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# **MICHIGAN TRUCK TRIP INFORMATION SURVEY**

(Version October 28, 1988)

November 1988 FINAL REPORT

Center for National Truck Statistics

UMTRI The University of Michigan Transportation Research Institute

# MICHIGAN TRUCK TRIP INFORMATION SURVEY (Version October 28, 1988)

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University of Michigan Transportation Research Institute

November 1988

The opinions, findings, and conclusions expressed in this publication are those of the author and not necessarily those of the Michigan Office of Highway Safety Planning or the U.S. Department of Transportation, National Highway Traffic Safety Administration.

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#### INTRODUCTION

#### Overview

The Michigan Truck Trip Information Survey (MTTIS) is a sample survey of the population and travel of heavy-duty truck tractors registered and operating in Michigan. The target group for the study consists of truck tractors with an empty weight over 6,000 pounds. Since an empty weight of 6,000 pounds is the practical lower limit for truck tractors, the study population for MTTIS covers basically all heavy-duty truck tractors registered and operating in Michigan.

This report documents the October 28, 1988, version of the Michigan Truck Trip Information Survey file. The report summarizes all the information in the computerized MTTIS data file, and consists of two parts. Part 1, the Truck File Codebook, documents the truck file. The truck file has variables at the vehicle level which describe the physical dimensions of the truck (weight, length, cabstyle and so on), company (owner) type, and annual mileage estimates, with one record for each truck in the file. The Truck File Codebook displays weighted and unweighted frequencies and percentage distributions. For each variable, the first two columns show the unweighted frequencies and percents, with the heading "N" for the frequency column. The second two columns show the frequencies and percents weighted by the appropriate inflation factor. These two columns show population estimates for truck tractors in Michigan. The column headed "WGHT" shows the weighted frequencies.

Part 2 is the Trip File Codebook, which contains trailer, cargo, route, time of day, and driver information, one record per trip, for each trip taken by a survey truck on a survey day. Only travel that occurred in the State of Michigan is included in the trip file. All the frequencies in the trip file are for actual trips.

The truck file contains information on 1,055 tractors registered in Michigan. Of the sample trucks, 71.1% are owned by firms that operate in interstate commerce, while 27.4% operate only within the state of Michigan. For-hire trucking firms own 475 or 45.0% of the sample trucks; private companies operate 564 (53.5%), and 16 (1.5%) are rental vehicles. These tractors took 8,464 trips which were traced on specially prepared maps. The mileage accumulated during these trips was broken down by road type, time of day, and area population type. The total travel of the tractors on survey days was 470,017 miles, all on Michigan roads. Mappers were able to map and categorize 96.1.% of that travel.

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#### Sample Design

The file of truck registrations maintained by the Michigan Department of State as of April 1987 was used to draw a sample for the study. The file consisted of all registrations of commercial truck tractors with an empty weight greater than 6,000 pounds and "other" trucks; i.e., straight trucks licensed to operate at a weight of 80,000 pounds or more. Trucks participating in the International Registration Plan (IRP) with Michigan as a base state were included. After processing to eliminate duplicate registrations and a few vehicles mistakenly included, the file consisted of 40,796 trucks. This was the "sampling frame" from which the original sample of 1,522 trucks was drawn.

An examination of the expiration dates of the vehicles in the registration file showed that 15,421, or about 37.8%, of the registrations had expired. This was surprising, especially since the file of truck registrations was thought to be current. The version of the registration file as of April 1987 was used. The registration year for large trucks in Michigan runs from February 28th in one year to February 28th in the next. Registrations for all large trucks, then, expire at the same time, on February 28th. But a pilot survey determined that about 70% of the expired truck registrations on the April tape had actually been renewed for the current year. Apparently not all of the transactions renewing registrations had been received and processed by the time the tape was made. Many of the unprocessed registrations were for IRP trucks.

Since the pilot study showed that many of the registrations listed as expired had actually been renewed, it was decided to include expired registrations in the sampling frame. The sampling frame was divided into three groups, or strata, which were sampled separately. The strata employed were: Currently registered, expired IRP registration, and expired non-IRP registration. Selection was made by means of an interval procedure with a random start. The actual sample sizes drawn from each strata were chosen based on the estimated rate of renewed registrations in the expired strata and a projected non-response rate, to ensure that there would be about 1,000 completed cases of trucks with valid current registrations at the end of the survey. Table 1 shows the breakdown of the original sampling frame and the number of registrations drawn from each category.

In June of 1987 another tape file of the appropriate truck registrations was obtained. It was expected that the processing of registrations for February would be substantially complete on the June tape. Thus the June tape could be used to determine reliably the population of trucks registered on February 28, 1987. Again the tape was processed to eliminate duplicate registrations and to eliminate a few registrations that did not fit the original filter. Of the original sample of 1,522 trucks, the June tape showed that 212 were still listed as expired. Accordingly, those 212 expired registrations were deleted from the survey as non-sample vehicles. On the other hand, the June tape contained 1,054 trucks with expiration dates after February 28 that

#### TABLE 1

 $q \sim 10^{\frac{1}{2}}$ 

	Regist	trations	Sample Size		
	N	Percent	N	Percent	
Current Registration IRP Expired Non-IRP Expired	25,375 10,484 4,937	62.2% 25.7 12.1	819 456 247	53.8% 30.0 16.2	
Total	40,796	100.0%	1,522	100.0%	

## Original Sampling Frame of Michigan Truck Registrations by Sampling Strata and Sample Size

were not included in the April tape. The 1,054 additional registrations that should have been on the original tape were treated as an addition to the sampling frame. Thirty-four registrations were drawn from that group and added to the sample.

In the final sample of completed cases, there were 1,055 tractors and only 30 straight trucks. That there were so few straight trucks is perhaps not surprising since only straight trucks with a licensed weight of 80,000 pounds or more were included. Since there were too few straight trucks in the sample to support any kind of meaningful analysis, it was determined to drop straight trucks from the file.

#### Data Collection for the Truck File

Data collection began in May of 1987. Survey interviewing was conducted by telephone whenever possible. Mail versions of the interview forms were used only when the interview could not be completed by telephone. The survey work consisted of two parts, which correspond to the two parts of the data file. The first part consisted of the initial contact with the owner. As part of the initial contact, interviewers secured the owner's cooperation, confirmed the sample vehicle's identification, obtained descriptive information on the company and truck, and made arrangements for acquiring detailed mileage information on each of four random survey days. The company and vehicle description information is summarized in V101 through V112 in Part 1, the Truck File Codebook, of this report.

### Response Rates and Population Estimates

Table 2 shows the final disposition of the final sample along with some population estimates. A total of 1,556 registrations were sampled from Michigan truck registration files. Of that total, 212 or 13.6% were listed as having expired registrations and thus should not have been included among current registrations. Another 59 were determined to be non-sample vehicles on other grounds---one was a light truck, 12 had been destroyed, and 46 were straight trucks with licensed weights under 80,000 pounds. Of the 1,285 remaining registrations, relatively complete information was gathered on 1,085. Two hundred cases could not be completed, due to an inability to locate the owner or the owner's refusal to cooperate. Considering just the 1,285 valid registrations in the sample, the completion of 1,085 cases amounts to a response rate of 84.4%. As noted above, the 30 straight trucks among the completed cases were dropped from the final file. The straight trucks were deleted after all the weighting procedures had been gone through, so that their elimination would not affect the weights.

#### TABLE 2

	Samp:	le Cases	Population Estimates				
	N	Percent	N	Percent			
Complete Incomplete Non-Sample Expired Reg	1,085 200 59 212	69.7% 12.9 3.8 13.6	30,014.2 5,590.2 1,705.1 4,540.8	71.7% 13.4 4.1 10.9			
Total	1,556	100.0%	41,850.3	100.0%			

#### Michigan Truck Trip Information Survey Sample Cases And Population Estimates

Table 2 also shows estimates of the population of heavy trucks in Michigan. The format of the table represents what is, in effect, a "virtual truck registration" file. The population estimate given in the "Total" row represents all the truck registrations on the April tape plus the additional 1,054 registrations on the June tape which should have been on the April tape. The total, 41,850, is the number of registrations which would have been on the April tape if all registrations had been received and processed by then. Of that total, 4,541 registrations were expired and so should not be counted among current registrations. An additional 1,705 registrations were for vehicles that had been destroyed or were light trucks and so can not be counted among the population of heavy trucks as defined above. The sum of the remaining two figures, which were estimated from the valid cases in the sample, represents the number of truck tractors and straight trucks licensed for 80,000 pounds or more operating in Michigan. There are 35,604 such trucks with Michigan registrations. Truck tractors account for 34,577 of the Michigan truck population. The remaining 1,027 are straight trucks with licensed weights of 80,000 pounds or more.

 $\underline{Y}^{i}$ 

### Truck File Weighting Procedures

Calculation of truck file weights was quite straightforward. Trucks were sampled from the registration file by strata. The strata were: Currently registered, expired IRP registration, and expired non-IRP registration. Variable 7 in the Truck File Codebook indicates the selection stratum from which the sample trucks were drawn. An interval selection procedure was used within each stratum. The resulting "sample weight" is contained in V11, and is simply the sampling frame total for a particular stratum divided by the number of vehicles selected from that stratum. Table 1 above shows the frame totals and sample sizes for each stratum. Table A in the Appendix shows the sample weight for each stratum.

The only adjustment factor calculated for the truck file is the "non-contact adjustment," (V13), which corrects for the cases that could not be completed. There were 200 such cases. The non-contact adjustments for each stratum are shown in Table B in the Appendix. The "final contact weight," V14, is simply the product of the original sampling weight times the non-contact adjustment, or V11 times V13. This is the weight that should be used to produce Michigan population totals for all the vehicle-level variables, which run from V101 to V112 in Part 1 of this report. The range of the final contact weight is shown in Table D of the Appendix.

### Data Collection for the Trip File

Travel information was collected on the survey vehicles over the course of one year. The survey year ran from May 3, 1987, to May 2, 1988, and was divided into four quarters. Each truck was assigned a "date code," indicating the day for which travel information would be gathered in each quarter. The "date codes" (1-89) correspond to the 89 days of a trip quarter. Date codes were randomly assigned to each vehicle at the time of selection. The list of selected vehicles was sorted by owner, and date codes were assigned in such a way that adjacent vehicles on the list, and therefore possibly trucks operated by the same owner, were not given consecutive date codes. Short, two or three day "break periods" were introduced between quarters to allow the staff to prepare for the next quarter of interviewing. The start date for each trip quarter was chosen so that the survey day of any particular vehicle fell on a weekend no more than twice over the course of the survey year.

