

# TREASURE VALLEY TRUCK FREIGHT TRAVEL SURVEY

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COMPASS REPORT No. 11-2008

## COMMERCIAL VEHICLE INTERCEPT SURVEY AND VIDEO EXTERNAL STATION SURVEY FINAL REPORT

PREPARED FOR  
**COMMUNITY PLANNING ASSOCIATION OF SOUTHWEST IDAHO  
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Data collection is an essential element in the transportation planning and travel demand forecast modeling process. The Community Planning Association of Southwest Idaho (COMPASS) is the designated Metropolitan Planning Organization (MPO) for the Ada and Canyon County area. The purpose of this study was to provide vital inputs and make improvement to the regional transportation planning and travel demand modeling process. Improved inputs provide COMPASS with the ability to be more responsive to the evolving transportation planning needs of the region.

This report documents the design, implementation, and results of the **Commercial Vehicle Intercept Survey** and **External Station License Plate Survey** components of the Treasure Valley Truck Freight Study. The study included multiple data collection and analysis elements:

1. Commercial vehicle survey
  - a. Commercial vehicle base location information
  - b. Commercial vehicle travel surveys
2. Commercial vehicle intercept surveys
  - a. Intercepts at the two major Ports of Entry (POE)
  - b. Intercepts at many of the regions truck stops
3. External station survey with video license plate capture at nine (9) locations
  - a. I-84 East @ Ada/Elmore County line
  - b. I-84 West @ Canyon/Payette county line
  - c. US 95 South @ Canyon/Owyhee County line
  - d. US 95 North @ Canyon/Payette County line
  - e. SH 55 South @ Canyon/Owyhee County line
  - f. SH 55 North @ Ada/Boise County line
  - g. SH 16 North @ Ada/Gem County line
  - h. SH 21 East @ Ada/Boise County line
  - i. SH 45 South @ Canyon/Owyhee County line
4. Data expansion
  - a. Trip length frequencies for commercial vehicles
  - b. Trip generation characteristics for commercial vehicle
  - c. External-External (EE) trip table for both commercial and noncommercial vehicles

The commercial vehicle intercept surveys provided information on commercial trips that fell into three primary categories: a) those trips coming into the study area, which originated outside the area; b) those trips that had originated at a base location in the study area, traveled to a location outside the study area and were returning to the base location within the study area; or c) those commercial trips that were simply passing through the study area, often referred to as EE (external-external) trips.

The external station survey is a data collection effort that provides specific information on the EE trips for both commercial and noncommercial vehicles. The external station survey focused on nine roadways that provide the main points of access and egress into and out of the study area (commonly referred to as external stations). A map of the study area with the location of each external station is included as Appendix A. The stations are listed above under number three (a-i).

Video cameras were stationed to record traffic entering and exiting the study area at each of the nine stations from approximately 8:00 a.m. to 6:30 p.m. on Tuesday, October 23, 2007. Video was successfully captured for all lanes at each of the nine locations. The captured license plate information was post-processed and transcribed in the Alliance Transportation Group, Inc. (Alliance) Austin offices and was processed to determine matching plates and create external-external (EE) trip tables. A total of 51,118 license plates were captured and of those, 46,758 were fully transcribed, for a transcription rate of 91.5%. The 24-hour traffic counts recorded for the day of the survey totaled 80,251 vehicles, with over 64% of the counted vehicles being recorded during the survey period.

## **INTERCEPT INTERVIEWS**

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### **INTRODUCTION**

Commercial vehicle intercept surveys were conducted by Alliance Transportation Group (Alliance) at Ports of Entry and truck stops in Ada and Canyon Counties. Commercial vehicle intercept surveys provide information on commercial trips that fall into three primary categories: a) those trips coming into the study area, which originated outside the area; b) those trips that had originated at a base location in the study area, traveled to a location outside the study area and were returning to the base location within the study area; or c) those commercial trips that were simply passing through the study area, often referred to as EE (external-external) trips.

A commercial vehicle intercept survey instrument was developed in coordination with COMPASS and Idaho Transportation Department (ITD) to include information such as: commercial vehicles classification by weight, size, and configuration; geocoded trip true origin and destination; land use at the origin and destination; time of day of travel; cargo transfer type; cargo; and trip frequency. A copy of the intercept survey instrument is included in Appendix C.

