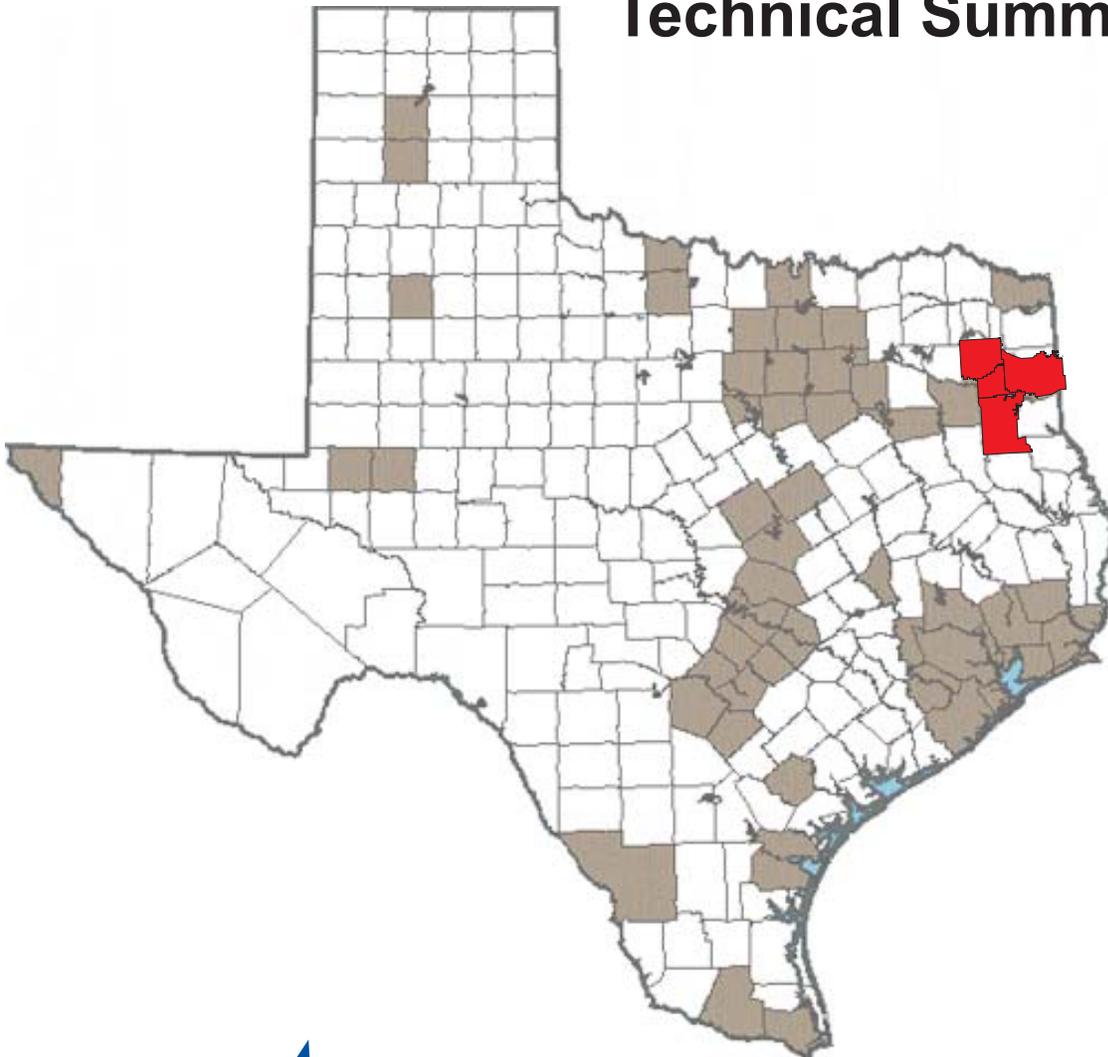


2004 Longview Commercial Vehicle Survey Technical Summary



Prepared by the
Texas Transportation Institute
January 2006

2004 Longview Commercial Vehicle Survey

TECHNICAL SUMMARY

Texas Department of Transportation Travel Survey Program

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INTRODUCTION

In 2004 the Transportation Planning and Programming (TPP) Division of the Texas Department of Transportation (TxDOT) funded a commercial vehicle travel survey in Gregg, Harrison, Rusk, and Upshur Counties, the Longview Metropolitan Planning Organization (MPO) study area. The Longview commercial vehicle survey measured commercial vehicle travel patterns in Gregg, Harrison, Rusk, and Upshur Counties. The purpose of the survey is to provide data that allows TxDOT to forecast commercial vehicle demand and travel patterns within the area.

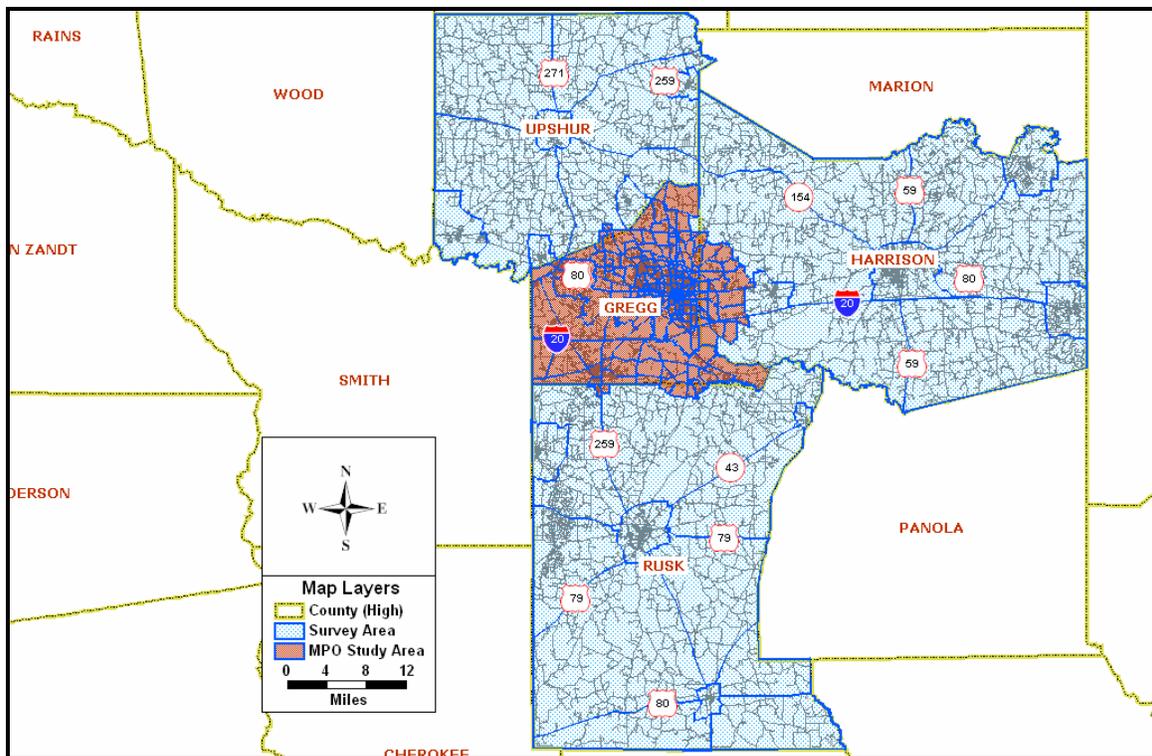
This report presents a Technical Summary of the 2004 Longview Commercial Vehicle Survey, documents the data collected, and presents the analysis results for the four-county Longview study area. The summary is organized into seven sections. The first section presents a brief description of the Longview study area. The second discusses the survey methodology. The third section describes the data editing that was done, the fourth provides an overview of external commercial vehicle data, and the fifth presents summaries of the survey data. The sixth section discusses the methodology utilized to expand the survey data and also provides expanded survey results. The final section presents recommendations for use of the data in travel demand models. Additionally, survey instruments utilized for the Longview Commercial Vehicle survey are provided in the Appendix.

LONGVIEW STUDY AREA

The boundary established for the Longview commercial vehicle survey was comprised of Gregg, Harrison, Rusk, and Upshur Counties. The survey study area and the transportation study area shown in Figure 1, are located in east Texas near the Texas/Louisiana border. While the survey area is comprised of four counties, the current transportation study area for Longview is a smaller area located primarily in Gregg County. The four-county area was surveyed in the event Longview is declared a non-attainment area for air quality. If that were to happen, the transportation study area boundary is expected to be expanded to include the four counties.

For travel demand modeling purposes, urban areas are typically divided into small geographic sections called traffic analysis zones (TAZ). Each zone is normally bound by transportation facilities and/or geographic features (e.g. bodies of water, parks, etc), and the activity that occurs within that area is typically somewhat homogenous. Zones are categorized by the density of activity associated with them. The zonal density is measured in terms of population and employment relative to the area in acres. The Longview MPO defined the TAZ structure and subsequent transportation study area boundary for the city (which is smaller than the survey study area). The general location of the MPO study area for Longview is provided in Figure 1 (shaded red). Also shown in Figure 1 is the rural TAZ structure (blue shaded area) which was developed in conjunction with other travel surveys in the Longview area.

Figure 1. Longview County Study Area.



According to the 2000 census, the population of Longview was nearly 73,000 persons while the population of the entire study area was approximately 256,000 persons. There

were over 96,000 households in the four-county area in 2000 and the average household size according to this census was 2.66 persons per household.

SURVEY METHODOLOGY

The sample of survey vehicles was randomly selected from motor carrier and vehicle registration databases provided by TxDOT. For the purpose of the survey, commercial vehicles were defined as any vehicle having six or more tires, a gross vehicle weight of over 8,500 pounds, and primarily used for commercial purposes. Gram Traffic Counting conducted the commercial vehicle survey in Longview. Selected businesses were contacted by Gram and asked to participate in the survey effort. Those businesses agreeing to participate were provided with survey packets to distribute to drivers and were provided with instructions on how the survey forms should be filled out. After the survey of an individual business was complete, a representative from Gram would retrieve all survey packets. A total of 251 vehicle surveys were obtained from 146 participating businesses during the conduct of the Longview commercial vehicle survey. It is worth noting that some totals (such as the number of vehicles in Table 2) will not always match this total exactly. This is a result of non-response to certain questions on the survey instrument.

DATA EDITING

Data editing consisted primarily of reviewing the database to ensure that it was complete and followed guidelines set forth in the bid specification issued by TxDOT. A program was utilized to perform checks relative to geocoding of locations as well as perform logic checks of survey responses. The majority of the data errors were corrected prior to the data being submitted by Gram. However, there was one prevalent error that was not correctable. It is not uncommon for there to be a misunderstanding between transportation planners and the general public as to the definition of a trip. In travel surveys, a trip is defined as the journey from one location to another. The trip ends consist of the last location where a driver got into the vehicle (the origin) and the next location that the driver will stop or exit the vehicle (the destination). However, to the general public a trip is often interpreted as a “round-trip” where the origin and destination

are the same location and any stops in between are omitted. In the Longview commercial vehicle survey, there were a number of trips with the same TAZ for the origin and destination location. Each trip was reviewed to ascertain whether the address and/or location provided were identical for each trip end. If identical origin and destination information was given, then the trip was removed from the analysis. If multiple instances of duplicate origin/destination information were given for a vehicle, then the vehicle data were removed from the analysis. As a result of the data review, one vehicle was dropped from the analysis. The rationale for dropping the vehicle from the analysis is that the trip specific information is not accurate and therefore could compromise the analysis results.

TRIP TYPE INFORMATION

For the purpose of this analysis, two primary trip types are identified. Those trips types are internal trips and external trips. Internal trips are those with both trip ends (origin and destination) inside the survey area. External trips are those where one or both trip ends are located outside of the survey area. The primary purpose of the commercial vehicle analysis is to ascertain commercial vehicle characteristics and movements within a survey area. Therefore, with the exception of trip tour characteristics, trip data for vehicles having one trip end outside of the survey area (external trips) were removed from the analysis of trip related characteristics.

Certain data quality elements preclude a detailed analysis of external trip data. For instance, trip information relative to reported departure and arrival times as well as odometer readings are historically inaccurate. For internal trips, trip lengths and travel times from one TAZ to another can be estimated from network travel time and distance matrices developed from the transportation network for Longview. However, this type of information is not available for locations outside of a specific study area. As a result, external trips were categorized into one of four groups.

- Rural Longview (outside the MPO transportation study area but within the four-county survey area)
- Texas (outside four-county survey area)

- Mexico
- United States (non-Texas)

Using these groups, trips were summarized by origin and destination and the results are provided in Table 1. As shown in Table 1, 828 of the 1405 trips (58.93%) were internal trips (both the origin and destination were within the transportation study area). Of those internal trips, 714 (86.23%) were inter-zonal and 114 (13.77%) were intra-zonal.

External trips (one or both trip ends outside of the transportation study area) comprised 577 of the total 1405 trips (41.07%). Of those 577 trips, 303 (52.51%) had only one trip end outside the study area, and 274 trips (47.49%) had both trip ends outside of the study area. Nineteen trips ended within the United States (non-Texas) and no trips were reported having an origin or destination in Mexico.

Table 1. Trips by Origin and Destination.

Trip Origin	Trip Destination					Total
	Rural Longview	Texas (non-Longview)	Mexico	United States (non-Texas)	Internal	
Rural Longview	105	6	0	0	61	172
Texas (non-Webb)	5	154	0	1	72	232
Mexico	0	0	0	0	0	0
United States (non-Texas)	0	2	0	1	16	19
Internal	66	71	0	17	828	982
Total Trips	176	233	0	19	977	1405

SURVEY SUMMARIES

Survey Sample Fleet Characteristics

Since the survey methodology employs a random selection process, it is presumed that each commercial vehicle in the survey area has the same non-zero probability of being selected to participate in the survey. Using a random sampling of vehicles provides a

means for expanding the data that were obtained through the survey to the entire population of vehicles operating within the survey area.

As previously mentioned, a total of 251 commercial vehicles were surveyed. However, one commercial vehicle had a base location that was in the rural Longview area and therefore, the vehicle data for that vehicle was not included in the analysis.

As part of the survey, information relative to the year, make and model, odometer reading, and fuel type of each vehicle surveyed was collected. This provides an indication of the distribution of vehicles traveling in the survey area by type, age, and condition (as implied by the number of miles on the vehicle). Table 2 below shows the age distribution of the surveyed vehicles.

Table 2. Commercial Vehicle Age Distribution.

Age	Number of Vehicles	Percent of Total	Cumulative Percent of Total	Vehicles with Odometer Values Reported	Percent of Total	Average Reported Odometer Value
1	6	2.40	2.40	6	2.41	10,293
2	22	8.80	11.20	22	8.84	44,912
3	25	10.00	21.20	25	10.04	70,558
4	36	14.40	35.60	36	14.46	89,152
5	28	11.20	46.80	28	11.24	113,444
6	23	9.20	56.00	23	9.24	184,599
7	39	15.60	71.60	39	15.67	134,003
8	9	3.60	75.20	9	3.61	173,138
9	14	5.60	80.80	14	5.62	217,575
10	11	4.40	85.20	11	4.42	196,463
11	5	2.00	87.20	5	2.01	242,533
12	4	1.60	88.80	4	1.61	132,754
13	6	2.40	91.20	6	2.41	308,248
14	2	0.80	92.00	2	0.80	214,246
15	4	1.60	93.60	4	1.61	309,611
16	3	1.20	94.80	3	1.20	367,102
17	1	0.40	95.20	1	0.40	65,612
18	0	0.00	95.20	0	0.00	285,832
19	2	0.80	96.00	2	0.80	216,696
20	3	1.20	97.20	3	1.20	390,768
>20	7	2.80	100.00	6	2.41	142,291
Total	250	100.00		249	100.00	

Figure 2 and Figure 3 provide the distribution and cumulative distribution of surveyed vehicles by age. Vehicles three years old or less comprised approximately twenty percent (21.20%) of the fleet, while nearly half the vehicles (46.80%) were five years old or less. Three-quarters of the vehicles (75.20%) were eight years of age or less.

Figure 2. Commercial Vehicle Age Distribution.