Data collection for the trip file went forward at the same time as the initial contacts were being made. During the first quarter of interviewing, both contact and the first quarter of travel information were collected. The travel data are summarized in Part 2 of this report, the Trip File Codebook. Questions covered the driver's age and experience, cargo weights and types, the number and type of trailers, and the route followed for the twenty-four hours of the truck's survey day as determined by its date code. In the case of private carriers, the owner was asked if the truck was operated for-hire on that day, and if so whether the trip was interstate and what type of regulatory · · · ·

authority was used. (During the third and fourth quarters of the survey, questions concerning the source and type of the driver's training were added to the interview.) If the truck was not in use on its survey day, interviewers took the travel information from the last day the truck was used prior to the survey day. This strategy made it much more likely that travel data would be collected on each truck during each quarter. In some few cases, the truck operator knew when truck was last in use but could only give typical travel the information. Those trips were assigned trip numbers between 81 and 89. (See V1002.) In some other cases, the owner could only give typical trip and frequency of use information. Those trips were assigned trip numbers between 71 and 79.

All the frequencies in the trip file are for actual trips. The exposure data of interest are the miles accumulated by various configurations by road type, time of day, population type, and so on. A "trip" was defined so as to permit the aggregation of miles traveled for configurations of interest. A new "trip" began whenever there was a change in driver, operating authority, vehicle configuration (e.g., adding or changing trailers, lowering or raising lift axles), or cargo type or amount. Thus if the driver changed, or cargo was loaded or and the second unloaded, or one trailer type was exchanged for another, the interviewer £. began a new trip form to track the mileage accumulated by the new " configuration. Consequently, frequencies in the trip file reflect the - number of trips and thus are not directly meaningful. For example, one of the tractors took 17 trips on one of its survey days. That vehicle - ... on a single day generated 17 records for each of the variables in the trip file. It is important to keep in mind while examining trip file frequencies that the value of the trip file lies in aggregating different types of travel across trips and survey days for the configurations of interest.

The response rate in collecting travel information can be measured in two ways. Of the 1,055 tractors on which trip calls were made, at least one quarterly trip interview was completed for 986, for a response rate of 93.5%. The goal was to complete four trip calls on each tractor over the course of a year, for a total of 4,220 potential travel days. Interviews on a total of 3,603 were actually completed, for a survey day response rate of 85.4%

#### Trip File Weighting Procedures

A number of weights and inflation factors were calculated to permit the estimation of annual mileages for the Michigan tractor population from the sample of travel on survey days. The weight variable (V117, the "final trip weight") used in producing these annual mileage estimates is basically the product of the vehicle weight for the trip file times a factor that inflates the survey day mileage to an annual basis. The first step in calculating the final trip weight is the "trip non-response adjustment," V113. This adjustment corrects for the cases for which no trip surveys could be completed. It was calculated using the same strata as were used in determining the truck

file weights. (See Table C in the Appendix.) Variable 114, "trip vehicle weight," is the product of V14, the final contact weight, times the trip non-response adjustment (V113), and thus gives the vehicle level weight for tractors in the trip file.

The other component of the final trip weight is the adjustment that inflates the sample of survey day mileage to an annual basis. The trip year was divided into four quarters, and optimally travel data would have been collected on each truck in every quarter. For most of the cases, four quarters of interviewing were completed. Variable 115, the survey day weight, weights the quarterly information based on the number of quarters completed. It was calculated by dividing 365 by the number of quarters completed for a particular case.

The next step was to determine the weight of the individual survey days within a quarter. As described above, the method of collecting travel data was designed to produce mileage information for each quarter. If a tractor was not used on its selected survey date, the interview was done of the last use of the tractor on public roads before the survey day. (The survey dates and use dates are contained in V1003-V1008 in Part 2, Trip File Codebook. The Julian versions of the dates are in V1009 and V1010.) For some trips, determining the interval,  $I_{i}$ between uses, and thus the frequency of use, was simple. In a few cases the respondent did not know when the truck was last in use, but he did know how the truck was typically used and how often it was used. In those cases, which were given trip numbers from 71 through 79, a dummy date was assigned based on the respondent's estimated frequency of use. The interval between the survey date and the use date could be used directly to determine the frequency of use for a particular quarter.

For the remaining cases, determining the interval I was somewhat more involved since the survey method did not directly determine the interval between trucks uses, but only the interval between the survey day and the day of last use. However, once a random date was selected, the particular interval between uses of the sample vehicle that span the survey day was also specified. Suppose the sample vehicle was used on the 10th and the 20th, so that this particular interval, I, was 10 days. Survey dates from the 10th to the 19th would fall in this interval (the 20th being the beginning of the next interval). The "half-interval" is estimated by the difference between the survey date and the date the truck was last used. If the survey date were the 14th, then the halfinterval is 4 days. The possible outcomes for the half-interval for this example are the integers  $0,1,2,3,\ldots,9$ . Since the survey date was randomly selected, the probability of each outcome is the same, and the interval, I, is estimated by:

I = 2(half-interval) + 1

The frequency of use for each quarter is 1/I. The resulting factor was multiplied by the survey day weight to determine the "annual mileage inflation factor," Vll6. This factor weights the survey day mileage to a yearly basis.

With the trip level vehicle weight, V114, and the factor which annualizes the survey travel, V116, the "final trip weight," V117, could be calculated by multiplying V114 times V116. Variable 117 is the appropriate weight for population estimates of travel from the trip file. Table D in the Appendix shows the ranges of the weight variables for the trip file.

#### Obtaining Information from the Dataset

This report provides counts and distributions of the code values for each variable in the truck and trip files. These tabulations are useful for understanding the variables available in the file, the completeness of the data, and the number of cases or trips with any specific code value. This report does not present either analysis or interpretation of the data.

Most research questions require more detailed cross-classification of the data, and for the trip file the value of the data lies primarily in the ability to aggregate mileages across configurations of interest. One might, for example, be interested in examining the differences between dump trailers and vans in road type usage. While this dataset is not accessible to public users of the Michigan Terminal System, the staff of the UMTRI Center for National Truck Statistics will be pleased to make the appropriate runs for outside users. Requests for consultation on and analysis of the data are welcomed and may be addressed to Ken Campbell at (313) 764-0248. Finally, while every effort has been made to check the accuracy of the data, the file may contain errors as yet undetected. PART 1

The Truck File Codebook

# TRUCK FILE CODEBOOK

Variable	Variable	Field	Character	Mult	Page
Number	Name	Width	-туре	Resp	
1	SELECTION NUMBER	4	Numeric		13
2	DATE CODE	2	Numeric		13
3	MAKE	2	Numeric		15
4	MODEL YEAR	2	Numeric		15
5	LICENSED WEIGHT	6	Numeric		16
6	WEIGHT INDICATOR	1	Numeric		16
7	SELECTION STRATUM	1	Numeric		16
8	TRIP FLAG	1	Numeric		17
9	REASON NSV	1	Numeric		17
10	JULIAN EXPIRATION DATE	5	Numeric		17
11	SAMPLE WEIGHT	5	Numeric		17
12	OUTCOME FLAG	1	Numeric		18
13	NON-CONTACT ADJUSTMENT	4	Numeric		18
14	FINAL CONTACT WEIGHT	5	Numeric		18
101	AREA OF OPERATION	1	Numeric		18
102	OPERATING AUTHORITY	1	Numeric		18
103	CARRIER TYPE	1	Numeric		19
104	OWNER OPERATOR	1	Numeric		19
105	POWER UNIT TYPE	1	Numeric		19
106	POWER UNIT BODY STYLE	1	Numeric		19
107	POWER UNIT NO. AXLES	1	Numeric		20
108	CAB STYLE	1	Numeric		20
109	FUEL TYPE	1	Numeric		20
110	POWER UNIT WEIGHT	6	Numeric		20
111	POWER UNIT LENGTH	3	Numeric		21
112	ESTIMATED ANNUAL MILEAGE	6	Numeric		21

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Variable	1	SELECTIC	IN NUMB	ER		MD1: MD2:	None None	Field Type:	Width: 4 Numeric
Variable	2	DATE COD	)E			MD1: MD2:	None None	Field Type:	Width: 2 Numeric
N	Prcnt	WGHT	Prcnt	DATE	CODE				
14	1.3	463	1.3	01.	Date	code	1		
13	1.2	426	1.2	02.	Date	code	2		
11	1.0	362	1.0	03.	Date	code	3		
15	1.4	500	1.4	04.	Date	code	4		
12	1.1	399	1.2	05.	Date	code	5		
10	0.9	325	0.9	06.	Date	code	6		
15	1.4	500	1.4	07.	Date	code	7		
10	0.9	336	1.0	08.	Date	code	8		
11	1.0	386	1.1	09.	Date	code	9		
14	1.3	463	1.3	10.	Date	code	10		
10	0.9	338	1.0	11.	Date	code	11		
11	1.0	362	1.0	12.	Date	code	12		
11	1.0	362	1.0	13.	Date	code	13		
13	1.2	450	1.3	14.	Date	code	14		
13	1.2	426	1.2	15.	Date	code	15		
7	0.7	248	0.7	16.	Date	code	16		
14	1.3	463	1.3	17.	Date	code	17		
11	1.0	362	1.0	18.	Date	code	18		
15	1.4	476	1.4	19.	Date	code	19		
10	0.9	323	0.9	20.	Date	code	20		
12	1.1	399	1.2	21.	Date	code	21		
9	0.9	299	0.9	22.	Date	code	22		
10	0.9	338	1.0	23.	Date	code	23		
11	1.0	352	1.0	24.	Date	code	24		
10	0.9	338	1.0	25.	Date	code	25		
14	1.3	439	1.3	26.	Date	code	26		
13	1.2	426	1.2	27.	Date	code	27		
10	0.9	336	1.0	28.	Date	code	28		
12	1.1	376	1.1	29.	Date	code	29		
13	1.2	426	1.2	30.	Date	code	30		
15	1.4	492	1.4	31.	Date	code	31		
13	1.2	426	1.2	32.	Date	code	32		
10	0.9	325	0.9	33.	Date	code	33		
9	0.9	291	0.8	34.	Date	code	34		
11	1.0	349	1.0	35.	Date	code	35		
11	1.0	362	1.0	36.	Date	code	36		
11	1.0	365	1.1	37.	Date	code	37		
14	1.3	437	1.3	38.	Date	code	38		
10	0.9	325	0.9	39.	Date	code	39		
14	1.3	447	1.3	40.	Date	code	40		
12	1.1	386	1.1	41.	Date	code	41		
13	1.2	413	1.2	42.	Date	code	42		
13	1.2	421	1.2	43.	Date	code	43		

