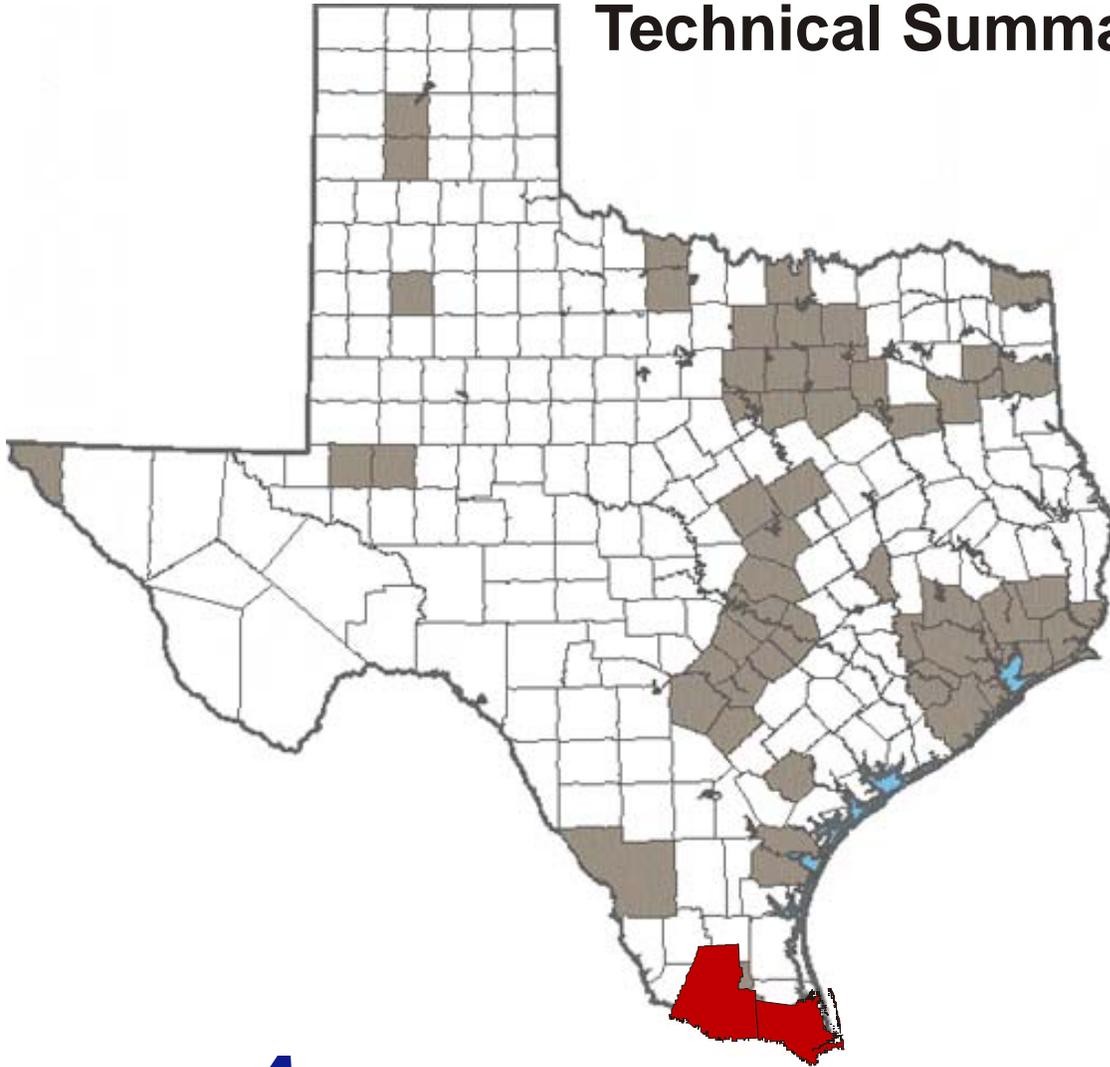


2004 Rio Grande Valley External Survey Technical Summary



Prepared by the
Texas Transportation Institute
October 2008

2004 Rio Grande Valley External Survey

TECHNICAL SUMMARY

Texas Department of Transportation Travel Survey Program

Prepared by

Timothy L. Forrest
Assistant Transportation Researcher

and

David F. Pearson, Ph.D., P.E.
Program Manager

of the
Texas Transportation Institute

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TEXAS TRANSPORTATION INSTITUTE
The Texas A&M University System
College Station, Texas 77843-3135

DISCLAIMER

The contents of this report reflect the views of the authors who are responsible for the data, findings, and conclusions presented herein. The contents do not necessarily reflect the official views or policies of the Federal Highway Administration or the Texas Department of Transportation (TxDOT). This report does not constitute a standard, specification, or regulation. Timothy L. Forrest was the author of this report and David F. Pearson, Ph.D., P.E., was the study supervisor. Charlie Hall of the TxDOT Planning and Programming Division was the project director.

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INTRODUCTION

In 2004, the Transportation Planning and Programming (TPP) Division of the Texas Department of Transportation (TxDOT) funded an external station travel survey in the Rio Grande Valley (Valley) study area. The Valley study area is composed of two counties containing three metropolitan planning organizations (MPOs) – the Hidalgo County MPO, the Harlingen-San Benito MPO, and the Brownsville MPO. This survey measured and identified travel patterns into, within, and out of the Valley study area. This report presents a technical summary of the entire Valley region portion of the 2004 Valley External Station Survey, documents the data collected, and presents the analysis results for the study Valley area.

EXTERNAL STATION SURVEY

An external station survey collects data through personal interviews to measure and identify travel patterns of vehicles and/or pedestrians entering and exiting a particular study area. Surveys are conducted during daylight hours for one day at each designated location. Additionally, 24-hour vehicle classification counts are performed on the same day as the survey at each location. These counts provide a basis for expanding the survey data to represent the average weekday movements into, out of, and through the study area. Data are also collected on the movements of vehicles during the survey day prior to the time the vehicle is surveyed. These data are used to estimate the amount of travel occurring in the study area by persons that do not live in the study area.

RIO GRANDE VALLEY STUDY AREA

The Valley study area is Hidalgo County and Cameron County, Texas. The U.S Census Bureau¹ 2004 estimates for the combined population of these two counties is approximately 1,030,000 people. However, the 2004 estimates for the combined populations of Brownsville, Harlingen, and McAllen (the largest cities in the two counties) only represents about one-third of the total population at 333,000 people, indicating that a majority of the people living in the Valley do not

¹ <http://quickfacts.census.gov/qfd/states/48/48061.html>, <http://quickfacts.census.gov/qfd/states/48/48215.html>.

live in these major cities. Figure 1 provides a graphical illustration of the Valley study area, highlighting each of the three MPOs, as well as the surrounding rural area in Cameron County.

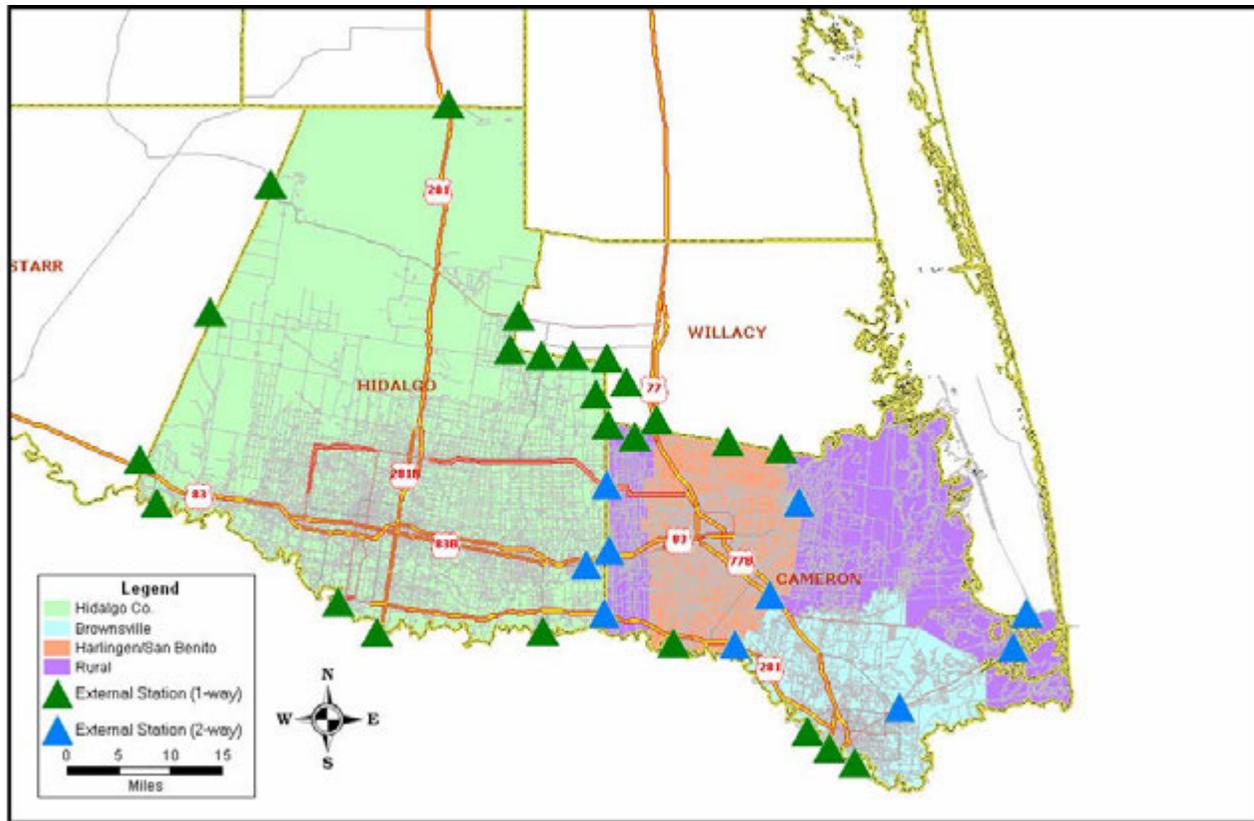


Figure 1. Valley Study Area.

SURVEY LOCATIONS

There were 34 locations in and around the Valley study area (Cameron and Hidalgo counties) identified as external stations. An external station is a transportation facility that crosses a study area boundary where travelers may enter and exit a study area. Since there are three MPOs in the two-county area, each had its own set of external stations with some being shared on a common study area boundary. To provide data for the potential development of external trip tables for each MPO, it was necessary to survey some locations that would normally be considered internal to the entire Valley. Of the 34 locations in the Valley study area, 26 were selected to be surveyed on the roadside. For the remaining eight sites, six were selected for a vehicle classification count only, and two were considered high volume, requiring a video license plate matching process to be used. Additionally, 10 of the 34 locations were surveyed in

both directions (listed as 2-way in Figure 1). This is because these locations occurred on the shared border of two study areas, or exhibited special travel patterns that warranted surveying in both directions.

Figure 2 shows the location of the 24 external stations established for the Valley region. These represent the stations that will be used in the regional model for the two counties. The data and analysis results presented in this report are for these 24 stations. Table 1 identifies the external stations, their general location, whether or not on-site surveys were conducted, and the 24-hour traffic count at the location in both the inbound and outbound direction. The location groups indicated in Table 1 are used to aggregate data to present external local and through trip information later in the summary.

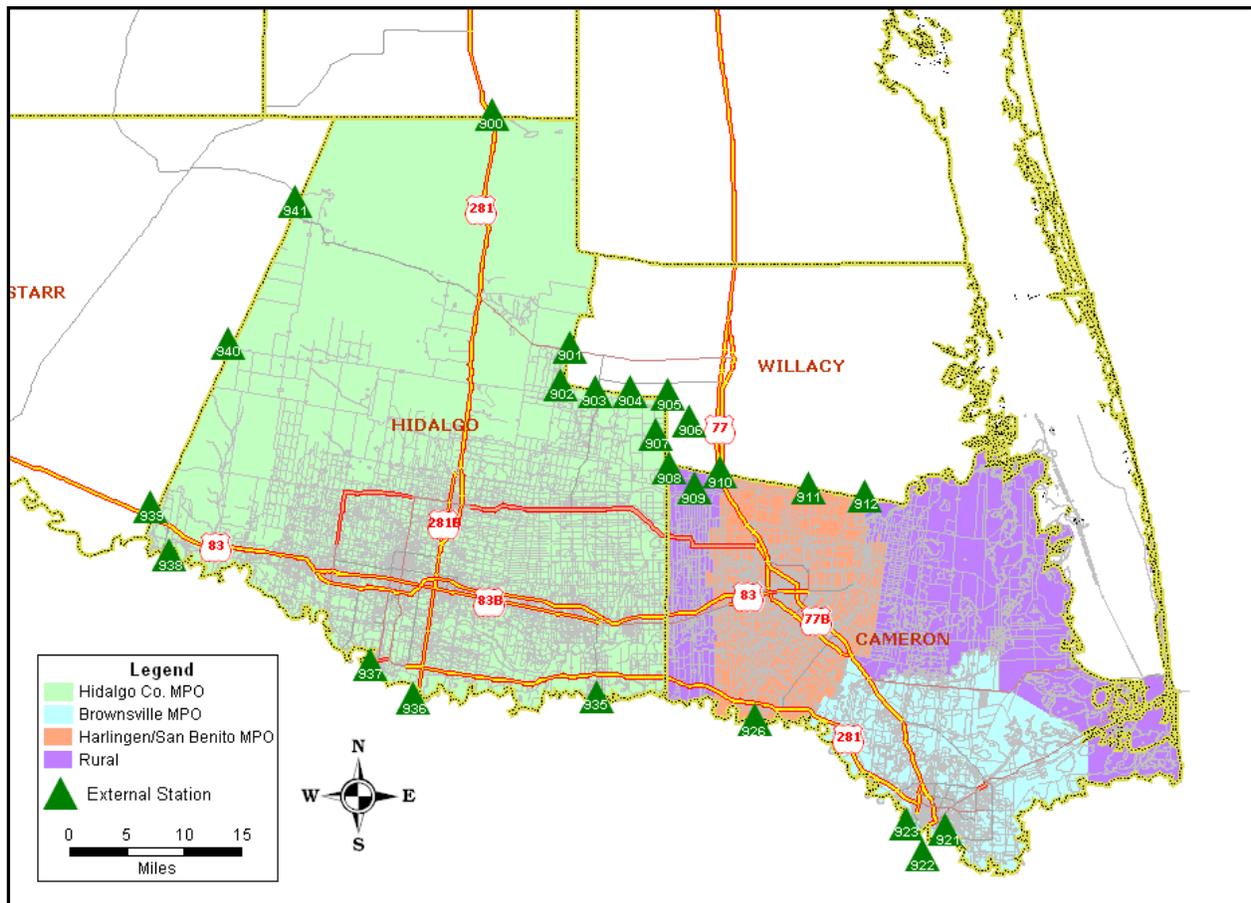


Figure 2. Valley External Station Locations.

One of the 24 locations in the Valley was identified as a high-volume site. In the full survey, this location was paired with another location. These locations were on US Highway 83 at the border

of Hidalgo and Starr counties (station number 939) and at the border of Hidalgo and Cameron counties. Non-commercial vehicles on high-volume roadways were not surveyed, but instead a license plate matching methodology was employed to estimate on the number of through and local trips. Commercial vehicles were surveyed at rest areas, weigh stations, and truck stops on this facility using an intercept interview method. More details on this methodology are provided later in the analysis.

Table 1. Valley External Stations.

Station Number	Facility	Location	Surveyed	24-Hour Vehicle Count		Location Group
				Inbound	Outbound	
900	US 281 N	at Brooks County line	Yes	4,573	6,363	North
901	SH 186	at Willacy County line	Yes	961	989	East
902	FM 490	at Willacy County line	No	173	281	North
903	FM 88	at Willacy County line	Yes	582	752	
904	FM 1015	at Willacy County line	Yes	446	452	
905	FM 1921	at Willacy County line	No	104	118	East
906	FM 491	at Willacy County line	No	204	218	
907	FM 1425	at Willacy County line	Yes	274	309	
908	FM 2629	at Willacy County line	No	250	246	
909	FM 506	at Willacy County line	Yes	373	416	
910	US 77 N	at Willacy County line	Yes	7,728	7,569	North
911	FM 507	at Willacy County line	Yes	308	200	
912	FM 1420	at Willacy County line	Yes	197	218	
921	US 77	at Veterans Intl. Bridge	Yes	2,445	2,343	South
922	SH 4	at Gateway Intl. Bridge	Yes	6,630	6,511	
923	12th St.	at B&M Bridge	Yes	7,025	6,846	
926	FM 509	at Los Indios Bridge	Yes	2,335	2,224	
935	FM 1015	at Progreso Intl. Bridge	Yes	4,608	4,742	
936	Spur 600	at Pharr-Reynosa Intl. Bridge	Yes	5,882	5,829	
937	SH 115	at McAllen-Hidalgo-Reynosa Bridge	Yes	14,120	13,169	
938	FM 886	at Los Ebanos Ferry	No	584	355	West
939	US 83 W	at Starr County line	Yes	8,466	8,841	
940	FM 490	at Starr County line	Yes	911	958	
941	FM 1017	at Starr County line	Yes	1,073	926	
Total				70,252	70,875	

SURVEY METHODOLOGY

Two methodologies were employed in the conduct of the survey. For roadways with low-to-moderate traffic volumes, a roadside intercept interview method was used. For external stations on high-volume roadways, non-commercial vehicles were surveyed using a license plate match method and commercial vehicles were surveyed at rest areas, weigh stations, and truck stops using an intercept interview method. The surveys were conducted by interviewing drivers of commercial vehicles when the driver stopped for gas, weighing, or personal reasons. Since this method involved surveying the drivers off the roadway, there was no traffic control required. For purposes of this study, roadways with traffic volumes in excess of 20,000 vehicles per day were considered high volume. Only two stations were identified as high volume in the Valley.

For each non-international border external station surveyed using the roadside intercept interview method, traffic control plans were set up and vehicles in the outbound direction (i.e., leaving the study area) were directed into an area where trained survey personnel interviewed the drivers. Drivers of commercial and non-commercial vehicles were interviewed using different survey instruments and those forms are provided in Appendix A. The data file formats used to store the collected survey data are provided in Appendix B. Figure 3 shows a typical survey station at an external station. For each international border external station surveyed, vehicles in the inbound direction (i.e., entering the study area) were directed into an area where trained survey personnel interviewed the drivers. Pedestrians were also surveyed at the international border crossings using an intercept survey method.



Figure 3. Typical External Survey Station.

DATA ANALYSIS

Data analysis for non-commercial and commercial vehicles is developed separately and presented in this section. Non-commercial vehicles are typically personal use passenger cars, trucks, vans, and motorcycles. Commercial vehicles are those used for commercial purposes and, in most cases, consist of heavy-duty trucks.

The analysis is based on information obtained from completed interviews of motorists. The majority of vehicles surveyed (84 percent) were non-commercial. Table 2 shows the number of surveys for commercial and non-commercial vehicles by station, as well as the 24-hour outbound (inbound for international border sites) traffic volume on the survey day for the Valley. Approximately 14 percent of the non-commercial vehicles and 34 percent of the commercial vehicles that traveled through the external stations in the outbound direction (inbound for

international border sites) during survey hours were interviewed. This does not include the stations where no roadside intercept survey was performed.

During the review of the data, there were a number of vehicles that indicated that the location where they entered the study area was the same location at which they were being surveyed. Since the survey is conducted in the outbound or inbound direction, it was assumed that the motorists misinterpreted the definition of a trip, and subsequently did not provide information on where they may have stopped within the study area. As a result, those non-commercial and commercial vehicle surveys were dropped from the analysis.

Trip Types

There are two types of trips identified as part of an external survey — external-local trips and external-through trips. A local trip is one where either the origin or destination of the trip is in the study area and the other trip end is outside the study area. A through trip is one traveling through the study area without stopping. Table 3 presents the survey data for non-commercial and commercial vehicles in terms of trips identified as local or through movements. For the Valley region, over 97 percent of non-commercial vehicle trips and over 95 percent of commercial vehicle trips were local trips. Figure 4 shows the percent of local trips in each study area.

Table 2. Number of Non-Commercial and Commercial Vehicle Surveys.

Station Number	Facility	Location	Non-Commercial		Commercial	
			Surveyed	Count	Surveyed	Count
900	US 281 N	at Brooks County line	405	5,554	72	809
901	SH 186	at Willacy County line	222	832	102	157
902	FM 490	at Willacy County line	No Survey	N/A	No Survey	N/A
903	FM 88	at Willacy County line	294	666	52	86
904	FM 1015	at Willacy County line	212	414	16	38
905	FM 1921	at Willacy County line	No Survey	N/A	No Survey	N/A
906	FM 491	at Willacy County line	No Survey	N/A	No Survey	N/A
907	FM 1425	at Willacy County line	126	260	11	49
908	FM 2629	at Willacy County line	No Survey	N/A	No Survey	N/A
909	FM 506	at Willacy County line	154	373	13	43
910	US 77 N	at Willacy County line	399	6,589	84	980
911	FM 507	at Willacy County line	No Survey	N/A	No Survey	N/A
912	FM 1420	at Willacy County line	132	214	8	4
921	US 77	at Veterans Intl. Bridge	404	2,241	224	204
922	SH 4	at Gateway Intl. Bridge	366	6,354	No Survey	N/A
923	12th St.	at B&M Bridge	504	6,729	No Survey	N/A
926	FM 509	at Los Indios Bridge	433	2,259	69	76
935	FM 1015	at Progresso Intl. Bridge	468	4,350	38	258
936	Spur 600	at Pharr-Reynosa Intl. Bridge	353	5,549	156	333
937	SH 115	at McAllen-Hidalgo-Reynosa Bridge	588	13,969	No Survey	N/A
938	FM 886	at Los Ebanos Ferry	No Survey	N/A	No Survey	N/A
939	US 83 W	at Starr County line	342	7,973	64	868
940	FM 490	at Starr County line	241	798	80	161
941	FM 1017	at Starr County line	313	698	65	228
Total*			5,956	65,822	1,054	4,294

* Totals only include stations with both surveys and counts

Table 3. Survey Results by Trip Type (Commercial and Non-Commercial Vehicles).

Station Number	Facility	Non-Commercial Vehicles					Commercial Vehicles				
		Local	Percent	Through	Percent	Total	Local	Percent	Through	Percent	Total
900	US 281 N	399	98.5%	6	1.5%	405	70	97.2%	2	2.8%	72
901	SH 186	133	59.9%	89	40.1%	222	73	71.6%	29	28.4%	102
902	FM 490	N/A					N/A				
903	FM 88	292	99.3%	2	0.7%	294	52	100.0%	0	0.0%	52
904	FM 1015	206	97.2%	6	2.8%	212	16	100.0%	0	0.0%	16
905	FM 1921	N/A					N/A				
906	FM 491	N/A					N/A				
907	FM 1425	124	98.4%	2	1.6%	126	11	100.0%	0	0.0%	11
908	FM 2629	N/A					N/A				
909	FM 506	152	98.7%	2	1.3%	154	13	100.0%	0	0.0%	13
910	US 77 N	395	99.0%	4	1.0%	399	84	100.0%	0	0.0%	84
911	FM 507	N/A					N/A				
912	FM 1420	131	99.2%	1	0.8%	132	8	100.0%	0	0.0%	8
921	US 77	404	100.0%	0	0.0%	404	224	100.0%	0	0.0%	224
922	SH 4	366	100.0%	0	0.0%	366	N/A				
923	12th St.	502	99.6%	2	0.4%	504	N/A				
926	FM 509	426	98.4%	7	1.6%	433	69	100.0%	0	0.0%	69
935	FM 1015	459	98.1%	9	1.9%	468	38	100.0%	0	0.0%	38
936	Spur 600	352	99.7%	1	0.3%	353	152	97.4%	4	2.6%	156
937	SH 115	579	98.5%	9	1.5%	588	N/A				
938	FM 886	N/A					N/A				
939	US 83 W	337	98.5%	5	1.5%	342	63	98.4%	1	1.6%	64
940	FM 490	215	89.2%	26	10.8%	241	76	95.0%	4	5.0%	80
941	FM 1017	279	89.1%	34	10.9%	313	63	96.9%	2	3.1%	65
Total		5,751	96.6%	205	3.4%	5,956	1,012	96.0%	42	4.0%	1,054

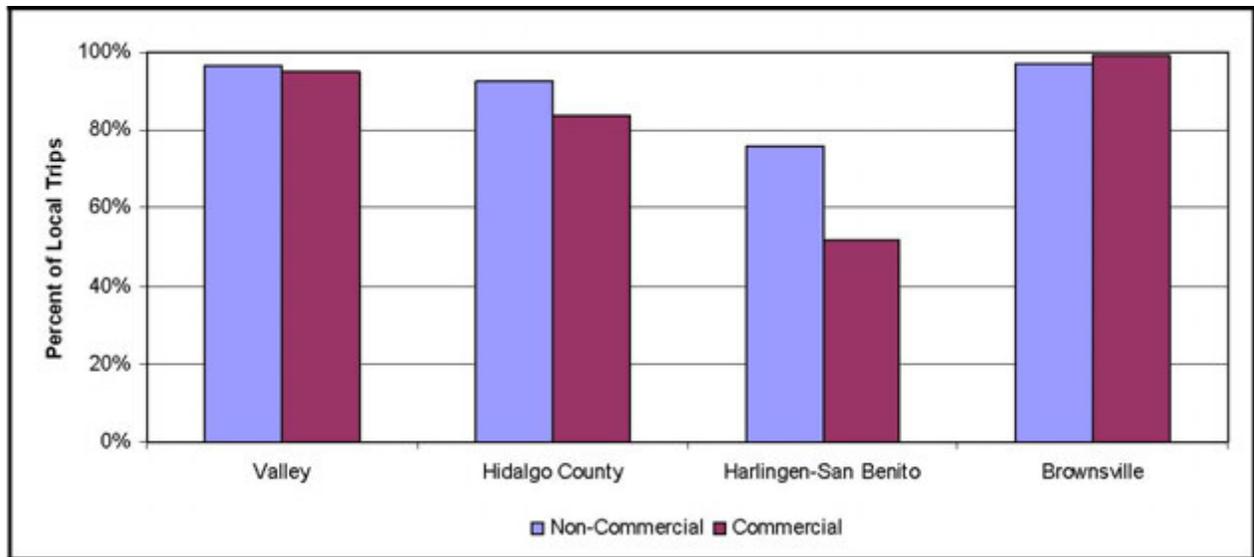


Figure 4. Percent of Local Trips in Each Study Area.

The second type of trip identified in the survey is a sub-category of external local trips. These are reported as resident and non-resident trips. A resident is a survey respondent that reported they lived in the study area. A non-resident is a respondent that reported they lived outside of the study area. Table 4 presents the survey data by residents and non-residents as well as the number of internal trips made by the non-residents within the study area prior to being surveyed. An important element of the trips reported by non-residents is the number of trips made prior to being surveyed. Based on the information provided in the survey, these trips are evaluated to estimate the number of internal trips made by non-residents (trips where both the origin and destination are within the study area). By measuring the number of non-residents that travel in and out of the study areas and the number of internal trips they make, an estimate of the total internal trips within each study area attributable to non-residents can be developed.

The residency questions were only asked of respondents in non-commercial vehicles. Table 4 indicates that over 42 percent of the non-commercial travel in and out of the Valley study area is made by persons that do not live inside the study area. The average number of internal trips made by those individuals is 0.01 trips per vehicle. This value is extremely low, and brings into question the effectiveness of the survey in obtaining information about internal trips made. Additionally, data presented in the next section regarding trip purposes is inconsistent with the internal trip information presented here. It is recommended that a review of the survey

instrument and surveying process be conducted to correct trip reporting problems relating to internal trips taken prior to exiting the study area.

Table 4. Survey Results by Residency (Non-Commercial Vehicles Only).

Station Number	Facility	Number of Surveys	Residents	Percent	Non-Residents	Percent	Internal Trips (Non-Residents)	Total Vehicle Count	Internal Trips (Expanded)
900	US 281 N	405	299	73.8%	106	26.2%	2	5,554	27.4
901	SH 186	222	147	66.2%	75	33.8%	5	832	18.7
902	FM 490	No Survey							
903	FM 88	294	200	68.0%	94	32.0%	0	666	0.0
904	FM 1015	212	132	62.3%	80	37.7%	8	414	15.6
905	FM 1921	No Survey							
906	FM 491	No Survey							
907	FM 1425	126	62	49.2%	64	50.8%	2	260	4.1
908	FM 2629	No Survey							
909	FM 506	154	99	64.3%	55	35.7%	1	373	2.4
910	US 77 N	399	276	69.2%	123	30.8%	3	6,589	49.5
911	FM 507	No Survey							
912	FM 1420	132	101	76.5%	31	23.5%	0	214	0.0
921	US 77	404	160	39.6%	244	60.4%	0	2,241	0.0
922	SH 4	366	172	47.0%	194	53.0%	0	6,354	0.0
923	12th St.	504	215	42.7%	289	57.3%	0	6,729	0.0
926	FM 509	433	181	41.8%	252	58.2%	0	2,259	0.0
935	FM 1015	468	334	71.4%	134	28.6%	1	4,350	9.3
936	Spur 600	353	138	39.1%	215	60.9%	0	5,549	0.0
937	SH 115	588	267	45.4%	321	54.6%	0	13,969	0.0
938	FM 886	No Survey							
939	US 83 W	342	157	45.9%	185	54.1%	0	7,973	0.0
940	FM 490	241	183	75.9%	58	24.1%	0	798	0.0
941	FM 1017	313	185	59.1%	128	40.9%	5	698	11.2
Total		5,956	3,308	55.5%	2,648	44.5%	27	65,822	138.2

Travel Purpose

To understand the reasons people travel, the survey included questions about the driver's purpose for being at the location where the trip began (i.e., trip origin) and the purpose for traveling to their destination. There were 15 different purposes included on the survey instrument for non-commercial vehicles and nine purposes on the commercial vehicle survey. Table 5 provides the trip purposes for each survey. For the purpose of presenting survey results, the trip purpose categories are combined into a fewer number to reflect the primary purposes of travel.

Table 5. Trip Purpose Categories.

Code	Non-Commercial Vehicle Trip Purpose	Code	Commercial Vehicle Trip Purpose
1	Home/Return Home	1	Base Location/Return to Base Location
2	Go/Return to Work	2	Delivery
3	Work Related	3	Pick Up
4	School	4	Maintenance
5	Vacation	5	Driver Needs (Lunch, Etc.)
6	Visit Friends/Family	6	To Home
7	Eat Out	7	Buy Fuel
8	Shop	8	Other (Specify)
9	Buy Gas	99	Unknown/Refused
10	Personal Business		
11	Pick Up/Drop Off Passenger		
12	Change Travel Mode		
13	Delivery		
14	Recreation		
15	Overnight Stay/Sleep		
16	Other (Specify)		
99	Refused/Do Not Know		

For non-commercial vehicles, the trip purposes listed in Table 5 were combined into the following six categories:

<u>Category</u>	<u>Trip Purpose Codes (from Table 5)</u>
Home	1
Work	2 and 3
School	4
Personal	5, 6, 10, 11, 14, and 15
Shop	7, 8, and 9
Other	12, 13, 16, and 99

Figure 5 presents the distribution of non-commercial vehicles by reported trip purpose at the origin of the trip and Figure 6 shows the distribution of non-commercial vehicles at the destination of the trip. The information is provided for residents, non-residents, and both groups combined. Figure 5 shows that for the entire Valley region, the distribution for the origin purpose with the largest percentage of trips for residents (61 percent) was at a home location, while the most common non-resident trip origin purpose (33 percent each) was at a personal location or shopping. For both groups combined, the most common origin purposes were home (36 percent), personal related (22 percent), and work (21 percent).