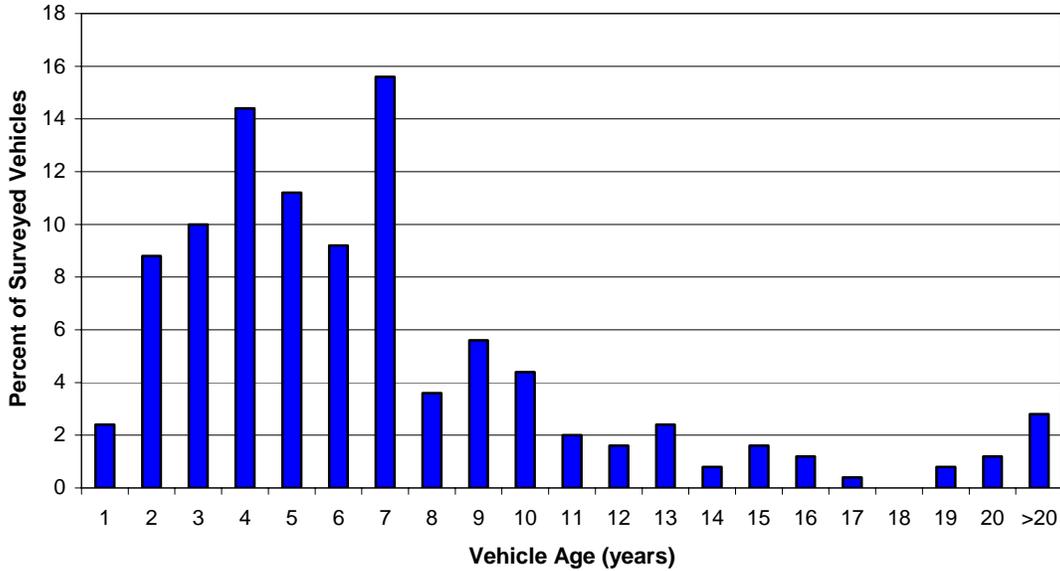
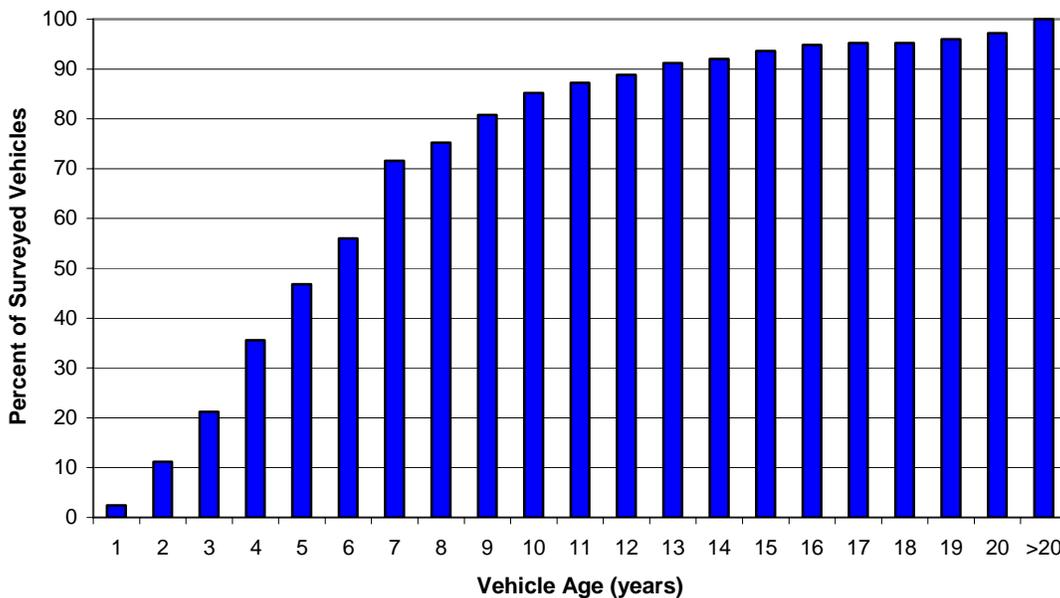


Figure 3. Cumulative Vehicle Age Distribution.



A total of 250 vehicles responded to the age of vehicle question, and 249 vehicles (99.60%) reported odometer values. The average reported odometer value for all vehicles was 137,845 miles per vehicle and the average vehicle age was 6.92 years.

The majority of the respondents surveyed listed diesel as the fuel utilized by the vehicle. Diesel accounted for 94.80 percent of the fuel types, followed by unleaded gasoline at 4.80 percent. One vehicle (0.40%) reported using leaded gasoline.

Single unit 2-axle vehicles comprised 49.20 percent of the sample, with single unit 3-axle vehicles accounting for 18.40 percent of the sample. Tractor-trailers accounted for an additional 28.40 percent of the sample. The distribution of vehicle classification information is provided in Table 3.

Table 3. Vehicle Classification Distribution.

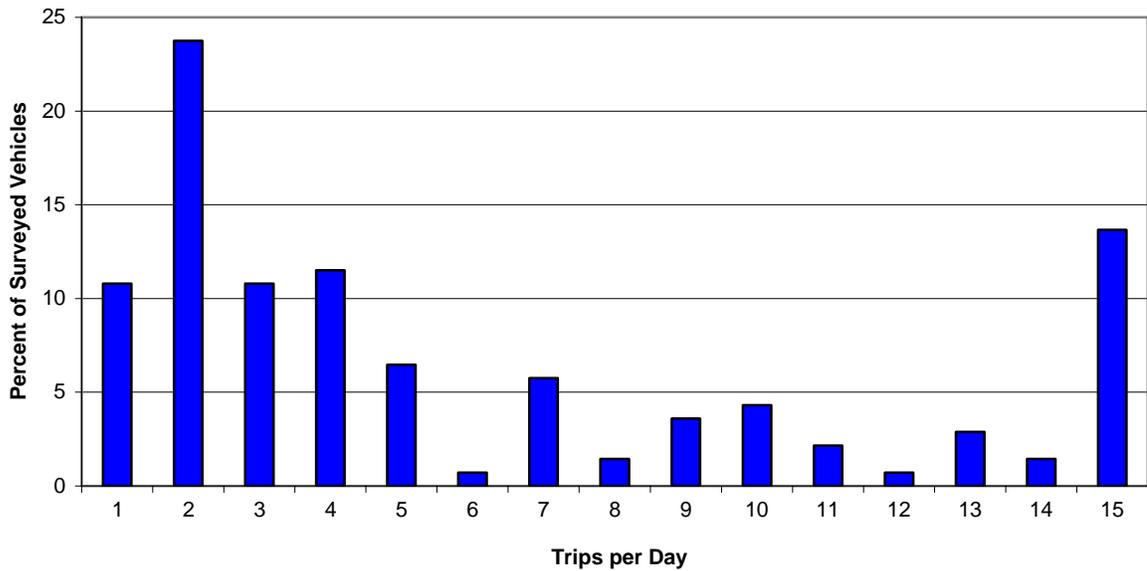
Vehicle Classification	Number of Vehicles	Percent of Total	Cumulative Number	Cumulative Percent
Single Unit 2-axle (6 wheels)	123	49.20	123	49.20
Single Unit 3-axle (10 wheels)	46	18.40	169	67.60
Single Unit 4-axle (14 wheels)	6	2.40	175	70.00
Semi (all tractor-trailer combinations)	71	28.40	246	98.40
Other	4	1.60	250	100.00
Total	250	100.00		

The distribution of the number of trips per day for commercial vehicles is provided in Table 4 and Figure 4. The greatest percentage of vehicles (23.74%) made only two trips and approximately half (56.83%) made four or fewer trips per day. Nearly a quarter of the vehicles (25.18%) made 10 or more trips per day. Interestingly, 19 vehicles (13.67%) made 15 trips in one day. The average number of trips per day per vehicle was 5.96.

Table 4. Distribution of Vehicles by Total Number of Trips.

Number of Trips per Day	Number of Vehicles	Percent of Total	Cumulative Total		Number of Trips per Day	Number of Vehicles	Percent of Total	Cumulative Total
1	15	10.79	10.79		9	5	3.60	74.82
2	33	23.74	34.53		10	6	4.32	79.14
3	15	10.79	45.32		11	3	2.16	81.30
4	16	11.51	56.83		12	1	0.72	82.02
5	9	6.47	63.30		13	4	2.88	84.90
6	1	0.72	64.02		14	2	1.44	86.34
7	8	5.76	69.78		15	19	13.66	100.00
8	2	1.44	71.22		Total	139	100.00	

Figure 4. Vehicle Trip Count Distribution.



The number of trips per day by vehicle classification is provided in Table 5. Due to similarities among certain classes of vehicles, the classification groups provided in Table 3 are aggregated into three new groups. For the remainder of the analysis, all of the single unit multi-axle vehicles are aggregated into a “small-medium” classification. Semi/tractor-trailer combinations are listed as the “large” classification, and any vehicles listed as other are categorized as “other”. 84.89 percent of the trips shown in Table 5 were made by vehicles in the small-medium category and large vehicles accounted for 15.11 percent of the trips. There were no vehicles in the ‘other’ category. The total

number of vehicles provided in Table 5 (139) is significantly less than the total number of surveyed vehicles (250). The reason for this is that for this portion of the analysis, vehicles making any external trips were removed from the analysis. Although this amounts to 44.40 percent of the vehicles being removed, trip related characteristics for vehicles making external trips are included in the trip tour characteristics portion of the analysis.

Table 5. Distribution of Total Number of Trips by Vehicle Classification.

Number of Trips per Day	Small-Medium Vehicles		Large Vehicles		Other Vehicles		Total
	Number of Vehicles	Percent of Total	Number of Vehicles	Percent of Total	Number of Vehicles	Percent of Total	
1	11	9.32	4	19.05	0	—	15
2	27	22.88	6	28.58	0	—	33
3	15	12.71	0	0.00	0	—	15
4	14	11.86	2	9.52	0	—	16
5	7	5.93	2	9.52	0	—	9
6	1	0.85	0	0.00	0	—	1
7	5	4.24	3	14.29	0	—	8
8	2	1.69	0	0.00	0	—	2
9	4	3.39	1	4.76	0	—	5
10	5	4.24	1	4.76	0	—	6
11	2	1.69	1	4.76	0	—	3
12	1	0.85	0	0.00	0	—	1
13	3	2.54	1	4.76	0	—	4
14	2	1.69	0	0.00	0	—	2
15	19	16.12	0	0.00	0	—	19
Total	118	100.00	21	100.00	0	—	139

Trip Purpose and Cargo Characteristics

An analysis of the distribution of trip origins and destinations disaggregated by land use type are provided in Table 6. The largest percentage of trip origins and destinations was classified as retail (29.23% and 28.38%, respectively). Industrial, retail, residential, and

office building land use types accounted for 65.22 percent of the origins and 66.18 percent of the destinations. The survey instrument provided two educational land use categories (12th grade or less and college/trade/etc.), but for the purpose of the analysis, the two categories were combined into one.

Table 6. Distribution of Trip Origins and Destinations by Land Use Activity.

Land Use Type	Origins	Percent of Total	Destinations	Percent of Total
Office Building	62	7.49	71	8.57
Retail	242	29.23	235	28.38
Industrial	89	10.75	91	10.99
Medical	2	0.24	3	0.36
Educational	9	1.09	10	1.21
Government	47	5.68	40	4.83
Residential	147	17.75	151	18.24
Airport	0	0.00	0	0.00
Eating Establishment	80	9.66	83	10.02
Other	150	18.11	144	17.40
Refused/Unknown	0	0.00	0	0.00
Total	828	100.00	828	100.00

A large majority of the trip origins and destinations (88.16%) were for the small-medium vehicle classification. Large vehicles accounted for the remaining 11.84 percent of the trip origins and destinations. Table 7 provides the trip origins by land use type and vehicle classification while Table 8 provides the trip destinations for the same categories.

Table 7. Distribution of Trip Origins by Land Use Type and Vehicle Classification.

Land Use Type	Small-Medium Vehicles		Large Vehicles		Other Vehicles		Total
	Number of Vehicles	Percent of Total	Number of Vehicles	Percent of Total	Number of Vehicles	Percent of Total	
Office Building	53	7.26	9	9.18	0	—	62
Retail	190	26.03	52	53.06	0	—	242
Industrial	74	10.14	15	15.31	0	—	89
Medical	2	0.27	0	0.00	0	—	2
Educational	8	1.10	1	1.02	0	—	9
Government	47	6.44	0	0.00	0	—	47
Residential	146	20.00	1	1.02	0	—	147
Airport	0	0.00	0	0.00	0	—	0
Eating Estab.	76	10.41	4	4.08	0	—	80
Other	134	18.35	16	16.33	0	—	150
Refused/Unknown	0	0.00	0	0.00	0	—	0
Total	730	100.00	98	100.00	0	—	828

Table 8. Distribution of Trip Destinations by Land Use Type and Vehicle Classification.

Land Use Type	Small-Medium Vehicles		Large Vehicles		Other Vehicles		Total
	Number of Vehicles	Percent of Total	Number of Vehicles	Percent of Total	Number of Vehicles	Percent of Total	
Office Building	59	8.08	12	12.24	0	—	71
Retail	184	25.21	51	52.04	0	—	235
Industrial	75	10.27	16	16.33	0	—	91
Medical	2	0.27	1	1.02	0	—	3
Educational	9	1.23	1	1.02	0	—	10
Government	40	5.48	0	0.00	0	—	40
Residential	151	20.68	0	0.00	0	—	151
Airport	0	0.00	0	0.00	0	—	0
Eating Estab.	79	10.82	4	4.08	0	—	83
Other	131	17.96	13	13.27	0	—	144
Refused/Unknown	0	0.00	0	0.00	0	—	0
Total	730	100.00	98	100.00	0	—	828

Table 9 summarizes the analysis of trip purposes reported in the survey in terms of the trip origin and destination. The majority of the trip purposes at both the origin and destination were reported as delivery (53.38% and 54.11%, respectively). 17.27 percent of the origin purposes and 18.60 percent of the destination purposes were listed as ‘pick-up’.

Table 9. Trip Purpose by Origin – Destination Summary.

Trip Origin Purpose	Trip Destination Purpose								
	Base Location/ Return to Base	Delivery	Pick-up	Vehicle Maintenance	Driver Needs	To Home	Other	No Response	Total
Base Location/ Return to Base	0	89	28	13	3	0	12	0	145
Delivery	77	291	47	4	20	0	3	0	442
Pick-up	17	49	70	1	4	0	2	0	143
Vehicle Maintenance	19	0	1	1	0	0	2	0	23
Driver Needs	6	17	4	0	0	0	3	0	30
To Home	0	0	0	0	0	0	0	0	0
Other	12	2	4	2	2	0	23	0	45
No Response	0	0	0	0	0	0	0	0	0
Total Trips	131	448	154	21	29	0	45	0	828

A more detailed breakdown by vehicle classification is provided in Table 10. As with the overall totals, ‘delivery’ was the most commonly cited origin and destination purpose (52.47% and 53.42%, respectively) for the small-medium category. In the large category, 60.20 percent of the origin purposes and 59.18 percent of the destination purposes were listed as ‘delivery’.

Table 10. Trip Purpose by Origin – Destination Summary by Vehicle Classification.

Small-Medium Vehicles									
Trip Origin Purpose	Trip Destination Purpose								
	Base Location/ Return to Base	Delivery	Pick-up	Vehicle Maintenance	Driver Needs	To Home	Other	No Response	Total
Base Location/ Return to Base	0	81	23	12	3	0	11	0	130
Delivery	69	247	44	3	17	0	3	0	383
Pick-up	12	46	68	1	2	0	2	0	131
Vehicle Maintenance	16	0	1	1	0	0	2	0	20
Driver Needs	4	14	2	0	0	0	3	0	23
To Home	0	0	0	0	0	0	0	0	0
Other	11	2	4	1	2	0	23	0	43
No Response	0	0	0	0	0	0	0	0	0
Total Trips	112	390	142	18	24	0	44	0	730
Large Vehicles									
Trip Origin Purpose	Trip Destination Purpose								
	Base Location/ Return to Base	Delivery	Pick-up	Vehicle Maintenance	Driver Needs	To Home	Other	No Response	Total
Base Location/ Return to Base	0	8	5	1	0	0	1	0	15
Delivery	8	44	3	1	3	0	0	0	59
Pick-up	5	3	2	0	2	0	0	0	12
Vehicle Maintenance	3	0	0	0	0	0	0	0	3
Driver Needs	2	3	2	0	0	0	0	0	7
To Home	0	0	0	0	0	0	0	0	0
Other	1	0	0	1	0	0	0	0	2
No Response	0	0	0	0	0	0	0	0	0
Total Trips	19	58	12	3	5	0	1	0	98

Drivers of commercial vehicles were asked to provide the type of cargo being delivered or picked up at each stop. The results of the responses are provided in Table 11. Miscellaneous shipments accounted for approximately thirty percent of cargo types at both the origin and destination (29.11% and 27.66%, respectively). Food, health, and beauty products also represented a sizable portion of the sample with 20.77 percent of origin cargos and 19.08 percent of the destination cargos. Respondents reported not carrying any cargo at 5.68 percent of the origins and 11.35 percent of the destinations.

Table 11. Distribution of Cargo Types by Origin and Destination.