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N	Prcnt	WGHT	Prcnt	Var 2	DATE	CODI	Ξ
10	0.0	205			<b>-</b> .		
10	0.9	325	0.9	44.	Date	code	44
14	0.9	325	0.9	45.	Date	code	45
12	1 1	43/	1.3	40.	Date	code	40
10	1.1	336	1.1	4/. /2	Date	code	4/
13	1 2	330	1.0	40.	Date	code	40
16	1 5	514	1 5	49. 50	Date	code	49 50
11	1.0	376	1 1	51	Date	code	50
13	1.2	437	1.3	52	Date	code	52
-0	0.9	288	0.8	53	Date	code	53
10	0.9	328	1.0	54.	Date	code	54
14	1.3	476	1.4	55.	Date	code	55
12	1.1	389	1.1	56.	Date	code	56
11	1.0	362	1.0	57.	Date	code	57
12	1.1	389	1.1	58.	Date	code	58
15	1.4	498	1.4	59.	Date	code	59
11	1.0	352	1.0	60.	Date	code	60
16	1.5	500	1.4	61.	Date	code	61
11	1.0	360	1.0	62.	Date	code	62
13	1.2	410	1.2	63.	Date	code	63
11	1.0	386	1.1	64.	Date	code	64
13	1.2	410	1.2	65.	Date	code	65
13	1.2	402	1.2	66.	Date	code	66
11	1.0	352	1.0	67.	Date	code	67
10	0.9	336	1.0	68.	Date	code	68
9	0.9	291	0.8	69.	Date	code	69
14	1.3	460	1.3	70.	Date	code	70
13	1.2	439	1.3	71.	Date	code	71
12	1.1	399	1.2	72.	Date	code	72
11	1.0	354	1.0	73.	Date	code	73
9	0.9	301	0.9	74.	Date	code	74
13	1.2	426	1.2	75.	Date	code	75
14	1.3	476	1.4	76.	Date	code	76
9	0.9	291	0.8	77.	Date	code	77
11	1.0	376	1.1	78.	Date	code	78
11	1.0	360	1.0	79.	Date	code	79
11	1.0	383	1.1	80.	Date	code	80
15	1.4	487	1.4	81.	Date	code	81
10	0.9	328	1.0	82.	Date	code	82
9	0.9	301	0.9	83.	Date	code	83
12	1.1	389	1.1	84.	Date	code	84
12	1.1	386	1.1	85.	Date	code	85
14	1.3	450	1.3	86.	Date	code	86
10	0.9	312	0.9	87.	Date	code	87
13	1.2	402	1.2	88.	Date	code	88
12	1.1	397	1.1	89.	Date	code	89

# TRUCK FILE CODEBOOK

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Variable	3	MAKE			MD1: MD2:	Noi	9 I ne :	Tield Type:	Width Nu	: mer:	2 ic
N	Prcnt	WGHT	Prcnt	MAKE							
14	1.3	508	1.5	01.	Autocar						
0	0.0	0	0.0	02.	Brockway						
34	3.2	1207	3.5	03.	Chevrolet						
9	0.9	296	0.9	04.	Diamond Red	C					
2	0.2	60	0.2	05.	Dodge						
202	19.1	6854	19.9	06.	Ford						
62	5.9	1918	5.6	07.	Freightlin	er					
257	24.4	8395	24.3	08.	GMC						
0	0.0	0	0.0	09.	Hendrickson	n					
223	21.1	7364	21.3	10.	Internation	nal	Harve	ster			
74	7.0	2310	6.7	11.	Kenworth						
69	6.5	2188	6.3	12.	Mack						
0	0.0	0	0.0	13.	Marmon						
47	4.5	1410	4.1	14.	Peterbilt						
54	5.1	1795	5.2	15.	White						
0	0.0	0	0.0	16.	Mercedes-B	enz					
0	0.0	0	0.0	17.	Volvo						
3	0.3	90	0.3	18.	Western St	ar					
0	0.0	0	0.0	19.	FWD						
0	0.0	0	0.0	20.	Oskosh						
0	0.0	) 0	0.0	21.	Iveco						
2	0.2	74	0.2	98.	Other						
3	0.3	100	0.3	99.	Unknown						

Variable	4	MODEL YI	EAR		MD1 MD2	: 0 : None	Field Type:	Width: 2 Numeric
N	Prcnt	WGHT	Prcnt	MODEL	YEAR			
0	0.0	0	0.0	00.	Unknown			
1	0.1	37	0.1	55.	1955			
1	0.1	37	0.1	61.	1961			
2	0.2	74	0.2	64.	1964			
2	0.2	74	0.2	65.	1965			
1	0.1	37	0.1	66.	1966			
5	0.5	185	0.5	67.	1967			
4	0.4	135	0.4	68.	1968			
10	0.9	331	1.0	69.	1969			
13	1.2	455	1.3	70.	1970			
19	1.8	643	1.9	71.	1971			
33	3.1	1075	3.1	72.	1972			
40	3.8	1371	4.0	73.	1973			
39	3.7	1269	3.7	74.	1974			
34	3.2	1128	3.3	75.	1975			
29	2.7	977	2.8	76.	1976			
72	6.8	2365	6.9	77.	1977			

N	Prcnt	WGHT	Prcnt	Var 4	MODEL	YEAR
85	8.1	2842	8.2	78.	1978	
125	11.8	4211	12.2	79.	1979	
62	5.9	2068	6.0	80.	1980	
45	4.3	1514	4.4	81.	1981	
50	4.7	1600	4.6	82.	1982	
48	4.5	1544	4.5	83.	1983	
102	9.7	3177	9.2	84.	1984	
118	11.2	3662	10.6	85.	1985	
90	8.5	2903	8.4	86.	1986	
25	2.4	852	2.5	87.	1987	

Variable	5	LICENSED WEIGHT	C	MD1: MD2:	0 None	Field Type:	Width: 6 Numeric
N	Prcnt	WGHT Prent	LICENSED	WEIGHT			
0	0.0	0 0.0	000000.	Unknown			
1	0.1	23 0.1	006130.				
6	0.6	222 0.6	 161000.	Licensed	weight		

Variable	6	WEIGHT	INDICATO	R	MD. MD:	1: No: 2: No:	ne ne	Field Type:	Width: 1 Numeric	2
N	Prcnt	WGHT	Prcnt	WEIGH	T INDICA	TOR				
1055 0	100.0 0.0	3 <b>4</b> 576 0	100.2 0.0	1. 2.	Licensed Licensed	weight weight	is is	GVW empty	weight	

Variable	7	SELECTIC	ON STRA	TUM		MD1 MD2	: None : None	Field Type:	Width: 1 Numeric
N	Prcnt	WGHT	Prcnt	SELE	CTION	STRA	rum		
651 302 102	61.7 28.6 9.7	24120 8013 2442	69.9 23.2 7.1	1. 2. 3.	Curre "Exp: "Exp:	ent re ired" ired"	egistrat IRP reg Non-IRP	ion istration registra	n ation

Variable	8	TRIP FLA	AG			MD1: MD2:	9 None	Field Type:	Width: Numer:	1 ic
Trip	Surve	ey Respor	nse Ind	icator			,			
N	Prcnt	WGHT	Prcnt	TRIP	FLAC	5				
69 986	6.5 93.5	2264 32311	6.6 93.6	0. 1.	No t At ]	rip surv east one	vey res trip	ponse i survey :	ndicator response	

Variable	9	REASON I	NSV		MD1: MD2:	0 None	Field Type:	Width: 1 Numeric
N	Prcnt	WGHT	Prcnt	REAS	on NSV			
1055	100.0	34576	100.2	0.	Not NSV			
0	0.0	0	0.0	1.	Light truck			
0	0.0	0	0.0	2.	Destroyed			
0	0.0	0	0.0	з.	Not a truck			
0	0.0	0	0.0	4.	No longer re	egister	ed in M	ichigan
0	0.0	0	0.0	5.	Fire truck	-		-
0	0.0	0	0.0	6.	Government-	owned		
0	0.0	0	0.0	7.	Straight tru 80,000	uck, li	censed	under

Variable	10	JULIAN	EXPIRAT	ION DATE	MD1: - MD2:	99999 None	Field Type:	Width: 5 Numeric
N	Prcnt	WGHT	Prcnt	JULIAN	EXPIRATION	DATE		
1	0.1	37	0.1	31813	. April 6,	1987		
7	0.7	259	0.8	- 32872	. February	28, 1	. <b>99</b> 0	

MD1:	None	Field	Width	: 5
— MD2:	None	Type:	Nu	meric
Impli	ed Dec	Places:	3	
	MD1: MD2: Impli	MDl: None MD2: None Implied Dec	MDl: None Field — MD2: None Type: Implied Dec Places:	MDl: None Field Width MD2: None Type: Nu Implied Dec Places: 3

Original Sampling Weight

Variable	12	OUTCOME	FLAG		MD1: MD2:	0 None	Field Type:	Width: 1 Numeric
N	Prcnt	WGHT	Prcnt	OUTCOME	FLAG			
0	0.0	0	0.0	0. In	complete	mabiala		
1055	100.0	34576	100.2	1. NC 2. CC	on-sampie omplete	venicie		

Variable 13 NON-CONTACT ADJUSTMENT MD1: None Field Width: 4 MD2: None Type: Numeric Implied Dec Places: 3

Population Adjustment Factor For Non-Contact

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Variable	14	FINAL CONTACT WEIGHT	MD1:	None	Field	Width	1: 5
			MD2:	None	Type:	Nu	meric
			Implie	ed Dec	Places:	3	

Final Vehicle Weighting Factor For Contact Information

Variable	101	AREA OF	OPERAT	ION		MD1:	9	Field	Width: 1
						- MD2:	None	Type:	Numeric
N	Prcnt	WGHT	Prcnt	AREA	OF	OPERATION			
750	71.1	24007	69.5	l.	In	terstate			
289	27.4	10102	29.3	2.	In	trastate			
16	1.5	466	1.3	7.	Da	ily rental			
0	0.0	0	0.0	9.	Unl	known			

Variable	102	OPERATI)	NG AUTHO	ORITY		MD1: MD2:	9 None	Field Type:	Width: 1 Numeric
N	Prcnt	WGHT	Prcnt	OPER	ATING	AUTHOR:	ITY		
564 475	53.5 45.0	19064 15045	55.2 43.6	1.	Priva For H	te ire			
16 0	1.5 0.0	<b>466</b> 0	1.3 0.0	7. 9.	Daily Unkno	Renta: wn	L		