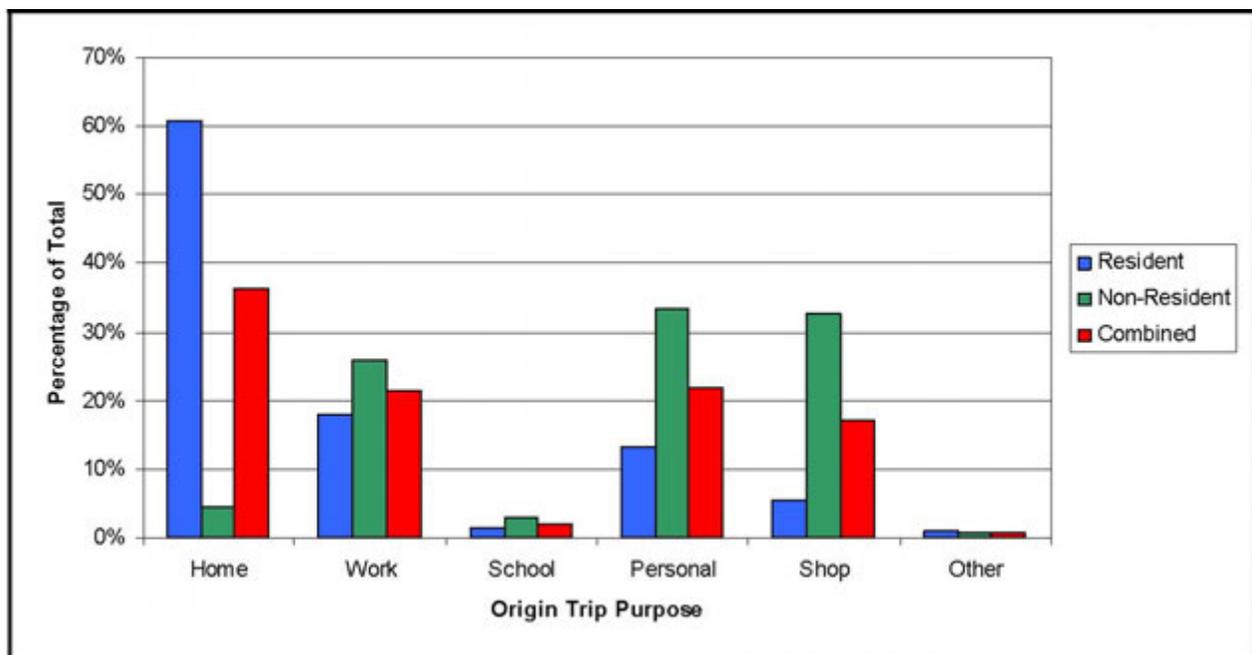


Figure 5. Trip Purpose at Origin for Non-Commercial Vehicles.

For the Valley, Figure 6 shows that the largest distribution of destination purposes for residents were to a personal location (41 percent) and work (33 percent). The trip purpose at the destination for non-residents was primarily comprised of home (75 percent). For both groups combined, home (38 percent), personal related (27 percent), and work (23 percent) were the most common trip purposes. Table 6 provides the data shown in Figures 5 and 6 in tabular form for comparative purposes.

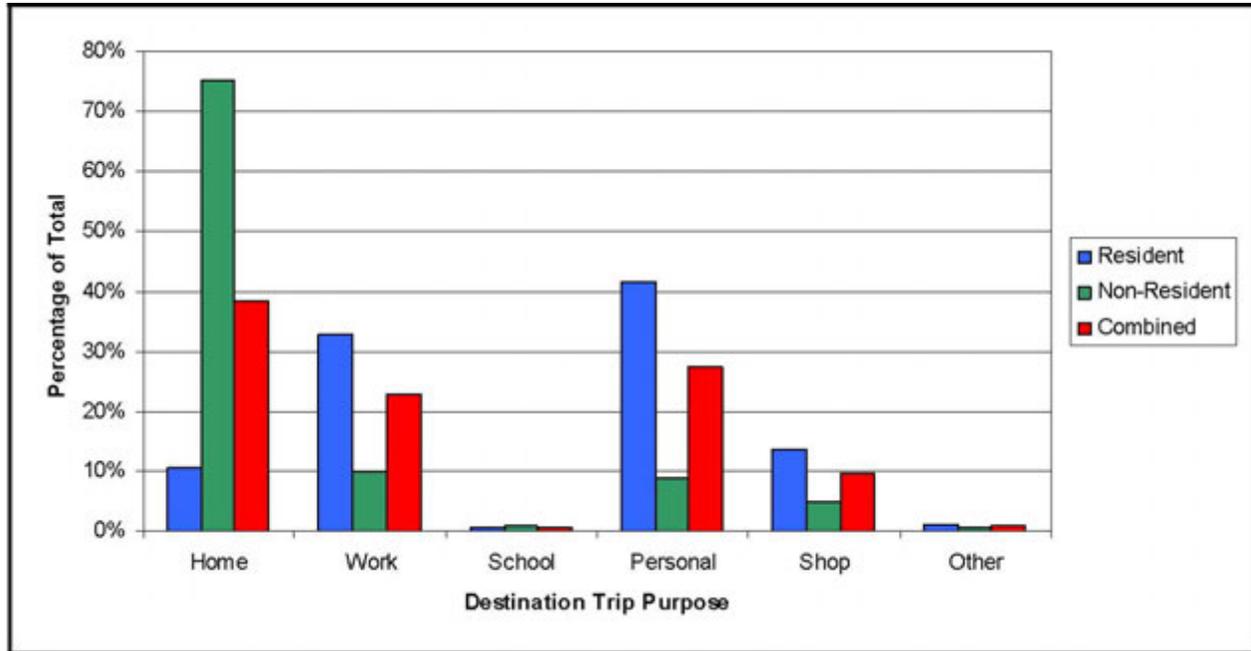


Figure 6. Trip Purpose at Destination for Non-Commercial Vehicles.

Table 6. Non-Commercial Vehicle Trip Purpose at Origin and Destination.

Trip Purpose	Origin			Destination		
	Resident	Non-Resident	Combined	Resident	Non-Resident	Combined
Home	60.7%	4.6%	36.4%	10.5%	75.2%	38.5%
Work	18.0%	26.0%	21.5%	32.8%	9.8%	22.8%
School	1.5%	2.9%	2.1%	0.5%	0.8%	0.6%
Personal	13.3%	33.3%	22.0%	41.4%	8.8%	27.3%
Shop	5.5%	32.6%	17.2%	13.5%	4.8%	9.8%
Other	1.0%	0.6%	0.8%	1.3%	0.6%	1.0%

The trip purposes normally used in travel demand modeling are home-based work (HBW), home-based non-work (HBNW), and non-home based (NHB). HBW trips are those that have one end of the trip at home and the other end of the trip at work. Trips that begin at home and end at work or those that begin at work and end at home are HBW. An HBNW trip is one where one end of the trip is at home and the other trip end is any location other than work. An NHB trip is a trip that does not begin or end at home. Figure 7 shows the distribution of trips by trip purpose. For residents, nearly 50 percent of the trips were home-based non-work trips. For non-residents, home-based non-work trips accounted for almost 58 percent of the trips. HBNW trips were the most common trip purpose for residents and non-residents combined (53 percent). The data shown in Figure 7 are based on the raw survey results, and have not been expanded.

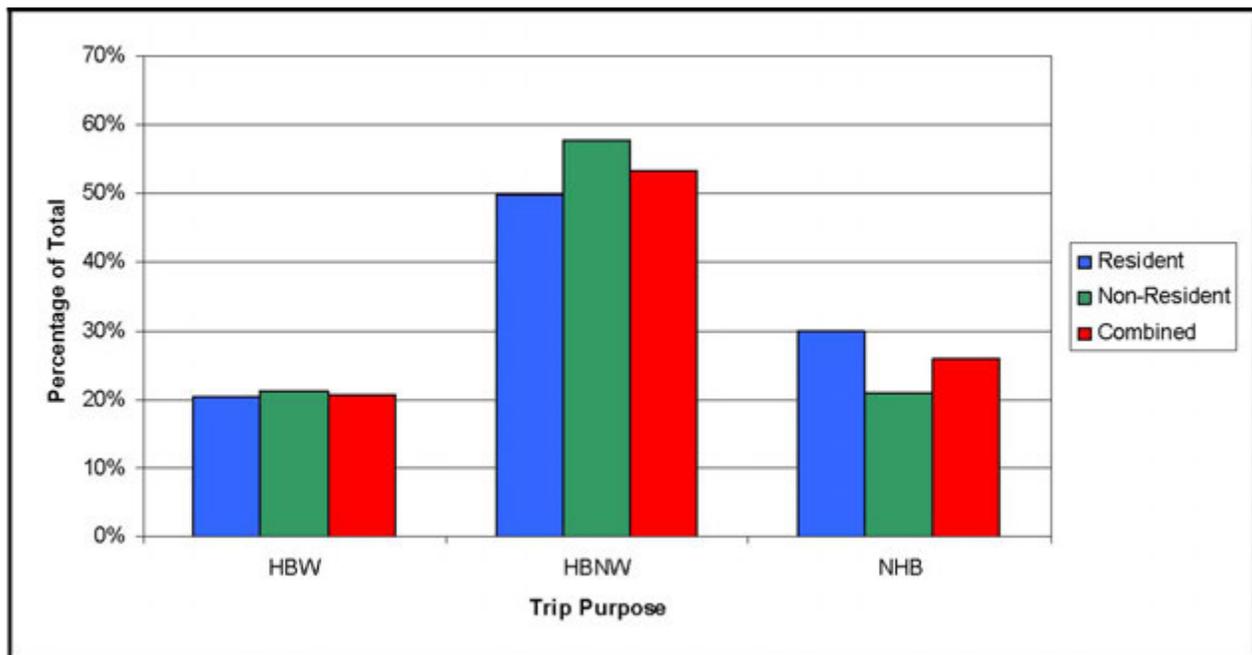


Figure 7. Distribution of Non-Commercial Vehicle Trips by Trip Purpose.

For commercial vehicles, the trip purposes shown in Table 5 were combined into the following five categories:

<u>Category</u>	<u>Trip Purpose Codes</u>
Base Location	1
Delivery	2
Pick Up	3
Support Functions	4, 5, 6, and 7
Other	8 and 99

Figure 8 shows the distribution of commercial vehicle trips by reported trip purpose at the origin and destination of the trip for the entire Valley region. At the origin, pick up is the most common origin trip purpose (37 percent). Base (29 percent), delivery (23 percent), and support functions (11 percent) were the other most commonly cited trip purposes at the origin. The distribution for the destination trip purpose shows that the majority of the surveyed vehicles, 47 percent, were destined for delivering cargo and another 42 percent were destined for picking up cargo. Only 6 percent of the trip destinations were for the base category and 5 percent of the destinations were for support functions. For both origin and destination, trip purposes classified as other were both less than 1 percent.

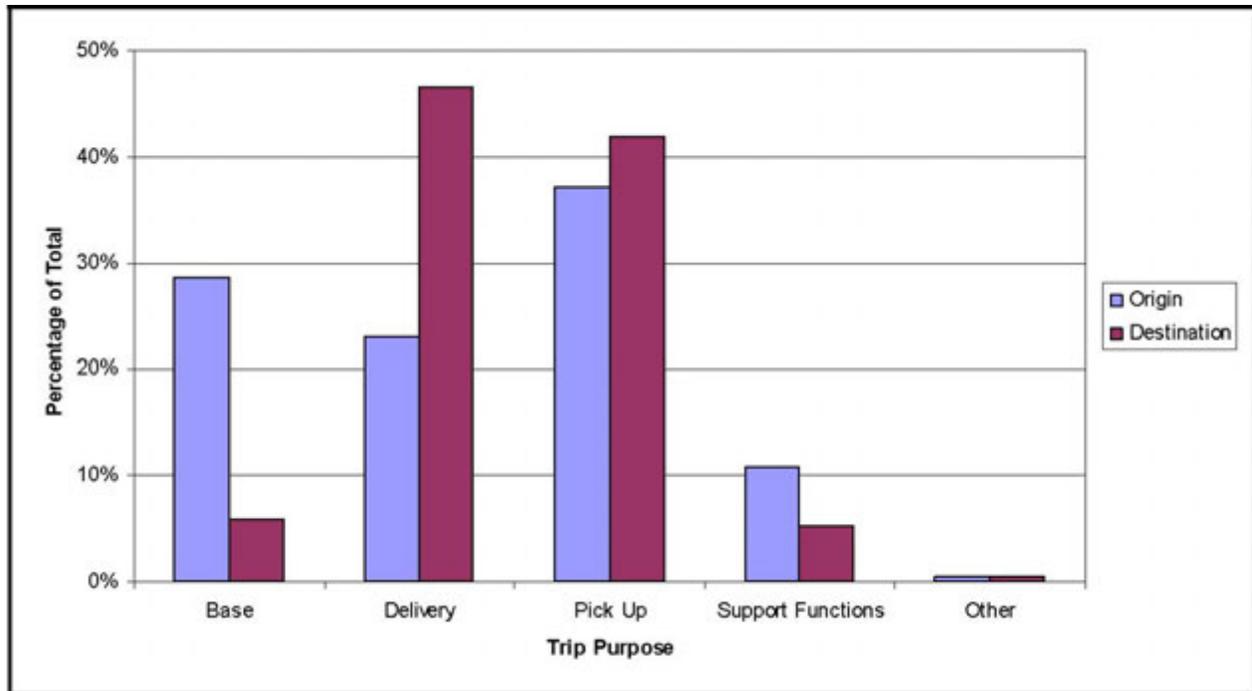


Figure 8. Trip Purpose at Origin and Destination for Commercial Vehicles.

In addition to obtaining information on the purpose of travel, questions were asked to identify the type of place associated with the origin of the trip. Table 7 provides the results of the responses provided for both commercial and non-commercial vehicles, and Figure 9 shows the results in graphical form. For non-commercial vehicles, the largest percentage of respondents listed residential (58 percent) as the type of place at the origin. An additional 15 percent of the non-commercial vehicles cited retail/shopping/gas as the type of place. For commercial vehicles, the majority of the respondents (74 percent) listed industrial/manufacturing as the type of place at the origin. Residential was the next largest percentage of type of place at the origin for commercial vehicles at almost 10 percent.

Table 7. Type of Place at Trip Origin.

Type of Place	Non-Commercial Vehicles				Commercial Vehicles			
	Survey Count	Percent	Expanded Count	Percent	Survey Count	Percent	Expanded Count	Percent
Office Building	534	9.0%	5,193	7.9%	73	6.8%	416	9.7%
Retail/Shopping/Gas	878	14.7%	10,632	16.2%	50	4.7%	336	7.8%
Industrial/Manufacturing/Warehouse	475	8.0%	4,214	6.4%	795	74.0%	2,683	62.5%
Medical	152	2.5%	1,938	3.0%	0	0.0%	0	0.0%
Educational	141	2.4%	1,255	1.9%	7	0.6%	44	1.0%
Government	57	1.0%	733	1.1%	29	2.7%	186	4.3%
Residential	3,462	58.1%	39,510	60.0%	106	9.9%	573	13.4%
Airport	9	0.2%	57	0.1%	0	0.0%	0	0.0%
Eating Establishment	109	1.8%	1,271	1.9%	2	0.2%	12	0.3%
Hotel/Motel	47	0.8%	532	0.8%	0	0.0%	0	0.0%
Other	92	1.5%	487	0.7%	12	1.1%	44	1.0%
Total	5,956	100.0%	65,822	100.0%	1,074	100.0%	4,294	100.0%

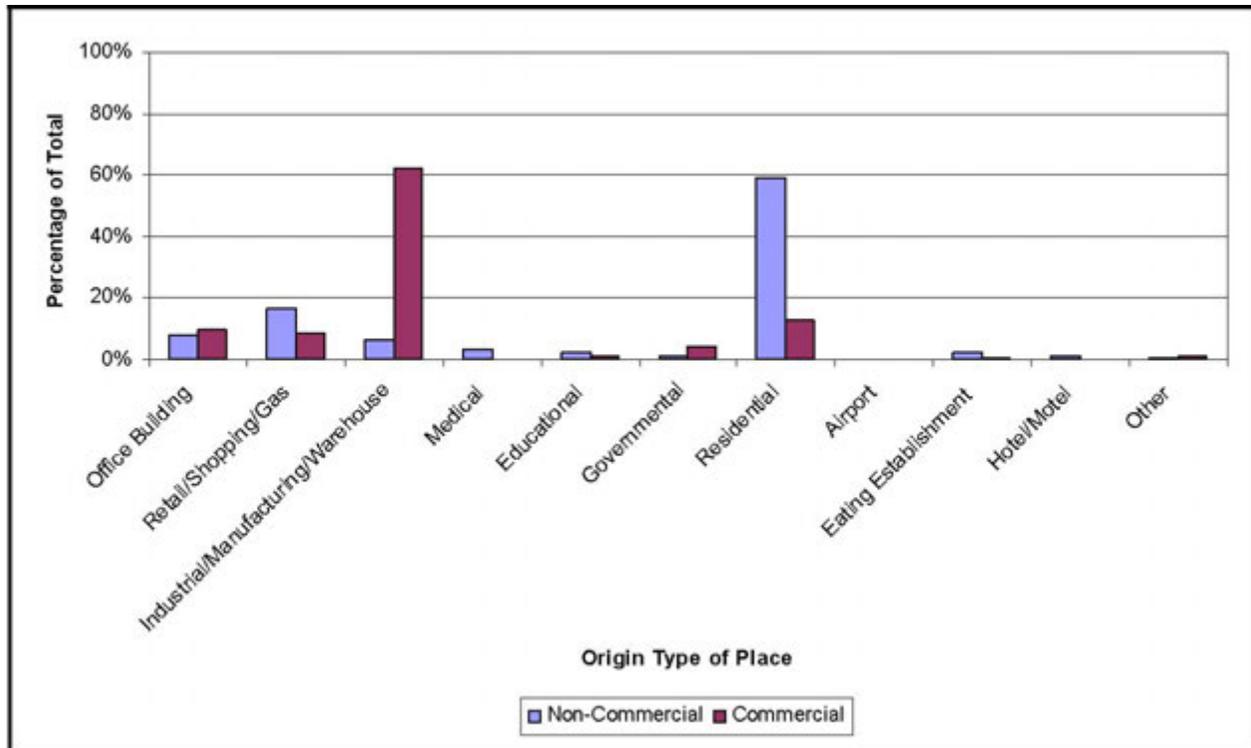


Figure 9. Type of Place at Trip Origin.

Time-of-Day

Vehicle classification counts were conducted at each external survey location on the same day as the survey. These counts were for a 24-hour period and they include data by time-of-day and by direction. This information is primarily used for expansion of the survey data, but is also of interest to examine the distribution of vehicles by time-of-day. Figures 10 and 11 provide the distribution of non-commercial and commercial vehicles by time-of-day for all of the external locations by inbound and outbound direction, respectively.

For inbound vehicles, the morning peak occurs at 7 a.m. for non-commercial and commercial vehicles. There is an afternoon peak period for non-commercial vehicles between 5 p.m. and 6 p.m., while commercial vehicles remain fairly constant from the morning peak through 5 p.m. when the amount of commercial vehicles begins to decline. For outbound traffic, the morning peak period also occurs at 7 a.m. Non-commercial vehicles have a significant afternoon peak between 5 p.m. and 6 p.m., while the percentage of commercial vehicles remains fairly constant from 9 a.m. through 5 p.m.

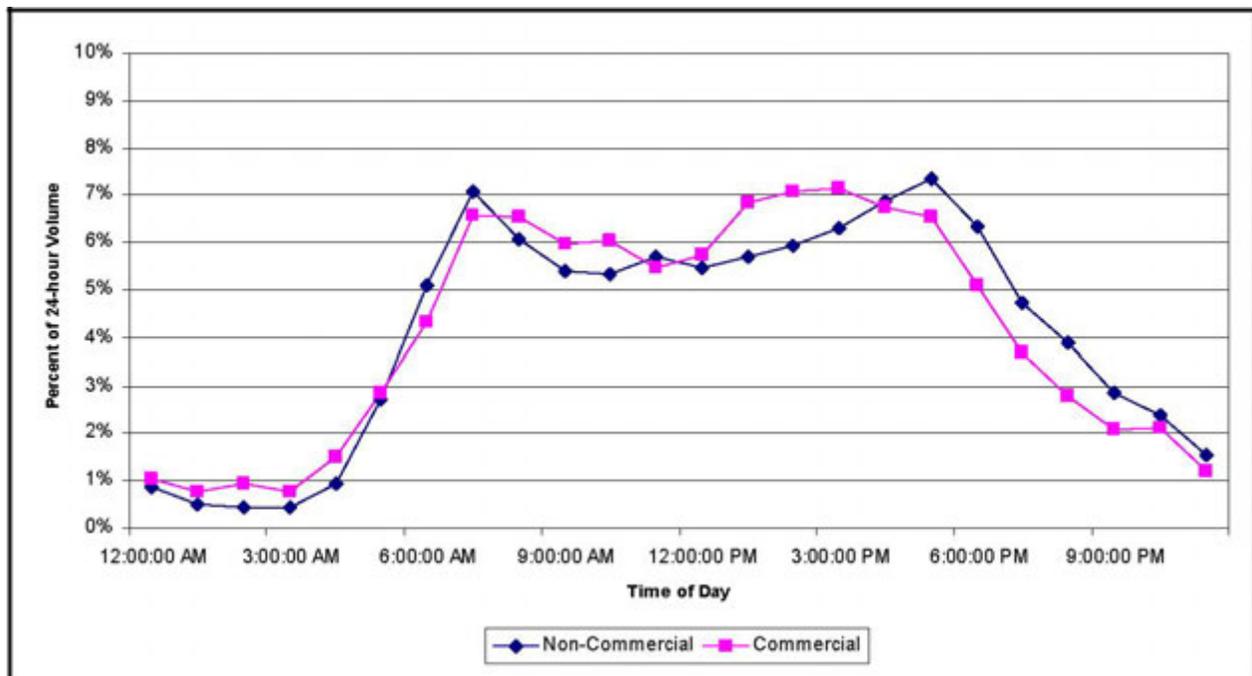


Figure 10. Distribution of Inbound Vehicles by Time-of-Day.

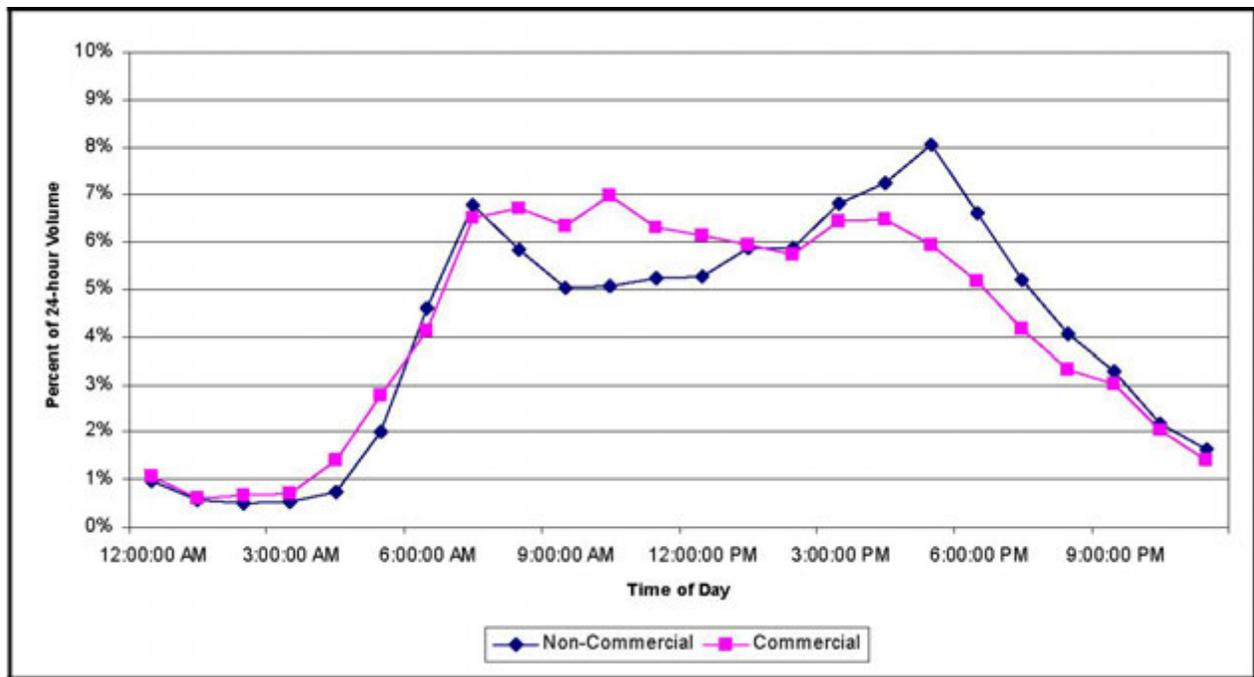


Figure 11. Distribution of Outbound Vehicles by Time-of-Day.

An additional analysis was performed comparing the number of surveys by time-of-day for both non-commercial and commercial vehicles. In this analysis, the percent of vehicles surveyed in each hourly increment was determined for the time period in which surveys were conducted. Figure 12 shows these results.

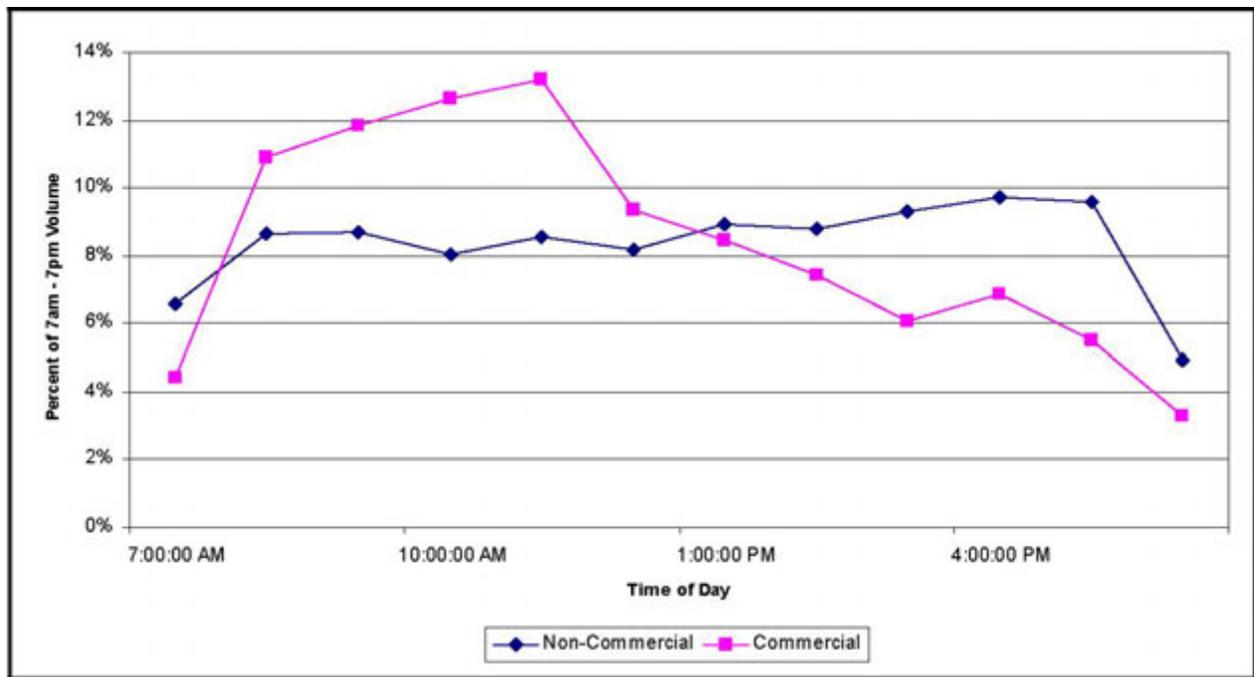


Figure 12. Distribution of Surveys by Time-of-Day.

For non-commercial vehicles, the percent of surveys completed each hour was fairly constant throughout the day, with a slightly higher peak during the afternoon hours. During the survey hours, 14 percent of the non-commercial vehicles traveling out of the study area were interviewed. There was a different trend among commercial vehicles. The percent of vehicles counted peaked during the morning, and then declined throughout the afternoon. In total, over 14 percent of the commercial vehicles that were traveling out of the study area (into the study area at international border sites) were successfully interviewed during survey hours.

A final comparison of the count totals for the survey locations was also conducted. In this analysis, the percent of total vehicles counted in each hourly increment was determined for the time the survey was conducted. Figure 13 shows these results.

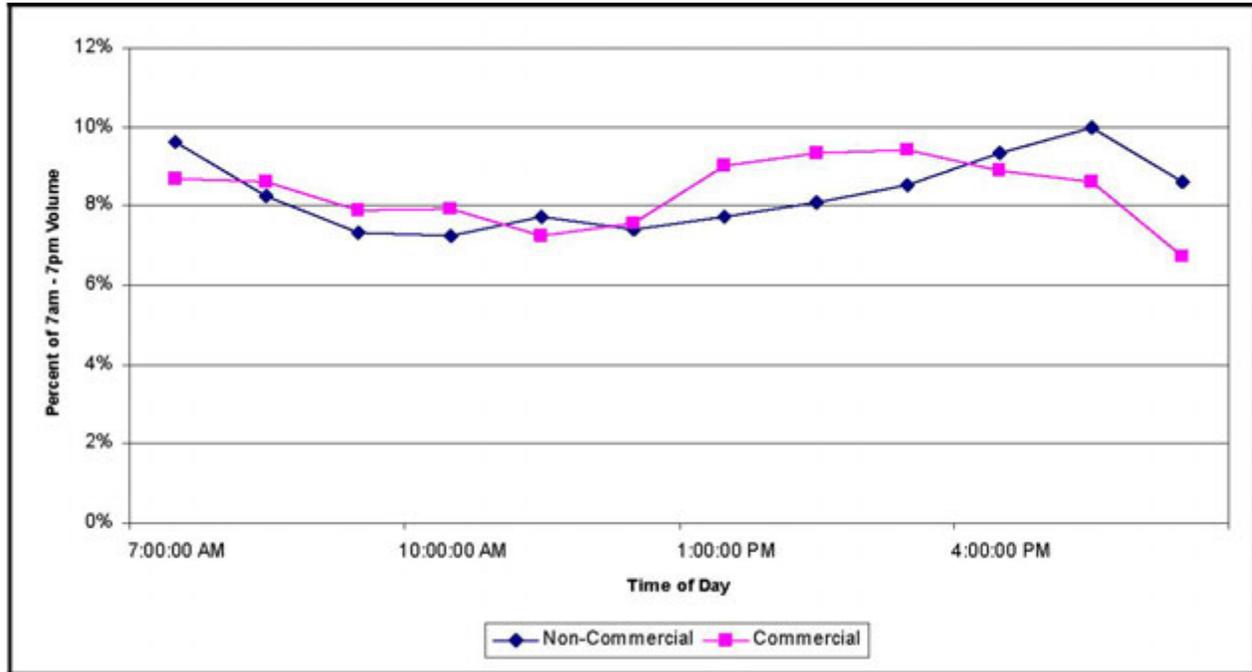


Figure 13. Distribution of Counted Outbound Vehicles during Survey Hours.

