TECHNICAL DOCUMENTATION[1]
for the
1990 NATIONWIDE TRUCK ACTIVITY AND COMMODITY SURVEY PUBLIC USE FILE

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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 design of the NTACS are described in this document.

Background

Informed public decisionmaking requires an understanding of the relationships among transportation activity, passenger flows, commodity movements, logistical requirements of economic activities, international trade, safety, and the condition of the Nation's transportation system to:

- identify characteristics of current and anticipated transportation system use that affect interstate commerce, international trade, and the cost of personal and business logistics;

- assess the effects of proposed Federal legislation and Federal and State regulations on the Nation's transportation system;

- evaluate the cost effectiveness of alternative levels of investment in existing transportation infrastructure and new transportation technologies;

- determine whether user charges are adequate and equitable;

- analyze and oversee operating restrictions on transportation services (such as truck size and weight limits) that affect interstate commerce, international trade, and safety; and

- make federal programs responsive to national goals beyond mobility and safety, such as economic development, environmental protection, social justice, and defense.

The requisite understanding can no longer be based solely on past experience since transportation services are responding in unprecedented and often unpredictable ways to deregulation, new transportation technologies, the growth of international trade, structural changes in the economy, and other factors. Data are needed to identify emerging and desired relationships among patterns of transportation system use, the availability and quality of transportation facilities and services, demographic conditions, the economy, and the environment, especially since these relationships are central to the themes of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA).

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The U.S. Department of Transportation (DOT) has turned to surveys based on motor vehicles as a major source of data to meet many of these critical information needs. Vehicle-based surveys provide a keystone for the DOT's understanding because motor vehicles carry the largest and least-known portion of passenger trips and freight shipments, and because highways provide local access to harbors, railroad yards, pipeline terminals, airports, and other facilities for intermodal transportation. Vehicle registration files provide a sampling frame that is generally not limited by the economic activity of establishments or the household status of individuals.

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 minivans. 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.

Once the NTACS was designed and questionnaires were in the field, the DOT turned to the transportation experts at Oak Ridge National Laboratory (ORNL) to supplement the data collection expertise of the Census Bureau. ORNL used its experience with analysis and model development for DOT, the Department of Defense, and the Department of Energy-as

well as with production of the annual *Transportation Energy Data Book*-to create and disseminate data products from the NTACS. ORNL is producing a series of reports based on analyses of the NTACS and related data in addition to the NTACS Public Use File.

ORNL developed the NTACS Public Use File by creating linkages among data items for case of use, by conducting consistency checks and minor data edits, and by identifying data items of tolerable quality for inclusion. ORNL adjusted expansion factors for nonresponse, and certain items were imputed for item nonresponse. Selected data items for sample day one were also annualized.

The NTACS was one of the most ambitious efforts undertaken by anyone to measure trucking activity, and tackled measurement problems with little previous experience for guidance. The questionnaire became quite large to accommodate the diversity of trucking operations that would be encountered and to provide insights on a broad range of issues of keen interest to both government and industry.

Plans are moving forward to conduct a second survey as a follow-on to the Census Bureau's 1992 TIUS. Because the Census Bureau and the DOT are implementing the 1993 Commodity Flow Survey, the commodity component will not be required for the upcoming 1994 survey. The second survey will be known as the Nationwide Truck Activity Survey (NTAS) and focus on collecting sample day truck activity. In the spirit of continual improvement, DOT, the Census Bureau, and ORNL will make use of lessons learned from the 1990 NTACS to conduct a more efficient and effective NTAS resulting in higher quality data. As a part of the learning process, data user comments are a key to understanding the problems that must be overcome and the improvements that should be made. User comments are welcomed and should be directed to ORNL's Center for Transportation Analysis using the form at the end of this document.

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│                          IMPORTANT                                 │
│                                                                    │
│  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.                                                       │
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1990 NTACS Universe Description:

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). The sample is a stratified probability sample of 44,002 trucks. It is important to note that the NTACS universe does not include trucks in the United States during the NTACS period which are three years old and younger. The data were collected over a one year span, referred to as the NTACS period, starting approximately October 29, 1989, and ending approximately October 27, 1990. Because the NTACS period covers most of 1990, we refer to this data collection effort as the "1990 NTACS."

Estimated 1990 NTACS Universe Size:

43,375,733 trucks (See Table G of Appendix A.)

1990 NTACS Sample Size:

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

Estimated 1990 NTACS Sample Respondents Reporting Annual and General Data:

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

Estimated 1990 NTACS Sample Respondents Reporting Sample Day One Data:

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

Subject Matter Description:

This national public use file contains individual responses of trucks and nonresponse records from the 1990 NTACS and matching records from the Census Bureau's 1987 TIUS. The TIUS data content provides actual and recorded responses for the physical and operational characteristics of trucks, truck activity, and unaggregated levels of truck use, while the NTACS provides detailed information on the characteristics and activity patterns of trucks collecting trip-specific information for specific sample days from commodity and non-commodity-carrying trucks. The NTACS physical and operational characteristics collected include vehicle ownership, operating status and disposition, total miles and places of operation, sources of fuel, vehicle type, body type, and trailer axle configuration. Sample day information includes mileage, fuel consumption, tolls paid, vehicle dimensions, and hours of operation. Trip-specific information includes departure times; destinations; types of stops; departure, pickup and delivery weights; and types of products picked up and delivered.

Geographic Coverage:

The state in which the truck is registered and state(s) in which the truck operated have been converted to a Census Geographic Division.

Technical Description:

The 1990 NTACS Public Use File contains partial information on 22,044 trucks. Not all trucks have the same quantity of data due to NTACS unit and item nonresponse. The data for a single truck are distributed among three data subfiles as follows:

Subfile 1.   Imputed General and Annual Truck Data Items Collected by NTACS for 22,044 trucks.

Subfile 2.   Imputed Sample Day One Truck Data Collected by NTACS for 9,794 trucks.

Subfile 3.   1987 TIUS Truck Data for 22,044 trucks. (There are no TIUS data for 213 of these trucks.)

Each of the 22,044 trucks has a unique identification number (TRUKID) which serves to link the data for a single truck among the three subfiles.

Tape:

The data are contained on a 6250 BPI standard label tape in EBCDIC format.

Tape Name: *NTACSP*

Subfile Names:
1.   *NTACSP.FILE1.DATA*
2.   *NTACSP.FILE2.DATA*
3.   *NTACSP.FILE3.DATA*

Questions:

Please direct all questions concerning the 1990 NTACS Public Use File to:

Acknowledgments:

SECTION 1

THE 1990 NTACS PUBLIC USE FILE DATA DICTIONARY

I. Introduction

Each NTACS sample truck has a record which has been partitioned among a maximum of three subfiles (subrecords):

> **Subfile 1**   Imputed General and Annual Truck Data Collected by NTACS and RI Codes

> **Subfile 2**   Imputed Sample Day 1 Truck Data Collected by NTACS and RI Codes

> **Subfile 3**   1987 TIUS Truck Data and RI Codes

What follows for each file is a listing of the data items, a definition for each data item, and the RI code for each data item.

For each data item, its RI Code (Response and Imputation Codes) indicates whether the information shown is reported, corrected, edited, or imputed either by an analyst or by computer-driven edit and correction. The following values for response and imputation codes are possible and represent actions taken by the U. S. Bureau of the Census (Codes: A, C, D, I, P, U) or Oak Ridge National Laboratory (Code: O).

> "A"   DATA ITEM CORRECTED OR BLANKED BY AN ANALYST
> "C"   COMPUTER GENERATED DURING EDIT OR ANALYSIS
> "D"   DATA ITEMS DELETED BY ANALYST
> "I"   COMPUTER EDIT IMPUTATION OR SPECIAL "HSPWR"/"CID" IMPUTATION
> "O"   IMPUTED BY Oak Ridge National Laboratory
> "P"   POLK CONTROL FILE CORRECTION
> "U"   UNREASONABLE REPORTED "HSPWR"/"CID"

A blank in the RI Code fields indicates that the data item remains unchanged from the original reported data. If all trucks had no changes for a single data item, then there is no RI Code for that data item. THE SIZE OF EACH RI CODE FIELD IS 1 DIGIT.

First the variable TRUKID, which is the truck identifier, is defined.

TRUKID = _____ _____ _____ _____ _____ _____ _____

↑   ↑   ↑

DIV   HAUL   SAMTYP   The number of the sample truck in the given NTACS stratum.

where DIV is the Census Geographic Division Based on State of Registration as known from the Census Bureau's 1987 TIUS (see Appendix G).

DIV =
1 (ME, VT, RI, NH, MA, CT)
2 (NY, NJ, PA)
3 (OH, IN, IL, MI, WI)
4 (MN, IA, MO, ND, SD, NE, KS)
5 (DE, MD, DC, VA, WV, NC, SC, GA, FL)
6 (KY, TN, AL, MS)
7 (AR, LA, OK, TX)
8 (MT, ID, WY, CO, NM, AZ, UT, NV)
9 (WA, OR, CA, AK, HI)

HAUL is the code used to distinguish between idle, commodity-carrying, and non-commodity-carrying trucks as identified in the 1987 TIUS. For commodity-carrying trucks, it will also identify length of HAUL (short or long); for non-commodity-carrying trucks, it will indicate either personal transportation or business use.

HAUL =
1 Short haul, commodity-carrying
2 Long haul, commodity-carrying
3 Non-commodity-carrying, operated for business use
4 Non-commodity-carrying, operated for personal transportation
5 Truck was idle, wrecked or otherwise not in use, for more than 90 days during 1987

and SAMTYP is the code corresponding to the 1987 TIUS sample strata.

SAMTYP =
1 Pickup trucks
2 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

For example, there are $n_{432} = 80$ NTACS sample trucks in DIV = 4, HAUL = 3, and SAMTYP = 2, and the TRUKIDs for the 80 sample trucks would be

4320001
4320002
4320003
.
.
.
4320080

2

<u>Note</u>: Every NTACS sample truck has a TRUKID.

Next is a general comment on "DATE" variables. All "DATE" variables in the data base have been recorded to a three - or five - digit code with the formats:

MDD   or   MDDYY

Month Day   Month Day Year

The "Month" has been recorded to the following value definitions:

> 1 ... January, February, or March
> 2 ... April, May, or June
> 3 ... July, August, or September
> 4 ... October, November, or December

The "Day" has been recoded to the following value definitions:

> 01 ... Sunday
> 02 ... Monday
> 03 ... Tuesday
> 04 ... Wednesday
> 05 ... Thursday
> 06 ... Friday
> 07 ... Saturday

The "Year" remains as two-digits.

For example, if a respondent reported the date "June 14, 1990", the recorded date would be "205" or "20590", because June is in the second calendar quarter and the 14th falls on a Thursday.

Table 1 gives an overview of the names of all of the data items for each NTACS sample truck and how they are distributed among the three data subfiles.

TABLE 1. Overview of Data Items in Each Subfile for Each NTACS Sample Truck

1990 NTACS General/Annual Subfile 1			
Data Item		Short Description	RI Code for Data Item
1.	TRUKID	TRUCK IDENTIFIER	•
2.	XPFAN	ANNUAL EXPANSION FACTOR (Subfiles 1 & 3)	•
3.	MDLYR	MODEL YEAR	•
4.	POSSE	POSSESSION	17. RI_POSSE
5.	CUROP	CURRENTLY OPERATE	18. RI_CUROP
6.	WKSOP	WEEKS OPERATED	19. RI_WKSOP
7.	RANMI	REPORTED ANNUAL MILES	20. RI_RANMI
8.	OPSTA	NUMBER OF STATES OPERATED IN	21. RI_OPSTA
9.	OPCAN	OPERATED IN CANADA	22. RI_OPCAN
10.	OPMEX	OPERATED IN MEXICO	23. RI_OPMEX
11.	FUELD	FUEL FROM PRIVATE FUEL DUMP	24. RI_FUELD
12.	GASTA	FUEL FROM GAS STATION	25. RI_GASTA
13.	MUSEA	MAJOR ANNUAL USE	26. RI_MUSEA
14.	VEHDA	MOST FREQUENT ANNUAL DESCRIPTION	27. RI_VEHDA
15.	TKCFG	TRUCK CONFIGURATION	28. RI_TKCFG
16.	BDTYA	MOST FREQUENT BODY TYPE	29. RI_BDTYA

• Means no corresponding RI codes.   4

Table 1 (Continued)

1990 NTACS Sample Day One Subfile 2		
Data Item	Short Description	RI Code for Data Item
1. TRUKID	TRUCK IDENTIFIER	•
2. XPFD1	SAMPLE DAY ONE EXPANSION FACTOR (Subfile 2)	•
3. SAMD1	SAMPLE DAY ONE	39. RI_SAMD1
4. NSPD1	NUMBER OF PICKUP OR DELIVERY STOPS	40. RI_NSPD1
5. D1WK1	OPERATE ON SUNDAY	41. RI_D1WK1
6. D2WK1	OPERATE ON MONDAY	42. RI_D2WK1
7. D3WK1	OPERATE ON TUESDAY	43. RI_D3WK1
8. D4WK1	OPERATE ON WEDNESDAY	44. RI_D4WK1
9. D5WK1	OPERATE ON THURSDAY	45. RI_D5WK1
10. D6WK1	OPERATE ON FRIDAY	46. RI_D6WK1
11. D7WK1	OPERATE ON SATURDAY	47. RI_D7WK1
12. MUSE1	MAJOR SAMPLE DAY ONE USE	48. RI_MUSE1
13. VEHD1	MOST FREQUENT SAMPLE DAY ONE DESCRIPTION	49. RI_VEHD1
14. BDTY1	MOST FREQUENT SAMPLE DAY ONE BODY TYPE	50. RI_BDTY1
15. OMIL1	SAMPLE DAY ONE ODOMETER MILEAGE	51. RI_OMIL1
16. AOMIL	ANNUALIZED ODOMETER MILEAGE	52. RI_AOMIL
17. RMIL1	SAMPLE DAY ONE REPORTED MILEAGE	53. RI_RMIL1
18. ARMIL	ANNUALIZED REPORTED MILEAGE	54. RI_ARMIL
19. PINT1	PERCENT INTERSTATE SAMPLE DAY ONE	55. RI_PINT1
20. P4LN1	PERCENT 4 OR MORE LANES SAMPLE DAY ONE	56. RI_P4LN1
21. POFF1	PERCENT OFF ROAD SAMPLE DAY ONE	57. RI_POFF1
22. FUEL1	SAMPLE DAY ONE FUEL	58. RI_FUEL1
23. TOLL1	SAMPLE DAY ONE TOLLS	59. RI_TOLL1
24. MXLN1	MAXIMUM LENGTH SAMPLE DAY ONE	60. RI_MXLN1
25. MXHT1	MAXIMUM HEIGHT SAMPLE DAY ONE	61. RI_MXHT1
26. MEWT1	MAXIMUM EMPTY WEIGHT SAMPLE DAY ONE	62. RI_MEWT1
27. MXLD1	MAXIMUM LOADED WEIGHT SAMPLE DAY ONE	63. RI_MXLD1
28. MXPL1	MAXIMUM UTILIZED PAYLOAD SPACE SAMPLE DAY ONE	64. RI_MXPL1
29. HAZM1	CARRIED HAZARDOUS MATERIALS ON SAMPLE DAY ONE	65. RI_HAZM1
30. HRS11	OPERATED 12:01 A.M.-4:00 A.M. SAMPLE DAY ONE	66. RI_HRS11
31. HRS21	OPERATED 4:01 A.M.-6:00 A.M. SAMPLE DAY ONE	67. RI_HRS21
32. HRS31	OPERATED 6:01 A.M.-8:00 A.M. SAMPLE DAY ONE	68. RI_HRS31
33. HRS41	OPERATED 8:01 A.M.-10:00 A.M. SAMPLE DAY ONE	69. RI_HRS41
34. HRS51	OPERATED 10:01 A.M.-4:00 P.M. SAMPLE DAY ONE	70. RI_HRS51
35. HRS61	OPERATED 4:01 P.M.-6:00 P.M. SAMPLE DAY ONE	71. RI_HRS61
36. HRS71	OPERATED 6:01 P.M.-8:00 P.M. SAMPLE DAY ONE	72. RI_HRS71
37. HRS81	OPERATED 8:01 P.M.-12:00 MIDNIGHT SAMPLE DAY ONE	73. RI_HRS81
38. COMD1	COMMODITY CARRIED WITH GREATEST TON MILES ON SAMPLE DAY ONE	74. RI_COMD1

Table 1 (Continued)

	1987 TIUS Subfile 3		
Data Item	Short Description		RI Code for Data Item
1. TRUKID	TRUCK IDENTIFIER		•
2. STOWN	POSSESSION	124.	RI_STOWN
3. HWRID	HOW DISPOSED	125.	RI_HWRID
4. DISPZ	WHEN DISPOSED	126.	RI_DISPZ
5. VEHTP	VEHICLE TYPE	127.	RI_VEHTYP
6. BODTP	BODY TYPE	128.	RI_BODTP
7. OPCLS	OPERATION CLASSIFICATION	129.	RI_OPCLS
8. MJUSE	MAJOR USE	130.	RI_MJUSE
9. POFFR	PERCENT MILEAGE OFF ROAD	131.	RI_POFFR
10. PLOCL	PERCENT MILEAGE LESS THAN 50 MILES RADIUS	132.	RI_PLOCL
11. PSHRT	PERCENT MILEAGE 50-200 MILES RADIUS	133.	RI_PSHRT
12. PLONG	PERCENT MILEAGE BEYOND 200 MILES RADIUS	134.	RI_PLONG
13. PNOLD	PERCENT MILEAGE NO LOAD	135.	RI_PNOLD
14. PRPRO	PRINCIPAL PRODUCT CARRIED		•
15. ACQYR	ACQUISITION YEAR	136.	RI_ACQYR
16. OBTAN	HOW OBTAINED	137.	RI_OBTAN
17. HWLEA	HOW LEASED	138.	RI_HWLEA
18. HWLNG	HOW LONG LEASED	139.	RI_HWLNG
19. OWNLS	OWNER OR LEASSEE	140.	RI_OWNLS
20. AXLRE	REPRESENTATION OF NUMBER OF AXLES		•
21. LAXTL	LIFTABLE AXLES		•
22. PCNTR	PERCENT MILEAGE HAULING CONTAINERS		•
23. PPIGY	PERCENT MILEAGE HAULING PIGGYBACK TRAILERS		•
24. NAXLS	NUMBER OF AXLES		•
25. LFTAX	NUMBER OF LIFTABLE AXLES		•
26. DRAXS	NUMBER OF DRIVING AXLES		•
27. CABTP	CAB TYPE		•
28. LNGTH	LENGTH	141.	RI_LNGTH
29. WTHTL	TRAILER WIDTH		•
30. EMPWT	EMPTY WEIGHT	142.	RI_EMPWT
31. AVGWT	AVERAGE WEIGHT	143.	RI_AVGWT
32. MAXWT	MAXIMUM GROSS WEIGHT	144.	RI_MAXWT
33. PCRSZ	PERCENT MILEAGE CARRYING MAXIMUM PAYLOAD SIZE		•
34. PCRWT	PERCENT MILEAGE CARRYING MAXIMUM PAYLOAD WEIGHT		•
35. TLATT	ATTACHED TRAILER		•
36. PTPUL	PERCENT OF MILEAGE PULLING TRAILER		•
37. AXON	NUMBER OF TRAILER AXLES		•
38. LODWT	TRAILER LOADED WEIGHT		•
39. ANMIL	ANNUAL MILES	145.	RI_ANMIL
40. LTMIL	LIFETIME MILES	146.	RI_LTMIL
41. MPG	MILES-PER-GALLON	147.	RI_MPG
42. BASTA	CURRENT HOME BASE STATE	148.	RI_BASTA

* Means no corresponding RI codes.

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Table 1 (Continued)

Data Item		Short Description	RI Code for Data Item	
43.	POBST	PERCENT MILEAGE OUTSIDE HOME BASE STATE	149.	RI_POBST
44.	HSPWR	HORSEPOWER RATING	150.	RI_HSPWR
45.	CID	ENGINE SIZE	151.	RI_CID
46.	ENGTP	FUEL TYPE	152.	RI_ENGTP
47.	BRAKE	BRAKE TYPE		*
48.	AEROD	AERODYNAMIC FEATURES		*
49.	AXLRA	AXLE OR DRIVE RATIO		*
50.	ECENG	FUEL ECONOMY ENGINE		*
51.	REFLT	REFLECTIVE MATERIALS		*
52.	RADIL	RADIAL TIRES		*
53.	GOVNR	ROAD SPEED GOVERNOR		*
54.	VRFAN	VARIABLE FAN DRIVES		*
55.	OTFUL	OTHER FUEL CONSERVATION FEATURES		*
56.	PWSTR	POWER STEERING		*
57.	AIRCN	AIR CONDITIONING		*
58.	ENGRT	ENGINE RETARDER		*
59.	EVMS	ELECTRONIC VEHICLE MANAGEMENT SYSTEM		*
60.	EVIS	ELECTRONIC VEHICLE IDENTIFICATION DEVICE		*
61.	RECDR	TRIP RECORDERS		*
62.	NAVSY	NAVIGATIONAL SYSTEMS		*
63.	FRNWH	FRONT-WHEEL DRIVE		*
64.	GMSEL	GENERAL MAINTENANCE BY SELF		*
65.	GMCOM	GENERAL MAINTENANCE BY COMPANY		*
66.	GMDEL	GENERAL MAINTENANCE BY DEALER		*
67.	GMLES	GENERAL MAINTENANCE BY LEASING COMPANY		*
68.	GMGAR	GENERAL MAINTENANCE BY GARAGE		*
69.	GMDIS	GENERAL MAINTENANCE BY COMPONENT DISTRIBUTORSHIP		*
70.	GMNON	GENERAL MAINTENANCE BY NO ONE		*
71.	GMOTH	GENERAL MAINTENANCE BY OTHER		*
72.	OVSEL	OVERHAULS BY SELF		*
73.	OVCOM	OVERHAULS BY COMPANY		*
74.	OVDEL	OVERHAULS BY DEALER		*
75.	OVLES	OVERHAULS BY LEASING COMPANY		*
76.	OVGAR	OVERHAULS BY GARAGE		*
77.	OVDIS	OVERHAULS BY COMPONENT DISTRIBUTORSHIP		*
78.	OVNON	OVERHAULS BY NO ONE		*
79.	OVOTH	OVERHAULS BY OTHER		*
80.	PBUS	PERCENT BUSINESS USE		*
81.	PPTRA	PERCENT PERSONAL USE		*
82.	FORHR	PERCENT FOR-HIRE USE		*
83.	PMCAR	PERCENT MILEAGE AS MOTOR CARRIER	153.	RI_PMCAR
84.	PINDP	PERCENT MILEAGE BY INDEPENDENT OWNER/OPERATOR	154.	RI_PINDP
85.	PLESE	PERCENT MILEAGE BY OWNER/OPERATOR LEASED TO A COMPANY	155.	RI_PLESE

1987 TIUS
Subfile 3

* Means no corresponding RI codes.

Table 1 (Continued)

		1987 TIUS Subfile 3		
Data Item		Short Description	RI Code for Data Item	
86.	PINTE	PERCENT MILEAGE INTERSTATE	156.	RI_PINTE
87.	PINTR	PERCENT MILEAGE INTRASTATE	157.	RI_PINTR
88.	PLOCJ	PERCENT MILEAGE LOCAL	158.	RI_PLOCJ
89.	PCNTR	PERCENT MILEAGE CONTRACT CARRIER	159.	RI_PCNTR
90.	PCOMN	PERCENT MILEAGE COMMON CARRIER	160.	RI_PCOMN
91.	PEXEM	PERCENT MILEAGE EXEMPT CARRIER	161.	RI_PEXEM
92.	ICCRG	ICC AUTHORITY		*
93.	LVAML	PERCENT MILEAGE CARRYING LIVE ANIMALS	162.	RI_LVAML
94.	FRMPR	PERCENT MILEAGE CARRYING FRESH FARM PRODUCTS	163.	RI_FRMPR
95.	PRFOD	PERCENT MILEAGE CARRYING PROCESSED FOODS AND TOBACCO PRODUCTS	164.	RI_PRFOD
96.	MINPR	PERCENT MILEAGE CARRYING PRODUCTS - UNREFINED	165.	RI_MINPR
97.	BLDGM	PERCENT MILEAGE CARRYING BUILDING MATERIALS	166.	RI_BLDGM
98.	LOGPR	PERCENT MILEAGE CARRYING LOGS AND FOREST PRODUCTS	167.	RI_LOGPR
99.	LUMBE	PERCENT MILEAGE CARRYING LUMBER AND FABRICATED WOOD PRODUCTS	168.	RI_LUMBE
100.	PAPER	PERCENT MILEAGE CARRYING PAPER AND PAPER PRODUCTS	169.	RI_PAPER
101.	CHEM	PERCENT MILEAGE CARRYING CHEMICALS AND/OR DRUGS	170.	RI_CHEM
102.	PETRO	PERCENT MILEAGE CARRYING PETROLEUM AND PETROLEUM PRODUCTS	171.	RI_PETRO
103.	PLAST	PERCENT MILEAGE CARRYING PLASTICS AND/OR RUBBER PRODUCTS	172.	RI_PLAST
104.	PRMTL	PERCENT MILEAGE CARRYING PRIMARY METAL PRODUCTS	173.	RI_PRMTL
105.	FBMTL	PERCENT MILEAGE CARRYING FABRICATED METAL PRODUCTS	174.	RI_FBMTL
106.	MACHN	PERCENT MILEAGE CARRYING MACHINERY	175.	RI_MACHN
107.	TEQUI	PERCENT MILEAGE CARRYING TRANSPORTATION EQUIPMENT AND PARTS	176.	RI_TEQUI
108.	FURN	PERCENT MILEAGE CARRYING FURNITURE AND/OR HARDWARE	177.	RI_FURN
109.	GLASS	PERCENT MILEAGE CARRYING GLASS PRODUCTS	178.	RI_GLASS
110.	TEXTL	PERCENT MILEAGE CARRYING TEXTILES AND APPARELS	179.	RI_TEXTL
111.	MSMFG	PERCENT MILEAGE CARRYING MISCELLANEOUS PRODUCT OF MANUFACTURING	180.	RI_MSMFG
112.	MOVNG	PERCENT MILEAGE MOVING HOUSEHOLD FURNITURE	181.	RI_MOVNG
113.	TOOLS	PERCENT MILEAGE CARRYING MISCELLANEOUS TOOLS	182.	RI_TOOLS
114.	MXCAR	PERCENT MILEAGE CARRYING MIXED CARGO	183.	RI_MXCAR
115.	REFUS	PERCENT MILEAGE CARRYING SCRAP, GARBAGE, TRASH, ETC.	184.	RI_REFUS
116.	INDWR	PERCENT MILEAGE CARRYING INDUSTRIAL WATER	185.	RI_INDWR
117.	HWAST	PERCENT MILEAGE CARRYING HAZARDOUS WASTE	186.	RI_HWAST
118.	HAZMA	HAZARDOUS MATERIALS REQUIRING SPECIAL PLACARD	187.	RI_HAZMA
119.	NFLET	NUMBER OF TRUCKS AND/OR TRAILERS OWNED AND/OR OPERATED		*
120.	TIUGW	GROSS WEIGHT CATEGORY		*
121.	VEHSZ	VEHICLE SIZE CLASS CODE		*
122.	AREAO	AREA OF OPERATION		*
123.	MSAIO	METROPOLITAN STATISTICAL AREA INDICATOR (See caution on page 56.)		*

* Means no corresponding RI codes.   8

SUBFILE 1 General and Annual Truck Data Items Collected by NTACS and RI Codes

1. TRUKID: DEFINITION GIVEN IN INTRODUCTION OF SECTION 1.

   NOTE: SIZE OF DATA FIELD IS 7 CHARACTERS. DATA FIELD BEGINS IN COLUMN 1.

2. XPFAN: EXPANSION FACTOR TO BE USED TO INFLATE NTACS MICRODATA IN SUBFILE 1 AND SUBFILE 3 TO UNIVERSE LEVELS. DEFINED AS THE TIUS EXPANSION FACTOR MULTIPLIED BY THE NTACS FRAME WEIGHT FOR EACH SAMPLE UNIT MULTIPLIED BY AN ADJUSTMENT FACTOR FOR TRUCK NONRESPONSE. FOR A GIVEN NTACS STRATUM, THE NTACS FRAME WEIGHT IS THE QUOTIENT OF ESTIMATED SIZE OF THE NTACS STRATUM BY THE NUMBER OF TRUCKS SELECTED FOR THE NTACS SAMPLE FROM THE STRATUM. THE ADJUSTMENT FACTOR FOR A GIVEN NTACS STRATUM IS THE QUOTIENT OF THE TOTAL NTACS SAMPLE SIZE FOR THAT STRATUM BY THE NUMBER OF TRUCK RESPONDENTS FOR THAT STRATUM.

   NOTE: SIZE OF DATA FIELD IS 9 CHARACTERS. THE LAST TWO PLACES ARE DECIMAL PLACES. DATA FIELD BEGINS IN COLUMN 8.

3. MDLYR: MDLYR GIVES THE MODEL YEAR RECODE OF SPECIFIC MODEL YEAR RANGES.

   MDLYR =   1. 1988, 1987
             2. 1986
             3. 1985
             4. 1984
             5. 1983
             6. 1982
             7. 1981
             8. 1980
             9. 1979
            10. 1978
            11. PRE-1978

   NOTE: SIZE OF DATA FIELD IS 2 CHARACTERS. DATA FIELD BEGINS IN COLUMN 16.

4. POSSE: IS THIS VEHICLE STILL IN YOUR POSSESSION?
   1. YES
   2. NO: SOLD IT (OR GAVE IT AWAY)
   3. NO: SCRAPPED, JUNKED, OR OTHERWISE DESTROYED
   4. NO: OTHER (INCLUDES RETURNED TO LEASING COMPANY)
   BLANK REPRESENTS UNKNOWN

   NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 18.

5. CUROP: DO YOU CURRENTLY OPERATE THIS VEHICLE?

           1. YES
           2. NO: IDLE
           3. NO: WRECKED
           4. NO: DISMANTLED
           5. NO: OTHER
      BLANK   REPRESENTS UNKNOWN

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 19.

6. WKSOP: HOW MANY WEEKS DURING THE PAST 12 MONTHS DID YOU OPERATE THIS VEHICLE?
RANGE = 00:52.

NOTE: SIZE OF DATA FIELD IS 2 CHARACTERS. DATA FIELD BEGINS IN COLUMN 20.

7. RANMI: HOW MANY MILES WAS THIS VEHICLE DRIVEN IN THE PAST 12 MONTHS (ESTIMATES ARE ACCEPTABLE)?

      1. LESS THAN 5,000
      2. 5,000 THRU 9,999
      3. 10,000 THRU 14,999
      4. 15,000 THRU 19,999
      5. 20,000 THRU 24,999
      6. 25,000 THRU 29,999
      7. 30,000 THRU 39,999
      8. 40,000 THRU 49,999
      9. 50,000 THRU 74,999
    10. 75,000 THRU 99,999
    11. 100,000 THRU 124,999
    12. 125,000 THRU 149,999
    13. 150,000 THRU 199,999
    14. 200,000 OR MORE

NOTE: SIZE OF DATA FIELD IS 2 CHARACTERS. DATA FIELD BEGINS IN COLUMN 22.

8. OPSTA: IN HOW MANY STATES DID THIS VEHICLE OPERATE DURING THE PAST 12 MONTHS?

    1. LESS THAN 3
    2. 3 - 5
    3. 6 - 9
    4. 10 - 24
    5. 25 - 40
    6. 41 OR MORE
  BLANK   REPRESENTS UNKNOWN

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 24.