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Variable	103	CARRIER	TYPE		MD1: MD2:	9 None	Field Type:	Width: 1 Numeric
N	Prcnt	WGHT	Prcnt	CARR	IER TYPE			
328	31.1	10789	31.3	1.	Interstate	Private		
408	38.7	12788	37.0	2.	Interstate	Authoriz	ed	
14	1.3	429	1.2	3.	Interstate	Exempt		
236	22.4	8275	24.0	4.	Intrastate	Private		
40	3.8	1369	4.0	5.	Intrastate	For Hire		
13	1.2	458	1.3	6.	Intrastate	Exempt		
16	1.5	466	1.3	7.	Daily Rent	al		
0	0.0	0	0.0	9.	Unknown			
Variable	104	OWNER O	PERATOR		MD1:	9	Field	Width: 1
			_		MD2:	None	Type:	Numeric
N	Prcnt	WGHT	Prcnt	OWNE	R OPERATOR			
27	2.6	879	2.5	1.	Yes			
447	42.4	14128	40.9	2.	No			
580	55.0	19531	56.6	8.	Not applic	able (pri	vate)	
1	0.1	37	0.1	9.	Unknown	-		
	105		NTM MVDP		MD1 -	0	Diel-	<i>Midth</i> 3
variable	102	POWER U	MIT TIPE		MD1:	U	-rieid	
					MD2:	NONE	Type:	NUMETIC

0 0.0 0 0.0 0. Unknown 0 0.0 0 0.0 1. Straight Truck	N	Prcnt	WGHT	Prcnt	POWER UNIT TYPE
	0	0.0	0 0	0.0	0. Unknown 1. Straight Truck

Variable	106	POWER U	NIT BODY	STYLE	MD1: MD2:	9 None	Field Type:	Width: 1 Numeric
N	Prcnt	WGHT	Prcnt	POWER	UNIT BODY	STYLE		
1055	100.0	34576	100.2	0.	Not applica	able		
0	0.0	0	0.0	1.	Van			
0	0.0	0	0.0	2.	Flat			
0	0.0	0	0.0	3.	Tank			
0	0.0	0	0.0	5.	Refrigerat	ed		
0	0.0	0	0.0	6.	Dump			
0	0.0	0	0.0	7.	Refuse			
0	0.0	0	0.0	8.	Other			
0	0.0	0	0.0	9.	Unknown			

Variable	107	POWER UI	NIT NO.	AXLES	MD1:	9	Field	Width: 1
					MDZ:	None	Type:	Numeric
N	Prcnt	WGHT	Prcnt	POWER UNI	T NO. A	XLES		
269	25.5	9381	27.2	2. Two				
781	74.0	25020	72.5	3. Thre	e			
5	0.5	174	0.5	9. Unkr	nown			

Variable	108	CAB STY	LE	MDl: 9 Field Width: 1 MD2: None Type: Numeric
N	Prcnt	WGHT	Prcnt	CAB STYLE
419	39.7	13223	38.3	2. Cabover
209	19.8	7058	20.4	3. Short Conventional
304	28.8	10349	30.0	4. Medium Conventional
123	11.7	3945	11.4	5. Long Conventional
0	0.0	0	0.0	9. Unknown

Variable	109	FUEL TY	PE		MD1: MD2:	9 None	Field Type:	Width: 1 Numeric
N	Prcnt	WGHT	Prcnt	FUEL	TYPE			
67	6.4	2403	7.0	1.	Gasoline			
983	93.2	32008	92.7	2.	Diesel			
3	0.3	111	0.3	3.	Other			
2	0.2	53	0.2	9.	Unknown			

Variable	110	POWER UN	IIT WEI	GHT	MD1: MD2:	999999 None	Field Type:	Width: 6 Numeric
N	Prcnt	WGHT	Prcnt	POWER UNIT	WEIG	ĦT		
1	0.1	37	0.1	006000.	Weigh	t in pour	nds	
1 5	0.1 0.5	23 174	0.1 0.5	026860. 999999.	Unknow	wn		

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Variable	111	POWER UI	NIT LEN	GTH		MD1: MD2:	999 None	Field Type:	Width: 3 Numeric
N	Prcnt	WGHT	Prcnt	POWER	UNI	C LENGTH			
1	0.1	37	0.1	014.	14	feet			
5	0.5	185	0.5	015.	15	feet			
26	2.5	881	2.6	016.	16	feet			
66	6.3	2364	6.8	017.	17	feet			
110	10.4	3786	11.0	018.	18	feet			
136	12.9	4469	12.9	019.	19	feet			
193	18.3	6163	17.9	020.	20	feet			
103	9.8	3330	9.6	021.	21	feet			
177	16.8	5799	16.8	022.	22	feet			
75	7.1	2403	7.0	023.	23	feet			
38	3.6	1242	3.6	024.	24	feet			
41	3.9	1298	3.8	025.	25	feet			
41	3.9	1266	3.7	026.	26	feet			
13	1.2	394	1.1	027.	27	feet			
11	1.0	365	1.1	028.	28	feet			
11	1.0	323	0.9	029.	29	feet			
2	0.2	53	0.2	030.	. 30	feet			
1	0.1	37	0.1	032.	. 32	feet			
5	0.5	174	0.5	999.	. Unl	CNOWN			

Variable	112	ESTIMATI	ED ANNUA	L MILEAGE	MD1: MD2:	999999 None	Field Type:	Width: 6 Numeric
N	Prcnt	WGHT	Prcnt	ESTIMATED	ANNUAL	MILEAGE		
3	0.3	111	0.3	000000.	Miles			
1 52	0.1 4.9	37 1642	0.1 4.8	250000. 999999.	Unknow	m		

PART 2

The Trip File Codebook

All frequencies reported in the Trip File Codebook are for the number of trips taken by the trucks in the sample and are therefore not directly meaningful.

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Variable	Variable	Field	Character	Mult	Page
Number	Name	Width	Туре	Resp	Number
·····					
1	SELECTION NUMBER	4	Numeric		27
2	DATE CODE	2	Numeric		27
113	TRIP NON-RESPONSE ADJUST	4	Numeric		29
114	TRIP VEHICLE WEIGHT	5	Numeric		29
115	SURVEY DAY WEIGHT	6	Numeric		29
116	ANNHAL MILEAGE INFLATION	6	Numeric		29
117	FINAL TRIP WEIGHT	8	Numeric		29
1001	TRIP OUARTER	1	Numeric		29
1002	TRIP NUMBER	2	Numeric		30
1002	SUDVEY MONTH	2	Numeric		31
1005	SURVEY DAY	2	Numeric		31
1004	CIIDUFY VEAD	2	Numeric		31
1005	USE MONTH	2	Numeric		31
1008	USE DAY	2	Numeric		32
1007	USE DAI USE VEND	2	Numeric		32
1008	USE IEAR CUDVEY THITAN DATE	5	Numeric		32
1009	SURVEI JULIAN DAIL	5	Numeric		33
1010	USE JULIAN DALE	1	Numeric		33
1011	PRIVATE/FOR-HIRE	1	Numeric		33
1012	AREA OF OPERATION	1	Numeric		33
1013	FOR HIRE TYPE	⊥ 2	Numeric		34
1014	DRIVER AGE	2	Numeric		35
1015	DRIVER YEARS W/COMPANY	2	Numeric		35
1016	POWER UNIT TYPE	1	Numeric		36
1017	STRT TRUCK BODY STYLE	1	Numeric		30
1018	POWER UNIT NO. OF AXLES	1 2	Numeric		30
1019	POWER UNIT LENGTH	3	Numer1C		21
1020	STRAIGHT TRUCK CARGO	2	Numeric		27
1021	STRAIGHT TRUCK CARGO WT	6	Numeric		20
1022	STRT TRUCK HAZARD CARGO	1	Numeric		20
1023	ANY TRAILERS	1	Numeric		30
1024	1ST TRAILER TYPE	Ţ	Numeric		30
1025	1ST TRAILER BODY	2	Numeric		39
1026	1ST TRAILER NO. OF AXLES	2	Numeric		39
1027	1ST TRAILER LENGTH	3	Numeric		39
1028	1ST TRAILER EMPTY WEIGHT	6	Numeric		40
1029	1ST TRAILER CARGO	2	Numeric		41
1030	1ST TRAILER CARGO WEIGHT	6	Numeric		41
1031	1ST TRAILER HAZARD CARGO	1	Numeric		41
1032	2ND TRAILER TYPE	1	Numeric		42
1033	2ND TRAILER BODY	2	Numeric		42
1034	2ND TRAILER NO. OF AXLES	2	Numeric		42
1035	2ND TRAILER LENGTH	3	Numeric		43
1036	2ND TRAILER EMPTY WEIGHT	6	Numeric		43
1037	2ND TRAILER CARGO	2	Numeric		44
1038	2ND TRAILER CARGO WEIGHT	6	Numeric		44
1039	2ND TRAILER HAZARD CARGO	1	Numeric		44
1040	3RD TRAILER TYPE	1	Numeric		45
1041	3RD TRAILER BODY	2	Numeric		45
1042	3RD TRAILER NO. OF AXLES	2	Numeric		45
1043	3RD TRAILER LENGTH	3	Numeric		45

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TRIP FILE CODEBOOK

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Variable Number	Variable Name	Field Width	Character Type	Mult Resp	Page Number
1044	3RD TRAILER EMPTY WEIGHT	6	Numeric		46
1045	3RD TRAILER CARGO	2	Numeric		46
1046	3RD TRAILER CARGO WEIGHT	6	Numeric		46
1047	3RD TRAILER HAZARD CARGO	1	Numeric		47
1048	GROSS COMBINATION WEIGHT	б	Numeric		47
1049	NUMBER OF TRAILERS	1	Numeric		47
1050	VEHICLE COMBINATION CODE	2	Numeric		47
1051	TOTAL MILES FOR THE TRIP	4	Numeric		48
1052	LIMITED DAY RURAL	4	Numeric		48
1053	LIMITED NIGHT RURAL	4	Numeric		48
1054	MAJOR DAY RURAL	4	Numeric		48
1055	MAJOR NIGHT RURAL	4	Numeric		49
1056	OTHER DAY RURAL	4	Numeric		49
1057	OTHER NIGHT RURAL	4	Numeric		49
1058	LIMITED DAY URBAN	4	Numeric		49
1059	LIMITED NIGHT URBAN	4	Numeric		50
1060	MAJOR DAY URBAN	4	Numeric		50
1061	MAJOR NIGHT URBAN	4	Numeric		50
1062	OTHER DAY URBAN	4	Numeric		50
1063	OTHER NIGHT URBAN	4	Numeric		51
1071	DRIVER TRAINED	1	Numeric		51
1072	SOURCE OF TRAINING	1	Numeric		51
1073	TYPE OF TRAINING	1	Numeric		51