Vehicle Characteristics

As part of the survey, interviewers collected data on the year, make, odometer readings, and model of each vehicle surveyed. This provides an indication of the distribution of vehicles traveling through the external stations by type, age, and condition (as implied by the number of miles on the vehicle). Figure 14 presents the percent distribution of non-commercial and commercial vehicles by age as reported in the surveys. The average age was 7.6 years for non-commercial vehicles and 9.8 years for commercial vehicles. The median age for non-commercial vehicles was seven years, and for commercial vehicles it was nine years.

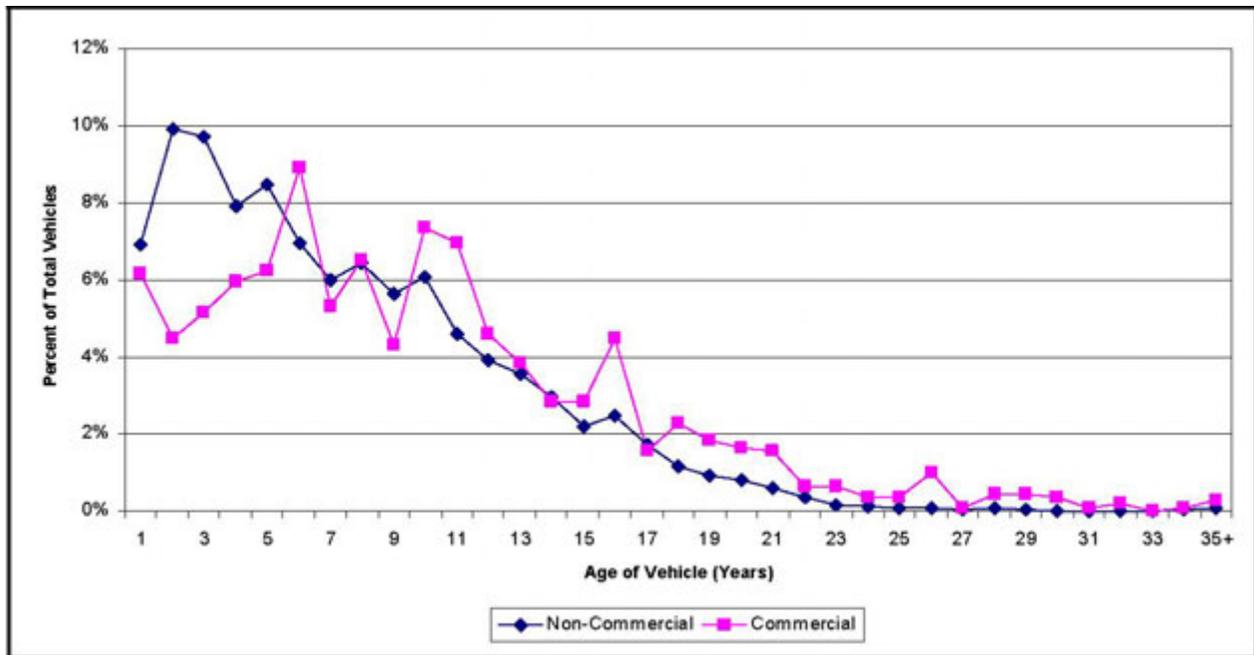


Figure 14. Distribution of Surveyed Vehicles by Age of Vehicle.

Figure 15 presents the average odometer reading for non-commercial and commercial vehicles by age. This data shows the difference in mileage accumulation rates of commercial vehicles as compared to non-commercial vehicles. For the Valley, the average odometer reading for non-commercial vehicles was 115,744 and the average commercial vehicle odometer reading was 385,994. Figure 15 shows that, on average, non-commercial vehicles took five years to reach the first 100,000 miles, but an additional 11+ years to reach the next 100,000 miles. Commercial vehicles, however, reached the first 200,000 miles in two years, but took an additional four years to reach the next 200,000 miles. For more detailed information, Table 8 presents the numerical values for the non-commercial data plotted in Figures 14 and 15. Table 9 provides similar information for commercial vehicles.

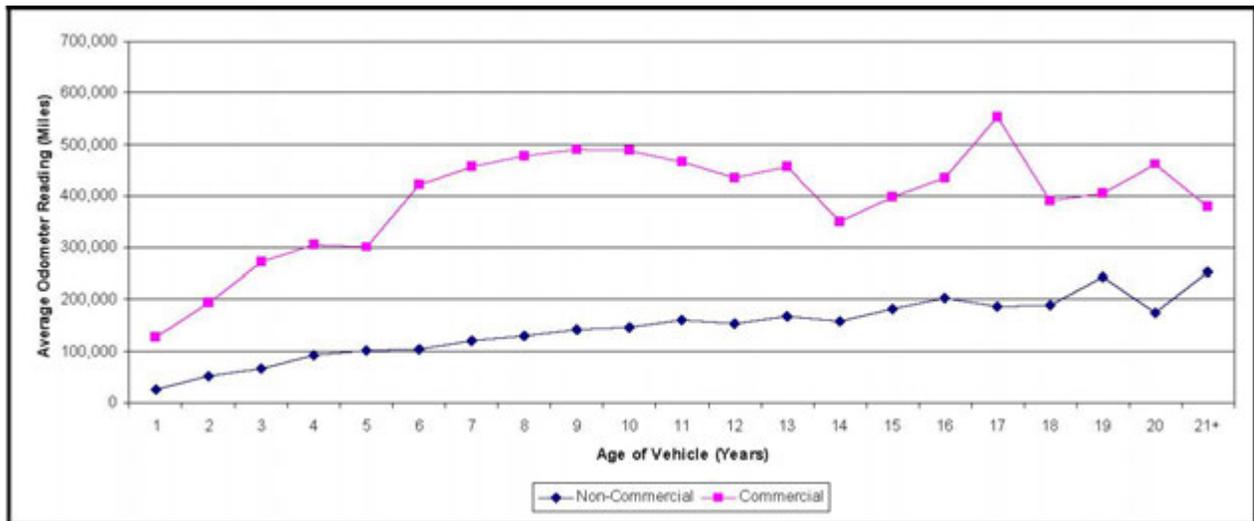


Figure 15. Average Odometer Readings for Vehicles by Age of Vehicle.

Table 8. Distribution of Non-Commercial Vehicles by Age and Average Odometer Readings.

Age	Number of Vehicles (Counted)	Percent of Total	Number of Vehicles (Expanded)	Percent of Total	Average Reported Odometer Value
1	418	7.0%	4,134	6.3%	27,168
2	585	9.8%	5,933	9.0%	51,355
3	579	9.7%	6,050	9.2%	67,368
4	477	8.0%	5,093	7.7%	91,761
5	502	8.4%	5,297	8.1%	102,365
6	411	6.9%	4,194	6.4%	104,762
7	361	6.1%	4,068	6.2%	121,351
8	393	6.6%	4,717	7.2%	131,022
9	333	5.6%	3,829	5.8%	141,191
10	358	6.0%	4,336	6.6%	147,729
11	274	4.6%	3,424	5.2%	160,366
12	227	3.8%	2,685	4.1%	154,836
13	214	3.6%	2,336	3.5%	166,762
14	176	3.0%	2,151	3.3%	159,169
15	129	2.2%	1,560	2.4%	182,896
16	153	2.6%	1,805	2.7%	202,620
17	97	1.6%	1,139	1.7%	187,630
18	70	1.2%	770	1.2%	188,747
19	53	0.9%	561	0.8%	244,560
20	49	0.8%	730	1.1%	174,145
>20	98	1.6%	1,011	1.5%	252,961
Total	5,957	100.0%	65,823	100.0%	

Table 9. Distribution of Commercial Vehicles by Age and Average Odometer Readings.

Age	Number of Vehicles (Counted)	Percent of Total	Number of Vehicles (Expanded)	Percent of Total	Average Reported Odometer Value
1	67	6.2%	356	8.3%	126,608
2	49	4.6%	232	5.4%	193,186
3	55	5.1%	245	5.7%	272,243
4	64	6.0%	255	6.0%	305,326
5	66	6.1%	297	6.9%	301,242
6	94	8.7%	418	9.7%	422,103
7	58	5.4%	245	5.7%	456,398
8	71	6.6%	299	7.0%	477,461
9	46	4.3%	242	5.6%	488,639
10	79	7.4%	279	6.5%	486,768
11	75	7.0%	299	7.0%	465,668
12	50	4.6%	212	4.9%	434,513
13	41	3.8%	100	2.3%	455,256
14	30	2.8%	81	1.9%	350,473
15	31	2.9%	98	2.3%	398,370
16	48	4.5%	203	4.7%	435,682
17	17	1.6%	63	1.5%	553,589
18	24	2.2%	55	1.3%	390,229
19	20	1.9%	72	1.7%	404,800
20	17	1.6%	27	0.6%	460,493
>20	72	6.7%	213	5.0%	378,552
Total	1,074	100.0%	4,291	100.0%	

Vehicle Occupancy

As vehicles were surveyed, one of the data items recorded was the class or type of vehicle and the number of persons in the vehicle. This information provides a means for estimating the number of persons traveling in and out of the Valley study area. Table 10 presents the number of observed non-commercial and commercial vehicles by class and the average occupancy of each. Nearly all of the non-commercial vehicles (99 percent) were classified as passenger vehicles. The majority of commercial vehicles (80 percent) were semi/tractor-trailer combinations. The overall average occupancy for non-commercial vehicles was 1.42 and 1.03 for commercial vehicles.

Table 10. Distribution of Vehicles by Class and Average Occupancy.

Non-Commercial Vehicles	Observed Vehicles	Average Occupancy	Commercial Vehicles	Observed Vehicles	Average Occupancy
Passenger Vehicle	5,928	1.42	Single Unit 2-axle (6 wheels)	99	1.08
Bus	0	0.00	Single Unit 3-axle (10 wheels)	82	1.04
Taxi/Paid Limo	4	2.00	Single Unit 4-axle (14 wheels)	23	1.00
School Bus	0	0.00	Semi (tractor-trailer)	868	1.02
Commercial Vehicle (over 1 ton)	6	1.17	Other	2	1.00
Motorcycle	14	1.14			
Recreational Vehicle	4	1.00			
Other	0	0.00			
Total	5,956	1.42	Total	1,074	1.03

COMMERCIAL VEHICLE CARGO CHARACTERISTICS

Commercial vehicles represent a major component of travel into, out of, and through most study areas. Specific questions were included in the commercial vehicle survey to obtain information about the cargo being transported, the type of facility where it was picked up and dropped off, and how the cargo was transported to the vehicle. Table 11 presents data on the number of commercial vehicles surveyed by external station, the number and percent of vehicles not transporting any cargo, and whether or not their cargo was from Mexico. In Table 11, nearly 51 percent of the vehicles reported not carrying any cargo. Of those vehicles transporting cargo, 43

percent of those cargos were from or headed to Mexico. For those vehicles carrying a cargo, less than 1 percent reported picking their cargo up at an intermodal facility and 8 percent indicated that they would be dropping their cargo off at an intermodal facility. An intermodal facility is a site where cargo may be transferred between several different modes (e.g., rail to truck, ship to truck, pipeline to truck, etc.).

Table 11. Commercial Vehicles with Cargo from Mexico.

Station Number	Facility	Surveyed Vehicles	Empty Vehicles	Percent Empty	Vehicles with Mexico Cargo	Vehicles without Mexico Cargo
900	US 281 N	72	45	62.5%	2	70
901	SH 186	102	29	28.4%	0	102
902	FM 490	N/A				
903	FM 88	52	32	61.5%	1	51
904	FM 1015	16	10	62.5%	0	16
905	FM 1921	N/A				
906	FM 491	N/A				
907	FM 1425	11	7	63.6%	0	11
908	FM 2629	N/A				
909	FM 506	13	4	30.8%	1	12
910	US 77 N	84	44	52.4%	2	82
911	FM 507	N/A				
912	FM 1420	8	4	50.0%	0	8
921	US 77	224	112	50.0%	112	112
922	SH 4	N/A				
923	12th St.	N/A				
926	FM 509	69	18	26.1%	50	19
935	FM 1015	38	34	89.5%	4	34
936	Spur 600	156	97	62.2%	59	97
937	SH 115	N/A				
938	FM 886	N/A				
939	US 83 W	84	68	81.0%	0	84
940	FM 490	80	25	31.3%	1	79
941	FM 1017	65	23	35.4%	0	65
Total		1,074	552	51.4%	232	842

Table 12 provides a detailed summary of cargo types reported for commercial vehicles. It was found that 15 percent reported that their cargo was manufactured goods/equipment, 11 percent reported a cargo of farm products, and food, health, and beauty products accounted for an additional 9 percent of the cargo.

Table 12. Distribution of Commercial Vehicles by Type of Cargo.

Cargo Description		Number of Vehicles	Percent of Vehicles
1	Farm Products	114	10.6%
2	Forest Products	3	0.3%
3	Marine Products	0	0.0%
4	Metals and Minerals	40	3.7%
5	Food, Health, and Beauty Products	91	8.5%
6	Tobacco Products	0	0.0%
7	Textiles	7	0.7%
8	Wood Products	22	2.0%
9	Printer Matter	2	0.2%
10	Chemical Products	8	0.7%
11	Refined Petroleum or Coal Products	22	2.0%
12	Rubber, Plastic, and Styrofoam Products	14	1.3%
13	Clay, Concrete, Glass, or Stone	10	0.9%
14	Manufactured Goods/Equipment	161	15.0%
15	Wastes	7	0.7%
16	Miscellaneous Shipments	2	0.2%
17	Hazardous Materials	3	0.3%
18	Transportation	16	1.5%
19	Unclassified Cargo	0	0.0%
20	Driver Refused to Answer	0	0.0%
21	Unknown to Driver	0	0.0%
22	Empty	552	51.4%
Total		1,074	100.0%

Figures 16 and 17 present the distribution of surveyed commercial vehicles by the type of transfer for their cargo at the origin (point of pick up), and at their destination (point of delivery). Warehouse-to-truck, truck-to-truck, and rail-to-truck accounted for the majority of cargo transfers at both the origin and destination. At the origin, 72 percent of the transfers were warehouse-to-truck and 16 percent were truck-to-truck. At the destination, 70 percent of the transfers were truck-to-warehouse and 16 percent were truck-to-truck.

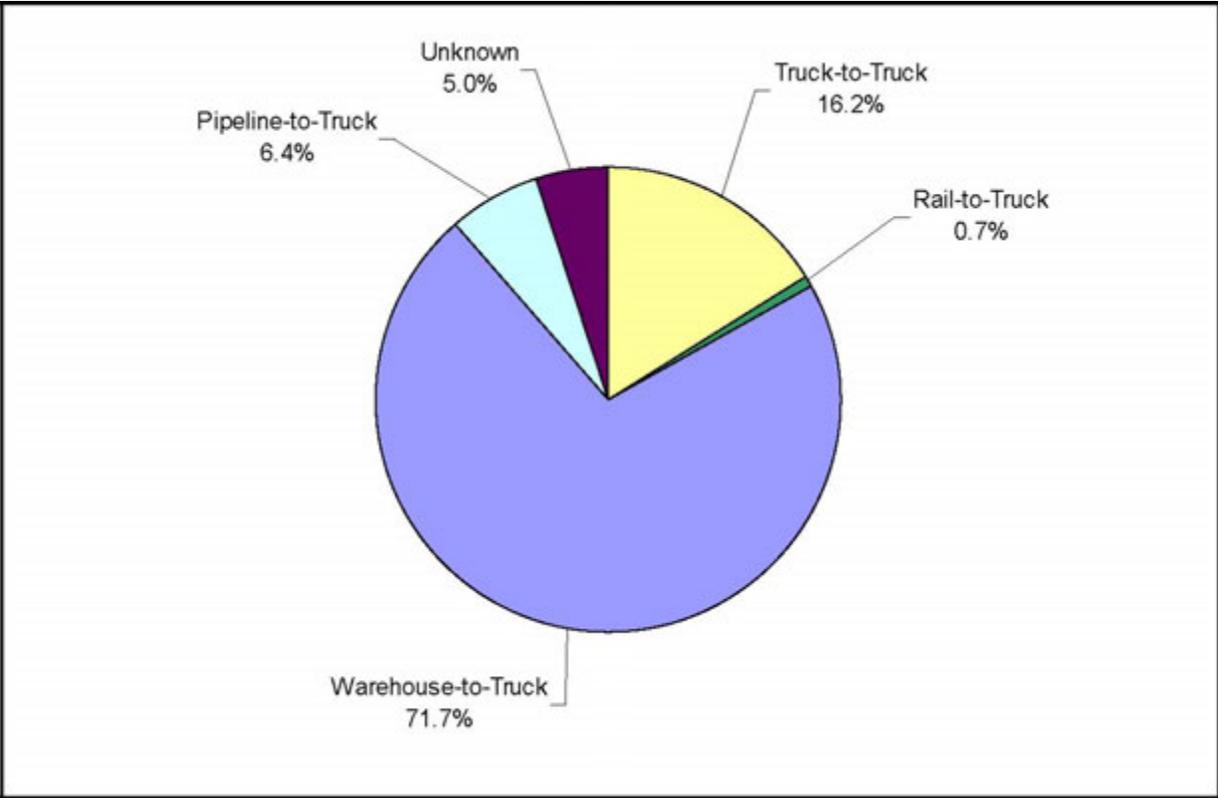


Figure 16. Cargo Transfer at Point of Pick Up.

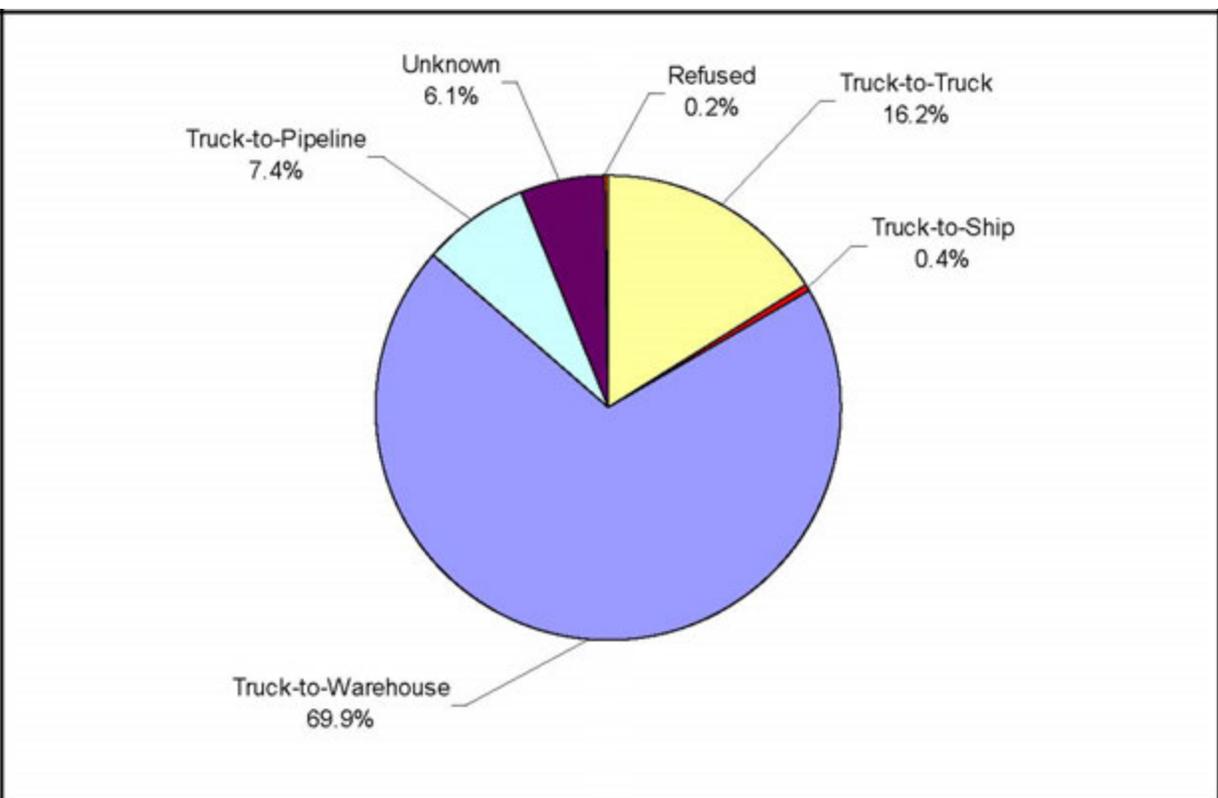


Figure 17. Cargo Transfer at Point of Drop Off.

HIGH-VOLUME LICENSE PLATE MATCH SURVEYS

Two locations in the Valley had traffic volumes that were too high to safely stop traffic and interview motorists. These locations were in Hidalgo County and Harlingen-San Benito. Since these locations connected with a third external station at the Hidalgo County line, the external station was also treated as a high-volume location. For these locations, a license plate match method was used as a means to estimate the number of external-local and external-through non-commercial trips. The license plate matching survey was conducted using high-speed digital cameras, which recorded license plates of non-commercial vehicles entering and exiting the study area at each high-volume location. As previously mentioned, for the purpose of this study, any roadway that had more than 20,000 vehicles per day was considered high volume. The license plate information for these locations was gathered on the same day. After the plate information was recorded, it was processed through a computer program that determined the number of license plate matches between each license plate survey location. For the Hidalgo County high-volume locations, the number of license plates recorded by direction and the 24-hour traffic counts for these locations are provided in Table 13a. For Harlingen-San Benito, this information can be found in Table 13b.

Table 13a. High-Volume Locations for Hidalgo County.

Station Number	Facility	Location	License Plates Recorded		24-Hour Vehicle Count	
			Inbound	Outbound	Inbound	Outbound
939	US 83 W	at Starr County Line	5,737	5,223	8,466	8,841
932	US 83	at Cameron County Line	13,772	11,679	23,542	23,498

Table 13b. High-Volume Locations for Harlingen-San Benito.

Station Number	Facility	Location	License Plates Recorded		24-Hour Vehicle Count	
			Inbound	Outbound	Inbound	Outbound
931	US 83	at Cameron County Line	11,679	13,772	23,498	23,542
942	US 83 E	south of San Benito	13,044	13,330	23,037	23,118

Only matches meeting specified criteria that occurred within acceptable time limits between each survey location were considered valid matches. One criterion for license plate data was that at least five of the six characters (in consecutive order) match in order for the plate to be considered

valid. Additionally, travel time runs were made for the AM peak, off-peak, and PM peak periods to establish reasonable time limits for an external-through vehicle to travel between license plate survey stations. The travel times were then increased by 20 percent for peak periods and 10 percent for off-peak periods to account for variation in travel speeds among motorists. Table 14a provides the travel times used for the analysis of license plate data for Hidalgo County. Table 14b provides the travel times used for the analysis of license plate data for Harlingen-San Benito.

Table 14a. High-Volume Travel Times for Hidalgo County.

Movement	Travel Time in Minutes		
	AM Peak	Off-Peak	PM Peak
US 83 W (939) to US 83 (932)	42	39	48

Table 14b. High-Volume Travel Times for Harlingen-San Benito.

Movement	Travel Time in Minutes		
	AM Peak	Off-Peak	PM Peak
US 83 (931) to US 83 E (942)	25	30	39

Using the travel time estimates provided in Tables 14a and 14b, the total number of license plates determined to be traveling between the high-volume locations was determined. The results of this analysis are provided in Tables 15a and 15b.

Table 15a. Results of License Plate Matching for High-Volume Locations in Hidalgo County.

License Recorded Route		External-Through Trips (Matched Licenses)	External-Local Trips (Unmatched Licenses)
From	To		
US 83 W (939)	US 83 (932)	32	5,705
US 83 (932)	US 83 W (939)	21	13,751

Table 15b. Results of License Plate Matching for High-Volume Locations in Harlingen-San Benito.

License Recorded Route		Through Trips (Matched Licenses)	Local Trips (Unmatched Licenses)
From	To		
US 83 (931)	US 83 E (942)	295	11,384
US 83 E (942)	US 83 (931)	782	12,262

PEDESTRIAN SURVEYS

Included in the Rio Grande Valley external survey were surveys of pedestrians at international crossings. While most external surveys typically involve stopping and surveying drivers of vehicles at locations where vehicles enter and leave a study area, those areas that have international crossing with Mexico also allow pedestrians to enter and leave the study area at certain locations. Four international crossings were identified in the Rio Grande Valley where pedestrians were allowed to cross between Mexico and the study area. At these locations, pedestrians entering the study area were stopped and asked to participate in the survey. Those agreeing were interviewed. The data collected was similar to that collected for vehicles entering the study area. Table 16 presents the locations surveyed, number of pedestrians surveyed and the inbound and outbound counts of pedestrians at each location.

Table 16. Rio Grande Valley Pedestrian Survey Locations.

Location	Pedestrians Surveyed	24 Hour Pedestrian Counts		
		Inbound	Outbound	Total
Gateway International Bridge	360	6,937	7,020	13,957
McAllen-Hidalgo-Reynosa International Bridge	119	5,214	4,892	10,106
B & M International Bridge	248	335	247	582
Progreso International bridge	186	1,693	1,655	3,348
Totals	913	14,179	13,814	27,993

Nearly 28,000 pedestrians move between Mexico and the study area on an average weekday. Figures 18 and 19 present the percent distributions of these movements by time-of-day for inbound and outbound. The inbound movements show definite peaks in the morning and evening for all but one of the crossings, the B & M bridge. The inbound pedestrian crossings on the B & M bridge have an afternoon peak and a mid-day peak. The distribution of inbound and outbound pedestrians on the two largest crossings, the McAllen-Hidalgo-Reynosa and the Gateway bridges, are very similar and almost mirror images. The inbound and outbound distributions on the other two bridges are different. For the Progreso International crossing, the inbound movement peaks in the afternoon while the outbound movement peaks in the morning. The reason for this type of distribution is unknown. One possible explanation is movement of tourists at that location. The majority of participants in the survey, however, stated they lived in Mexico. Inbound movements on the B & M bridge peaked in the afternoon while outbound movements peaked mid-day.

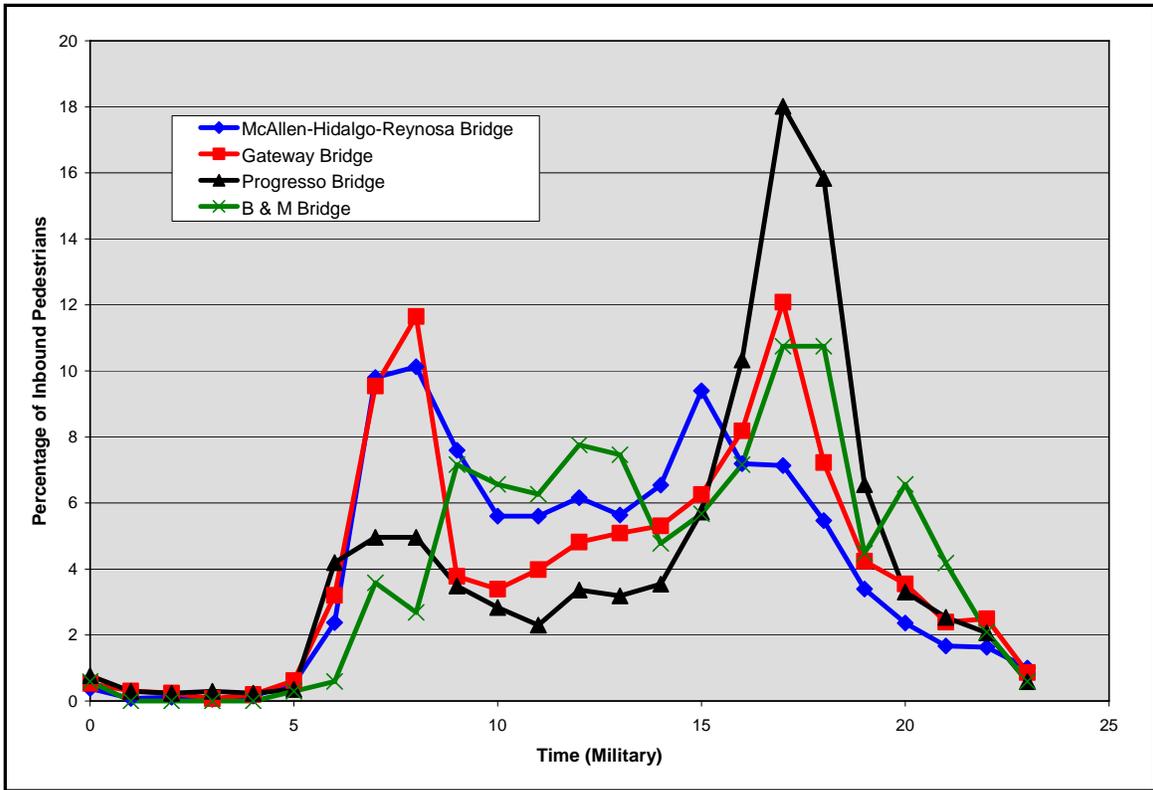


Figure 18. Percent of Inbound Pedestrian Crossings by Time-of-Day.

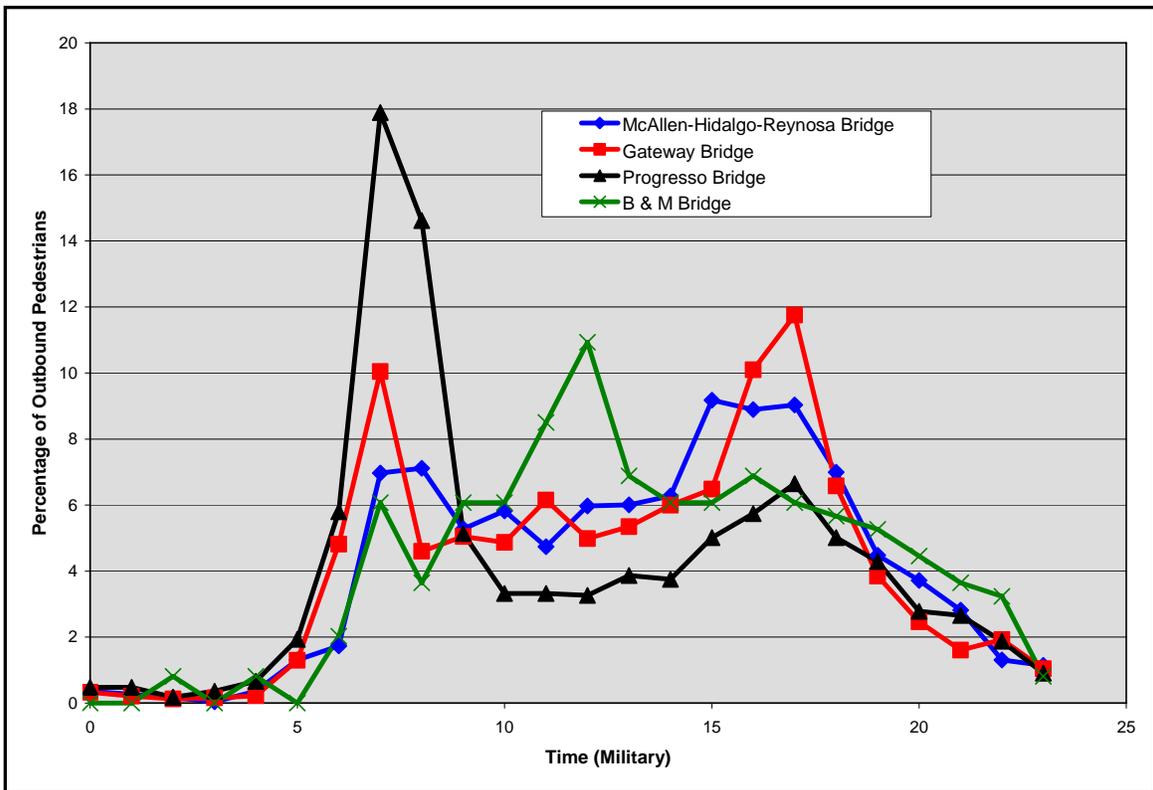


Figure 19. Percent of Outbound Pedestrian Crossings by Time-of-Day.