9. OPCAN: DID THIS VEHICLE OPERATE IN CANADA DURING THE PAST 12 MONTHS?

    1. YES
    2. NO
  BLANK   REPRESENTS UNKNOWN

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 25.

10. OPMEX: DID THIS VEHICLE OPERATE IN MEXICO IN THE PAST 12 MONTHS?

    1. YES
    2. NO
  BLANK   REPRESENTS UNKNOWN

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 26.

11. FUELD: WHAT PERCENT OF THIS VEHICLE'S FUEL DURING THE PAST 12 MONTHS WAS OBTAINED FROM A PRIVATE FUEL DUMP?
RANGE = 000:100. BLANK REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 3 CHARACTERS. DATA FIELD BEGINS IN COLUMN 27.

12. GASTA: WHAT PERCENT OF THIS VEHICLE'S FUEL DURING THE PAST 12 MONTHS WAS OBTAINED FROM A GAS STATION (TRUCK STOP, ETC)?
RANGE = 000:100. BLANK REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 3 CHARACTERS. DATA FIELD BEGINS IN COLUMN 30.

13. MUSEA: DURING THE PAST TWELVE MONTHS, THIS TRUCK WAS MOST FREQUENTLY OPERATED AS _____. BLANK REPRESENTS UNKNOWN.

1. PERSONAL TRANSPORTATION
2. CONTRACT CARRIER
3. COMMON CARRIER
4. OTHER BUSINESS USE

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 33.

14. VEHDA: HOW WOULD YOU BEST DESCRIBE THIS VEHICLE AS IT WAS MOST FREQUENTLY OPERATED DURING THE PAST TWELVE MONTHS? BLANK REPRESENTS UNKNOWN.

1. STRAIGHT TRUCK WITH 4 TIRES WITHOUT TRAILER
2. STRAIGHT TRUCK WITH 4 TIRES PULLING TRAILER(S)
3. STRAIGHT TRUCK WITH 6 OR MORE TIRES WITHOUT TRAILER
4. STRAIGHT TRUCK WITH 6 OR MORE TIRES PULLING TRAILER(S)
5. TRUCK-TRACTOR (POWER-UNIT) PULLING TRAILER(S)
6. TRUCK-TRACTOR WITHOUT TRAILER
7. OTHER

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 34.

15. TKCFG: INDICATE THE KIND(S) OF TRAILER(S) PULLED DURING THE PAST 12 MONTHS. BLANK REPRESENTS UNKNOWN.

1. NO TRAILER(S) PULLED.
2. A UTILITY TRAILER OR OTHER TRAILER LESS THAN 20 FEET IN LENGTH, WITH ONE AXLE ON TRAILER PULLED. APPROPRIATE FOR STRAIGHT TRUCK ONLY.
3. A UTILITY TRAILER OR OTHER TRAILER LESS THAN 20 FEET IN LENGTH, WITH TWO AXLES ON TRAILER PULLED. APPROPRIATE FOR STRAIGHT TRUCK ONLY.
4. A UTILITY TRAILER OR OTHER TRAILER LESS THAN 20 FEET IN LENGTH, WITH THREE AXLES ON TRAILER PULLED. APPROPRIATE FOR STRAIGHT TRUCK ONLY.
5. A FULL TRAILER, WITH TWO AXLES ON TRAILER PULLED. APPROPRIATE FOR STRAIGHT TRUCK ONLY.
6. A FULL TRAILER, WITH THREE AXLES ON TRAILER PULLED. APPROPRIATE FOR STRAIGHT TRUCK ONLY.
7. A FULL TRAILER, WITH FOUR AXLES ON TRAILER PULLED. APPROPRIATE FOR STRAIGHT TRUCK ONLY.
8. A SEMI-TRAILER, WITH ONE AXLE ON TRAILER PULLED.
9. A SEMI-TRAILER, WITH TWO AXLES ON TRAILER PULLED.
10. A SEMI-TRAILER, WITH THREE AXLES ON TRAILER PULLED.
11. TWO TRAILERS, ONE SEMI-AND ONE FULL, WITH A TOTAL OF THREE AXLES ON TWO TRAILERS PULLED.

12. TWO TRAILERS, ONE SEMI - AND ONE FULL, WITH A TOTAL OF FOUR AXLES ON TWO TRAILERS PULLED.
13. TWO OR THREE TRAILERS, ONE SEMI - AND ONE FULL OR ONE SEMI - AND TWO FULL, WITH FIVE AXLES ON TWO OR THREE TRAILERS PULLED.
14. TWO OR THREE TRAILERS, ONE SEMI - AND ONE FULL OR ONE SEMI - AND TWO FULL, WITH SIX OR MORE AXLES ON ALL TRAILERS PULLED.
15. SOME OTHER TYPE OF TRAILER, NOT LISTED ABOVE PULLED.

NOTE: SIZE OF DATA FIELD IS 2 CHARACTERS. DATA FIELD BEGINS IN COLUMN 35.

16. BDTYA: INDICATE THE BODY TYPE THAT MOST CLOSELY RESEMBLES THE VEHICLE DURING THE PAST TWELVE MONTHS.

IF THE POWER UNIT IS A TRUCK-TRACTOR, INDICATE THE BODY TYPE OF THE TRAILER(S) ATTACHED.

1. PLATFORM TYPES - INCLUDES FLATBEDS, STAKES, FLATBEDS WITH ADDED DEVICES, AND LOW BOYS (GOOSENECKS).
2. PICKUP
3. PANEL OR COMPACT VAN
4. MINI-VAN, UTILITY, STATION WAGON (BRONCO, BLAZER, JEEP, ETC.)
5. VAN TYPES - INCLUDES ENCLOSED VANS, OPEN TOP VANS, DROP FRAME VANS, REFRIGERATED, NONREFRIGERATED, MULTISTOP, AND HIGH CUBES

SPECIALIZED USE TRUCKS

6. AUTOMOBILE OR BOAT TRANSPORT
7. BEVERAGE TRUCK
8. REMOVABLE DRY CONTAINER ON TRAILER CHASSIS
9. REMOVABLE LIQUID CONTAINER ON TRAILER CHASSIS
10. OTHER CARGO CONTAINER CHASSIS
11. CONCRETE MIXER
12. DUMP TRUCK
13. GRAIN BODIES (INCLUDING HOPPERS, GRAIN BOXES)
14. GARBAGE TRUCK
15. LIVESTOCK TRUCK, INCLUDING LIVESTOCK DROP FRAME
16. POLE, LOGGING, OR PIPE TRUCK
17. TANK TRUCK FOR DRY BULK
18. TANK TRUCK FOR LIQUIDS OR GASES (NONHAZARDOUS MATERIALS)
19. TANK TRUCK FOR LIQUIDS OR GASES (HAZARDOUS MATERIALS) - INCLUDING TYPES FROM PLACARD ON TANK (MC-307, MC-331, MC-312, MC-337, MC-306).

25. UTILITY TRUCK
26. OTHER
BLANK REPRESENTS UNKNOWN

NOTE: SIZE OF DATA FIELD IS 2 CHARACTERS.   DATA FIELD BEGINS IN
COLUMN 37.

17. RI_POSSE: DATA FIELD IN COLUMN 39.

18. RI_CUROP: DATA FIELD IN COLUMN 40.

19. RI_WKSOP: DATA FIELD IN COLUMN 41.

20. RI_RANMI: DATA FIELD IN COLUMN 42.

21. RI_OPSTA: DATA FIELD IN COLUMN 43.

22. RI_OPCAN: DATA FIELD IN COLUMN 44.

23. RI_OPMEX: DATA FIELD IN COLUMN 45.

24. RI_FUELD: DATA FIELD IN COLUMN 46.

25. RI_GASTA: DATA FIELD IN COLUMN 47.

26. RI_MUSEA: DATA FIELD IN COLUMN 48.

27. RI_VEHDA: DATA FIELD IN COLUMN 49.

28. RI_TKCFG: DATA FIELD IN COLUMN 50.

29. RI_BDTYA: DATA FIELD IN COLUMN 51.

SUBFILE 2 Sample Day One Truck Data Items Collected By NTACS and RI Codes

The name of each data item in subfile 2, except TRUKID, AOMIL, and ARMIL ends in "1" for sample day one.

1. TRUKID: DEFINITION GIVEN IN INTRODUCTION OF SECTION 1.

   NOTE: SIZE OF DATA FIELD IS 7 CHARACTERS. DATA FIELD BEGINS IN COLUMN 1.

2. XPFD1: EXPANSION FACTOR TO BE USED TO INFLATE NTACS MICRODATA IN SUBFILE 2 ONLY FOR SAMPLE DAY ONE DATA TO UNIVERSE LEVELS. DEFINED AS THE TIUS EXPANSION FACTOR MULTIPLIED BY THE NTACS FRAME WEIGHT FOR EACH SAMPLE UNIT MULTIPLIED BY AN ADJUSTMENT FACTOR FOR TRUCK NONRESPONSE OF ANY SAMPLE DAY ONE DATA. FOR A GIVEN NTACS STRATUM, THE NTACS FRAME WEIGHT IS THE QUOTIENT OF ESTIMATED SIZE OF THE NTACS STRATUM BY THE NUMBER OF TRUCKS SELECTED FOR THE NTACS SAMPLE FROM THE STRATUM. THE ADJUSTMENT FACTOR FOR A GIVEN NTACS STRATUM IS THE QUOTIENT OF THE TOTAL NTACS SAMPLE SIZE FOR THAT STRATUM BY THE NUMBER OF SAMPLE DAY ONE DATA TRUCK RESPONDENTS FOR THAT STRATUM.

   NOTE: SIZE OF DATA FIELD IS 8 CHARACTERS. THE LAST TWO PLACES ARE DECIMAL PLACES. DATA FIELD BEGINS IN COLUMN 8.

3. SAMD1: THIS IS THE FIRST DAY FOR WHICH SAMPLE DATA WERE REPORTED. IF MISSING, EITHER DAY1, SUB1, OR ALTDAY1 WAS USED.) SEE PAGES 2-3.

   NOTE: SIZE OF DATA FIELD IS 6 CHARACTERS. DATA FIELD BEGINS IN COLUMN 16.

4. NSPD1: THIS IS THE TOTAL NUMBER OF STOPS FOR WHICH THE PURPOSE WAS TO PICK UP OR DELIVER ITEMS ON SAMPLE DAY ONE. RANGE = 00:99.

   NOTE: SIZE OF DATA FIELD IS 2 CHARACTERS. DATA FIELD BEGINS IN COLUMN 22.

5. D1WK1: DID THIS VEHICLE OPERATE (INCLUDING TRAVELING EMPTY) ON SUNDAY (DAY 1) OF SAMPLE WEEK 1?

   0. NO
   1. YES

   NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 24.

6. D2WK1:   DID THIS VEHICLE OPERATE (INCLUDING TRAVELING EMPTY) ON MONDAY (DAY 2) OF SAMPLE WEEK 1?

        0. NO
        1. YES

        NOTE: SIZE OF DATA FIELD IS 1 CHARACTER.   DATA FIELD BEGINS IN COLUMN 25.

7. D3WK1:   DID THIS VEHICLE OPERATE (INCLUDING TRAVELING EMPTY) ON TUESDAY (DAY 3) OF SAMPLE WEEK 1?

        0. NO
        1. YES

        NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 26.

8. D4WK1:   DID THIS VEHICLE OPERATE (INCLUDING TRAVELING EMPTY) ON WEDNESDAY (DAY 4) OF SAMPLE WEEK 1.

        0. NO
        1. YES

        NOTE: SIZE OF DATA FIELD IS 1 CHARACTER.   DATA FIELD BEGINS IN COLUMN 27.

9. D5WK1:   DID THIS VEHICLE OPERATE (INCLUDING TRAVELING EMPTY) ON THURSDAY (DAY 5) OF SAMPLE WEEK 1?

        0. NO
        1. YES

        NOTE: SIZE OF DATA FIELD IS 1 CHARACTER.   DATA FIELD BEGINS IN COLUMN 28.

10. D6WK1:   DID THIS VEHICLE OPERATE (INCLUDING TRAVELING EMPTY) ON FRIDAY (DAY 6) OF SAMPLE WEEK 1?

        0. NO
        1. YES

        NOTE: SIZE OF DATA FIELD IS 1 CHARACTER.   DATA FIELD BEGINS IN COLUMN 29.

11. D7WK1:   DID THIS VEHICLE OPERATE (INCLUDING TRAVELING EMPTY) ON SATURDAY (DAY 7) OF SAMPLE WEEK 1?

0. NO
1. YES

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 30.

12. MUSE1: DURING SAMPLE DAY ONE, THIS TRUCK WAS MOST FREQUENTLY OPERATED AS _____. BLANK REPRESENTS UNKNOWN.

1. PERSONAL TRANSPORTATION
2. CONTRACT CARRIER
3. COMMON CARRIER
4. OTHER BUSINESS USE

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 31.

13. VEHD1: HOW WOULD YOU BEST DESCRIBE THIS VEHICLE AS IT WAS MOST FREQUENTLY OPERATED DURING SAMPLE DAY ONE? BLANK REPRESENTS UNKNOWN.

1. STRAIGHT TRUCK WITH 4 TIRES WITHOUT TRAILER
2. STRAIGHT TRUCK WITH 4 TIRES PULLING TRAILER(S)
3. STRAIGHT TRUCK WITH 6 OR MORE TIRES WITHOUT TRAILER
4. STRAIGHT TRUCK WITH 6 OR MORE TIRES PULLING TRAILER(S)
5. TRUCK-TRACTOR (POWER-UNIT) PULLING TRAILER(S)
6. TRUCK-TRACTOR WITHOUT TRAILER
7. OTHER

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 32.

14. BDTY1: INDICATE THE BODY TYPE THAT MOST CLOSELY RESEMBLES THE VEHICLE DURING SAMPLE DAY ONE.
IF THE POWER UNIT IS A TRUCK-TRACTOR, INDICATE THE BODY TYPE OF THE TRAILER(S) ATTACHED.

1. PLATFORM TYPES - INCLUDES FLATBEDS, STAKES, FLATBEDS WITH ADDED DEVICES, AND LOW BOYS (GOOSENECKS).
2. PICKUP
3. PANEL OR COMPACT VAN
4. MINI-VAN, UTILITY, STATION WAGON (BRONCO, BLAZER, JEEP, ETC.)
5. VAN TYPES - INCLUDES ENCLOSED VANS, OPEN TOP VANS, DROP FRAME VANS, REFRIGERATED, NONREFRIGERATED, MULTISTOP, AND HIGH CUBES.

SPECIALIZED USE TRUCKS

6. AUTOMOBILE OR BOAT TRANSPORT
7. BEVERAGE TRUCK
8. REMOVABLE DRY CONTAINER ON TRAILER CHASSIS
9. REMOVABLE LIQUID CONTAINER ON TRAILER CHASSIS
10. OTHER CARGO CONTAINER CHASSIS
11. CONCRETE MIXER
12. DUMP TRUCK
13. GRAIN BODIES (INCLUDING HOPPERS, GRAIN BOXES)
14. GARBAGE TRUCK
15. LIVESTOCK TRUCK, INCLUDING LIVESTOCK DROP FRAME
16. POLE, LOGGING, OR PIPE TRUCK

17. TANK TRUCK FOR DRY BULK
18. TANK TRUCK FOR LIQUIDS OR GASES (NONHAZARDOUS MATERIALS)
19. TANK TRUCK FOR LIQUIDS OR GASES (HAZARDOUS MATERIALS) - INCLUDING TYPES FROM PLACARD ON TANK (MC-307, MC-331, MC-312, MC-337, MC-306).
25. UTILITY TRUCK
26. OTHER
BLANK   REPRESENTS UNKNOWN

NOTE: SIZE OF DATA FIELD IS 2 CHARACTERS. DATA FIELD BEGINS IN COLUMN 33.

15. OMIL1:   THE ODOMETER MILEAGE FOR SAMPLE DAY ONE DEFINED AS

$$OMIL1 = EODM1 - BODM1$$

WHERE

BODM1   IS THE ODOMETER READING OF THE VEHICLE AT 12:01 A.M. ON SAMPLE DAY ONE, AND

EODM1   IS THE ODOMETER READING OF THE VEHICLE AT 11:59 P.M. ON SAMPLE DAY ONE.

NOTE: SIZE OF DATA FIELD IS 4 CHARACTERS. DATA FIELD BEGINS IN COLUMN 35.

16. AOMIL: ANNUALIZED ODOMETER MILEAGE BASED ON OMIL1 WHERE

$$AOMIL = \left(OMIL1 \right) \cdot \left(\begin{array}{c} \text{NUMBER OF DAYS OPERATED} \\ \text{DURING SAMPLE WEEK ONE} \end{array} \right) \cdot \left(WKSOP \right)$$

NOTE: SIZE OF DATA FIELD IS 7 CHARACTERS. DATA FIELD BEGINS IN COLUMN 39.

17. RMIL1:   HOW MANY MILES DID THE VEHICLE TRAVEL DURING SAMPLE DAY ONE?

NOTE: SIZE OF DATA FIELD IS 4 CHARACTERS. DATA FIELD BEGINS IN COLUMN 46.

18. ARMIL: ANNUALIZED REPORTED MILEAGE BASED ON RMIL1 WHERE

$$ARMIL = \left(RMIL1 \right) \cdot \left(\begin{array}{c} \text{NUMBER OF DAYS OPERATED} \\ \text{DURING SAMPLE WEEK ONE} \end{array} \right) \cdot \left(WKSOP \right)$$

NOTE: SIZE OF DATA FIELD IS 7 CHARACTERS. DATA FIELD BEGINS IN COLUMN 50.

19. PINT1:   WHAT PERCENT OF THE MILEAGE DRIVEN ON SAMPLE DAY ONE WERE ON THE INTERSTATE HIGHWAY SYSTEMS?

1.   BELOW 10%
2.   10 - 24%
3.   25 - 49%
4.   50 - 74%
5.   75 - 100%
BLANK   REPRESENTS UNKNOWN

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 57.

20. P4LN1:   WHAT PERCENT OF THE MILEAGE DRIVEN ON SAMPLE DAY ONE WERE ON ROADS WHICH HAD FOUR OR MORE LANES BUT WERE NOT ON THE INTERSTATE HIGHWAY SYSTEM?

1.   BELOW 10%
2.   10 - 24%
3.   25 - 49%
4.   50 - 74%
5.   75 - 100%
BLANK   REPRESENTS UNKNOWN

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 58.

21. POFF1:   WHAT PERCENT OF THE MILEAGE DRIVEN ON SAMPLE DAY ONE WERE OFF ROAD (LITTLE TRAVEL ON PUBLIC ROADS)?

1.   BELOW 10%
2.   10 - 24%
3.   25 - 49%
4.   50 - 74%
5.   75 - 100%

BLANK REPRESENTS UNKNOWN

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 59.

22. FUEL1: HOW MUCH FUEL (IN U.S. GALLONS) WAS USED DURING SAMPLE DAY ONE?

NOTE: SIZE OF DATA FIELD IS 3 CHARACTERS. DATA FIELD BEGINS IN COLUMN 60.

23. TOLL1: HOW MUCH WAS PAID IN HIGHWAY TOLLS DURING SAMPLE DAY ONE?

NOTE: SIZE OF DATA FIELD IS 4 CHARACTERS. DATA FIELD BEGINS IN COLUMN 63.

24. MXLN1: FOR EACH VEHICLE, MXLN1 IS THE MAXIMUM OF MAXLEN1 AND LEN1

WHERE

LEN1= WHAT WAS THE LENGTH OF THE VEHICLE (IN FEET), FROM THE FRONT BUMPER TO THE END OF THE LAST TRAILER, AS IT LEFT THE STARTING PLACE ON SAMPLE DAY ONE?

AND MAXLEN1= WHAT WAS THE LENGTH OF THE VEHICLE (IN FEET), FROM THE FRONT BUMPER TO THE END OF THE LAST TRAILER, DURING SAMPLE DAY ONE WHEN THE VEHICLE WAS AT ITS MAXIMUM WEIGHT?

1. LESS THAN 13
2. 13 - 15
3. 16 - 19
4. 20 - 27
5. 28 - 35
6. 36 - 40
7. 41 - 44
8. 45 - 49
9. 50 - 55
10. 56 - 66
11. 67 - 74
12. 75 OR MORE

NOTE: SIZE OF DATA FIELD IS 2 CHARACTERS. DATA FIELD BEGINS IN COLUMN 67.

25. MXHT1: FOR EACH VEHICLE MXHT1 IS THE MAXIMUM OF MAXHT1 AND HT1 WHERE

HT1= WHAT WAS THE HEIGHT OF THE VEHICLE (IN FEET) AS IT

20

LEFT THE STARTING PLACE ON SAMPLE DAY ONE.

AND MAXHT1= WHAT WAS THE HEIGHT OF THE VEHICLE (IN FEET) DURING SAMPLE DAY ONE WHEN THE VEHICLE WAS AT ITS MAXMUM WEIGHT?

NOTE: SIZE OF DATA FIELD IS 2 CHARACTERS. DATA FIELD BEGINS IN COLUMN 69.

26. MEWT1: FOR EACH VEHICLE, MEWT1 IS THE MAXIMUM OF EMPWT1 AND EMAXWT1 WHERE

EMPWT1= WHAT WAS THE TARE (EMPTY) WEIGHT OF THE VEHICLE (IN POUNDS) AS IT LEFT THE STARTING PLACE ON SAMPLE DAY ONE?

AND EMAXWT1= WHAT WAS THE TARE (EMPTY) WEIGHT OF THE VEHICLE (IN POUNDS) DURING SAMPLE DAY ONE WHEN THE VEHICLE WAS AT ITS MAXIMUM WEIGHT?

NOTE: SIZE OF DATA FIELD IS 5 CHARACTERS. DATA FIELD BEGINS IN COLUMN 71.

27. MXLD1: FOR EACH VEHICLE, MXLD1 IS THE MAXIMUM OF LOADWT1 AND MAXLOD1 WHERE

LOADWT1= WHAT WAS THE LOADED WEIGHT OF THE VEHICLE (WEIGHT OF TRUCK AND CARGO IN POUNDS) AS IT LEFT THE STARTING PLACE ON SAMPLE DAY ONE?

AND MAXLOD1= WHAT WAS THE LOADED WEIGHT OF THE VEHICLE (WEIGHT OF TRUCK AND CARGO IN POUNDS) DURING SAMPLE DAY ONE WHEN THE VEHICLE WAS AT ITS MAXIMUM WEIGHT?

NOTE: SIZE OF DATA FIELD IS 6 CHARACTERS. DATA FIELD BEGINS IN COLUMN 76.

28. MXPL1: FOR EACH VEHICLE, MXPL1 IS THE MAXIMUM OF PPL1 AND MAXPL1 WHERE

PPL1= WHAT PERCENT OF THE VEHICLE'S PAYLOAD SPACE WAS UTILIZED AS IT LEFT THE STARTING PLACE ON SAMPLE DAY ONE?

AND MAXPL1= WHAT PERCENT OF THE VEHICLE'S PAYLOAD SPACE WAS UTILIZED DURING SAMPLE DAY ONE WHEN THE VEHICLE WAS AT ITS MAXIMUM WEIGHT?

         1. BELOW 10%
         2. 10 - 24%
         3. 25 - 49%
         4. 50 - 74%
         5. 75 - 100%

    NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
          COLUMN 82.

29. HAZM1: WAS THE VEHICLE USED ON SAMPLE DAY ONE TO CARRY HAZARDOUS
            MATERIALS IN QUANTITIES LARGE ENOUGH TO REQUIRE A SPECIAL
            PLACARD UNDER THE CODE OF FEDERAL REGULATIONS, TITLE 49,
            TRANSPORTATION?

            1. YES
            2. NO
         BLANK   REPRESENTS UNKNOWN

    NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
          COLUMN 83.

30. HRS11. DID THE VEHICLE OPERATE BETWEEN 12:01 AND 4:00 A.M. ON SAMPLE DAY
            ONE?

            1. YES
         BLANK   REPRESENTS UNKNOWN

    NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
          COLUMN 84.

31. HRS21: DID THE VEHICLE OPERATE BETWEEN 4:01 A.M. AND 6:00 A.M. ON SAMPLE
            DAY ONE?

            1. YES
         BLANK   REPRESENTS UNKNOWN
    NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
          COLUMN 85.

32. HRS31: DID THE VEHICLE OPERATE BETWEEN 6:01 A.M. AND 8:00 A.M. ON SAMPLE
            DAY ONE?

            1. YES
         BLANK   REPRESENTS UNKNOWN

    NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
          COLUMN 86.

33. HRS41: DID THE VEHICLE OPERATE BETWEEN 8:01 A.M. AND 10:00 A.M. ON SAMPLE
            DAY ONE?

1. YES
BLANK   REPRESENTS UNKNOWN

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 87.

34. HRS51:   DID THE VEHICLE OPERATE BETWEEN 10:01 A.M. AND 4:00 P.M ON SAMPLE DAY ONE?

1. YES
BLANK   REPRESENTS UNKNOWN

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 88.

35. HRS61:   DID THE VEHICLE OPERATE BETWEEN 4:01 P.M. AND 6:00 P.M. ON SAMPLE DAY ONE?

1. YES
BLAND   REPRESENTS UNKNOWN

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 89.

36. HRS71:   DID THE VEHICLE OPERATE BETWEEN 6:01 P.M. AND 8:00 P.M. ON SAMPLE DAY ONE?

1. YES
BLANK   REPRESENTS UNKNOWN

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 90.

37. HRS81:   DID THE VEHICLE OPERATE BETWEEN 8:01 P.M. AND 12:00 MIDNIGHT ON SAMPLE DAY ONE?

1. YES
BLANK   REPRESENTS UNKNOWN

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 91.

38. COMD1:   THIS IS THE COMMODITY WITH THE GREATEST TON MILES ON SAMPLE DAY ONE. SEE APPENDIX B FOR COMMODITY CODES.

NOTE: SIZE OF DATA FIELD IS 2 CHARACTERS. DATA FIELD BEGINS IN COLUMN 92.

39. RI_SAMD1:   DATA FIELD IN COLUMN 94.

40. RI_NSPD1:   DATA FIELD IN COLUMN 95.

41. RI_D1WK1:   DATA FIELD IN COLUMN 96.

42. RI_D2WK1:   DATA FIELD IN COLUMN 97.

43. RI_D3WK1:   DATA FIELD IN COLUMN 98.

44. RI_D4WK1:   DATA FIELD IN COLUMN 99.

45. RI_D5WK1:   DATA FIELD IN COLUMN 100.

46. RI_D6WK1:   DATA FIELD IN COLUMN 101.

47. RI_D7WK1:   DATA FIELD IN COLUMN 102.

48. RI_MUSE1:   DATA FIELD IN COLUMN 103.

49. RI_VEHD1:   DATA FIELD IN COLUMN 104.

50. RI_BDTY1:   DATA FIELD IN COLUMN 105.

51. RI_OMIL1:   DATA FIELD IN COLUMN 106.

52. RI_AOMIL: DATA FIELD IN COLUMN 107.

53. RI_RMIL1:   DATA FIELD IN COLUMN 108.

54. RI_ARMIL: DATA FIELD IN COLUMN 109.

55. RI_PINT1:   DATA FIELD IN COLUMN 110.

56. RI_P4LN1:   DATA FIELD IN COLUMN 111.

57. RI_POFF1:   DATA FIELD IN COLUMN 112.

58. RI_FUEL1:   DATA FIELD IN COLUMN 113.

59. RI_TOLL1:   DATA FIELD IN COLUMN 114.

60. RI_MXLN1:   DATA FIELD IN COLUMN 115.

61. RI_MXHT1:   DATA FIELD IN COLUMN 116.

62. RI_MEWT1:   DATA FIELD IN COLUMN 117.

63. RI_MXLD1:   DATA FIELD IN COLUMN 118.

64. RI_MXPL1:   DATA FIELD IN COLUMN 119.

65. RI_HAZM1:   DATA FIELD IN COLUMN 120.

66. RI_HRS11:   DATA FIELD IN COLUMN 121.

67. RI_HRS21:   DATA FIELD IN COLUMN 122.

68. RI_HRS31:   DATA FIELD IN COLUMN 123.

69. RI_HRS41:   DATA FIELD IN COLUMN 124.

70. RI_HRS51:   DATA FIELD IN COLUMN 125.

71. RI_HRS61:   DATA FIELD IN COLUMN 126.

72. RI_HRS71:   DATA FIELD IN COLUMN 127.

73. RI_HRS81:   DATA FIELD IN COLUMN 128.

74. RI_COMD1:   DATA FIELD IN COLUMN 129.

SUBFILE 3 1987 TIUS Truck Data Items and RI Codes

1. TRUKID: DEFINITION GIVEN IN INTRODUCTION OF SECTION 1.

   NOTE: SIZE OF DATA FIELD IS 7 CHARACTERS. DATA FIELD BEGINS IN COLUMN 1.

2. STOWN: IS THIS VEHICLE STILL IN YOUR POSSESSION?

   1. YES
   2. NO

   ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN

   NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 8.

3. HWRID: HOW DID YOU DISPOSE OF THE VEHICLE? APPROPRIATE FOR TRUCKS WITH VALUES OF "2" FOR "STOWN."

   1. SOLD IT OR GAVE IT AWAY.
   2. JUNKED, SCRAPPED, OR OTHERWISE DESTROYED.
   3. RETURNED IT TO LEASING COMPANY.

   ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN

   NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 9.

4. DISPZ: WHEN DID YOU DISPOSE OF THE VEHICLE? APPROPRIATE FOR TRUCKS WITH VALUES OF "2" FOR "STOWN."

   ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN

   NOTE: SIZE OF DATA FIELD IS 4 CHARACTERS. DATA FIELD BEGINS IN COLUMN 10.

5. VEHTP: VEHICLE TYPE OF THE TRUCK AS IT WAS MOST OFTEN OPERATED.

   1. STRAIGHT TRUCK.
   2. STRAIGHT TRUCK PULLING TRAILER(S).
   3. TRUCK TRACTOR (POWER-UNIT) PULLING TRAILER(S).
   4. OTHER
   BLANK REPRESENTS UNKNOWN

   NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 14.

6. **BODTP:** INDICATE THE BODY TYPE WHICH MOST CLOSELY RESEMBLES THIS VEHICLE OR THE TRAILER MOST OFTEN ATTACHED TO IT, IF THE POWER-UNIT IS A TRUCK TRACTOR.