Cargo Description		Surveyed Cargo at Origin	Percent of Total	Surveyed Cargo at Destination	Percent of Total
1	— Farm Products	11	1.33	10	1.21
2	— Forest Products	3	0.36	3	0.36
3	— Marine Products	0	0.00	0	0.00
4	— Metals and Minerals	9	1.09	11	1.33
5	— Food, Health, and Beauty Products	172	20.77	158	19.08
6	— Tobacco Products	1	0.12	0	0.00
7	— Textiles	14	1.69	14	1.69
8	— Wood Products	20	2.42	19	2.29
9	— Printer Matter	0	0.00	0	0.00
10	— Chemical Products	9	1.09	7	0.85
11	— Refined Petroleum or Coal Products	21	2.54	17	2.05
12	— Rubber, Plastic, and Styrofoam Products	2	0.24	2	0.24
13	— Clay, Concrete, Glass, or Stone	75	9.06	74	8.94
14	— Manufactured Goods/Equipment	67	8.09	50	6.04
15	— Wastes	64	7.73	65	7.85
16	— Miscellaneous Shipments	241	29.10	229	27.66
17	— Hazardous Materials	27	3.26	25	3.02
18	— Transportation	4	0.48	5	0.60
19	— Unclassified Cargo	1	0.12	0	0.00
20	— Driver Refused to Answer	0	0.00	0	0.00
21	— Unknown to Driver	0	0.00	0	0.00
22	— Empty	47	5.68	94	11.36
23	— Other	40	4.83	45	5.43
	Total	828	100.00	828	100.00

Survey Trip Length Characteristics

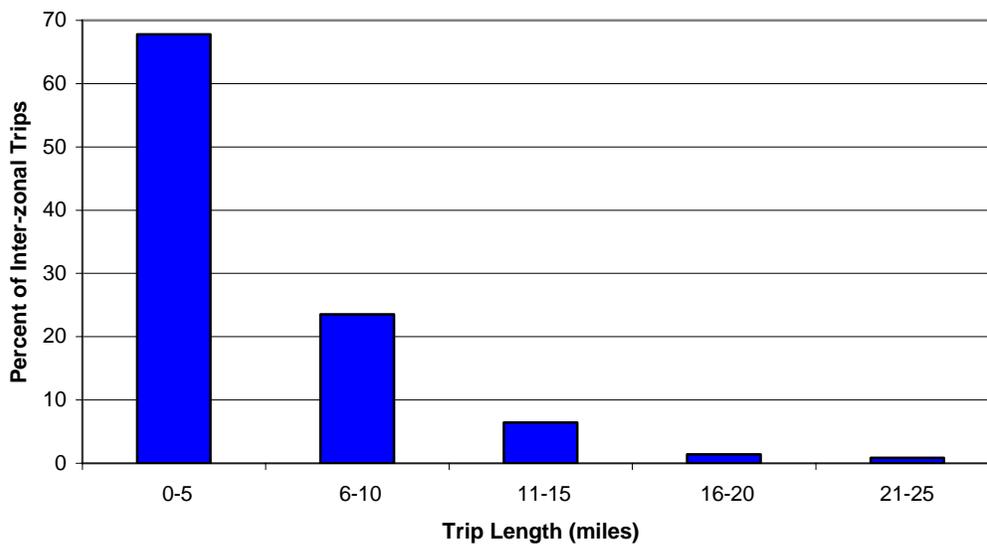
As part of the survey, respondents were asked to provide odometer readings at the beginning and end of each trip. This data can be useful in estimating the trip lengths of external and intra-zonal trips. Reported trip lengths for inter-zonal trips can also be compared with trips lengths provided in network travel time and distance matrices. However, when reviewing the completed data set a high number of inconsistent and inaccurate odometer values were observed. In an effort to not compromise the integrity of the analysis, reported odometer values were not used in the analysis of trip length measurements. As a result, trip length frequency distribution results are based on network travel time and distance matrices and contain information on only local (inter-zonal) trips. The results of this analysis are provided in Table 12 and in Figure 5. Nearly two-thirds of

the trips (67.79%) were less than five miles in length. Only 8.68 percent of the trips were longer than ten miles. The average trip length for all trips was 4.98 miles.

Table 12. Trip Length Frequency Distribution for Local Trips (grouped intervals).

Trip Length (miles)	Number of Trips	Percent of Trips
0-5	484	67.79
6-10	168	23.53
11-15	46	6.44
16-20	10	1.40
21-25	6	0.84
Total	714	100.00

Figure 5. Trip Length Frequency Distribution for Local Trips (grouped intervals).



In order to provide a more detailed summary, Table 13 provides the grouped interval trip length frequency distribution by vehicle classification. Additionally, trip length frequency distribution information is also provided in an ungrouped format in Table 14 and Figure 6.

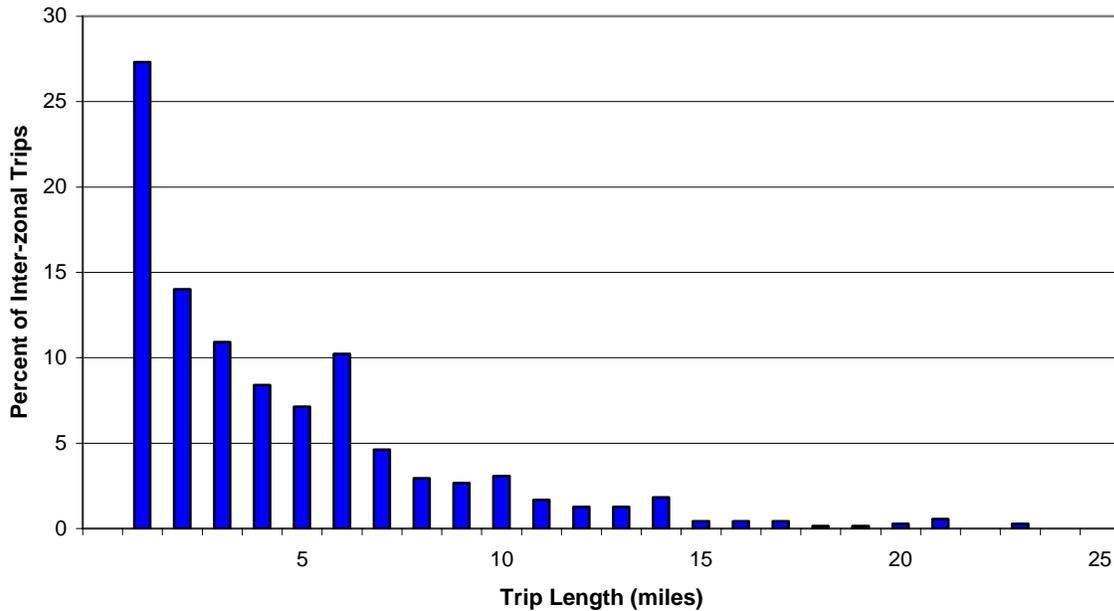
Table 13. Trip Length Frequency Distribution by Vehicle Classification for Local Trips.

Trip Length (miles)	Small-Medium Vehicles		Large Vehicles		Other Vehicles		Total
	Number of Vehicles	Percent of Total	Number of Vehicles	Percent of Total	Number of Vehicles	Percent of Total	
0-5	426	67.73	58	68.24	0	—	484
6-10	154	24.48	14	16.47	0	—	168
11-15	33	5.25	13	15.29	0	—	46
16-20	10	1.59	0	0.00	0	—	10
21-25	6	0.95	0	0.00	0	—	6
Total	629	100.00	85	100.00	0	—	714

Table 14. Ungrouped Trip Length Frequency Distribution for Local Trips.

Trip Length (miles)	Number of Trips	Percent of Trips	Trip Length (miles)	Number of Trips	Percent of Trips
1	195	27.32	13	9	1.26
2	100	14.02	14	13	1.82
3	78	10.92	15	3	0.42
4	60	8.40	16	3	0.42
5	51	7.14	17	3	0.42
6	73	10.22	18	1	0.14
7	33	4.62	19	1	0.14
8	21	2.94	20	2	0.28
9	19	2.66	21	4	0.56
10	22	3.08	22	0	0.00
11	12	1.68	23	2	0.28
12	9	1.26	24	0	0.00
			Total	714	100.00

Figure 6. Ungrouped Trip Length Frequency Distribution for Local Trips.



Mean trip lengths for internal trips by land use type at the destination are presented in Table 15. The table also provides the mean trip lengths by vehicle classification. Internal (local) trip lengths are typically relatively small, and in Longview the overall average was 4.98 miles. The averages ranged from 2.43 miles for the medical land uses to 6.66 miles for industrial land use destinations. The shortest and longest mean trip length for land use types was more varied when the data were disaggregated by vehicle classification. For example, in the large vehicle classification, the shortest mean trip length was for the educational land use type (1.55 miles) and the longest mean trip length was 9.05 miles for the office building category.

Table 15. Mean Trip Length for Local Trips.

Land Use Type	Overall Mean Trip Length (miles)	Mean Trip Length (miles)		
		Small-Medium Vehicles	Large Vehicles	Other Vehicles
Office Building	4.87	4.09	9.05	—
Retail	4.77	4.90	4.33	—
Industrial	6.66	7.06	4.77	—
Medical	2.43	1.71	3.88	—
Educational	4.32	4.67	1.55	—
Government	3.45	3.45	—	—
Residential	4.12	4.12	—	—
Airport	—	—	—	—
Eating Establishment	4.16	3.97	7.53	—
Other	6.02	5.83	8.11	—
Refused/Unknown	—	—	—	—
Average	4.98	4.91	5.51	—

Survey Travel Time and Speed Characteristics

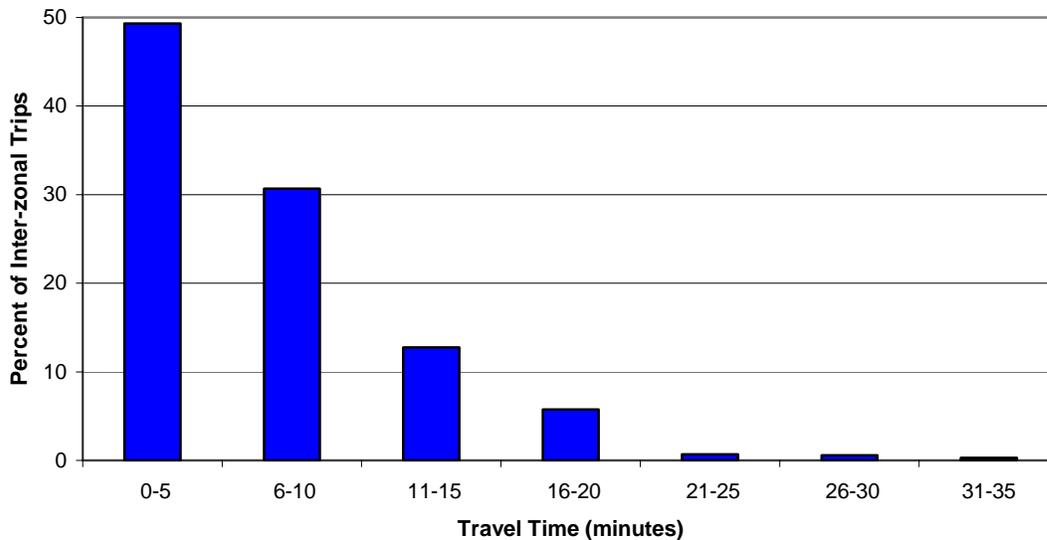
Survey respondents were also asked to provide arrival and departure times for each logged trip on the survey day. Since external and intra-zonal travel time data is not provided in network travel time and distance matrices, reported travel times can provide information useful in estimating travel times for these types of trips. Additionally, reported travel times for inter-zonal trips can be compared to travel times provided in network travel time and distance matrices. However, much like the reported trip length information, reported travel time data in Longview was found to be illogical and inaccurate. For instance, there were numerous occasions where a trip would be reported to arrive at the next location before it left the previous location. Additionally, it was observed that the time information provided for arrivals and departures was almost always rounded off. Most often the times were rounded off to either 15 or 30 minute increments. As a result, reported travel time information was not utilized in the analysis of travel time characteristics. All travel time results are for inter-zonal trips and are based on network travel time matrices. The results of this analysis are provided in Table 16 and Figure 7. Nearly

half of the trips (49.30%) were less than five minutes. Trips less than ten minutes accounted for 79.97 percent of all trips. Only 1.54 percent of the trips were longer than twenty minutes.

Table 16. Travel Time Frequency Distribution for Local Trips (grouped intervals).

Travel Time (minutes)	Number of Trips	Percent of Trips
0-5	352	49.30
6-10	219	30.67
11-15	91	12.75
16-20	41	5.74
21-25	5	0.70
26-30	4	0.56
31-35	2	0.28
Total	714	100.00

Figure 7. Travel Time Frequency Distribution for Local Trips (grouped intervals).



In order to provide a more detailed analysis, Table 17 provides the grouped interval travel time frequency distribution by vehicle classification. Additionally, travel time frequency distribution information is also provided in an ungrouped format in Table 18 and Figure 8.

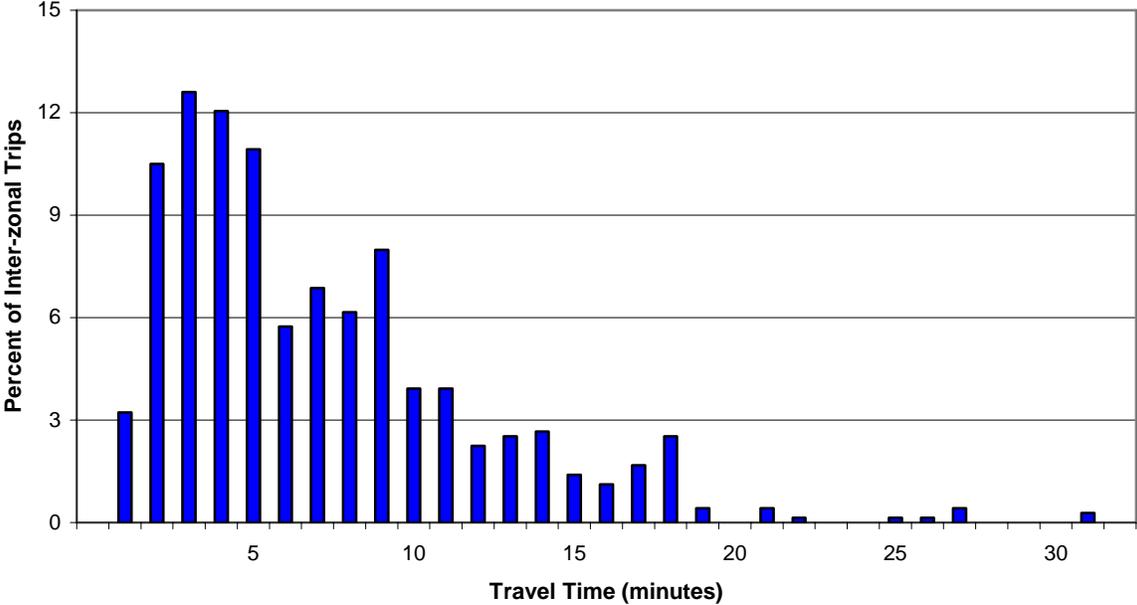
Table 17. Travel Time Frequency Distribution by Vehicle Classification for Local Trips.

Travel Time (minutes)	Small-Medium Vehicles		Large Vehicles		Other Vehicles		Total
	Number of Vehicles	Percent of Total	Number of Vehicles	Percent of Total	Number of Vehicles	Percent of Total	
0-5	314	49.92	38	44.70	0	—	352
6-10	193	30.68	26	30.59	0	—	219
11-15	79	12.56	12	14.12	0	—	91
16-20	32	5.09	9	10.59	0	—	41
21-25	5	0.79	0	0.00	0	—	5
26-30	4	0.64	0	0.00	0	—	4
31-35	2	0.32	0	0.00	0	—	2
Total	629	100.00	85	100.00	0	—	714

Table 18. Ungrouped Travel Time Frequency Distribution for Local Trips.

Travel Time (minutes)	Number of Trips	Percent of Trips	Travel Time (minutes)	Number of Trips	Percent of Trips
1	23	3.22	17	12	1.68
2	75	10.50	18	18	2.52
3	90	12.62	19	3	0.42
4	86	12.05	20	0	0.00
5	78	10.93	21	3	0.42
6	41	5.74	22	1	0.14
7	49	6.86	23	0	0.00
8	44	6.16	24	0	0.00
9	57	7.98	25	1	0.14
10	28	3.92	26	1	0.14
11	28	3.92	27	3	0.42
12	16	2.24	28	0	0.00
13	18	2.52	29	0	0.00
14	19	2.66	30	0	0.00
15	10	1.40	31	2	0.28
16	8	1.12	32	0	0.00
			Total	714	100.00

Figure 8. Ungrouped Travel Time Frequency Distribution for Local Trips.



Mean travel times for local trips by land use type at the destination are provided in Table 19. The overall mean travel time for Longview was 7.58 minutes. The shortest mean travel time was for medical land use types (4.35 minutes) and the longest was 9.36 minutes for industrial land use types. The table also provides the mean travel times by vehicle classification.