Table 17 presents the distribution of participants based on where they said they lived. Two-out-of-three respondents in the survey stated they lived in Mexico. A majority of the remaining respondents reported they lived in the study area that consisted of Cameron and Hidalgo counties. Only 4 percent reported they lived in Texas.

Table 17. Pedestrians by Place of Residence.

Survey Location	Place of Residence							
	Mexico	Pct	Study Area	Pct	Texas	Pct	Other	Pct
Gateway International Bridge	295	81.9	64	17.8	1	0.3	0	0.0
McAllen-Hidalgo-Reynosa International Bridge	89	74.8	29	24.4	1	0.8	0	0.0
B & M International Bridge	83	33.5	121	48.8	32	12.9	12	4.8
Progreso International bridge	138	74.2	41	22.0	5	2.7	2	1.1
Totals	605	66.3	255	27.9	39	4.3	14	1.5

Pedestrians were asked the type of place where they began their trip to the crossing and the type of place at their destination from the crossing. Figures 20 and 21 present the percent distribution at the origin and destination for all crossings combined. Tables 18 and 19 present the distributions for each crossing. The majority of pedestrians surveyed began their trip at a residential type of place. The majority indicated that their destination was at a retail/shop/gas type of place.

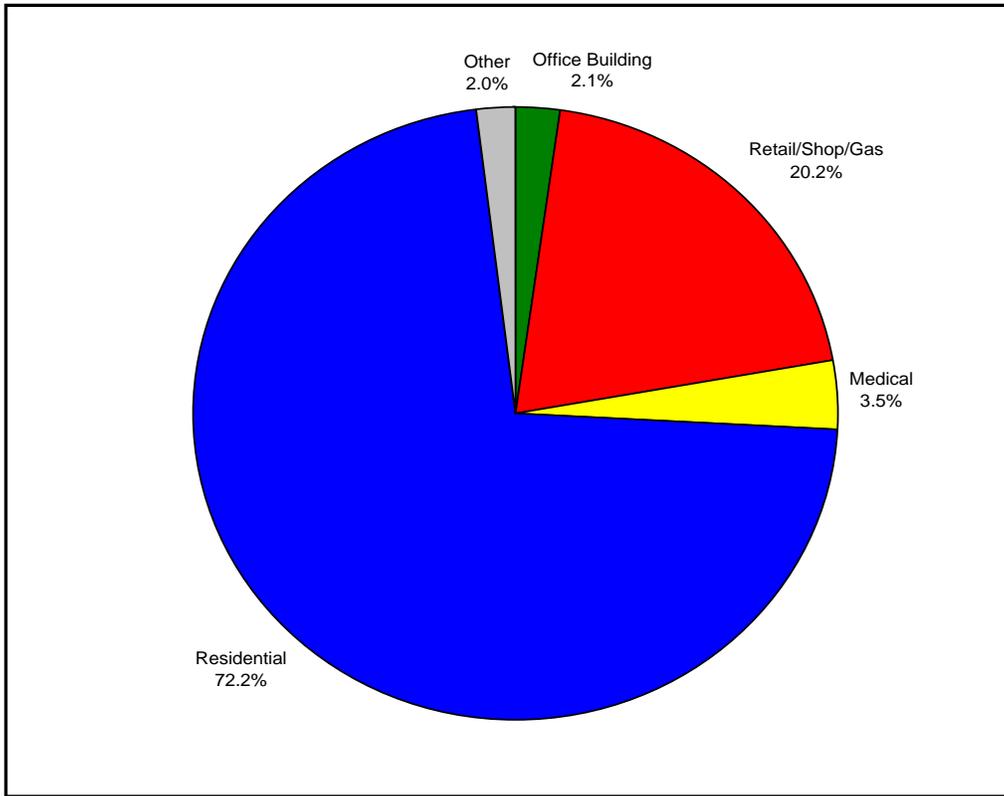


Figure 20. Percent of Place Types at Origin of Trip.

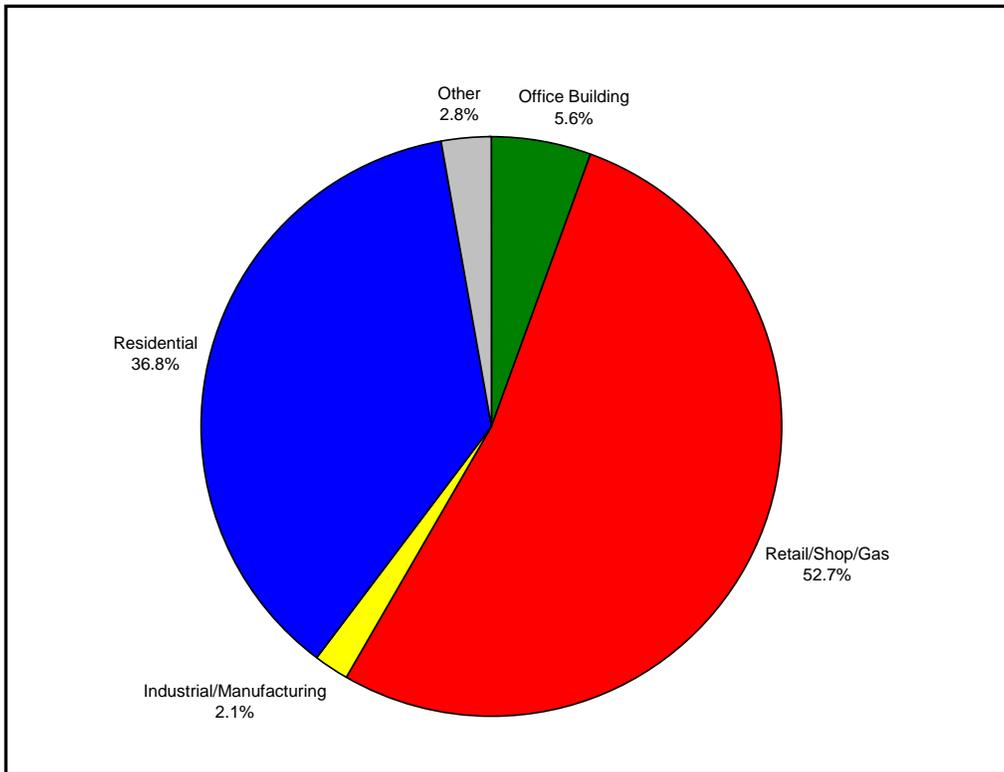


Figure 21. Percent of Place Types at Destination of Trip.

Table 18. Type of Place at Origin of Trip.

Type of Place	International Bridge Crossing							
	Gateway	Pct	McAllen-Hidalgo Reynosa	Pct	B & M	Pct	Progreso	Pct
Office Bldg.	4	1.1	13	10.9	0	0.0	2	1.1
Retail/Shop/Gas	32	8.8	7	5.9	134	54.0	11	5.9
Industrial/Manufacturing	1	0.3	3	2.5	0	0.0	0	0.0
Medical	4	1.1	1	0.8	19	7.7	8	1.3
Education – 1 thru 12	1	0.3	0	0.0	0	0.0	1	0.5
Education – Post Sec.	1	0.3	0	0.0	0	0.0	0	0.0
Government	1	0.3	0	0.0	1	0.4	0	0.0
Residential	315	87.5	93	78.2	88	35.5	163	87.7
Airport	0	0.0	0	0.0	0	0.0	0	0.0
Eating Place	0	0.0	2	1.7	5	2.0	0	0.0
Other	1	0.3	0	0.0	1	0.4	1	0.5
Unknown	0	0.0	0	0.0	0	0.0	0	0.0
Total	360	100.0	119	100.0	248	100.0	186	100.0

Table 19. Type of Place at Destination of Trip.

Type of Place	International Bridge Crossing							
	Gateway	Pct	McAllen-Hidalgo Reynosa	Pct	B & M	Pct	Progreso	Pct
Office Bldg.	4	1.1	17	14.3	19	7.7	11	5.9
Retail/Shop/Gas	267	74.1	61	51.3	56	22.6	97	52.2
Industrial/Manufacturing	1	0.3	8	6.7	7	2.8	3	1.6
Medical	1	0.3	0	0.0	0	0.0	1	0.5
Education – 1 thru 12	2	0.6	0	0.0	3	1.2	0	0.0
Education – Post Sec.	0	0.0	0	0.0	0	0.0	0	0.0
Government	3	0.8	3	2.5	1	0.4	1	0.5
Residential	81	22.5	29	24.4	156	62.9	70	37.7
Airport	0	0.0	0	0.0	0	0.0	1	0.5
Eating Place	1	0.3	1	0.8	2	0.8	0	0.0
Other	0	0.0	0	0.0	4	1.6	2	1.1
Unknown	0	0.0	0	0.0	0	0.0	0	0.0
Total	360	100.0	119	100.0	248	100.0	186	100.0

Pedestrians were also asked their purpose for being at the origin of their trip and their purpose for traveling to their destination. Figures 22 and 23 present the distribution of these purposes at the origin and destination for all crossings combined while Tables 20 and 21 present the detailed distributions by crossing. The majority of persons surveyed began their trip at home as indicated in Figure 22 but interestingly, the next largest purpose at the origin was shopping. At the destination, the majority of respondents indicated their purpose was shopping with the next largest purpose being at home or returning home. Only 7 percent of the respondents were traveling to their destination for work-related purposes.

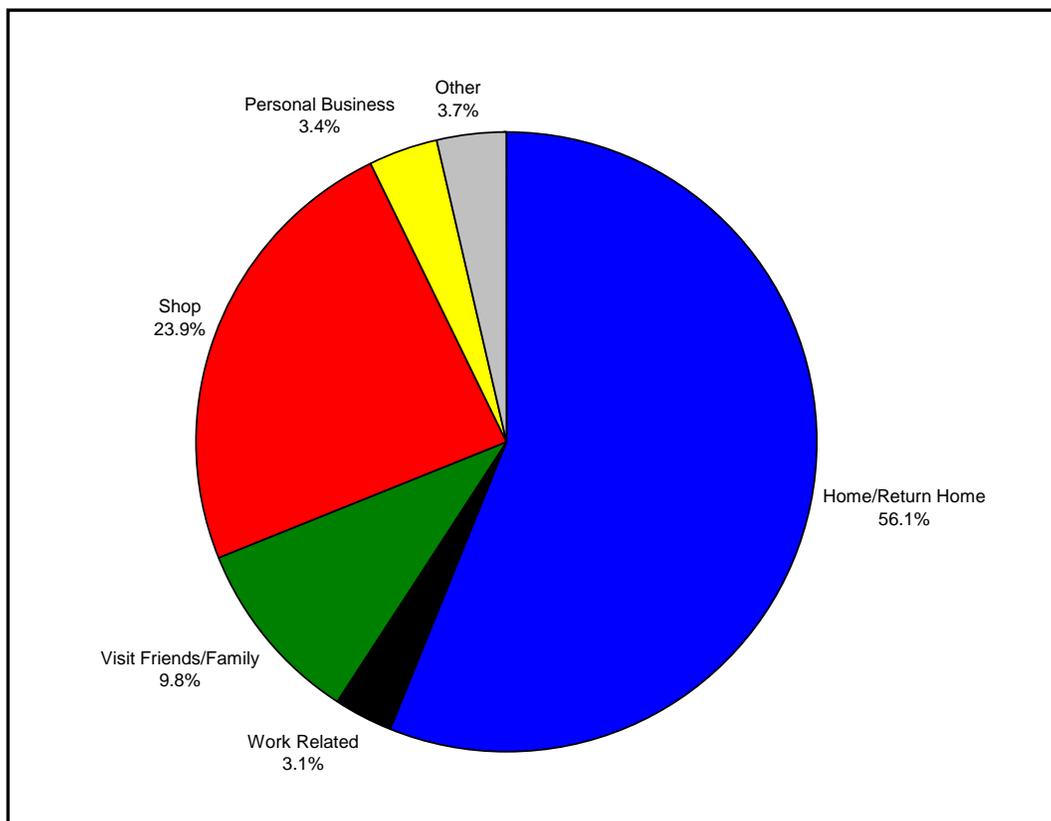


Figure 22. Percent of Trip Purposes at Origin of Trip.

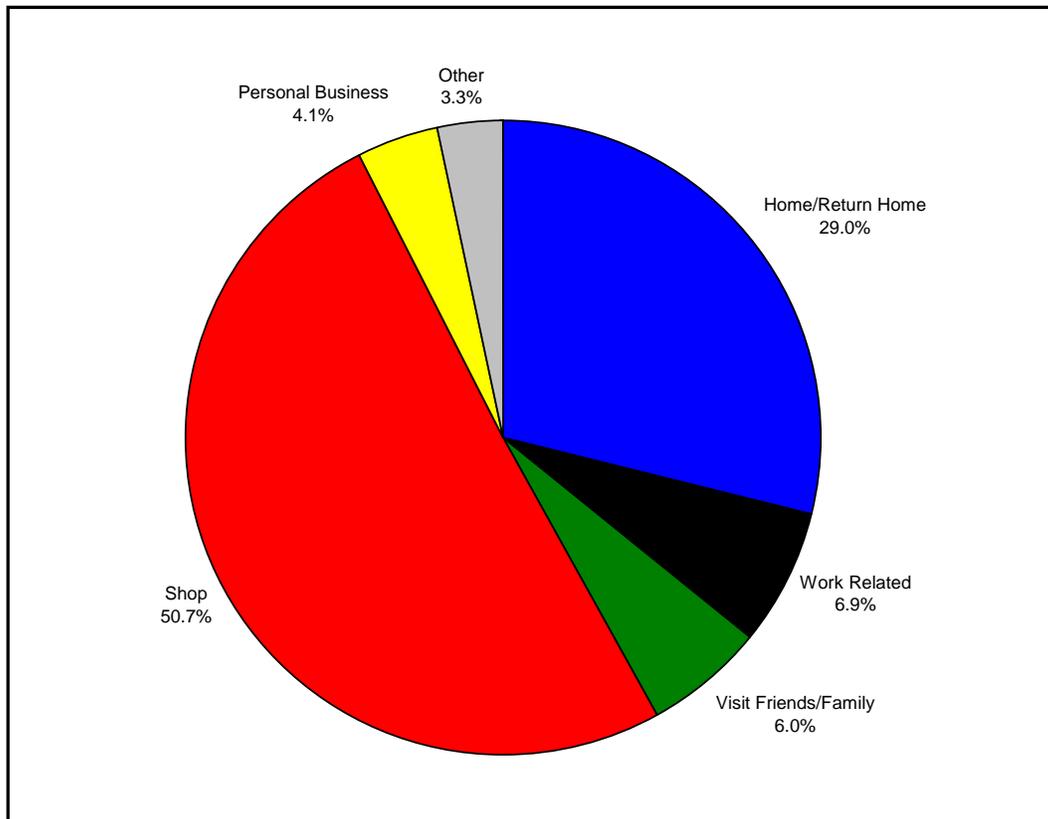


Figure 23. Percent of Trip Purposes at Destination of Trip.

Table 20. Purpose at Origin of Trip.

Purpose	International Bridge Crossing							
	Gateway	Pct	McAllen-Hidalgo-Reynosa	Pct	B & M	Pct	Progresso	Pct
Home/Ret. to Home	283	78.6	72	60.5	78	31.5	79	42.5
Go To/Ret. Work	1	0.3	1	0.8	2	0.8	2	1.1
Work Related	3	0.8	15	12.6	2	0.8	8	4.3
School	1	0.3	0	0.0	0	0.0	0	0.0
Vacation	0	0.0	0	0.0	0	0.0	2	1.1
Visit Friends/Family	32	8.9	19	16.0	9	3.6	29	15.6
Eat Out	0	0.0	2	1.7	8	3.2	1	0.5
Shop	35	9.7	7	5.9	135	54.5	41	22.0
Personal Business	3	0.8	3	2.5	6	2.4	19	10.2
Delivery	0	0.0	0	0.0	0	0.0	0	0.0
Other	2	0.6	0	0.0	7	2.8	4	2.2
Unknown	0	0.0	0	0.0	1	0.4	1	0.5
Total	360	100.0	119	100.0	248	100.0	186	100.0

Table 21. Purpose at Destination of Trip.

Purpose	International Bridge Crossing							
	Gateway	Pct	McAllen-Hidalgo-Reynosa	Pct	B & M	Pct	Progreso	Pct
Home/Ret. to Home	66	18.3	23	19.3	145	58.5	31	16.7
Go To/Ret. Work	2	0.6	1	0.8	7	2.8	4	2.2
Work Related	4	1.1	25	21.0	19	7.7	15	8.1
School	2	0.6	0	0.0	2	0.8	0	0.0
Vacation	1	0.3	0	0.0	0	0.0	0	0.0
Visit Friends/Family	16	4.4	6	5.1	13	5.2	20	10.7
Eat Out	1	0.3	1	0.8	2	0.8	0	0.0
Shop	263	73.0	56	47.1	55	22.2	89	47.8
Personal Business	2	0.6	7	5.9	2	0.8	26	14.0
Delivery	3	0.8	0	0.0	0	0.0	0	0.0
Other	0	0.0	0	0.0	3	1.2	1	0.5
Unknown	0	0.0	0	0.0	0	0.0	0	0.0
Total	360	100.0	119	100.0	248	100.0	186	100.0

While all of the pedestrians crossed between Mexico and the study area by foot, they were asked how they traveled to the bridge from the origin location and how they would travel from the bridge to their destination location. Figures 24 and 25 present the percent distribution of the responses for the mode of travel to and from the bridge for all bridges combined. Tables 22 and 23 present the distributions for each bridge. The majority of pedestrians (42 percent) traveled from their origin location to the bridge by bus. About one-in-four pedestrians traveled to the bridge by either walking or as a passenger in a car, truck, or van. These three modes accounted for 94 percent of the pedestrians in terms of the mode of travel from the origin location to the bridge used for crossing. After crossing into the study area, 84 percent of the pedestrians continued their trip to their destination by either walking (43 percent) or as a passenger in a car, truck, or van (41 percent).

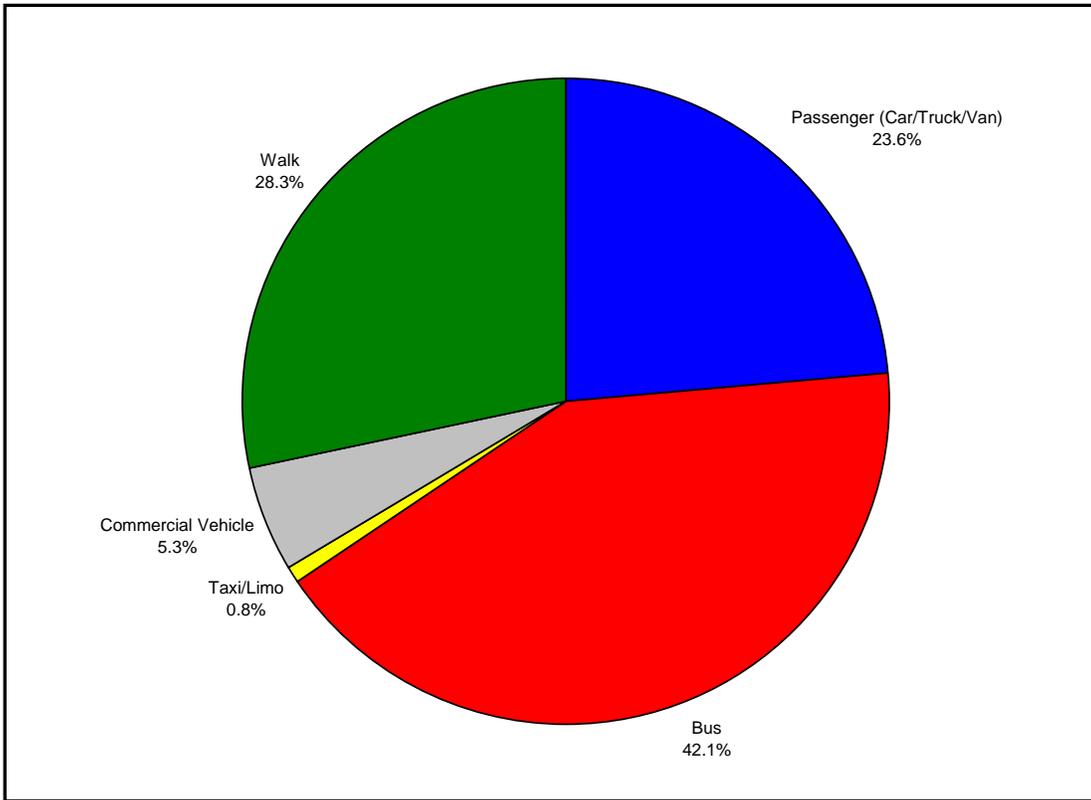


Figure 24. Percent of Trips by Mode from Origin.

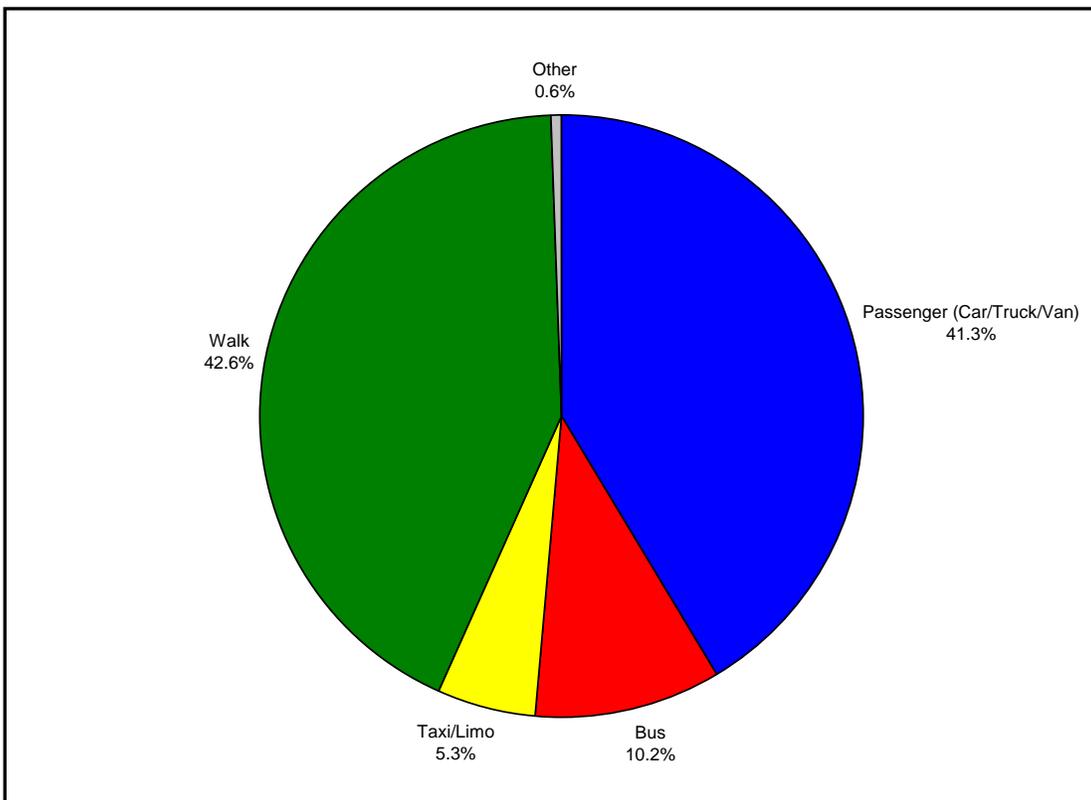


Figure 25. Percent of Trips by Mode to Destination.

Table 22. Percent Distribution of Trips by Mode of Travel from Origin.

Mode	International Bridge Crossing							
	Gateway	Pct	McAllen-Hidalgo-Reynosa	Pct	B & M	Pct	Progreso	Pct
Passenger (Car/Truck/Van)	77	21.4	55	46.2	49	19.8	34	18.3
Bus	246	68.3	35	29.4	26	10.5	77	41.4
Taxi/Limo	4	1.1	1	0.9	1	0.4	1	0.5
School Bus	0	0.0	0	0.0	0	0.0	0	0.0
Commercial Vehicle	2	0.6	1	0.9	0	0.0	45	24.2
Motorcycle	0	0.0	0	0.0	0	0.0	1	0.5
Recreational Vehicle	0	0.0	0	0.0	0	0.0	0	0.0
Walk	31	8.6	27	22.6	172	69.3	28	15.1
Other	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0
Total	360	100.0	119	100.0	248	100.0	186	100.0

Table 23. Percent Distribution of Trips by Mode of Travel to Destination.

Mode	International Bridge Crossing							
	Gateway	Pct	McAllen-Hidalgo-Reynosa	Pct	B & M	Pct	Progreso	Pct
Passenger (Car/Truck/Van)	60	16.7	61	51.3	203	81.9	53	28.4
Bus	37	10.3	2	1.7	3	1.2	51	27.4
Taxi/Limo	25	6.9	9	7.5	13	5.2	1	0.6
School Bus	0	0.0	0	0.0	0	0.0	0	0.0
Commercial Vehicle	1	0.3	0	0.0	0	0.0	3	1.6
Motorcycle	0	0.0	0	0.0	0	0.0	1	0.6
Recreational Vehicle	1	0.3	0	0.0	0	0.0	0	0.0
Walk	236	65.5	47	39.5	29	11.7	77	41.4
Other	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0
Total	360	100.0	119	100.0	248	100.0	186	100.0

Pedestrians were also asked how often they made the trip between Mexico and the study area. Table 24 presents the responses for each bridge crossing and Figure 26 presents the distribution for all bridges combined. While one third of the respondents indicated they made the trip more than one time per week, only one percent made the trip every day. This implies that these trips are somewhat discretionary and may be made at different times during the week.

Pedestrians comprise a significant number of trips into and out of the study area. While these trips are walking trips across the international border, they generate a significant number of vehicle movements to and from the bridge crossings for individuals to reach their destination. Based on the survey responses, it is estimated that nearly 12,000 vehicle trips are made to and from the bridge crossings to transport these pedestrians to and from destinations within the study area.

Table 24. Weekly Frequency of Trips by Pedestrians.

Number of Times Per Week Trip is Made	International Bridge Crossing							
	Gateway	Pct	McAllen-Hidalgo-Reynosa	Pct	B & M	Pct	Progresso	Pct
0	100	27.8	31	26.1	143	57.7	58	31.2
1	133	36.9	38	31.9	47	18.9	50	26.9
2	87	24.2	26	21.9	28	11.3	41	22.0
3	27	7.5	6	5.0	16	6.5	13	7.0
4	4	1.1	1	0.8	3	1.2	8	4.3
5	7	1.9	7	5.9	7	2.8	12	6.5
6	1	0.3	6	5.0	2	0.8	0	0.0
7	1	0.3	4	3.4	2	0.8	3	1.6
More than 7	0	0.0	0	0.0	0	0.0	1	0.5
Total	360	100.0	119	100.0	248	100.0	186	100.0

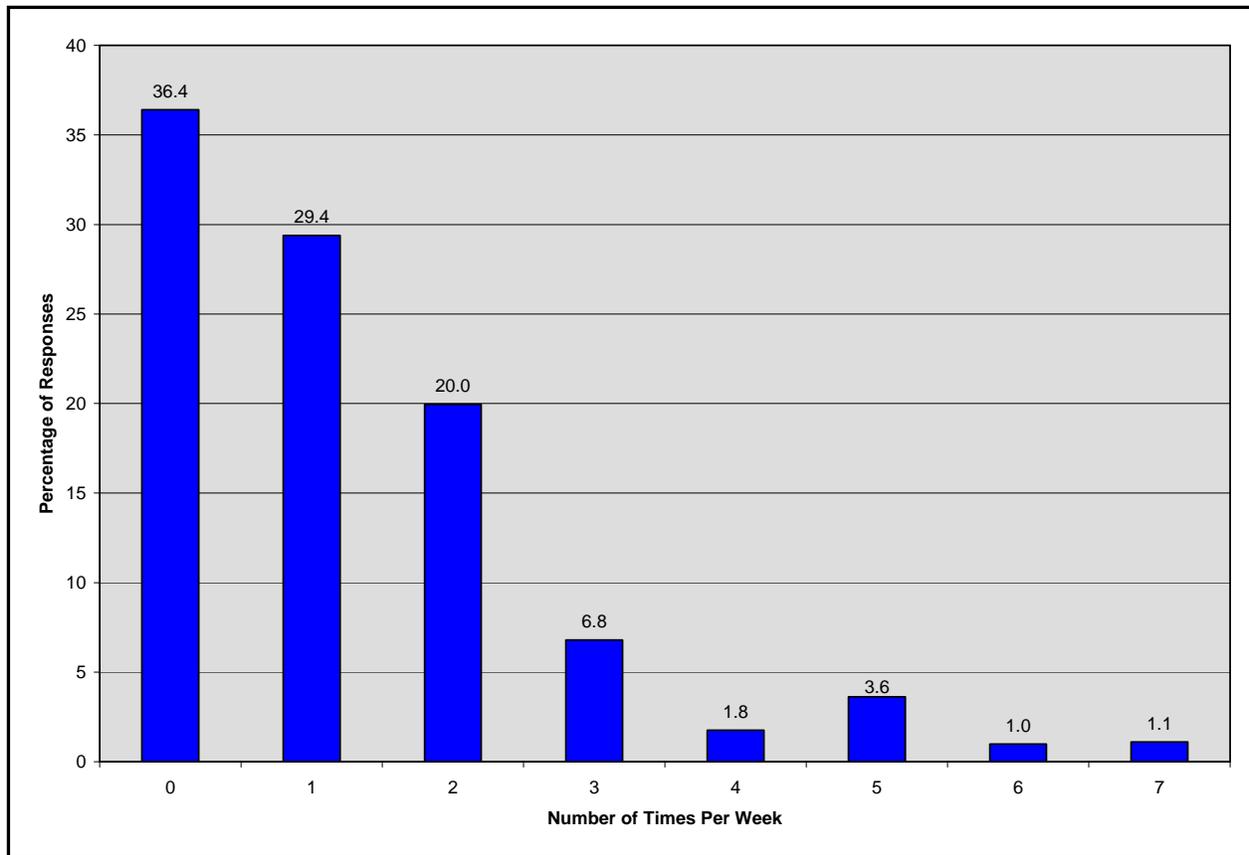


Figure 26. Percent of Trips per Week between Mexico and the Survey Area.