Interviewers were recruited from a local temporary agency and trained to conduct both the intercept surveys and the license plate recording. Interviewers were trained with regard to proper attire (clothing, grooming, hardhat, and safety vest); site safety; interviewing technique; survey instrument administration; and courtesy to the traveling public.

### **PORTS OF ENTRY**

The Marsing and East Boise Ports of Entry (POEs) were identified as the POE locations for inclusion in the intercept surveys. Scheduling and survey procedures were coordinated with the ITD Port of Entry officials prior to the survey date. The target survey estimate was 800 – 1,000 total surveys dependent upon location volumes.

Commercial Vehicle Intercept Surveys were collected during daylight hours at the Marsing POE (located on US Highway 95 approximately 5.5 miles south of the junction of US 95 and State Highway 55 in Marsing) on October 16, 2007 and in both directions at the East Boise POE (located on Interstate 84 at approximately milepost 67) on October 17-18, 2007. The second day of surveys at the East Boise POE was suspended at mid-day due to rain. However, the total number of completed surveys (1,751) was more than double the target minimum of 800 surveys.

### **TRUCK STOPS**

A total of twelve truck stops were identified as potential locations for inclusion in the intercept surveys. Approvals were granted for eleven locations and scheduling and survey procedures were coordinated with the managers of the respective locations prior to the survey date. The target survey estimate was 400 – 500 total surveys dependent upon location volumes.

Commercial Vehicle Intercept Surveys were scheduled for collection during daylight hours at three truck stop locations (ION, Black Canyon Stinker, and Jackson-Wilder) on October 17, 2007 to run concurrently with the surveys at the East Boise POE but were suspended at mid-day due to rain. Full day surveys were completed at ten of the eleven locations on October 23-24, 2007. One of the two scheduled Jackson's locations in Nampa was determined to have minimal volumes and the interviewers from that location were directed to other locations. However, the total number of completed surveys (483) was within the target range established for the survey effort.

## DATA PROCESSING

Surveys were monitored throughout the intercept survey effort. Supervisors collected and reviewed survey forms as they were completed to insure proper completion. This allowed the opportunity to provide additional training and clarification early in the process and provided ongoing quality control in the field.

Data from the completed survey instruments were transcribed into a database upon return to the Alliance offices following the field data collection. A data entry interface reflecting the questions and layout of the survey instrument was used to minimize the possibility of mistakes due to interpretation of the information collected in the field. Upon completion of the data entry, the address and location information was geocoded to allow spatial review and analysis of the data.

## FINDINGS

A total of 2,234 completed surveys were collected (1,751 at the ports of entry and 483 at truck stops within the study area). Table 1 summarizes the intercept survey field data collection efforts. The figures on the following pages summarize the data collected and provide distributions for the various survey data elements.

TABLE 1 - INTERCEPT LOCATIONS AND COMPLETED SURVEYS

Survey Location	Type	Survey Date					Grand Total
		10/16/07	10/17/07	10/18/07	10/23/07	10/24/07	
East Boise P.O.E. EB	Port of Entry		686	127			813
East Boise P.O.E. WB	Port of Entry		585	122			707
Marsing P.O.E.	Port of Entry	231					231
Black Canyon Stinker	Truck Stop			11	56		67
Boise Stage Stop	Truck Stop					88	88
Flying J Truck Stop - Boise	Truck Stop					26	26
Flying J Truck Stop - Caldwell	Truck Stop					66	66
Ion Truck Stop	Truck Stop			7	40		47
Jackson's – Wilder	Truck Stop			7	14		21
Jackson's – Nampa	Truck Stop					37	37
Pilot #350	Truck Stop					67	67
Sage Travel Plaza	Truck Stop					23	23
TA Travel Center	Truck Stop					41	41
Grand Total		231	1,271	274	110	348	2,234

The following figures document several questions regarding the locations of various cargo events were included in the survey.

- Cargo Origin – The origin location of the cargo. This may be different from the location where the driver picked up the load.
- Cargo Pick-Up – This is the location where the driver being interviewed picked up the load being transported.
- Trailer Pick-Up – If the driver was not transporting any cargo (empty load), this is the location where the driver picked up the trailer being pulled or dropped of the previous cargo.
- Cargo Drop-Off – The drop-off location of the load being transported.
- Cargo Final Destination – The final destination of the cargo in the event that the cargo drop-off location is for transfer purposes.
- Cargo Related Stop – Any cargo related stop not included in the previous descriptions.

