checkbox"/> Pick up items <input type="checkbox"/> Pick up trailer						
	City	County	State			<input type="checkbox"/> Delivery <input type="checkbox"/> Drop off trailer <input type="checkbox"/> Other - Specify						
	Loaded vehicle wt. at departure		No. of trailers attached									
Step 13		a.m. p.m.	a.m. p.m.			<input type="checkbox"/> Return to base <input type="checkbox"/> Pick up items <input type="checkbox"/> Pick up trailer						
	City	County	State			<input type="checkbox"/> Delivery <input type="checkbox"/> Drop off trailer <input type="checkbox"/> Other - Specify						
	Loaded vehicle wt. at departure		No. of trailers attached									
Step 14		a.m. p.m.	a.m. p.m.			<input type="checkbox"/> Return to base <input type="checkbox"/> Pick up items <input type="checkbox"/> Pick up trailer						
	City	County	State			<input type="checkbox"/> Delivery <input type="checkbox"/> Drop off trailer <input type="checkbox"/> Other - Specify						
	Loaded vehicle wt. at departure		No. of trailers attached									
Step 15		a.m. p.m.	a.m. p.m.			<input type="checkbox"/> Return to base <input type="checkbox"/> Pick up items <input type="checkbox"/> Pick up trailer						
	City	County	State			<input type="checkbox"/> Delivery <input type="checkbox"/> Drop off trailer <input type="checkbox"/> Other - Specify						
	Loaded vehicle wt. at departure		No. of trailers attached									
Step 16		a.m. p.m.	a.m. p.m.			<input type="checkbox"/> Return to base <input type="checkbox"/> Pick up items <input type="checkbox"/> Pick up trailer						
	City	County	State			<input type="checkbox"/> Delivery <input type="checkbox"/> Drop off trailer <input type="checkbox"/> Other - Specify						
	Loaded vehicle wt. at departure		No. of trailers attached									
Step 17		a.m. p.m.	a.m. p.m.			<input type="checkbox"/> Return to base <input type="checkbox"/> Pick up items <input type="checkbox"/> Pick up trailer						
	City	County	State			<input type="checkbox"/> Delivery <input type="checkbox"/> Drop off trailer <input type="checkbox"/> Other - Specify						
	Loaded vehicle wt. at departure		No. of trailers attached									



**INTERNAL DISTRIBUTION**

- |                   |                                |
|-------------------|--------------------------------|
| 1. M. S. Bronzini | 7. ORNL Patent Office          |
| 2. S. C. Davis    | 8-9. Central Research Library  |
| 3. D. L. Greene   | 10. Document Reference Section |
| 4. P. S. Hu       | 11-12. Laboratory Records      |
| 5. M. A. Kuliasha | 13. Laboratory Records - RC    |
| 6. T. Wright      |                                |

**EXTERNAL DISTRIBUTION**

14. D. R. Bohi, Director, Energy and Natural Resources Division, Resources for the Future, 1616 P Street, N.W., Washington, DC 20036
15. T. E. Drabek, Professor, Department of Sociology, University of Denver, Denver, Colorado 80208-0209.
16. C. D. MacCracken, President, Calmac Manufacturing Corporation, 101 West Sheffield Avenue, P.O. Box 710, Englewood, New Jersey 07631
17. J. B. Shrago, Director, Office of Technology Transfer, 405 Kirkland Hall, Vanderbilt University, Nashville, Tennessee 37240
18. G. F. Sowers, Senior Vice President, Law Companies Group, Inc., 114 Townpark Drive, Suite 250, Kennesaw, Georgia 30144-5599
19. C. M. Walton, Paul D. and Betty Robertson Meek Centennial Professor and Chairman, Department of Civil Engineering, College of Engineering, The University of Texas at Austin, Cockrell Hall, Suite 4.2, Austin, Texas 78712
- 20-27. Center for Transportation Analysis, Energy Division, 5500A, MS-6366, Room A217
- 28-29. OSTI, U.S. Department of Energy, P.O. Box 62, Oak Ridge, TN 37831
30. Office of Assistant Manager of Energy Research and Development, DOE/ORO, P.O. Box 2001, Oak Ridge, TN 37831-8600