SURVEY DATA EXPANSION

The vehicle survey data were expanded based on the 24-hour directional vehicle classification counts conducted at each survey site on the day the site was surveyed. The assumption was made that the traffic in the non-surveyed direction was a mirror image of the traffic in the surveyed direction. For example, if 10 percent of the surveyed outbound traffic was through trips, it is assumed that 10 percent of the inbound traffic would be through trips. It is also assumed that the surveyed vehicles are a representative sample of the vehicles at each site for a 24-hour period. Table 25 presents the expanded estimates of external-local and external-through trips for non-commercial and commercial vehicles by site as well as the estimates of trips by residents and visitors (non-residents). Note that estimates are included in Table 25 for the non-surveyed sites.

Additionally, the number of residents and visitors for the non-surveyed sites was determined using the percentage of residents and visitors from a proximal surveyed site. For example, the

percentage of residents as determined from the survey for FM 1420 (station number 912) were applied to the total number of trips for FM 507 (station number 911), which was a non-surveyed location. For the high-volume site on US 83 south of San Benito (station number 942), the resident and through data from a nearby station, US 281 east of FM 732 (station number 925), was used. For the high-volume site on US 83 W at the Cameron County line (station number 931), the resident and through data for three nearby stations was used – US 281 at the Cameron County line (station number 927), Business US 83 W at the Cameron County line (station number 929), and SH 107 at the Cameron County line (station number 933). For the high-volume site on US 83 at the Cameron County line (station number 932), the resident and through data for three nearby stations was used – US 281 at the Cameron County line (station number 928), Business US 83 W at the Cameron County line (station number 930), and SH 107 at the Cameron County line (station number 934). For the high-volume site on US 83 W at the Starr County line (station number 939), a survey was also performed, so there is no need to use data from nearby survey sites.

The expanded survey data were used to develop zone-to-zone estimates of non-commercial and commercial vehicle trips based on the geocoded origins and destinations for the surveyed trips. Trips for the non-surveyed sites were distributed to the destination zones observed from the surveyed sites on a proportional basis. It is assumed that the surveyed sites are representative of the most likely destination zones for the non-surveyed sites. Since the volume of vehicle trips at the non-surveyed sites is typically low, the amount of error that may be generated by that assumption is believed to be small. For the high-volume locations, a license plate match was used to record the number of through trips made by non-commercial vehicles. Survey data obtained from commercial vehicles at several locations along the US 83 corridor were used to develop the estimated number of through and local trips for commercial vehicles.

Table 25. Expanded Survey Results by Station.

Station Number	Facility	Non-Commercial Vehicles			Commercial Vehicles			Residents	Visitors
		Local	Through	Total	Local	Through	Total		
900	US 281 N	7,609	768	8,377	2,376	183	2,559	5,617	1,992
901	SH 186	817	775	1,592	188	170	358	541	276
902	FM 490	377	43	420	29	5	34	257	120
903	FM 88	1,055	8	1,063	271	0	271	718	337
904	FM 1015	781	27	808	90	0	90	486	295
905	FM 1921	211	0	211	11	0	11	132	79
906	FM 491	380	0	380	42	0	42	187	193
907	FM 1425	492	8	500	83	0	83	243	249
908	FM 2629	423	0	423	73	0	73	208	215
909	FM 506	683	9	692	97	0	97	439	244
910	US 77 N	12,173	807	12,980	2,249	68	2,317	8,420	3,753
911	FM 507	480	0	480	28	0	28	367	113
912	FM 1420	313	3	316	99	0	99	240	73
921	US 77	4,094	0	4,094	694	0	694	1,621	2,473
922	SH 4	10,009	120	10,129	3,012	0	3,012	4,703	5,306
923	12th St.	11,349	41	11,390	2,467	14	2,481	4,832	6,517
926	FM 509	4,060	72	4,132	427	0	427	1,697	2,363
935	FM 1015	8,108	190	8,298	1,052	0	1,052	5,786	2,322
936	Spur 600	10,244	169	10,413	1,270	28	1,298	4,004	6,240
937	SH 115	26,162	515	26,677	602	10	612	11,881	14,281
938	FM 886	939	0	939	0	0	0	426	513
939	US 83 W	15,276	309	15,585	1,648	74	1,722	7,013	8,263
940	FM 490	1,380	149	1,529	322	18	340	1,047	333
941	FM 1017	949	312	1,261	704	34	738	561	388

Figure 27 shows the estimates of external-local trip movements by direction and location group. The largest number of external-local trips occurred at the south group of external stations.

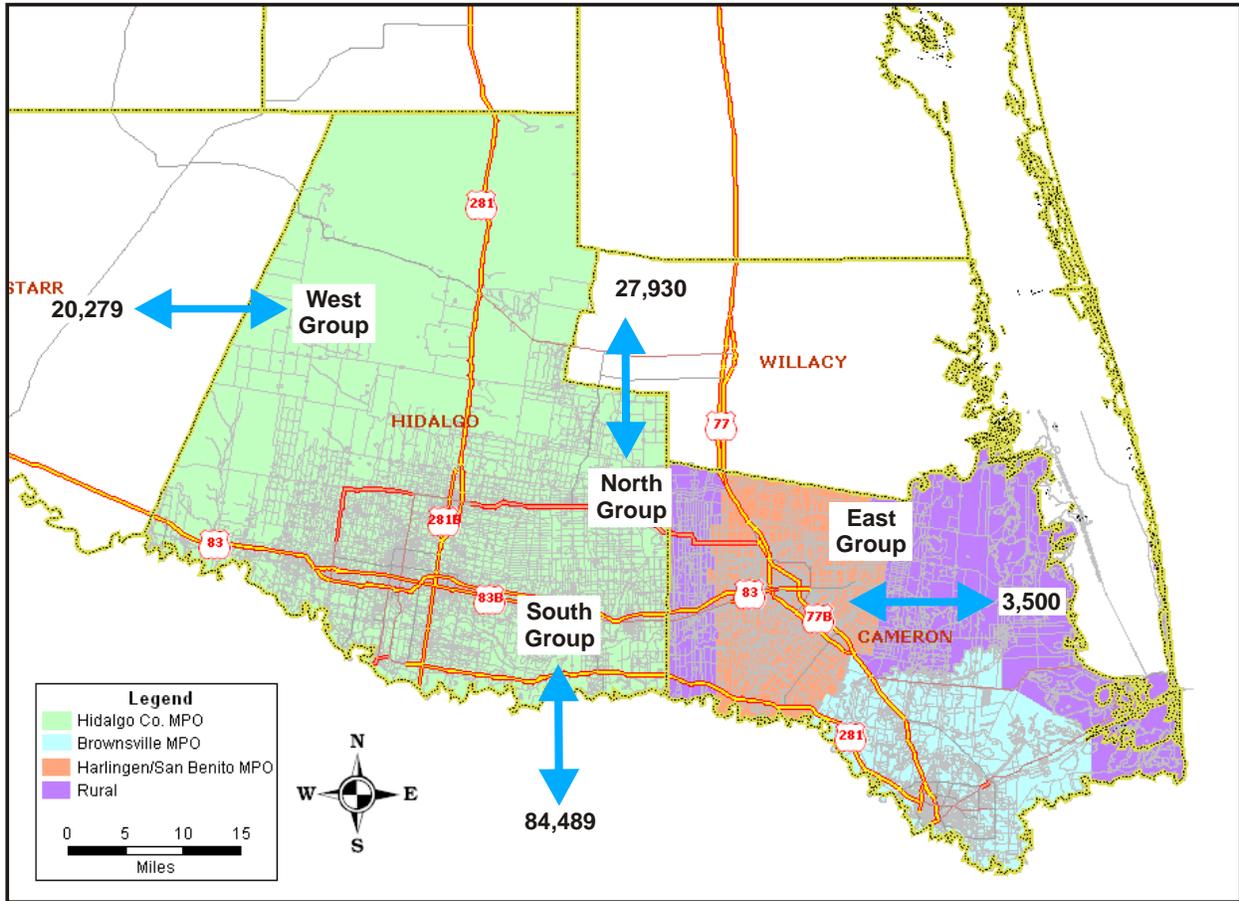


Figure 27. Estimates of External-Local Trip Movements by Location Group.

Figure 28 shows the estimates of external-through trip movements by direction and location group. For the Valley region, the most external-through movements were in the North-South, North-West, and South-West pairs.

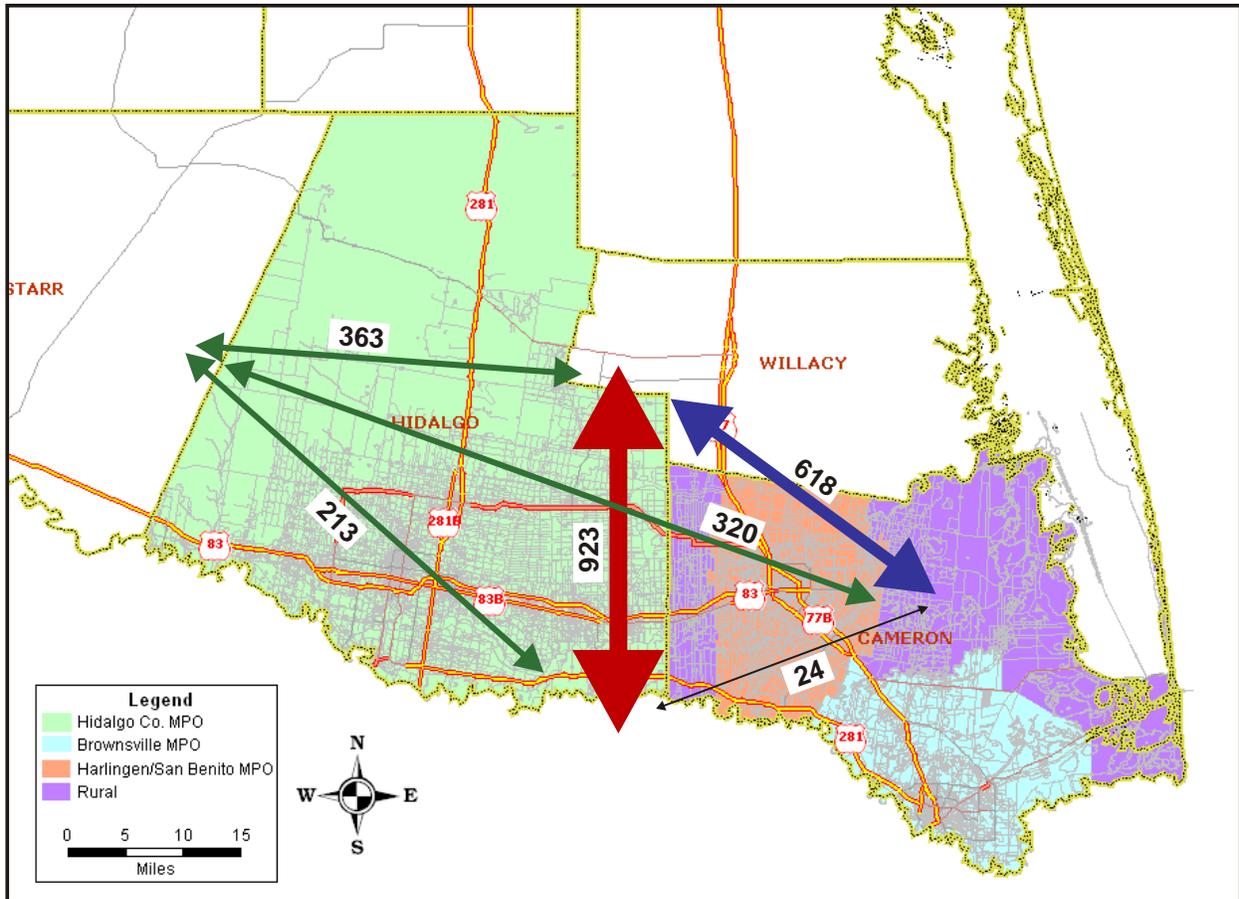


Figure 28. Estimates of External-Through Trip Movements by Location Group.

SURVEY SUMMARY

More than 145,000 vehicles enter and leave the two-county study area daily. About 13 percent are commercial vehicles. Less than 4 percent of the approximate 145,000 vehicles are making through trips. Based on the average vehicle occupancy observed in the survey, an estimated 174,000 persons are entering and leaving the study area daily by non-commercial vehicle and nearly 19,000 persons are entering and leaving by commercial vehicle. The estimated number of non-residents (persons that do not live in the study area) in non-commercial vehicles that enter the study area daily is nearly 57,000. It was found, however, that there are problems with the

survey instrument with regard to internal trips, and it is recommended that a review of the survey instrument and surveying process be conducted to correct trip reporting problems relating to these internal trips taken prior to exiting the study area.

Approximately 36 percent of non-commercial trip origins were leaving home and 39 percent of non-commercial trip destinations were returning to home. HBNW trips accounted for nearly 58 percent of the non-commercial trips. The percentage of trips that were NHB and HBW were 26 percent and 21 percent, respectively.

Commercial vehicle drivers reported varied trip purposes at the origin and destination ends of their trip. Approximately 37 percent of the trip origin purposes were reported to be for picking up cargo. The base location accounted for an additional 29 percent of trip origins. Delivering cargo was the stated purpose for 47 percent of the destination trips, while picking up cargo accounted for 42 percent of the destinations. Leaving base operations accounted for 6 percent of the destination trips.

The percent distribution of non-commercial and commercial vehicles by time-of-day was similar between inbound and outbound directions for all the sites combined. The outbound volumes “mirrored” the inbound volumes, which is the expected result. The largest “spike” in the inbound direction occurred during the morning peak period (as people entered the study area to work, shop, etc.), and the spike for the outbound direction was in the afternoon peak period.

The median vehicle year for non-commercial vehicles was 1998 and for commercial vehicles it was 1996. The average vehicle age was 7.6 years for non-commercial vehicles and 9.7 years for commercial vehicles. The average odometer reading for commercial vehicles was approximately three times higher than that for non-commercial vehicles. Average vehicle occupancy for non-commercial vehicles was 1.42, or nearly 40 percent greater than the 1.03 reported for commercial vehicles.

Commercial vehicles represented 13 percent of the vehicles traveling into and out of the study area daily. Over 50 percent of the commercial vehicles were carrying no cargo. Additionally, over 21 percent were carrying cargo of Mexico origin/destination.

One of the primary purposes of conducting this survey is to determine an estimate of the total vehicle miles traveled (VMT) and the average trip length (ATL) for the region of study. For non-commercial vehicles, the total estimated VMT due to external travel in the Rio Grande Valley study area was 1,855,000, accumulated over almost 118,000 external local trips. This resulted in an ATL of 15.76 miles/trip for non-commercial vehicles. For external local commercial vehicle trips, the total estimated VMT was 365,000, accumulated over 17,700 trips. This results in an average trip length of 20.56 miles/trip for commercial vehicles. In total, over 2,220,000 miles were accumulated over 135,000 external local trips, yielding an overall ATL of 16.39 miles/trip.

**APPENDIX A:
SURVEY FORMS**

**CAMERON/HIDALGO COUNTY INTERNATIONAL CROSSING
NON-COMMERCIAL VEHICLE SURVEY FORM - A**
(Inbound Direction)

Station # _____ Survey Date _____
Station Name/Location _____ Interviewer _____

For each vehicle you collect	Vehicle 1	Vehicle 2	Vehicle 3
Time	_____ a.m. _____ p.m.	_____ a.m. _____ p.m.	_____ a.m. _____ p.m.
Number of people in vehicle			
Vehicle Type			

Vehicle Type Options: 1) Passenger (car/truck/van) 2) Bus 3) Taxi/Paid Limo 4) School Bus
5) Commercial Vehicle (over 1 ton) 6) Motorcycle 7) Recreational Vehicle 8) Other (specify in block)

QUESTIONS:	Vehicle 1	Vehicle 2	Vehicle 3
1. What year, make, and model is this vehicle? Gas (leaded, unleaded), diesel, propane or other fuel?	_____ Year _____ Make _____ Model Leaded <input type="checkbox"/> Unleaded <input type="checkbox"/> Diesel <input type="checkbox"/> Propane <input type="checkbox"/> Other <input type="checkbox"/> _____	_____ Year _____ Make _____ Model Leaded <input type="checkbox"/> Unleaded <input type="checkbox"/> Diesel <input type="checkbox"/> Propane <input type="checkbox"/> Other <input type="checkbox"/> _____	_____ Year _____ Make _____ Model Leaded <input type="checkbox"/> Unleaded <input type="checkbox"/> Diesel <input type="checkbox"/> Propane <input type="checkbox"/> Other <input type="checkbox"/> _____
2. What is the mileage on your odometer?			
3. Do you live in Matamoros/Reynosa? <i>If No</i>	<input type="checkbox"/> Yes (go to 5) <input type="checkbox"/> No <input type="checkbox"/> Refused	<input type="checkbox"/> Yes (go to 5) <input type="checkbox"/> No <input type="checkbox"/> Refused	<input type="checkbox"/> Yes (go to 5) <input type="checkbox"/> No <input type="checkbox"/> Refused
3a. What city, state, and country (if other than Mexico) do you live in?	_____ _____ (city/state in Mexico, US, or other) <input type="checkbox"/> Refused	_____ _____ (city/state in US or Mexico) <input type="checkbox"/> Refused	_____ _____ (city/state in US or Mexico) <input type="checkbox"/> Refused
4a. Did you enter Matamoros/Reynosa today? <i>If No</i> , what date did you enter Matamoros/Reynosa?	<input type="checkbox"/> Yes (if yes, go to 4b) <input type="checkbox"/> No _____ (date) <input type="checkbox"/> Refused	<input type="checkbox"/> Yes (if yes, go to 4b) <input type="checkbox"/> No _____ (date) <input type="checkbox"/> Refused	<input type="checkbox"/> Yes (if yes, go to 4b) <input type="checkbox"/> No _____ (date) <input type="checkbox"/> Refused
4b. Where outside of Matamoros/Reynosa did you travel from? (city, state, country [if not Mexico])	_____ _____ (city/state in Mexico, US, or other) <input type="checkbox"/> Refused	_____ _____ (city/state in US or Mexico) <input type="checkbox"/> Refused	_____ _____ (city/state in US or Mexico) <input type="checkbox"/> Refused

5. Where was the <i>last</i> place you got into your vehicle(place/address or nearest intersection/city)			
5a. What time did you leave that place?	_____ a.m. _____ p.m.	_____ a.m. _____ p.m.	_____ a.m. _____ p.m.
5b. What type of place was that? (choose from type of place options)			
5c. What was your purpose for being at your last location? (Choose from trip purpose options)			
5d. Was that location in Matamoros/Reynosa, Mexico?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused

- Type of Place Options:**
- | | | | |
|--|---------------------------------------|---------------------------------------|----------------|
| 1) Office Building | 2) Retail/Shopping | 3) Industrial/Manufacturing/Warehouse | 4) Medical |
| 5) Educational (12 th grade or lower) | 6) Educational (college, trade, etc.) | 7) Government | 8) Residential |
| 9) Airport | 10) Eating Establishment | 11) Hotel/Motel | |
| 12) Other (specify) | 99) Refused/Unknown | | |

- Trip Purpose Options:**
- | | | | |
|------------------------|-------------------------|--------------------------------|--------------------------|
| 1) Home/Return Home | 2) Go/Return to Work | 3) Work-Related | 4) School |
| 5) Vacation | 6) Visit Family/Friends | 7) Eat Out | 8) Shop |
| 9) Buy Fuel | 10) Personal Business | 11) Pick-Up/Drop-Off Passenger | |
| 12) Change Travel Mode | 13) Delivery | 14) Recreation | 15) Overnight Stay/Sleep |
| 16) Other (specify) | 99) Refused/Unknown | | |

6. Where is your next destination? (place/address or nearest intersection/city)			
6a. What type of place was that? (choose from trip purpose options)			
6b. What is your purpose for traveling to this destination? (choose from trip purpose options)			
6c. Is that location in Cameron/Hidalgo County?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused (if yes, go to 7)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused (if yes, go to 7)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused (if yes, go to 7)
6d. What road/highway will you be on when you leave Cameron/Hidalgo County?			
7. Are you going to a location out of Texas?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused (if no, go to 7d)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused (if no, go to 7d)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused (if no, go to 7d)
If Yes: 7a. What city and state are you going to?			
7b. What road/bridge will you use to leave Texas?			
7c. How many more days will you be in Texas?			
If No 7d. What city/county in Texas are you going to?			

To measure the amount of travel you made today, we need to know the number of places you have gone today. Would you please tell us:

8. Where did your first trip today begin? (city/county/landmark)			
9. Where did you go from there? (city/county/landmark)			
10. Where did you go next? (city/county/landmark)			
11. Where did you go next? (city/county/landmark)			
12. How many more places did you stop today?			

**CAMERON/HIDALGO COUNTY INTERNATIONAL CROSSING
COMMERCIAL VEHICLE SURVEY FORM B
(Inbound Direction)**

Station # _____ Survey Date _____

Station Name/Location _____ Interviewer _____

For each vehicle you collect:

	Vehicle 1	Vehicle 2	Vehicle 3
1. Time	_____ a.m. _____ p.m.	_____ a.m. _____ p.m.	_____ a.m. _____ p.m.
2. Number of people in vehicle			
3. Vehicle Classification			
4. What is the cargo (choose from vehicle cargo codes)	_____ <input type="checkbox"/> Empty (no cargo)	_____ <input type="checkbox"/> Empty (no cargo)	_____ <input type="checkbox"/> Empty (no cargo)
4a. If empty, what was the last cargo you delivered	(go to 12)	(go to 12)	(go to 12)
4b. Is your load full or partial? <i>* determine 4a and 4b by observation *</i>	<input type="checkbox"/> Full <input type="checkbox"/> Partial	<input type="checkbox"/> Full <input type="checkbox"/> Partial	<input type="checkbox"/> Full <input type="checkbox"/> Partial
4c. Is cargo being hauled using a multi-modal container/trailer or TEU?	<input type="checkbox"/> Yes <input type="checkbox"/> No (go to 5)	<input type="checkbox"/> Yes <input type="checkbox"/> No (go to 5)	<input type="checkbox"/> Yes <input type="checkbox"/> No (go to 5)
<i>If Yes</i> 4d. Is the container a Reefer or Dry Box?	<input type="checkbox"/> Reefer <input type="checkbox"/> Dry Box	<input type="checkbox"/> Reefer <input type="checkbox"/> Dry Box	<input type="checkbox"/> Reefer <input type="checkbox"/> Dry Box
5. Did the cargo originate in Mexico?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused/Unknown	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused/Unknown	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused/Unknown
6. Where did you pick up your load? (place/address or nearest intersection/city)			
7. Was that location an inter-modal transfer or custom brokerage site?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused or Unknown	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused or Unknown	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused or Unknown
8. How was your load transferred at that site (choose from transfer codes)?			
9. Where will you drop your cargo off? (place/address or nearest intersection/city)			
10. Is that location an inter-modal transfer or custom brokerage site?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused/Unknown	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused/Unknown	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused/Unknown
11. How will the cargo be transferred at that site (choose from transfer codes)?			

Vehicle Classification Options: 1) Single Unit 2-axle (6 wheels) 2) Single Unit 3-axle (10 wheels) 3) Single Unit 4-axel (14 wheels)
4) Semi (all tractor-trailer combinations) 5) Other (specify) 99) Unknown

Cargo Transfer Options: 1) Truck-to/from-Truck 2) Rail-to/from-Truck 3) Ship-to/from-Truck 4) Airplane-to/from-Truck
5) Warehouse-to/from-Truck 6) Pipeline-to/from-Truck 7) Unknown 99) Refused/Unknown

QUESTIONS:

12. What is the year and gross weight rating of this vehicle ?	_____ Year	_____ Year	_____ Year
Gas (leaded, unleaded), diesel, propane or other fuel?	Gross Weight Leaded <input type="checkbox"/> Unleaded <input type="checkbox"/> Diesel <input type="checkbox"/> Propane <input type="checkbox"/> Other <input type="checkbox"/> _____	Gross Weight Leaded <input type="checkbox"/> Unleaded <input type="checkbox"/> Diesel <input type="checkbox"/> Propane <input type="checkbox"/> Other <input type="checkbox"/> _____	Gross Weight Leaded <input type="checkbox"/> Unleaded <input type="checkbox"/> Diesel <input type="checkbox"/> Propane <input type="checkbox"/> Other <input type="checkbox"/> _____
13. What is the mileage on your odometer?			

14. Where are you coming from? (city, state, country (if other than Mexico))			
14a. Was that location in Matamoros/Reynosa, Mexico?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused (if yes, go to 16)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused (if yes, go to 16)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused (if yes, go to 16)
15. Did you enter Matamoros/Reynosa today? <i>If No</i> , what date did you enter Matamoros/Reynosa?	<input type="checkbox"/> Yes (if yes, go to 15a) <input type="checkbox"/> No _____ (date)	<input type="checkbox"/> Yes (if yes, go to 15a) <input type="checkbox"/> No _____ (date)	<input type="checkbox"/> Yes (if yes, go to 15a) <input type="checkbox"/> No _____ (date)
15a. Where outside of Matamoros/Reynosa did you travel from? (city, state, country [if not Mexico])	<input type="checkbox"/> Refused/	<input type="checkbox"/> Refused	<input type="checkbox"/> Refused
16. Where was the <i>last</i> place you got into your vehicle? (place/address or nearest intersection/city)			
16a. What time did you leave that place?	_____ a.m. _____ p.m.	_____ a.m. _____ p.m.	_____ a.m. _____ p.m.
16b. What type of place was this? (choose from type of place options).			
16c. What was your purpose for being at your last location?			
16d. Was that location in Matamoros/Reynosa, Mexico?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused
17. Where is your next destination? (place/address or nearest intersection/city)			
17a. What is your purpose for traveling to this destination? (Choose from trip purpose options.)			
17b. What type of place is that? (choose from type of place options)			
17c. Is that location in Cameron/Hidalgo County?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused (if yes, go to 18)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused (if yes, go to 18)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused (if yes, go to 18)
17d. What road/highway will you be on when you leave Cameron/Hidalgo County?			
18. Are you going to a location outside of Texas?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused (If no go to 18d)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused (if No go to 18d)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused (If No go to 18d)
<i>If Yes</i> 18a. What city and state are you going to?			
18b. What road/bridge will you use to leave Texas?			
18c. How many more days will you be in Texas?			
<i>If No</i> 18d. What city/county in Texas are you going to?			

- Type of Place Options:**
- | | | |
|---------------------|--|---------------------------------------|
| 1) Office Building | 2) Retail/Shopping/Gas | 3) Industrial/Manufacturing/Warehouse |
| 4) Medical | 5) Education (12 th grade or lower) | 6) Educational (college, trade, etc.) |
| 7) Government | 8) Residential | 9) Airport |
| 11) Other (specify) | 99) Refused/Unknown | 10) Eating Establishment |

- Trip Purpose Options:**
- | | | |
|--|-------------------------------|-------------|
| 1) Base Location/Return to Base Location | 2) Delivery | 3) Pick-Up |
| 4) Maintenance | 5) Driver Needs (lunch, etc.) | 6) To Home |
| 8) Other (specify) | 99) Refused/Unknown | 7) Buy fuel |

To measure the amount of travel you made today, we need to know the places you have gone today. Would you please tell us:

19. Where did your first trip today begin? (city/county/landmark)			
20. Where did you go from there? (city/county/landmark)			
21. Where did you go next? (city/county/landmark)			
22. Where did you go next? (city/county/landmark)			
23. How many more places did you stop today?			

Vehicle Cargo Codes

- | | |
|--|---|
| 1 – Farm Products | Livestock, fertilizer, dirt, landscaping, etc. |
| 2 – Forest Products | Trees, sod, etc. |
| 3 – Marine Products | Fresh fish, seafood, etc. |
| 4 – Metals and Minerals | Crude petroleum, natural gas, propane, metals, gypsum, etc. |
| 5 – Food, Health, Beauty Products | Assorted food products, cosmetics, etc. |
| 6 – Tobacco Products | Cigarettes, cigars, and chewing tobacco |
| 7 – Textiles | Clothing, lines, etc |
| 8 – Wood Products | Lumber, paper, cardboard, wood pulp, etc |
| 9 – Printed Matter | Newspapers, magazines, books, etc. |
| 10 – Chemical Products | Soaps, paints, household or industrial chemicals, etc |
| 11 – Refined Petroleum or Coal Products | Gasoline, etc. |
| 12 – Rubber, Plastic, Styrofoam Products | Finished products of rubber, plastic, or Styrofoam |
| 13 – Clay, Concrete, Glass, or Stone | Finished products of clay, concrete, glass, or stone |
| 14 – Manufactured Goods/Equipment | Miscellaneous products such as machinery, appliances, etc |
| 15 – Wastes | Waste products, including scrap and recyclable materials |
| 16 – Miscellaneous Shipments | U.S. Mail, U.P.S., Federal Express, and other mixed cargo |
| 17 – Hazardous Materials | Hazardous chemicals and substances |
| 18 – Transportation | Automobiles, heavy equipment, etc. |
| 19 – Unclassified Cargo | Cargo not falling within one of the above categories |
| 20 – Driver Refused to Answer | Driver refused to answer |
| 21 – Unknown to Driver | Unknown to driver |
| 22 - Empty | Empty |

**CAMERON/HIDALGO COUNTY INTERNATIONAL CROSSING
PEDESTRIAN SURVEY INTERVIEW FORM – C
(Inbound Direction)**

Station # _____ Survey Date _____
 Station Name/Location _____ Interviewer _____

For each person you collect:	Person 1	Person 2	Person 3
Time	_____ a.m. _____ p.m.	_____ a.m. _____ p.m.	_____ a.m. _____ p.m.
1. Where are you coming from? (place/address or nearest intersection/city)			
2. What type of place was this? (choose from type of place options)			
3. What mode of transportation did you use to travel from your last location?			
4. What time did you leave that place?	_____ a.m. _____ p.m.	_____ a.m. _____ p.m.	_____ a.m. _____ p.m.
5. What was your purpose for being at that location?			
6. What is your next destination? (place/address or nearest intersection)			
7. What type of place is that? (choose from type of place options)			
8. How will you travel to that destination? (choose from vehicle/mode options)			
9. What is the purpose of traveling to your next destination? (choose from trip purpose options)			
10. How many places/stores do you plan to visit in today?			
11. Do you live in	<input type="checkbox"/> Mexico (go to 12) <input type="checkbox"/> Cameron/Hidalgo Co. <input type="checkbox"/> Texas <input type="checkbox"/> Other _____ <input type="checkbox"/> Refused/Unknown	<input type="checkbox"/> Mexico (go to 12) <input type="checkbox"/> Cameron/Hidalgo Co. <input type="checkbox"/> Texas <input type="checkbox"/> Other _____ <input type="checkbox"/> Refused/Unknown	<input type="checkbox"/> Mexico (go to 12) <input type="checkbox"/> Cameron/Hidalgo Co. <input type="checkbox"/> Texas <input type="checkbox"/> Other _____ <input type="checkbox"/> Refused/Unknown
12. Are you a Winter Texan?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
13. How many times per week do you make this trip?			