Table 19. Mean Travel Times for Local Trips.

Land Use Type	Overall Mean Travel Time (minutes)	Mean Travel Time (minutes)		
		Small-Medium Vehicles	Large Vehicles	Other Vehicles
Office Building	7.61	6.69	12.51	—
Retail	7.36	7.57	6.63	—
Industrial	9.36	9.87	6.95	—
Medical	4.35	3.62	5.80	—
Educational	6.44	6.84	3.25	—
Government	5.85	5.85	—	—
Residential	6.62	6.62	—	—
Airport	—	—	—	—
Eating Establishment	6.46	6.22	10.81	—
Other	8.86	8.64	11.21	—
Refused/Unknown	—	—	—	—
Average	7.58	7.52	8.05	—

In Longview, the overall mean travel time was 7.58 minutes and the overall average speed for local trips was 35.63 miles per hour. Mean travel speeds for local trips by land use at the destination are provided in Table 20. The table also provides the travel speeds for each land use type by vehicle classification. Educational land use types had the lowest average travel speed (31.76 mph) and industrial land use types had the highest average travel speed (38.86 mph).

Table 20. Mean Travel Speed for Local Trips.

Land Use Type	Overall Mean Speed (miles per hour)	Mean Speed (miles per hour)		
		Small-Medium Vehicles	Large Vehicles	Other Vehicles
Office Building	34.38	33.22	40.55	—
Retail	35.15	35.30	34.61	—
Industrial	38.86	39.46	36.06	—
Medical	32.25	28.30	40.14	—
Educational	31.76	32.14	28.67	—
Government	32.36	32.36	—	—
Residential	34.37	34.37	—	—
Airport	—	—	—	—
Eating Establishment	34.80	34.70	36.67	—
Other	37.63	37.57	38.32	—
Refused/Unknown	—	—	—	—
Average	35.63	35.57	36.07	—

Given the geographic size of the study area, mean trip length, travel time, and speed values seem reasonable. However, until better methods are available to provide more accurate reported odometer readings and arrival and departure times, there is a limited ability to compare the difference between observed values and transportation network travel time and distance matrices. Additionally, external and intra-zonal trip lengths and travel times can not be determined.

Trip Tour Characteristics

In an effort to ascertain the amount of circuitous travel performed by commercial vehicles, analyses of trip tours were conducted. Trip tours may be defined as a combination (or chaining) of trips in which a surveyed vehicle leaves and returns to a common point, typically the vehicle's base location. In order to accurately analyze trip tour information, external trips had to be added back into the analysis. As a result, there are a total of 1405 trips recorded. This was done since it is possible for trip tours to begin within the study area, travel outside of the study area, and return back during the one-day survey period. Therefore, to exclude external trip data would significantly reduce the accuracy of trip tour analyses.

For each trip recorded, information was provided on whether or not the trip origin location was the vehicle’s base location. This served as the basis for determining if the trip was a base trip or non-base trip. For a trip to be a base trip, either the origin or destination of the trip had to be at the base location. If neither trip end was at the base location, then the trip was a non-base trip. In Longview, there were a total of 555 base trips (39.50%) and 850 non-base trips (60.50%). Table 21 provides a breakdown of base and non-base trip by vehicle classification.

Table 21. Base vs. Non-Base Trips by Vehicle Classification.

Trip Type	Small-Medium Vehicles		Large Vehicles		Other Vehicles		Total
	Number of Trips	Percent of Total	Number of Trips	Percent of Total	Number of Trips	Percent of Total	
Base	392	35.80	153	51.00	10	100.00	555
Non-Base	703	64.20	147	49.00	0	0.00	850
Total	1095	100.00	300	100.00	10	100.00	1405

The sequence of trips provided by survey respondents was analyzed in order to determine the total number of trip tours that were made on the survey day as well as ascertain the number and type of trips made during each respective trip tour. The 250 commercial vehicles included in the analysis reported making 261 trip tours. A breakdown of the number and percent of tours performed per vehicle is provided in Table 22 and in Figure 9. A detailed breakdown by vehicle classification is provided in Table 23. The majority of the vehicles (75.60%) made only one trip tour on the survey day. The overwhelming majority of vehicles (97.60%) made two or less trip tours on the survey day. Thirty-three vehicles (13.20%) reported making no trip tours and the most tours made in one day was seven. The average number of tours per vehicle was 1.04. Additionally, there were 36 instances where a vehicle reported leaving a base location and it did not return to the base on the survey day. Reasons for this include a trip tour that involved traveling out of the study area and not returning until the next day, or instances when the vehicle operator took the vehicle to the person’s residence at the end of the day.

Table 22. Number and Percent of Trips Tours per Vehicle.

Number of Trip Tours	Number of Vehicles	Percent of Total	Cumulative Number	Cumulative Percent	Total Number of tours
0	33	13.20	33	13.20	0
1	189	75.60	222	88.80	189
2	22	8.80	244	97.60	44
3	2	0.80	246	98.40	6
4	2	0.80	248	99.20	8
5	0	0.00	248	99.20	0
6	0	0.00	248	99.20	0
7	2	0.80	250	100.00	14
Total	250	100.00			261

Figure 9. Number and Percent of Trip Tours per Vehicle.

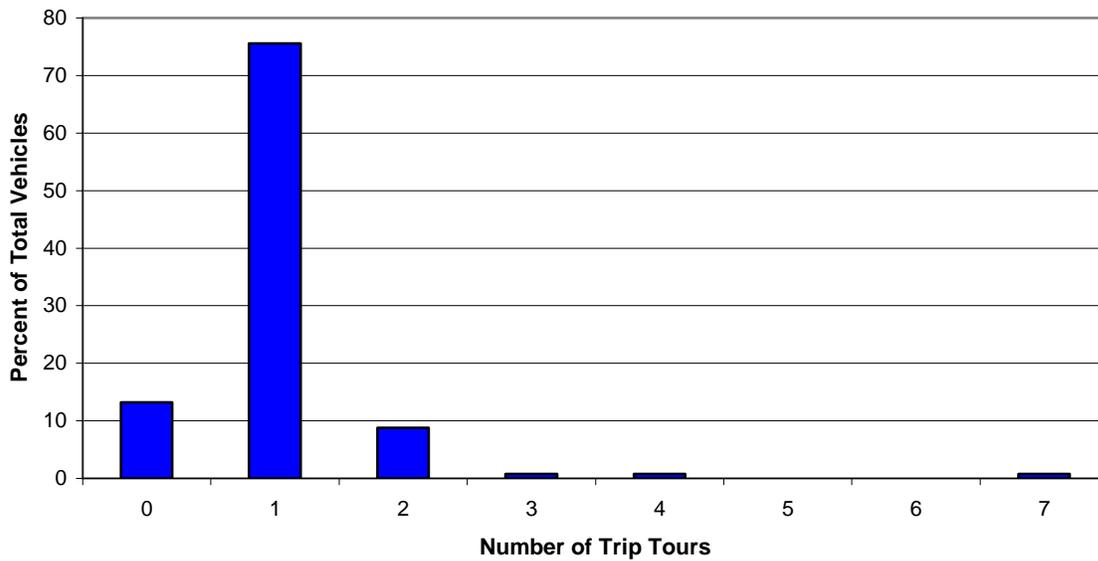


Table 23. Number and Percent of Trips Tours per Vehicle by Vehicle Classification.

Number of Trip Tours	Small-Medium Vehicles		Large Vehicles		Other Vehicles		Total
	Number of Vehicles	Percent of Total	Number of Vehicles	Percent of Total	Number of Vehicles	Percent of Total	
0	30	17.14	3	4.23	0	0.00	33
1	123	70.30	63	88.73	3	75.00	189
2	17	9.71	4	5.63	1	25.00	22
3	1	0.57	1	1.41	0	0.00	2
4	2	1.14	0	0.00	0	0.00	2
5	0	0.00	0	0.00	0	0.00	0
6	0	0.00	0	0.00	0	0.00	0
7	2	1.14	0	0.00	0	0.00	2
Total	175	100.00	71	100.00	4	100.00	250

Knowing the number of trip tours that were made is useful, but it does not reveal the total amount and type of travel that occurred during the course of the tour. Therefore, the analysis also ascertained the number and type of trips that were made in the trip tours. The review of trip tour data was divided into three components; the number of non-base trips within trip tours, the number of external trips within trip tours, and the number of internal trips within trip tours. The analysis provides the frequency that a particular vehicle made a specific number of trip types (i.e. non-base, external, and internal). In Table 24, the number of non-base trips that occurred within trip tours is provided. As shown in the table, there were 3 trip tours (1.15%) that had one non-base trip and 258 tours (98.85%) that had two non-base trips. The number of non-base trips within trip tours by vehicle classification is provided in Table 25.

Table 24. Number and Percent of Non-Base Trips Within Trip Tours.

Number of Trips	Frequency	Percent of Total	Cumulative Number	Cumulative Percent
0	0	0.00	0	0.00
1	3	1.15	3	1.15
2	258	98.85	261	100.00
Total	261	100.00		

Table 25. Number and Percent of Non-Base Trips Within Trip Tours by Vehicle Classification.

Number of Trips	Small-Medium Vehicles		Large Vehicles		Other Vehicles		Total
	Frequency	Percent of Total	Frequency	Percent of Total	Frequency	Percent of Total	
0	0	0.00	0	0.00	0	0.00	0
1	3	1.65	0	0.00	0	0.00	3
2	179	98.35	74	100.00	5	100.00	258
Total	182	100.00	74	100.00	5	100.00	261

The number and percent of external trips within trip tours is provided in Table 26, while Table 27 provides the information by vehicle classification. Nearly half of the trip tours (47.89%) did not have any external trips. Two external trips within a tour was the second most common occurrence (32.95%). This is logical since each trip leaving the study area needs to have a trip returning to the study area in order to make a completed tour possible. However, there was one trip tour that recorded only one external trip. This appears to be an illogical event.

Table 26. Number and Percent of External Trips Within Trip Tours.

Number of Trips	Frequency	Percent of Total	Cumulative Number	Cumulative Percent
0	125	47.90	125	47.90
1	1	0.38	126	48.28
2	86	32.95	212	81.23
3	17	6.51	229	87.74
4	6	2.30	235	90.04
5	5	1.92	240	91.96
6	6	2.30	246	94.26
7	6	2.30	252	96.56
8	3	1.15	255	97.71
9	1	0.38	256	98.09
10	1	0.38	257	98.47
11	1	0.38	258	98.85
12	0	0.00	258	98.85
13	0	0.00	258	98.85
14	1	0.38	259	99.23
15	2	0.77	261	100.00
Total	261	100.00		

Table 27. Number and Percent of External Trips Within Trip Tours by Vehicle Classification.

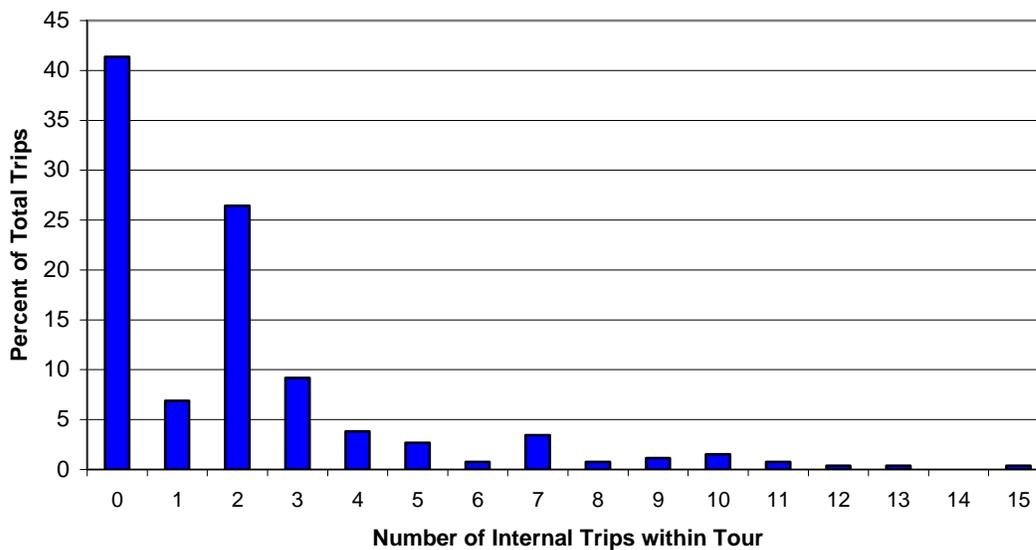
Number of Trips	Small-Medium Vehicles		Large Vehicles		Other Vehicles		Total
	Frequency	Percent of Total	Frequency	Percent of Total	Frequency	Percent of Total	
0	110	60.43	15	20.28	0	0.00	125
1	0	0.00	1	1.35	0	0.00	1
2	46	25.27	35	47.31	5	100.00	86
3	8	4.40	9	12.16	0	0.00	17
4	3	1.65	3	4.05	0	0.00	6
5	2	1.10	3	4.05	0	0.00	5
6	3	1.65	3	4.05	0	0.00	6
7	5	2.75	1	1.35	0	0.00	6
8	0	0.00	3	4.05	0	0.00	3
9	0	0.00	1	1.35	0	0.00	1
10	1	0.55	0	0.00	0	0.00	1
11	1	0.55	0	0.00	0	0.00	1
12	0	0.00	0	0.00	0	0.00	0
13	0	0.00	0	0.00	0	0.00	0
14	1	0.55	0	0.00	0	0.00	1
15	2	1.10	0	0.00	0	0.00	2
Total	182	100.00	74	100.00	5	100.00	261

The number and percent of internal trips within trip tours is provided in Table 28 and Figure 10. The largest percentage of trip tours (41.38%) had no internal trips. This was likely a result of the survey area being significantly larger than the MPO study area. As a result, trips began within the study area and traveled to rural communities within the four-county survey area. This is consistent with the fact that over forty percent of the trips in the analysis were external trips. Two internal trips within a tour was the second most common occurrence (26.44%). Over ninety percent (90.42%) had five or less internal trips within their respective trip tours. Nine of the trip tours (3.45%) had ten or more internal trips.

Table 28. Number and Percent of Internal Trips Within Trip Tours.

Number of Trips	Frequency	Percent of Total	Cumulative Number	Cumulative Percent
0	108	41.37	108	41.37
1	18	6.90	126	48.27
2	69	26.44	195	74.71
3	24	9.20	219	83.91
4	10	3.83	229	87.74
5	7	2.68	236	90.42
6	2	0.77	238	91.19
7	9	3.45	247	94.64
8	2	0.77	249	95.41
9	3	1.15	252	96.56
10	4	1.53	256	98.09
11	2	0.77	258	98.86
12	1	0.38	259	99.24
13	1	0.38	260	99.62
14	0	0.00	260	99.62
15	1	0.38	261	100.00
Total	261	100.00		

Figure 10. Number and Percent of Internal Trips Within Trip Tours.

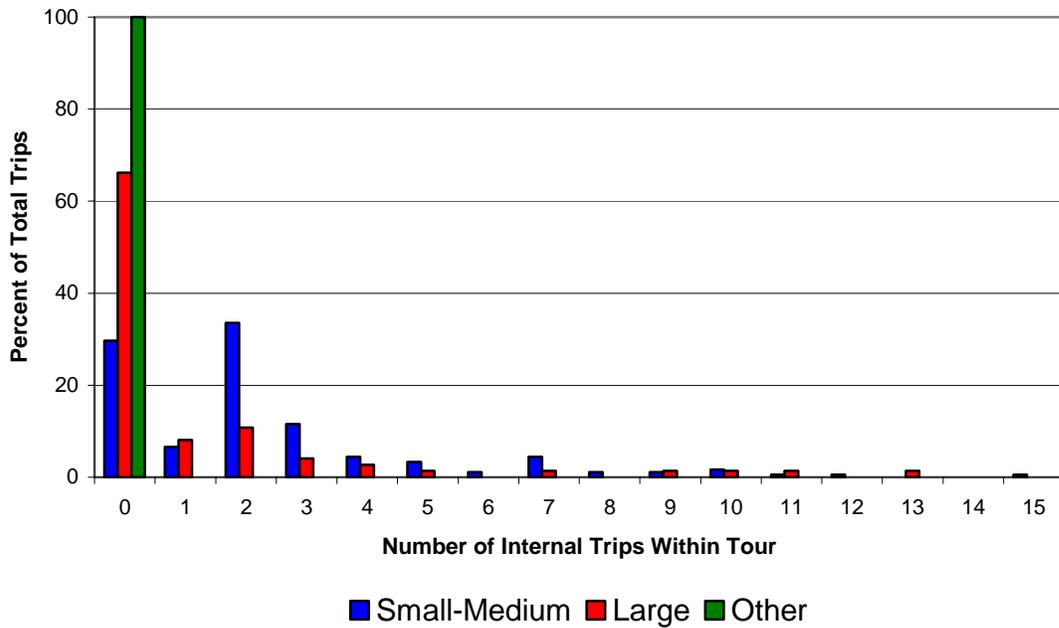


The number and percent of internal trips within trip tours are disaggregated by vehicle classification and are provided in Table 29 and Figure 11.