01. PICKUP
02. VAN OTHER THAN MINI-VAN
03. MULTI-STOP OR STEP VAN (INCLUDING HI-CUBE OR CUTAWAY)
04. PLATFORM WITH DEVICES PERMANENTLY MOUNTED ON BED OF TRUCK (SUCH AS HIGH LIFT, LIFT GATE, HOIST, ETC.)
05. LOW BOY (GOOSENECK) - PLATFORM WITH DEPRESSED CENTER
06. BASIC - INCLUDING FLATBED, STAKE, ETC.
07. LIVESTOCK TRUCK (INCLUDING LIVESTOCK DROP FRAME)
08. INSULATED, NONREFRIGERATED VAN
09. INSULATED REFRIGERATED VAN
10. DROP FRAME VAN - INCLUDING FURNITURE VAN, ETC.
11. OPEN TOP VAN, INCLUDING FRUIT
12. BASIC ENCLOSED VAN (DRY CARGO)
13. BEVERAGE TRUCK
14. UTILITY TRUCK - USED IN PUBLIC UTILITY OPERATIONS (TELEPHONE LINE TRUCK, ETC.), BODY EQUIPPED FOR MAJOR REPAIR (MAY HAVE AERIAL LIFT, DERRICK, ETC.)
15. WINCH OR CRANE TRUCK - LIFTING EQUIPMENT (INCLUDING ROLL-ON, ROLL-OFF) PERMANENTLY MOUNTED ON VEHICLE
16. WRECKER - FOR MOTOR VEHICLE TOWING OR LIFTING
17. POLE, LOGGING, PULPWOOD OR PIPE TRUCK
18. AUTOMOBILE TRANSPORT
22. SERVICE TRUCK OR "CRAFTSMAN'S VEHICLE" - BODY EQUIPPED FOR MOBILE REPAIR AND SERVICE
23. YARD TRACTOR - CAB AND CHASSIS ONLY, USED TO SPOT TRAILERS
24. UTILITY (FOR EXAMPLE: BRONCO, BLAZER, JEEP, CJ-5, 7, ETC.)
25. STATION WAGON BUILT ON TRUCK CHASSIS (FOR EXAMPLE: SUBURBAN, WAGONEER, ETC.)
26. MINI-VAN
27. OILFIELD TRUCK - SERVICE EQUIPMENT PERMANENTLY MOUNTED ON VEHICLE
29. GRAIN BODIES (INCLUDING LOW-SIDE GRAIN AND HOPPERS, ETC.)
30. GARBAGE TRUCK
40. DUMP TRUCK (INCLUDING BELLY OR BOTTOM DUMP)
50. TANK TRUCK FOR LIQUIDS OR GASES
60. TANK TRUCK FOR DRY BULK
70. CONCRETE MIXER
80. OTHER

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN

NOTE: SIZE OF DATA FIELD IS 2 CHARACTERS. DATA FIELD BEGINS IN COLUMN 15.

7. OPCLS: WHICH OF THE FOLLOWING BEST DESCRIBES THE PRIMARY WAY THE VEHICLE WAS OPERATED?

    1. BUSINESS USE - OPERATED BY AND FOR PRIVATE BUSINESSES (INCLUDING SELF-EMPLOYERS) OR A COMPANY; USED IN RELATED ACTIVITIES OF THAT BUSINESS (INCLUDING TRANSPORTATION OF EMPLOYEES).

    2. PERSONAL TRANSPORTATION - OPERATED AS A PERSONAL-USE VEHICLE IN PLACE OF AN AUTOMOBILE FOR PLEASURE DRIVING, TRAVEL TO WORK, ETC. (NO BUSINESS USE).

    3. FOR HIRE

    4. DAILY RENTAL (NOT A MOTOR CARRIER)

    5. MIXED

    ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 17.

8. MJUSE: WHICH OF THE FOLLOWING BEST DESCRIBES YOUR BUSINESS OR THE PART OF YOUR BUSINESS IN WHICH THE VEHICLE WAS USED? (IF THE) VEHICLE WAS LEASED, INDICATE BUSINESS OF LESSEE.)

    01. AGRICULTURAL SERVICES (INCLUDING FISHERIES)

    02. FORESTRY OR LUMBERING ACTIVITIES

    03. CONSTRUCTION WORK (BUILDINGS, HOMES, ROADS, STRUCTURES, ETC.)

    04. CONTRACTOR ACTIVITIES OR SPECIAL TRADES (PAINTING, PLUMBING, ELECTRICAL WORK, MASONRY, CARPENTRY, ETC.)

    05. MANUFACTURING, REFINING, OR PROCESSING ACTIVITIES

    06. WHOLESALE TRADE

    07. RETAIL TRADE

    08. BUSINESS AND PERSONAL SERVICES - (USED TO ASSIST IN SUCH SERVICES AS LODGING OPERATIONS, LANDSCAPING, REPAIR (EXCEPT PLUMBING, ELECTRICAL WORK, ETC.), LAUNDRY, ADVERTISING, ENTERTAINMENT, ETC.)

    09. UTILITIES - USED TO ASSIST IN OPERATION OR SERVICE OF PUBLIC UTILITIES (TELEPHONE, GAS, ELECTRIC, ETC.)

    10. MINING OR QUARRY ACTIVITIES (INCLUDES WELL-DRILLING) - USED TO ASSIST IN THE EXTRACTION OF NATURAL RESOURCES OR IN HAULING TO PROCESSORS

    11. DAILY RENTAL - RENTED OUT, WITHOUT A DRIVER, TO SOMEONE ELSE ON A DAILY OR SHORT-TERM BASIS

    12. GOVERNMENTAL OPERATIONS

    13. NOT IN USE - VEHICLE IDLE, WRECKED, AWAITING REPAIR, ETC., FOR MORE THAN 90 DAYS

    14. FOR HIRE TRANSPORTATION - INCLUDING SMALL PACKAGE DELIVERY

15. OTHER
16. ONE WAY RENTAL
20. PERSONAL TRANSPORTATION

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN

NOTE: SIZE OF DATA FIELD IS 2 CHARACTERS. DATA FIELD BEGINS IN COLUMN 18.

9. POFFR: WHAT PERCENT OF THIS VEHICLE'S ANNUAL MILEAGE WAS ACCOUNTED FOR BY TRIPS OFF-THE-ROAD (LITTLE TRAVEL ON PUBLIC ROADS)? RANGE=000:100. BLANK REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 3 CHARACTERS. DATA FIELD BEGINS IN COLUMN 20.

10. PLOCL: WHAT PERCENT OF THIS VEHICLE'S ANNUAL MILEAGE WAS ACCOUNTED FOR BY TRIPS LESS THAN A 50 MILES RADIUS OF THE VEHICLE'S HOME BASE? RANGE=000:100. BLANK REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 3 CHARACTERS. DATA FIELD BEGINS IN COLUMN 23.

11. PSHRT: WHAT PERCENT OF THIS VEHICLE'S ANNUAL MILEAGE WAS ACCOUNTED FOR BY TRIPS WITHIN A 50-200 MILE RADIUS OF THE VEHICLE'S HOME BASE? RANGE=000:100. BLANK REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 3 CHARACTERS. DATA FIELD BEGINS IN COLUMN 26.

12. PLONG: WHAT PERCENT OF THIS VEHICLE'S ANNUAL MILEAGE WAS ACCOUNTED FOR BY TRIPS BEYOND A 200 MILE RADIUS OF THE VEHICLE'S HOME BASE? RANGE=000:100. BLANK REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 3 CHARACTERS. DATA FIELD BEGINS IN COLUMN 29. (POFFR + PLOCL + PSHRT + PLONG SHOULD EQUAL 100 PERCENT.)

13. PNOLD: WHAT APPROXIMATE PERCENTAGE OF THE VEHICLE'S ANNUAL MILEAGE WAS ACCOUNTED FOR BY CARRYING NO LOAD? RANGE=000:100. BLANK REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 3 CHARACTERS. DATA FIELD BEGINS IN COLUMN 32.

14. PRPRO: THIS VALUE INDICATES THE PRINCIPAL PRODUCT CARRIED BY THE VEHICLE, IF ANY. SEE APPENDIX D FOR VALUE DEFINITIONS.

NOTE: SIZE OF DATA FIELD IS 2 CHARACTERS. DATA FIELD BEGINS IN COLUMN 35.

15. ACQYR: ACQUISITION YEAR. FORMAT=YY. ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 2 CHARACTERS. DATA FIELD BEGINS IN COLUMN 37.

16. OBTAN: HOW WAS THE VEHICLE OBTAINED?

1. PURCHASED IT NEW
2. PURCHASED IT USED
3. LEASED OR RENTED IT FROM OTHERS

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 39.

17. HWLEA: IF LEASED, HOW WAS THE VEHICLE LEASED FROM OTHERS? APPROPRIATE FOR VEHICLES WITH OBTAN=3.

1. WITHOUT A DRIVER
2. WITH A DRIVER OTHER THAN AN OWNER-OPERATOR
3. WITH AN OWNER-OPERATOR AS DRIVER

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 40.

18. HWLNG: IF LEASED, WAS THE AGREEMENT FOR 12 MONTHS OR MORE? APPROPRIATE FOR VEHICLES WITH OBTAN=3.

1. YES
2. NO

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 41.

19. OWNLS: ARE YOU THE OWNER OR THE LESSEE OF THIS VEHICLE? APPROPRIATE FOR VEHICLES WITH STOWN=1.

1. OWNER
2. LESSEE

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 42.

20. AXLRE: THIS ITEM IS A REPRESENTATION OF THE TOTAL NUMBER OF AXLES ON A PARTICULAR TRUCK AND/OR COMBINATION. THE VALUE OF THIS ITEM DEPENDS UPON THE TYPE OF VEHICLE, THE NUMBER OF AXLES ON THE VEHICLE ITSELF, AND THE TYPE OF TRAILER PULLED, IF ANY. SEE APPENDIX E FOR VALUE DEFINITIONS.

NOTE: SIZE OF DATA FIELD IS 2 CHARACTERS. DATA FIELD BEGINS IN COLUMN 43.

21. LAXTL: IF THE VEHICLE WAS OPERATED WITH A TRAILER, HOW MANY, IF ANY OF THE TRAILER'S AXLES ARE LIFTABLE? RANGE=0:6 APPROPRIATE FOR VEHICLES WITH SAMTYP = 3, 4, OR 5. ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 45.

22. PCNTR: IF YOU OPERATED A TRUCK TRACTOR (POWER-UNIT) PULLING TRAILER(S), WHAT PERCENT OF ANNUAL MILEAGE DID YOU HAUL RAILROAD, OCEAN-GOING, OR SIMILAR CONTAINERS? RANGE=000:100. APPROPRIATE FOR VEHICLES WITH SAMTYP = 3, 4, OR 5. ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 3 CHARACTERS. DATA FIELD BEGINS IN COLUMN 46.

23. PPIGY: IF YOU OPERATED A TRUCK TRACTOR (POWER-UNIT) PULLING TRAILER(S), WHAT PERCENT OF ANNUAL MILEAGE DID YOU HAUL PIGGYBACK TRAILERS? RANGE=000:100. APPROPRIATE FOR VEHICLES WITH SAMTYP = 3, 4, OR 5. ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 3 CHARACTERS. DATA FIELD BEGINS IN COLUMN 49.

24. NAXLS: TOTAL NUMBER OF AXLES ON TRUCK OR TRUCK TRACTOR (POWER-UNIT). INCLUDE FRONT AND REAR AXLES.

1. TWO AXLES (FOUR TIRES)
2. TWO AXLES (SIX TIRES)
3. THREE AXLES
4. FOUR OR MORE AXLES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 52.

25. LFTAX: OF THE TOTAL NUMBER OF AXLES ON THE TRUCK OR TRUCK TRACTOR, HOW MANY OF THEM ARE LIFTABLE AXLES? APPROPRIATE FOR VEHICLES WITH SAMTYP = 3, 4, OR 5.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 53.

26. DRAXS: NUMBER OF DRIVING (POWERED) AXLES ON TRUCK OR TRUCK TRACTOR (POWER UNIT).

1. ONE DRIVING AXLE
2. TWO DRIVING AXLES
3. THREE OR MORE DRIVING AXLES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 54.

27. CABTP: WHAT TYPE OF CAB DOES THIS VEHICLE HAVE?

1. CAB FORWARD OF ENGINE
2. CAB OVER ENGINE
3. CONVENTIONAL CAB
4. CAB BESIDE ENGINE
5. OTHER

APPROPRIATE FOR VEHICLES WITH SAMTYP = 3, 4, OR 5. ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 55.

28. LNGTH: VEHICLE LENGTH IN FEET.

01. LESS THAN 13.0
02. 13.0 - 15.9
03. 16.0 - 19.9
04. 20.0 - 27.9
05. 28.0 - 35.9
06. 36.0 - 40.9
07. 41.0 - 44.9
08. 45.0 - 49.9
09. 50.0 - 55.9
10. 56.0 - 66.9

11. 67.0 - 74.9
12. 75.0 OR MORE
BLANK REPRESENTS UNKNOWN

NOTE: SIZE OF DATA FIELD IS 2 CHARACTERS. DATA FIELD BEGINS IN COLUMN 56.

29. WTHTL: WHAT WAS THE WIDTH OF THE TRAILER MOST OFTEN ATTACHED TO THE VEHICLE? RANGE=78:112 INCHES. BLANK REPRESENTS UNKNOWN. APPROPRIATE FOR VEHICLES WITH SAMTYP = 1 OR 2, TLATT = 1, AND PTPUL > 050. APPROPRIATE FOR VEHICLES WITH SAMTYP = 3, 4, OR 5 AND VEHTP = 2 OR 3.

NOTE: SIZE OF DATA FIELD IS 3 CHARACTERS. DATA FIELD BEGINS IN COLUMN 58.

30. EMPWT: EMPTY WEIGHT OF THE VEHICLE IN POUNDS.

01. LESS THAN 6,001
02. 6,001 - 10,000
03. 10,001 - 14,000
04. 14,001 - 16,000
05. 16,001 - 19,500
06. 19,501 - 26,000
07. 26,001 - 33,000
08. 33,001 - 40,000
09. 40,001 OR MORE
BLANK REPRESENTS UNKNOWN; APPROPRIATE FOR VEHICLES WITH SAMTYP = 3, 4, OR 5.

NOTE: SIZE OF DATA FIELD IS 2 CHARACTERS. DATA FIELD BEGINS IN COLUMN 61.

31. AVGWT: AVERAGE WEIGHT (EMPTY WEIGHT PLUS WEIGHT OF CARGO) IN POUNDS OF VEHICLE OR VEHICLE/TRAILER COMBINATION WHEN CARRYING A TYPICAL PAYLOAD DURING THE PAST YEAR.

01. LESS THAN 6,001
02. 6,001 - 10,000
03. 10,001 - 14,000
04. 14,001 - 16,000
05. 16,001 - 19,500
06. 19,501 - 26,000
07. 26,001 - 33,000
08. 33,001 - 40,000
09. 40,001 - 50,000
10. 50,001 - 60,000
11. 60,001 - 70,000

33

12. 70,001 - 80,000
13. 80,001 - 100,000
14. 100,001 - 120,000
15. 120,001 - 130,000
16. 130,001 OR MORE
BLANK REPRESENTS UNKNOWN

NOTE: SIZE OF DATA FIELD IS 2 CHARACTERS. DATA FIELD BEGINS IN COLUMN 63.

32. MAXWT: MAXIMUM GROSS WEIGHT IN POUNDS AT WHICH THE VEHICLE OR VEHICLE/TRAILER COMBINATION WAS OPERATED

01. LESS THAN 6,001
02. 6,001 - 10,000
03. 10,001 - 14,000
04. 14,001 - 16,000
05. 16,001 - 19,500
06. 19,501 - 26,000
07. 26,001 - 33,000
08. 33,001 - 40,000
09. 40,001 - 50,000
10. 50,001 - 60,000
11. 60,001 - 70,000
12. 70,001 - 80,000
13. 80,001 - 100,000
14. 100,001 - 120,000
15. 120,001 - 130,000
16. 130,001 OR MORE
BLANK REPRESENTS UNKNOWN; APPROPRIATE FOR VEHICLES WITH SAMTYP = 3, 4, OR 5

NOTE: SIZE OF DATA FIELD IS 2 CHARACTERS. DATA FIELD BEGINS IN COLUMN 65.

33. PCRSZ: WHAT PERCENT OF ANNUAL MILEAGE DID THE VEHICLE CARRY PAYLOADS THAT FILLED ITS MAXIMUM CARGO SIZE? RANGE = 000:100. BLANK REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 3 CHARACTERS. DATA FIELD BEGINS IN COLUMN 67.

34. PCRWT: WHAT PERCENT OF ANNUAL MILES DID THE VEHICLE CARRY PAYLOADS THAT WEIGHED THE MAXIMUM CARGO WEIGHT? RANGE = 000:100. BLANK REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 3 CHARACTERS. DATA FIELD BEGINS IN COLUMN 70.

35. TLATT: DURING 1987 DID YOU ATTACH ANY TRAILER TO THIS VEHICLE?

        1. YES
        2. NO

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN. APPROPRIATE FOR VEHICLES WITH SAMTYP = 1 OR 2.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 73.

36. PTPUL: WHAT PERCENT OF ANNUAL MILEAGE DID THE VEHICLE PULL A TRAILER? RANGE = 000:100.

APPROPRIATE FOR VEHICLES WITH SAMTYP = 1 OR 2 AND TLATT = 1. ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 3 CHARACTERS. DATA FIELD BEGINS IN COLUMN 74.

37. AXON: HOW MANY AXLES WERE ON TRAILER THAT YOU MOST FREQUENTLY ATTACHED TO THIS VEHICLE? RANGE = 0 : 8. APPROPRIATE FOR VEHICLES WITH SAMTYP = 1 OR 2, TLATT = 1, AND PTPUL > 050. ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 77.

38. LODWT: WHAT WAS THE LOADED WEIGHT OF THE TRAILER MOST OFTEN ATTACHED TO THE VEHICLE? (AN ESTIMATE IS ACCEPTABLE.) RANGE = 00100:30000 POUNDS. APPROPRIATE FOR VEHICLES WITH SAMTYP = 1 OR 2, TLATT = 1, AND PTPUL > 050. ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 5 CHARACTERS. DATA FIELD BEGINS IN COLUMN 78.

39. ANMIL: HOW MANY MILES WAS THE VEHICLE DRIVEN DURING 1987?

        01. LESS THAN 5,000
        02. 5,000 - 9,999
        03. 10,000 - 14,999
        04. 15,000 - 19,999
        05. 20,000 - 24,999
        06. 25,000 - 29,999
        07. 30,000 - 39,999
        08. 40,000 - 49,999
        09. 50,000 - 74,999

> 10. 75,000 - 99,999
> 11. 100,000 - 124,999
> 12. 125,000 - 149,999
> 13. 150,000 - 199,999
> 14. 200,000 OR MORE

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 2 CHARACTERS. DATA FIELD BEGINS IN COLUMN 83.

40. LTMIL: HOW MANY MILES HAS THIS VEHICLE BEEN DRIVEN SINCE IT WAS MANUFACTURED? NOTES: IF THE VEHICLE IS NO LONGER IN YOUR POSSESSION, ESTIMATE THE TOTAL LIFETIME MILEAGE AT THE TIME YOU LAST OPERATED IT. IF THE ODOMETER/SPEEDOMETER IS BROKEN, GIVE YOUR BEST ESTIMATE. IF THE ODOMETER HAS TURNED OVER (100,000+ MILES), PLEASE ENTER THE TOTAL READING.

> 01. LESS THAN 50,000
> 02. 50,000 - 74,999
> 03. 75,000 - 99,999
> 04. 100,000 - 124,999
> 05. 125,000 - 149,999
> 06. 150,000 - 199,999
> 07. 200,000 - 249,999
> 08. 250,000 - 399,999
> 09. 400,000 - 499,999
> 10. 500,000 - 749,999
> 11. 750,000 - 999,999
> 12. 1,000,000 OR MORE
> BLANK   REPRESENTS UNKNOWN

NOTE: SIZE OF DATA FIELD IS 2 CHARACTERS. DATA FIELD BEGINS IN COLUMN 85.

41. MPG: HOW MANY MILES-PER-GALLON (MPG) DID THIS VEHICLE AVERAGE DURING 1987? (USE TENTHS, IF AVAILABLE.) RANGE = 00:40. BLANK REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 2 CHARACTERS. DATA FIELD BEGINS IN COLUMN 87.

42. BASTA: WHERE WAS THE HOME BASE OF THIS VEHICLE ON JULY 1, 1987? IF PUT INTO SERVICE AFTER JULY 1, 1987? ENTER THE CURRENT HOME BASE. RECODED TO CENSUS GEOGRAPHIC DIVISIONS. RANGE = 0:9. BLANK REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 89.

43. POBST: WHAT PERCENT OF ANNUAL MILEAGE WAS DRIVEN OUTSIDE THE HOME BASE STATE? RANGE = 000:100. BLANK REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 3 CHARACTERS. DATA FIELD BEGINS IN COLUMN 90.

44. HSPWR: WHAT IS THE HORSEPOWER RATING OF THE VEHICLE'S ENGINE? THE FOLLOWING VALUES FOR HORSEPOWER APPLY WHEN ENGTP = 1 (GASOLINE), 3 (LIQUIFIED PETROLEUM GAS), 4 (OTHER), OR BLANK.

BLANK OR 0. BLANK
01. 1-99
02. 100-149
03. 150-199
04. 200-249
05. 250-350
06. 351-500
07. 501 AND OVER

THE FOLLOWING VALUES FOR HORSEPOWER APPLY WHEN ENGTP = 2 (DIESEL).

BLANK OR 0. BLANK
08. 1-100
09. 101-249
10. 250-300
11. 301-349
12. 350-400
13. 401-449
14. 450-600
15. 601 AND OVER

NOTE: SIZE OF DATA FIELD IS 2 CHARACTERS. DATA FIELD BEGINS IN COLUMN 93.

45. CID: WHAT IS THE SIZE (DISPLACEMENT) OF THIS VEHICLE'S ENGINE (IN CUBIC INCHES)? THE FOLLOWING VALUES FOR CID APPLY WHEN ENGTP = 1 (GASOLINE), 3 (LPG), 4 (OTHER), OR BLANK.

BLANK OR 0. BLANK
01. 1-115
02. 116-133
03. 134-169
04. 170-199
05. 200-240

06. 241-280
07. 281-299
08. 300-340
09. 341-360
10. 361-399
11. 400-480
12. 481 AND OVER

THE FOLLOWING VALUES FOR CID APPLY WHEN ENGTP = 2 (DIESEL).

BLANK OR 0. BLANK
13. 1-300
14. 301-399
15. 400-499
16. 500-599
17. 600-699
18. 700-799
19. 800-899
20. 900-1000
21. 1001 AND OVER

NOTE: SIZE OF DATA FIELD IS 2 CHARACTERS. DATA FIELD BEGINS IN COLUMN 95.

46. ENGTP: WHAT KIND OF FUEL DOES THIS VEHICLE USE?

1. GASOLINE
2. DIESEL
3. LIQUIFIED PETROLEUM GAS
4. OTHER

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 97.

47. BRAKE: WHAT TYPE OF BRAKES DOES THE POWER UNIT (TRUCK OR TRUCK TRACTOR) HAVE?

1. HYDRAULIC (STANDARD)
2. HYDRAULIC WITH POWER ASSIST
3. AIR

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN. APPROPRIATE FOR VEHICLES WITH SAMTYP = 3, 4, OR 5.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 98.

48. **AEROD:** DOES THE VEHICLE HAVE AERODYNAMIC FEATURES?

> 1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN. APPROPRIATE FOR VEHICLES WITH SAMTYP = 3, 4, OR 5.

> NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 99.

49. **AXLRA:** DOES THE VEHICLE HAVE AXLE OR DRIVE RATIO TO MAXIMIZE FUEL EFFICIENCY?

> 1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN. APPROPRIATE FOR VEHICLES WITH SAMTYP = 3, 4, OR 5.

> NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 100.

50. **ECENG:** DOES THE VEHICLE HAVE A FUEL ECONOMY ENGINE WITH LOW RPM, HIGH TORQUE RISE, TURBO-CHARGE, ETC.?

> 1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN. APPROPRIATE FOR VEHICLES WITH SAMTYP = 3, 4, OR 5.

> NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 101.

51. **REFLT:** DOES THE VEHICLE HAVE REFLECTIVE MATERIALS (IN ADDITION TO THOSE REQUIRED BY LAW)?

> 1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN. APPROPRIATE FOR VEHICLES WITH SAMTYP = 3, 4, OR 5.

> NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 102.

52. **RADIL:** DOES THE VEHICLE HAVE RADIAL TIRES?

> 1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 103.

53. GOVNR: DOES THE VEHICLE HAVE A ROAD SPEED GOVERNOR?

    1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN. APPROPRIATE FOR VEHICLES WITH SAMTYP = 3, 4, OR 5.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 104.

54. VRFAN: DOES THE VEHICLE HAVE VARIABLE FAN DRIVES?

    1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN. APPROPRIATE FOR VEHICLES WITH SAMTYP = 3, 4, OR 5.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 105.

55. OTFUL: DOES THE VEHICLE HAVE OTHER FUEL CONSERVATION FEATURES?

    1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN. APPROPRIATE FOR VEHICLES WITH SAMTYP = 3, 4, OR 5.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 106.

56. PWSTR: DOES THE VEHICLE HAVE POWER STEERING?

    1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 107.

57. AIRCN: DOES THE VEHICLE HAVE AIR CONDITIONING?

    1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

40

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 108.

58. ENGRT: DOES THE VEHICLE HAVE AN ENGINE RETARDER?

1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN. APPROPRIATE FOR VEHICLES WITH SAMTYP = 3, 4, OR 5.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 109.

59. EVMS: DOES THE VEHICLE HAVE AN ELECTRONIC VEHICLE MANAGEMENT SYSTEM?

1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN. APPROPRIATE FOR VEHICLES WITH SAMTYP = 3, 4, OR 5.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 110.

60. EVIS: DOES THE VEHICLE HAVE AN ELECTRONIC VEHICLE IDENTIFICATION DEVICE (TRANSPONDER), ETC.?

1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN. APPROPRIATE FOR VEHICLES WITH SAMTYP = 3, 4, OR 5.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 111.

61. RECDR: DOES THE VEHICLE HAVE TRIP RECORDERS?

1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN. APPROPRIATE FOR VEHICLES WITH SAMTYP = 3, 4, OR 5.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 112.

62. NAVSY: DOES THE VEHICLE HAVE NAVIGATIONAL SYSTEMS?

1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN. APPROPRIATE FOR VEHICLES WITH SAMTYP = 3, 4, OR 5.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 113.

63. FRNWH: DOES THE VEHICLE HAVE FRONT-WHEEL DRIVE?

1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN. APPROPRIATE FOR VEHICLES WITH SAMTYP = 1 OR 2.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 114.

64. GMSEL: DID YOU PERFORM THE GENERAL MAINTENANCE ON THIS VEHICLE?

1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 115.

65. GMCOM: DID YOUR COMPANY'S OWN MAINTENANCE FACILITIES PERFORM THE GENERAL MAINTENANCE ON THIS VEHICLE?

1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 116.

66. GMDEL: DID A DEALERSHIP'S SERVICE DEPARTMENT PERFORM THE GENERAL MAINTENANCE ON THIS VEHICLE?

1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 117.

67. GMLES: DID A LEASING COMPANY PERFORM THE GENERAL MAINTENANCE ON THIS VEHICLE?

1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 118.

68. GMGAR: DID AN INDEPENDENT GARAGE OR PRIVATE MECHANIC (INCLUDES GASOLINE OR SERVICE STATIONS) PERFORM THE GENFRAL MAINTENANCE ON THIS VEHICLE?

1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 119.

69. GMDIS: DID A COMPONENT DISTRIBUTORSHIP (ENGINE, TRANSMISSION, ETC.) PERFORM THE GENERAL MAINTENANCE ON THIS VEHICLE?

1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 120.

70. GMNON: DID NO ONE PERFORM THE GENERAL MAINTENANCE ON THIS VEHICLE?

1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 121.

71. GMOTH: DID SOMEONE OTHER THAN THOSE SPECIFICALLY MENTIONED PREVIOUSLY PERFORM THE GENERAL MAINTENANCE ON THIS VEHICLE?

1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 122.

72. OVSEL: DID YOU PERFORM THE MAJOR OVERHAULS ON THIS VEHICLE?

1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
            COLUMN 123.

73. OVCOM: DID YOUR COMPANY'S OWN MAINTENANCE FACILITIES PERFORM THE
            MAJOR OVERHAULS ON THIS VEHICLE?

1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
            COLUMN 124.

74. OVDEL: DID A DEALERSHIP'S SERVICE DEPARTMENT PERFORM THE MAJOR
            OVERHAULS ON THIS VEHICLE?

1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
            COLUMN 125.

75. OVLES: DID A LEASING COMPANY PERFORM THE MAJOR OVERHAULS ON THIS
            VEHICLE?

1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
            COLUMN 126.

76. OVGAR: DID AN INDEPENDENT GARAGE OR PRIVATE MECHANIC (INCLUDES
            GASOLINE OR SERVICE STATIONS) PERFORM THE MAJOR OVERHAULS ON
            THIS VEHICLE?

1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
            COLUMN 127.

77. OVDIS: DID A COMPONENT DISTRIBUTORSHIP (ENGINE, TRANSMISSION, ETC.) PERFORM THE MAJOR OVERHAULS ON THIS VEHICLE?

           1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 128.

78. OVNON: DID NO ONE PERFORM THE MAJOR OVERHAULS ON THIS VEHICLE?

           1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 129.

79. OVOTH: DID SOMEONE OTHER THAN THOSE SPECIFICALLY MENTIONED PREVIOUSLY PERFORM THE MAJOR OVERHAULS ON THIS VEHICLE?

           1. YES

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 130.

80. PBUS: IF "MIXED" WAS CHECKED FOR "OPCLS," WHAT PERCENT WAS BUSINESS USE? RANGE = 000:100.

      BLANK REPRESENTS UNKNOWN

NOTE: SIZE OF DATA FIELD IS 3 CHARACTERS. DATA FIELD BEGINS IN COLUMN 131.

81. PPTRA: IF "MIXED" WAS CHECKED FOR "OPCLS," WHAT PERCENT WAS PERSONAL USE? RANGE = 000:100.

      BLANK REPRESENTS UNKNOWN

NOTE: SIZE OF DATA FIELD IS 3 CHARACTERS. DATA FIELD BEGINS IN COLUMN 134.

82. FORHR: IF "MIXED" WAS CHECKED FOR "OPCLS," WHAT PERCENT WAS FOR-HIRE USE (INCLUDES INTER-CORPORATE HAULING AND TRIP LEASING, ETC.)? RANGE = 000:100.

BLANK REPRESENTS UNKNOWN

NOTE: SIZE OF DATA FIELD IS 3 CHARACTERS. DATA FIELD BEGINS IN COLUMN 137.

83. PMCAR: IF THE VEHICLE WAS FOR-HIRE, WHAT PERCENT OF ANNUAL MILEAGE WAS IT OPERATED AS A MOTOR CARRIER? RANGE = 000:100. BLANK REPRESENTS UNKNOWN. APPROPRIATE FOR VEHICLES WITH OPCLS = 3 OR OPCLS = 5 AND FORHR $\geq$ 000.

NOTE: SIZE OF DATA FIELD IS 3 CHARACTERS. DATA FIELD BEGINS IN COLUMN 140.

84. PINDP: IF THE VEHICLE WAS FOR-HIRE, WHAT PERCENT OF ANNUAL MILEAGE WAS IT OPERATED BY AN INDEPENDENT OWNER/OPERATOR? RANGE = 000:100. BLANK REPRESENTS UNKNOWN. APPROPRIATE FOR VEHICLES WITH OPCLS = 3 OR OPCLS = 5 AND FORHR $\geq$ 000.

NOTE: SIZE OF DATA FIELD IS 3 CHARACTERS. DATA FIELD BEGINS IN COLUMN 143.

85. PLESE: IF THE VEHICLE WAS FOR-HIRE, WHAT PERCENT OF ANNUAL MILEAGE WAS IT OPERATED BY AN OWNER-OPERATOR LEASED TO A COMPANY? RANGE = 000:100. BLANK REPRESENTS UNKNOWN. APPROPRIATE FOR VEHICLES WITH OPCLS = 3 OR OPCLS = 5 AND FORHR $\geq$ 000.