Variable 1		SELECT	SELECTION NUMBER			 MD1: - MD2:	None None	Field Type:	Width: 4 Numeric
Variable	e 2	DATE C	ODE			 MD1: MD2:	None	Field	Width: 2
FREQ P	Prcnt	DATE C	ODE				Nonc	1160.	
155	1.8	01.	Date	code	1				
120	1.4	02.	Date	code	2				
121	1.4	03.	Date	code	3				
123	1.5	04.	Date	code	4				
121	1.4	05.	Date	code	5				
94	1.1	06.	Date	code	6				
136	1.6	07.	Date	code	7				
102	1.2	08.	Date	code	8				
63	0.7	09.	Date	code	9				
89	1.1	10.	Date	code	10				
71	0.8	11.	Date	code	11				
74	0.9	12.	Date	code	12				
86	1.0	13.	Date	code	13				
135	1.6	14.	Date	code	14				
94	1.1	15.	Date	code	15				
50	0.6	16.	Date	code	16				
155	1.8	17.	Date	code	17				
105	1.2	18.	Date	code	18				
107	1.3	19.	Date	code	19				
53	0.6	20.	Date	code	20				
/3	0.9	21.	Date	code	21				
02 69	1.0	22.	Date	code	22				
75	0.0	23.	Date	code	23				
75 77	0.9	24.	Date	code	24				
113	13	25.	Date	code	25				
141	1.7	20.	Date	code	20				
109	1.3	28.	Date	code	28				
100	1.2	29.	Date	code	29				
75	0.9	30.	Date	code	30				
110	1.3	31.	Date	code	31				
110	1.3	32.	Date	code	32				
66	0.8	33.	Date	code	33				
71	0.8	34.	Date	code	34				
. 81	1.0	35.	Date	code	35				
124	1.5	36.	Date	code	36				
107	1.3	37.	Date	code	37				
114	1.3	38.	Date	code	38				
90	1.1	39.	Date	code	39				
88	1.0	40.	Date	code	40				
93	1.1	41.	Date	code	41				
122	1.4	42.	Date	code	42				
89	1.1	43.	Date	code	43				

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# FREQ Prcnt Var 2 DATE CODE

53	0.6	44. Date code 44
66	0.8	45. Date code 45
119	1.4	46. Date code 46
<b>9</b> 5	1.1	47. Date code 47
96	1.1	48. Date code 48
79	0.9	49. Date code 49
94	1.1	50. Date code 50
90	1.1	51. Date code 51
116	1.4	52. Date code 52
65	0.8	53. Date code 53
76	0.9	54. Date code 54
69	0.8	55. Date code 55
68	0.8	56. Date code 56
81	1.0	57. Date code 57
113	1.3	58. Date code 58
97	1.1	59. Date code 59
84	1.0	60. Date code 60
122	1.4	61. Date code 61
95	1.1	62. Date code 62
110	1.3	63. Date code 63
108	1.3	64. Date code 64
159	1.9	65. Date code 65
135	1.6	66. Date code 66
75	0.9	67. Date code 67
67	0.8	68. Date code 68
89	1.1	69. Date code 69
95	1.1	70. Date code 70
149	1.8	71. Date code 71
72	0.9	72. Date code 72
98	1.2	73. Date code 73
80	0.9	74. Date code 74
96	1.1	75. Date code 75
95	1.1	76. Date code 76
45	0.5	77. Date code 77
68	0.8	78. Date code 78
121	1.4	79. Date code 79
99	1.2	80. Date code 80
143	1.7	81. Date code 81
80	0.9	82. Date code 82
49	0.6	83. Date code 83
65	0.8	84. Date code 84
85	1.0	85. Date code 85
92	1.1	86. Date code 86
97	1.1	87. Date code 87
116	1.4	88. Date code 88
66	0.8	89. Date code 89

Adjustment Factor For Non-Response to Travel Survey

Vehicle Weight For Trip File

Variable 115 SURVEY DAY WEIGHT MD1: None Field Width: 6 MD2: None Type: Numeric Implied Dec Places: 3

762190.0091.254 trip responses5606.6121.673 trip responses1802.1182.502 trip responses1031.2365.001 trip response

FREQ Prcnt SURVEY DAY WEIGHT

Inflation Factor For Survey Day to Annual Basis

Variable 117 FINAL TRIP WEIGHT MD1: 0 Field Width: 8 ------ MD2: None Type: Numeric Implied Dec Places: 3

Final Weighting Factor For Trip File Information

Variabl	.e 1001	TRIP	QUARTER		 MD1: MD2:	None	Field	Width: 1
					FIDZ .	none	TAbe.	Numer IC
FREQ	Prcnt	TRIP	QUARTER					
2160	25 6	-	0	•				
2109	22.0	<b>T</b> •	Quarter	T				
2205	26.1	2.	Quarter	2				
2084	24.6	з.	Quarter	3				•

FREQ Prcnt Var 1001 TRIP QUARTER

2006 23.7 4. Quarter 4

Variabl 	e 1002	TRIP NUMBER		l	MD1: MD2:	None None	Field Type:	Width: 2 Numeric
FREQ	Prcnt	TRIP NUMBER						
2812	33.2	01. Trip 1						
1997	23.6	02. Trip 2						
949	11.2	03. Trip 3						
585	6.9	04. Trip 4						
294	3.5	05. Trip 5						
195	2.3	06. Trip 6						
120	1.4	07. Trip 7						
84	1.0	08. Trip 8						
57	0.7	09. Trip 9						
46	0.5	10. Trip 10	)					
23	0.3	ll. Trip ll	L					
14	0.2	12. Trip 12	2					
10	0.1	13. Trip 13	3					
7	0.1	14. Trip 14	1					
4	0.0	15. Trip 15	5					
1	0.0	16. Trip 16	5					
1	0.0	17. Trip 17	7					
202	2.4	71. Trip 1,	, typical	trip,	dummy	date		
118	1.4	72. Trip 2,	, typical	trip,	dummy	date		
31	0.4	73. Trip 3,	, typical	trip,	dummy	date		
20	0.2	74. Trip 4,	, typical	trip,	dummy	date		
3	0.0	75. Trip 5,	, typical	trip,	dummy	date		
2	0.0	76. Trip 6,	, typical	trip,	dummy	date		
1	0.0	77. Trip 7,	, typical	trip,	dummy	date		
1	0.0	78. Trip 8,	, typical	trip,	dummy	date		
276	3.3	81. Trip 1,	, typical	trip,	actual	. date		
150	1.8	82. Trip 2,	, typical	trip,	actual	date		
59	0.7	83. Trip 3,	, typical	trip,	actual	date		
46	0.5	84. Trip 4,	, typical	trip,	actual	date		
13	0.2	85. Trip 5,	, typical	trip,	actual	date		
10	0.1	86. Trip 6,	, typical	trip,	actual	. date		
7	0.1	87. Trip 7,	, typical	trip,	actual	. date		
6	0.1	88. Trip 8,	, typical	trip,	actual	. date		
6	0.1	89. Trip 9,	, typical	trip,	actual	. date		
253	3.0	93. Not use	ed	_				
30	0.4	95. No long	ger regist	tered	in Mich	ligan		
31	0.4	96. Destroy	yed .					

Variable	1003	SURVEY MONTH	MD1: MD2:	99 None	Field Type:	Width: 2 Numeric
FREQ F	rcnt	SURVEY MONTH				
714	8 4	01 January				
597	7.1	02. February				
695	8.2	03. March				
674	8.0	04. April				
781	9.2	05. May				
701	8.3	06. June				
727	8.6	07. July				
711	8.4	08. August				
700	8.3	09. September				
794	9.4	10. October				
666	7.9	ll. November				
704	8.3	12. December				
Variable	e 1004	SURVEY DAY	MD1:	99 None	Field Type:	Width: 2 Numeric
			1021	none	-IPC.	
FREQ I	Prcnt	SURVEY DAY				
247	2.9	01.				
		Day of month				
114	1.3	31.				
Variable	e 1005	SURVEY YEAR	MD1:	99 Node	Field	Width: 2 Numeric
·			102.	none	17501	
FREQ	Prcnt	SURVEY YEAR				
5744	67.9	87. 1987				
2720	32.1	88. 1988				
Variabl	 e 1006	use month	MD1:	99	Field	Width: 2
			MD2:	None	Type:	Numeric
FREQ	Prcnt	USE MONTH				
501	7 0					
571	7.U 6.8	02. February				
651	7.7	03. March				
621	7.3	04. April				
731	8.6	05. May				
691	8.2	06. June				
684	8.1	07. July				

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FREQ	Prcnt	Var 1006 USE MONTH
712	8.4	08. August
674	8.0	09. September
796	9.4	10. October
708	8.4	11. November
716	8.5	12. December
317	3.7	99. Unknown

Variable	1007	USE DAY	MD1: MD2:	99 None	Field Type:	Width: 2 Numeric
FREQ Pr	cnt	USE DAY				
281	3.3	01. Day of month				
97 317	1.1 3.7	31. 99. Unknown				

Variabl	.e 1008	USE YEAR	MD1: MD2:	99 None	Field Type:	Width: 2 Numeric
FREQ	Prcnt	USE YEAR				
26	0.3	86. 1986				
5765	68.1	87.1987				
2356	27.8	88. 1988				
317	3.7	99. Unknown				

Variabl	.e 1009	SURVEY JULIAN DATE	MD1: MD2:	99999 None	Field	Width: 5
				none	Tibe.	Numer re
FREQ	Prcnt	SURVEY JULIAN DATE				
46	0.5	31840. May 3, 1987				
12	0.1	32205. May 2, 1988				

Variabl	e 1010	USE JULIAN DATE	MD1: MD2:	99999 None	Field Width: 5 Type: Numeric
FREQ	Prcnt	USE JULIAN DATE			
2	0.0	31518. June 15, 1986			
7 317	0.1 3.7	 32205. May 2, 1988 99999.			
Variabl	.e 1011	PRIVATE/FOR-HIRE	MD1: MD2:	9 None	Field Width: 1 Type: Numeric
Ap	plicabl	e only to private carrier:	5.		
FREQ	Prcnt	PRIVATE/FOR-HIRE			
4574 59 3605 226	54.0 0.7 42.6 2.7	l. No 2. Yes 8. Not applicable 9. Unknown			
Variabl	.e 1012	AREA OF OPERATION	MD1: MD2:	9 None	Field Width: 1 Type: Numeric
Ap	plicabl	e only to private carrier:	s.		
FREQ	Prcnt	AREA OF OPERATION			
16	0.2	l. Interstate			
43	0.5	2. Intrastate			
8179 226	96.6 2.7	8. Not applicable 9. Unknown			
Variabl	e 1013	FOR HIRE TYPE	MD1: MD2:	9 None	Field Width: 1 Type: Numeric
Ap	plicabl	e only to private carrier	5.		
FREQ	Prcnt	FOR HIRE TYPE			
14	0.2	2. ICC Authorized			
2	0.0	3. ICC Exempt			
32	0.4	5. Intrastate Authoriz	ed		
11	0.1	6. Intrastate Exempt			
8179	96.6	8. Not applicable			
226	2.7	9. Unknown			