Trip Purpose Options: 1) Home/Return Home 2) Go/Return to Work 3) Work-Related 4) School 5) Vacation
6) Visit Friends/Family 7) Eat Out 8) Shop 9) Personal Business
10) Delivery 11) Other (specify) 99) Refused/Unknown

Type of Place Options: 1) Office Building 2) Retail/Shopping/Gas 3) Industrial/Manufacturing/Warehouse
4) Medical 5) Educational (12 grade or lower) 6) Educational (college, trade, etc.)
7) Government 8) Residential 9) Airport 10) Eating Establish.
99) Refused/Unknown

Vehicle / Mode Options: 1) Passenger (car/truck/van) 2) Bus 3) Taxi/Paid Limo 4) School Bus
5) Commercial Vehicle (over 1 ton) 6) Motorcycle 7) Recreational Vehicle 8) Walk
9) Other (specify in block) 99) Refused/Unknown

**CAMERON/HIDALGO COUNTY EXTERNAL STATION
NON-COMMERCIAL VEHICLE SURVEY FORM - D**
(Outbound Direction)

Station # _____ Survey Date _____
Station Name/Location _____ Interviewer _____

For each vehicle you collect	Vehicle 1	Vehicle 2	Vehicle 3
Time	_____ a.m. _____ p.m.	_____ a.m. _____ p.m.	_____ a.m. _____ p.m.
Number of people in vehicle			
Vehicle Type			

Vehicle Type Options: 1) Passenger (car/truck/van) 2) Bus 3) Taxi/Paid Limo 4) School Bus
5) Commercial Vehicle (over 1 ton) 6) Motorcycle 7) Recreational Vehicle 8) Other (specify in block)

QUESTIONS:	Vehicle 1	Vehicle 2	Vehicle 3
1. What year, make, and model is this vehicle?	_____ Year _____ Make _____ Model	_____ Year _____ Make _____ Model	_____ Year _____ Make _____ Model
Gas (leaded, unleaded), diesel, propane or other fuel?	Leaded <input type="checkbox"/> Unleaded <input type="checkbox"/> Diesel <input type="checkbox"/> Propane <input type="checkbox"/> Other <input type="checkbox"/> _____	Leaded <input type="checkbox"/> Unleaded <input type="checkbox"/> Diesel <input type="checkbox"/> Propane <input type="checkbox"/> Other <input type="checkbox"/> _____	Leaded <input type="checkbox"/> Unleaded <input type="checkbox"/> Diesel <input type="checkbox"/> Propane <input type="checkbox"/> Other <input type="checkbox"/> _____
2. What is the mileage on your odometer?			
3. Are you a Winter Texan?	<input type="checkbox"/> Yes <input type="checkbox"/> No (go to 4)	<input type="checkbox"/> Yes <input type="checkbox"/> No (go to 4)	<input type="checkbox"/> Yes <input type="checkbox"/> No (go to 4)
<i>If Yes</i> 3a. What is your primary residence during the Summer? (city/state)			
3b. How many months per year do you live in south Texas?			
3c. What is your winter address? (street address/city/county)	(go to 6)	(go to 6)	(go to 6)
4. Do you live in Cameron or Hidalgo County?	<input type="checkbox"/> Cameron County <input type="checkbox"/> Hidalgo County <input type="checkbox"/> No (go to 5)	<input type="checkbox"/> Cameron County <input type="checkbox"/> Hidalgo County <input type="checkbox"/> No (go to 5)	<input type="checkbox"/> Cameron County <input type="checkbox"/> Hidalgo County <input type="checkbox"/> No (go to 5)
4a. What city do you live in?	(go to 6)	(go to 6)	(go to 6)
5. What city and state do you live in?	_____ _____ (city/state in US or Mexico)	_____ _____ (city/state in US or Mexico)	_____ _____ (city/state in US or Mexico)
5a. Did you stay overnight as part of your travel?	<input type="checkbox"/> Refused <input type="checkbox"/> Yes <input type="checkbox"/> Refused <input type="checkbox"/> No (go to 5d)	<input type="checkbox"/> Refused <input type="checkbox"/> Yes <input type="checkbox"/> Refused <input type="checkbox"/> No (go to 5d)	<input type="checkbox"/> Refused <input type="checkbox"/> Yes <input type="checkbox"/> Refused <input type="checkbox"/> No (go to 5d)

5b. Where did you stay?	_____ _____ (city/state in US or Mexico) <input type="checkbox"/> Refused	_____ _____ (city/state in US or Mexico) <input type="checkbox"/> Refused	_____ _____ (city/state in US or Mexico) <input type="checkbox"/> Refused
5c. How many nights have you stayed?			
5d. Did you enter Texas today?	<input type="checkbox"/> Yes <input type="checkbox"/> Refused <input type="checkbox"/> No (go to 6)	<input type="checkbox"/> Yes <input type="checkbox"/> Refused <input type="checkbox"/> No (go to 6)	<input type="checkbox"/> Yes <input type="checkbox"/> Refused <input type="checkbox"/> No (go to 6)
5e. Where outside Texas did you travel from?	_____ _____ (city/state in US or Mexico) <input type="checkbox"/> Refused	_____ _____ (city/state in US or Mexico) <input type="checkbox"/> Refused	_____ _____ (city/state in US or Mexico) <input type="checkbox"/> Refused
5f. What road/highway did you use to enter Texas			
6. Where was the last place you got into your vehicle (place/address or nearest intersection/city)			
6a. What time did you leave that place?	_____ a.m. _____ p.m.	_____ a.m. _____ p.m.	_____ a.m. _____ p.m.
6b. What type of place was that? (choose from type of place options)			
6c. What was your purpose for being at your last location? (choose from trip purpose options)			
6d. Was that location in Cameron or Hidalgo County?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused (Yes go to 7)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused (Yes go to 7)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused (Yes go to 7)
6e. What road/bridge did you use to enter Cameron or Hidalgo County?			

- Type of Place Options:**
- | | | |
|--------------------|--|---------------------------------------|
| 1) Office Building | 2) Retail/Shopping/Gas | 3) Industrial/Manufacturing/Warehouse |
| 4) Medical | 5) Education (12 th grade or lower) | 6) Educational (college, trade, etc.) |
| 7) Government | 8) Residential | 9) Airport |
| 11) Hotel/Motel | 12) Other (specify) | 10) Eating Establishment |
| | | 99) Refused//Unknown |

- Trip Purpose Options:**
- | | | | |
|------------------------|-------------------------|--------------------------------|--------------------------|
| 1) Home/Return Home | 2) Go/Return to Work | 3) Work-Related | 4) School |
| 5) Vacation | 6) Visit Friends/Family | 7) Eat Out | 8) Shop |
| 9) Buy Gas | 10) Personal Business | 11) Pick-Up/Drop-Off Passenger | |
| 12) Change Travel Mode | 13) Delivery | 14) Recreation | 15) Overnight Stay/Sleep |
| 16) Other (specify) | 99) Refused/Unknown | | |

7. Where is your next destination? (place/address or nearest intersection/city)			
7a. What is your purpose for traveling to this destination? (choose from trip purpose options)			

8. Are you going to a location outside of Texas?	<input type="checkbox"/> Yes <input type="checkbox"/> Refused <input type="checkbox"/> No (go to 8d)	<input type="checkbox"/> Yes <input type="checkbox"/> Refused <input type="checkbox"/> No (go to 8d)	<input type="checkbox"/> Yes <input type="checkbox"/> Refused <input type="checkbox"/> No (go to 8d)
<i>If Yes:</i> 8a. What city and state are you going to?			
8b. What road/bridge will you use to leave Texas?			
8c. How many more days will you be in Texas?			
<i>If No:</i> 8d. What city/county in Texas are you going to?			

To measure the amount of travel you made today, we need to know the number of places you have gone today. Would you please tell us:

9. Where did your first trip today begin? (city/county/landmark)			
10. Where did you go from there? (city/county/landmark)			
11. Where did you go next? (city/county/landmark)			
12. Where did you go next? (city/county/landmark)			
13. Where did you go next? (city/county/landmark)			
14. How many more places did you stop today?			

**CAMERON/HIDALGO COUNTY EXTERNAL STATION
COMMERCIAL VEHICLE SURVEY FORM E
(Outbound Direction)**

Station # _____ Survey Date _____

Station Name/Location _____ Interviewer _____

For each vehicle you collect:

	Vehicle 1	Vehicle 2	Vehicle 3
1. Time	_____ a.m. _____ p.m.	_____ a.m. _____ p.m.	_____ a.m. _____ p.m.
2. Number of people in vehicle			
3. Vehicle Classification			
4. What is the cargo (choose from vehicle cargo codes)	_____ <input type="checkbox"/> Empty (no cargo)	_____ <input type="checkbox"/> Empty (no cargo)	_____ <input type="checkbox"/> Empty (no cargo)
4a. If empty, what was the last cargo you delivered	(go to 12)	(go to 12)	(go to 12)
4b. Is your load full or partial? <i>* determine 4a and 4b by observation *</i>	<input type="checkbox"/> Full <input type="checkbox"/> Partial	<input type="checkbox"/> Full <input type="checkbox"/> Partial	<input type="checkbox"/> Full <input type="checkbox"/> Partial
4c. Is cargo being hauled using a multi-modal container/trailer or TEU?	<input type="checkbox"/> Yes <input type="checkbox"/> No (go to 5)	<input type="checkbox"/> Yes <input type="checkbox"/> No (go to 5)	<input type="checkbox"/> Yes <input type="checkbox"/> No (go to 5)
<i>If Yes</i> 4d. Is the container a Reefer or Dry Box?	<input type="checkbox"/> Reefer <input type="checkbox"/> Dry Box	<input type="checkbox"/> Reefer <input type="checkbox"/> Dry Box	<input type="checkbox"/> Reefer <input type="checkbox"/> Dry Box
5. Did your cargo come from or is it going to Mexico?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused/Unknown	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused/Unknown	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused/Unknown
6. Where did you pick up your load? (place/address or nearest intersection/city)			
7. Was that location an inter-modal transfer or custom brokerage site?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused/Unknown	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused/Unknown	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused/Unknown
8. How was your load transferred at that site (choose from transfer codes)?			
9. Where will you drop your cargo off? (place/address or nearest intersection/city)			
10. Is that location an inter-modal transfer or custom brokerage site?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused/Unknown	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused/Unknown	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused/Unknown
11. How will the cargo be transferred at that site (choose from transfer codes)?			

Vehicle Classification Options: 1) Single Unit 2-axle (6 wheels) 2) Single Unit 3-axle (10 wheels) 3) Single Unit 4-axel (14 wheels)
4) Semi (all tractor-trailer combinations) 5) Other (specify) 99) Refused/Unknown

Cargo Transfer Options: 1) Truck-to/from-Truck 2) Rail-to/from-Truck 3) Ship-to/from-Truck 4) Airplane-to/from-Truck
5) Warehouse-to/from-Truck 6) Pipeline-to/from-Truck 99) Refused/Unknown

NOTE: All cargo transfer options are both ways (i.e., Truck-to-Warehouse should be coded same as Warehouse-to-Truck).

QUESTIONS:

<p>12. What is the year and gross weight rating of this vehicle ?</p> <p>Gas (leaded, unleaded), diesel, propane or other fuel?</p>	<p>_____</p> <p>Year</p> <p>_____</p> <p>Gross Weight</p> <p>Leaded <input type="checkbox"/> Unleaded <input type="checkbox"/></p> <p>Diesel <input type="checkbox"/> Propane <input type="checkbox"/></p> <p>Other <input type="checkbox"/> _____</p>	<p>_____</p> <p>Year</p> <p>_____</p> <p>Gross Weight</p> <p>Leaded <input type="checkbox"/> Unleaded <input type="checkbox"/></p> <p>Diesel <input type="checkbox"/> Propane <input type="checkbox"/></p> <p>Other <input type="checkbox"/> _____</p>	<p>_____</p> <p>Year</p> <p>_____</p> <p>Gross Weight</p> <p>Leaded <input type="checkbox"/> Unleaded <input type="checkbox"/></p> <p>Diesel <input type="checkbox"/> Propane <input type="checkbox"/></p> <p>Other <input type="checkbox"/> _____</p>
<p>13. What is the mileage on your odometer?</p>			
<p>14. Where are you coming from? (city/state in US or Mexico)</p>			
<p>14a. Is that location in Texas?</p>	<p><input type="checkbox"/> Yes (go to 14d)</p> <p><input type="checkbox"/> No</p>	<p><input type="checkbox"/> Yes (go to 14d)</p> <p><input type="checkbox"/> No</p>	<p><input type="checkbox"/> Yes (go to 14d)</p> <p><input type="checkbox"/> No</p>
<p>14b. (If not in Texas) Did you enter Texas today?</p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No (go to 14d)</p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No (go to 14d)</p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No (go to 14d)</p>
<p>14c. What road/highway did you use to enter Texas?</p>			
<p>14d. Did you stay overnight as part of your travel?</p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No (go to 15)</p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No (go to 15)</p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No (go to 15)</p>
<p>14e. If yes, where did you stay? (city/county/state)</p>			
<p>14f. How many nights have you stayed?</p>			
<p>15. Where was the last place you got into your vehicle (place/address or nearest intersection/city)</p>			
<p>15a. What time did you leave that place?</p>	<p>_____ a.m. _____ p.m.</p>	<p>_____ a.m. _____ p.m.</p>	<p>_____ a.m. _____ p.m.</p>
<p>15b. What type of place was this? (choose from type of place options)</p>			
<p>15c. What was your purpose for being at your last location? (choose from trip purpose options)</p>			
<p>15d. Was that location in Cameron or Hidalgo County?</p>	<p><input type="checkbox"/> Yes (go to 16)</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Refused/Unknown</p>	<p><input type="checkbox"/> Yes (go to 16)</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Refused/Unknown</p>	<p><input type="checkbox"/> Yes (go to 16)</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Refused/Unknown</p>
<p>15e. What road/bridge did you use to enter Cameron or Hidalgo County?</p>			
<p>16. Where is your next destination? (place/address or nearest intersection/city)</p>			
<p>16a. What is your purpose for traveling to this destination? (choose from trip purpose options)</p>			

17. Are you going to a location outside of Texas?	<input type="checkbox"/> Yes (go to 17a) <input type="checkbox"/> No (go to 17d) <input type="checkbox"/> Refused/Unknown	<input type="checkbox"/> Yes (go to 17a) <input type="checkbox"/> No (go to 17d) <input type="checkbox"/> Refused/Unknown	<input type="checkbox"/> Yes (go to 17a) <input type="checkbox"/> No (go to 17d) <input type="checkbox"/> Refused/Unknown
<i>If Yes</i> 17a. What city and state are you going to?			
17b. What road/bridge will you use to leave Texas?			
17c. How many more days will you be in Texas?			
<i>If No</i> 17d. What city/county in Texas are you going to?			

- Type of Place Options:**
- | | | |
|---------------------|--|---------------------------------------|
| 1) Office Building | 2) Retail/Shopping/Gas | 3) Industrial/Manufacturing/Warehouse |
| 4) Medical | 5) Education (12 th grade or lower) | 6) Educational (college, trade, etc.) |
| 7) Government | 8) Residential | 9) Airport |
| 11) Other (specify) | 99) Refused/Unknown | 10) Eating Establishment |

- Trip Purpose Options:**
- | | | |
|--|-------------------------------|-------------|
| 1) Base Location/Return to Base Location | 2) Delivery | 3) Pick-Up |
| 4) Maintenance | 5) Driver Needs (lunch, etc.) | 6) To Home |
| 8) Other (specify) | 99) Refused/Unknown | 7) Buy fuel |

To measure the amount of travel you made today, we need to know the places you have gone today. Would you please tell us:

19. Where did your first trip today begin? (city/county/landmark)			
19. Where did you go from there? (city/county/landmark)			
20. Where did you go next? (city/county/landmark)			
21. Where did you go next? (city/county/landmark)			
22. Where did you go next? (city/county/landmark)			
23. Where did you go next? (city/county/landmark)			
24. Where did you go next? (city/county/landmark)			
25. How many more places did you stop today?			

Vehicle Cargo Codes

1 – Farm Products	Livestock, fertilizer, dirt, landscaping, etc.
2 – Forest Products	Trees, sod, etc.
3 – Marine Products	Fresh fish, seafood, etc.
4 – Metals and Minerals	Crude petroleum, natural gas, propane, metals, gypsum, etc.
5 – Food, Health, Beauty Products	Assorted food products, cosmetics, etc.
6 – Tobacco Products	Cigarettes, cigars, and chewing tobacco
7 – Textiles	Clothing, lines, etc
8 – Wood Products	Lumber, paper, cardboard, wood pulp, etc
9 – Printed Matter	Newspapers, magazines, books, etc.
10 – Chemical Products	Soaps, paints, household or industrial chemicals, etc
11 – Refined Petroleum or Coal Products	Gasoline, etc.
12 – Rubber, Plastic, Styrofoam Products	Finished products of rubber, plastic, or Styrofoam
13 – Clay, Concrete, Glass, or Stone	Finished products of clay, concrete, glass, or stone
14 – Manufactured Goods/Equipment	Miscellaneous products such as machinery, appliances, etc
15 – Wastes	Waste products, including scrap and recyclable materials
16 – Miscellaneous Shipments	U.S. Mail, U.P.S., Federal Express, and other mixed cargo
17 – Hazardous Materials	Hazardous chemicals and substances
18 – Transportation	Automobiles, Heavy Equipment, etc.
19 – Unclassified Cargo	Cargo not falling within one of the above categories
20 – Driver Refused to Answer	Driver refused to answer
21 – Unknown to Driver	Unknown to driver
22 - Empty	Empty

**APPENDIX B:
DATA FILE FORMATS**

**Cameron/Hidalgo County International Crossing Non-Commercial Travel Survey
Form A Data File Format**

This file will contain the survey data collected using Form A of the Cameron/Hidalgo County International Crossing Survey. The data should be in an ASCII data file.

Item	Field Columns			Format	Description
	Begin	End	Type		
1. Record Type	1	2	Alphanum. LJ	A2	Code which indicates the type of record, here it should be A.
2. Month	3	4	Numeric RJ	I2	Month station is being surveyed.
3. Day	5	6	Numeric RJ	I2	Day of the month station is being surveyed.
4. Station Number	7	10	Alphanum. LJ	A4	Site number of the station being surveyed as described in Attachment A.
5. Station	11	40	Alphanum. LJ	A30	Name of station/facility being surveyed.
6. Longitude	41	50	Numeric RJ	F10.6	Longitude of location being surveyed.
7. Latitude	51	60	Numeric RJ	F10.6	Latitude of location being surveyed.
8. Vehicle Number	61	61	Numeric RJ	I1	Vehicle number surveyed (column number on survey form).
9. Arrival Hour	62	63	Numeric RJ	I2	Hour vehicle arrived at location. Must be in military time.
10. Arrival Minute	64	65	Numeric RJ	I2	Minute vehicle arrived at location.
11. Occupancy	66	67	Numeric RJ	I2	Number of people in vehicle.
12. Vehicle Class.	68	69	Numeric RJ	I2	Code indicating the classification of the vehicle. See below for code descriptions.
13. Vehicle Class. Other	70	79	Alphanum. LJ	A10	If vehicle classification is coded as other, this is the description of the vehicle type.
14. Year of Vehicle	80	83	Numeric RJ	I4	Year vehicle was manufactured. 9999 should be coded for unknown/refused.
15. Vehicle Make	84	113	Alphanum. LJ	A30	Make of vehicle.
16. Vehicle Model	114	143	Alphanum. LJ	A30	Model of vehicle.
17. Vehicle Fuel Type	144	145	Numeric RJ	I2	Type of fuel used by vehicle. 1 - Leaded Gas; 2 - Unleaded Gas; 3 - Diesel; 4 - Propane; 5 - Other.
18. Fuel Type Other	146	155	Alphanum. LJ	A10	If type of fuel is coded as "other", this is the description of the type of fuel. Otherwise it is blank.
19. Odometer	156	162	Numeric RJ	I7	Odometer mileage on vehicle. 9999999 should be coded for unknown / refused.
20. MX Resident	163	164	Numeric RJ	I2	Code indicating if person lives in Matamoros/Reynosa. 1 – Yes; 2 – No; 99 – Unknown / Refused.
21. Residency	165	194	Alphanum. LJ	A30	If person does not live in Matamoros/Reynosa (i.e., indicated by a 2 in item 20) this field should contain the city / state / country of their residence. City / state information is required for locations in Mexico. This field is left blank if item 20 is coded as 1.
22. Enter MX	195	196	Numeric RJ	I2	Code indicating if person entered Matamoros/Reynosa on the survey date. 1 – Yes; 2 – No; 99 – Unknown / Refused. This field is left blank if item 20 is coded as 1.
23. Entry Date	197	206	Numeric RJ	I10	If person did not enter Matamoros/Reynosa on the survey date (i.e., indicated by a 2 in item 22) this field contains the date that the person entered Matamoros/Reynosa (MMDDYYYY). This field is left blank if item 20 is coded as 1 or item 22 is coded as 1.
24. Travel Origin	207	236	Alphanum. LJ	A30	For travel originating outside of Matamoros/Reynosa, this field contains the city / state / country where the travel began. This field is left blank if item 20 is coded as 1.
25. Origin Field 1	237	286	Alphanum. LJ	A50	This is the address of the last place person got into their vehicle or the name of the nearest intersecting streets to that place. Address and/or nearest cross streets required for all origins in Matamoros/Reynosa, Mexico.
26. Origin Field 2	287	336	Alphanum. LJ	A50	This is the second street name of the nearest intersecting streets to the last place person got into their vehicle or a continuation of the address in item 25. Address and/or nearest cross streets required for all origins in Matamoros/Reynosa, Mexico.

Cameron/Hidalgo County International Crossing Travel Survey Form A Format (continued)

<u>Item</u>	<u>Field Columns</u>			<u>Format</u>	<u>Description</u>
	<u>Begin</u>	<u>End</u>	<u>Type</u>		
27. Origin Longitude	337	346	Numeric RJ	F10.6	This is the longitude of the origin address. Unknown / Refused origins within the study area should be coded as 888.8888. Unknown external origins outside of the study are but within Texas should be coded as 666.6666. Unknown Mexico external origins should be coded as 777.7777. Unknown out-of-state external origins (non-Mexico) should be coded as 999.9999.
28. Origin Latitude	347	356	Numeric RJ	F10.6	This is the latitude of the origin address. Unknown / Refused origins within the study area should be coded as 888.8888. Unknown external origins outside of the study are but within Texas should be coded as 666.6666. Unknown Mexico external origins should be coded as 777.7777. Unknown out-of-state external origins (non-Mexico) should be coded as 999.9999.
29. Departure Hour	357	358	Numeric RJ	I2	This is the hour the vehicle departed from the origin location. This should be in military time.
30. Departure Minute	359	360	Numeric RJ	I2	This is the minute the vehicle departed from the origin location.
31. Origin Type	361	362	Numeric RJ	I2	Code indicating the type of place from which the trip originated. See code definitions below.
32. Origin Type Other	363	382	Alphanum. LJ	A20	If the origin type is coded as "other", this is the description of the type of place. Otherwise it is blank.
33. Origin Purpose	383	384	Numeric RJ	I2	This is the driver's purpose for being at that location. See code definitions below.
34. Origin Purp. Other	385	404	Alphanum. LJ	A20	If the origin purpose is coded as "other", this is the description of the purpose. Otherwise it is blank.
35. Trip Indicator MX	405	406	Numeric RJ	I2	Code indicating if the origin address in item 25/26 is in Matamoros/ Reynosa, Mexico. 1 - Yes, 2 - No, 99 - Unknown / Refused.
36. Origin Zone	407	411	Numeric RJ	I5	If the trip origin is within the study area, this is the zone number where the origin is located. Unknown / refused internal locations within the study area should be coded as 8888. If the trip began outside of the study area but within Texas, it should be coded using the statewide zone system (SAM) and preceded by the number 1 in column 407. Unknown / refused external locations within Texas should be coded as 16666. If the origin is in Mexico, this should be the zone number for the international border crossing used to enter Texas. Unknown / refused border crossings from Mexico should be coded as 7777. If the origin is outside of Texas (non-Mexico), this should be the SAM zone number for the highway used to enter the state. Unknown / refused external locations outside of Texas (non-Mexico) should be coded as 9999.
37. Destination Field 1	412	461	Alphanum. LJ	A50	This is the address of the destination for the person or the name of the nearest intersecting streets to that destination. Address and/or nearest cross streets required for all destinations in Matamoros/ Reynosa, Mexico.
38. Destination Field 2	462	511	Alphanum. LJ	A50	This is the second street name of the nearest intersecting streets to the destination of the person or a continuation of the address in item 37. Address and/or nearest cross streets required for all destinations in Matamoros/Reynosa, Mexico.
39. Destination Longitude	512	521	Numeric RJ	F10.6	This is the longitude of the destination address. Unknown / Refused internal destinations should be coded as 888.8888. Unknown external destinations within Texas should be coded as 666.6666. Unknown Mexico external destinations should be coded as 777.7777. Unknown out-of-state external destinations (non-Mexico) should be coded as 999.9999.
40. Destination Latitude	522	531	Numeric RJ	F10.6	This is the latitude of the destination address. Unknown / Refused internal destinations should be coded as 888.8888. Unknown external destinations within Texas should be coded as 666.6666. Unknown Mexico external destinations should be coded as 777.7777. Unknown out-of-state external destinations (non-Mexico) should be coded as 999.9999.

Cameron/Hidalgo County International Crossing Travel Survey Form A Format (continued)

<u>Item</u>	<u>Field Columns</u>			<u>Format</u>	<u>Description</u>
	<u>Begin</u>	<u>End</u>	<u>Type</u>		
41. Destination Zone Identifier	532	532	Alphanum	A1	This field identifies the MPO study in which the destination zone in item 41 is located. TAZ zones in the Hidalgo County MPO study area should be coded as 'H', zones in the Harlingen-San Benito MPO study area should be coded as 'S', and zones located in the Brownsville MPO study area should be coded as 'B'.
42. Destination Zone	533	537	Numeric RJ	I5	If the trip destination is within the study area, this is the zone number where the destination is located. Unknown / refused internal locations within the study area should be coded as 8888. If the trips end outside of the study area but within Texas, it should be coded using the statewide zone system (SAM) and preceded by the number 1 in column 533. Unknown / refused external locations within Texas should be coded as 16666. If the destination is in Mexico, this should be the zone number for the international border crossing used to exit Texas. Unknown / refused border crossings to Mexico should be coded as 7777. If the destination is outside of Texas (non-Mexico), this should be the SAM zone number for the highway used to exit the state. Unknown / refused external locations outside of Texas (non-Mexico) should be coded as 9999.
43. Destination Type	538	539	Numeric RJ	I2	Code indicating the type of place of the destination. See code definitions below
44. Destination Type Other	540	559	Alphanum. LJ	A20	If the destination type is coded as "other", this is the description of the type of place. Otherwise it is blank.
45. Trip Purpose	560	561	Numeric RJ	I2	Code indicating purpose of trip to destination. See code definitions below.
46. Trip Purpose Other	562	581	Alphanum. LJ	A20	If trip purpose in item 45 is coded as "other", this field should contain the description of that other trip purpose.
47. Trip Indicator SA	582	583	Numeric RJ	I2	Code indicating if the destination address in item 37/38 was inside the study area. 1 - Yes, 2 - No, 99 - Unknown / Refused.
48. Exit Location SA	584	633	Alphanum. LJ	A50	If the trip destination is outside the study area (i.e., indicated by a 2 in item 47), this field should state the name of the external highway / bridge where the vehicle will exit the study area. Unknown should be coded as 99999. This field is blank if item 46 is coded as 1.
49. Exit Zone SA	634	638	Numeric RJ	I5	If person is traveling to a location outside of the study area (i.e., indicated by a 2 in item 47), this field contains the external station number of the exit point listed in item 48. Unknown should be coded as 99999. This field is blank if item 47 is coded as 1.
50. Destination Indicator	639	640	Numeric RJ	I2	Code indicating if the destination location is outside of Texas. 1 - Yes, 2 - No, 99 - Unknown / Refused.
51. Destination Location	641	690	Alphanum. LJ	A50	If person is traveling to a location outside of Texas (i.e., indicated by a 1 in item 50), this field should contain the city / state to which the person is traveling. This field is blank if item 50 is coded as 2.
52. Exit Location TX	691	740	Alphanum. LJ	A50	If person is traveling to a location outside of Texas (i.e., indicated by a 1 in item 50), this field should state the name of the external highway / bridge where the vehicle will exit Texas. This field is blank if item 50 is coded as 2.
53. Exit Zone TX	741	745	Numeric RJ	I5	If person is traveling to a location outside of Texas (i.e., indicated by a 1 in item 50), this field contains the external station number of the exit point listed in item 52. Unknown should be coded as 99999. This field is blank if item 50 is coded as 2.
54. Days Remaining	746	747	Numeric RJ	I2	If person is traveling to a location outside of Texas (i.e., indicated by a 1 in item 50), this field should contain the number of days the person will remain in Texas. This field is blank if item 50 is coded as 2.
55. Destination Texas	748	797	Alphanum. LJ	A50	If person is traveling to a location within Texas (i.e., indicated by a 2 in item 50), this field should contain the city / county to which the person is traveling. This field is blank if item 50 is coded as 1.
56. Beginning Location	798	847	Alphanum. LJ	A50	Location where person first trip began on day of survey. This can be a description or a zone number if location has been geocoded.
57. First Destination	848	897	Alphanum. LJ	A50	Location of first place person went.
58. Second Destination	898	947	Alphanum. LJ	A50	Location of second place person went.
59. Third Destination	948	997	Alphanum. LJ	A50	Location of third place person went.
60. Additional Trips	998	1001	Numeric RJ	I4	Number of additional trips/stops person made on day of survey up to the time they were surveyed.
61. Form	1002	1008	Numeric RJ	I7	Number of survey form where data was recorded.

Vehicle Classification Codes

- 1 – Passenger Vehicle (car/truck/van)
- 2 – Bus
- 3 – Taxi/Paid Limo
- 4 – School Bus
- 5 – Commercial Vehicle (over 1 Ton)
- 6 – Motorcycle
- 7 – Recreational Vehicle
- 8 – Other
- 99 – Unknown/Refused

Trip Purpose Options

- 1 – Home/Return Home
- 2 – Go/Return to Work
- 3 – Work Related
- 4 – School
- 5 – Vacation
- 6 – Visit Friends/Family
- 7 – Eat Out
- 8 – Shop
- 9 – Buy Gas
- 10 – Personal Business
- 11 – Pick Up/Drop Off Passenger

- 12 – Change Travel Mode
- 13 – Delivery
- 14 – Recreation
- 15 – Overnight Stay/Sleep
- 16 – Other (specify)
- 99 – Refused/Do Not Know

Type of Place Options

- 1 – Office Building
- 2 – Retail/Shopping/Gas
- 3 – Industrial/Manufacturing/Warehouse
- 4 – Medical
- 5 – Educational (12th grade or lower)
- 6 – Educational (college, trade. etc.)
- 7 – Government
- 8 – Residential
- 9 – Airport
- 10 – Eating Establishment
- 11 – Hotel/Motel
- 12 – Other (specify)
- 99 – Refused/Unknown

**Cameron/Hidalgo County International Crossing Commercial Vehicle Travel Survey
Form B Data File Format**

This file will contain the survey data collected using Form B in the Cameron/Hidalgo County International Crossing Commercial Vehicle Survey. The data should be in an ASCII data file.