NOTE: SIZE OF DATA FIELD IS 3 CHARACTERS. DATA FIELD BEGINS IN COLUMN 146.

86. PINTE: IF THE VEHICLE WAS FOR-HIRE, WHAT PERCENT OF ANNUAL MILEAGE WAS IT OPERATED INTERSTATE? RANGE = 000:100. BLANK REPRESENTS UNKNOWN. APPROPRIATE FOR VEHICLES WITH OPCLS = 3 OR OPCLS = 5 AND FORHR $\geq$ 000.

NOTE: SIZE OF DATA FIELD IS 3 CHARACTERS. DATA FIELD BEGINS IN COLUMN 149.

87. PINTR: IF THE VEHICLE WAS FOR-HIRE, WHAT PERCENT OF ANNUAL MILEAGE WAS IT OPERATED INTRASTATE? RANGE = 000:100. BLANK REPRESENTS UNKNOWN. APPROPRIATE FOR VEHICLES WITH OPCLS = 3 OR OPCLS = 5, AND FORHR $\geq$ 000.

NOTE: SIZE OF DATA FIELD IS 3 CHARACTERS. DATA FIELD BEGINS IN COLUMN 152.

88. PLOCJ: IF THE VEHICLE WAS FOR-HIRE, WHAT PERCENT OF ANNUAL MILEAGE WAS IT OPERATED LOCALLY? RANGE = 000:100. BLANK REPRESENTS UNKNOWN. APPROPRIATE FOR VEHICLES WITH OPCLS = 3 OR OPCLS = 5 AND FORHR ≥ 000.

   NOTE: SIZE OF DATA FIELD IS 3 CHARACTERS. DATA FIELD BEGINS IN COLUMN 155.

89. PCNTR: IF THE VEHICLE WAS FOR-HIRE, WHAT PERCENT OF ANNUAL MILEAGE WAS IT OPERATED AS A CONTRACT CARRIER? RANGE = 000:100. BLANK REPRESENTS UNKNOWN. APPROPRIATE FOR VEHICLES WITH OPCLS = 3 OR OPCLS = 5 AND FORHR ≥ 000.

   NOTE: SIZE OF DATA FIELD IS 3 CHARACTERS. DATA FIELD BEGINS IN COLUMN 158.

90. PCOMN: IF THE VEHICLE WAS FOR-HIRE, WHAT PERCENT OF ANNUAL MILEAGE WAS IT OPERATED BY A COMMON CARRIER? RANGE = 000:100. BLANK REPRESENTS UNKNOWN. APPROPRIATE FOR VEHICLES WITH OPCLS = 3 OR OPCLS = 5 AND FORHR ≥ 000.

   NOTE: SIZE OF DATA FIELD IS 3 CHARACTERS. DATA FIELD BEGINS IN COLUMN 161.

91. PEXEM: IF THE VEHICLE WAS FOR-HIRE, WHAT PERCENT OF ANNUAL MILEAGE WAS IT OPERATED AS AN EXEMPT CARRIER? RANGE = 000:100. BLANK REPRESENTS UNKNOWN. APPROPRIATE FOR VEHICLES WITH OPCLS = 3 OR OPCLS = 5 AND FORHR ≥ 000.

   NOTE: SIZE OF DATA FIELD IS 3 CHARACTERS. DATA FIELD BEGINS IN COLUMN 164.

92. ICCRG: WAS THIS VEHICLE UNDER ICC AUTHORITY?

   1. YES
   2. NO

   ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN. APPROPRIATE FOR VEHICLES WITH OPCLS = 3 OR OPCLS = 5 AND FORHR ≥ 000.

   NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 167.

93. LVAML: WHAT APPROXIMATE PERCENTAGE OF THE VEHICLE'S ANNUAL MILEAGE WAS ACCOUNTED FOR WHILE CARRYING LIVE ANIMALS--CATTLE, HORSES, POULTRY, HOGS, LIVE SEAFOOD, INSECTS, ETC.?

   1. BELOW 10%

2. 10-24%
3. 25-49%
4. 50-74%
5. 75-100%
BLANK   REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
           COLUMN 168.

94. FRMPR: WHAT APPROXIMATE PERCENTAGE OF THE VEHICLE'S ANNUAL MILEAGE
           WAS ACCOUNTED FOR WHILE CARRYING FRESH FARM PRODUCTS (GRAIN,
           CROPS, FLOWERS, NURSERY STOCK, RAW MILK, RAW TOBACCO, ETC.)?

1. BELOW 10%
2. 10-24%
3. 25-49%
4. 50-74%
5. 75-100%
BLANK   REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
           COLUMN 169.

95. PRFOD: WHAT APPROXIMATE PERCENTAGE OF THE VEHICLE'S ANNUAL MILEAGE
           WAS ACCOUNTED FOR WHILE CARRYING PROCESSED FOODS AND TOBACCO
           PRODUCTS (CANNED GOODS, PREPARED MEATS, FROZEN FOODS,
           BEVERAGES, BOTTLED WATER, DAIRY PRODUCTS, CIGARETTES, ETC.)?

1. BELOW 10%
2. 10-24%
3. 25-49%
4. 50-74%
5. 75-100%
BLANK   REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
           COLUMN 170.

96. MINPR: WHAT APPROXIMATE PERCENTAGE OF THE VEHICLE'S ANNUAL MILEAGE
           WAS ACCOUNTED FOR WHILE CARRYING PRODUCTS--UNREFINED (CRUDE
           OIL, COAL, METAL ORES)?

1. BELOW 10%
2. 10-24%
3. 25-49%
4. 50-74%
5. 75-100%
BLANK   REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 171.

97. BLDGM: WHAT APPROXIMATE PERCENTAGE OF THE VEHICLE'S ANNUAL MILEAGE WAS ACCOUNTED FOR WHILE CARRYING BUILDING MATERIALS--GRAVEL, SAND, CONCRETE, FLAT GLASS, ETC.--EXCEPT CUT LUMBER (SEE "LUMBE")?

        1. BELOW 10%
        2. 10-24%
        3. 25-49%
        4. 50-74%
        5. 75-100%
    BLANK REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 172.

98. LOGPR: WHAT APPROXIMATE PERCENTAGE OF THE VEHICLE'S ANNUAL MILEAGE WAS ACCOUNTED FOR WHILE CARRYING LOGS AND FOREST PRODUCTS (EXCEPT CUT LUMBER AND FABRICATED WOOD PRODUCTS)?

        1. BELOW 10%
        2. 10-24%
        3. 25-49%
        4. 50-74%
        5. 75-100%
    BLANK REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 173.

99. LUMBE: WHAT APPROXIMATE PERCENTAGE OF THE VEHICLE'S ANNUAL MILEAGE WAS ACCOUNTED FOR WHILE CARRYING LUMBER AND FABRICATED WOOD PRODUCTS--EXCEPT FURNITURE?

        1. BELOW 10%
        2. 10-24%
        3. 25-49%
        4. 50-74%
        5. 75-100%
    BLANK REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 174.

100. PAPER: WHAT APPROXIMATE PERCENTAGE OF THE VEHICLE'S ANNUAL MILEAGE WAS ACCOUNTED FOR WHILE CARRYING PAPER AND PAPER PRODUCTS?

1. BELOW 10%
2. 10-24%
3. 25-49%
4. 50-74%
5. 75-100%
BLANK   REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
           COLUMN 175.

101. CHEM: WHAT APPROXIMATE PERCENTAGE OF THE VEHICLE'S ANNUAL MILEAGE
             WAS ACCOUNTED FOR WHILE CARRYING CHEMICALS AND/OR DRUGS
             (INCLUDING FERTILIZERS, PESTICIDES, COSMETICS, PAINTS, ETC.)?

1. BELOW 10%
2. 10-24%
3. 25-49%
4. 50-74%
5. 75-100%
BLANK   REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
           COLUMN 176.

102. PETRO: WHAT APPROXIMATE PERCENTAGE OF THE VEHICLE'S ANNUAL MILEAGE
              WAS ACCOUNTED FOR WHILE CARRYING PETROLEUM AND PETROLEUM
              PRODUCTS--INCLUDING PAVING AND ROOFING MATERIALS?

1. BELOW 10%
2. 10-24%
3. 25-49%
4. 50-74%
5. 75-100%
BLANK   REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
           COLUMN 177.

103. PLAST: WHAT APPROXIMATE PERCENTAGE OF THE VEHICLE'S ANNUAL MILEAGE
              WAS ACCOUNTED FOR WHILE CARRYING PLASTICS AND/OR RUBBER
              PRODUCTS?

1. BELOW 10%
2. 10-24%
3. 25-49%
4. 50-74%
5. 75-100%
BLANK   REPRESENTS UNKNOWN.

50

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
          COLUMN 178.

104. PRMTL: WHAT APPROXIMATE PERCENTAGE OF THE VEHICLE'S ANNUAL MILEAGE
             WAS ACCOUNTED FOR WHILE CARRYING PRIMARY METAL PRODUCTS--PIPES,
             INGOTS, BILLETS, SHEETS, ETC.?

                         1. BELOW 10%
                         2. 10-24%
                         3. 25-49%
                         4. 50-74%
                         5. 75-100%
                    BLANK REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
          COLUMN 179.

105. FBMTL: WHAT APPROXIMATE PERCENTAGE OF THE VEHICLE'S ANNUAL MILEAGE
             WAS ACCOUNTED FOR WHILE CARRYING FABRICATED METAL PRODUCTS
             (EXCEPT MACHINERY OR TRANSPORTATION EQUIPMENT)?

                         1. BELOW 10%
                         2. 10-24%
                         3. 25-49%
                         4. 50-74%
                         5. 75-100%
                    BLANK REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
          COLUMN 180.

106. MACHN: WHAT APPROXIMATE PERCENTAGE OF THE VEHICLE'S ANNUAL MILEAGE
             WAS ACCOUNTED FOR WHILE CARRYING MACHINERY--ELECTRICAL OR
             NONELECTRICAL AND ELECTRONIC?

                         1. BELOW 10%
                         2. 10-24%
                         3. 25-49%
                         4. 50-74%
                         5. 75-100%
                    BLANK REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
          COLUMN 181.

107. TEQUI: WHAT APPROXIMATE PERCENTAGE OF THE VEHICLE'S ANNUAL MILEAGE
             WAS ACCOUNTED FOR WHILE CARRYING TRANSPORTATION EQUIPMENT
             (INCLUDING COMPLETE VEHICLES) AND PARTS?

1. BELOW 10%
2. 10-24%
3. 25-49%
4. 50-74%
5. 75-100%
BLANK   REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
            COLUMN 182.

108. FURN: WHAT APPROXIMATE PERCENTAGE OF THE VEHICLE'S ANNUAL MILEAGE
             WAS ACCOUNTED FOR WHILE CARRYING FURNITURE (WOOD OR NONWOOD)
             AND/OR HARDWARE--NOT INVOLVED IN HOUSEHOLD MOVING.

1. BELOW 10%
2. 10-24%
3. 25-49%
4. 50-74%
5. 75-100%
BLANK   REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
            COLUMN 183.

109. GLASS: WHAT APPROXIMATE PERCENTAGE OF THE VEHICLE'S ANNUAL MILEAGE
              WAS ACCOUNTED FOR WHILE CARRYING GLASS PRODUCTS?

1. BELOW 10%
2. 10-24%
3. 25-49%
4. 50-74%
5. 75-100%
BLANK   REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
            COLUMN 184.

110. TEXTL: WHAT APPROXIMATE PERCENTAGE OF THE VEHICLE'S ANNUAL MILEAGE
              WAS ACCOUNTED FOR WHILE CARRYING TEXTILES AND APPARELS--FIBERS,
              LEATHER GOODS, CARPETS, CLOTHING, ETC.

1. BELOW 10%
2. 10-24%
3. 25-49%
4. 50-74%
5. 75-100%
BLANK   REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
          COLUMN 185.

111. MSMFG: WHAT APPROXIMATE PERCENTAGE OF THE VEHICLE'S ANNUAL MILEAGE
             WAS ACCOUNTED FOR WHILE CARRYING MISCELLANEOUS PRODUCTS OF
             MANUFACTURING--INCLUDING PHOTOGRAPHIC GOODS, WATCHES, CLOCKS,
             JEWELRY AND TOYS?

             1. BELOW 10%
             2. 10-24%
             3. 25-49%
             4. 50-74%

             5. 75-100%
          BLANK   REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
          COLUMN 186.

112. MOVNG: WHAT APPROXIMATE PERCENTAGE OF THE VEHICLE'S ANNUAL MILEAGE
             WAS ACCOUNTED FOR BY THE MOVING OF HOUSEHOLD FURNITURE--FROM
             HOMES, OFFICES, ETC.--UNDER CONTRACT?

             1. BELOW 10%
             2. 10-24%
             3. 25-49%
             4. 50-74%
             5. 75-100%
          BLANK   REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
          COLUMN 187.

113. TOOLS: WHAT APPROXIMATE PERCENTAGE OF THE VEHICLE'S ANNUAL MILEAGE
             WAS ACCOUNTED FOR WHILE CARRYING MISCELLANEOUS TOOLS AND/OR
             PARTS FOR SPECIALIZED USE, AS IN A CRAFTSMAN'S VEHICLE--TRAVELING
             WORKSHOP FOR PLUMBERS, CARPENTERS, ROAD SERVICE CREWS, ETC.?

             1. BELOW 10%
             2. 10-24%
             3. 25-49%
             4. 50-74%
             5. 75-100%
          BLANK   REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
          COLUMN 188.

114. MXCAR: WHAT APPROXIMATE PERCENTAGE OF THE VEHICLE'S ANNUAL MILEAGE WAS ACCOUNTED FOR WHILE CARRYING MIXED CARGO, GENERAL FREIGHT (INCLUDING THE DELIVERY OF SMALL PACKAGES)?

    1. BELOW 10%
    2. 10-24%
    3. 25-49%
    4. 50-74%
    5. 75-100%
BLANK REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 189.

115. REFUS: WHAT APPROXIMATE PERCENTAGE OF THE VEHICLE'S ANNUAL MILEAGE WAS ACCOUNTED FOR WHILE CARRYING SCRAP, GARBAGE, TRASH, SEPTIC TANK WASTE?

    1. BELOW 10%
    2. 10-24%
    3. 25-49%
    4. 50-74%
    5. 75-100%
BLANK REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 190.

116. INDWR: WHAT APPROXIMATE PERCENTAGE OF THE VEHICLE'S ANNUAL MILEAGE WAS ACCOUNTED FOR WHILE CARRYING INDUSTRIAL WATER?

    1. BELOW 10%
    2. 10-24%
    3. 25-49%
    4. 50-74%
    5. 75-100%
BLANK REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 191.

117. HWAST: WHAT APPROXIMATE PERCENTAGE OF THE VEHICLE'S ANNUAL MILEAGE WAS ACCOUNTED FOR WHILE CARRYING HAZARDOUS WASTE?

    1. BELOW 10%
    2. 10-24%
    3. 25-49%
    4. 50-74%

5. 75-100%
BLANK   REPRESENTS UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 192.

118. HAZMA: AT ANY TIME DURING 1987 WAS THIS VEHICLE (OR COMBINATION) USED TO HAUL HAZARDOUS MATERIALS IN QUANTITIES LARGE ENOUGH TO REQUIRE A SPECIAL PLACARD PLACED ON THE VEHICLE DUE TO THE "CODE OF FEDERAL REGULATIONS, TITLE 49, TRANSPORTATION"?

1. YES
2. NO

ALL OTHER CHARACTERS AND BLANK REPRESENT UNKNOWN.

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN COLUMN 193.

119. NFLET: TOTAL NUMBER OF TRUCKS AND/OR TRAILERS YOU OWN AND/OR OPERATE AT THE SAME HOME BASE LISTED PREVIOUSLY.

01. 1
02. 2-5
03. 6-19
04. 20-99
05. 100-499
06. 500 AND OVER
BLANK   REPRESENTS UNKNOWN

NOTE: SIZE OF DATA FIELD IS 2 CHARACTERS. DATA FIELD BEGINS IN COLUMN 194.

120. TIUGW: THIS VALUE INDICATES THE GROSS WEIGHT OF THE VEHICLE BASED ON AVERAGE WEIGHT AND RECODED TO TIUS SPECIFICATIONS (POUNDS).

01. 6000 OR LESS
02. 6001-10000
03. 10001-14000
04. 14001-16000
05. 16001-19500
06. 19501-26000
07. 26001-33000
08. 33001-40000
09. 40001-50000
10. 50001-60000
11. 60001-80000
12. 80001-100000

13. 100001-130000
14. 130001 AND OVER
BLANK   REPRESENTS UNKNOWN

NOTE: SIZE OF DATA FIELD IS 2 CHARACTERS. DATA FIELD BEGINS IN
COLUMN 196.

121. VEHSZ: VEHICLE SIZE CLASS CODE. BASED ON AVERAGE WEIGHT (POUNDS).

1. 10000 OR LESS
2. 10001-19500
3. 19501-26000
4. 26001 AND OVER
BLANK   REPRESENTS UNKNOWN

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
COLUMN 198.

122. AREAO: THIS VALUE INDICATES THE AREA OF OPERATION OF THE VEHICLE.

1. GREATEST PERCENTAGE OF MILES TRAVELED OFF-ROAD
2. GREATEST PERCENTAGE OF MILES TRAVELED WITHIN A 50 MILE
RADIUS OF HOME BASE
3. GREATEST PERCENTAGE OF MILES TRAVELED WITHIN A 50-200
MILES RADIUS OF HOME BASE
4. GREATEST PERCENTAGE OF MILES TRAVELED BEYOND A 200
MILES RADIUS FROM HOME BASE
BLANK   REPRESENTS UNKNOWN

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
COLUMN 199.

123. MSAIO: MSA INDICATOR. IS THE HOME BASE OF THE VEHICLE LOCATED WITHIN A
METROPOLITAN STATISTICAL AREA? NOTE: IF THE HOME BASE WAS NOT
REPORTED THEN THE REGISTRATION MAILING ADDRESS WAS USED TO
CODE MSAIO. (CAUTION: DATA USERS SHOULD USE CAUTION WHEN USING
THIS DATA ITEM BECAUSE NO PROVISIONS WERE MADE IN THE SAMPLE
DESIGN TO ESTIMATE ANY DEGREE OF RELIABILITY AT THE MSA LEVEL
FOR TIUS OR THE NTACS.)

1. NO
2. YES
BLANK   REPRESENTS UNKNOWN

NOTE: SIZE OF DATA FIELD IS 1 CHARACTER. DATA FIELD BEGINS IN
COLUMN 200.

DATA ITEM	DATA FIELD BEGINS IN COLUMN	DATA ITEM	DATA FIELD BEGINS IN COLUMN
124. RI_STOWN	201	162. RI_LVAML	239
125. RI_HWRID	202	163. RI_FRMPR	240
126. RI_DISPZ	203	164. RI_PRFOD	241
127. RI_VEHTP	204	165. RI_MINPR	242
128. RI_BODTP	205	166. RI_BLDGM	243
129. RI_OPCLS	206	167. RI_LOGPR	244
130. RI_MJUSE	207	168. RI_LUMBE	245
131. RI_POFFR	208	169. RI_PAPER	246
132. RI_PLOCL	209	170. RI_CHEM	247
133. RI_PSHRT	210	171. RI_PETRO	248
134. RI_PLONG	211	172. RI_PLAST	249
135. RI_PNOLD	212	173. RI_PRMTL	250
136. RI_ACQYR	213	174. RI_FBMTL	251
137. RI_OBTAN	214	175. RI_MACHN	252
138. RI_HWLEA	215	176. RI_TEQUI	253
139. RI_HWLNG	216	177. RI_FURN	254
140. RI_OWNLS	217	178. RI_GLASS	255
141. RI_LNGTH	218	179. RI_TEXTL	256
142. RI_EMPWT	219	180. RI_MSMFG	257
143. RI_AVGWT	220	181. RI_MOVNG	258
144. RI_MAXWT	221	182. RI_TOOLS	259
145. RI_ANMIL	222	183. RI_MXCAR	260
146. RI_LTMIL	223	184. RI_REFUS	261
147. RI_MPG	224	185. RI_INDWR	262
148. RI_BASTA	225	186. RI_HWAST	263
149. RI_POBST	226	187. RI_HAZMA	264
150. RI_HSPWR	227		
151. RI_CID	228		
152. RI_ENGTP	229		
153. RI_PMCAR	230		
154. RI_PINDP	231		
155. RI_PLESE	232		
156. RI_PINTE	233		
157. RI_PINTR	234		
158. RI_PLOCJ	235		
159. RI_PCNTR	236		
160. RI_PCOMN	237		
161. RI_PEXEM	238		

SECTION 2

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.

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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 of Appendix A) selected from the TIUS universe of approximately 45,393,671 trucks (Table A of Appendix 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[1] $\leq$ 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 of Appendix A).

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)

---

[1] Gross Vehicle Weight rating (GVW) is the weight of a vehicle when loaded to its capacity.

3.   1987 TIUS expansion factor

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.   <u>Preparation of the Frame</u>

The 103,737 trucks (Table D of Appendix A) 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. <u>Sample Size</u>

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 Appendix A). 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 (excluding new trucks registered after July 1, 1987) is approximately 43,375,733 (Table G of Appendix A).

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 H of Appendix A.

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).

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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

Information was collected about the characteristics of all selected trucks operating during the NTACS period. Separate questionnaires were developed for short-haul commodity-carrying and non-commodity-carrying vehicles (NTACS-1) and for long-haul commodity-carrying vehicles (NTACS-2). (Section 3 displays copies of both questionnaires.) The personal transportation truck respondents were instructed to skip certain data items.

The following information was collected:

A.   Physical and operational characteristics of the vehicle during the previous 12-month period (Section A of the NTACS Questionnaire).

B.   Detailed operational characteristics of the vehicle for a specific sample day(s) and the past 12 months (Section B of the NTACS Questionnaire).

C.   Trip-specific information made by the vehicle for a specific sample day(s) and trip-specific information made by the vehicle prior to and after the specific sample day(s) (Sections C and D of the NTACS Questionnaire).

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.

VIII. 1990 NTACS Public Use File

The lowest level of geographic detail is the Census geographic divisions (see Appendix G).

To avoid potential disclosures and a direct link to the existing 1987 TIUS Public Use Tape, certain fields have been recoded.

Each sampling unit in subfile 1 is assigned an adjusted expansion factor XPFAN that can be used to inflate the NTACS sample data in subfile 1 and subfile 3 to NTACS universe levels. Because more than half of the trucks represented in subfiles 1 and 3 did not report sample day one data, each truck in subfile 2 is assigned a different adjusted expansion factor XPFD1 that can be used to inflate the NTACS sample data in subfile 2 to NTACS universe levels. For more on the development of these expansion factors, see Sections 1 and 4.

SECTION 3

THE QUESTIONNAIRES
- 1990 NTACS-1
- 1990 NTACS-2
- Census Bureau's 1987 TC-9501 (TIUS)
- Census Bureau's 1987 TC-9502 (TIUS)

This Section contains copies of the two 1987 TIUS questionnaires and the two 1990 NTACS questionnaires. 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.

No NTACS sample day two data are included in the 1990 NTACS Public Use File because of sparseness.

FORM **NTACS-1**
(6-14-89)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

NATIONWIDE TRUCK ACTIVITY AND COMMODITY SURVEY

REGISTRATION INFORMATION

100 Vehicle Identification Number (VIN)	101 Make of vehicle	102 Year	103 State

104 Sample week	105 Sample day	106 Substitute day

Please complete the form and RETURN TO →

**BUREAU OF THE CENSUS
1201 East Tenth Street
Jeffersonville, IN 47134**

BE A PART OF AMERICA'S TRANSPORTATION PLANS FOR THE 1990's AND BEYOND!

- 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:
  - New highways
  - Terminal facilities
  - Highway maintenance and repair

- Your vehicle identified in the **Registration Information Section** above was selected in a scientific sample of vehicles to represent the country's truck population.

- Please take some of your valuable time to complete this form for the sample day indicated in the box above.

- 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.

- Please return this questionnaire immediately after your Sample Day.

Please read before completing this form

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.

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 (301) 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.

In correspondence pertaining to this report, please refer to this Census File Number (CFN).

(Please correct any error in name and address including ZIP Code)

a. Is the vehicle still in your possession? 110 ☐₁ YES – Are you the ⌐
   111 ☐₁ Owner? ⎫ SKIP to Section A on
      ☐₂ Lessee? ⎭ page 2 and continue with questionnaire

   ☐₂ NO – *Continue with items b–d*

b. When did you dispose of this vehicle? *Enter figures only*

	112	Month	Year

c. How did you dispose of this vehicle?

113
☐₁ Sold it (or gave it away)   ☐₂ Junked, scrapped, or otherwise destroyed   ☐₃ Returned to leasing company   ☐₄ Other – *Specify* ⌐

d. Who is the current owner of this vehicle?   114 ☐ Unknown

115 Name	116 Address (Number and Street)

117 City	118 State	119 ZIP Code

If this vehicle is no longer in your possession, please sign on page 11 and return the questionnaire immediately.

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Section A — Vehicle Information

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

¹²⁰ 1 ☐ YES

2 ☐ NO

¹²¹ 1 ☐ Idle   3 ☐ Dismantled
2 ☐ Wrecked   4 ☐ Other — *Specify* _____

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

¹²² _____ 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?

¹²⁷ _____ Miles *(Estimates are acceptable)*

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

¹²⁸ _____ States

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

¹²⁹ (1) _____

¹³⁰ (2) _____

¹³¹ (3)

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

¹³² 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?

¹⁴⁵ 1 ☐ YES   2 ☐ NO

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

a. Private fuel dump? . . . .

¹⁴⁶ _____ %

b. Gas station (truck stop, etc.)? . . . .

¹⁴⁷ _____ %

4. SAMPLE WEEK

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)

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	¹⁴⁸	¹⁴⁹	¹⁵⁰	¹⁵¹	¹⁵²	¹⁵³	¹⁵⁴
	1 ☐ YES	1 ☐ YES	1 ☐ YES	1 ☐ YES	1 ☐ YES	1 ☐ YES	1 ☐ YES
	2 ☐ NO	2 ☐ NO	2 ☐ NO	2 ☐ NO	2 ☐ NO	2 ☐ NO	2 ☐ NO

FORM NTACS-1 (6-14-89)   Page 2

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) 763–1744 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 ☐	164 ☐
b. Contract carrier	165 ☐	167 ☐
c. Common carrier	168 ☐	170 ☐
d. Other business use	171 ☐	173 ☐

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*		
a. Straight truck with 4 tires without trailer	174 ☐	176 ☐
b. Straight truck with 4 tires pulling trailer(s)	177 ☐	179 ☐
c. Straight truck with 6 or more tires without trailer	180 ☐	182 ☐
d. Straight truck with 6 or more tires pulling trailer(s)	183 ☐	185 ☐
e. Truck-tractor (power unit) pulling trailer(s)	186 ☐	188 ☐
f. Truck-tractor without trailer	189 ☐	191 ☐
g. Other — *Specify in the columns* ⟶	192 ☐	194 ☐

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 ☐	197 ☐
b. Utility and other trailers less than 20 feet used with straight truck		
(1) One axle on trailer	198 ☐	200 ☐
(2) Two axles on trailer	201 ☐	203 ☐
(3) Three or more axles on trailer	204 ☐	206 ☐
c. One full trailer used with straight truck		
(1) Two axles on trailer	207 ☐	209 ☐
(2) Three axles on trailer	210 ☐	212 ☐
(3) Four or more axles on trailer	213 ☐	215 ☐
d. One semi-trailer		
(1) One axle on trailer	216 ☐	218 ☐
(2) Two axles on trailer	219 ☐	221 ☐
(3) Three or more axles on trailer	222 ☐	224 ☐
e. Two trailers, one semi- and one full		
(1) Three axles on two trailers	225 ☐	227 ☐
(2) Four axles on two trailers	228 ☐	230 ☐
(3) Five axles on two trailers	231 ☐	233 ☐
(4) Six or more axles on two trailers	234 ☐	236 ☐
f. Three trailers, one semi- and two full		
(1) Five axles on three trailers	237 ☐	239 ☐
(2) Six axles on three trailers	240 ☐	242 ☐
(3) Seven axles on three trailers	243 ☐	245 ☐
(4) Eight or more axles on three trailers	246 ☐	248 ☐
g. Other — *Please describe in detail the number of trailers and axles on those trailers. Specify in the columns* ⟶	249 ☐	251 ☐

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	Past 12 months
A. PLATFORM TYPES, includes flatbeds, stakes, and flatbeds with added devices, and low boys (goosenecks) .	252 ☐	254 ☐
B. PICKUP	255 ☐	257 ☐
C. PANEL OR COMPACT VAN	258 ☐	260 ☐
D. MINI-VAN, UTILITY, STATION WAGON (Bronco, Blazer, Jeep, etc.)	261 ☐	263 ☐
E. VAN TYPES, includes enclosed vans, open top vans, drop frame vans, refrigerated, nonrefrigerated, and multistop and high cubes	264 ☐	266 ☐
F. SPECIALIZED USE TRUCKS		
1. Automobile or boat transport	267 ☐	269 ☐
2. Beverage truck	270 ☐	272 ☐
3. Removable dry container on trailer chassis	273 ☐	275 ☐
4. Removable liquid container on trailer chassis	276 ☐	278 ☐
5. Other cargo container chassis	279 ☐	281 ☐
6. Concrete mixer	282 ☐	284 ☐
7. Dump truck	285 ☐	287 ☐
8. Grain bodies (including hoppers, grain boxes)	288 ☐	290 ☐
9. Garbage truck	291 ☐	293 ☐
10. Livestock truck, including livestock drop frame	294 ☐	296 ☐
11. Pole, logging, or pipe truck	297 ☐	299 ☐
12. Tank truck for dry bulk	300 ☐	302 ☐
13. Tank truck for liquids or gases (nonhazardous materials)	303 ☐	305 ☐
14. Tank truck for liquids or gases (hazardous materials) — Indicate type (from placard on tank)	306 ☐	308 ☐
a. MC-307	309 ☐	311 ☐
b. MC-331	312 ☐	314 ☐
c. MC-312	315 ☐	317 ☐
d. MC-337	318 ☐	320 ☐
e. MC-306	321 ☐	323 ☐
15. Utility truck	324 ☐	326 ☐

Note — *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.*

	Sample day	Past 12 months
G. Other — *Specify in the columns* ——————→	327 ☐	329 ☐

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)*	401 ____ / ____ / ____ 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? (1)	During the sample day when vehicle was at its maximum weight? (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 ☐ Single shipments (Truck-load) 2 ☐ 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 ☐ YES 2 ☐ 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 ☐ 12:01 a.m. – 4:00 a.m. 06 ☐ 10:01 a.m. – 4:00 p.m. 02 ☐ 4:01 a.m. – 6:00 a.m. 05 ☐ 4:01 p.m. – 6:00 p.m. 03 ☐ 6:01 a.m. – 8:00 a.m. 07 ☐ 6:01 p.m. – 8:00 p.m. 04 ☐ 8:01 a.m. – 10:00 a.m. 08 ☐ 8:01 p.m. – 12:00 a.m.

COMMODITY REFERENCE LIST FOR USE IN ITEMS 9(e), (9f), 13(c), AND 14(d)
This is a list of products, materials, and equipment the vehicle may have carried.