FIGURE 1 – NUMBER OF VEHICLES PARTICIPATING BY VEHICLE TYPE

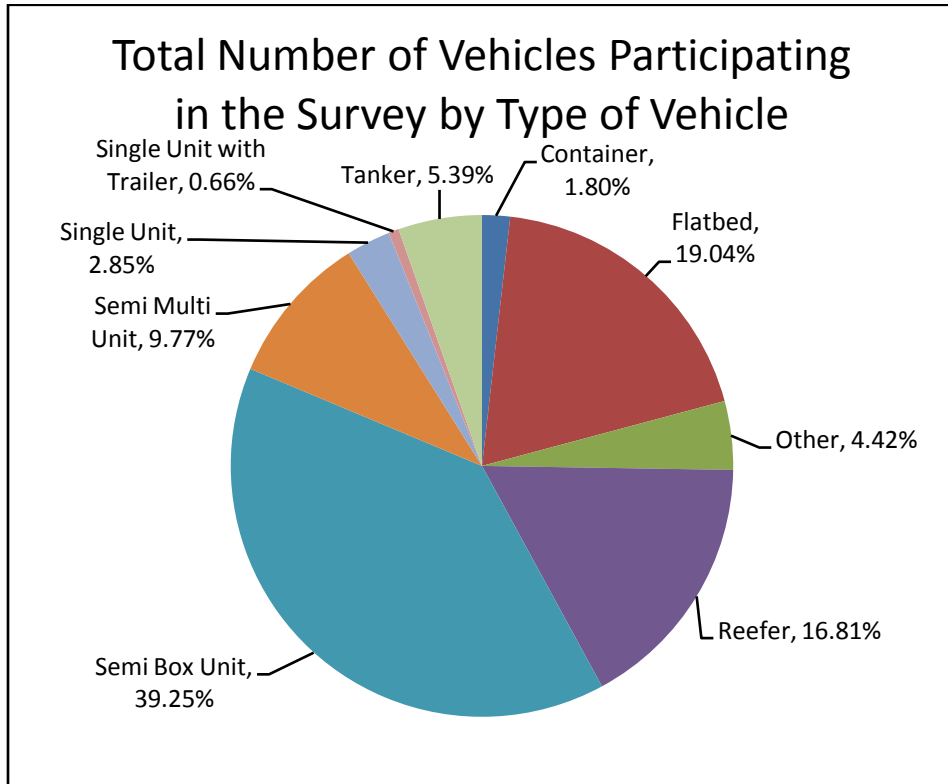


FIGURE 2 – CARGO DISTRIBUTION BY TYPE