Table 29. Number and Percent of Internal Trips Within Trip Tours by Vehicle Classification.

Number of Trips	Small-Medium Vehicles		Large Vehicles		Other Vehicles		Total
	Frequency	Percent of Total	Frequency	Percent of Total	Frequency	Percent of Total	
0	54	29.66	49	66.23	5	100.00	108
1	12	6.59	6	8.11	0	0.00	18
2	61	33.51	8	10.81	0	0.00	69
3	21	11.54	3	4.05	0	0.00	24
4	8	4.40	2	2.70	0	0.00	10
5	6	3.30	1	1.35	0	0.00	7
6	2	1.10	0	0.00	0	0.00	2
7	8	4.40	1	1.35	0	0.00	9
8	2	1.10	0	0.00	0	0.00	2
9	2	1.10	1	1.35	0	0.00	3
10	3	1.65	1	1.35	0	0.00	4
11	1	0.55	1	1.35	0	0.00	2
12	1	0.55	0	0.00	0	0.00	1
13	0	0.00	1	1.35	0	0.00	1
14	0	0.00	0	0.00	0	0.00	0
15	1	0.55	0	0.00	0	0.00	1
Total	182	100.00	74	100.00	5	100.00	261

Figure 11. Number and Percent of Internal Trips Within Trip Tours by Vehicle Classification.



SURVEY EXPANSION

Expansion of the commercial vehicle survey data was performed in an indirect manner. Typically, an estimate of the population being sampled is known and the survey data are expanded to represent that population. However, the population of commercial vehicles operating in the Longview area is unknown. Vehicle registration was not considered a viable basis for estimation purposes since vehicles registered in counties outside of Gregg, Harrison, Rusk, and Upshur Counties may be operating within the study area.

The methodology utilized for expanding the survey data was vehicle miles of travel estimates from the Highway Performance Monitoring System (HPMS) combined with vehicle classification counts by functional classification. Essentially, an estimate of the commercial vehicle miles of travel is developed from the HPMS data and is then used to expand the vehicle miles of travel observed from sampled commercial vehicles.

HPMS data contains annual average daily traffic (AADT) estimates of the total vehicle miles of travel by functionally classified facilities. Since AADT includes weekend traffic, a correction factor was applied to the data in order to obtain average week day volumes by functional classification (freeway, arterial, collector, and local). As part of an external station motorist intercept survey, 24-hour vehicle classification counts were performed throughout the Longview area in 2003. Additionally, vehicle classification data were collected at 147 randomly selected locations within the study area. This data provided an estimate of the percentage of vehicles operating on each of the four functionally classified facilities being used in the analysis. Table 30 provides the percent of commercial and non-commercial vehicles by functional classification as determined with the vehicle classification counts performed in 2003.

Table 30. Percent of Vehicles by Functional Classification.

Functional Classification	Percentage of Commercial Vehicles	Percentage of Non-Commercial Vehicles
Freeway	31.30	68.70
Arterial	8.49	91.51
Collector	4.41	95.59
Local	7.45	92.55

An assumption is made that the amount of travel on each facility by functional classification is equivalent to the percentage of vehicles counted on that facility. For example, since 4.41 percent of the vehicles counted on arterials were commercial vehicles, it is assumed that 4.41 percent of the vehicle miles of travel on arterials is being made by commercial vehicles. The estimate of commercial vehicle miles of travel within the study area may be developed by multiplying the percentages provided in Table 30 with the 2003 HPMS vehicle miles of travel estimates which are provided in Table 31.

Table 31. 2003 HPMS Estimates of Week Day Vehicle Miles of Travel.

Functional Classification	Week Day Vehicle Miles of Travel
Freeway	534,298
Arterial	2,141,111
Collector	539,460
Local	209,745
Total	3,424,614

An adjustment must be made to these estimates in order to account for intra-zonal and external travel. The HPMS data includes all vehicle miles of travel. However, data from the commercial vehicle survey approximates vehicle miles of travel based on zone to zone distances as measured from the transportation network travel time and distance matrices used for travel demand modeling. Intra-zonal trips in the survey do not have an estimate of vehicle miles of travel because the travel distance associated with these trips via the transportation network is not known. The amount of vehicle miles of travel associated with intra-zonal commercial vehicle trips is not known, and it is assumed to be a relatively small amount. Therefore, for the purpose of this analysis, the vehicle miles of travel attributed to intra-zonal commercial vehicle trips is not removed from the HPMS totals.

However, vehicle miles of travel attributable to external commercial vehicles was removed in order to provide a more accurate estimate of vehicle miles of travel within the study area. In order to ascertain the estimated vehicle miles of travel for external commercial vehicles, the average trip length for external commercial vehicles was multiplied by the total number of commercial vehicles recorded at external stations in the Longview area. Using this methodology, it was estimated that there were 328,822 vehicle miles of travel attributed to external commercial vehicles.

After adjustments were made to the HMPS estimates of vehicle miles of travel, the percentages of commercial vehicles provided in Table 30 were multiplied by the adjusted vehicle miles of travel by functional classification. The result is the estimated total week day commercial vehicle miles of travel by functional classification. This information is provided in Table 32.

Table 32. Estimates of Commercial Vehicle Miles of Travel.

Functional Classification	Percentage of Commercial Vehicles	Adjusted Vehicle Miles of Travel	Estimated Commercial Vehicle Miles of Travel
Freeway	31.30	534,298	167,235
Arterial	8.49	2,141,111	181,780
Collector	4.41	539,460	23,790
Local	7.45	209,745	15,626
Total		3,424,614	388,431

Next, the external related commercial vehicle miles of travel (328,822) was removed to provide the total internal vehicle miles of travel attributable to commercial vehicles. The resulting vehicle miles of travel is 59,609.

The next step is the computation of the survey expansion factor. The commercial vehicle survey had a total of 250 respondents with useable data. There was a total of 1,405 trips recorded, of which 828 (58.93%) were internal. Of the internal trips, 714 (86.23%) were inter-zonal and 114 (13.77%) were intra-zonal. The amount of commercial vehicle miles of travel for surveyed vehicles was determined by summing the distance between all inter-zonal trip ends. Using lengths provided in the transportation network travel distance matrix, a total of 3,559 vehicle miles were attributed to surveyed commercial vehicles. The resulting average vehicle miles traveled per trip was 4.98 miles. To obtain the survey expansion factor, the population vehicle miles of travel (59,609) is divided by the survey vehicle miles of travel (3,559). The resulting expansion factor is 16.7.

The expansion factor is then applied to the total number of inter-zonal commercial vehicle trips (714) to yield a total of 11,924 daily inter-zonal commercial vehicle trips in the Longview area. The expansion factor is assumed to be reasonable for intra-zonal trips also. With approximately fourteen percent (13.77%) of the trips being intra-zonal, a total of 1,904 commercial trips in the study area are estimated to be intra-zonal. The inter-zonal and intra-zonal trips combined amounts to 13,828. Since the average number of trips per commercial vehicle in the Longview area is 5.96, the resulting average number of commercial vehicles operating within the study area on an average week day is 2,320.

SURVEY SUMMARY

The 2004 Longview Commercial Vehicle Survey for the Longview area provides information relative to the operating characteristics of commercial vehicles. Through the analysis of 250 commercial vehicles that participated in the survey, estimates of the total amount of commercial vehicles operating in the study area were developed. Survey data was combined with HPMS data to estimate that 59,609 vehicle miles of travel can be attributed to commercial vehicles on a daily basis. Additionally, the expansion of the survey data also provides an estimate of 2,320 commercial vehicles operating within the Longview area each day.

In addition to providing expanded results related to vehicle miles of travel and number of commercial vehicles operating in the area, the survey provided valuable insight into the composition of the fleet, types of trips being made, and cargo related information. The average vehicle age was 6.92 years and the average reported odometer reading was 137,845. The average number of trips per day per truck was 5.96. A majority of the trips (60.50%) were non-base trips, nearly half the vehicles (56.83%) made four or fewer trips per day, and 75.60 percent of the vehicles made only one trip tour on the survey day. Additionally, the average trip length was 4.98 miles and the average travel time per trip was 7.58 minutes.

While the information provided in this analysis summarizes responses from portion of the commercial vehicles operating within the study area, it is possible to presume that the results can be viewed as representative of the commercial fleet as a whole. However, due to unique characteristics of the Longview area, the survey results are not applicable to other study areas. Each urbanized area needs to have an individual analysis conducted in order to ascertain the amount and characteristics of commercial vehicles in that area.

APPENDIX

(Example Only)

**COMMERCIAL VEHICLE SURVEY
PART 1: VEHICLE INFORMATION**

(If you have participated in prior surveys, please fill out this form anyway.)

Vehicle ID#: _____

Vehicle License #: _____

Survey Location (zone): _____

SIC Code: _____

Travel Day: _____
Month / Day

Company, Public Agency, or Name of Owner (name on registration):

Address of location where vehicle was based at beginning of travel day:

(Street Address or Nearest Intersection)

City

State

ZIP

Vehicle Make: _____

Vehicle Model: _____

Vehicle Year: _____

Vehicle Fuel Type: 1) Leaded Gas 2) Unleaded Gas 3) Diesel 4) Propane

5) Other _____ (Specify)

Vehicle Classification: 1) Single Unit 2-axle (6 wheels)
2) Single Unit 3-axle (10 wheels)
3) Single Unit 4-axle (14 wheels)
4) Semi (all Tractor-Trailer combinations)
5) Other _____

Gross Vehicle Weight: _____ pounds

Beginning Odometer Reading: _____

(Example Only)
COMMERCIAL VEHICLE SURVEY
PART 2: TRIP INFORMATION

VEHICLE LICENSE #: _____
 BEGINNING ODOMETER READING: _____

BEGIN: MY FIRST TRIP TODAY BEGAN AT: (1) Base Location (6) Home (7) Other Location

PLEASE ENTER YOUR :

TRAVEL DAY _____
 Month / Day

DEPARTURE TIME: _____ Am
 pm

 (Fill in address)

 (Place/address or nearest intersection, city, county, state, zip code)

Stop Number	Location Address	When did you Arrive/Depart?	Purpose of Stop (check one)	Type of Activity at This Location (check one)	Type of Cargo (check one)	Facilities Used
1 FIRST I WENT TO:	Name of Place	Arrive ____: ____	<input type="checkbox"/> (1) Base Location / Return to Base Location <input type="checkbox"/> (2) Delivery <input type="checkbox"/> (3) Pick-up <input type="checkbox"/> (4) Maintenance (fuel, oil, etc.) <input type="checkbox"/> (5) Driver Needs (lunch, etc.) <input type="checkbox"/> (6) To Home <input type="checkbox"/> (7) Other	<input type="checkbox"/> (1) Office building (non-government) <input type="checkbox"/> (2) Retail/Shopping/Gas <input type="checkbox"/> (3) Industrial/Manufacturing/Warehouse <input type="checkbox"/> (4) Medical <input type="checkbox"/> (5) Educational (12th grade or <) <input type="checkbox"/> (6) Educational (College, trade, etc.) <input type="checkbox"/> (7) Government <input type="checkbox"/> (8) Residential <input type="checkbox"/> (9) Airport <input type="checkbox"/> (10) Eating Establishment <input type="checkbox"/> (11) Other (Specify) <input type="checkbox"/> (99) Do not know	<input type="checkbox"/> (1) Farm Products <input type="checkbox"/> (2) Forest Products <input type="checkbox"/> (3) Marine Products <input type="checkbox"/> (4) Metals & Minerals <input type="checkbox"/> (5) Food, Health & Beauty Products <input type="checkbox"/> (6) Tobacco Products <input type="checkbox"/> (7) Textiles <input type="checkbox"/> (8) Wood Products <input type="checkbox"/> (9) Printed Matter <input type="checkbox"/> (10) Chemical Products <input type="checkbox"/> (11) Refined Petroleum or Coal Products <input type="checkbox"/> (12) Rubber, Plastic or Styrofoam Products <input type="checkbox"/> (13) Clay, Concrete, Glass or Stone <input type="checkbox"/> (14) Manufactured Goods / Equipment <input type="checkbox"/> (15) Wastes <input type="checkbox"/> (16) Miscellaneous <input type="checkbox"/> (17) Hazardous Materials <input type="checkbox"/> (18) Transportation <input type="checkbox"/> (19) Unclassified Cargo <input type="checkbox"/> (20) Driver Refused to Answer <input type="checkbox"/> (21) Unknown to Driver <input type="checkbox"/> (22) Empty <input type="checkbox"/> (23) No Cargo picked up or dropped off at location. *If 17 above, Hazardous Material Placard # _____	<input type="checkbox"/> (1) IH 20 <input type="checkbox"/> (2) US 59 <input type="checkbox"/> (3) US 69 <input type="checkbox"/> (4) US 271 <input type="checkbox"/> (5) US 79 <input type="checkbox"/> (6) SH 155 <input type="checkbox"/> (7) SH 31 <input type="checkbox"/> (8) SH 64 <input type="checkbox"/> (9) SH 110 <input type="checkbox"/> (10) SH 42 <input type="checkbox"/> (11) SH 135 <input type="checkbox"/> (12) SH 322 <input type="checkbox"/> (13) SH 149 <input type="checkbox"/> (14) SH 43 <input type="checkbox"/> (15) SH 300 <input type="checkbox"/> (16) Loop 323 <input type="checkbox"/> (17) Loop 281 <input type="checkbox"/> Other <input type="checkbox"/> (99) None
	Address, nearest intersection, landmark City/County/State/Zip If location written above is not Smith, Harrison, Gregg, Rusk, or Upshur county, which road did you use to leave the Tyler / Longview area? _____(Road name) Is this vehicle usually based at or out of this location? <input type="checkbox"/> Yes <input type="checkbox"/> No Odometer reading _____	a.m. p.m. Depart ____: ____ a.m. p.m.				

☞ We are collecting 'complete' information on all travel during the day. Please include ANY and ALL stops including lunch, restroom, convenient store, rest stops, etc. Please be sure to mark the 'OTHER' box under 'Purpose of Stop' and specify in the space provided. We appreciate your cooperation.