Part A — HAZARDOUS MATERIALS	Hazmat code
Flammable liquids	41
Combustible liquids	42
Corrosive liquids	43
Poison B solids	44
Poison B liquids	45
Flammable solids	46
Oxidizers	47
Flammable gas	48
Nonflammable gas	49
Poison A	50
Corrosive solids	51
Explosives, A or B	52
Blasting agents	53
Radioactive materials	54
ORM — A, B, or C	55
ORM E	56
Hazardous materials not listed above — Specify ⇗	57

Part B — PRODUCTS, EQUIPMENT, MATERIALS, ETC.	Commodity code
Agricultural and Food Products	
Live animals — cattle, horses, poultry, hogs, fish, and other marine products, etc.	15
Fresh farm products — grain, crops, flowers, nursery stock, raw milk, raw tobacco, etc.	16
Processed foods — canned goods, prepared meats, frozen foods, beverages, bottled water, dairy products, tobacco products, etc.	17
Mining Products, unrefined — crude oil, coal, and metal ores	18
Building materials — gravel, sand, concrete, glass, and stone, etc.	19
Forestry, Wood, and Paper Products	
Logs and forest products — Except cut lumber and fabricated wood products, (see below) barks or gums	20
Lumber and fabricated wood products — Except furniture	21
Paper, printed matter, and paper products	22
Chemicals, Petroleum, and Allied Products	
Chemicals and/or drugs — Including fertilizers, pesticides, cosmetics, paints, etc.	23
Petroleum, petroleum products, paving, and asphalt or tar cements	24
Plastics and/or rubber products	25

Metals and Metal Products	Commodity code
Primary metal products — pipes, ingots, billets, metal sheets, etc.	26
Fabricated metal products and bolts and nuts — Except machinery or transportation equipment (see below)	27
Machinery — electrical or nonelectrical	28
Transportation equipment (including complete vehicles) and parts	29
Other Manufactured Products	
Furniture (wood and nonwood) and/or fixtures — not involved in household moving	30
Textiles and apparels — fibers, leather goods, carpets, clothing, etc.	31
Miscellaneous products of manufacturing — Including photographic goods, watches, clocks, jewelry and toys	32
Miscellaneous	
Moving of household and office furniture, including exhibits — from home, offices, etc., under contract	33
Mixed cargo, general freight, personal goods, mail and express traffic, and small packaged freight	34
Tools/parts for specialized use as in craftsman's vehicle	35
Scrap, garbage, trash	36
Industrial water	37
Other — Please describe in detail	38
	39
▲ NO LOAD CARRIED — Vehicle empty	40

Type of Place Codes
(Refer to these codes for completing items 9(b), 13(b), and 14(b))

A — Railroad facility (servicing facility)
B — Railroad facility (pickup or delivery of rail shipment)
C — Airport (servicing facility)
D — Airport (pickup or delivery of air shipment)
E — Harbor or port facility (servicing facility)
F — Harbor/port facility (pickup or delivery of water shipment)
G — Truck/bus terminal not part of airport, harbor, or railroad
H — Warehouse
I — Tank farm
J — Power plant/distribution station
K — House, apartment building
L — Forest, farm, field, farm building, fisheries
M — Grain elevator, stockyard
N — Mine, quarry, gravel pit, stone crusher
O — Construction site
P — Manufacturing facility or assembly plant
Q — Store or other retail or service outlet
R — Office building, school, hospital, other public facilities
S — Park or other recreational facility
T — Other

Section C – Vehicle Use – Continued

9. Enter below the following data for EACH STOP during the entire SAMPLE DAY only. Exclude stops for food, fuel or rest.

SAMPLE DAY STOPS

If traveling at the beginning of sample day, enter where vehicle was at 12:01 a.m. for starting place.

Type of place code — Enter the type of place code from above. (b)

Miles from previous stop? (c)

What was the purpose of the stop? Mark (X) all that apply (d)

From the reference list of commodities, on page 8 enter the code and weight for the items picked up and/or delivered at each stop (if any). (See instruction sheet)

Items delivered (e): Commodity code | Hazmat code | Weight (lbs.)
Items picked up (f): Commodity code | Hazmat code | Weight (lbs.)

(a)

9.0 Starting place — Date (Mo/Day) — Departure time a.m./p.m. — City — County — State — Loaded vehicle wt. at departure — No. of trailers attached
- 1 ☐ Base
- 2 ☐ Pick up items
- 3 ☐ Pick up trailer
- 4 ☐ Delivery
- 5 ☐ Drop off trailer
- 6 ☐ Other or in transit – Specify ↗

Stop 1 — Arrival time a.m./p.m. — Departure time a.m./p.m. — City — County — State — Loaded vehicle wt. at departure — No. of trailers attached — From starting place
- 1 ☐ Return to base
- 2 ☐ Pick up items
- 3 ☐ Pick up trailer
- 4 ☐ Delivery
- 5 ☐ Drop off trailer
- 6 ☐ Other – Specify ↗

Stop 2 — Arrival time a.m./p.m. — Departure time a.m./p.m. — City — County — State — Loaded vehicle wt. at departure — No. of trailers attached — From stop 1
- 1 ☐ Return to base
- 2 ☐ Pick up items
- 3 ☐ Pick up trailer
- 4 ☐ Delivery
- 5 ☐ Drop off trailer
- 6 ☐ Other – Specify ↗

Stop 3 — Arrival time a.m./p.m. — Departure time a.m./p.m. — City — County — State — Loaded vehicle wt. at departure — No. of trailers attached — From stop 2
- 1 ☐ Return to base
- 2 ☐ Pick up items
- 3 ☐ Pick up trailer
- 4 ☐ Delivery
- 5 ☐ Drop off trailer
- 6 ☐ Other – Specify ↗

Stop 4 — Arrival time a.m./p.m. — Departure time a.m./p.m. — City — County — State — Loaded vehicle wt. at departure — No. of trailers attached — From stop 3
- 1 ☐ Return to base
- 2 ☐ Pick up items
- 3 ☐ Pick up trailer
- 4 ☐ Delivery
- 5 ☐ Drop off trailer
- 6 ☐ Other – Specify ↗

Stop 5 — Arrival time a.m./p.m. — Departure time a.m./p.m. — City — County — State — Loaded vehicle wt. at departure — No. of trailers attached — From stop 4
- 1 ☐ Return to base
- 2 ☐ Pick up items
- 3 ☐ Pick up trailer
- 4 ☐ Delivery
- 5 ☐ Drop off trailer
- 6 ☐ Other – Specify ↗

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ADDITIONAL SAMPLE DAY STOPS

(a)

Stop	Date	Time of arrival (a.m./p.m.)	Departure time (a.m./p.m.)
City		County	State
Loaded vehicle wt. at departure		No. of trailers attached	

(b) Type of place code — Enter the type of place code from p. 6

(c) Miles from previous stop?

(d) What was the purpose of the stop? Mark (X) all that apply

1 ☐ Return to base
2 ☐ Pick up items
3 ☐ Pick up trailer
4 ☐ Delivery
5 ☐ Drop off trailer
6 ☐ Other – Specify ↗

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). (See instructions above)

(e) Items delivered

Commodity code	Hazmat code	Weight (lbs.)

(f) Items picked up

Commodity code	Hazmat code	Weight (lbs.)

Stop 6
Stop 7
Stop 8
Stop 9
Stop 10
Stop 11

ADDITIONAL SAMPLE DAY STOPS

(a)	Type of place code — Enter the type of place code from p. 6 (b)	Was from previous stop? (c)	What was the purpose of the stop? Mark (X) all that apply (d)	Items delivered — 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). (See instruction sheet) (e)			Items picked up (f)		
				Commodity code	Hazmat code	Weight (lbs.)	Commodity code	Hazmat code	Weight (lbs.)

Stop 12 Date | Time of arrival a.m. p.m. | Departure time a.m. p.m.
City | County | State
Loaded vehicle wt. at departure | No. of trailers attached

Purpose (d):
1. ☐ Return to base
2. ☐ Pick up items
3. ☐ Pick up trailer
4. ☐ Delivery
5. ☐ Drop off trailer
6. ☐ Other — Specify ↗ _____

Stop 13 Date | Time of arrival a.m. p.m. | Departure time a.m. p.m.
City | County | State
Loaded vehicle wt. at departure | No. of trailers attached

Purpose (d):
1. ☐ Return to base
2. ☐ Pick up items
3. ☐ Pick up trailer
4. ☐ Delivery
5. ☐ Drop off trailer
6. ☐ Other — Specify ↗ _____

Stop 14 Date | Time of arrival a.m. p.m. | Departure time a.m. p.m.
City | County | State
Loaded vehicle wt. at departure | No. of trailers attached

Purpose (d):
1. ☐ Return to base
2. ☐ Pick up items
3. ☐ Pick up trailer
4. ☐ Delivery
5. ☐ Drop off trailer
6. ☐ Other — Specify ↗ _____

Stop 15 Date | Time of arrival a.m. p.m. | Departure time a.m. p.m.
City | County | State
Loaded vehicle wt. at departure | No. of trailers attached

Purpose (d):
1. ☐ Return to base
2. ☐ Pick up items
3. ☐ Pick up trailer
4. ☐ Delivery
5. ☐ Drop off trailer
6. ☐ Other — Specify ↗ _____

Stop 16 Date | Time of arrival a.m. p.m. | Departure time a.m. p.m.
City | County | State
Loaded vehicle wt. at departure | No. of trailers attached

Purpose (d):
1. ☐ Return to base
2. ☐ Pick up items
3. ☐ Pick up trailer
4. ☐ Delivery
5. ☐ Drop off trailer
6. ☐ Other — Specify ↗ _____

Stop 17 Date | Time of arrival a.m. p.m. | Departure time a.m. p.m.
City | County | State
Loaded vehicle wt. at departure | No. of trailers attached

Purpose (d):
1. ☐ Return to base
2. ☐ Pick up items
3. ☐ Pick up trailer
4. ☐ Delivery
5. ☐ Drop off trailer
6. ☐ Other — Specify ↗ _____

ADDITIONAL SAMPLE DAY STOPS

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). (See instruction sheet)

				Items delivered (e)			Items picked up (f)		
ADDITIONAL SAMPLE DAY STOPS (a)	**Type of place code** Enter the type of place code from p. 6 (b)	**Miles from previous stop?** (c)	**What was the purpose of the stop?** Mark (X) all that apply (d)	Commodity code	Hazmat code	Weight (lbs.)	Commodity code	Hazmat code	Weight (lbs.)

Stop 18 Date | Time of arrival a.m. p.m. | Departure time a.m. p.m.
City | County | State
Loaded vehicle wt. at departure | No. of trailers attached
(d): 1 ☐ Return to base 2 ☐ Pick up items 3 ☐ Pick up trailer   4 ☐ Delivery 5 ☐ Drop off trailer 6 ☐ Other – Specify

Stop 19 Date | Time of arrival a.m. p.m. | Departure time a.m. p.m.
City | County | State
Loaded vehicle wt. at departure | No. of trailers attached
(d): 1 ☐ Return to base 2 ☐ Pick up items 3 ☐ Pick up trailer   4 ☐ Delivery 5 ☐ Drop off trailer 6 ☐ Other – Specify

Stop 20 Date | Time of arrival a.m. p.m. | Departure time a.m. p.m.
City | County | State
Loaded vehicle wt. at departure | No. of trailers attached
(d): 1 ☐ Return to base 2 ☐ Pick up items 3 ☐ Pick up trailer   4 ☐ Delivery 5 ☐ Drop off trailer 6 ☐ Other – Specify

Stop 21 Date | Time of arrival a.m. p.m. | Departure time a.m. p.m.
City | County | State
Loaded vehicle wt. at departure | No. of trailers attached
(d): 1 ☐ Return to base 2 ☐ Pick up items 3 ☐ Pick up trailer   4 ☐ Delivery 5 ☐ Drop off trailer 6 ☐ Other – Specify

Stop 22 Date | Time of arrival a.m. p.m. | Departure time a.m. p.m.
City | County | State
Loaded vehicle wt. at departure | No. of trailers attached
(d): 1 ☐ Return to base 2 ☐ Pick up items 3 ☐ Pick up trailer   4 ☐ Delivery 5 ☐ Drop off trailer 6 ☐ Other – Specify

Stop 23 Date | Time of arrival a.m. p.m. | Departure time a.m. p.m.
City | County | State
Loaded vehicle wt. at departure | No. of trailers attached
(d): 1 ☐ Return to base 2 ☐ Pick up items 3 ☐ Pick up trailer   4 ☐ Delivery 5 ☐ Drop off trailer 6 ☐ Other – Specify

If vehicle made more than 23 stops, use page 12 for additional stop information

Section C — Vehicle Use — Continued

10. How many stops were made by this vehicle to each TYPE OF PLACE during the sample day? *(If the place where vehicle was stopped fits into more than one type of place, pick the one that best describes it)* Exclude stops for food, fuel, and rest.

Code	Type of place	No. of stops	Code	Type of place	No. of stops
A	Railroad facility (servicing facility)	424	K	House, apartment building	434
B	Railroad facility (pickup or delivery of rail shipment)	425	L	Forest, farm, field, farm building, fisheries	435
C	Airport (servicing facility)	426	M	Grain elevator, stockyard	436
D	Airport (pickup or delivery of air shipment)	427	N	Mine, quarry, gravel pit, stone crusher	437
E	Harbor or port facility (servicing facility)	428	O	Construction site	438
F	Harbor/port facility (pickup or delivery of water shipment)	429	P	Manufacturing facility or assembly plant	439
G	Truck/bus terminal not part of airport, harbor, or railroad	430	Q	Store or other retail or service outlet	440
H	Warehouse	431	R	Office building, school, hospital, other public facilities	441
I	Tank farm	432	S	Park or other recreational facility	442
J	Power plant/distribution station	433	T	Other	443

11. How many stops were made for food, fuel, and rest during the sample day?

444 _____ Stops

12. What was the odometer reading of the vehicle at 11:59 p.m. on the sample day?

445 _____ Miles *(Estimates are acceptable)*

13a. Where was the last pickup or delivery prior to the sample day?

446 Date		447 Departure time	a.m. p.m.
448 City	449 County		450 State
451 Loaded vehicle weight at departure		452 No. of trailers attached	

b. What type of place was this?
Enter the type of place letter code from item 10 above

453 _____ Type of place

c. *From the reference list of commodities, enter the code and weight for the items picked up or delivered: (See page 6)*

Items delivered			Items picked up		
Commodity code	Hazmat code	Weight (lbs.)	Commodity code	Hazmat code	Weight (lbs.)

14a. Where was the first pickup or delivery after the sample day?

454 Date		455 Arrival time	a.m. p.m.
456 City	457 County		458 State
459 Loaded vehicle weight at departure		460 No. of trailers attached	

b. What type of place was this?
Enter the type of place letter code from item 10 above

461 _____ Type of place

c. How many miles from last stop on the sample day?

462 _____ Miles *(Estimates are acceptable)*

d. *From the reference list of commodities, enter the code and weight for the items picked up or delivered: (See page 6)*

Items delivered			Items picked up		
Commodity code	Hazmat code	Weight (lbs.)	Commodity code	Hazmat code	Weight (lbs.)

CERTIFICATION This report is substantially accurate and has been prepared in accordance with instructions.

Name	Date			
	Telephone	Area code	Number	Extension

FORM NTACS-1 (6-14-89)

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ADDITIONAL SAMPLE DAY STOPS

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). (See instruction sheet)

(a)	Type of place code (b) Enter the type of place code from p. 6	Miles from previous stop? (c)	What was the purpose of the stop? Mark (X) all that apply (d)	Items delivered (e) Commodity code	Hazmat code	Weight (lbs.)	Items picked up (f) Commodity code	Hazmat code	Weight (lbs.)
Stop Date — Time of arrival a.m./p.m. — Departure time a.m./p.m.			1 ☐ Return to base 2 ☐ Pick up items 3 ☐ Pick up trailer 4 ☐ Delivery 5 ☐ Drop off trailer 6 ☐ Other – Specify						
City — County — State									
Loaded vehicle wt. at departure — No. of trailers attached									
Stop Date — Time of arrival a.m./p.m. — Departure time a.m./p.m.			1 ☐ Return to base 2 ☐ Pick up items 3 ☐ Pick up trailer 4 ☐ Delivery 5 ☐ Drop off trailer 6 ☐ Other – Specify						
City — County — State									
Loaded vehicle wt. at departure — No. of trailers attached									
Stop Date — Time of arrival a.m./p.m. — Departure time a.m./p.m.			1 ☐ Return to base 2 ☐ Pick up items 3 ☐ Pick up trailer 4 ☐ Delivery 5 ☐ Drop off trailer 6 ☐ Other – Specify						
City — County — State									
Loaded vehicle wt. at departure — No. of trailers attached									
Stop Date — Time of arrival a.m./p.m. — Departure time a.m./p.m.			1 ☐ Return to base 2 ☐ Pick up items 3 ☐ Pick up trailer 4 ☐ Delivery 5 ☐ Drop off trailer 6 ☐ Other – Specify						
City — County — State									
Loaded vehicle wt. at departure — No. of trailers attached									
Stop Date — Time of arrival a.m./p.m. — Departure time a.m./p.m.			1 ☐ Return to base 2 ☐ Pick up items 3 ☐ Pick up trailer 4 ☐ Delivery 5 ☐ Drop off trailer 6 ☐ Other – Specify						
City — County — State									
Loaded vehicle wt. at departure — No. of trailers attached									
Stop Date — Time of arrival a.m./p.m. — Departure time a.m./p.m.			1 ☐ Return to base 2 ☐ Pick up items 3 ☐ Pick up trailer 4 ☐ Delivery 5 ☐ Drop off trailer 6 ☐ Other – Specify						
City — County — State									
Loaded vehicle wt. at departure — No. of trailers attached									

Thank you for your cooperation!

(If you made more stops, please copy this page)

FORM **NTACS-2**
(6-14-89)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

NATIONWIDE TRUCK ACTIVITY
AND COMMODITY SURVEY

REGISTRATION INFORMATION

100 Vehicle Identification Number (VIN)	101 Make of vehicle	102 Year	103 State

104 Sample week 1	105 Sample day 1	106 Substitute day 1

107 Sample week 2	108 Sample day 2	109 Substitute day 2

Please complete this form and RETURN TO: ➤ **BUREAU OF THE CENSUS**
1201 East Tenth Street
Jeffersonville, IN 47134

BE A PART OF AMERICA'S TRANSPORTATION PLANS FOR THE 1990's AND BEYOND!

• 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:
 – New highways
 – Terminal facilities
 – Highway maintenance and repair

• Your vehicle identified in the **Registration Information Section** above was selected in a scientific sample of vehicles to represent the country's truck population.

• Please take some of your valuable time to complete this form for the sample days indicated in the box above.

• We suggest that you take this questionnaire with you in the sampled vehicle on the Sample Days, and complete Sections C and D as you perform your days' activities.

• Please return this questionnaire immediately after your Sample Day 2.

Please read before completing this form

This questionnaire covers the activities of the vehicle specified in the **Registration Information Section** above, for the specific sample days indicated. The questionnaire is divided into 4 sections, A, B, C, and D. Sections A and B request general information on the vehicle's characteristics and use. Section C, beginning on page 5, and Section D, beginning on page 9, refer to the vehicle's use on the sample days. Sections C and D contain a diary type listing to report the activities of the vehicle during the sample days.

If the vehicle did not operate on the sample day specified, use its substitute day. If the vehicle did not operate on either the sample day or its substitute day specified, but was active during the sample week, call us collect on (301) 763–1744. Do not substitute another day unless told to do so. The sample days were selected scientifically, and we want to know what the vehicle did on those particular days, even though it may not seem typical to you.

In correspondence pertaining to this report, please refer to this Census File Number (CFN).

(Please correct any error in name and address including ZIP Code)

a. Is the vehicle still in your possession? 110
  1 ☐ YES – Are you the ⌐
    111 1 ☐ **Owner?** ⎫ SKIP to Section A on
       2 ☐ **Lessee?** ⎭ page 2 and continue
                        with questionnaire
  2 ☐ NO – *Continue with items b–d*

b. When did you dispose of this vehicle? *Enter figures only*

	112	Month	Year

c. How did you dispose of this vehicle?

113
1 ☐ Sold it (or gave it away)   2 ☐ Junked, scrapped, or otherwise destroyed   3 ☐ Returned to leasing company   4 ☐ Other – *Specify* ⌐
_____

d. Who is the current owner of this vehicle? 114 ☐ Unknown

115 Name	116 Address *(Number and Street)*

117 City	118 State	119 ZIP Code

If this vehicle is no longer in your possession, please sign on page 11 and return the questionnaire immediately.

Section A — Vehicle Information

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

¹²⁰ 1 ☐ YES

2 ☐ NO ↴

¹²¹ 1 ☐ Idle   3 ☐ Dismantled

2 ☐ Wrecked   4 ☐ Other — *Specify*_____

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

¹²² _____ 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?

¹²⁷ _____ Miles *(Estimates are acceptable)*

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

¹²⁸ _____ States

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

¹²⁹ (1) _____

¹³⁰ (2) _____

¹³¹ (3) _____

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

¹³² 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?

¹⁴⁵ 1 ☐ YES   2 ☐ NO

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

a. Private fuel dump? . . . .

¹⁴⁶ _____ %

b. Gas station (truck stop, etc.)? . . . .

¹⁴⁷ _____ %

4a. SAMPLE WEEK 1

For each day of **sample week 1** (shown in the Registration Information on page 1) check "Yes" if the vehicle operated on that day; otherwise check "No."

(Operating includes traveling empty)

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	¹⁴⁸	¹⁴⁹	¹⁵⁰	¹⁵¹	¹⁵²	¹⁵³	¹⁵⁴
	1 ☐ YES	1 ☐ YES	1 ☐ YES	1 ☐ YES	1 ☐ YES	1 ☐ YES	1 ☐ YES
	2 ☐ NO	2 ☐ NO	2 ☐ NO	2 ☐ NO	2 ☐ NO	2 ☐ NO	2 ☐ NO

b. SAMPLE WEEK 2

For each day of **sample week 2** (shown in the Registration Information on page 1) check "Yes" if the vehicle operated on that day; otherwise check "No."

(Operating includes traveling empty)

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	¹⁵⁵	¹⁵⁶	¹⁵⁷	¹⁵⁸	¹⁵⁹	¹⁶⁰	¹⁶¹
	1 ☐ YES	1 ☐ YES	1 ☐ YES	1 ☐ YES	1 ☐ YES	1 ☐ YES	1 ☐ YES
	2 ☐ NO	2 ☐ NO	2 ☐ NO	2 ☐ NO	2 ☐ NO	2 ☐ NO	2 ☐ NO

Section B — Vehicle Description

The following questions relate to this vehicle's use during sample day 1, sample day 2, and the past 12 months. **If the vehicle did not operate on the sample day, use its substitute day.** If the vehicle did not operate on the sample day or substitute day, **call (301) 763–1744 collect.**

1. This truck was MOST FREQUENTLY operated as — *Mark (X) only one box in each column*	**Sample day 1**	**Sample day 2**	**Past 12 months**
a. Personal transportation	162 ☐	163 ☐	164 ☐
b. Contract carrier	165 ☐	166 ☐	167 ☐
c. Common carrier	168 ☐	169 ☐	170 ☐
d. Other business use	171 ☐	172 ☐	173 ☐

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*			
a. Straight truck with 4 tires without trailer	174 ☐	175 ☐	176 ☐
b. Straight truck with 4 tires pulling trailer(s)	177 ☐	178 ☐	179 ☐
c. Straight truck with 6 or more tires without trailer	180 ☐	181 ☐	182 ☐
d. Straight truck with 6 or more tires pulling trailer(s)	183 ☐	184 ☐	185 ☐
e. Truck-tractor (power unit) pulling trailer(s)	186 ☐	187 ☐	188 ☐
f. Truck-tractor without trailer	189 ☐	190 ☐	191 ☐
g. Other — *Specify in the columns* —	192 ☐	193 ☐	194 ☐
	_____	_____	_____

3. Indicate the kind(s) of trailer(s) pulled during each period.	*Mark (X) all that apply*	*Mark (X) all that apply*	*Mark (X) only one*
a. No trailer pulled	195 ☐	196 ☐	197 ☐
b. Utility and other trailers less than 20 feet used with straight truck			
(1) One axle on trailer	198 ☐	199 ☐	200 ☐
(2) Two axles on trailer	201 ☐	202 ☐	203 ☐
(3) Three or more axles on trailer	204 ☐	205 ☐	206 ☐
c. One full trailer used with straight truck			
(1) Two axles on trailer	207 ☐	208 ☐	209 ☐
(2) Three axles on trailer	210 ☐	211 ☐	212 ☐
(3) Four or more axles on trailer	213 ☐	214 ☐	215 ☐
d. One semi-trailer			
(1) One axle on trailer	216 ☐	217 ☐	218 ☐
(2) Two axles on trailer	219 ☐	220 ☐	221 ☐
(3) Three or more axles on trailer	222 ☐	223 ☐	224 ☐
e. Two trailers, one semi- and one full			
(1) Three axles on two trailers	225 ☐	226 ☐	227 ☐
(2) Four axles on two trailers	228 ☐	229 ☐	230 ☐
(3) Five axles on two trailers	231 ☐	232 ☐	233 ☐
(4) Six or more axles on two trailers	234 ☐	235 ☐	236 ☐
f. Three trailers, one semi- and two full			
(1) Five axles on three trailers	237 ☐	238 ☐	239 ☐
(2) Six axles on three trailers	240 ☐	241 ☐	242 ☐
(3) Seven axles on three trailers	243 ☐	244 ☐	245 ☐
(4) Eight or more axles on three trailers	246 ☐	247 ☐	248 ☐
g. Other — *Please describe in detail the number of trailers and axles on those trailers. Specify in the columns* ⟶	249 ☐	250 ☐	251 ☐
	_____	_____	_____

Section B — Vehicle Description — Continued

4. **Indicate the body type that most closely resembles the vehicle during each 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 1	Sample day 2	Past 12 months
A. PLATFORM TYPES, includes flatbeds, stakes, flatbeds with added devices, and low boys (goosenecks)	252 ☐	253 ☐	254 ☐
B. PICKUP	255 ☐	256 ☐	257 ☐
C. PANEL OR COMPACT VAN	258 ☐	259 ☐	260 ☐
D. MINI-VAN, UTILITY, STATION WAGON (Bronco, Blazer, Jeep, etc.)	261 ☐	262 ☐	263 ☐
E. VAN TYPES, includes enclosed vans, open top vans, drop frame vans, refrigerated, nonrefrigerated, and multistop and high cubes	264 ☐	265 ☐	266 ☐
F. SPECIALIZED USE TRUCKS			
1. Automobile or boat transport	267 ☐	268 ☐	269 ☐
2. Beverage truck	270 ☐	271 ☐	272 ☐
3. Removable dry container on trailer chassis	273 ☐	274 ☐	275 ☐
4. Removable liquid container on trailer chassis	276 ☐	277 ☐	278 ☐
5. Other cargo container chassis	279 ☐	280 ☐	281 ☐
6. Concrete mixer	282 ☐	283 ☐	284 ☐
7. Dump truck	285 ☐	286 ☐	287 ☐
8. Grain bodies (including hoppers, grain boxes)	288 ☐	289 ☐	290 ☐
9. Garbage truck	291 ☐	292 ☐	293 ☐
10. Livestock truck, including livestock drop frame	294 ☐	295 ☐	296 ☐
11. Pole, logging, or pipe truck	297 ☐	298 ☐	299 ☐
12. Tank truck for dry bulk	300 ☐	301 ☐	302 ☐
13. Tank truck for liquids or gases (nonhazardous materials)	303 ☐	304 ☐	305 ☐
14. Tank truck for liquids or gases (hazardous materials) — *Indicate type (from placard on tank)*	306 ☐	307 ☐	308 ☐
a. MC-307	309 ☐	310 ☐	311 ☐
b. MC-331	312 ☐	313 ☐	314 ☐
c. MC-312	315 ☐	316 ☐	317 ☐
d. MC-337	318 ☐	319 ☐	320 ☐
e. MC-306	321 ☐	322 ☐	323 ☐
15. Utility truck	324 ☐	325 ☐	326 ☐
Note — *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 vehicle.*			
G. Other — *Specify in the columns* ⟶	327 ☐	328 ☐	329 ☐

Section C — Vehicle Use

The following questions relate to the vehicle's use DURING SAMPLE DAY 1. **If the vehicle did not operate on the sample day 1, use substitute day 1.** If the vehicle did not operate on either day given, **call (301) 763-1744 collect.**

1. **Enter date used** (Enter figures only)	401 _____ / _____ / _____ Month Day Year
2. **What was the odometer reading of the vehicle at 12:01 a.m. on sample day 1?**	402 _____ Miles (Estimates are acceptable)
3a. **How many miles did the vehicle travel during sample day 1?**	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 sample day 1?**	407 _____ U.S. gallons (Estimates are acceptable)
b. **How much was paid in highway tolls during sample day 1?**	408 $ _____

5a. **What was the size of the vehicle —**	As it left the starting place on sample day 1? (1)	During sample day 1 when vehicle was at its maximum weight? (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 sample day 1?** (If the vehicle was empty the entire day, mark the box that typically applies)	419 1 ☐ Single shipments (Truck-load) 2 ☐ 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 sample day 1?**	420 1 ☐ YES 2 ☐ NO
7a. **How many employees, including owner/operators, were on board the vehicle as it left the starting place on sample day 1?**	421 _____ Employees on board
b. **How many of these employees drove the vehicle sometime during sample day 1?**	422 _____ Employees who drove
8. **Mark all boxes that include the hours during which you operated the vehicle during sample day 1.**	423 01 ☐ 12:01 a.m. – 4:00 a.m. 06 ☐ 10:01 a.m. – 4:00 p.m. 02 ☐ 4:01 a.m. – 6:00 a.m. 05 ☐ 4:01 p.m. – 6:00 p.m. 03 ☐ 6:01 a.m. – 8:00 a.m. 07 ☐ 6:01 p.m. – 8:00 p.m. 04 ☐ 8:01 a.m. – 10:00 a.m. 08 ☐ 8:01 p.m. – 12:00 a.m.

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Section C — Vehicle Use — Continued

COMMODITY REFERENCE LIST FOR USE IN ITEMS 9(e), (9f), 13(c), AND 14(d)
This is a list of products, materials, and equipment the vehicle may have carried.