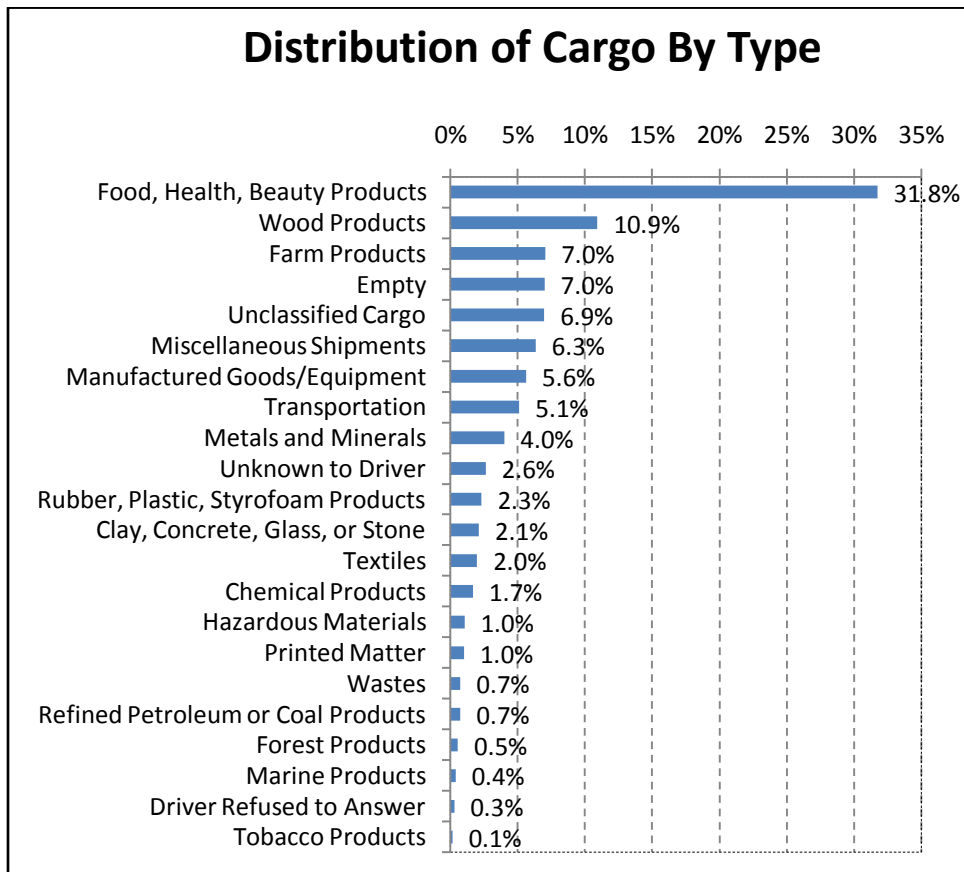




FIGURE 3 – TOP 10 CARGO ORIGINS BY CITY

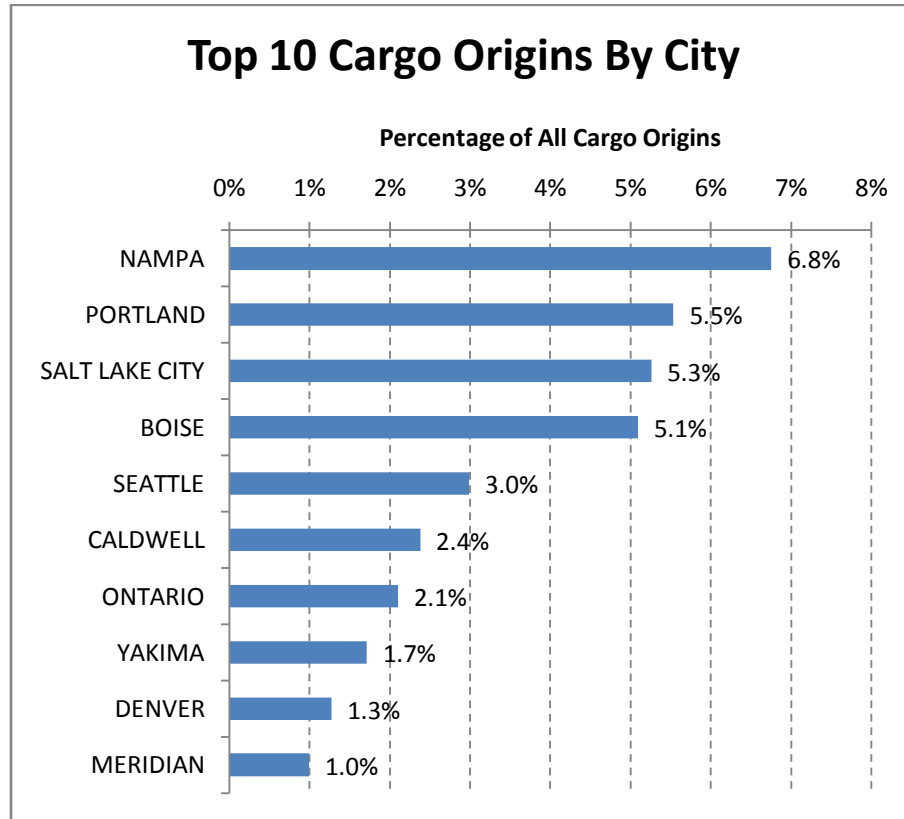


FIGURE 4 – CARGO ORIGINS IN STUDY AREA