COMMERCIAL VEHICLE SURVEY PART 2: TRIP INFORMATION

Stop Number	Location Address	When did you Arrive/Depart?	Purpose of Stop (check one)	Type of Activity at This Location (check one)	Type of Cargo (check one)	Facilities Used	
2 THEN I WENT TO:	_____ Name of Place	Arrive ____:_____	<input type="checkbox"/> (1) Base Location / Return to Base Location <input type="checkbox"/> (2) Delivery <input type="checkbox"/> (3) Pick-up <input type="checkbox"/> (4) Maintenance (fuel, oil, etc.) <input type="checkbox"/> (5) Driver Needs (lunch, etc.) <input type="checkbox"/> (6) To Home <input type="checkbox"/> (7) Other	<input type="checkbox"/> (1) Office building (non-government) <input type="checkbox"/> (2) Retail/Shopping/Gas <input type="checkbox"/> (3) Industrial/Manufacturing/Warehouse <input type="checkbox"/> (4) Medical <input type="checkbox"/> (5) Educational (12th grade or <) <input type="checkbox"/> (6) Educational (College, trade, etc.) <input type="checkbox"/> (7) Government <input type="checkbox"/> (8) Residential <input type="checkbox"/> (9) Airport <input type="checkbox"/> (10) Eating Establishment <input type="checkbox"/> (11) Other (Specify) _____ <input type="checkbox"/> (99) Do not know	<input type="checkbox"/> (1) Farm Products <input type="checkbox"/> (2) Forest Products <input type="checkbox"/> (3) Marine Products <input type="checkbox"/> (4) Metals & Minerals <input type="checkbox"/> (5) Food, Health & Beauty Products <input type="checkbox"/> (6) Tobacco Products <input type="checkbox"/> (7) Textiles <input type="checkbox"/> (8) Wood Products <input type="checkbox"/> (9) Printed Matter <input type="checkbox"/> (10) Chemical Products <input type="checkbox"/> (11) Refined Petroleum or Coal Products <input type="checkbox"/> (12) Rubber, Plastic or Styrofoam Products <input type="checkbox"/> (13) Clay, Concrete, Glass or Stone	<input type="checkbox"/> (14) Manufactured Goods / Equipment <input type="checkbox"/> (15) Wastes <input type="checkbox"/> (16) Miscellaneous Materials <input type="checkbox"/> (17)* Hazardous <input type="checkbox"/> (18) Transportation <input type="checkbox"/> (19) Unclassified Cargo <input type="checkbox"/> (20) Driver Refused to Answer <input type="checkbox"/> (21) Unknown to Driver <input type="checkbox"/> (22) Empty <input type="checkbox"/> (23) No Cargo picked up or dropped off at location. *If 17 above, Hazardous Material Placard # _____	<input type="checkbox"/> (1) IH 20 <input type="checkbox"/> (2) US 59 <input type="checkbox"/> (3) US 69 <input type="checkbox"/> (4) US 271 <input type="checkbox"/> (5) US 79 <input type="checkbox"/> (6) SH 155 <input type="checkbox"/> (7) SH 31 <input type="checkbox"/> (8) SH 64 <input type="checkbox"/> (9) SH 110 <input type="checkbox"/> (10) SH 42 <input type="checkbox"/> (11) SH 135 <input type="checkbox"/> (12) SH 322 <input type="checkbox"/> (13) SH 149 <input type="checkbox"/> (14) SH 43 <input type="checkbox"/> (15) SH 300 <input type="checkbox"/> (16) Loop 323 <input type="checkbox"/> (17) Loop 281 <input type="checkbox"/> Other <input type="checkbox"/> (99) None
	_____ Address, intersection, landmark	a.m. p.m.					
	_____ City/County/State/Zip	Depart ____:_____					
	If location written above is not Smith, Harrison, Gregg, Rusk, or Upshur county, which road did you use to leave the Tyler / Longview area? _____(Road name)						
	Is this vehicle usually based at or out of this location? <input type="checkbox"/> Yes <input type="checkbox"/> No						
	Odometer reading _____						
3 THEN I WENT TO:	_____ Name of Place	Arrive ____:_____	<input type="checkbox"/> (1) Base Location / Return to Base Location <input type="checkbox"/> (2) Delivery <input type="checkbox"/> (3) Pick-up <input type="checkbox"/> (4) Maintenance (fuel, oil, etc.) <input type="checkbox"/> (5) Driver Needs (lunch, etc.) <input type="checkbox"/> (6) To Home <input type="checkbox"/> (7) Other	<input type="checkbox"/> (1) Office building (non-government) <input type="checkbox"/> (2) Retail/Shopping/Gas <input type="checkbox"/> (3) Industrial/Manufacturing/Warehouse <input type="checkbox"/> (4) Medical <input type="checkbox"/> (5) Educational (12th grade or <) <input type="checkbox"/> (6) Educational (College, trade, etc.) <input type="checkbox"/> (7) Government <input type="checkbox"/> (8) Residential <input type="checkbox"/> (9) Airport <input type="checkbox"/> (10) Eating Establishment <input type="checkbox"/> (11) Other (Specify) _____ <input type="checkbox"/> (99) Do not know	<input type="checkbox"/> (1) Farm Products <input type="checkbox"/> (2) Forest Products <input type="checkbox"/> (3) Marine Products <input type="checkbox"/> (4) Metals & Minerals <input type="checkbox"/> (5) Food, Health & Beauty Products <input type="checkbox"/> (6) Tobacco Products <input type="checkbox"/> (7) Textiles <input type="checkbox"/> (8) Wood Products <input type="checkbox"/> (9) Printed Matter <input type="checkbox"/> (10) Chemical Products <input type="checkbox"/> (11) Refined Petroleum or Coal Products <input type="checkbox"/> (12) Rubber, Plastic or Styrofoam Products <input type="checkbox"/> (13) Clay, Concrete, Glass or Stone	<input type="checkbox"/> (14) Manufactured Goods / Equipment <input type="checkbox"/> (15) Wastes <input type="checkbox"/> (16) Miscellaneous Materials <input type="checkbox"/> (17)* Hazardous <input type="checkbox"/> (18) Transportation <input type="checkbox"/> (19) Unclassified Cargo <input type="checkbox"/> (20) Driver Refused to Answer <input type="checkbox"/> (21) Unknown to Driver <input type="checkbox"/> (22) Empty <input type="checkbox"/> (23) No Cargo picked up or dropped off at location. *If 17 above, Hazardous Material Placard # _____	<input type="checkbox"/> (1) IH 20 <input type="checkbox"/> (2) US 59 <input type="checkbox"/> (3) US 69 <input type="checkbox"/> (4) US 271 <input type="checkbox"/> (5) US 79 <input type="checkbox"/> (6) SH 155 <input type="checkbox"/> (7) SH 31 <input type="checkbox"/> (8) SH 64 <input type="checkbox"/> (9) SH 110 <input type="checkbox"/> (10) SH 42 <input type="checkbox"/> (11) SH 135 <input type="checkbox"/> (12) SH 322 <input type="checkbox"/> (13) SH 149 <input type="checkbox"/> (14) SH 43 <input type="checkbox"/> (15) SH 300 <input type="checkbox"/> (16) Loop 323 <input type="checkbox"/> (17) Loop 281 <input type="checkbox"/> Other <input type="checkbox"/> (99) None
	_____ Address, nearest intersection, landmark	a.m. p.m.					
	_____ City/County/State/Zip	Depart ____:_____					
	If location written above is not Smith, Harrison, Gregg, Rusk, or Upshur county, which road did you use to leave the Tyler / Longview area? _____(Road name)						
	Is this vehicle usually based at or out of this location? <input type="checkbox"/> Yes <input type="checkbox"/> No						
	Odometer reading _____						

COMMERCIAL VEHICLE SURVEY PART 2: TRIP INFORMATION

Stop Number	Location Address	When did you Arrive/Depart?	Purpose of Stop (check one)	Type of Activity at This Location (check one)	Type of Cargo (check one)	Facilities Used
4 THEN I WENT TO:	Name of Place _____	Arrive ____:_____	<input type="checkbox"/> (1) Base Location / Return to Base Location <input type="checkbox"/> (2) Delivery <input type="checkbox"/> (3) Pick-up <input type="checkbox"/> (4) Maintenance (fuel, oil, etc.) <input type="checkbox"/> (5) Driver Needs (lunch, etc.) <input type="checkbox"/> (6) To Home <input type="checkbox"/> (7) Other	<input type="checkbox"/> (1) Office building (non-government) <input type="checkbox"/> (2) Retail/Shopping/Gas <input type="checkbox"/> (3) Industrial/Manufacturing/Warehouse <input type="checkbox"/> (4) Medical <input type="checkbox"/> (5) Educational (12th grade or <) <input type="checkbox"/> (6) Educational (College, trade, etc.) <input type="checkbox"/> (7) Government <input type="checkbox"/> (8) Residential <input type="checkbox"/> (9) Airport <input type="checkbox"/> (10) Eating Establishment <input type="checkbox"/> (11) Other (Specify) <input type="checkbox"/> (99) Do not know	<input type="checkbox"/> (1) Farm Products <input type="checkbox"/> (2) Forest Products <input type="checkbox"/> (3) Marine Products <input type="checkbox"/> (4) Metals & Minerals <input type="checkbox"/> (5) Food, Health & Beauty Products <input type="checkbox"/> (6) Tobacco Products <input type="checkbox"/> (7) Textiles <input type="checkbox"/> (8) Wood Products <input type="checkbox"/> (9) Printed Matter <input type="checkbox"/> (10) Chemical Products <input type="checkbox"/> (11) Refined Petroleum or Coal Products <input type="checkbox"/> (12) Rubber, Plastic or Styrofoam Products <input type="checkbox"/> (13) Clay, Concrete, Glass or Stone <input type="checkbox"/> (14) Manufactured Goods / Equipment <input type="checkbox"/> (15) Wastes <input type="checkbox"/> (16) Miscellaneous <input type="checkbox"/> (17)* Hazardous Materials <input type="checkbox"/> (18) Transportation <input type="checkbox"/> (19) Unclassified Cargo <input type="checkbox"/> (20) Driver Refused to Answer <input type="checkbox"/> (21) Unknown to Driver <input type="checkbox"/> (22) Empty <input type="checkbox"/> (23) No Cargo picked up or dropped off at location. *If 17 above, Hazardous Material Placard # _____	<input type="checkbox"/> (1) IH 20 <input type="checkbox"/> (2) US 59 <input type="checkbox"/> (3) US 69 <input type="checkbox"/> (4) US 271 <input type="checkbox"/> (5) US 79 <input type="checkbox"/> (6) SH 155 <input type="checkbox"/> (7) SH 31 <input type="checkbox"/> (8) SH 64 <input type="checkbox"/> (9) SH 110 <input type="checkbox"/> (10) SH 42 <input type="checkbox"/> (11) SH 135 <input type="checkbox"/> (12) SH 322 <input type="checkbox"/> (13) SH 149 <input type="checkbox"/> (14) SH 43 <input type="checkbox"/> (15) SH 300 <input type="checkbox"/> (16) Loop 323 <input type="checkbox"/> (17) Loop 281 <input type="checkbox"/> Other <input type="checkbox"/> (99) None
	Address, intersection, landmark _____	a.m. p.m.				
	City/County/State/Zip _____	Depart ____:_____				
	If location written above is not Smith, Harrison, Gregg, Rusk, or Upshur county, which road did you use to leave the Tyler / Longview area? _____(Road name)	a.m. p.m.				
	Is this vehicle usually based at or out of this location? <input type="checkbox"/> Yes <input type="checkbox"/> No					
	Odometer reading _____					
5 THEN I WENT TO:	Name of Place _____	Arrive ____:_____	<input type="checkbox"/> (1) Base Location / Return to Base Location <input type="checkbox"/> (2) Delivery <input type="checkbox"/> (3) Pick-up <input type="checkbox"/> (4) Maintenance (fuel, oil, etc.) <input type="checkbox"/> (5) Driver Needs (lunch, etc.) <input type="checkbox"/> (6) To Home <input type="checkbox"/> (7) Other	<input type="checkbox"/> (1) Office building (non-government) <input type="checkbox"/> (2) Retail/Shopping/Gas <input type="checkbox"/> (3) Industrial/Manufacturing/Warehouse <input type="checkbox"/> (4) Medical <input type="checkbox"/> (5) Educational (12th grade or <) <input type="checkbox"/> (6) Educational (College, trade, etc.) <input type="checkbox"/> (7) Government <input type="checkbox"/> (8) Residential <input type="checkbox"/> (9) Airport <input type="checkbox"/> (10) Eating Establishment <input type="checkbox"/> (11) Other (Specify) <input type="checkbox"/> (99) Do not know	<input type="checkbox"/> (1) Farm Products <input type="checkbox"/> (2) Forest Products <input type="checkbox"/> (3) Marine Products <input type="checkbox"/> (4) Metals & Minerals <input type="checkbox"/> (5) Food, Health & Beauty Products <input type="checkbox"/> (6) Tobacco Products <input type="checkbox"/> (7) Textiles <input type="checkbox"/> (8) Wood Products <input type="checkbox"/> (9) Printed Matter <input type="checkbox"/> (10) Chemical Products <input type="checkbox"/> (11) Refined Petroleum or Coal Products <input type="checkbox"/> (12) Rubber, Plastic or Styrofoam Products <input type="checkbox"/> (13) Clay, Concrete, Glass or Stone <input type="checkbox"/> (14) Manufactured Goods / Equipment <input type="checkbox"/> (15) Wastes <input type="checkbox"/> (16) Miscellaneous <input type="checkbox"/> (17)* Hazardous Materials <input type="checkbox"/> (18) Transportation <input type="checkbox"/> (19) Unclassified Cargo <input type="checkbox"/> (20) Driver Refused to Answer <input type="checkbox"/> (21) Unknown to Driver <input type="checkbox"/> (22) Empty <input type="checkbox"/> (23) No Cargo picked up or dropped off at location. *If 17 above, Hazardous Material Placard # _____	<input type="checkbox"/> (1) IH 20 <input type="checkbox"/> (2) US 59 <input type="checkbox"/> (3) US 69 <input type="checkbox"/> (4) US 271 <input type="checkbox"/> (5) US 79 <input type="checkbox"/> (6) SH 155 <input type="checkbox"/> (7) SH 31 <input type="checkbox"/> (8) SH 64 <input type="checkbox"/> (9) SH 110 <input type="checkbox"/> (10) SH 42 <input type="checkbox"/> (11) SH 135 <input type="checkbox"/> (12) SH 322 <input type="checkbox"/> (13) SH 149 <input type="checkbox"/> (14) SH 43 <input type="checkbox"/> (15) SH 300 <input type="checkbox"/> (16) Loop 323 <input type="checkbox"/> (17) Loop 281 <input type="checkbox"/> Other <input type="checkbox"/> (99) None
	Address, intersection, landmark _____	a.m. p.m.				
	City/County/State/Zip _____	Depart ____:_____				
	If location written above is not Smith, Harrison, Gregg, Rusk, or Upshur county, which road did you use to leave the Tyler / Longview area? _____(Road name)	a.m. p.m.				
	Is this vehicle usually based at or out of this location? <input type="checkbox"/> Yes <input type="checkbox"/> No					
	Odometer reading _____					

COMMERCIAL VEHICLE SURVEY PART 2: TRIP INFORMATION

Stop Number	Location Address	When did you Arrive/Depart?	Purpose of Stop (check one)	Type of Activity at This Location (check one)	Type of Cargo (check one)	Facilities Used
6 THEN I WENT TO:	Name of Place _____	Arrive ____:____	<input type="checkbox"/> (1) Base Location / Return to Base Location <input type="checkbox"/> (2) Delivery <input type="checkbox"/> (3) Pick-up <input type="checkbox"/> (4) Maintenance (fuel, oil, etc.) <input type="checkbox"/> (5) Driver Needs (lunch, etc.) <input type="checkbox"/> (6) To Home <input type="checkbox"/> (7) Other	<input type="checkbox"/> (1) Office building (non-government) <input type="checkbox"/> (2) Retail/Shopping/Gas <input type="checkbox"/> (3) Industrial/Manufacturing/Warehouse <input type="checkbox"/> (4) Medical <input type="checkbox"/> (5) Educational (12th grade or <) <input type="checkbox"/> (6) Educational (College, trade, etc.) <input type="checkbox"/> (7) Government <input type="checkbox"/> (8) Residential <input type="checkbox"/> (9) Airport <input type="checkbox"/> (10) Eating Establishment <input type="checkbox"/> (11) Other (Specify) <input type="checkbox"/> (99) Do not know	<input type="checkbox"/> (1) Farm Products <input type="checkbox"/> (2) Forest Products <input type="checkbox"/> (3) Marine Products <input type="checkbox"/> (4) Metals & Minerals <input type="checkbox"/> (5) Food, Health & Beauty Products <input type="checkbox"/> (6) Tobacco Products <input type="checkbox"/> (7) Textiles <input type="checkbox"/> (8) Wood Products <input type="checkbox"/> (9) Printed Matter <input type="checkbox"/> (10) Chemical Products <input type="checkbox"/> (11) Refined Petroleum or Coal Products <input type="checkbox"/> (12) Rubber, Plastic or Styrofoam Products <input type="checkbox"/> (13) Clay, Concrete, Glass or Stone <input type="checkbox"/> (14) Manufactured Goods / Equipment <input type="checkbox"/> (15) Wastes <input type="checkbox"/> (16) Miscellaneous <input type="checkbox"/> (17)* Hazardous Materials <input type="checkbox"/> (18) Transportation <input type="checkbox"/> (19) Unclassified Cargo <input type="checkbox"/> (20) Driver Refused to Answer <input type="checkbox"/> (21) Unknown to Driver <input type="checkbox"/> (22) Empty <input type="checkbox"/> (23) No Cargo picked up or dropped off at location. *If 17 above, Hazardous Material Placard # _____	<input type="checkbox"/> (1) IH 20 <input type="checkbox"/> (2) US 59 <input type="checkbox"/> (3) US 69 <input type="checkbox"/> (4) US 271 <input type="checkbox"/> (5) US 79 <input type="checkbox"/> (6) SH 155 <input type="checkbox"/> (7) SH 31 <input type="checkbox"/> (8) SH 64 <input type="checkbox"/> (9) SH 110 <input type="checkbox"/> (10) SH 42 <input type="checkbox"/> (11) SH 135 <input type="checkbox"/> (12) SH 322 <input type="checkbox"/> (13) SH 149 <input type="checkbox"/> (14) SH 43 <input type="checkbox"/> (15) SH 300 <input type="checkbox"/> (16) Loop 323 <input type="checkbox"/> (17) Loop 281 <input type="checkbox"/> Other <input type="checkbox"/> (99) None
	Address, intersection, landmark _____	a.m.				
	City/County/State/Zip _____	p.m.				
	If location written above is not Smith, Harrison, Gregg, Rusk, or Upshur county, which road did you use to leave the Tyler / Longview area? _____ (Road name)	Depart ____:____				
	Is this vehicle usually based at or out of this location? <input type="checkbox"/> Yes <input type="checkbox"/> No	a.m.				
	Odometer reading _____	p.m.				
7 THEN I WENT TO:	Name of Place _____	Arrive ____:____	<input type="checkbox"/> (1) Base Location / Return to Base Location <input type="checkbox"/> (2) Delivery <input type="checkbox"/> (3) Pick-up <input type="checkbox"/> (4) Maintenance (fuel, oil, etc.) <input type="checkbox"/> (5) Driver Needs (lunch, etc.) <input type="checkbox"/> (6) To Home <input type="checkbox"/> (7) Other	<input type="checkbox"/> (1) Office building (non-government) <input type="checkbox"/> (2) Retail/Shopping/Gas <input type="checkbox"/> (3) Industrial/Manufacturing/Warehouse <input type="checkbox"/> (4) Medical <input type="checkbox"/> (5) Educational (12th grade or <) <input type="checkbox"/> (6) Educational (College, trade, etc.) <input type="checkbox"/> (7) Government <input type="checkbox"/> (8) Residential <input type="checkbox"/> (9) Airport <input type="checkbox"/> (10) Eating Establishment <input type="checkbox"/> (11) Other (Specify) <input type="checkbox"/> (99) Do not know	<input type="checkbox"/> (1) Farm Products <input type="checkbox"/> (2) Forest Products <input type="checkbox"/> (3) Marine Products <input type="checkbox"/> (4) Metals & Minerals <input type="checkbox"/> (5) Food, Health & Beauty Products <input type="checkbox"/> (6) Tobacco Products <input type="checkbox"/> (7) Textiles <input type="checkbox"/> (8) Wood Products <input type="checkbox"/> (9) Printed Matter <input type="checkbox"/> (10) Chemical Products <input type="checkbox"/> (11) Refined Petroleum or Coal Products <input type="checkbox"/> (12) Rubber, Plastic or Styrofoam Products <input type="checkbox"/> (13) Clay, Concrete, Glass or Stone <input type="checkbox"/> (14) Manufactured Goods / Equipment <input type="checkbox"/> (15) Wastes <input type="checkbox"/> (16) Miscellaneous <input type="checkbox"/> (17)* Hazardous Materials <input type="checkbox"/> (18) Transportation <input type="checkbox"/> (19) Unclassified Cargo <input type="checkbox"/> (20) Driver Refused to Answer <input type="checkbox"/> (21) Unknown to Driver <input type="checkbox"/> (22) Empty <input type="checkbox"/> (23) No Cargo picked up or dropped off at location. *If 17 above, Hazardous Material Placard # _____	<input type="checkbox"/> (1) IH 20 <input type="checkbox"/> (2) US 59 <input type="checkbox"/> (3) US 69 <input type="checkbox"/> (4) US 271 <input type="checkbox"/> (5) US 79 <input type="checkbox"/> (6) SH 155 <input type="checkbox"/> (7) SH 31 <input type="checkbox"/> (8) SH 64 <input type="checkbox"/> (9) SH 110 <input type="checkbox"/> (10) SH 42 <input type="checkbox"/> (11) SH 135 <input type="checkbox"/> (12) SH 322 <input type="checkbox"/> (13) SH 149 <input type="checkbox"/> (14) SH 43 <input type="checkbox"/> (15) SH 300 <input type="checkbox"/> (16) Loop 323 <input type="checkbox"/> (17) Loop 281 <input type="checkbox"/> Other <input type="checkbox"/> (99) None
	Address, intersection, landmark _____	a.m.				
	City/County/State/Zip _____	p.m.				
	If location written above is not Smith, Harrison, Gregg, Rusk, or Upshur county, which road did you use to leave the Tyler / Longview area? _____ (Road name)	Depart ____:____				
	Is this vehicle usually based at or out of this location? <input type="checkbox"/> Yes <input type="checkbox"/> No	a.m.				
	Odometer reading _____	p.m.				