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Variable	1014	DRIVER AGE	MD1: MD2:	99 None	Field Width: 2 Type: Numeric
FREQ P	rcnt	DRIVER AGE			,
11	0.1	19. 19 years			
19	0.2	20. 20 years			
33	0.4	21. 21 years			
78	0.9	22. 22 years			
89	1.1	23. 23 years			
163	1.9	24. 24 years			
217	2.6	25. 25 years			
166	2.0	26. 26 years			
235	2.8	27. 27 years			
320	3.8	28. 28 years			
163	1.9	29. 29 years			
390	4.6	30. 30 years			
195	2.3	31. 31 years			
320	3.8	32. 32 years			
152	1.8	33. 33 years			
255	3.0	34. 34 years			
488	5.8	35. 35 years			
201	2.1	36. 36 years			
228	2.7	37. 37 years			
308	3.6	38. 38 years			
167	2.0	39. 39 years			
446	5.3	40. 40 years			
169	2.0	41. 41 years			
225	2.7	42. 42 years			
126	1.5	43. 43 years			
130	1.5	44. 44 years			
300 101	4.2	45. 45 years			
153	2.5	40. 40 years			
155	10	47. 47 years			
105	1.1	49. 49 years			
275	3.2	50. 50 years			
109	1.3	51. 51 years			
158	1.9	52. 52 years			
144	1.7	53. 53 years			
118	1.4	54. 54 years			
157	1.9	55. 55 years			
58	0.7	56. 56 years			
97	1.1	57. 57 years			
90	1.1	58. 58 years			
73	0.9	59. 59 years			
102	1.2	60. 60 years			
57	0.7	61. 61 years			
61	0.7	62. 62 years			
12	0.1	63. 63 years			
4	0.0	64. 64 years			
12	0.1	65. 65 years			
12	0.1	bb. bb years			

FREQ Prcnt Var 1014 DRIVER AGE

4 4 3 2	0.0 0.0 0.1 0.0 0.0 7.6	68. 68 years 69. 69 years 71. 71 years 73. 73 years 74. 74 years	
647	7.6	99. Unknown	

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Variabl	le 1015	DRIVER YEARS W/COMPANY	MD1: - MD2:	99 None	Field Width: 2 Type: Numeric
FREQ	Prcnt	DRIVER YEARS W/COMPANY			
		00 0			
655	7.7	00. U years			
/52	8.9	01. 1 year			
814	9.0				
/53	6.9	03. 3 years			
222	0.3	05 5 veers			
200	3.0	05. 5 years			
257	3.0	07. 7 years			
237	2.8	08. 8 years			
170	2.0	09. 9 vears			
574	6.8	10. 10 years			
154	1.8	ll. ll years			
266	3.1	12. 12 years			
113	1.3	13. 13 years			
123	1.5	14. 14 years			
293	3.5	15. 15 years			
82	1.0	16. 16 years			
99	1.2	17. 17 years			
94	1.1	18. 18 years			
85	1.0	19. 19 years			
230	2.7	20. 20 years			
53	0.6	21. 21 years			
56	0.7	22. 22 years			
40	0.5	23. 23 years			
50	0.6	24. 24 years			
114	1.3	25. 25 years			
14	0.2	26. 26 years			
31	0.4	27. 27 years			
10	0.1	28. 28 years			
8	U.1	29. 29 years			
6/	1.0	30. SU years			
5 7 2	0.1	32 32 years			
23		33, 33 Vears			
16	0.2	34. 34 years			
58	0.7	35. 35 years			
7	0.1	36. 36 years			
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FREQ Prcnt Var 1015 DRIVER YEARS W/COMPANY

8	0.1	37. 37 years
3	0.0	38. 38 years
20	0.2	39. 39 years
37	0.4	40. 40 years
18	0.2	41. 41 years
8	0.1	43. 43 years
3	0.0	44. 44 years
4	0.0	45. 45 years
3	0.0	46. 46 years
696	8.2	99. Unknown

Variable 1016		POWER UNIT TYPE		MD1: - MD2:	9 None	Field Type:	Width: 1 Numeric
FREQ	Prcnt	POWEI	R UNIT TYPE				
0 8150 314	0.0 96.3 3.7	1. 8. 9.	Straight Truck Tractor Unknown				
Variabl	le 1017	STRT	TRUCK BODY STYLE	MD1: - MD2:	9 None	Field Type:	Width: 1 Numeric
FREQ	Prcnt	STRT	TRUCK BODY STYLE				
8150 0 0 0 0 0 0 314	96.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 3.7	0. 1. 2. 3. 5. 6. 7. 8. 9.	Not applicable Van Flat Tank Refrigerated Dump Refuse Other Unknown				

Variabl	e 1018	POWER UNIT NO. OF AXLES MD1:	9	Field	Width: 1
		MD2: N	lone	Type:	Numeric
FREQ	Prcnt	POWER UNIT NO. OF AXLES			
2106	24.9	2. Two			
6044	71.4	3. Three			
314	3.7	9. Unknown			

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Variabl	le 1019	POWER UNIT LENGTH	MD1:	999 Nono	Field Wid	th: 3
<u></u>			MDZ:	None	туре:	NUMELIC
FREQ	Prcnt	POWER UNIT LENGTH				
11	0.1	014. 14 feet				
37	0.4	015. 15 feet				
225	2.7	016. 16 feet				
407	4.8	017. 17 feet				
858	10.1	018. 18 feet				
927	11.0	019. 19 feet				
1483	17.5	020. 20 feet				
872	10.3	021. 21 feet				
1446	17.1	022. 22 feet				
638	7.5	023. 23 feet				
352	4.2	024. 24 feet				
397	4.7	025. 25 feet				
270	3.2	026. 26 feet				
91	1.1	027. 27 feet				
60	0.7	028. 28 feet				
54	0.6	029. 29 feet				
6	0.1	030. 30 feet				
16	0.2	032. 32 feet				
314	3.7	999. Unknown				
Variab	le 1020	STRAIGHT TRUCK CARGO	MD1: MD2:	99 None	Field Wid Type:	lth: 2 Numeric
FREQ	Prcnt	STRAIGHT TRUCK CARGO				
0	0.0	01. General freight				
0	0.0	02. Household goods				
0	0.0	03. Metal: coils, shee	ts, etc			
2	0.0	04. Heavy machinery				
72	0.9	05. Motor vehicles				
0	0.0	06. Driveaway/towaway				
C	0.0	07. Gases in bulk				
C	0.0	08. Solids in bulk				
C	0.0	09. Liquids in bulk				
C	0.0	10. Explosives				
C	0.0	11. Logs/poles/lumber				
C	0.0	12. None (empty)				
C	0.0	13. Refrigerated food				
C	0.0	14. Mobile home				
C	0.0	15. Farm products				
	0.0	16. Other				
8076	95.4	98. Not applicable				
314	3.7	99. Unknown				

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Variab:	le 1021	STRAIGHT TRUCK CARGO WT	MD1: MD2:	9999999 None	Field Type:	Width: 6 Numeric
FREQ	Prcnt	STRAIGHT TRUCK CARGO WT				
l	0.0	000400.				
_		Weight in pound:	5			
1	0.0	016000.	(++			
0070	95.4	999996. Not applicable	(tracto			
3	0.0	999998. Full cargo (wei)	sht un	known)		
314	3.7	999999. Unknown	J			
Variabl	Le 1022	STRT TRUCK HAZARD CARGO	MD1:	9 None	Field	Width: 1
			ridz.	None	Type.	Numer IC
FREQ	Prcnt	STRT TRUCK HAZARD CARGO				
0	0.0	1. Hazardous cargo				
74	0.9	2. Non-hazardous cargo				
8076	95.4	8. Not applicable				
314	3.7	9. Unknown				
Variab:	le 1023	ANY TRAILERS	MD1: MD2:	9 None	Field Type:	Width: 1 Numeric
FREQ	Prcnt	ANY TRAILERS			-11 -1	
279	3.3	l. No				
7870	93.0	2. Yes				
315	3.7	9. Unknown				
Variab	le 1024	1ST TRAILER TYPE	MD1: MD2:	9 None	Field Type:	Width: 1 Numeric
FREQ	Prcnt	1ST TRAILER TYPE				
7846	92.7	1. Semi-trailer				
0	0.0	2. Full trailer				
0	0.0	3. Utility trailer				
22	0.3	4. Other				
281	3.3	5. NONE 9. Unknow				
772	3.1	<b>7.</b> UIIKIIOWII				

Variable 1025	1ST TRAILER BODY	MD1: - MD2:	99 None	Field Type:	Width: 2 Numeric
FREQ Prcnt	1ST TRAILER BODY				
315 3.7 4131 48.8 1269 15.0	00. Unknown if 1st tr 01. Van 02. Flatbed	ailer			

1269	15.0	02. Flatbed	
530	6.3	03. Tank	
135	1.6	04. Auto Carrier	
924	10.9	06. Dump	
876	10.3	08. Other	
281	3.3	98. Not applicable	
3	0.0	99. Unknown	

Variabl	.e 1026	1ST TRAILER NO. OF AXLES	MD1: MD2:	99 None	Field Width: 2 Type: Numeric
FREQ	Prcnt	1ST TRAILER NO. OF AXLES	5		
527	6.2	01. 1 <b>axle</b>			
5194	61.4	02. 2 axles			
1553	18.3	03. 3 axles			
310	3.7	04. 4 axles			
165	1.9	05. 5 <b>axles</b>			
43	0.5	06. 6 axles			
17	0.2	07. 7 axles			
38	0.4	08. 8 axles			
315	3.7	97. Unknown if 1st tra	ailer		
281	3.3	98. Not applicable			
21	0.2	99. Unknown			
Variab:	le 1027	1ST TRAILER LENGTH	MD1:	999 None	Field Width: 3 Type: Numeric
FREQ	Prcnt	1ST TRAILER LENGTH		none	

2	0.0	012. 12 feet
4	0.0	016. 16 feet
6	0.1	018. 18 feet
48	0.6	020. 20 feet
19	0.2	021. 21 feet
54	0.6	022. 22 feet
49	0.6	023. 23 feet
399	4.7	024. 24 feet
125	1.5	025. 25 feet
64	0.8	026. 26 feet
121	1.4	027. 27 feet
452	5.3	028. 28 feet