Item	Begin	End	Type	Field Columns	
				Format	Description
1. Record Type	1	2	Alphanum LJ	A2	Code which indicates the type of record, here it should be B.
2. Month	3	4	Numeric RJ	I2	Month station is being surveyed.
3. Day	5	6	Numeric RJ	I2	Day of the month station is being surveyed.
4. Station Number	7	10	Alphanum LJ	A4	Site number of the station being surveyed as described in Attachment A.
5. Station	11	40	Alphanum. LJ	A30	Name of station / facility being surveyed.
6. Longitude	41	50	Numeric RJ	F10.6	Longitude of location being surveyed.
7. Latitude	51	60	Numeric RJ	F10.6	Latitude of location being surveyed.
8. Truck Number	61	61	Numeric RJ	I1	Truck number surveyed (column number on survey form).
9. Arrival Hour	62	63	Numeric RJ	I2	Hour vehicle arrived at location. Must be in military time.
10. Arrival Minute	64	65	Numeric RJ	I2	Minute vehicle arrived at location.
11. Occupancy	66	67	Numeric RJ	I2	Number of people in vehicle.
12. Vehicle Class.	68	69	Numeric RJ	I2	Code indicating the classification of the vehicle. See below for code descriptions.
13. Vehicle Class. Other	70	79	Alphanum. LJ	A10	If the vehicle classification is coded as "other", this is the description of the type of place. Otherwise it is blank.
14. Vehicle Cargo	80	81	Numeric RJ	I2	This is a code number indicating the type of cargo being carried by the vehicle. See code definitions.
15. Vehicle Cargo Other	82	111	Alphanum RJ	A30	If the cargo type in Item 14 is coded as 19 "Unclassified Cargo", this is the description of the Cargo. Otherwise it is blank.
16. Empty Cargo Indicator	112	112	Numeric RJ	I1	Code indicating if vehicle is empty and has no cargo. If vehicle cargo is empty this field should be coded as 1, otherwise it should be left blank
17. Last Cargo	113	114	Numeric RJ	I2	If cargo is empty indicated by a 1 in item 15, this is the code number indicating the type of cargo that was last delivered by the vehicle, prior to it being empty. See code definitions.
18. Last Cargo Other	115	144	Alphanum RJ	A30	If the last cargo type in Item 17 is coded as 19 "Unclassified Cargo", this is the description of the last cargo. Otherwise it is blank.
19. Load Capacity	145	146	Numeric RJ	I2	Code indicating if the vehicle is carrying a full or partial load. 1-Full, 2-Partial, 3 - Refused/Unknown.
20. Multimodal container	147	147	Numeric RJ	I1	Code indicating if cargo is being hauled by a multimodal container/trailer or a TEU. 1-Yes, 2-No, 3 - Neither.
21. Container type	148	148	Numeric RJ	I1	If item 20 is coded as 1, this field indicated the type of container is a reefer or a dry box. 1-reefer, 2-dry box. Field should be left blank if item 20 is not 1.
22. Origination	149	150	Numeric RJ	I2	Code indicating if cargo originated in Mexico. 1 - Yes; 2 - No; 99 - Unknown / Refused. This field is blank if item 16 is coded as 1.
23. Pick up Address	151	200	Alphanum. LJ	A50	Address of location where cargo was picked up. This field is blank if item 16 is coded as 1.
24. Pick up Intermodal	201	202	Numeric RJ	I2	Code indicating if location where cargo was picked up was an intermodal transfer or custom brokerage facility. 1 - Yes; 2 - No; 99 - Unknown / Refused. This field is blank if item 16 is coded as 1.
25. Cargo Transfer Type	203	205	Numeric RJ	I3	Code indicating how cargo was transferred. See below for code descriptions. This field is blank if item 16 is coded as 1.
26. Drop off Address	206	255	Alphanum. LJ	A50	Address of location where cargo will be dropped off. This field is blank if item 16 is coded as 1.
27. Drop off Intermodal	256	257	Numeric RJ	I2	Code indicating if location where cargo will be dropped off is an intermodal transfer or custom brokerage facility. 1 - Yes; 2 - No; 99 - Unknown / Refused. This field is blank if item 16 is coded as 1.
28. Cargo Transfer Type	258	260	Numeric RJ	I3	Code indicating how cargo will be transferred. See below for code descriptions. This field is blank if item 16 is coded as 1.
29. Year of Vehicle	261	264	Numeric RJ	I4	Year vehicle was manufactured. 9999 should be coded for unknown/refused.
30. Gross Rating Weight	265	270	Numeric RJ	I6	Gross weight rating of the vehicle or truck/trailer combination.

Cameron/Hidalgo County International Crossing Commercial Vehicle Survey, Form B Format (continued)

<u>Item</u>	Field Columns			<u>Format</u>	<u>Description</u>
	<u>Begin</u>	<u>End</u>	<u>Type</u>		
31. Vehicle Fuel Type	271	272	Numeric RJ	I2	Type of fuel used by vehicle. 1 – Leaded Gas; 2 – Unleaded Gas; 3 – Diesel; 4 – Propane; 5 – Other.
32. Fuel Type Other	273	282	Alphanum. LJ	A10	If type of fuel is coded as “other”, this is the description of the type of fuel. Otherwise it is blank.
33. Odometer	283	289	Numeric RJ	I7	Odometer mileage on the vehicle. Unknown or refused should be coded as 9999999.
34. General Origin	290	319	Alphanum. LJ	A30	This is the city / state / country where the vehicle is coming from.
35. Origin MX	320	321	Numeric RJ	I2	Code indicating if location in item 34 is located in Matamoros/ Reynosa, Mexico. 1 – Yes; 2 – No; 99 – Unknown / Refused.
36. Enter MX	322	323	Numeric RJ	I2	Code indicating if person entered Matamoros/Reynosa on the survey date. 1 – Yes; 2 – No; 99 – Unknown / Refused. This field is left blank if item 35 is coded as 1.
37. Entry Date	324	333	Numeric RJ	I10	If person did not enter Matamoros/Reynosa on the survey date (i.e., indicated by a 2 in item 36) this field contains the date that the person entered Matamoros/Reynosa (MMDDYYYY). This field is left blank if item 35 is coded as 1 or if item 36 is coded as 1.
38. Travel Origin	334	363	Alphanum. LJ	A30	For travel originating outside of Matamoros/Reynosa, this field contains the city / state / country where the travel began. This field is left blank if item 35 is coded as 1.
39. Origin Field 1	364	413	Alphanum. LJ	A50	This is the address of the last place person got into their vehicle or the name of the nearest intersecting streets to that place. Address and/or nearest cross streets required for all origins in Matamoros/ Reynosa, Mexico.
40. Origin Field 2	414	463	Alphanum. LJ	A50	This is the second street name of the nearest intersecting streets to the last place person got into their vehicle or a continuation of the address in item 39. Address and/or nearest cross streets required for all origins in Matamoros/Reynosa, Mexico.
41. Origin Longitude	464	473	Numeric RJ	F10.6	This is the longitude of the origin address. Unknown / Refused origins within the study area should be coded as 888.8888. Unknown external origins outside of the study area but within Texas should be coded as 666.6666. Unknown Mexico external origins should be coded as 777.7777. Unknown out-of-state external origins (non-Mexico) should be coded as 999.9999.
42. Origin Latitude	474	483	Numeric RJ	F10.6	This is the latitude of the origin address. Unknown / Refused origins within the study area should be coded as 888.8888. Unknown external origins outside of the study area but within Texas should be coded as 666.6666. Unknown Mexico external origins should be coded as 777.7777. Unknown out-of-state external origins (non-Mexico) should be coded as 999.9999.
43. Departure Hour	484	485	Numeric RJ	I2	This is the hour the vehicle departed from the origin location. This should be in military time.
44. Departure Minute	486	487	Numeric RJ	I2	This is the minute the vehicle departed from the origin location.
45. Origin Type	488	489	Numeric RJ	I2	Code indicating the type of place from which the trip originated. See code definitions below.
46. Origin Type Other	490	509	Alphanum. LJ	A20	If the origin type is coded as “other”, this is the description of the type of place. Otherwise it is blank.
47. Origin Purpose	510	511	Numeric RJ	I2	This is the driver's purpose for being at that location. See code definitions below.
48. Origin Purp. Other	512	531	Alphanum. LJ	A20	If the origin purpose is coded as “other”, this is the description of the purpose. Otherwise it is blank.
49. Trip Indicator MX	532	533	Numeric RJ	I2	Code indicating if the origin address in item 39/40 is in Matamoros/ Reynosa, Mexico. 1 - Yes, 2 – No, 99 – Unknown / Refused.

Cameron/Hidalgo County International Crossing Commercial Vehicle Survey, Form B Format (continued)

<u>Item</u>	Field Columns			<u>Format</u>	<u>Description</u>
	<u>Begin</u>	<u>End</u>	<u>Type</u>		
50. Origin Zone	534	538	Numeric RJ	I5	If the trip origin is within the study area, this is the zone number where the origin is located. Unknown / refused internal locations within the study area should be coded as 8888. If the trip began outside of the study area but within Texas, it should be coded using the statewide zone system (SAM) and preceded by the number 1 in column 526. Unknown / refused external locations within Texas should be coded as 16666. If the origin is in Mexico, this should be the zone number for the international border crossing used to enter Texas. Unknown / refused border crossings from Mexico should be coded as 7777. If the origin is outside of Texas (non-Mexico), this should be the SAM zone number for the highway used to enter the state. Unknown / refused external locations outside of Texas (non-Mexico) should be coded as 9999.
51. Destination Field 1	539	588	Alphanum. LJ	A50	This is the address of the destination for the person or the name of the nearest intersecting streets to that destination. Address and/or nearest cross streets required for all destinations in Matamoros/Reynosa, Mexico.
52. Destination Field 2	589	638	Alphanum. LJ	A50	This is the second street name of the nearest intersecting streets to the destination of the person or a continuation of the address in item 51. Address and/or nearest cross streets required for all destinations in Matamoros/Reynosa, Mexico.
53. Destination Longitude	639	648	Numeric RJ	F10.6	This is the longitude of the destination address. Unknown / Refused internal destinations should be coded as 888.8888. Unknown external destinations within Texas should be coded as 666.6666. Unknown Mexico external destinations should be coded as 777.7777. Unknown out-of-state external destinations (non-Mexico) should be coded as 999.9999.
54. Destination Latitude	649	658	Numeric RJ	F10.6	This is the latitude of the destination address. Unknown / Refused internal destinations should be coded as 888.8888. Unknown external destinations within Texas should be coded as 666.6666. Unknown Mexico external destinations should be coded as 777.7777. Unknown out-of-state external destinations (non-Mexico) should be coded as 999.9999.
55. Destination Zone Identifier	659	659	Alphanum	A1	This field identifies the MPO study in which the destination zone in item 55 is located. TAZ zones in the Hidalgo County MPO study area should be coded as 'H', zones in the Harlingen-San Benito MPO study area should be coded as 'S', and zones located in the Brownsville MPO study area should be coded as 'B'.
56. Destination Zone	660	664	Numeric RJ	I5	If the trip destination is within the study area, this is the zone number where the destination is located. Unknown / refused internal locations within the study area should be coded as 8888. If the trips end outside of the study area but within Texas, it should be coded using the statewide zone system (SAM) and preceded by the number 1 in column 660. Unknown / refused external locations within Texas should be coded as 16666. If the destination is in Mexico, this should be the zone number for the international border crossing used to exit Texas. Unknown / refused border crossings to Mexico should be coded as 7777. If the destination is outside of Texas (non-Mexico), this should be the SAM zone number for the highway used to exit the state. Unknown / refused external locations outside of Texas (non-Mexico) should be coded as 9999.
57. Destination Type	665	666	Numeric RJ	I2	Code indicating the type of place of the destination. See code definitions below
58. Destination Type Other	667	686	Alphanum. LJ	A20	If the destination type is coded as "other", this is the description of the type of place. Otherwise it is blank.
59. Trip Purpose	687	688	Numeric RJ	I2	Code indicating purpose of trip to destination. See code definitions below.
60. Trip Purpose Other	689	708	Alphanum. LJ	A20	If trip purpose in item 59 is coded as "other", this field should contain the description of that other trip purpose.
61. Trip Indicator SA	709	710	Numeric RJ	I2	Code indicating if the destination address in item 51/52 was inside the study area. 1 - Yes, 2 - No, 99 - Unknown / Refused.

Cameron/Hidalgo County International Crossing Commercial Vehicle Survey, Form B Format (continued)

<u>Item</u>	<u>Field Columns</u>			<u>Format</u>	<u>Description</u>
	<u>Begin</u>	<u>End</u>	<u>Type</u>		
62. Exit Location SA	711	760	Alphanum. LJ	A50	If the trip destination is outside the study area (i.e., indicated by a 2 in item 61), this field should state the name of the external highway / bridge where the vehicle will exit the study area. Unknown should be coded as 99999. This field is blank if item 61 is coded as 1.
63. Exit Zone SA	761	765	Numeric RJ	I5	If person is traveling to a location outside of the study area (i.e., indicated by a 2 in item 61), this field contains the external station number of the exit point listed in item 62. Unknown should be coded as 99999. This field is blank if item 61 is coded as 1.
64. Destination Indicator	766	767	Numeric RJ	I2	Code indicating if the destination location is outside of Texas. 1 - Yes, 2 - No, 99 - Unknown / Refused.
65. Destination Location	768	817	Alphanum. LJ	A50	If person is traveling to a location outside of Texas (i.e., indicated by a 1 in item 64), this field should contain the city / state to which the person is traveling. This field is blank if item 64 is coded as 2.
66. Exit Location TX	818	867	Alphanum. LJ	A50	If person is traveling to a location outside of Texas (i.e., indicated by a 1 in item 64), this field should state the name of the external highway / bridge where the vehicle will exit Texas. This field is blank if item 64 is coded as 2.
67. Exit Zone TX	867	872	Numeric RJ	I5	If person is traveling to a location outside of Texas (i.e., indicated by a 1 in item 64), this field contains the external station number of the exit point listed in item 58. Unknown should be coded as 99999. This field is blank if item 63 is coded as 2.
68. Days Remaining	873	874	Numeric RJ	I2	If person is traveling to a location outside of Texas (i.e., indicated by a 1 in item 64), this field should contain the number of days the person will remain in Texas. This field is blank if item 64 is coded as 2.
69. Destination Texas	875	924	Alphanum. LJ	A50	If person is traveling to a location within Texas (i.e., indicated by a 2 in item 64), this field should contain the city / county to which the person is traveling. This field is blank if item 64 is coded as 1.
70. Beginning Location	925	974	Alphanum. LJ	A50	Location where person first trip began on day of survey. This can be a description or a zone number if location has been geocoded.
71. First Destination	975	1024	Alphanum. LJ	A50	Location of first place person went.
72. Second Destination	1025	1074	Alphanum. LJ	A50	Location of second place person went.
73. Third Destination	1075	1124	Alphanum. LJ	A50	Location of third place person went.
74. Additional Trips	1125	1128	Numeric RJ	I4	Number of additional trips/stops person made on day of survey up to the time they were surveyed.
75. Form	1129	1135	Numeric RJ	I7	Number of survey form where data was recorded.

Vehicle Classification Codes

- 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
- 99 - Unknown

Trip Purpose Options

- 1 - Base location/Return to Base location
- 2 - Delivery
- 3 - Pick Up
- 4 - Maintenance
- 5 - Driver Needs (lunch, etc.)
- 6 - To Home
- 7 - Buy Fuel
- 8 - Other
- 99 - Refused/unknown

Cargo Transfer Codes

- 1 - Truck-to/from-Truck
- 2 - Rail- to/from -Truck
- 3 - Ship- to/from -Truck
- 4 - Airplane- to/from -Truck
- 5 - Warehouse- to/from -Truck
- 6 - Pipeline- to/from -Truck
- 7 - Unknown
- 99 - Refused

Type of Place Options

- 1 – Office Building
- 2 – Retail/Shopping/Gas
- 3 – Industrial/Manufacturing/Warehouse
- 4 – Medical
- 5 – Educational (12th grade or lower)
- 6 – Educational (college, trade. etc.)
- 7 – Government
- 8 – Residential
- 9 – Airport
- 10 – Eating Establishment
- 11 – Other (specify)
- 99 – Refused/Unknown

Vehicle Cargo Codes

- | | |
|--|--|
| 1 - Farm Products | Livestock, fertilizer, dirt, landscaping, etc. |
| 2 - Forest Products | Trees, sod, etc. |
| 3 - Marine Products | Fresh fish, seafood, etc. |
| 4 - Metals and Minerals | Crude petroleum, natural gas, propane, Metals, gypsum, ores, etc. |
| 5 - Food, Health, and Beauty Products | Assorted food products, cosmetics, etc. |
| 6 - Tobacco Products | Cigarettes, cigars, and chewing tobacco |
| 7 - Textiles | Clothing, linens, etc. |
| 8 - Wood Products | Lumber, paper, cardboard, wood pulp, etc. |
| 9 - Printed Matter | Newspapers, magazines, books, etc. |
| 10 - Chemical Products | Soaps, paints, household or industrial chemicals, etc. |
| 11 - Refined Petroleum or Coal Products | Gasoline, etc. |
| 12 - Rubber, Plastic, and Styrofoam Products | Finished products of rubber, plastic, or Styrofoam |
| 13 - Clay, Concrete, Glass, or Stone | Finished products of clay, concrete, glass, or stone |
| 14 - Manufactured Goods/Equip. | Miscellaneous products, such as machinery, appliances, furniture, etc. |
| 15 - Wastes | Waste products including scrap and recyclable materials |
| 16 - Miscellaneous Shipments | U.S. mail, U.P.S., Federal Express, and other mixed cargo |
| 17 - Hazardous Materials | Hazardous chemicals and substances |
| 18 - Transportation | Automobiles, Heavy Equipment, etc. |
| 19 - Unclassified Cargo (specify) | Cargo not falling within one of the above categories |
| 20 - Driver Refused to Answer | Driver refused to answer |
| 21 - Unknown to Driver | Unknown to driver |
| 22 - Empty | Empty (including empty shipping containers) |

**Cameron/Hidalgo County International Border Crossing Pedestrian Survey
Form C Data File Format**

This file will contain the survey data collected using Form C in the Cameron/Hidalgo County International Crossing Pedestrian Survey. The data should be in an ASCII data file.

Item	Field Columns			Format	Description
	Begin	End	Type		
1. Record Type	1	2	Alphanum. LJ	A2	Code which indicates the type of record, here it should be C.
2. Month	3	4	Numeric RJ	I2	Month station is being surveyed.
3. Day	5	6	Numeric RJ	I2	Day of the month station is being surveyed.
4. Station Number	7	10	Alphanum. LJ	A4	Site number of the station being surveyed as described in Attachment A.
5. Station	11	40	Alphanum. LJ	A30	Name of station / facility being surveyed.
6. Longitude	41	50	Numeric RJ	F10.6	Longitude of location being surveyed.
7. Latitude	51	60	Numeric RJ	F10.6	Latitude of location being surveyed.
8. Person Number	61	61	Numeric RJ	I1	Person number surveyed (column number on survey form).
9. Arrival Hour	62	63	Numeric RJ	I2	Hour person arrived at location. Must be in military time.
10. Arrival Minute	64	65	Numeric RJ	I2	Minute person arrived at location.
11. Origin Field 1	66	115	Alphanum. LJ	A50	This is the address or the name of the nearest intersecting streets where the person's trip originated. Address and/or nearest cross streets required for all origins in Matamoros/Reynosa, Mexico.
12. Origin Field 2	116	165	Alphanum. LJ	A50	This is the second street name of the nearest intersecting streets to the place where the person's trip originated or a continuation of the address in item 11. Address and/or nearest cross streets required for all origins in Matamoros/Reynosa, Mexico.
13. Origin Longitude	166	175	Numeric RJ	F10.6	This is the longitude of the origin address. Unknown / Refused origins within the study area should be coded as 888.8888. Unknown external origins outside of the study are but within Texas should be coded as 666.6666. Unknown Mexico external origins should be coded as 777.7777. Unknown out-of-state external origins (non-Mexico) should be coded as 999.9999.
14. Origin Latitude	176	185	Numeric RJ	F10.6	This is the latitude of the origin address. Unknown / Refused origins within the study area should be coded as 888.8888. Unknown external origins outside of the study are but within Texas should be coded as 666.6666. Unknown Mexico external origins should be coded as 777.7777. Unknown out-of-state external origins (non-Mexico) should be coded as 999.9999.
15. Origin Zone	186	190	Numeric RJ	I5	If the trip origin is within the study area, this is the zone number where the origin is located. Unknown / refused internal locations within the study area should be coded as 8888. If the trip began outside of the study area but within Texas, it should be coded using the statewide zone system (SAM) and preceded by the number 1 in column 186. Unknown / refused external locations within Texas should be coded as 16666. If the origin is in Mexico, this should be the zone number for the international border crossing used to enter Texas. Unknown / refused border crossings from Mexico should be coded as 7777. If the origin is outside of Texas (non-Mexico), this should be the SAM zone number for the highway used to enter the state. Unknown / refused external locations outside of Texas (non-Mexico) should be coded as 9999.
16. Origin Type	191	192	Numeric RJ	I2	Code indicating the type of place from which the trip originated. See code definitions below.
17. Origin Type Other	193	212	Alphanum. LJ	A20	If the origin type is coded as "other", this is the description of the type of place. Otherwise it is blank.
18. Travel Mode	213	214	Numeric RJ	I2	Code indicating the type of mode used to travel from the last location. See code definitions below.
19. Travel Mode Other	215	234	Alphanum. LJ	A20	If the travel mode type is coded as "other", this is the description of the type of place. Otherwise it is blank.
20. Departure Hour	235	236	Numeric RJ	I2	This is the hour the person departed origin address in item 11/12. Must be in military time.
21. Departure Minute	237	238	Numeric RJ	I2	This is the minute the person departed from the origin location.
22. Origin Purpose	239	240	Numeric RJ	I2	Code indicating purpose of trip to destination. See code definitions below.
23. Origin Purpose Other	241	260	Alphanum. LJ	A20	If trip purpose is coded as "other", this field should contain the description of that other trip purpose.

Cameron/Hidalgo County International Crossing Pedestrian Survey, Form C Format (continued)

Item	Field Columns			Format	Description
	Begin	End	Type		
24. Destination Field 1	261	310	Alphanum. LJ	A50	This is the address of the destination for the person or the first street name of the nearest intersecting streets to that location.
25. Destination Field 2	311	360	Alphanum. LJ	A50	This is the second street name of the nearest intersecting streets to the destination of the person or a continuation of the address in item 24.
26. Destination Zone Identifier	361	361	Alphanum	A1	This field identifies the MPO study in which the destination zone in item 27 is located. TAZ zones in the Hidalgo County MPO study area should be coded as 'H', zones in the Harlingen-San Benito MPO study area should be coded as 'S', and zones located in the Brownsville MPO study area should be coded as 'B'.
27. Destination Zone	362	366	Numeric RJ	I5	If the trip destination is within the study area, this is the zone number where the destination is located. Unknown / refused internal locations within the study area should be coded as 8888. If the trips end outside of the study area but within Texas, it should be coded using the statewide zone system (SAM) and preceded by the number 1 in column 362. Unknown / refused external locations within Texas should be coded as 16666. If the destination is in Mexico, this should be the zone number for the international border crossing used to exit Texas. Unknown / refused border crossings to Mexico should be coded as 7777. If the destination is outside of Texas (non-Mexico), this should be the SAM zone number for the highway used to exit the state. Unknown / refused external locations outside of Texas (non-Mexico) should be coded as 9999.
28. Destination Longitude	367	376	Numeric RJ	F10.6	This is the longitude of the destination location. Unknown / Refused internal destinations should be coded as 888.8888. Unknown external destinations within Texas should be coded as 666.6666. Unknown Mexico external destinations should be coded as 777.7777. Unknown out-of-state external destinations (non-Mexico) should be coded as 999.9999.
29. Destination Latitude	377	386	Numeric RJ	F10.6	This is the latitude of the destination location. Unknown / Refused internal destinations should be coded as 888.8888. Unknown external destinations within Texas should be coded as 666.6666. Unknown Mexico external destinations should be coded as 777.7777. Unknown out-of-state external destinations (non-Mexico) should be coded as 999.9999.
30. Destination Type	387	388	Numeric RJ	I2	Code indicating the type of place of the destination.
31. Destination Type Other	389	408	Alphanum. LJ	A20	If the destination type is coded as "other", this is the description of the type of place. Otherwise it is blank.
32. Destination Mode	409	410	Numeric RJ	I2	Code indicating the mode of travel used by the person to travel to his or her next destination. See code definitions below.
33. Destination Mode Other	411	430	Alphanum. LJ	A20	If the destination mode is coded as "other", this is the description of the type of place. Otherwise it is blank.
34. Trip Purpose	431	432	Numeric RJ	I2	Code indicating purpose of trip to destination. See code definitions below.
35. Trip Purpose Other	433	452	Alphanum. LJ	A20	If trip purpose in item 34 is coded as "other", this field should contain the description of that other trip purpose.
36. No. of Stops	453	455	Numeric RJ	I3	Number of places/stores person plans to visit
37. Residence	456	457	Numeric RJ	I2	Code indicating where person lives. 1 – Mexico; 2 – Cameron/ Hidalgo County; 3 – Texas; 4 – Other; 99 – Unknown / Refused.
38. Winter Texan	458	459	Numeric RJ	I2	Code indicating if person is a winter Texan. 1=yes, 2=no.
39. Residence Other	460	489	Alphanum. LJ	A30	If residence is coded as "other" in item 37, this field should contain the description of where person lives. This should include city / state / country.
40. Frequency	490	492	Numeric RJ	I3	Number of times per week person makes this trip.
41. Form	493	499	Numeric RJ	I7	Number of survey form where data was recorded.

Cameron/Hidalgo County International Crossing Pedestrian Survey, Form C Format (continued)

<u>Type of Place Options</u>	<u>Trip Purpose Options</u>	<u>Vehicle / Mode Options</u>
1 – Office Building	1 – Home/Return Home	1 – Passenger (car/truck/van)
2 – Retail/Shopping/Gas	2 – Go/Return to Work	2 – Bus
3 – Industrial/Manufacturing/Warehouse	3 – Work Related	3 – Taxi/Paid Limo
4 – Medical	4 – School	4 – School Bus
5 – Educational (12 th grade or lower)	5 – Vacation	5 – Commercial Vehicle (over 1 ton)
6 – Educational (college, trade. etc.)	6 – Visit Friends/Family	6 – Motorcycle
7 – Government	7 – Eat Out	7 – Recreational Vehicle
8 – Residential	8 – Shop	8 – Walk
9 – Airport	9 – Personal Business	9 – Other (specify)
10 – Eating Establishment	10 – Delivery	99 – Refused/Unknown
11 – Other (specify)	11 – Other	
99 – Refused/Unknown	99 – Refused/Do Not Know	

**Cameron/Hidalgo County External Station Non-Commercial Travel Survey
Form D Data File Format**

This file will contain the survey data collected using Form D in the Cameron/Hidalgo County External Station survey . The data should be in an ASCII data file.

Item	Field Columns			Format	Description
	Begin	End	Type		
1. Record Type	1	2	Alphanum LJ	A2	Code which indicates the type of record, here it should be D.
2. Month	3	4	Numeric RJ	I2	Month station is being surveyed.
3. Day	5	6	Numeric RJ	I2	Day of the month survey is being conducted.
4. Station Number	7	10	Alphanum LJ	A4	Site number of the station being surveyed as described in Attachment A.
5. Station	11	40	Alphanum. LJ	A30	Name of station/facility being surveyed.
6. Longitude	41	50	Numeric RJ	F10.6	Longitude of location being surveyed.
7. Latitude	51	60	Numeric RJ	F10.6	Latitude of location being surveyed.
8. Vehicle Number	61	61	Numeric RJ	I1	Vehicle number surveyed (column number on survey form).
9. Arrival Hour	62	63	Numeric RJ	I2	Hour vehicle arrived at location. Must be in military time.
10. Arrival Minute	64	65	Numeric RJ	I2	Minute vehicle arrived at location.
11. Occupancy	66	67	Numeric RJ	I2	Number of people in vehicle.
12. Vehicle Class.	68	69	Numeric RJ	I2	Code indicating the classification of the vehicle. See below for code descriptions.
13. Vehicle Class. Other	70	79	Alphanum. LJ	A10	If vehicle type is coded as other, this is the description of the vehicle type.
14. Year of Vehicle	80	83	Numeric RJ	I4	Year vehicle was manufactured. 9999 should be coded for unknown / refused.
15. Vehicle Make	84	113	Alphanum. LJ	A30	Make of vehicle.
16. Vehicle Model	114	143	Alphanum. LJ	A30	Model of vehicle.
17. Vehicle Fuel Type	144	145	Numeric RJ	I2	Type of fuel used by vehicle. 1 - Leaded Gas; 2 - Unleaded Gas; 3 - Diesel; 4 - Propane; 5 - Other.
18. Fuel Type Other	146	155	Alphanum. LJ	A10	If type of fuel is coded as "other", this is the description of the type of fuel. Otherwise it is blank.
19. Odometer	156	162	Numeric RJ	I7	Odometer mileage on vehicle. 9999999 should be coded for unknown / refused.
20. Winter Texan	163	164	Numeric RJ	I2	Code indicating if person is winter Texan. 1=yes, 2=no.
21. Primary Residence	165	194	Alphanum. LJ	A30	If winter Texan indicated by a 1 in item 20, this field contains the city and state of their primary address for non-winter months. This field should remain blank if item 20 is coded as 2.
22. Duration of Stay	195	196	Numeric RJ	I2	If winter Texan indicated by a 1 in item 20, this field contains the number of months per year they reside in south Texas. This field should remain blank if item 20 is coded as 2.
23. Winter Address	197	246	Alphanum. LJ	A50	If winter Texan indicated by a 1 in item 20, this field provides the street address, city, and county of their winter residence in south Texas. . This field should remain blank if item 20 is coded as 2.
24. Study area indicator	247	248	Numeric RJ	I2	Code indicating if person lives in the study area. 1 – Cameron County; 2 – Hidalgo County; 3-Neither, 99 – Unknown / Refused. This field should remain blank if winter Texan, item 20 coded as 1.
25. Home Location – Resident	249	278	Alphanum. LJ	A30	This field contains the city and state of their home. This field is blank if item 24 is coded as 3 or 4.
26. Home Location Non-Resident	279	308	Numeric RJ	A30	For persons not living in the study area, this field contains the city and state where they reside. This field is blank if item 24 is coded 1 or 2.
27. Stayed Overnight (Non-Resident)	309	310	Numeric RJ	I2	For persons not living in study area, this field contains code indicating if person stayed overnight in study area. 1 – Yes; 2 – No; 99 – Unknown / Refused. This field is blank if item 24 is coded 1 or 2.
28. Stay-Over Location (Non-Resident)	311	340	Alphanum LJ	A30	For persons not living in study area who indicated they stayed overnight in item 27, this field contains the name and location of where they stayed.
29. Number of Nights (Non-Resident)	341	342	Numeric RJ	I2	This field should contain the number of nights non-resident stayed overnight in the study area.
30. Enter Texas (Non-Resident)	343	344	Numeric RJ	I2	For persons not living in the study area, this field contains the code indicating if person entered Texas on the survey date. 1- Yes; 2 – No; 99 – Unknown / Refused. This field is blank if item 24 is coded 1 or 2.
31. Travel Origin (Non-Resident)	345	374	Alphanum. LJ	A30	For persons not living in the study area, this field contains the travel origin for persons who entered Texas on the survey day. This field is blank if item 24 is coded 1 or 2 or if item 30 is coded as 2.