Part A — HAZARDOUS MATERIALS	Hazmat code
Flammable liquids	41
Combustible liquids	42
Corrosive liquids	43
Poison B solids	44
Poison B liquids	45
Flammable solids	46
Oxidizers	47
Flammable gas	48
Nonflammable gas	49
Poison A	50
Corrosive solids	51
Explosives, A or B	52
Blasting agents	53
Radioactive materials	54
ORM — A, B, or C	55
ORM E	56
Hazardous materials not listed above —	57
Specify → ____	

Part B — PRODUCTS, EQUIPMENT, MATERIALS, ETC.	Commodity code
Agricultural and Food Products	
Live animals — cattle, horses, poultry, hogs, fish, and other marine products, etc.	15
Fresh farm products — grain, crops, flowers, nursery stock, raw milk, raw tobacco, etc.	16
Processed foods — canned goods, prepared meats, frozen foods, beverages, bottled water, dairy products, tobacco products, etc.	17
Mining Products, unrefined — crude oil, coal, and metal ores	18
Building materials — gravel, sand, concrete, glass, and stone, etc.	19
Forestry, Wood, and Paper Products	
Logs and forest products — Except cut lumber and fabricated wood products, (see below) barks or gums	20
Lumber and fabricated wood products — Except furniture	21
Paper, printed matter, and paper products	22
Chemicals, Petroleum, and Allied Products	
Chemicals and/or drugs — Including fertilizers, pesticides, cosmetics, paints, etc.	23
Petroleum, petroleum products, paving, and asphalt or tar cements	24
Plastics and/or rubber products	25

	Commodity code
Metals and Metal Products	
Primary metal products — pipes, ingots, billets, metal sheets, etc.	26
Fabricated metal products and bolts and nuts — Except machinery or transportation equipment (see below)	27
Machinery — electrical or nonelectrical	28
Transportation equipment (including complete vehicles) and parts	29
Other Manufactured Products	
Furniture (wood and nonwood) and/or fixtures — not involved in household moving	30
Textiles and apparels — fibers, leather goods, carpets, clothing, etc.	31
Miscellaneous products of manufacturing — Including photographic goods, watches, clocks, jewelry and toys	32
Miscellaneous	
Moving of household and office furniture, including exhibits — from home, offices, etc., under contract	33
Mixed cargo, general freight, personal goods, mail and express traffic, and small packaged freight	34
Tools/parts for specialized use as in craftsman's vehicle	35
Scrap, garbage, trash	36
Industrial water	37
Other — Please describe in detail _____	38
	39
▲ NO LOAD CARRIED — Vehicle empty	40

Type of Place Codes
(Refer to these codes for completing items 9(b), 13(b), and 14(b))

A — Railroad facility (servicing facility)
B — Railroad facility (pickup or delivery of rail shipment)
C — Airport (servicing facility)
D — Airport (pickup or delivery of air shipment)
E — Harbor or port facility (servicing facility)
F — Harbor/port facility (pickup or delivery of water shipment)
G — Truck/bus terminal not part of airport, harbor, or railroad
H — Warehouse
I — Tank farm
J — Power plant/distribution station
K — House, apartment building
L — Forest, farm, field, farm building, fisheries
M — Grain elevator, stockyard
N — Mine, quarry, gravel pit, stone crusher
O — Construction site
P — Manufacturing facility or assembly plant
Q — Store or other retail or service outlet
R — Office building, school, hospital, other public facilities
S — Park or other recreational facility
T — Other

Section C — Vehicle Use — Continued

9. Enter below the following data for EACH STOP during the entire SAMPLE DAY 1 only. Exclude stops for food, fuel or rest.

(a) SAMPLE DAY 1 STOPS	(b) Type of place code Enter the type of place code from above	(c) Miles (from previous stop)	(d) What was the purpose of the stop? Mark (X) all that apply	(e) Items delivered — Commodity code / Hazmat code / Weight (lbs.)	(f) Items picked up — Commodity code / Hazmat code / Weight (lbs.)

If traveling at the beginning of sample day, enter where vehicle was at 12:01 a.m. for starting place.

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). (See instruction sheet)

9.0 Starting place (Mo/Day) Date — Departure time a.m. / p.m.
City — County — State
Loaded vehicle wt. at departure — No. of trailers attached
(d) 1 ☐ Base 4 ☐ Delivery 2 ☐ Pick up items 5 ☐ Drop off trailer 6 ☐ Other or In transit — Specify 3 ☐ Pick up trailer

Stop 1 Arrival time a.m. / p.m. — Departure time a.m. / p.m. — From starting place
City — County — State
Loaded vehicle wt. at departure — No. of trailers attached
(d) 1 ☐ Return to base 4 ☐ Delivery 2 ☐ Pick up items 5 ☐ Drop off trailer 6 ☐ Other — Specify 3 ☐ Pick up trailer

Stop 2 Arrival time a.m. / p.m. — Departure time a.m. / p.m. — From stop 1
City — County — State
Loaded vehicle wt. at departure — No. of trailers attached
(d) 1 ☐ Return to base 4 ☐ Delivery 2 ☐ Pick up items 5 ☐ Drop off trailer 6 ☐ Other — Specify 3 ☐ Pick up trailer

Stop 3 Arrival time a.m. / p.m. — Departure time a.m. / p.m. — From stop 2
City — County — State
Loaded vehicle wt. at departure — No. of trailers attached
(d) 1 ☐ Return to base 4 ☐ Delivery 2 ☐ Pick up items 5 ☐ Drop off trailer 6 ☐ Other — Specify 3 ☐ Pick up trailer

Stop 4 Arrival time a.m. / p.m. — Departure time a.m. / p.m. — From stop 3
City — County — State
Loaded vehicle wt. at departure — No. of trailers attached
(d) 1 ☐ Return to base 4 ☐ Delivery 2 ☐ Pick up items 5 ☐ Drop off trailer 6 ☐ Other — Specify 3 ☐ Pick up trailer

Stop 5 Arrival time a.m. / p.m. — Departure time a.m. / p.m. — From stop 4
City — County — State
Loaded vehicle wt. at departure — No. of trailers attached
(d) 1 ☐ Return to base 4 ☐ Delivery 2 ☐ Pick up items 5 ☐ Drop off trailer 6 ☐ Other — Specify 3 ☐ Pick up trailer

If vehicle made more than 5 stops, use page 12 for additional stop information

Section C — Vehicle Use — Continued

10. How many stops were made by this vehicle to each TYPE OF PLACE during sample day 1? *(If the place where vehicle was stopped fits into more than one type of place, pick the one that best describes it) Exclude stops for food, fuel, and rest.*

Code	Type of place	No. of stops	Code	Type of place	No. of stops
A	Railroad facility (servicing facility)	424	K	House, apartment building	434
B	Railroad facility (pickup or delivery of rail shipment)	425	L	Forest, farm, field, farm building, fisheries	435
C	Airport (servicing facility)	426	M	Grain elevator, stockyard	436
D	Airport (pickup or delivery of air shipment)	427	N	Mine, quarry, gravel pit, stone crusher	437
E	Harbor or port facility (servicing facility)	428	O	Construction site	438
F	Harbor/port facility (pickup or delivery of water shipment)	429	P	Manufacturing facility or assembly plant	439
G	Truck/bus terminal not part of airport, harbor, or railroad	430	Q	Store or other retail or service outlet	440
H	Warehouse	431	R	Office building, school, hospital, other public facilities	441
I	Tank farm	432	S	Park or other recreational facility	442
J	Power plant/distribution station	433	T	Other	443

11. How many stops were made for food, fuel, and rest, during sample day 1?

444 _____ Stops

12. What was the odometer reading of the vehicle at 11:59 p.m. on sample day 1?

445 _____ Miles *(Estimates are acceptable)*

13a. Where was the last pickup or delivery prior to sample day 1?

446 Date		447 Departure time	a.m. p.m.
448 City	449 County		450 State
451 Loaded vehicle weight at departure		452 No. of trailers attached	

b. What type of place was this?
Enter the type of place letter code from item 10 above

453 _____ Type of place

c. *From the reference list of commodities, enter the code and weight for the items picked up or delivered: (See page 6)*

Items delivered			Items picked up		
Commodity code	Hazmat code	Weight (lbs.)	Commodity code	Hazmat code	Weight (lbs.)

14a. Where was the first pickup or delivery after sample day 1?

454 Date		455 Arrival time	a.m. p.m.
456 City	457 County		458 State
459 Loaded vehicle weight at departure		460 No. of trailers attached	

b. What type of place was this?
Enter the type of place letter code from item 10 above

461 _____ Type of place

c. How many miles from last stop on sample day 1?

462 _____ Miles *(Estimates are acceptable)*

d. *From the reference list of commodities, enter the code and weight for the items picked up or delivered: (See page 6)*

Items delivered			Items picked up		
Commodity code	Hazmat code	Weight (lbs.)	Commodity code	Hazmat code	Weight (lbs.)

Section D — Vehicle Use

The following questions relate to the vehicle's use DURING SAMPLE DAY 2. **If the vehicle did not operate on the sample day 2, use substitute day 2.** If the vehicle did not operate on either day given, **call (301) 763-1744 collect.**

1. Enter date used *(Enter figures only)*	501 ____ / ____ / ____ Month / Day / Year
2. What was the odometer reading of the vehicle at 12:01 a.m. on sample day 2?	502 _____ Miles *(Estimates are acceptable)*
3a. How many miles did the vehicle travel during sample day 2?	503 _____ Miles *(Estimates are acceptable)*
b. What percent of those miles were on the INTERSTATE HIGHWAY SYSTEM?	504 _____ %
c. What percent of those miles were on roads which had four or more lanes but were NOT on the INTERSTATE HIGHWAY SYSTEM?	505 _____ %
d. What percent of those miles were off-road (little travel on public roads)?	506 _____ %
4a. How much fuel was used during sample day 2?	507 _____ U.S. gallons *(Estimates are acceptable)*
b. How much was paid in highway tolls during sample day 2?	508 $ _____

5a. What was the size of the vehicle —

	As it left the starting place on sample day 2? (1)	During sample day 2 when vehicle was at its maximum weight? (2)
Length (ft.) (Front bumper to end of last trailer)	509 _____ ft.	510 _____ ft.
Height (ft.)	511 _____ ft.	512 _____ ft.
Tare weight (empty)	513 _____ lbs.	514 _____ lbs.
Loaded vehicle weight (weight of truck and cargo) . .	515 _____ lbs.	516 _____ lbs.
Percent of payload space utilized	517 _____ %	518 _____ %

b. How would you best describe the vehicle's loads during sample day 2? *(If the vehicle was empty the entire day, mark the box that typically applies)*

519
1 ☐ Single shipments (Truck-load)
2 ☐ 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 sample day 2?

520
1 ☐ YES
2 ☐ NO

7a. How many employees, including owner/operators, were on board the vehicle as it left the starting place on sample day 2?

521 _____ Employees on board

b. How many of these employees drove the vehicle sometime during sample day 2?

522 _____ Employees who drove

8. Mark all boxes that include the hours during which you operated the vehicle during sample day 2.

523
01 ☐ 12:01 a.m. – 4:00 a.m.   05 ☐ 10:01 a.m. – 4:00 p.m.
02 ☐ 4:01 a.m. – 6:00 a.m.   06 ☐ 4:01 p.m. – 6:00 p.m.
03 ☐ 6:01 a.m. – 8:00 a.m.   07 ☐ 6:01 p.m. – 8:00 p.m.
04 ☐ 8:01 a.m. – 10:00 a.m.   08 ☐ 8:01 p.m. – 12:00 a.m.

Sample Day 2 Stops

Section D — Vehicle Use — Continued

9. Enter below the following data for EACH STOP during the entire SAMPLE DAY 2 only. Exclude stops for food, fuel or rest.

SAMPLE DAY 2 STOPS	Type of place code	Miles from previous stop?	What was the purpose of the stop? Mark (X) all that apply	Items delivered			Items picked up		
If traveling at the beginning of sample day, enter where vehicle was at 12:01 a.m. for starting place.	Enter the type of place code from p. 6			Commodity code	Hazmat code	Weight (lbs.)	Commodity code	Hazmat code	Weight (lbs.)
(a)	(b)	(c)	(d)	(e)			(f)		

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). (See instruction sheet)

9.0 Starting place [Mo./Day] — Date — Departure time a.m./p.m.
City — County — State
Loaded vehicle wt. at departure — No. of trailers attached

Stop 1 Arrival time a.m./p.m. — From starting place — Departure time a.m./p.m.
City — County — State
Loaded vehicle wt. at departure — No. of trailers attached
1 ☐ Base 4 ☐ Delivery
2 ☐ Pick up items 5 ☐ Drop off trailer
3 ☐ Pick up trailer 6 ☐ Other or in transit – Specify

Stop 2 Arrival time a.m./p.m. — From stop 1 — Departure time a.m./p.m.
City — County — State
Loaded vehicle wt. at departure — No. of trailers attached
1 ☐ Return to base 4 ☐ Delivery
2 ☐ Pick up items 5 ☐ Drop off trailer
3 ☐ Pick up trailer 6 ☐ Other – Specify

Stop 3 Arrival time a.m./p.m. — From stop 2 — Departure time a.m./p.m.
City — County — State
Loaded vehicle wt. at departure — No. of trailers attached
1 ☐ Return to base 4 ☐ Delivery
2 ☐ Pick up items 5 ☐ Drop off trailer
3 ☐ Pick up trailer 6 ☐ Other – Specify

Stop 4 Arrival time a.m./p.m. — From stop 3 — Departure time a.m./p.m.
City — County — State
Loaded vehicle wt. at departure — No. of trailers attached
1 ☐ Return to base 4 ☐ Delivery
2 ☐ Pick up items 5 ☐ Drop off trailer
3 ☐ Pick up trailer 6 ☐ Other – Specify

Stop 5 Arrival time a.m./p.m. — From stop 4 — Departure time a.m./p.m.
City — County — State
Loaded vehicle wt. at departure — No. of trailers attached
1 ☐ Return to base 4 ☐ Delivery
2 ☐ Pick up items 5 ☐ Drop off trailer
3 ☐ Pick up trailer 6 ☐ Other – Specify

If vehicle made more than 5 stops, use page 12 for additional stop information

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Section D — Vehicle Use — Continued

10. How many stops were made by this vehicle to each TYPE OF PLACE during sample day 2? *(If the place where vehicle was stopped fits into more than one type of place, pick the one that best describes it) Exclude stops for food, fuel, and rest.*

Code	Type of place	No. of stops	Code	Type of place	No. of stops
A	Railroad facility (servicing facility)	524	K	House, apartment building	534
B	Railroad facility (pickup or delivery of rail shipment)	525	L	Forest, farm, field, farm building, fisheries	535
C	Airport (servicing facility)	526	M	Grain elevator, stockyard	536
D	Airport (pickup or delivery of air shipment)	527	N	Mine, quarry, gravel pit, stone crusher	537
E	Harbor or port facility (servicing facility)	528	O	Construction site	538
F	Harbor/port facility (pickup or delivery of water shipment)	529	P	Manufacturing facility or assembly plant	539
G	Truck/bus terminal not part of airport, harbor, or railroad	530	Q	Store or other retail or service outlet	540
H	Warehouse	531	R	Office building, school, hospital, other public facilities	541
I	Tank farm	532	S	Park or other recreational facility	542
J	Power plant/distribution station	533	T	Other	543

11. How many stops were made for food, fuel, and rest, during sample day 2?
544 _____ Stops

12. What was the odometer reading of the vehicle at 11:59 p.m. on sample day 2?
545 _____ Miles *(Estimates are acceptable)*

13a. Where was the last pickup or delivery prior to sample day 2?

546 Date	547 Departure time	a.m. p.m.
548 City	549 County	550 State
551 Loaded vehicle weight at departure		552 No. of trailers attached

b. What type of place was this?
Enter the type of place letter code from item 10 above
553 _____ Type of place

c. From the reference list of commodities, enter the code and weight for the items picked up or delivered: (See page 6)

Items delivered			Items picked up		
Commodity code	Hazmat code	Weight (lbs.)	Commodity code	Hazmat code	Weight (lbs.)

14a. Where was the first pickup or delivery after sample day 2?

554 Date	555 Arrival time	a.m. p.m.
556 City	557 County	558 State
559 Loaded vehicle weight at departure		560 No. of trailers attached

b. What type of place was this?
Enter the type of place letter code from item 10 above
561 _____ Type of place

c. How many miles from last stop on sample day 2?
562 _____ Miles *(Estimates are acceptable)*

d. From the reference list of commodities, enter the code and weight for the items picked up or delivered: (See page 6)

Items delivered			Items picked up		
Commodity code	Hazmat code	Weight (lbs.)	Commodity code	Hazmat code	Weight (lbs.)

CERTIFICATION   This report is substantially accurate and has been prepared in accordance with instructions.

Name	Date
	Telephone →	Area code	Number	Extension

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ADDITIONAL SAMPLE DAY STOPS

Only use this section if this vehicle made more than 5 stops on either of the sample days.

ADDITIONAL SAMPLE DAY STOPS
(a)

		Type of place code	Miles from previous stop?	What was the purpose of the stop?	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). (See instruction sheet)					
		Enter the type of place code from p. 6		Mark (X) all that apply	Items delivered (e)			Items picked up (f)		
		(b)	(c)	(d)	Commodity code	Hazmat code	Weight (lbs.)	Commodity code	Hazmat code	Weight (lbs.)

Stop Date | Time of arrival a.m. p.m. | Departure time a.m. p.m.
City | County | State

Loaded vehicle wt. at departure | No. of trailers attached

(d)
1 □ Return to base   4 □ Delivery
2 □ Pick up items   5 □ Drop off trailer
3 □ Pick up trailer   6 □ Other – Specify ↱

Stop Date | Time of arrival a.m. p.m. | Departure time a.m. p.m.
City | County | State

Loaded vehicle wt. at departure | No. of trailers attached

1 □ Return to base   4 □ Delivery
2 □ Pick up items   5 □ Drop off trailer
3 □ Pick up trailer   6 □ Other – Specify ↱

Stop Date | Time of arrival a.m. p.m. | Departure time a.m. p.m.
City | County | State

Loaded vehicle wt. at departure | No. of trailers attached

1 □ Return to base   4 □ Delivery
2 □ Pick up items   5 □ Drop off trailer
3 □ Pick up trailer   6 □ Other – Specify ↱

Stop Date | Time of arrival a.m. p.m. | Departure time a.m. p.m.
City | County | State

Loaded vehicle wt. at departure | No. of trailers attached

1 □ Return to base   4 □ Delivery
2 □ Pick up items   5 □ Drop off trailer
3 □ Pick up trailer   6 □ Other – Specify ↱

Stop Date | Time of arrival a.m. p.m. | Departure time a.m. p.m.
City | County | State

Loaded vehicle wt. at departure | No. of trailers attached

1 □ Return to base   4 □ Delivery
2 □ Pick up items   5 □ Drop off trailer
3 □ Pick up trailer   6 □ Other – Specify ↱

Stop Date | Time of arrival a.m. p.m. | Departure time a.m. p.m.
City | County | State

Loaded vehicle wt. at departure | No. of trailers attached

1 □ Return to base   4 □ Delivery
2 □ Pick up items   5 □ Drop off trailer
3 □ Pick up trailer   6 □ Other – Specify ↱

(If you made more stops, please copy this page)

Thank you for your cooperation!

1987 CENSUS OF TRANSPORTATION
TRUCK INVENTORY AND USE SURVEY

OMB APPROVAL NO 0607-0582 EXPIRES 12/88

In correspondence pertaining to this report, please refer to this Census File Number (CFN)

Please complete this form and RETURN TO

BUREAU OF THE CENSUS
1201 East Tenth Street
Jeffersonville, Indiana 47134

DUE DATE: 15 days after receipt of form

Important — Please read

All questions on this form refer to the vehicle described below and its use **during 1987**. If you did not own the vehicle during 1987, please continue with the questionnaire answering each item according to how you used the vehicle during the last 12 months you owned (or leased) it. If there are errors in the vehicle registration information, consult the instruction sheet before continuing with the questionnaire

ESTIMATES ARE ACCEPTABLE.

Please correct errors in name, address, and ZIP Code. ENTER street and number if not shown

CENSUS USE	1	2	3	4	5	6

REGISTRATION INFORMATION

Make of vehicle	Year of model	State	License number	Vehicle identification number (VIN)
101	102	103	104	105

Item 1 – When did you obtain this vehicle?
Enter figures only
110 Month / Year

Item 2 – How did you obtain this vehicle?
111
1 ☐ Purchased it new
2 ☐ Purchased it used (or otherwise acquired)   } SKIP to item 3
3 ☐ Leased or rented it FROM someone else – Continue with items 2a and b

a. How was this vehicle leased or rented?
112
1 ☐ Without a driver
2 ☐ With a driver other than an owner-operator
3 ☐ With an owner-operator as driver

b. Was the agreement for 12 months or more?
113
2 ☐ NO
1 ☐ YES – Which of the following did the leasing agreement include?
Mark (X) all that apply
114 ☐ Financing only (Do not mark if installment sales contract)
115 ☐ Full maintenance
116 ☐ Maintenance on specified parts only
117 ☐ Payment on taxes
118 ☐ Obtaining licenses and permits
119 ☐ Recordkeeping for leased trucks
120 ☐ Other – Specify

Item 3 – Is this vehicle still in your possession?
206
1 ☐ YES – Are you the – 207 1 ☐ owner?   } SKIP to item 4 and continue
                            2 ☐ lessee?   } with questionnaire
2 ☐ NO – Please continue with this questionnaire, answering each item according to how you used the vehicle during the last 12 months you owned (or leased) it Continue with items 3a and b

a. When did you dispose of this vehicle?
Enter figures only
208 Month / Year

b. How did you dispose of this vehicle?
209
1 ☐ Sold it (or gave it away)
2 ☐ Junked, scrapped, or otherwise destroyed
3 ☐ Returned to leasing company

Item 9 – Continued
c. What was the loaded weight of the trailer most often attached to the vehicle?
An estimate is acceptable
333 Pounds

d. What was the width of the trailer most often attached to the vehicle?
335 Inches

Item 10 – How many miles was this vehicle driven during 1987?
An estimate is acceptable
400 Miles

Item 11 – How many miles has this vehicle been driven since it was manufactured?
401 Miles

NOTE – If it is no longer in your possession, please estimate the total lifetime mileage at the time you last operated it
If the odometer/speedometer is broken, please give your best estimate.
If the odometer has turned over (100,000 + miles), please enter the total figure

Item 12 – How many miles-per-gallon (MPG) did this vehicle average during 1987? (Use tenths, if available.)
402 Miles / Tenths

Example: 10.5 MPG should be entered as | Miles 10 | Tenths 5 | Enter miles per gallon →

Item 13 – Where was the home base of this vehicle on July 1, 1987?
If put into service after July 1, 1987, enter current home base

404 City		
405 County	406 State	407 ZIP Code

Item 14 – What percent of annual mileage was driven OUTSIDE the home base state?
An estimate is acceptable. (If none, enter zero.)
408 %

Item 15 – What PERCENTAGE of this vehicle's ANNUAL MILEAGE was accounted for by the type of trips listed below? (If all trips were within one range, enter 100%. If more than one range is applicable, be sure that percentages add up to 100%.)

Trips off-the-road, little travel on public roads	409 %
Trips less than a 50 mile radius of vehicle's home base	410 %
Trips within a 50–200 mile radius of vehicle's home base	411 %
Trips beyond a 200 mile radius of vehicle's home base	412 %
TOTAL – Should equal 100% →	100%

Item 4 – Did you lease or rent out this vehicle TO anyone else?

210 1 ☐ YES – *Continue with items 4a and b*
　　 2 ☐ NO – *SKIP to item 5*

a. How was it leased or rented out?

211 1 ☐ Without a driver
　　 2 ☐ With a driver other than an owner-operator
　　 3 ☐ With an owner-operator as driver

b. Was the agreement for 12 months or more?

213 2 ☐ NO
　　 1 ☐ YES – *Which of the following did the leasing agreement include?*
　　　 Mark (X) all that apply
　　　　214 ☐ Financing only *(Do not mark if installment sales contract)*
　　　　215 ☐ Full maintenance
　　　　216 ☐ Maintenance on specified parts only
　　　　217 ☐ Payment of taxes
　　　　218 ☐ Obtaining licenses and permits
　　　　219 ☐ Recordkeeping for leased trucks
　　　　220 ☐ Other – *Specify*

Item 5 – What is the body type of this vehicle?

311 01 ☐ Pickup
　　 25 ☐ Mini-van
　　 02 ☐ Van other than mini-van
　　 24 ☐ Utility (For example: Bronco, Blazer, Jeep, CJ-5, 7, etc)
　　 25 ☐ Station wagon built on truck chassis (For example: Suburban, Wagoneer, etc)
　　 80 ☐ Other – *If the above descriptions do not match the body type of this vehicle, please describe the body type in detail*

Item 6 – How many axles are on this vehicle and how many of them are driving axles?
(Do not include axles on any trailers pulled)

a. Total number of axles on truck (include front and rear axles)

316 1 ☐ Two axles (4 tires)　　3 ☐ Three axles
　　 2 ☐ Two axles (6 tires)　　4 ☐ Four or more axles

b. Number of driving (powered) axles on truck

318 1 ☐ One driving axle
　　 2 ☐ Two driving axles
　　 3 ☐ Three or more driving axles

Item 7 – What is the overall length of this vehicle or vehicle and trailer (if a trailer was pulled more than 50 percent of the annual miles)? *Report distance from front bumper to rear of vehicle or trailer, whichever is applicable* — 325 | Feet

Item 8a – What was the average weight (empty weight plus weight of cargo) of this vehicle as it was usually operated? *An estimate is acceptable* — 327 | Pounds

b. What percent of annual mileage did this vehicle carry no payload? — 328 | %

c. What percent of annual mileage did this vehicle carry payloads that –

(1) filled its maximum cargo size? — 329 | %

(2) weighed the maximum cargo weight? — 330 | %

Item 9 – During 1987, did you attach any trailers to this vehicle?

301 1 ☐ YES – *Continue with items 9a, b, c, and d below*
　　 2 ☐ NO – *SKIP to item 10*

a. What percent of annual mileage did this vehicle pull a trailer? *If less than 50 percent, skip to item 10* — 302 | %

b. How many axles were on the trailer unit which you attached most frequently to the vehicle? — 303

Item 16 – Not applicable to this form.

Item 17 – What is the horsepower rating of this vehicle's engine? — 341 | Horsepower

Item 18 – What is the size (displacement) of this vehicle's engine?
Enter cubic inches, cubic centimeters, or liters, whichever is applicable

342 Cubic inches (CI)	OR	343 Cubic centimeters (CC)	OR	344 Liters (L)

Item 19 – What kind of fuel does this vehicle use?

345 1 ☐ Gasoline　　　　4 ☐ Other – *Specify fuel*
　　 2 ☐ Diesel
　　 3 ☐ Liquefied petroleum gas (LPG)

Item 20 – Does this vehicle have any of the following? *Mark (X) all that apply*

354 ☐ Radial tires　　359 ☐ Air conditioning
358 ☐ Power steering　365 ☐ Front-wheel drive

Item 21 – Who performed the general maintenance and major overhauls on this vehicle? *Mark (X) all that apply*

	General maintenance	Major overhauls
Yourself	370 ☐	378 ☐
Your company's own maintenance facilities	371 ☐	379 ☐
Dealership's service department	372 ☐	380 ☐
Leasing company	373 ☐	381 ☐
Independent garage or private mechanic (includes gasoline or service stations)	374 ☐	382 ☐
Component distributorship (engine, transmission, etc)	375 ☐	383 ☐
No one	376 ☐	384 ☐
Other – *Specify*	377 ☐	385 ☐

Item 22a – Which of the following best describes the primary way this vehicle was operated?

501 1 ☐ BUSINESS USE – Operated by and for a private business (including self-employers) or a company; used in related activities of that business (including transportation of employees) – *SKIP to item 23*

　　 2 ☐ PERSONAL TRANSPORTATION – Operated as a personal-use vehicle in place of an automobile for pleasure driving, travel to work, etc (NO BUSINESS USE) – *SKIP to item 26*

　　 3 ☐ FOR HIRE – *SKIP to item 22b*

　　 4 ☐ DAILY RENTAL (Not motor carrier)　*SKIP to item 23*

　　 5 ☐ MIXED

Percent business use	502	%
Percent personal use	503	%
Percent for hire (includes intercorporate hauling and trip leasing, etc)	504	%

Complete b below

b. *If this vehicle was for hire, indicate below the type of for hire operation Enter percentage of mileage for each category (See instruction sheet for further information and definitions)*

(1) Operation type

MOTOR CARRIER	506	%
OWNER OPERATOR		
as an independent	507	%
leased to a company	508	%

(2) Jurisdiction served

INTERSTATE	509	%
INTRASTATE	510	%
LOCAL	511	%

(3) Kind of carrier

CONTRACT	512	%
COMMON	513	%
EXEMPT	514	%

(4) Was this vehicle operated under ICC authority?
518 1 ☐ YES
　　 2 ☐ NO

Continue on reverse →

91

Item 23 – **Which of the following best describes your business (or the part of your business in which the vehicle was used)?** *If vehicle was leased, indicate business of lessee*

526
- 01 ☐ AGRICULTURAL ACTIVITIES (including fisheries)
- 02 ☐ FORESTRY OR LUMBERING ACTIVITIES
- 03 ☐ CONSTRUCTION WORK – buildings, homes, roads, structures, etc.
- 04 ☐ CONTRACTOR ACTIVITIES OR SPECIAL TRADES – painting, plumbing, electrical work, masonry, carpentry, etc.
- 05 ☐ MANUFACTURING, REFINING, OR PROCESSING ACTIVITIES
- 06 ☐ WHOLESALE TRADE
- 07 ☐ RETAIL TRADE
- 08 ☐ BUSINESS AND PERSONAL SERVICES – used to assist in such services as lodging operations, landscaping, repair (except plumbing, electrical work, etc – *See "Contractor Activities"*), laundry, advertising, entertainment, etc
- 09 ☐ UTILITIES – Used to assist in operation or service of public utilities (telephone, gas, electric, etc)
- 10 ☐ MINING OR QUARRY ACTIVITIES (includes well drilling) – used to assist in the extraction of natural resources or in hauling to processors
- 11 ☐ DAILY RENTAL – rented out, without a driver, to someone else on a daily or short-term basis
- 16 ☐ ONE-WAY RENTAL
- 12 ☐ GOVERNMENTAL OPERATIONS
- 13 ☐ NOT IN USE – vehicle idle, wrecked, awaiting repair, etc , for more than 90 days
- 14 ☐ FOR HIRE TRANSPORTATION – including small package delivery
- 15 ☐ OTHER – *Please describe in detail*

Item 24 – From the following list of products, materials, and equipment, indicate which item or items this vehicle carried. Write in the approximate percentage of the vehicle's annual mileage that was accounted for while carrying loads. *(See instruction sheet for further explanation and examples)*

Products, equipment, materials, etc.

(1) AGRICULTURAL AND FOOD PRODUCTS
- (a) Live animals – cattle, horses, poultry, hogs, live seafood, insects, etc   526 ____ %
- (b) Fresh farm products – grain, crops, flowers, nursery stock, raw milk, raw tobacco, etc.   527 ____ %
- (c) Processed foods and tobacco products – canned goods, prepared meats, frozen foods, beverages, bottled water, dairy products, cigarettes, etc   528 ____ %

(2) MINING PRODUCTS, UNREFINED – crude oil, coal, metal ores   529 ____ %

(3) BUILDING MATERIALS – gravel, sand, concrete, flat glass, etc (except cut lumber – *See "Lumber."*)   530 ____ %

(4) FORESTRY, WOOD, AND PAPER PRODUCTS   531
- (a) Logs and forest products – except cut lumber and fabricated wood products *(See below)*
- (b) Lumber and fabricated wood products – except furniture *(See (7) below)*   532 ____ %
- (c) Paper and paper products   533 ____ %

(5) CHEMICALS, PETROLEUM, AND ALLIED PRODUCTS
- (a) Chemicals and/or drugs (including fertilizers, pesticides, cosmetics, paints, etc.)   534 ____ %
- (b) Petroleum and petroleum products (including paving and roofing materials)   535 ____ %
- (c) Plastics and/or rubber products   536 ____ %

(6) METALS AND METAL PRODUCTS
- (a) Primary metal products – pipes, ingots, billets, sheets, etc   537 ____ %
- (b) Fabricated metal products – except machinery or transportation equipment *(See below)*   538 ____ %
- (c) Machinery – electrical or nonelectrical and electronic   539 ____ %
- (d) Transportation equipment (including complete vehicles) and parts   540 ____ %

(7) OTHER MANUFACTURED PRODUCTS
- (a) Furniture (wood and nonwood) and/or hardware – not involved in household moving   541 ____ %
- (b) Glass products   542 ____ %
- (c) Textiles and apparels – fibers, leather goods, carpets, clothing, etc   543 ____ %
- (d) Miscellaneous products of manufacturing – including photographic goods, watches, clocks, jewelry, and toys   544 ____ %

(8) MISCELLANEOUS
- (a) Moving of household and office furniture – from home, offices, etc., under contract   545 ____ %
- (b) Miscellaneous tools and/or parts for specialized use, as in a craftsman's vehicle – traveling workshop for plumbers, carpenters, road service crews, etc.   546 ____ %
- (c) Mixed cargo, general freight (including the delivery of small packages)   547 ____ %
- (d) Scrap, garbage, trash, septic tank waste   548 ____ %
- (e) Industrial water   549 ____ %
- (f) Hazardous waste   550 ____ %

(9) OTHER (not elsewhere classified) – *Please describe in detail*   551 ____ %

Item 25 – At any time during 1987 was this vehicle (or combination) used to haul hazardous materials in quantities large enough to require a special placard placed on the vehicle due to the Code of Federal Regulations, title 49, Transportation?