FREO	Pront	Var	1027	157	TRATLER	LENGTH
L UTO		var	1021		TUNTUUN	neugru

61	0.7	029.	29	feet				
168	2.0	030.	30	feet				
15	0.2	031.	31	feet				
142	1.7	032.	32	feet				
48	0.6	033.	33	feet				
103	1.2	034.	34	feet				
153	1.8	035.	35	feet				
107	1.3	036.	36	feet				
37	0.4	037.	37	feet				
117	1.4	038.	38	feet				
24	0.3	039.	39	feet				
1219	14.4	040.	40	feet				
44	0.5	041.	41	feet				
568	6.7	042.	42	feet				
88	1.0	043.	43	feet				
88	1.0	044.	44	feet				
2164	25.6	045.	45	feet				
48	0.6	046.	46	feet				
43	0.5	047.	47	feet				
1061	12.5	048.	48	feet				
6	0.1	049.	49	feet				
72	0.9	050.	50	feet				
28	0.3	053.	53	feet				
1	0.0	056.	56	feet				
8	0.1	058.	58	feet				
9	0.1	060.	<b>6</b> 0	feet				
19	0.2	065.	65	feet				
12	0.1	070.	70	feet				
1	0.0	080.	80	feet				
315	3.7	995.	Unl	nown	if	lst	trailer	•
281	3.3	996.	Not	: appl	ica	able		
21	0.2	997.	Sho	ort				
2	0.0	998.	Loi	ıg				
48	0.6	999.	Unl	known				

Variable 1028	<b>1ST TRAILER EMPTY WEIGHT</b> MD1: 999999	Field Width: 6	
		MD2: None	Type: Numeric
FREQ	Prcnt	IST TRAILER EMPTY WEIGHT	
1	0.0	000200.	
		<ul> <li>Weight in pounds</li> </ul>	
2	0.0	046000.	
315	3.7	999997. Unknown if 1st trailer	
281	3.3	999998. Not applicable	
72	0.9	999999. Unknown	

Variabl	le 1029	1ST TRAILER CARGO	MD1: MD2:	99 None	Field Type:	Width: 2 Numeric
FREQ	Prcnt	1ST TRAILER CARGO				
1946	23.0	01. General freight				
71	0.8	02. Household goods				
264	3.1	03. Metal: coils, sheets	s, etc			
715	8.4	04. Heavy machinery	•			
125	1.5	05. Motor vehicles				
0	0.0	06. Driveaway/towaway				
19	0.2	07. Gases in bulk				
767	9.1	08. Solids in bulk				
269	3.2	09. Liquids in bulk				
0	0.0	10. Explosives				
170	2.0	ll. Logs/poles/lumber				
2718	32.1	12. None (empty)				
490	5.8	13. Refrigerated food				
14	0.2	14. Mobile home				
231	2.7	15. Farm products				
62	0.7	16. Other				
315	3.7	97. Unknown if 1st trail	ler			
281	3.3	98. Not applicable	-			
7	0.1	99. Unknown				
Variab.	le 1030	1ST TRAILER CARGO WEIGHT	MD1: MD2:	999999 None	Field Type:	Width: 6 Numeric
FREQ	Prcnt	1ST TRAILER CARGO WEIGHT				
2718	32.1	00000.				
	0212	Weight in pounds	5			
1	0.0	105910.	-			
315	3.7	999995. Unknown if 1st 1	traile	r		
281	3.3	999996. Not applicable		-		
166	2.0	999997. Some cargo (weig	aht un	known)		
29	0.3	999998. Full cargo (weig	aht un	known)		
11	0.1	999999. Unknown		,		
Variah		IST TRATLER HAZARD CARCO	MT 1 •	٥	Field	Width• 1
<u></u>			MD2:	None	Type:	Numeric
FREQ	Prcnt	1ST TRAILER HAZARD CARGO			-41 -	
1 7 4	2 1	1 Venerdeur				
1/8	2.1	1. Hazardous cargo				
/68/	90.8	2. Non-nazardous cargo				
312	5.1	/. UNKNOWN II IST TRAIL(	er			
281	3.3	o. Not applicable				
	0.0	9. UNKNOWN				

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<u></u>			- MD2:	None	Type: Numeri
FREQ	Prcnt	2ND TRAILER TYPE			
0	0.0	l. Semi-trailer			
668	7.9	2. Full trailer			
2	0.0	3. Utility trailer			
0	0.0	4. Other			
7478	88.4	5. None			
316	3.7	9. Unknown			
Variab.	le 1033	2ND TRAILER BODY	MD1: - MD2:	99 None	Field Width: Type: Numeri
FREQ	Prcnt	2ND TRAILER BODY			
316	3.7	00. Unknown if 2nd tra	ailer		
43	0.5	01. Van			
<b>9</b> 0	1.1	02. Flatbed			
52	0.6	03. Tank			
0	0.0	04. Auto Carrier			
387	4.6	06. Dump			
98	1.2	08. Other			
7478	88.4	98. Not applicable			
0	0.0	99. Unknown			
Variab	le 1034	2ND TRAILER NO. OF AXLE:	5 MD1: - MD2:	99 None	Field Width: Type: Numeri
FREQ	Prcnt	2ND TRAILER NO. OF AXLES	S		
59	0.7	02. 2 axles			
51	0.6	03. 3 axles			

98	1.2	04.	4 axles
459	5.4	05.	5 axles
316	3.7	97.	Unknown if 2nd trailer
7478	88.4	98.	Not applicable
3	0.0	99.	Unknown

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Variabl	.e 1035	2ND TR	AILER LE	ngth	MDI	. 999	Field	Width: 3
					MD2	2: None	e Type:	Numeric
FREQ	Prcnt	2ND TR	AILER LE	NGTH				
2	0.0	010.	10 feet					
2	0.0	012.	12 feet					
8	0.1	014.	14 feet					
13	0.2	015.	15 feet					
17	0.2	016.	16 feet					
4	0.0	017.	17 feet					
64	0.8	018.	18 feet					
109	1.3	019.	19 feet					
78	0.9	020.	20 feet					
41	0.5	021.	21 feet					
56	0.7	022.	22 feet					
38	0.4	023.	23 feet					
52	0.6	024.	24 feet					
58	0.7	025.	25 feet					
42	0.5	026.	26 feet					
18	0.2	027.	27 feet					
31	0.4	028.	28 feet					
16	0.2	029.	29 feet					
4	0.0	035.	35 feet					
316	3.7	995.	Unknown	if 2nd	trailer			
7478	88.4	996.	Not app	licable				
17	0.2	997.	Short					
0	0.0	998.	Long					
0	0.0	999.	Unknown					

Variabl	e 1036	2ND TRAILER EMPTY WEIGHT MD1: 999999 Field Width: 6 MD2: None Type: Numeric
FREQ	Prcnt	2ND TRAILER EMPTY WEIGHT
4	0.0	001240. Weight in pounds
4	0.0	026180.
316	3.7	999997. Unknown if 2nd trailer
7478	88.4	999998. Not applicable
5	0.1	999999. Unknown

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Variab:	Le 1037	2ND TRAILER CARGO	MD1: - MD2:	99 None	Field Wi Type:	dth: 2 Numeric
FREQ	Prcnt	2ND TRAILER CARGO				
5	0.1	01. General freight				
0	0.0	02. Household goods				
<b>2</b> 5	0.3	03. Metal: coils, shee	ets, etc			
6	0.1	04. Heavy machinery				
0	0.0	05. Motor vehicles				
0	0.0	06. Driveaway/towaway				
0	0.0	07. Gases in bulk				
207	2.4	08. Solids in bulk				
28	0.3	09. Liquids in bulk				
0	0.0	10. Explosives				
15	0.2	11. Logs/poles/lumber				
355	4.2	12. None (empty)				
1/	0.2	13. Reirigerated 1000				
0	0.0	14. MODILE NOME				
1	0.1	15. Faim products				
316	37	97 Unknown if 2nd tra	ilor			
7478	88 4	98 Not applicable	11161			
0	0.0	99. linknown				
Variab.	le 1038	2ND TRAILER CARGO WEIGHT	MD1: - MD2:	9999999 None	Field Wi Type:	idth: 6 Numeric
FREQ	Prcnt	2ND TRAILER CARGO WEIGHT	2			
355	4.2	00000				
		Weight in pour	nds			
1	0.0	076000.				
316	3.7	999995. Unknown if 2nd	l trailer			
7478	88.4	999996. Not applicable	2			
10	0.1	999997.Some cargo (we	eight unk	nown)		
б	0.1	999998. Full cargo (we	eight unk	nown)		
0	0.0	999999. Unknown				
Variab	le 1039	2ND TRAILER HAZARD CARGO	MD1:	9	Field Wi	idth: 1
			- MD2:	None	Type:	Numeric
FREQ	Prent	2ND TRAILER HAZARD CARGO	)			
21	0.2	1. Hazardous cargo				
649	7.7	2. Non-hazardous cargo	<b>b</b>			
316	3.7	7. Unknown if 2nd trai	ller			
7478	88.4	8. Not applicable	-			

.