Cameron/Hidalgo County External Station Travel Survey, Form D Format (continued)

Item	Field Columns				Format	Description
	Begin	End	Type			
32. Texas Entry Point (Non-Resident)	375	404	Alphanum.	LJ	A30	For persons not living in the study area that entered Texas on the travel day, this field should state the name of the road or highway they used to enter Texas. This field is blank if item 24 is coded 1 or 2 or if item 30 is coded as 2.
33. Texas Entry Zone (Non-Resident)	405	409	Numeric	RJ	I5	This field contains the external station zone number of the entry or exit point listed in item 28. This field is blank if item 24 is coded 1 or 2 or if item 30 is coded as 2.
34. Origin Field 1	410	459	Alphanum.	LJ	A50	This is the address of the last place person got into their vehicle or the name of the nearest intersecting streets to that place. Addresses and/or nearest cross streets are required for all origins in Matamoros/Reynosa.
35. Origin Field 2	460	509	Alphanum.	LJ	A50	This is the second street name of the nearest intersecting streets to the last place person got into their vehicle or a continuation of the address in item 30. Addresses and/or nearest cross streets are required for all origins in Matamoros/Reynosa.
36. Origin Longitude	510	519	Numeric	RJ	F10.6	This is the longitude of the origin address. Unknown / Refused origins within the study area should be coded as 888.8888. Unknown external origins outside of the study area but within Texas should be coded as 666.6666. Unknown Mexico external origins should be coded as 777.7777. Unknown out-of-state external origins (non-Mexico) should be coded as 999.9999.
37. Origin Latitude	520	529	Numeric	RJ	F10.6	This is the latitude of the origin address. Unknown / Refused origins within the study area should be coded as 888.8888. Unknown external origins outside of the study area but within Texas should be coded as 666.6666. Unknown Mexico external origins should be coded as 777.7777. Unknown out-of-state external origins (non-Mexico) should be coded as 999.9999.
38. Origin Zone Identifier	530	530	Alphanum		A1	This field identifies the MPO study in which the origin zone in item 37 is located. TAZ zones in the Hidalgo County MPO study area should be coded as 'H', zones in the Harlingen-San Benito MPO study area should be coded as 'S', and zones located in the Brownsville MPO study area should be coded as 'B'.
39. Origin Zone	531	535	Numeric	RJ	I5	If the trip origin is within the study area, this is the zone number where the origin is located. Unknown / refused internal locations within the study area should be coded as 8888. If the trip began outside of the study area but within Texas, it should be coded using the statewide zone system (SAM) and preceded by the number 1 in column 531. Unknown / refused external locations within Texas should be coded as 16666. If the origin is in Mexico, this should be the zone number for the international border crossing used to enter Texas. Unknown / refused border crossings from Mexico should be coded as 7777. If the origin is outside of Texas (non-Mexico), this should be the SAM zone number for the highway used to enter the state. Unknown / refused external locations outside of Texas (non-Mexico) should be coded as 9999.
40. Departure Hour	536	537	Numeric	RJ	I2	This is the hour the vehicle departed from the origin location. This should be in military time.
41. Departure Minute	538	539	Numeric	RJ	I2	This is the minute the vehicle departed from the origin location.
42. Origin Type	540	541	Numeric	RJ	I2	Code indicating the type of place from which the trip originated. See code definitions below.
43. Origin Type Other	542	561	Alphanum.	LJ	A20	If the origin type is coded as "other", this is the description of the type of place. Otherwise it is blank.
44. Origin Purpose	562	563	Numeric	RJ	I2	This is the driver's purpose for being at that location. See code definitions below.
45. Origin Purpose Other	564	583	Alphanum.	LJ	A20	If the origin purpose is coded as "other", this is the description of the purpose. Otherwise it is blank.
46. Trip Indicator	584	585	Numeric	RJ	I2	Code indicating if the origin address in item 34/35 is within the study area. 1 - Yes, 2 - No, 99 - Unknown / Refused.
47. Entry Point	586	615	Alphanum.	LJ	A30	If the trip origin is outside the study area (i.e., indicated by a 2 in item 46), this field should state the name of the external highway / bridge at which the vehicle entered the study area. This field is blank if item 46 is coded as 1.
48. Entry Zone	616	620	Numeric	RJ	I5	If the trip origin is outside the study area (i.e., indicated by a 2 in item 46), this field contains the external station number of the entry point listed in item 47. Unknown should be coded as 99999. This field is blank if item 46 is coded as 1.

Cameron/Hidalgo County External Station Travel Survey, Form D Format (continued)

<u>Item</u>	Field Columns				<u>Format</u>	<u>Description</u>
	<u>Begin</u>	<u>End</u>	<u>Type</u>			
49. Destination Field 1	621	670	Alphanum.	LJ	A50	This is the address of the destination for the person or the name of the nearest intersecting streets to that destination. Addresses and/or nearest cross streets are required for all destinations in Matamoros/Reynosa.
50. Destination Field 2	671	720	Alphanum.	LJ	A50	This is the second street name of the nearest intersecting streets to the destination of the person or a continuation of the address in item 49. Addresses and/or nearest cross streets are required for all destinations in Matamoros/Reynosa.
51. Destination Longitude	721	730	Numeric	RJ	F10.6	This is the longitude of the destination address. Unknown / Refused internal destinations should be coded as 888.8888. Unknown external destinations within Texas should be coded as 666.6666. Unknown Mexico external destinations should be coded as 777.7777. Unknown out-of-state external destinations (non-Mexico) should be coded as 999.9999.
52. Destination Latitude	731	740	Numeric	RJ	F10.6	This is the latitude of the destination address. Unknown / Refused internal destinations should be coded as 888.8888. Unknown external destinations within Texas should be coded as 666.6666. Unknown Mexico external destinations should be coded as 777.7777. Unknown out-of-state external destinations (non-Mexico) should be coded as 999.9999.
53. Destination Zone Identifier	741	741	Alphanum		A1	This field identifies the MPO study in which the destination zone in item 54 is located. TAZ zones in the Hidalgo County MPO study area should be coded as 'H', zones in the Harlingen-San Benito MPO study area should be coded as 'S', and zones located in the Brownsville MPO study area should be coded as 'B'.
54. Destination Zone	742	746	Numeric	RJ	I5	If the trip destination is within the study area, this is the zone number where the destination is located. Unknown / refused internal locations within the study area should be coded as 8888. If the trip ends outside of the study area but within Texas, it should be coded using the statewide zone system (SAM) and preceded by the number 1 in column 742. Unknown / refused external locations within Texas should be coded as 16666. If the destination is in Mexico, this should be the zone number for the international border crossing used to exit Texas. Unknown / refused border crossings to Mexico should be coded as 7777. If the destination is outside of Texas (non-Mexico), this should be the SAM zone number for the highway used to exit the state. Unknown / refused external locations outside of Texas (non-Mexico) should be coded as 9999.
55. Trip Purpose	747	748	Numeric	RJ	I2	Code indicating purpose of trip to destination. See code definitions below.
56. Trip Purpose Other	749	768	Alphanum.	LJ	A20	If trip purpose in item 55 is coded as "other", this field should contain the description of that other trip purpose.
57. Destination Indicator	769	770	Numeric	RJ	I2	Code indicating if the destination location is outside of Texas. 1 - Yes, 2 - No, 99 - Unknown / Refused.
58. Destination Location	771	820	Alphanum.	LJ	A50	If person is traveling to a location outside of Texas (i.e., indicated by a 1 in item 57), this field should contain the city / state to which the person is traveling. This field is blank if item 57 is coded as 2.
59. Exit Location	821	870	Alphanum.	LJ	A50	If person is traveling to a location outside of Texas (i.e., indicated by a 1 in item 57), this field should state the name of the road or highway where the vehicle will exit this state. This field is blank if item 57 is coded as 2.
60. Exit Zone	871	875	Numeric	RJ	I5	If person is traveling to a location outside of Texas (i.e., indicated by a 1 in item 57), this field contains the external station zone number of the exit point listed in item 59. Unknown should be coded as 99999. This field is blank if item 57 is coded as 2.
61. Days Remaining	876	877	Numeric	RJ	I2	If person is traveling to a location outside of Texas (i.e., indicated by a 1 in item 57), this field should contain the number of days the person will remain in this state. This field is blank if item 57 is coded as 2.
62. Destination Texas	878	927	Alphanum.	LJ	A50	If person is traveling to a location within Texas (i.e., indicated by a 2 in item 57), this field should contain the city / county to which the person is traveling. This field is blank if item 57 is coded as 1.
63. Beginning Location	928	977	Alphanum.	LJ	A50	Location where person's first trip began on day of survey. This can be a description or a zone number if location has been geocoded.
64. First Destination	978	1027	Alphanum.	LJ	A50	Location of first place person went.
65. Second Destination	1028	1077	Alphanum.	LJ	A50	Location of second place person went.
66. Third Destination	1078	1127	Alphanum.	LJ	A50	Location of third place person went.
67. Fourth Destination	1128	1277	Alphanum	LJ	A50	Location of fourth place person went.

Cameron/Hidalgo County External Station Travel Survey, Form D Format (continued)

<u>Item</u>	<u>Field Columns</u>			<u>Format</u>	<u>Description</u>
	<u>Begin</u>	<u>End</u>	<u>Type</u>		
68. Additional Trips	1278	1281	Numeric RJ	I4	Number of additional trips/stops person made on day of survey up to the time they were surveyed.
69. Form	1282	1288	Numeric RJ	I7	Number of survey form where data was recorded.

<u>Vehicle Classification Codes</u>	<u>Trip Purpose Options</u>	<u>Type of Place Options</u>
1 – Passenger Vehicle (car/truck/van)	1 – Home/Return Home	1 – Office Building
2 – Bus	2 – Go/Return to Work	2 – Retail/Shopping/Gas
3 – Taxi/Paid Limo	3 – Work Related	3 – Industrial/Manufacturing/Warehouse
4 – School Bus	4 – School	4 – Medical
5 – Commercial Vehicle (over 1 Ton)	5 – Vacation	5 – Educational (12 th grade or lower)
6 – Motorcycle	6 – Visit Friends/Family	6 – Educational (college, trade. etc.)
7 – Recreational Vehicle	7 – Eat Out	7 – Government
8 – Other Specify	8 – Shop	8 – Residential
99 – Unknown/Refused	9 – Buy Gas	9 – Airport
	10 – Personal Business	10 – Eating Establishment
	11 – Pick Up/Drop Off Passenger	11 –Hotel/Motel
		12- Other (specify)
	12 – Change Travel Mode	99 – Refused/Unknown
	13 – Delivery	
	14 – Recreation	
	15 –Overnight Stay/Sleep	
	16- Other (specify)	
	99 – Refused/Do Not Know	

**Cameron/Hidalgo County External Station Commercial Vehicle Survey
Form E Data File Format**

This file will contain the survey data collected using Form E in the Cameron/Hidalgo County External Station Commercial Vehicle survey. The data should be in an ASCII data file.

Item	Field Columns			Format	Description
	Begin	End	Type		
1. Record Type	1	2	Alphanumeric	LJ A2	Code which indicates the type of record, here it should be E.
2. Month	3	4	Numeric	RJ I2	Month station is being surveyed.
3. Day	5	6	Numeric	RJ I2	Day of the month station is being surveyed.
4. Station Number	7	10	Alphanumeric	LJ A4	Site number of the station being surveyed as described in Attachment A.
5. Station	11	40	Alphanumeric	LJ A30	Name of station / facility being surveyed.
6. Longitude	41	50	Numeric	RJ F10.6	Longitude of location being surveyed.
7. Latitude	51	60	Numeric	RJ F10.6	Latitude of location being surveyed.
8. Truck Number	61	61	Numeric	RJ I1	Truck number surveyed (column number on survey form).
9. Arrival Hour	62	63	Numeric	RJ I2	Hour vehicle arrived at location. Must be in military time.
10. Arrival Minute	64	65	Numeric	RJ I2	Minute vehicle arrived at location.
11. Occupancy	66	67	Numeric	RJ I2	Number of people in vehicle.
12. Vehicle Class.	68	69	Numeric	RJ I2	Code indicating the classification of the vehicle. See below for code descriptions.
13. Vehicle Class. Other	70	79	Alphanumeric	LJ A10	If vehicle classification is coded as "other", this is the description of the type of fuel. Otherwise it is blank.
14. Vehicle Cargo	80	81	Numeric	RJ I2	This is a code number indicating the type of cargo being carried by the vehicle. See code definitions.
15. Vehicle Cargo Other	82	111	Alphanumeric	RJ A30	If the cargo type in Item 14 is coded as 19 "Unclassified Cargo", this is the description of the Cargo. Otherwise it is blank.
16. Empty Cargo Indicator	112	112	Numeric	RJ I1	Code indicating if vehicle is empty and has no cargo. If vehicle cargo is empty this field should be coded as 1, otherwise it should be left blank
17. Last Cargo	113	114	Numeric	RJ I2	If cargo is empty indicated by a 1 in item 15, this is the code number indicating the type of cargo that was last delivered by the vehicle, prior to it being empty. See code definitions.
18. Last Cargo Other	115	144	Alphanumeric	RJ A30	If the last cargo type in Item 17 is coded as 19 "Unclassified Cargo", this is the description of the last cargo. Otherwise it is blank.
19. Load Capacity	145	146	Numeric	RJ I2	Code indicating if the vehicle is carrying a full or partial load. 1-Full, 2-Partial, 3 - Refused/Unknown.
20. Multimodal container	147	147	Numeric	RJ I1	Code indicating if cargo is being hauled by a multimodal container/trailor or a TEU. 1-Yes, 2-No.
21. Container type	148	148	Numeric	RJ I1	If item 20 is coded as 1, this field indicated the type of container is a reefer or a dry box. 1-reefer, 2-dry box, 3-neither. Field should be left blank if item 20 is not 1.
22. Mexico Cargo	149	150	Numeric	RJ I2	Code indicating if cargo came from or is going to Mexico. 1 - Yes; 2 - No; 99 - Unknown / Refused. This field is blank if item 14 is coded as 22.
23. Pick up Address	151	200	Alphanumeric	LJ A50	Address of location where cargo was picked up. This field is blank if item 14 is coded as 22.
24. Pick up Intermodal	201	202	Numeric	RJ I2	Code indicating if location where cargo was picked up was an interposal transfer or custom brokerage facility. 1 - Yes; 2 - No; 99 - Unknown / Refused. This field is blank if item 14 is coded as 22.
25. Cargo Transfer Type	203	205	Numeric	RJ I3	Code indicating how cargo was transferred. See below for code descriptions. This field is blank if item 14 is coded as 22.
26. Drop off Address	206	255	Alphanumeric	LJ A50	Address of location where cargo will be dropped off. This field is blank if item 14 is coded as 22.
27. Drop off Intermodal	256	257	Numeric	RJ I2	Code indicating if location where cargo will be dropped off is an interposal transfer or custom brokerage facility. 1 - Yes; 2 - No; 99 - Unknown / Refused. This field is blank if item 14 is coded as 22.
28. Cargo Transfer Type	258	260	Numeric	RJ I3	Code indicating how cargo will be transferred at drop off site. See below for code descriptions. This field is blank if item 14 is coded as 22.
29. Year of Vehicle	261	264	Numeric	RJ I4	Year vehicle was manufactured. 9999 should be coded for Unknown / Refused.
30. Gross Weight Rating	265	270	Numeric	RJ I6	Gross weight rating of the vehicle or of the truck/trailer combination.
31. Vehicle Fuel Type	271	272	Numeric	RJ I2	Type of fuel used by vehicle. 1 - Leaded Gas; 2 - Unleaded Gas; 3 - Diesel; 4 - Propane; 5 - Other.
32. Fuel Type Other	273	282	Alphanumeric	LJ A10	If type of fuel is coded as "other", this is the description of the type of fuel. Otherwise it is blank.
33. Odometer	283	289	Numeric	RJ I7	Odometer mileage on the vehicle. Unknown or refused should be coded as 9999999.

Cameron/Hidalgo County External Station Commercial Vehicle Survey, Form E (continued)

Item	Field Columns			Format	Description
	Begin	End	Type		
34. General Origin	290	339	Alphanum LJ	A50	This is the city / state where the vehicle is coming from. City / State information is required for locations in Mexico.
35. Texas Origin	340	341	Numeric RJ	I2	Code indicating if the location listed in item 34 is located in Texas. 1 – Yes; 2 – No; 99 – Unknown / Refused.
36. Enter Texas	342	343	Numeric RJ	I2	If general origin was not in Texas (indicated by a 2 in item 35), this field contains the code indicating if the person entered / left Texas on the survey date. 1- Yes; 2 – No; 99 – Unknown / Refused. This field is blank if item 35 is coded as 1.
37. Entry Point	344	373	Alphanum. LJ	A30	If general origin was not in Texas, this field should state the name of the road or highway at which the person entered or exited Texas. This field is blank if item 35 is coded as 1 or item 36 is coded as 2.
38. Entry Zone	374	378	Numeric RJ	I5	This field contains the external station zone number of the entry or exit point listed in item 37. This field is blank if item 35 is coded as 1 or if item 36 is coded as 2.
39. Stayed Overnight	379	380	Numeric RJ	I2	This field contains the code indicating if person stayed overnight as part of his/her travel. 1 – Yes; 2 – No; 99 – Unknown / Refused.
40. Stay-Over Location	381	410	Alphanum LJ	A30	For persons who indicated they stayed overnight as part of travel (indicated by a 1 in item 39), this field contains the name and location of where they stayed overnight. This field is blank if item 39 is coded as 2.
41. Number of Nights	411	412	Numeric RJ	I2	If person stayed overnight (i.e., indicated by a 1 in item 39) this field should contain the number of nights the person stayed overnight. This field is blank if item 39 is coded as 2.
42. Origin Field 1	413	462	Alphanum. LJ	A50	This is the address of the last place person got into the vehicle or the first street name of the nearest intersecting streets to that location. Addresses and/or nearest cross streets are required for all origins in Matamoros/Reynosa.
43. Origin Field 2	463	512	Alphanum. LJ	A50	This is the second street name of the nearest intersecting streets to the originating point or a continuation of the address in item 42. Addresses and/or nearest cross streets are required for all origins in Matamoros/Reynosa.
44. Origin Longitude	513	522	Numeric RJ	F10.6	This is the longitude of the origin address. Unknown / Refused origins within the study area should be coded as 888.8888. Unknown external origins outside of the study area but within Texas should be coded as 666.6666. Unknown Mexico external origins should be coded as 777.7777. Unknown out-of-state external origins (non-Mexico) should be coded as 999.9999.
45. Origin Latitude	523	532	Numeric RJ	F10.6	This is the latitude of the origin address. Unknown / Refused origins within the study area should be coded as 888.8888. Unknown external origins outside of the study area but within Texas should be coded as 666.6666. Unknown Mexico external origins should be coded as 777.7777. Unknown out-of-state external origins (non-Mexico) should be coded as 999.9999.
46. Origin Zone Identifier	533	533	Alphanum	A1	This field identifies the MPO study in which the origin zone in item 46 is located. TAZ zones in the Hidalgo County MPO study area should be coded as 'H', zones in the Harlingen-San Benito MPO study area should be coded as 'S', and zones located in the Brownsville MPO study area should be coded as 'B'.
47. Origin Zone	534	538	Numeric RJ	I5	If the trip origin is within the study area, this is the TAZ number where the origin is located. Unknown / refused locations within the study area should be coded as 8888. If the trip began outside of the study area but within Texas, it should be coded using the statewide zone system (SAM) and preceded by the number 1 in column 534. Unknown / refused external locations within Texas should be coded as 16666. If the origin is in Mexico, this should be the zone number for the international border crossing used to enter Texas. Unknown / refused border crossings from Mexico should be coded as 7777. If the origin is outside of Texas (non-Mexico), this should be the SAM zone number for the highway used to enter the state. Unknown / refused external locations outside of Texas (non-Mexico) should be coded as 9999.
48. Departure Hour	539	540	Numeric RJ	I2	This is the hour the vehicle departed from the location listed as "Origin". This should be in military time.
49. Departure Minute	541	542	Numeric RJ	I2	This is the minute the vehicle departed from the location listed as "Origin".
50. Origin Type	543	544	Numeric RJ	I2	Code indicating the type of place from which the trip originated. See code descriptions below.
51. Origin Type Other	545	564	Alphanum. LJ	A20	If the origin type in item 50 is coded as 'other', this is the description of the type of place. Otherwise it is blank.

Cameron/Hidalgo County External Station Commercial Vehicle Survey, Form E (continued)

Item	Field Columns			Format	Description
	Begin	End	Type		
52. Origin Purpose	565	566	Numeric RJ	I2	This is the driver's purpose for being at that location. See below for code descriptions.
53. Origin Purpose Other	567	586	Alphanum. LJ	A20	If trip purpose in item 52 is coded as 'other', this field should contain the description of that other trip purpose.
54. Trip Indicator	587	588	Numeric RJ	I2	Code indicating if trip origin is inside the study area. 1 – Yes; 2 – No; 99 – Unknown / Refused.
55. Origin Entry Point	589	618	Alphanum. LJ	A30	If the trip origin is outside the study area (i.e., indicated by a 2 in item 54), this field should state the name of the road or highway at which the vehicle entered the study area. This field is blank if item 54 is coded as 1.
56. Origin Entry Zone	619	623	Numeric RJ	I5	If the trip origin is outside the study area (i.e., indicated by a 2 in item 54), this field contains the external station number of the entry point listed in item 55. Unknown should be coded as 99999. This field is blank if item 54 is coded as 1.
57. Destination Field 1	624	673	Alphanum. LJ	A50	This is the address of the destination for the person or the first street name of the nearest intersecting streets to that location. (place / address or nearest intersection / city). Addresses and/or nearest cross streets are required for all destinations in Matamoros/Reynosa.
58. Destination Field 2	674	723	Alphanum. LJ	A50	This is the second street name of the nearest intersecting streets to the destination of the person or a continuation of the address in item 57. Addresses and/or nearest cross streets are required for all destinations in Matamoros/Reynosa.
59. Destination Longitude	724	733	Numeric RJ	F10.6	This is the longitude of the destination address. Unknown / Refused internal destinations should be coded as 888.8888. Unknown external destinations within Texas should be coded as 666.6666. Unknown Mexico external destinations should be coded as 777.7777. Unknown out-of-state external destinations (non-Mexico) should be coded as 999.9999.
60. Destination Latitude	734	743	Numeric RJ	F10.6	This is the latitude of the destination address. Unknown / Refused internal destinations should be coded as 888.8888. Unknown external destinations within Texas should be coded as 666.6666. Unknown Mexico external destinations should be coded as 777.7777. Unknown out-of-state external destinations (non-Mexico) should be coded as 999.9999.
61. Destination Zone Identifier	744	744	Alphanum	A1	This field identifies the MPO study in which the destination zone in item 62 is located. TAZ zones in the Hidalgo County MPO study area should be coded as 'H', zones in the Harlingen-San Benito MPO study area should be coded as 'S', and zones located in the Brownsville MPO study area should be coded as 'B'.
62. Destination Zone	745	749	Numeric RJ	I5	If the trip destination is within the study area, this is the TAZ number where the destination is located. Unknown / refused locations within the study area should be coded as 8888. If the trip ends outside of the study area but within Texas, it should be coded using the statewide zone system (SAM) and preceded by the number 1 in column 745. Unknown / refused external locations within Texas should be coded as 16666. If the destination is in Mexico, this should be the zone number for the international border crossing used to exit Texas. Unknown / refused border crossings to Mexico should be coded as 7777. If the destination is outside of Texas (non-Mexico), this should be the SAM zone number for the highway used to exit the state. Unknown / refused external locations outside of Texas (non-Mexico) should be coded as 9999.
63. Trip Purpose	750	751	Numeric RJ	I2	Code indicating purpose of trip to destination. See code definitions below.
64. Trip Purpose Other	752	771	Alphanum. LJ	A20	If trip purpose in item 63 is coded as "other", this field should contain the description of that other trip purpose.
65. Destination Indicator	772	773	Numeric RJ	I2	Code indicating if the destination location is outside of Texas. 1 - Yes, 2 – No, 99 – Unknown / Refused.
66. Destination Location	774	823	Alphanum. LJ	A50	If person is traveling to a location outside of Texas (i.e., indicated by a 1 in item 65), this field should contain the city / state to which the person is traveling. This field is blank if item 65 is coded as 2.
67. Exit Location	824	873	Alphanum. LJ	A50	If person is traveling to a location outside of Texas (i.e., indicated by a 1 in item 65), this field should state the name of the road or highway where the vehicle will exit Texas. This field is blank if item 65 is coded as 2.

Cameron/Hidalgo County External Station Commercial Vehicle Survey, Form E (continued)

Item	Field Columns			Format	Description
	Begin	End	Type		
68. Exit Zone	874	878	Numeric RJ	I5	This field contains the external station zone number of the exit point listed in item 67. Unknown should be coded as 99999. This field is blank if item 56 is coded as 2.
69. Days Remaining	879	880	Numeric RJ	I2	If person is traveling to a location outside of Texas (i.e., indicated by a 1 in item 65), this field should contain the number of days the person will remain in Texas. This field is blank if item 65 is coded as 2.
70. Destination Texas	881	930	Alphanum. LJ	A50	If person is traveling to a location inside Texas (i.e., indicated by a 2 in item 65), this field should contain the city / county in Texas to which the person is traveling. This field is blank if item 65 is coded as 1.
71. Beginning Location	931	980	Alphanum. LJ	A50	Location where person first trip began on day of survey. This can be a description or a zone number if location has been geocoded.
72. First Destination	981	1030	Alphanum. LJ	A50	Location of first place person went.
73. Second Destination	1031	1080	Alphanum. LJ	A50	Location of second place person went.
74. Third Destination	1081	1130	Alphanum. LJ	A50	Location of third place person went.
75. Fourth Destination	1131	1180	Alphanum. LJ	A50	Location of fourth place person went.
76. Fifth Destination	1181	1230	Alphanum. LJ	A50	Location of fifth place person went.
77. Sixth Destination	1231	1280	Alphanum. LJ	A50	Location of sixth place person went.
78. Additional Trips	1281	1284	Numeric RJ	I4	Number of additional trips/stops person made on day of survey up to the time they were surveyed.
79. Form	1285	1291	Numeric RJ	I7	Number of survey form where data was recorded.

Vehicle Classification Codes

- 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 (specify)
- 99 - Unknown

Trip Purpose Options

- 1 - Base location/Return to Base location
- 2 - Delivery
- 3 - Pick Up
- 4 - Maintenance
- 5 - Driver Needs (lunch, etc.)
- 6 - To Home
- 7 - Buy Fuel
- 8 - Other (specify)
- 99 - Refused/unknown

Cargo Transfer Codes

- 1 - Truck-to/from-Truck
- 2 - Rail-to/from-Truck
- 3 - Ship-to/from-Truck
- 4 - Airplane-to/from-Truck
- 5 - Warehouse-to/from-Truck
- 6 - Pipeline-to/from-Tuck
- 7 - Unknown
- 99 - Refused

Type of Place Options

- 1 - Office Building
- 2 - Retail/Shopping/Gas
- 3 - Industrial/Manufacturing/Warehouse
- 4 - Medical
- 5 - Educational (12th grade or lower)
- 6 - Educational (college, trade, etc.)
- 7 - Government
- 8 - Residential
- 9 - Airport
- 10 - Eating Establishment
- 11 - Other (specify)
- 99 - Refused/Unknown

Vehicle Cargo Codes

1 - Farm Products	Livestock, fertilizer, dirt, landscaping, etc.
2 - Forest Products	Trees, sod, etc.
3 - Marine Products	Fresh fish, seafood, etc.
4 - Metals and Minerals	Crude petroleum, natural gas, propane, Metals, gypsum, ores, etc.
5 - Food, Health, and Beauty Products	Assorted food products, cosmetics, etc.
6 - Tobacco Products	Cigarettes, cigars, and chewing tobacco
7 - Textiles	Clothing, linens, etc.
8 - Wood Products	Lumber, paper, cardboard, wood pulp, etc.
9 - Printed Matter	Newspapers, magazines, books, etc.
10 - Chemical Products	Soaps, paints, household or industrial chemicals, etc.
11 - Refined Petroleum or Coal Products	Gasoline, etc.
12 - Rubber, Plastic, and Styrofoam Products	Finished products of rubber, plastic, or Styrofoam
13 - Clay, Concrete, Glass, or Stone	Finished products of clay, concrete, glass, or stone
14 - Manufactured Goods/Equip.	Miscellaneous products, such as machinery, appliances, furniture, etc.
15 - Wastes	Waste products including scrap and recyclable materials
16 - Miscellaneous Shipments	U.S. mail, U.P.S., Federal Express, and other mixed cargo
17 - Hazardous Materials	Hazardous chemicals and substances
18 - Transportation	Automobiles, Heavy Equipment, etc.
19 - Unclassified Cargo (specify)	Cargo not falling within one of the above categories
20 - Driver Refused to Answer	Driver refused to answer
21 - Unknown to Driver	Unknown to driver
22 - Empty	Empty (including empty shipping containers)

Cameron/Hidalgo County High Volume External Station ASCII Data File Format

This file will contain the data collected as part of the Cameron/Hidalgo County high volume external station survey. The data should be in an ASCII data file.

<u>Item</u>	Field Columns			<u>Format</u>	<u>Description</u>
	<u>Begin</u>	<u>End</u>	<u>Type</u>		
1. Record Type	1	2	Alphanum LJ	A2	Code which indicates the type of record, here it should be F.
2. Month	3	4	Numeric RJ	I2	Month station is being surveyed.
3. Day	5	6	Numeric RJ	I2	Day of the month station is being surveyed.
4. Station Number	7	10	Alphanum LJ	A4	Site number of the station being surveyed as described in Attachment A.
5. Station	11	40	Alphanum. LJ	A30	Name of station / facility being surveyed.
6. Longitude	41	50	Numeric RJ	I10.6	Longitude of location being surveyed.
7. Latitude	51	60	Numeric RJ	I10.6	Latitude of location being surveyed.
8. Direction	61	61	Numeric RJ	I1	Code indicating the direction of travel. 0 – North; 1 – Northeast; 2 – East; 3 – Southeast; 4 – South; 5 – Southwest; 6 – West; 7 – Northwest.
9. Dealer Plate	62	62	Numeric RJ	I1	Code indicating if vehicle has a dealer/temporary license plate. 1 – Yes; 2 – No.
10. State	63	64	Alphanum LJ	A2	This field contains the State shown on the vehicle license plate. The entry should be abbreviated using all capital letters. This field is left blank if item 9 is coded as 1.
11. License Number	65	74	Alphanum LJ	A10	This field contains the license plate number of the vehicle. Use all capital letters. For partial license plates, a unique symbol shall be used in the position that the letter/number could not be read. This field is left blank if item 9 is coded as 1.
12. Hour	75	76	Numeric RJ	I2	Hour that the vehicle was observed. Must be in military time.
13. Minute	77	78	Numeric RJ	I2	Minute that the vehicle was observed.