552
- 1 ☐ YES – *Continue with items 25a and b*
- 2 ☐ NO – *SKIP to item 26*

a. What type(s) of hazardous materials were carried by this vehicle?
Mark (X) all that apply.

Hazardous Materials
- 553 ☐ Flammable liquids
- 554 ☐ Combustible liquids
- 555 ☐ Corrosive liquids
- 556 ☐ Poison B solids
- 557 ☐ Poison B liquids
- 558 ☐ Flammable solids
- 559 ☐ Oxidizers
- 560 ☐ Flammable gas
- 561 ☐ Nonflammable gas
- 562 ☐ Poison A
- 563 ☐ Corrosive solids
- 564 ☐ Explosives, A or B
- 565 ☐ Blasting agents
- 566 ☐ Radioactive materials
- 567 ☐ ORM – A, B, or C
- 568 ☐ ORM E
- 569 ☐ Hazardous materials not listed above – *Specify*

b. Approximately what percent of this vehicle's annual mileage was accounted for by carrying these hazardous materials?

570
- 1 ☐ Below 10%
- 2 ☐ 10 – 24%
- 3 ☐ 25 – 49%
- 4 ☐ 50 – 74%
- 5 ☐ 75 – 100%

Item 26a – Was this truck or power unit involved in any accidents during 1987?

580
- 1 ☐ YES – *Continue with item 26b*
- 2 ☐ NO – *SKIP to item 27*

b. If this truck or power unit was involved in any accidents during 1987, how many –

- (1) involved a fatality?   581 ____
- (2) involved no fatalities, but involved bodily injury requiring medical treatment?   582 ____
- (3) involved property damage of $4,200 or more?   583 ____

Item 27 – *Please enter below the number of any ADDITIONAL trucks and/or trailers you own and/or operate at the same home base you listed in item 13*

- a. Pickups, small vans (includes mini-vans)   571 ____
- b. Straight trucks   572 ____
- c. Truck-tractors (power units)   573 ____
- d. Trailers (semi- and/or full)   574 ____
- e. Converter dollies   575 ____

Item 28 – *Please enter below Employer Identification (EI) Number if vehicle owned by company or Social Security Number (SSN) if vehicle owned by individual*

EI ☐☐☐ — ☐☐☐☐☐☐☐

or

SSN ☐☐☐ — ☐☐ — ☐☐☐☐

Item 29 — REMARKS — *Please use this space for any explanations that may be essential in understanding your reported data*

Item 30 — Person to contact regarding this report
Does this person have records on (or knowledge of) the daily activities of driver (stops, weight of individual shipments, destinations of shipments, etc.)?

1 ☐ YES
2 ☐ NO

Name				Address (Number and street)	
City				State	ZIP Code
Daytime telephone number ⟶	Area code	Number	Extension if any	If this vehicle has a fleet number, please enter it here ──────⟶	

93

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

FORM
TC-9502

1987 CENSUS OF TRANSPORTATION
TRUCK INVENTORY AND USE SURVEY

OMB APPROVAL NO 0607-0582 EXPIRES 12/89

NOTICE — Response to this inquiry is required by law (title 13, U.S. Code). By the same law, your report to the Census Bureau is confidential It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are immune from legal process.

In correspondence pertaining to this report, please refer to this Census File Number (CFN)

Please complete this form and RETURN TO

BUREAU OF THE CENSUS
1201 East Tenth Street
Jeffersonville, Indiana 47134

DUE DATE: 15 days after receipt of form

Important — Please read

All questions on this form refer to the vehicle described below and its use during 1987. If you did not own the vehicle during 1987, please continue with the questionnaire answering each item according to how you used the vehicle during the last 12 months you owned (or leased) it. If there are errors in the vehicle registration information, consult the instruction sheet before continuing with the questionnaire

ESTIMATES ARE ACCEPTABLE.

Please correct errors in name, address, and ZIP Code ENTER street and number if not shown.

CENSUS USE	1	2	3	4	5	6	7

REGISTRATION INFORMATION

Make of vehicle	Year of model	State	License number	Vehicle identification number (VIN)
101	102	103	104	105

▶ **Item 1 — When did you obtain this vehicle?**
Enter figures only

110 Month | Year

▶ **Item 2 — How did you obtain this vehicle?**

111
1 ☐ Purchased it new
2 ☐ Purchased it used (or otherwise acquired) } SKIP to item 3
3 ☐ Leased or rented it FROM someone else — Continue with items 2a and b

a. How was this vehicle leased or rented?

112
1 ☐ Without a driver
2 ☐ With a driver other than an owner-operator
3 ☐ With an owner-operator as driver

b. Was the agreement for 12 months or more?

113
2 ☐ NO
1 ☐ YES — **Which of the following did the leasing agreement include?**
Mark (X) all that apply
114 ☐ Financing only (Do not mark if installment sales contract)
115 ☐ Full maintenance
116 ☐ Maintenance on specified parts only
117 ☐ Payment on taxes
118 ☐ Obtaining licenses and permits
119 ☐ Recordkeeping for leased trucks
120 ☐ Other — Specify

▶ **Item 3 — Is this vehicle still in your possession?**

206
1 ☐ YES — Are you the — 207 1 ☐ owner? } SKIP to item 4 and continue with questionnaire
2 ☐ lessee?
2 ☐ NO — Please continue with this questionnaire, answering each item according to how you used the vehicle during the last 12 months you owned (or leased) it. Continue with items 3a and b

a. When did you dispose of this vehicle?
Enter figures only

208 Month | Year

b. How did you dispose of this vehicle?

209
1 ☐ Sold it (or gave it away)
2 ☐ Junked, scrapped, or otherwise destroyed
3 ☐ Returned to leasing company

▶ **Item 8** — Please indicate the body type which most closely resembles this vehicle or the trailer most often attached to it, if the power-unit is a truck-tractor.

311 **PLATFORM TYPES**
05 ☐ Low boy (gooseneck) — platform with depressed center
06 ☐ Basic platform — including flatbed, stake, etc
04 ☐ Platform with devices permanently mounted on bed of truck — such as high lift, lift gate, hoist, etc

VAN TYPES
03 ☐ Multistop or step van (including hi-cube or cutaway)
12 ☐ Basic enclosed van (dry cargo)
10 ☐ Drop frame van — including furniture van, etc
08 ☐ Insulated, non-refrigerated van
09 ☐ Insulated, refrigerated van
11 ☐ Open top van, including fruit

SPECIALIZED USE TRUCKS
18 ☐ Automobile transport
13 ☐ Beverage truck
70 ☐ Concrete mixer
40 ☐ Dump truck (including belly or bottom dump)
29 ☐ Grain bodies (including low-side grain and hoppers, etc.)
30 ☐ Garbage truck
07 ☐ Livestock truck (including livestock drop frame)
27 ☐ Oilfield truck — service equipment permanently mounted on vehicle
17 ☐ Pole, logging, pulpwood, or pipe truck
22 ☐ Service truck or "craftsman's vehicle" — body equipped for mobile repair and service
60 ☐ Tank truck for dry bulk
50 ☐ Tank truck for liquids or gases
14 ☐ Utility truck — used in public utility operations (telephone line truck, etc.), body equipped for major repair (may have aerial lift, derrick, etc.)
15 ☐ Winch or crane truck — lifting equipment (including roll on, roll off) permanently mounted on vehicle
16 ☐ Wrecker — for motor vehicle towing or lifting
23 ☐ Yard tractor — cab and chassis ONLY, used to spot trailers

NOTE — If none of the above descriptions match the body type of this vehicle, or the trailer usually attached to it, mark (X) the "Other" box below and specify type

80 ☐ Other — Specify

94

Item 4 — Did you lease or rent out this vehicle TO anyone else?

210   1 ☐ YES – *Continue with items 4a and b*
    2 ☐ NO – *SKIP to item 5*

a. How was it leased or rented out?

211   1 ☐ **Without** a driver
    2 ☐ **With** a driver other than an owner-operator
    3 ☐ With an **owner-operator** as driver

b. Was the agreement for 12 months or more?

213   2 ☐ NO
    1 ☐ YES – **Which of the following did the leasing agreement include?**
     Mark (X) all that apply
     214 ☐ Financing only *(Do not mark if installment sales contract)*
     215 ☐ Full maintenance
     216 ☐ Maintenance on specified parts only
     217 ☐ Payment of taxes
     218 ☐ Obtaining licenses and permits
     219 ☐ Recordkeeping for leased trucks
     220 ☐ Other – *Specify*

Item 5 — How would you best describe this vehicle as it was most often operated? *(If the vehicle is a pickup, compact van, mini-van, or panel truck, enter body type on the "Other" line)*

300   1 ☐ Straight truck
    2 ☐ Straight truck pulling trailer(s)
    3 ☐ Truck-tractor (power unit) pulling trailer(s)
    4 ☐ Other – *Specify*

Item 6 — If you indicated in item 5 that you operated this vehicle with trailer(s) attached, indicate below the kind of trailer(s) you most often pulled *Mark (X) one box only, also indicate if axles are liftable*

a. Utility and other trailers less than 20 feet used with straight truck

304   1 ☐ One axle on trailer
    2 ☐ Two axles on trailer
    3 ☐ Three axles or more on trailer

b. One full trailer * used with straight truck

305   1 ☐ Two axles on trailer
    2 ☐ Three axles on trailer   How many, IF ANY,
    3 ☐ Four or more axles on trailer   of the trailer's axles _____ 306
                 are liftable? — ▶

c. One semi-trailer, used with truck-tractor (power unit)

307   1 ☐ One axle on trailer
    2 ☐ Two axles on trailer   How many, IF ANY,
    3 ☐ Three or more axles on trailer   of the trailer's axles _____ 306
                 are liftable? — ▶

d. Two trailers, one semi- and one full * used with truck-tractor (power unit)

308   1 ☐ Three axles on two trailers
    2 ☐ Four axles on two trailers   How many, IF ANY,
    3 ☐ Five axles on two trailers   of the trailer's axles _____ 306
    4 ☐ Six or more axles on two trailers   are liftable? — ▶

e. Three trailers, one semi- and two full * used with truck-tractor (power unit)

309   1 ☐ Five axles on three trailers
    2 ☐ Six axles on three trailers   How many, IF ANY,
    3 ☐ Seven axles on three trailers   of the trailer's axles _____ 306
    4 ☐ Eight or more axles on three trailers   are liftable? – ▶

f. Other – *Please describe in detail the number of trailers and axles on those trailers Also give number of any liftable axles on trailer(s)*

310

Item 7 — If you indicated in Item 5 that you operated a truck-tractor (power unit) pulling trailer(s), what percent of annual mileage did you haul –

a. Railroad, ocean-going, or similar containers?   312   %
b. Piggyback trailers?   313   %

* or Semi-trailer with converter dolly

Item 9 — How many axles are on this vehicle and how many of them are driving axles? *(Do not include axles on any trailers pulled)*

a. Total number of axles on truck or truck-tractor (power unit) *(Include front and rear axles)*

316   1 ☐ Two axles (4 tires)
    2 ☐ Two axles (6 tires)
    3 ☐ Three axles   How many, IF ANY,   317
    4 ☐ Four or more axles   are liftable axles? —▶ _____

b. Number of driving (powered) axles on truck or truck-tractor (power unit)

318   1 ☐ One driving axle
    2 ☐ Two driving axles
    3 ☐ Three or more driving axles

Item 10 — What type of cab does this vehicle have?

319   1 ☐ Cab forward of engine
    2 ☐ Cab over engine
    3 ☐ Conventional cab
    4 ☐ Cab beside engine
    5 ☐ Other

Item 11a — What is the OVERALL length of this vehicle or combination as it was most often operated? *Report distance from front bumper to rear of truck or rear of the last trailer attached.*   325   Feet

b. If this is a combination vehicle, what was the width of the trailer most often attached to the truck or power unit? *(If more than one trailer was pulled, give the width of the widest trailer pulled)*   335   Inches

Item 12 — What is the EMPTY weight (truck minus cargo) of this vehicle or vehicle/trailer combination? An estimate is acceptable.   326   Pounds

Item 13 — What was the AVERAGE weight (empty weight plus weight of cargo) of the vehicle or vehicle/trailer combination when carrying a typical payload during the past year? An estimate is acceptable.   327   Pounds

Item 14a — What was the MAXIMUM GROSS weight (MGW) at which this vehicle or vehicle/trailer combination was operated? An estimate is acceptable.   334   Pounds

b. What percent of annual mileage did this vehicle carry no payload?   328   %

c. What percent of annual mileage did this vehicle carry payloads that –
(1) filled its maximum cargo size?   329   %
(2) weighed the maximum cargo weight?   330   %

Item 15 — How many miles was this vehicle driven during 1987? An estimate is acceptable   400   Miles

Item 16 — How many miles has this vehicle been driven since it was manufactured?   401   Miles

NOTE – If it is no longer in your possession, please estimate the total lifetime mileage at the time you last operated it
If the odometer/speedometer is broken, please give your best estimate
If the odometer has turned over (100,000 + miles), please enter the total figure

Item 17 — How many miles-per-gallon (MPG) did this vehicle average during 1987? *(Use tenths, if available)*   402   Miles   Tenths

	Miles	Tenths	
Example: 10 5 MPG should be entered as	10	5	Enter miles per gallon ⟶

Item 18 — Where was the home base of this vehicle on July 1, 1987? *If put into service after July 1, 1987, enter current home base*

404 City _____

405 County _____   406 State _____   407 ZIP Code _____

Item 19 – What percent of annual mileage was driven OUTSIDE the home base state? 408
An estimate is acceptable. (If none, enter zero.) %

Item 20 – What PERCENTAGE of this vehicle's ANNUAL MILEAGE was accounted for by the type of trips listed below? (If all trips were within one range, enter 100%. If more than one range is applicable, be sure that percentages add up to 100%.)

Trips off-the-road, little travel on public roads .... 409 %
Trips less than a 50 mile radius of vehicle's home base .... 410 %
Trips within a 50–200 mile radius of vehicle's home base ...... 411 %
Trips beyond a 200 mile radius of vehicle's home base .... 412 %

TOTAL – Should equal 100% ⟶ 100%

Item 21 – Not applicable to this form.

Item 22 – What is the horsepower rating of this vehicle's engine? 341 Horsepower

Item 23 – What is the size (displacement) of this vehicle's engine?
Enter cubic inches, cubic centimeters, or liters, whichever is applicable.

| 342 Cubic inches (CI) | OR | 343 Cubic centimeters (CC) | OR | 344 Liters (L) |

Item 24 – What kind of fuel does this vehicle use?

345
1 ☐ Gasoline
2 ☐ Diesel
3 ☐ Liquefied petroleum gas (LPG)
4 ☐ Other – Specify fuel _____

Item 25 – What type of brakes does the power unit (truck or truck-tractor) have?

347
1 ☐ Hydraulic (standard)
2 ☐ Hydraulic with power assist
3 ☐ Air

Item 26 – Does this vehicle have any of the following equipment?
Mark (X) all that apply.

350 ☐ Aerodynamic features
351 ☐ Axle or drive ratio to maximize fuel efficiency
352 ☐ Fuel economy engine with low RPM, high torque rise, turbo-charge, etc
353 ☐ Reflective materials (in addition to those required by law)
354 ☐ Radial tires
355 ☐ Road speed governor
356 ☐ Variable fan drives
357 ☐ Other fuel conservation features
358 ☐ Power steering
359 ☐ Air conditioning in cab
360 ☐ Engine retarder
361 ☐ Electronic vehicle management system
362 ☐ Electronic vehicle identification device (transponder), etc
363 ☐ Trip recorders
364 ☐ Navigational systems

Item 27 – Who performed the general maintenance and major overhauls on this vehicle? Mark (X) all that apply

	General maintenance	Major overhauls
Yourself	370 ☐	378 ☐
Your company's own maintenance facilities	371 ☐	379 ☐
Dealership's service department	372 ☐	380 ☐
Leasing company	373 ☐	381 ☐
Independent garage or private mechanic (includes gasoline or service stations)	374 ☐	382 ☐
Component distributorship (engine, transmission, etc.)	375 ☐	383 ☐
No one	376 ☐	384 ☐
Other – Specify	377 ☐	385 ☐

Item 30 – From the following list of products, materials, and equipment, indicate which item or items this vehicle carried. Write in the approximate percentage of the vehicle's annual mileage that was accounted for while carrying loads. (See instruction sheet for further explanation and examples.)

Products, equipment, materials, etc.

(1) AGRICULTURAL AND FOOD PRODUCTS
(a) Live animals – cattle, horses, poultry, hogs, live seafood, insects, etc. .... 526 %
(b) Fresh farm products – grain, crops, flowers, nursery stock, raw milk, raw tobacco, etc. .... 527 %
(c) Processed foods and tobacco products – canned goods, prepared meats, frozen foods, beverages, bottled water, dairy products, cigarettes, etc. ... 528 %
529 %
(2) MINING PRODUCTS, UNREFINED – crude oil, coal, metal ores .... 530 %
(3) BUILDING MATERIALS – gravel, sand, concrete, flat glass, etc. (except cut lumber – See "Lumber.") .... 531 %
(4) FORESTRY, WOOD, AND PAPER PRODUCTS
(a) Logs and forest products – except cut lumber and fabricated wood products (See below.) .... %
(b) Lumber and fabricated wood products – except furniture (See (7) below.) 532 %
(c) Paper and paper products .... 533 %
(5) CHEMICALS, PETROLEUM, AND ALLIED PRODUCTS
(a) Chemicals and/or drugs (including fertilizers, pesticides, cosmetics, paints, etc.) .... 534 %
(b) Petroleum and petroleum products (including paving and roofing materials) 535 %
(c) Plastics and/or rubber products .... 536 %
(6) METALS AND METAL PRODUCTS
(a) Primary metal products – pipes, ingots, billets, sheets, etc. .... 537 %
(b) Fabricated metal products – except machinery or transportation equipment (See below.) .... 538 %
(c) Machinery – electrical or nonelectrical and electronic .... 539 %
(d) Transportation equipment (including complete vehicles) and parts .... 540 %
541
(7) OTHER MANUFACTURED PRODUCTS
(a) Furniture (wood and nonwood) and/or hardware – not involved in household moving .... 542 %
(b) Glass products .... 543 %
(c) Textiles and apparels – fibers, leather goods, carpets, clothing, etc. .... 544 %
(d) Miscellaneous products of manufacturing – including photographic goods, watches, clocks, jewelry, and toys .... 545 %
(8) MISCELLANEOUS
(a) Moving of household and office furniture – from home, offices, etc., under contract .... 546 %
(b) Miscellaneous tools and/or parts for specialized use, as in a craftsman's vehicle – traveling workshop for plumbers, carpenters, road service crews, etc. .... 547 %
(c) Mixed cargo, general freight (including the delivery of small packages) 548 %
(d) Scrap, garbage, trash, septic tank waste .... 549 %
(e) Industrial water .... 550 %
(f) Hazardous waste .... 551 %
(9) OTHER (not elsewhere classified) – Please describe in detail

%

Item 31 – At any time during 1987 was this vehicle (or combination) used to haul hazardous materials in quantities large enough to require a special placard placed on the vehicle due to the Code of Federal Regulations, title 49, Transportation?

552
1 ☐ YES – Continue with items 31a and b
2 ☐ NO – SKIP to item 32

a. What type(s) of hazardous materials were carried by this vehicle? Mark (X) all that apply.

Hazardous Materials

553 ☐ Flammable liquids   565 ☐ Blasting agents
554 ☐ Combustible liquids   566 ☐ Radioactive materials
555 ☐ Corrosive liquids   567 ☐ ORM – A, B, or C
556 ☐ Poison B solids   568 ☐ ORM E
557 ☐ Poison B liquids   569 ☐ Hazardous materials not listed above – Specify
558 ☐ Flammable solids
559 ☐ Oxidizers
560 ☐ Flammable gas
561 ☐ Nonflammable gas
562 ☐ Poison A
563 ☐ Corrosive solids
564 ☐ Explosives, A or B

b. Approximately what percent of this vehicle's annual mileage was accounted for by carrying these hazardous materials?

570
1 ☐ Below 10%   4 ☐ 50–74%
2 ☐ 10–24%   5 ☐ 75–100%
3 ☐ 25–49%

96

Item 28a — Which of the following best describes the primary way this vehicle was operated?

501   1 ☐ BUSINESS USE – Operated by and for a private business (including self-employers) or a company; used in related activities of that business (including transportation of employees) – *SKIP to item 29*

   2 ☐ PERSONAL TRANSPORTATION – Operated as a personal-use vehicle in place of an automobile for pleasure driving, travel to work, etc. (NO BUSINESS USE) – *SKIP to item 32*

   3 ☐ FOR HIRE – *SKIP to item 28b*

   4 ☐ DAILY RENTAL OR SHORT TERM LEASE – Rented or leased out to various operators and for various activities, under daily or short term rental or lease agreements (Not motor carrier) – *SKIP to item 29*

   5 ☐ MIXED

Percent business use	502	%
Percent personal use	503	%
Percent for hire (includes intercorporate hauling and trip leasing, etc.)	504	%

Complete b below

b. If this vehicle was for hire, indicate below the type of for hire operation. Enter percentage of mileage for each category.

(1) Operation type

MOTOR CARRIER – Operated by a company whose primary business is to provide transportation services, carrying freight belonging to others   506   %

OWNER/OPERATOR – Operated by an independent trucker who drives vehicle for himself or on lease to a company –

   as an independent   507   %

   leased to a company   508   %

(2) Jurisdiction served

INTERSTATE   509   %

INTRASTATE   510   %

LOCAL – In a single municipality, contiguous municipalities or a municipality and its suburban area, in commercial zones   511   %

(3) Kind of carrier

CONTRACT – Offered transportation service to certain shippers under contracts   512   %

COMMON – Offered transportation service to the general public over regular or irregular routes   513   %

EXEMPT – transported commodities or provided types of services that were exempt from Federal regulation, operated within exempt commercial zones   514   %

(4) Was this vehicle operated under ICC authority?   518   1 ☐ YES   2 ☐ NO

Item 29 — Which of the following best describes your business or the part of your business in which the vehicle was used? *If the vehicle was leased, indicate business of lessee*

525   01 ☐ AGRICULTURAL ACTIVITIES (including fisheries)

   02 ☐ FORESTRY OR LUMBERING ACTIVITIES

   03 ☐ CONSTRUCTION WORK – buildings, homes, roads, structures, etc.

   04 ☐ CONTRACTOR ACTIVITIES OR SPECIAL TRADES – painting, plumbing, electrical work, masonry, carpentry, etc

   05 ☐ MANUFACTURING, REFINING, OR PROCESSING ACTIVITIES

   06 ☐ WHOLESALE TRADE

   07 ☐ RETAIL TRADE

   08 ☐ BUSINESS AND PERSONAL SERVICES – used to assist in such services as lodging operations, landscaping, repair (except plumbing, electrical work, etc. – *See "Contractor Activities"*), laundry, advertising, entertainment, etc

   09 ☐ UTILITIES – Used to assist in operation or service of public utilities (telephone, gas, electric, etc.)

   10 ☐ MINING OR QUARRY ACTIVITIES (includes well drilling) – used to assist in the extraction of natural resources or in hauling to processors

   11 ☐ DAILY RENTAL – rented out, without a driver, to someone else on a daily or short-term basis

   16 ☐ ONE-WAY RENTAL

   12 ☐ GOVERNMENTAL OPERATIONS

   13 ☐ NOT IN USE – vehicle idle, wrecked, awaiting repair, etc., for more than 90 days

   14 ☐ FOR HIRE TRANSPORTATION – including small package delivery

   15 ☐ OTHER – *Please describe in detail*

Item 32a — Was this truck or power unit involved in any accidents during 1987?

580   1 ☐ YES – *Continue with item 32b*

   2 ☐ NO – *SKIP to item 33*

b. If this truck or power unit was involved in any accidents during 1987, how many –

(1) involved a fatality?   581

(2) involved no fatalities, but involved bodily injury requiring medical treatment?   582

(3) involved property damage of $4,200 or more?   583

Item 33 — *Please enter below the number of any ADDITIONAL trucks and/or trailers you own and/or operate at the same home base you listed in item 18*

a. Pickups, small vans (includes mini-vans)   571

b. Straight trucks   572

c. Truck-tractors (power units)   573

d. Trailers (semi- and/or full)   574

e. Converter dollies   575

Item 34 — *Please enter below Employer Identification (EI) Number if vehicle owned by company or Social Security Number (SSN) if vehicle owned by individual*

EI [ ][ ] — [ ][ ][ ][ ][ ][ ][ ]

or

SSN [ ][ ][ ] — [ ][ ] — [ ][ ][ ][ ]

Item 35 — REMARKS — *Please use this space for any explanations that may be essential in understanding your reported data*

Item 36 — Person to contact regarding this report

Does this person have records on (or knowledge of) the daily activities of driver (stops, weight of individual shipments, destinations of shipments, etc.)?

1 ☐ YES

2 ☐ NO

Name

Address (Number and street)

City	State	ZIP Code

Daytime telephone number ⟶	Area code	Number	Extension, if any

576

If this vehicle has a fleet number, please enter it here

SECTION 4

1990 NTACS PUBLIC USE FILE PROCEDURES FOR ADJUSTMENT, IMPUTATION, AND ANNUALIZATION BY ORNL

Response rates to selected data items in subfiles 1 and 2 were as follows for data received by Oak Ridge National Laboratory (ORNL) from the U.S. Bureau of the Census for responding trucks. No changes were made by ORNL to the 1987 TIUS data presented in subfile 3.

Subfile 1 (Maximum = 22,044)　　　　　　　Subfile 2 (Maximum = 9,794)

Data Item		Original No. of Responses	Data Item		Original No. of Responses	Data Item		Original No. of Responses
1.	TRUKID	22,044	1.	TRUKID	9,794	20.	P4LN1	8,427
2.[a]	XPFAN	22,044	2.[a]	XPFD1	9,794	21.	POFF1	8,306
3.	MDLYR	22,017	3.	SAMD1	9,238	22.[b]	FUEL1	8,624
4.	POSSE	21,922	4.[b]	NSPD1	7,284	23.[b]	TOLL1	8,337
5.	CUROP	16,367	5.[b]	D1WK1	9,124	24.[b]	MXLN1	7,303
6.[b]	WKSOP	16,270	6.[b]	D2WK1	9,178	25.[b]	MXHT1	7,293
7.[b]	RANMI	16,113	7.[b]	D3WK1	9,173	26.[b]	MEWT1	7,329
8.	OPSTA	14,392	8.[b]	D4WK1	9,167	27.[b]	MXLD1	7,313
9.	OPCAN	14,371	9.[b]	D5WK1	9,159	28.[b]	MXPL1	6,267
10.	OPMEX	14,276	10.[b]	D6WK1	9,166	29.	HAZM1	7,391
11.	FUELD	13,704	11.[b]	D7WK1	9,092	30.	HRS11	840
12.	GASTA	13,699	12.	MUSE1	9,160	31.	HRS21	1,363
13.	MUSEA	14,097	13.	VEHD1	9,240	32.	HRS31	3,958
14.	VEHDA	14,424	14.	BDTY1	9,239	33.	HRS41	6,122
15.	TKCFG	13,659	15.[b]	OMIL1	7,600 (approx)	34.	HRS51	3,742
16.	BDTYA	14,101	16.[c]	AOMIL	[d]	35.	HRS61	6,741
			17.[b]	RMIL1	9,017	36.	HRS71	1,508
			18.[c]	ARMIL	[d]	37.	HRS81	848
			19.	PINT1	8,600	38.[b]	COMD1	[d]

[a]　Data item adjusted by ORNL.
[b]　Data item inputed by ORNL. Final number of responses is 22,044 for each imputed data item in subfile 1 and 9,794 for each imputed data item in subfile 2.
[c]　Data item annualized by ORNL.
[d]　Not applicable.

Adjustments

To produce XPFAN: Within each of the 225 NTACS strata, the expansion factor of the Census Bureau was multiplied by the quotient of the total number of NTACS sample trucks in that stratum divided by the total number of responding trucks in that stratum. For more details, refer to Section 1.

To produce XPFD1:   Within each of the 225 NTACS strata, the expansion factor of the Census Bureau was multiplied by the quotient of the total number of NTACS sample trucks in that stratum divided by the total number of responding trucks in that stratum which reported some sample day one data. For more details, refer to Section 1.

Imputations

The method used to impute for item nonresponse was <u>mean</u> imputation. The method of mean imputation tends to produce data such that the estimated mean (and estimated total) using the imputed data is the same as the estimated mean (and estimated total) using the unimputed data while the distribution of the imputed data tends to differ from the distribution of the unimputed data. Mean imputation was used mainly because of its simplicity and the concern by the technical staff that the use of a more involved method such as regression imputation would give the user a false sense of confidence about the resulting data which could not be strongly defended due to the previously mentioned poor data quality. The exact variation of mean imputation used is illustrated by showing the steps used to impute the data item WKSOP.

(a) Note that 5,774 (= 22,044 - 16,270) of the 22,044 responding trucks did not respond to the data item WKSOP. For each of these trucks, imputation was carried out as follows within each stratum.

(b) Responding trucks in stratum ijk which <u>did not</u> respond to data item WKSOP were identified.

(c) Next, we identified the responding trucks in stratum ijk which <u>did</u> respond to data item WKSOP; within stratum ijk, we grouped these trucks by MDLYR (m = 01, 02,

... , 11); and for each of these groups we found $\overline{WKSOP}_{ijkm}$, the average value of WKSOP for the trucks in group m within stratum ijk. Each of the averages was rounded to the nearest integer. If any group m was empty within stratum ijk, we gave this group the average value of all of the responding trucks in stratum ijk. If no truck in stratum ijk responded to this data item (WKSOP), then we gave group m the average value for all responding trucks in HAUL=j and SAMTYP=i (i.e., over all DIVISIONS). If no truck in HAUL=j and SAMTYP=i responded to this

data item (WKSOP), then we gave group m the average value for all responding trucks in SAMTYP=i (i.e., over all DIVISIONS and all HAULS).

(d) We substituted the value $\overline{WKSOP}_{ijk\blacksquare}$ for each responding truck in stratum ijk with MDLYR=m which <u>did not</u> respond to data item WKSOP.

(e) The RI_WKSOP code for each such truck (<u>did not</u>) was set equal O.

(f) Thus there were 22,044 final responses for data item WKSOP.

Annualizations

To produce AOMIL: If DOP1 was the number of days in sample week one that a given truck operated then AOMIL, the annualized odometer mileage for that truck, was computed as

$$AOMIL = (OMIL1) \cdot (DOP1) \cdot (WKSOP) \cdot$$

To produce ARMIL: ARMIL, the annualized reported mileage for that truck was computed as

$$ARMIL = (RMIL1) \cdot (DOP1) \cdot (WKSOP) \cdot$$

SECTION 5

DATA LIMITATIONS AND CAVEATS

As noted earlier, the data, which were collected by the U.S. Bureau of the Census, in the 1990 NTACS Public Use File has poor quality resulting primarily from low response rates (unit and item) and other nonsampling problems.