COMMERCIAL VEHICLE SURVEY PART 2: TRIP INFORMATION

Stop Number	Location Address	When did you Arrive/Depart?	Purpose of Stop (check one)	Type of Activity at This Location (check one)	Type of Cargo (check one)	Facilities Used	
8 THEN I WENT TO:	Name of Place _____	Arrive ____:____	<input type="checkbox"/> (1) Base Location / Return to Base Location <input type="checkbox"/> (2) Delivery <input type="checkbox"/> (3) Pick-up <input type="checkbox"/> (4) Maintenance (fuel, oil, etc.) <input type="checkbox"/> (5) Driver Needs (lunch, etc.) <input type="checkbox"/> (6) To Home <input type="checkbox"/> (7) Other	<input type="checkbox"/> (1) Office building (non-government) <input type="checkbox"/> (2) Retail/Shopping/Gas <input type="checkbox"/> (3) Industrial/Manufacturing/Warehouse <input type="checkbox"/> (4) Medical <input type="checkbox"/> (5) Educational (12th grade or <) <input type="checkbox"/> (6) Educational (College, trade, etc.) <input type="checkbox"/> (7) Government <input type="checkbox"/> (8) Residential <input type="checkbox"/> (9) Airport <input type="checkbox"/> (10) Eating Establishment <input type="checkbox"/> (11) Other (Specify) _____ <input type="checkbox"/> (99) Do not know	<input type="checkbox"/> (1) Farm Products <input type="checkbox"/> (2) Forest Products <input type="checkbox"/> (3) Marine Products <input type="checkbox"/> (4) Metals & Minerals <input type="checkbox"/> (5) Food, Health & Beauty Products <input type="checkbox"/> (6) Tobacco Products <input type="checkbox"/> (7) Textiles <input type="checkbox"/> (8) Wood Products <input type="checkbox"/> (9) Printed Matter <input type="checkbox"/> (10) Chemical Products <input type="checkbox"/> (11) Refined Petroleum or Coal Products <input type="checkbox"/> (12) Rubber, Plastic or Styrofoam Products <input type="checkbox"/> (13) Clay, Concrete, Glass or Stone	<input type="checkbox"/> (14) Manufactured Goods / Equipment <input type="checkbox"/> (15) Wastes <input type="checkbox"/> (16) Miscellaneous Materials <input type="checkbox"/> (17)* Hazardous <input type="checkbox"/> (18) Transportation <input type="checkbox"/> (19) Unclassified Cargo <input type="checkbox"/> (20) Driver Refused to Answer <input type="checkbox"/> (21) Unknown to Driver <input type="checkbox"/> (22) Empty <input type="checkbox"/> (23) No Cargo picked up or dropped off at location. *If 17 above, Hazardous Material Placard # _____	<input type="checkbox"/> (1) IH 20 <input type="checkbox"/> (2) US 59 <input type="checkbox"/> (3) US 69 <input type="checkbox"/> (4) US 271 <input type="checkbox"/> (5) US 79 <input type="checkbox"/> (6) SH 155 <input type="checkbox"/> (7) SH 31 <input type="checkbox"/> (8) SH 64 <input type="checkbox"/> (9) SH 110 <input type="checkbox"/> (10) SH 42 <input type="checkbox"/> (11) SH 135 <input type="checkbox"/> (12) SH 322 <input type="checkbox"/> (13) SH 149 <input type="checkbox"/> (14) SH 43 <input type="checkbox"/> (15) SH 300 <input type="checkbox"/> (16) Loop 323 <input type="checkbox"/> (17) Loop 281 <input type="checkbox"/> Other <input type="checkbox"/> (99) None
	Address, intersection, landmark _____ City/County/State/Zip _____ If location written above is not Smith, Harrison, Gregg, Rusk, or Upshur county, which road did you use to leave the Tyler / Longview area? _____ (Road name) Is this vehicle usually based at or out of this location? <input type="checkbox"/> Yes <input type="checkbox"/> No Odometer reading _____	a.m. p.m. Depart ____:____ a.m. p.m.					
9 THEN I WENT TO:	Name of Place _____	Arrive ____:____	<input type="checkbox"/> (1) Base Location / Return to Base Location <input type="checkbox"/> (2) Delivery <input type="checkbox"/> (3) Pick-up <input type="checkbox"/> (4) Maintenance (fuel, oil, etc.) <input type="checkbox"/> (5) Driver Needs (lunch, etc.) <input type="checkbox"/> (6) To Home <input type="checkbox"/> (7) Other	<input type="checkbox"/> (1) Office building (non-government) <input type="checkbox"/> (2) Retail/Shopping/Gas <input type="checkbox"/> (3) Industrial/Manufacturing/Warehouse <input type="checkbox"/> (4) Medical <input type="checkbox"/> (5) Educational (12th grade or <) <input type="checkbox"/> (6) Educational (College, trade, etc.) <input type="checkbox"/> (7) Government <input type="checkbox"/> (8) Residential <input type="checkbox"/> (9) Airport <input type="checkbox"/> (10) Eating Establishment <input type="checkbox"/> (11) Other (Specify) _____ <input type="checkbox"/> (99) Do not know	<input type="checkbox"/> (1) Farm Products <input type="checkbox"/> (2) Forest Products <input type="checkbox"/> (3) Marine Products <input type="checkbox"/> (4) Metals & Minerals <input type="checkbox"/> (5) Food, Health & Beauty Products <input type="checkbox"/> (6) Tobacco Products <input type="checkbox"/> (7) Textiles <input type="checkbox"/> (8) Wood Products <input type="checkbox"/> (9) Printed Matter <input type="checkbox"/> (10) Chemical Products <input type="checkbox"/> (11) Refined Petroleum or Coal Products <input type="checkbox"/> (12) Rubber, Plastic or Styrofoam Products <input type="checkbox"/> (13) Clay, Concrete, Glass or Stone	<input type="checkbox"/> (14) Manufactured Goods / Equipment <input type="checkbox"/> (15) Wastes <input type="checkbox"/> (16) Miscellaneous Materials <input type="checkbox"/> (17)* Hazardous <input type="checkbox"/> (18) Transportation <input type="checkbox"/> (19) Unclassified Cargo <input type="checkbox"/> (20) Driver Refused to Answer <input type="checkbox"/> (21) Unknown to Driver <input type="checkbox"/> (22) Empty <input type="checkbox"/> (23) No Cargo picked up or dropped off at location. *If 17 above, Hazardous Material Placard # _____	<input type="checkbox"/> (1) IH 20 <input type="checkbox"/> (2) US 59 <input type="checkbox"/> (3) US 69 <input type="checkbox"/> (4) US 271 <input type="checkbox"/> (5) US 79 <input type="checkbox"/> (6) SH 155 <input type="checkbox"/> (7) SH 31 <input type="checkbox"/> (8) SH 64 <input type="checkbox"/> (9) SH 110 <input type="checkbox"/> (10) SH 42 <input type="checkbox"/> (11) SH 135 <input type="checkbox"/> (12) SH 322 <input type="checkbox"/> (13) SH 149 <input type="checkbox"/> (14) SH 43 <input type="checkbox"/> (15) SH 300 <input type="checkbox"/> (16) Loop 323 <input type="checkbox"/> (17) Loop 281 <input type="checkbox"/> Other <input type="checkbox"/> (99) None
	Address, intersection, landmark _____ City/County/State/Zip _____ If location written above is not Smith, Harrison, Gregg, Rusk, or Upshur county, which road did you use to leave the Tyler / Longview area? _____ (Road name) Is this vehicle usually based at or out of this location? <input type="checkbox"/> Yes <input type="checkbox"/> No Odometer reading _____	a.m. p.m. Depart ____:____ a.m. p.m.					

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Stop Number	Location Address	When did you Arrive/Depart?	Purpose of Stop (check one)	Type of Activity at This Location (check one)	Type of Cargo (check one)	Facilities Used
10 THEN I WENT TO:	Name of Place _____	Arrive ____:____	<input type="checkbox"/> (1) Base Location / Return to Base Location <input type="checkbox"/> (2) Delivery <input type="checkbox"/> (3) Pick-up <input type="checkbox"/> (4) Maintenance (fuel, oil, etc.) <input type="checkbox"/> (5) Driver Needs (lunch, etc.) <input type="checkbox"/> (6) To Home <input type="checkbox"/> (7) Other	<input type="checkbox"/> (1) Office building (non-government) <input type="checkbox"/> (2) Retail/Shopping/Gas <input type="checkbox"/> (3) Industrial/Manufacturing/Warehouse <input type="checkbox"/> (4) Medical <input type="checkbox"/> (5) Educational (12th grade or <) <input type="checkbox"/> (6) Educational (College, trade, etc.) <input type="checkbox"/> (7) Government <input type="checkbox"/> (8) Residential <input type="checkbox"/> (9) Airport <input type="checkbox"/> (10) Eating Establishment <input type="checkbox"/> (11) Other (Specify) <input type="checkbox"/> (99) Do not know	<input type="checkbox"/> (1) Farm Products <input type="checkbox"/> (2) Forest Products <input type="checkbox"/> (3) Marine Products <input type="checkbox"/> (4) Metals & Minerals <input type="checkbox"/> (5) Food, Health & Beauty Products <input type="checkbox"/> (6) Tobacco Products <input type="checkbox"/> (7) Textiles <input type="checkbox"/> (8) Wood Products <input type="checkbox"/> (9) Printed Matter <input type="checkbox"/> (10) Chemical Products <input type="checkbox"/> (11) Refined Petroleum or Coal Products <input type="checkbox"/> (12) Rubber, Plastic or Styrofoam Products <input type="checkbox"/> (13) Clay, Concrete, Glass or Stone <input type="checkbox"/> (14) Manufactured Goods / Equipment <input type="checkbox"/> (15) Wastes <input type="checkbox"/> (16) Miscellaneous <input type="checkbox"/> (17)* Hazardous Materials <input type="checkbox"/> (18) Transportation <input type="checkbox"/> (19) Unclassified Cargo <input type="checkbox"/> (20) Driver Refused to Answer <input type="checkbox"/> (21) Unknown to Driver <input type="checkbox"/> (22) Empty <input type="checkbox"/> (23) No Cargo picked up or dropped off at location. *If 17 above, Hazardous Material Placard # _____	<input type="checkbox"/> (1) IH 20 <input type="checkbox"/> (2) US 59 <input type="checkbox"/> (3) US 69 <input type="checkbox"/> (4) US 271 <input type="checkbox"/> (5) US 79 <input type="checkbox"/> (6) SH 155 <input type="checkbox"/> (7) SH 31 <input type="checkbox"/> (8) SH 64 <input type="checkbox"/> (9) SH 110 <input type="checkbox"/> (10) SH 42 <input type="checkbox"/> (11) SH 135 <input type="checkbox"/> (12) SH 322 <input type="checkbox"/> (13) SH 149 <input type="checkbox"/> (14) SH 43 <input type="checkbox"/> (15) SH 300 <input type="checkbox"/> (16) Loop 323 <input type="checkbox"/> (17) Loop 281 <input type="checkbox"/> Other <input type="checkbox"/> (99) None
	Address, intersection, landmark _____	a.m. p.m.				
	City/County/State/Zip _____	Depart ____:____				
	If location written above is not Smith, Harrison, Gregg, Rusk, or Upshur county, which road did you use to leave the Tyler / Longview area? _____(Road name)	a.m. p.m.				
	Is this vehicle usually based at or out of this location? <input type="checkbox"/> Yes <input type="checkbox"/> No					
	Odometer reading _____					
11 THEN I WENT TO:	Name of Place _____	Arrive ____:____	<input type="checkbox"/> (1) Base Location / Return to Base Location <input type="checkbox"/> (2) Delivery <input type="checkbox"/> (3) Pick-up <input type="checkbox"/> (4) Maintenance (fuel, oil, etc.) <input type="checkbox"/> (5) Driver Needs (lunch, etc.) <input type="checkbox"/> (6) To Home <input type="checkbox"/> (7) Other	<input type="checkbox"/> (1) Office building (non-government) <input type="checkbox"/> (2) Retail/Shopping/Gas <input type="checkbox"/> (3) Industrial/Manufacturing/Warehouse <input type="checkbox"/> (4) Medical <input type="checkbox"/> (5) Educational (12th grade or <) <input type="checkbox"/> (6) Educational (College, trade, etc.) <input type="checkbox"/> (7) Government <input type="checkbox"/> (8) Residential <input type="checkbox"/> (9) Airport <input type="checkbox"/> (10) Eating Establishment <input type="checkbox"/> (11) Other (Specify) <input type="checkbox"/> (99) Do not know	<input type="checkbox"/> (1) Farm Products <input type="checkbox"/> (2) Forest Products <input type="checkbox"/> (3) Marine Products <input type="checkbox"/> (4) Metals & Minerals <input type="checkbox"/> (5) Food, Health & Beauty Products <input type="checkbox"/> (6) Tobacco Products <input type="checkbox"/> (7) Textiles <input type="checkbox"/> (8) Wood Products <input type="checkbox"/> (9) Printed Matter <input type="checkbox"/> (10) Chemical Products <input type="checkbox"/> (11) Refined Petroleum or Coal Products <input type="checkbox"/> (12) Rubber, Plastic or Styrofoam Products <input type="checkbox"/> (13) Clay, Concrete, Glass or Stone <input type="checkbox"/> (14) Manufactured Goods / Equipment <input type="checkbox"/> (15) Wastes <input type="checkbox"/> (16) Miscellaneous <input type="checkbox"/> (17)* Hazardous Materials <input type="checkbox"/> (18) Transportation <input type="checkbox"/> (19) Unclassified Cargo <input type="checkbox"/> (20) Driver Refused to Answer <input type="checkbox"/> (21) Unknown to Driver <input type="checkbox"/> (22) Empty <input type="checkbox"/> (23) No Cargo picked up or dropped off at location. *If 17 above, Hazardous Material Placard # _____	<input type="checkbox"/> (1) IH 20 <input type="checkbox"/> (2) US 59 <input type="checkbox"/> (3) US 69 <input type="checkbox"/> (4) US 271 <input type="checkbox"/> (5) US 79 <input type="checkbox"/> (6) SH 155 <input type="checkbox"/> (7) SH 31 <input type="checkbox"/> (8) SH 64 <input type="checkbox"/> (9) SH 110 <input type="checkbox"/> (10) SH 42 <input type="checkbox"/> (11) SH 135 <input type="checkbox"/> (12) SH 322 <input type="checkbox"/> (13) SH 149 <input type="checkbox"/> (14) SH 43 <input type="checkbox"/> (15) SH 300 <input type="checkbox"/> (16) Loop 323 <input type="checkbox"/> (17) Loop 281 <input type="checkbox"/> Other <input type="checkbox"/> (99) None
	Address, intersection, landmark _____	a.m. p.m.				
	City/County/State/Zip _____	Depart ____:____				
	If location written above is not Smith, Harrison, Gregg, Rusk, or Upshur county, which road did you use to leave the Tyler / Longview area? _____(Road name)	a.m. p.m.				
	Is this vehicle usually based at or out of this location? <input type="checkbox"/> Yes <input type="checkbox"/> No					
	Odometer reading _____					