0 0.0 9. Unknown

Variabl	le 1040	3RD TRAILER TYPE	MD1: MD2:	9 None	Field Type:	Width: 1 Numeric
FREQ	Prcnt	3RD TRAILER TYPE				
0	0.0	l. Semi-trailer				
0	0.0	2. Full trailer				
0	0.0	3. Utility trailer				
0	0.0	4. Other				
8147	96.3	5. None				
317	3.7	9. Unknown				
Variabl	le 1041	3RD TRAILER BODY	MD1: MD2:	99 None	Field Type:	Width: 2 Numeric
FREQ	Prcnt	3RD TRAILER BODY				
317	3.7	00. Unknown if 3rd trai	ler			
0	0.0	Ol. Van				
0	0.0	02. Flatbed				
0	0.0	03. Tank				
0	0.0	04. Auto Carrier				
0	0.0	06. Dump				
U 7 1 1 9	0.0	U8. UTHER				
0	0.0	99. Unknown				
Variab:	le 1042	3RD TRAILER NO. OF AXLES	MD1: MD2:	99 None	Field Type:	Width: 2 Numeric
FREQ	Prcnt	3RD TRAILER NO. OF AXLES				
0	0.0	02. 2 axles				
Õ	0.0	03. 3 axles				
0	0.0	04. 4 axles				
317	3.7	97. Unknown if 3rd trai	ler			
8147	96.3	98. Not applicable				
0	0.0	99. Unknown				
Variab.	le 1043	3RD TRAILER LENGTH	MD1:	999	Field	Width: 3
			MD2:	NODE	луре:	NUMERIC
FREQ	Prcnt	3RD TRAILER LENGTH				
317	3.7	995. Unknown if 3rd tra	iler			
8147	96.3	996. Not applicable				
0	0.0	997. Short				

FREQ Pront Var 1043 3RD TRAILER LENGTH

0 0.0 998. Long 0 0.0 999. Unknown

Variable 10443RD TRAILER EMPTY WEIGHT<br/>MD1: 999999MD1: 999999Field Width: 6<br/>Type:FREQ Prcnt3RD TRAILER EMPTY WEIGHT3173.7999997.Unknown if 3rd trailer814796.300.0999999.Unknown

Variabl	e 1045	3RD TRAILER CARGO	MD1: MD2:	99 None	Field Wi Type:	.dth: 2 Numeric
					-11	
FREQ	Prcnt	3RD TRAILER CARGO				
0	0.0	01. General freight				
0	0.0	02. Household goods				
0	0.0	03. Metal: coils, shee	ts, etc			
0	0.0	04. Heavy machinery				
0	0.0	05. Motor vehicles				
0	0.0	06. Driveaway/towaway				
0	0.0	07. Gases in bulk				
0	0.0	08. Solids in bulk				
0	0.0	09. Liquids in bulk				
0	0.0	10. Explosives				
0	0.0	ll. Logs/poles/lumber				
0	0.0	12. None (empty)				
0	0.0	13. Refrigerated food				
0	0.0	14. Mobile home				
0	0.0	15. Farm products				
Ō	0.0	16. Other				
317	3.7	97. Unknown if 3rd tra	iler			
8147	96.3	98. Not applicable				
0	0.0	99. Unknown				
Variabl	e 1046	3RD TRAILER CARGO WEIGHT	MD1: - MD2:	9999999 None	Field Wi Type:	ldth: 6 Numeric
FREQ	Prcnt	3RD TRAILER CARGO WEIGHT	?			
317	3.7	999995. Unknown if 3rd	l traile	r		
8147	96.3	999996. Not applicable	2			
0	0.0	999997. Some cargo (we	eight un	known)		

FREQ Prcnt Var 1046 3RD TRAILER CARGO WEIGHT

 0
 0.0
 999998. Full cargo (weight unknown)

 0
 0.0
 999999. Unknown

Variable 1047 3RD TRAILER HAZARD CARGO MD1: 9 Field Width: 1 ----- MD2: None Type: Numeric FREQ Prcnt 3RD TRAILER HAZARD CARGO 00.01. Hazardous cargo00.02. Non-hazardous cargo3173.77. Unknown if 3rd trailer814796.38. Not applicable00.09. Unknown Variable 1048 GROSS COMBINATION WEIGHT MD1: 999999 Field Width: 6 MD2: None Type: Numeric FREQ Prcnt GROSS COMBINATION WEIGHT 1 0.0 007000. - . Weight in pounds 3 0.0 177200. 547 6.5 999999. Unknown Variable 1049 NUMBER OF TRAILERS MD1: 9 Field Width: 1 - MD2: None Type: Numeric -FREQ Pront NUMBER OF TRAILERS 281 3.3 0. No trailer 
 7196
 85.0
 1. 1 trailer

 670
 7.9
 2. 2 trailers

 0
 0.0
 3. 3 trailers

 317
 3.7
 9. Unknown
 Variable 1050 VEHICLE COMBINATION CODE MD1: 0 Field Width: 2 ----- MD2: None Type: Numeric FREQ Prcnt VEHICLE COMBINATION CODE 

 317
 3.7
 00. Unknown

 281
 3.3
 02. Bobtail tractor

 7175
 84.8
 05. Tractor & semi-trailer

# TRIP FILE CODEBOOK

FREQ Prent Var 1050 VEHICLE COMBINATION CODE

21	0.2	06. Tractor	<u>&amp;</u>	other (non-semi trailer)
668	7.9	07. Tractor	&	semi & full
2	0.0	08. Tractor	<u>چ</u>	semi & other

Variable 1051	TOTAL MILES FOR THE TRIP	MD1:	9999	Field	Width: 4
		MD2:	None	Type:	Numeric
FREQ Prcnt	TOTAL MILES FOR THE TRIP				
314 3.7	0000. 0 miles				
0 0.0	9998.9998 miles				
172 2.0	9999. Unknown				

Variabl	e 1052	LIMITED	DAY RURAL	MD1: MD2:	9999 None	Field Type:	Width: 4 Numeric
FREQ	Prcnt	LIMITED	DAY RURAL				
5258	62.1	0000.	0 miles Miles				
0	0.0	9998.	9998 miles				
175	2.1	9999.	Unknown				

Variabl	e 1053	LIMITED	NIGHT RURAL	MD1: MD2:	9999 None	Field Type:	Width: 4 Numeric
FREQ	Prcnt	LIMITED	NIGHT RURAL				
7791	92.0	0000.	0 miles Miles				
0	0.0	9998.	9998 miles				
54	0.6	9999.	Unknown				

Variabl	e 1054	MAJOR DAY RURAL	MD1: MD2:	9999 None	Field Type:	Width: 4 Numeric
FREQ	Prcnt	MAJOR DAY RURAL				
5797	68.5	0000. O miles Miles				
0 197	0.0 2.3	9998. 9998 miles 9999. Unknown				

Variabl	.e 1055	MAJOR NIGHT RURAL	MD1: MD2:	9999 None	Field Wi Type:	dth: 4 Numeric
FREQ	Prcnt	MAJOR NIGHT RURAL				
8084	95.5	0000. O miles Miles				
0	0.0	9998. 9998 miles				
55	0.6	9999. Unknown				
Variabl	le 1056	OTHER DAY RURAL	MD1: MD2:	9999 None	Field Wi Type:	idth: 4 Numeric
FREQ	Prcnt	OTHER DAY RURAL				
6311	74.6	0000. 0 miles				
		Miles				
0	0.0	9998. 9998 miles				
215	2.5	9999. Unknown				
Variab:	le 1057	OTHER NIGHT RURAL	MD1: MD2:	9999 None	Field W: Type:	idth: 4 Numeric
FREQ	Prcnt	OTHER NIGHT RURAL				
8242	97.4	0000. 0 miles				
•	~ ~	Miles				
12	0.0	9998. 9998 Miles 8888 Unknown				
72	0.5	JJJJ. OMMOWN				
Variab.	le 1058	LIMITED DAY URBAN	MD1: MD2:	9999 None	Field W. Type:	idth: 4 Numeric
FREQ	Prcnt	LIMITED DAY URBAN				
4052	47.9	0000. O miles Miles				
0	0.0	9998. 9998 miles				
233	2.8	9999. Unknown				

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Variabl	le 1059	LIMITED NIGHT URBAN	MD1: - MD2:	9999 None	Field Type:	Width: 4 Numeric
FREQ	Prcnt	LIMITED NIGHT URBAN				
7691	90.9	0000. 0 miles Miles				
0 61	0.0 0.7	9998. 9998 miles 9999. Unknown				
	le 1060	MAJOR DAY URBAN	MD1: MD2:	9999 None	Field Type:	Width: 4 Numeric
FREQ	Prcnt	MAJOR DAY URBAN				
4390	51.9	0000. 0 miles				
0 295	0.0 3.5	9998. 9998 miles 9999. Unknown				
Variabl	le 1061	MAJOR NIGHT URBAN	MD1: MD2:	9999 None	Field Type:	Width: 4 Numeric
FREQ	Prcnt	MAJOR NIGHT URBAN				
7902	93.4	0000. 0 miles				
0 71	0.0 0.8	9998. 9998 miles 9999. Unknown				
Variabl	e 1062	OTHER DAY URBAN	MD1: MD2:	9999 None	Field Type:	Width: 4 Numeric
FREQ	Prcnt	OTHER DAY URBAN			-45-4	
3690	43.6	0000. 0 miles				
0 332	0.0 3.9	9998. 9998 miles 9999. Unknown				

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Variable	e 1063	OTHEI	R NIGHT URBAN	MD1: MD2:	9999 None	Field Type:	Width: 4 Numeric
FREQ	Prcnt	OTHER	R NIGHT URBAN				
7890	93.2	000	00. 0 miles . Miles				
0	0.0	999	98. 9998 miles				
60	0.7	999	99. Unknown				
Variable	e 1071	DRIVI	CR TRAINED	MD1: MD2:	9 None	Field Type:	Width: 1 Numeric
FREQ 1	Prcnt	DRIVI	ER TRAINED				
2454	29.0	١.	No				
627	7.4	2.	Yes				
4374	51.7	7.	Not applicable (Q	uarters 1 a	and 2)		
1009	11.9	9.	Unknown				
FREQ	Prcnt	SOURC	CE OF TRAINING				
424	5.0	1.	Company				
10	⊥•4 ∩ 1	2.	SCHOOL	1			
48	0.6	4.	In the military	· <b>±</b>			
4374	51.7	7.	Not applicable (0	warters 1 a	and 2)		
2454	29.0	8.	Not applicable (n	o training	)		
1033	12.2	9.	Unknown				
Variable	e <u>1073</u>	TYPE	OF TRAINING	MD1:	9 None	Field Type:	Width: 1 Numeric
FREQ	Prcnt	TYPE	OF TRAINING			-1601	
96	1.1	1.	Classroom				
491	5.8	2.	Classroom and roa	d			
4374	51.7	7.	Not applicable (Q	uarters 1 a	and 2)		
2454	29.0	8.	Not applicable (n	o training)	)		
1049	12.4	9.	Unknown				

Appendix

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TABLE A SELECTION STRATA

Stratum	N	Weight
Current Registration	651	30.984
"Expired" IRP	302	22.991
"Expired" Non-IRP	102	19.988

TABLE B NON-CONTACT ADJUSTMENT

Stratum	N	Adjustment Factor
Current Registration	651	1.196
"Expired" IRP	302	1.154
"Expired" Non-IRP	102	1.198

TABLE C TRIP NON-RESPONSE ADJUSTMENT

Stratum	N	Adjustment Factor
Current Registration	651	1.068
"Expired" IRP	302	1.085
"Expired" Non-IRP	102	1.029

TABLE D MTTIS WEIGHTS

	N	, Range		
Name	N	Min.	Max.	
Final Contact Weight (V14)	1,055	23.948	37.052	
Trip Vehicle Weight (V114)	8,464	24.643	39.582	
Annual Mileage Inflation (V116)	8,461	0.113	365.000	
Final Trip Weight (V117)	8,461	4.465	14447.430	