The NTACS included sensitive questions plus some exploratory items in this first time effort of collecting trip-specific information from primarily commodity-carrying vehicles. As anticipated by the Census Bureau, low responses were obtained for selected items of priority interest to DOT. As a result of low response rates and the inconsistent reporting, extensive imputation was required on selected data items in the 1990 NTACS Public Use File. This public use file is considered exploratory and is to be used with extreme caution only. Tabulations generated from this data base should be used with discretion and only in conjunction with other data of proven reliability.

Because the NTACS sample is a subsample of the 1987 TIUS respondents, TIUS data exists for all 22,044 NTACS respondents and are included in subfile 3. To obtain NTACS universe estimates, use the expansion factor

- XPFAN, if the data item is in subfile 1,

- XPFD1, if the data item is in subfile 2, and

- XPFAN, if the data item is in subfile 3.

In some cases, it is possible to obtain more than one estimate for a NTACS universe parameter. For example, it is possible to estimate the annual miles for the trucks in the NTACS universe using any one of the following data items:

Subfile 1
  RANMI - reported annual miles from NTACS

Subfile 2
  AOMIL - annualized miles based on sample day one's odometer values
    from NTACS
  ARMIL - annualized miles based on sample day one's reported values
    from NTACS

Subfile 3
  ANMIL - annual miles from TIUS.

In such cases, different estimates will result and the user must explore which data item is most appropriate for the specific application.

APPENDIX A

Tables A-I have been included in this appendix to give details of the connections (using numbers) among:

      (i)   the 1987 TIUS universe;
      (ii)   the 1987 TIUS sample and sample respondents;
      (iii)   the restratification of the 1987 TIUS sample respondents before selection of the NTACS sample;
      (iv)   the estimated 1990 NTACS universe size; and
      (v)   the 1990 NTACS sample and sample respondents.

STATE	SAMTYP				
	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

GRAND TOTAL 45,393,671

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

TABLE B. 1987 TIUS PRELIMINARY SAMPLE SIZES BY STATE BY SAMTYP

STATE	SAMTYP 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

GRAND TOTAL 134,321

TABLE C. 1987 TIUS NUMBER OF SAMPLE RESPONDENTS BY STATE BY SAMTYP

STATE	SAMTYP				
	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	632
NM	456	154	456	121	296
NY	326	282	425	426	699
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

GRAND TOTAL 104,601

TABLE D. RESTRATIFICATION OF 1987 TIUS NUMBER OF SAMPLE RESPONDENTS BY DIVISION BY HAUL BY SAMTYP FOR NTACS SAMPLING (FRMWT TRUCK COUNT)

CENSUS DIVISION	HAUL	SAMTYP 1	2	3	4	5	TOTAL
1 New England (ME VT RI NH MA CT)	1	302	173	1,452	2,389	2,036	
	2	11	11	54	232	855	
	3	361	231	488	308	164	12,025
	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	
	2	2	7	18	61	738	
	3	149	156	282	133	98	6,370
	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	
	2	16	12	43	173	1,726	
	3	287	141	413	175	150	10,643
	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	
	2	19	12	46	266	2,266	
	3	584	167	435	188	199	14,954
	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	
	2	17	17	68	250	1,758	
	3	449	315	822	385	272	17,515
	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	
	2	7	14	27	239	1,152	
	3	224	66	359	106	174	8,004
	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	
	2	11	7	36	96	1,145	
	3	312	97	306	143	231	7,872
	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	
	2	34	5	107	434	2,168	
	3	558	174	732	252	335	16,452
	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	
	2	8	8	25	54	755	
	3	281	131	381	159	189	9,902
	4	1,586	608	305	16	23	
	5	6	6	31	18	29	
						GRAND TOTAL	103,737

TABLE E. NUMBER OF TRUCKS SELECTED FOR 1989 NTACS SAMPLE BY DIVISION BY HAUL BY SAMTYP (TRUCK COUNT)

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

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

STATE	SAMTYP 1	SAMTYP 2	SAMTYP 3	SAMTYP 4	SAMTYP 5	TOTAL
AL	627,411	166,350	49,606	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

GRAND TOTAL 44,557,190

*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. ESTIMATED 1989 NTACS UNIVERSE SIZE* BASED ON 1987 TIUS SAMPLE

CENSUS DIVISION	HAUL	SAMTYP 1	SAMTYP 2	SAMTYP 3	SAMTYP 4	SAMTYP 5	TOTAL
1	1	126,951	88,913	84,074	54,149	22,271	
	2	4,133	5,571	3,223	5,494	9,148	
	3	145,434	109,952	29,915	9,918	1,996	1,741,845
	4	641,041	372,345	16,460	4,362	244	
	5	1,333	1,824	1,773	926	395	
2	1	203,627	203,972	201,719	109,906	65,355	
	2	3,323	11,464	4,973	6,732	37,354	
	3	273,862	288,281	74,213	15,183	4,574	3,943,141
	4	1,361,742	1,031,412	24,730	10,050	369	
	5	0	2,277	5,428	1,461	1,134	
3	1	408,750	237,658	310,149	153,502	105,447	
	2	26,007	20,720	10,647	25,732	110,659	
	3	526,018	275,599	106,034	24,979	7,775	6,565,487
	4	2,514,472	1,576,889	63,547	42,283	1,015	
	5	4,259	2,542	5,328	3,682	1,794	
4	1	408,876	81,860	304,755	119,944	51,220	
	2	17,020	10,678	6,146	17,101	47,894	
	3	468,971	144,266	60,590	12,547	4,112	4,192,288
	4	1,729,993	618,767	42,164	15,748	970	
	5	13,986	3,816	6,932	3,350	582	
5	1	466,489	186,738	307,885	117,333	99,240	
	2	18,503	22,686	12,604	12,539	59,411	
	3	610,541	379,016	103,621	18,918	7,076	7,260,907
	4	3,256,145	1,431,540	82,375	21,946	3,240	
	5	20,804	10,084	7,706	3,252	1,215	
6	1	250,851	66,593	110,039	45,379	35,607	
	2	7,779	17,405	3,180	11,524	31,408	
	3	261,429	75,438	41,117	5,004	4,526	3,164,379
	4	1,690,206	458,656	27,462	6,505	2,890	
	5	3,656	2,221	3,091	1,293	1,120	
7	1	446,131	93,982	182,197	56,624	80,332	
	2	31,962	11,792	7,911	8,268	43,338	
	3	653,901	245,595	78,057	11,337	12,340	6,125,653
	4	3,058,120	1,044,854	24,067	1,834	1,027	
	5	17,249	2,632	7,866	1,792	2,445	
8	1	237,981	69,939	110,995	38,279	28,965	
	2	21,756	2,169	5,107	11,605	25,618	
	3	361,362	121,012	42,562	6,189	3,186	3,642,840
	4	1,699,081	789,988	35,495	2,777	621	
	5	16,047	3,772	5,780	1,529	1,025	
9	1	429,922	202,210	215,458	66,099	99,587	
	2	7,482	13,808	4,771	4,746	42,344	
	3	613,361	273,198	77,859	6,879	7,756	6,739,193
	4	3,285,986	1,289,556	37,836	391	628	
	5	19,165	28,974	7,608	1,149	2,420	
						GRAND TOTAL	43,375,733

* Estimates in a given stratum were obtained by summing the TIUS Expansion Factors for all of the TIUS sample trucks which were assigned to the given stratum.

CENSUS DIVISION	HAUL	SAMTYP 1	2	3	4	5	TOTAL
1	1	143(138)	74(94)	312(323)	413(505)	340(377)	
	2	8(3)	7(4)	20(33)	95(124)	321(491)	
	3	23(13)	32(28)	19(20)	13(7)	4(7)	1,983(2,290)
	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)	
	2	1(1)	5(2)	9(9)	30(30)	351(359)	
	3	50(30)	33(47)	56(65)	17(21)	10(13)	1,934(1,950)
	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	7(9)	5(7)	21(20)	72(91)	694(897)	
	3	22(28)	31(19)	27(23)	21(18)	9(16)	2,068(2,142)
	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)	
	2	9(10)	7(5)	20(26)	139(101)	1,108(986)	
	3	42(38)	41(39)	42(32)	26(8)	6(6)	3,834(3,119)
	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	6(11)	9(8)	41(25)	123(117)	850(820)	
	3	42(37)	34(46)	59(62)	29(20)	22(28)	2,789(2,743)
	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)	
	2	3(4)	7(7)	16(9)	99(119)	454(610)	
	3	45(35)	29(33)	20(30)	2(7)	9(7)	1,815(1,926)
	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	6(5)	4(3)	12(22)	37(55)	524(573)	
	3	18(31)	12(14)	28(24)	29(21)	33(46)	2,007(2,167)
	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)	
	2	18(16)	4(1)	56(47)	187(201)	941(984)	
	3	35(45)	37(43)	31(33)	41(42)	47(32)	3,392(3,135)
	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	6(2)	1(7)	13(11)	28(26)	306(419)	
	3	44(35)	37(43)	20(30)	21(29)	27(23)	2,222(2,336)
	4	69(81)	68(81)	23(27)	9(7)	8(13)	
	5	2(0)	3(2)	9(4)	5(3)	6(6)	

TOTALS → 22,044(21,808)

GRAND TOTAL = 22,044 + 21,808 = 43,852

*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)

CENSUS		SAMTYP					
DIVISION	HAUL	1	2	3	4	5	TOTAL
1	1	75(206)	35(133)	124(511)	203(715)	169(548)	
	2	4(7)	3(8)	5(48)	46(173)	151(661)	
	3	10(26)	19(41)	6(33)	5(15)	3(8)	925(3,348)
	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)	
	2	0(2)	4(3)	1(17)	18(42)	157(553)	
	3	28(52)	21(59)	28(93)	10(28)	3(20)	932(2,952)
	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)	
	2	4(12)	4(8)	9(32)	30(133)	282(1309)	
	3	16(34)	17(33)	13(37)	8(31)	2(23)	919(3,291)
	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)	
	2	2(17)	4(8)	9(37)	54(186)	426(1668)	
	3	23(57)	27(53)	15(59)	11(23)	2(10)	1,476(5,477)
	4	52(98)	42(107)	17(83)	6(29)	1(14)	
	5	0(7)	0(4)	1(25)	0(23)	0(17)	
5	1	04(257)	45(129)	184(554)	148(414)	164(581)	
	2	3(14)	3(14)	13(53)	50(190)	416(1254)	
	3	20(59)	17(63)	27(94)	15(34)	12(38)	1,343(4,189)
	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)	
	2	3(4)	3(11)	5(20)	37(181)	199(865)	
	3	23(57)	14(48)	7(43)	0(9)	4(12)	816(2,925)
	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)	
	2	2(9)	2(5)	5(29)	18(74)	247(850)	
	3	11(38)	7(19)	14(38)	16(34)	15(64)	886(3,288)
	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)	
	2	9(25)	1(4)	19(84)	53(335)	346(1579)	
	3	18(62)	18(62)	13(51)	21(62)	16(63)	1,371(5,156)
	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)	
	2	3(5)	0(8)	3(21)	12(42)	148(577)	
	3	31(48)	19(61)	9(41)	12(38)	8(42)	1,126(3,432)
	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

APPENDIX B

COMMODITY CODES FOR PRODUCTS, EQUIPMENT, AND MATERIALS

CODE   COMMODITY

Agricultural and Food Products

15   Live animals - cattle, horses, poultry, hogs, fish, and other marine products, etc.

16   Fresh farm products - grain, crops, flowers, nursery stock, raw milk, raw tobacco, etc.

17   Processed foods - canned goods, prepared meats, frozen foods, beverages, bottled water, dairy products, tobacco products, etc.

18   Mining Products, unrefined - crude oil, coal, and metal ores

19   Building materials - gravel, sand, concrete, glass, and stone, etc.

Forestry, Wood, and Paper Products

20   Logs and forest products - Except cut lumber and fabricated wood products, (see below) barks or gums

21   Lumber and fabricated wood products - Except furniture

22   Paper, printed matter, and paper products

Chemicals, Petroleum, and Allied Products

23   Chemicals and/or drugs - including fertilizers, pesticides, cosmetics, paints, etc.

24   Petroleum, petroleum products, paving, and asphalt or tar cements

25   Plastics and/or rubber products

Metals and Metal Products

26   Primary metal products - pipes, ingots, billets, metal sheets, etc.

27   Fabricated metal products and bolts and nuts - Except machinery or transportation equipment (see below)

28   Machinery - electrical or nonelectrical

29   Transportation equipment (including complete vehicles) and parts

Other Manufactured Products

30   Furniture (wood and nonwood) and/or fixtures - not involved in household moving

31   Textiles and apparels - fibers, leather goods, carpets, clothing, etc.

32   Miscellaneous products of manufacturing - including photographic
        goods, watches, clocks, jewelry and toys

        Miscellaneous
33   Moving of household and office furniture, including exhibits - from
          home, offices, etc., under contract

34   Mixed cargo, general freight, personal goods, mail and express
          traffic, and small packaged freight

35   Tools/parts for specialized use as in craftsman's vehicle

36   Scrap, garbage, trash

37   Industrial water

38, 39 Other

        No Load Carried
40   Vehicle empty

APPENDIX C

TYPE OF PLACE CODES

Code	Place
A	Railroad facility (servicing facility)
B	Railroad facility (pickup or delivery of rail shipment)
C	Airport (servicing facility)
D	Airport (pickup or delivery of air shipment)
E	Harbor or port facility (servicing facility)
F	Harbor/port facility (pickup or delivery of water shipment)
G	Truck/bus terminal not part of airport, harbor, or railroad
H	Warehouse
I	Tank farm
J	Power plant/distribution station
K	House, apartment building
L	Forest, farm, field, farm building, fisheries
M	Grain elevator, stockyard
N	Mine, quarry, gravel pit, stone crusher
O	Construction site
P	Manufacturing facility or assembly plant
Q	Store or other retail or service outlet
R	Office building, school, hospital, other public facilities
S	Park or other recreational facility
T	Other

APPENDIX D

PRINCIPAL PRODUCTS, CORRESPONDING MNEMONICS, AND CODES

DESCRIPTION	MNEMONIC	PRINCIPAL PRODUCT CODE
Fresh farm products	FARMPD	01
Live animals	LVANML	02
Processed foods	PRFOOD	03
Mining products	MINPRO	04
Building Materials	BLDGMA	05
Logs and forest products	LOGPRO	06
Lumber and fabricated wood products	LUMBER	07
Paper and paper products	PAPER	08
Chemicals and/or drugs	CHEM	09
Petroleum and petroleum products	PETROL	10
Plastics and/or rubber products	PLASTK	11
Primary metal products	PRIMTL	12
Fabricated metal products	FABMTL	13
Machinery	MACHNE	14
Transportation equipment	TEQUIP	15
Furniture and/or hardware	FURN	16
Textiles and apparels	TEXTIL	17
Moving of household and office furniture	MOVING	18
Miscellaneous tools and/or parts for use (as in a craftsman's vehicle)	TOOLS	19
Mixed cargo, general freight	MXDCAR	20
Scrap, garbage, trash, septic tank waste	REFUSE	21
Other	OTHER	22
No load carried	PNOLOD	23
Personal transportation	PRSTN	24
Not in use	NONUSE	25
Miscellaneous products of manufacturing	MSCMFG	27
Industrial water	INDWTR	28
Hazardous waste	HWASTE	29

APPENDIX E

AXLE RECODE CHART									
TYPE OF UNIT	VEHTP Code	MAXLS Code	STTRFT Code	SINGLE Code	DOUBLE Code	TRIPLE Code	UTLTRL Code	AXONTU Code	AXLRE Code
Single Unit Truck (2 axles)	1	1 or 2							01
Single Unit Truck (3 axles)	1	3							02
Single Unit Truck (4 or more axles)	1	4							03
Single Unit Truck (2 axles) Pulling a Full Trailer (2 axles)	2	1 or 2	1						04
Single Unit Truck (2 axles) Pulling a Full Trailer (3 axles)	2	1 or 2	2						05
Single Unit Truck (2 axles) Pulling a Full Trailer (4 or more axles)	2	1 or 2	3						08
Single Unit Truck (3 axles) Pulling a Full Trailer (2 axles)	2	3	1						06
Single Unit Truck (3 axles) Pulling a Full Trailer (3 axles)	2	3	2						07
Single Unit Truck (3 axles) Pulling a Full Trailer (4 or more axles)	2	3	3						09
Single Unit Truck (4 or more axles) Pulling a Full Trailer (2 axles)	2	4	1						10
Single Unit Truck (4 or more axles) Pulling a Full Trailer (3 axles)	2	4	2						11
Single Unit Truck (4 or more axles) Pulling a Full Trailer (4 or more axles)	2	4	3						12

TYPE OF UNIT	VEHTP Code	MAXLS Code	STTRFT Code	SINGLE Code	DOUBLE Code	TRIPLE Code	UTLTRL Code	AXONTU Code	AXLRE Code
Truck-Tractor (2 axles) Pulling a Semi-Trailer (1 axle)	3	1 or 2		1					13
Truck-Tractor (2 axles) Pulling a Semi-Trailer (2 axles)	3	1 or 2		2					14
Truck-Tractor (2 axles) Pulling a Semi-Trailer (3 or more axles)	3	1 or 2		3					18
Truck-Tractor (3 axles) Pulling a Semi-Trailer (one axle)	3	3		1					15
Truck-Tractor (3 axles) Pulling a Semi-Trailer (two axles)	3	3		2					16
Truck-Tractor (3 axles) Pulling a Semi-Trailer (3 or more axles)	3	3		3					19
Truck-Tractor (4 or more axles) Pulling a Semi-Trailer (1 axle)	3	4		1					17
Truck-Tractor (4 or more axles) Pulling a Semi-Trailer (2 axles)	3	4		2					20
Truck-Tractor (4 or more axles) Pulling a Semi-Trailer (3 or more axles)	3	4		3					21
Truck-Tractor (2 axles) Pulling Two Trailers (total of 3 axles on both)	3	1 or 2			1				22
Truck-Tractor (2 axles) Pulling Two Trailers (total of 4 axles on both)	3	1 or 2			2				23
Truck-Tractor (3 axles) Pulling Two Trailers (total of 3 axles on both)	3	3			1				24
Truck-Tractor (3 axles) Pulling Two Trailers (total of 4 axles on both)	3	3			2				27
Truck-Tractor (4 or more axles) Pulling Two Trailers (3 axles on both)	3	4			1				30

AXLE RECODE CHART

TYPE OF UNIT	VEHTP Code	MAXLS Code	STTRFT Code	SINGLE Code	DOUBLE Code	TRIPLE Code	UTLTRL Code	AXONTU Code	AXLRE Code
Truck-Tractor (4 or more axles) Pulling Two Trailers (total of 4 axles on both)	3	4			2				31
Straight Truck (2 axles, small) Pulling Utility Trailer (1 axle)	2	1 or 2					1 or..	...1	46
Straight Truck (2 axles, small) Pulling Utility Trailer (2 axles)	2	1 or 2					2 or..	...2	47
Straight Truck (2 axles, small) Pulling Utility Trailer (3 or more axles)	2	1 or 2					3 or..	...3	48
Straight Truck (3 axles, small) Pulling Utility Trailer (1 axle)	2	3						1	49
Straight Truck (3 axles, small) Pulling Utility Trailer (2 axles)	2	3						2	50
Straight Truck (3 axles, small) Pulling Utility Trailer (3 or more axles)	2	3						3	51
Straight Truck (2 axles, large) Pulling Utility Trailer (1 axle)	2	2					1		52
Straight Truck (2 axles, large) Pulling Utility Trailer (2 axles)	2	2					2		53
Straight Truck (2 axles, large) Pulling Utility Trailer (3 or more axles)	2	2					3		54
Straight Truck (3 axles, large) Pulling Utility Trailer (1 axle)	2	3					1		55
Straight Truck (3 axles, large) Pulling Utility Trailer (2 axles)	2	3					2		56
Straight Truck (3 axles, large) Pulling Utility Trailer (3 or more axles)	2	3					3		57

AXLE RECODE CHART

Source: U.S. Bureau of the Census   E-3

TYPE OF UNIT	VEHTP Code	MAXLS Code	STTRFT Code	SINGLE Code	DOUBLE Code	TRIPLE Code	UTLTRL Code	AXONTU Code	AXLRE Code
									AXLE RECODE CHART
Straight Truck (4 or more axles) Pulling Utility Trailer (1 axle)	2	4					1		58
Straight Truck (4 or more axles) Pulling Utility Trailer (2 axles)	2	4					2		59
Straight Truck (4 or more axles) Pulling Utility Trailer (3 or more axles)	2	4					3		60
Truck-Tractor (2 or more axles) Pulling 2 or more Trailers (5 axles)	3	1,2,3, or 4			3 or...	...1			25
Truck-Tractor (2 or more axles) Pulling 2 or more Trailers (6 or more axles)	3	1,2,3, or 4			4 or...	...2, 3, or 4			26

APPENDIX F

USER COMMENT FORM
&
DATA SHARING FORM

Technical Documentation for the
1990 Nationwide Truck Activity and Commodity Survey
Public Use File

PURPOSE: The 1990 Nationwide Truck Activity and Commodity Survey (NTACS) collected one- and two-day snapshots of a vehicle's activity for a sample of 1987 Truck Inventory and Use Survey (TIUS) respondents. The NTACS was designed to provide for more detailed information than is possible on the TIUS.

Plans are moving forward to conduct a second NTAS (page vii) as a follow-on to the 1992 TIUS. DOT, the Census Bureau, and ORNL are anxious to learn from the first NTACS so that the quality of NTAS data can be improved and the second NTAS can be conducted with greater efficiency and effectiveness. Data user comments are a key element to understanding the problems that must be overcome and the improvements that should be made.

User Comment Form
The purpose of the 1990 NTACS User Comment Form is to provide an opportunity for users of the 1990 NTACS File and Documentation to comment on the content and quality of these products in meeting user needs. Comments will be used for future improvements. (See Form on pages F-3 and F-4.)

Data Sharing Form
Users are invited to share novel statistics computed from this 1990 NTACS File which may be beneficial to other users. Users desiring to share such statistics with the rest of the TIUS/NTACS community are requested to send their voluntary submissions to the NTACS Library as indicated on page F-6 in the format illustrated below using the components (statistic, definition, procedures, special data editing, table of results) in the following example.

EXAMPLE

Statistic:
1990 TOTAL ANNUAL TOLLS (TATOLLS) for Short Haul and Long Haul Commodity-Carrying Trucks

Definition(s):

- TATOLLS is an estimate of the total 1990 annual amount paid in tolls for the NTACS population.

- Short haul, commodity-carrying trucks are identified as those trucks having the second character of TRUKID equal to 1.

- Long haul, commodity-carrying trucks are identified as those trucks having the second character of TRUKID equal to 2. (See page 60.)

Procedure:

Step 1.   For each truck in the 1990 NTACS (Imputed) File, compute an estimate of the annual amount paid in tolls.

$$\text{ATOLLS} = (\text{TOLL1}) \bullet \left(\begin{array}{c} \text{NUMBER OF DAYS OPERATED DURING} \\ \text{SAMPLE WEEK ONE} \end{array} \right) \bullet (\text{WKSOP}).$$

Step 2.   Then TATOLLS for each classification is computed separately as

$$\text{TATOLLS} = \sum_{\substack{\text{Sample} \\ \text{Trucks} \\ \text{in} \\ \text{Classification}}} (\text{ATOLLS}) \bullet (\text{XPFD1}).$$

Special Data Editing:

None.

Table of Results:

TATOLLS of Short Haul and Long Haul Commodity-Carrying Trucks

Type	Estimated 1990 TATOLLS
Short Haul, Commodity-Carrying	$ 696,697,976
Long Haul, Commodity -Carrying	$ 843,906,070
Total	$1,540,604,046

Organization:

Oak Ridge National Laboratory
Contact: Stacy Davis (615) 574-5957
Date Prepared: July, 1992

USER COMMENT FORM

Technical Documentation
for the
1990 Nationwide Truck Activity and
Commodity Survey
Public Use File

Purpose: The purpose of this form is to provide an opportunity for users of the 1990 NTACS File and Documentation to comment on the content and quality of these products in meeting user needs. Comments will be used for future improvements.

Name _____

Job Title _____

Organization _____

Mailing Address _____

_____

_____ , _____ _____
City   State   Zip

Telephone   (   ) _____

1. I found the following data items most useful.

_____

_____

2. I found the following data items least useful.

_____

_____

3. Other comments on the 1990 NTACS User File.

_____

_____

_____

4. Other comments on the 1990 NTACS Documentation.

_____

_____

_____

5. Comments for improving future NTACS User Files.

_____

_____

_____

6. Comments for improving future NTACS Documentation.

_____

_____

_____

Thank you for your comments. Please return this form to:

1990 NTACS
Data Analysis Group
Center for Transportation Analysis
Oak Ridge National Laboratory
P.O. Box 2008, Bldg. 5500A
Oak Ridge, Tennessee 37831-6366
Voice: (615) 574-5957
Fax: (615) 574-3851

DATA SHARING FORM

Technical Documentation for the
1990 Nationwide Truck Activity and Commodity Survey
Public Use File

Purpose: The purpose of this form is to provide an opportunity for users of the NTACS File to share novel statistics computed from this 1990 NTACS File which may be beneficial to other users.

Statistic:

Definition(s)

Procedure:

Special Data Editing:
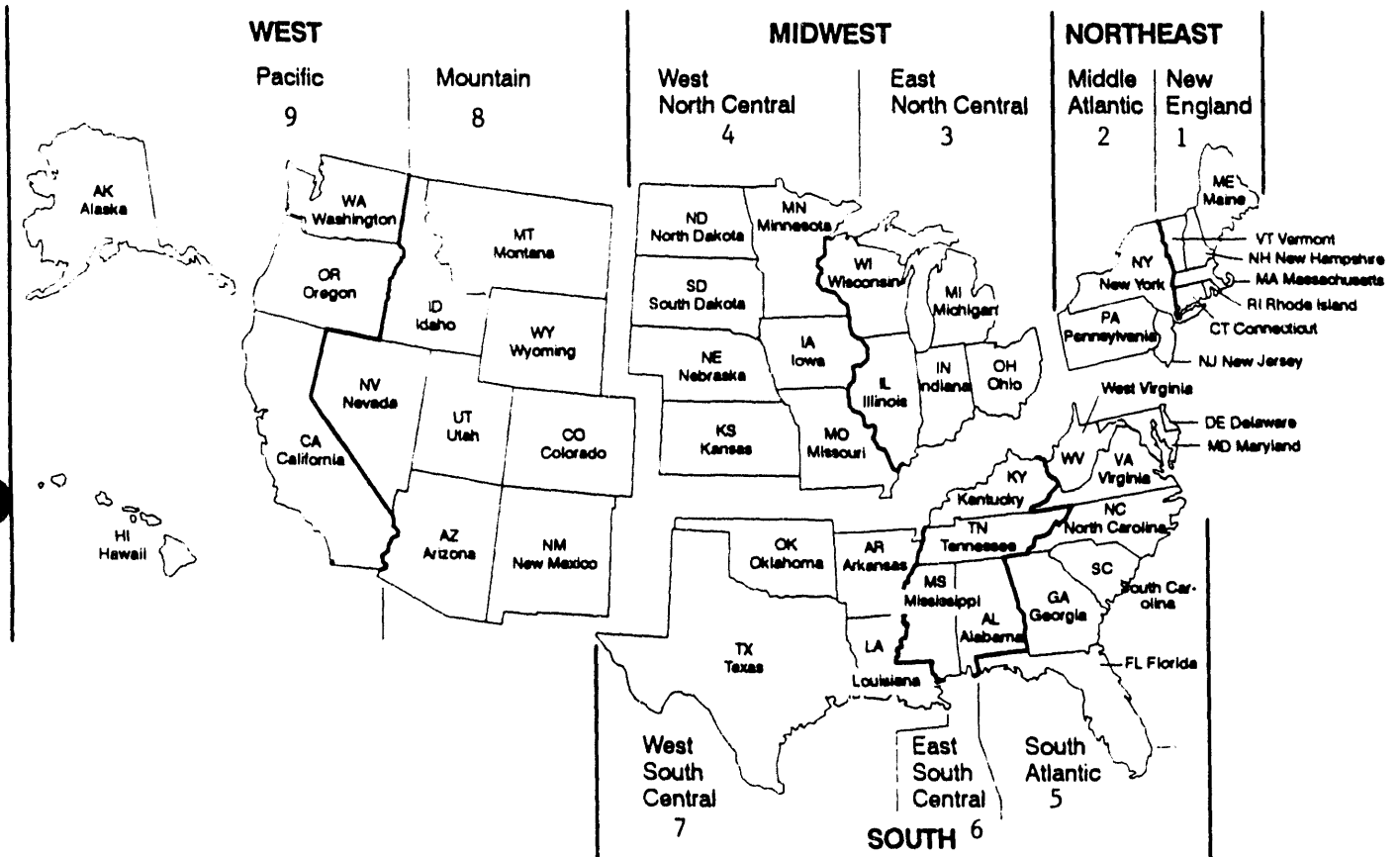
Table of Results:

Organization:

Thank you for sharing your statistics. Please return this form to:

1990 NTACS Library
Statistics and Data Analysis Group
Center for Transportation Analysis
Oak Ridge National Laboratory
P.O. Box 2008, Building 5500A
Oak Ridge, Tennessee 37831-6368
Voice: (615) 574-5957
Fax: (615) 574-3851

APPENDIX G

MAP OF NINE CENSUS DIVISIONS

WEST

Pacific 9 | Mountain 8

MIDWEST

West North Central 4 | East North Central 3

NORTHEAST

Middle Atlantic 2 | New England 1

AK Alaska

WA Washington
OR Oregon
ID Idaho
MT Montana
WY Wyoming
NV Nevada
UT Utah
CA California
AZ Arizona
CO Colorado
NM New Mexico

HI Hawaii

ND North Dakota
SD South Dakota
NE Nebraska
KS Kansas
MN Minnesota
WI Wisconsin
IA Iowa
MO Missouri
IL Illinois
IN Indiana
MI Michigan
OH Ohio

ME Maine
VT Vermont
NH New Hampshire
MA Massachusetts
RI Rhode Island
CT Connecticut
NJ New Jersey
NY New York
PA Pennsylvania
West Virginia
DE Delaware
MD Maryland

KY Kentucky
WV
VA Virginia
TN Tennessee
NC North Carolina
SC South Carolina
MS Mississippi
AL Alabama
GA Georgia
FL Florida
AR Arkansas
OK Oklahoma
TX Texas
LA Louisiana

West South Central 7 | East South Central | South Atlantic 5

SOUTH 6

G-1

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22. J. B. Shrago, Director, Office of Technology Transfer, 405 Kirkland Hall, Vanderbilt University, Nashville, Tennessee 37240

23. M. Williams, Professor, Department of Economics, Northern Illinois University, DeKalb, Illinois 60115

24-73. Center for Transportation Analysis, Energy Division, 5500A, MS-6366, Room A217

74-83. OSTI, U.S. Department of Energy, P.O. Box 62, Oak Ridge, TN 37831

84. Office of Assistant Manager of Energy Research and Development, DOE/ORO, P.O. Box 2001, Oak Ridge, TN 37831-8600

END

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