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12 THEN I WENT TO:	Name of Place _____	Arrive ____:____	<input type="checkbox"/> (1) Base Location / Return to Base Location <input type="checkbox"/> (2) Delivery <input type="checkbox"/> (3) Pick-up <input type="checkbox"/> (4) Maintenance (fuel, oil, etc.) <input type="checkbox"/> (5) Driver Needs (lunch, etc.) <input type="checkbox"/> (6) To Home <input type="checkbox"/> (7) Other	<input type="checkbox"/> (1) Office building (non-government) <input type="checkbox"/> (2) Retail/Shopping/Gas <input type="checkbox"/> (3) Industrial/Manufacturing/Warehouse <input type="checkbox"/> (4) Medical <input type="checkbox"/> (5) Educational (12th grade or <) <input type="checkbox"/> (6) Educational (College, trade, etc.) <input type="checkbox"/> (7) Government <input type="checkbox"/> (8) Residential <input type="checkbox"/> (9) Airport <input type="checkbox"/> (10) Eating Establishment <input type="checkbox"/> (11) Other (Specify) _____ <input type="checkbox"/> (99) Do not know	<input type="checkbox"/> (1) Farm Products <input type="checkbox"/> (2) Forest Products <input type="checkbox"/> (3) Marine Products <input type="checkbox"/> (4) Metals & Minerals <input type="checkbox"/> (5) Food, Health & Beauty Products <input type="checkbox"/> (6) Tobacco Products <input type="checkbox"/> (7) Textiles <input type="checkbox"/> (8) Wood Products <input type="checkbox"/> (9) Printed Matter <input type="checkbox"/> (10) Chemical Products <input type="checkbox"/> (11) Refined Petroleum or Coal Products <input type="checkbox"/> (12) Rubber, Plastic or Styrofoam Products <input type="checkbox"/> (13) Clay, Concrete, Glass or Stone	<input type="checkbox"/> (14) Manufactured Goods / Equipment <input type="checkbox"/> (15) Wastes <input type="checkbox"/> (16) Miscellaneous Materials <input type="checkbox"/> (17)* Hazardous <input type="checkbox"/> (18) Transportation <input type="checkbox"/> (19) Unclassified Cargo <input type="checkbox"/> (20) Driver Refused to Answer <input type="checkbox"/> (21) Unknown to Driver <input type="checkbox"/> (22) Empty <input type="checkbox"/> (23) No Cargo picked up or dropped off at location. *If 17 above, Hazardous Material Placard # _____	<input type="checkbox"/> (1) IH 20 <input type="checkbox"/> (2) US 59 <input type="checkbox"/> (3) US 69 <input type="checkbox"/> (4) US 271 <input type="checkbox"/> (5) US 79 <input type="checkbox"/> (6) SH 155 <input type="checkbox"/> (7) SH 31 <input type="checkbox"/> (8) SH 64 <input type="checkbox"/> (9) SH 110 <input type="checkbox"/> (10) SH 42 <input type="checkbox"/> (11) SH 135 <input type="checkbox"/> (12) SH 322 <input type="checkbox"/> (13) SH 149 <input type="checkbox"/> (14) SH 43 <input type="checkbox"/> (15) SH 300 <input type="checkbox"/> (16) Loop 323 <input type="checkbox"/> (17) Loop 281 <input type="checkbox"/> Other <input type="checkbox"/> (99) None
	Address, intersection, landmark _____ City/County/State/Zip _____ If location written above is not Smith, Harrison, Gregg, Rusk, or Upshur county, which road did you use to leave the Tyler / Longview area? _____ (Road name) Is this vehicle usually based at or out of this location? <input type="checkbox"/> Yes <input type="checkbox"/> No Odometer reading _____	a.m. p.m. Depart ____:____ a.m. p.m.					
13 THEN I WENT TO:	Name of Place _____	Arrive ____:____	<input type="checkbox"/> (1) Base Location / Return to Base Location <input type="checkbox"/> (2) Delivery <input type="checkbox"/> (3) Pick-up <input type="checkbox"/> (4) Maintenance (fuel, oil, etc.) <input type="checkbox"/> (5) Driver Needs (lunch, etc.) <input type="checkbox"/> (6) To Home <input type="checkbox"/> (7) Other	<input type="checkbox"/> (1) Office building (non-government) <input type="checkbox"/> (2) Retail/Shopping/Gas <input type="checkbox"/> (3) Industrial/Manufacturing/Warehouse <input type="checkbox"/> (4) Medical <input type="checkbox"/> (5) Educational (12th grade or <) <input type="checkbox"/> (6) Educational (College, trade, etc.) <input type="checkbox"/> (7) Government <input type="checkbox"/> (8) Residential <input type="checkbox"/> (9) Airport <input type="checkbox"/> (10) Eating Establishment <input type="checkbox"/> (11) Other (Specify) _____ <input type="checkbox"/> (99) Do not know	<input type="checkbox"/> (1) Farm Products <input type="checkbox"/> (2) Forest Products <input type="checkbox"/> (3) Marine Products <input type="checkbox"/> (4) Metals & Minerals <input type="checkbox"/> (5) Food, Health & Beauty Products <input type="checkbox"/> (6) Tobacco Products <input type="checkbox"/> (7) Textiles <input type="checkbox"/> (8) Wood Products <input type="checkbox"/> (9) Printed Matter <input type="checkbox"/> (10) Chemical Products <input type="checkbox"/> (11) Refined Petroleum or Coal Products <input type="checkbox"/> (12) Rubber, Plastic or Styrofoam Products <input type="checkbox"/> (13) Clay, Concrete, Glass or Stone	<input type="checkbox"/> (14) Manufactured Goods / Equipment <input type="checkbox"/> (15) Wastes <input type="checkbox"/> (16) Miscellaneous Materials <input type="checkbox"/> (17)* Hazardous <input type="checkbox"/> (18) Transportation <input type="checkbox"/> (19) Unclassified Cargo <input type="checkbox"/> (20) Driver Refused to Answer <input type="checkbox"/> (21) Unknown to Driver <input type="checkbox"/> (22) Empty <input type="checkbox"/> (23) No Cargo picked up or dropped off at location. *If 17 above, Hazardous Material Placard # _____	<input type="checkbox"/> (1) IH 20 <input type="checkbox"/> (2) US 59 <input type="checkbox"/> (3) US 69 <input type="checkbox"/> (4) US 271 <input type="checkbox"/> (5) US 79 <input type="checkbox"/> (6) SH 155 <input type="checkbox"/> (7) SH 31 <input type="checkbox"/> (8) SH 64 <input type="checkbox"/> (9) SH 110 <input type="checkbox"/> (10) SH 42 <input type="checkbox"/> (11) SH 135 <input type="checkbox"/> (12) SH 322 <input type="checkbox"/> (13) SH 149 <input type="checkbox"/> (14) SH 43 <input type="checkbox"/> (15) SH 300 <input type="checkbox"/> (16) Loop 323 <input type="checkbox"/> (17) Loop 281 <input type="checkbox"/> Other <input type="checkbox"/> (99) None
	Address, intersection, landmark _____ City/County/State/Zip _____ If location written above is not Smith, Harrison, Gregg, Rusk, or Upshur county, which road did you use to leave the Tyler / Longview area? _____ (Road name) Is this vehicle usually based at or out of this location? <input type="checkbox"/> Yes <input type="checkbox"/> No Odometer reading _____	a.m. p.m. Depart ____:____ a.m. p.m.					

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Stop Number	Location Address	When did you Arrive/Depart?	Purpose of Stop (check one)	Type of Activity at This Location (check one)	Type of Cargo (check one)	Facilities Used	
14 THEN I WENT TO:	Name of Place _____	Arrive ____:____	<input type="checkbox"/> (1) Base Location / Return to Base Location <input type="checkbox"/> (2) Delivery <input type="checkbox"/> (3) Pick-up <input type="checkbox"/> (4) Maintenance (fuel, oil, etc.) <input type="checkbox"/> (5) Driver Needs (lunch, etc.) <input type="checkbox"/> (6) To Home <input type="checkbox"/> (7) Other	<input type="checkbox"/> (1) Office building (non-government) <input type="checkbox"/> (2) Retail/Shopping/Gas <input type="checkbox"/> (3) Industrial/Manufacturing/Warehouse <input type="checkbox"/> (4) Medical <input type="checkbox"/> (5) Educational (12th grade or <) <input type="checkbox"/> (6) Educational (College, trade, etc.) <input type="checkbox"/> (7) Government <input type="checkbox"/> (8) Residential <input type="checkbox"/> (9) Airport <input type="checkbox"/> (10) Eating Establishment <input type="checkbox"/> (11) Other (Specify) _____ <input type="checkbox"/> (99) Do not know	<input type="checkbox"/> (1) Farm Products <input type="checkbox"/> (2) Forest Products <input type="checkbox"/> (3) Marine Products <input type="checkbox"/> (4) Metals & Minerals <input type="checkbox"/> (5) Food, Health & Beauty Products <input type="checkbox"/> (6) Tobacco Products <input type="checkbox"/> (7) Textiles <input type="checkbox"/> (8) Wood Products <input type="checkbox"/> (9) Printed Matter <input type="checkbox"/> (10) Chemical Products <input type="checkbox"/> (11) Refined Petroleum or Coal Products <input type="checkbox"/> (12) Rubber, Plastic or Styrofoam Products <input type="checkbox"/> (13) Clay, Concrete, Glass or Stone	<input type="checkbox"/> (14) Manufactured Goods / Equipment <input type="checkbox"/> (15) Wastes <input type="checkbox"/> (16) Miscellaneous Materials <input type="checkbox"/> (17)* Hazardous <input type="checkbox"/> (18) Transportation <input type="checkbox"/> (19) Unclassified Cargo <input type="checkbox"/> (20) Driver Refused to Answer <input type="checkbox"/> (21) Unknown to Driver <input type="checkbox"/> (22) Empty <input type="checkbox"/> (23) No Cargo picked up or dropped off at location. *If 17 above, Hazardous Material Placard # _____	<input type="checkbox"/> (1) IH 20 <input type="checkbox"/> (2) US 59 <input type="checkbox"/> (3) US 69 <input type="checkbox"/> (4) US 271 <input type="checkbox"/> (5) US 79 <input type="checkbox"/> (6) SH 155 <input type="checkbox"/> (7) SH 31 <input type="checkbox"/> (8) SH 64 <input type="checkbox"/> (9) SH 110 <input type="checkbox"/> (10) SH 42 <input type="checkbox"/> (11) SH 135 <input type="checkbox"/> (12) SH 322 <input type="checkbox"/> (13) SH 149 <input type="checkbox"/> (14) SH 43 <input type="checkbox"/> (15) SH 300 <input type="checkbox"/> (16) Loop 323 <input type="checkbox"/> (17) Loop 281 <input type="checkbox"/> Other <input type="checkbox"/> (99) None
	Address, intersection, landmark _____ City/County/State/Zip _____ If location written above is not Smith, Harrison, Gregg, Rusk, or Upshur county, which road did you use to leave the Tyler / Longview area? _____ (Road name) Is this vehicle usually based at or out of this location? <input type="checkbox"/> Yes <input type="checkbox"/> No Odometer reading _____	a.m. p.m. Depart ____:____ a.m. p.m.					
15 THEN I WENT TO:	Name of Place _____	Arrive ____:____	<input type="checkbox"/> (1) Base Location / Return to Base Location <input type="checkbox"/> (2) Delivery <input type="checkbox"/> (3) Pick-up <input type="checkbox"/> (4) Maintenance (fuel, oil, etc.) <input type="checkbox"/> (5) Driver Needs (lunch, etc.) <input type="checkbox"/> (6) To Home <input type="checkbox"/> (7) Other	<input type="checkbox"/> (1) Office building (non-government) <input type="checkbox"/> (2) Retail/Shopping/Gas <input type="checkbox"/> (3) Industrial/Manufacturing/Warehouse <input type="checkbox"/> (4) Medical <input type="checkbox"/> (5) Educational (12th grade or <) <input type="checkbox"/> (6) Educational (College, trade, etc.) <input type="checkbox"/> (7) Government <input type="checkbox"/> (8) Residential <input type="checkbox"/> (9) Airport <input type="checkbox"/> (10) Eating Establishment <input type="checkbox"/> (11) Other (Specify) _____ <input type="checkbox"/> (99) Do not know	<input type="checkbox"/> (1) Farm Products <input type="checkbox"/> (2) Forest Products <input type="checkbox"/> (3) Marine Products <input type="checkbox"/> (4) Metals & Minerals <input type="checkbox"/> (5) Food, Health & Beauty Products <input type="checkbox"/> (6) Tobacco Products <input type="checkbox"/> (7) Textiles <input type="checkbox"/> (8) Wood Products <input type="checkbox"/> (9) Printed Matter <input type="checkbox"/> (10) Chemical Products <input type="checkbox"/> (11) Refined Petroleum or Coal Products <input type="checkbox"/> (12) Rubber, Plastic or Styrofoam Products <input type="checkbox"/> (13) Clay, Concrete, Glass or Stone	<input type="checkbox"/> (14) Manufactured Goods / Equipment <input type="checkbox"/> (15) Wastes <input type="checkbox"/> (16) Miscellaneous Materials <input type="checkbox"/> (17)* Hazardous <input type="checkbox"/> (18) Transportation <input type="checkbox"/> (19) Unclassified Cargo <input type="checkbox"/> (20) Driver Refused to Answer <input type="checkbox"/> (21) Unknown to Driver <input type="checkbox"/> (22) Empty <input type="checkbox"/> (23) No Cargo picked up or dropped off at location. *If 17 above, Hazardous Material Placard # _____	<input type="checkbox"/> (1) IH 20 <input type="checkbox"/> (2) US 59 <input type="checkbox"/> (3) US 69 <input type="checkbox"/> (4) US 271 <input type="checkbox"/> (5) US 79 <input type="checkbox"/> (6) SH 155 <input type="checkbox"/> (7) SH 31 <input type="checkbox"/> (8) SH 64 <input type="checkbox"/> (9) SH 110 <input type="checkbox"/> (10) SH 42 <input type="checkbox"/> (11) SH 135 <input type="checkbox"/> (12) SH 322 <input type="checkbox"/> (13) SH 149 <input type="checkbox"/> (14) SH 43 <input type="checkbox"/> (15) SH 300 <input type="checkbox"/> (16) Loop 323 <input type="checkbox"/> (17) Loop 281 <input type="checkbox"/> Other <input type="checkbox"/> (99) None
	Address, intersection, landmark _____ City/County/State/Zip _____ If location written above is not Smith, Harrison, Gregg, Rusk, or Upshur county, which road did you use to leave the Tyler / Longview area? _____ (Road name) Is this vehicle usually based at or out of this location? <input type="checkbox"/> Yes <input type="checkbox"/> No Odometer reading _____	a.m. p.m. Depart ____:____ a.m. p.m.					

16 HOW MANY MORE TRIPS WILL YOU MAKE TODAY? _____