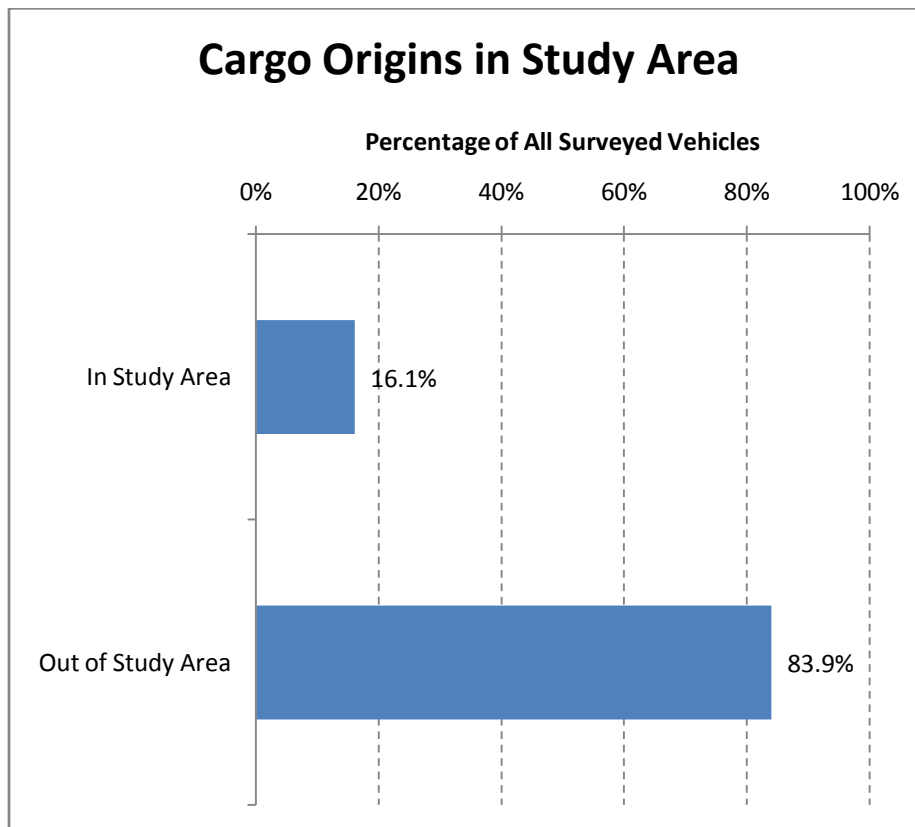


FIGURE 5 – TOP 10 CARGO PICK-UP LOCATIONS BY CITY

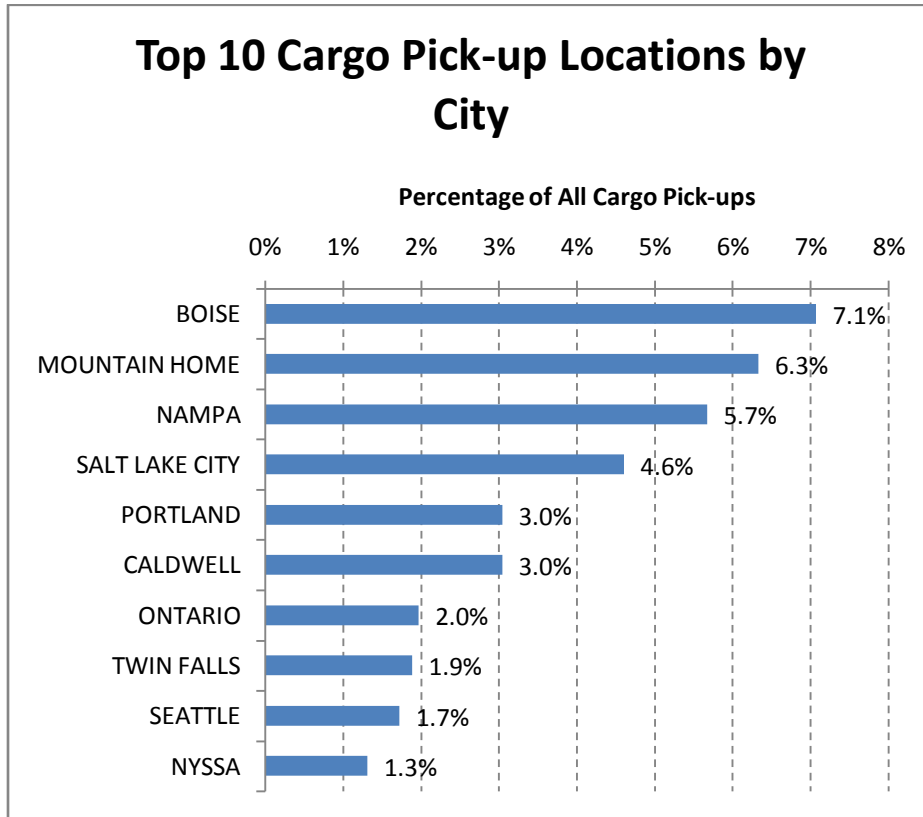


FIGURE 6 – CARGO PICK-UPS IN STUDY AREA

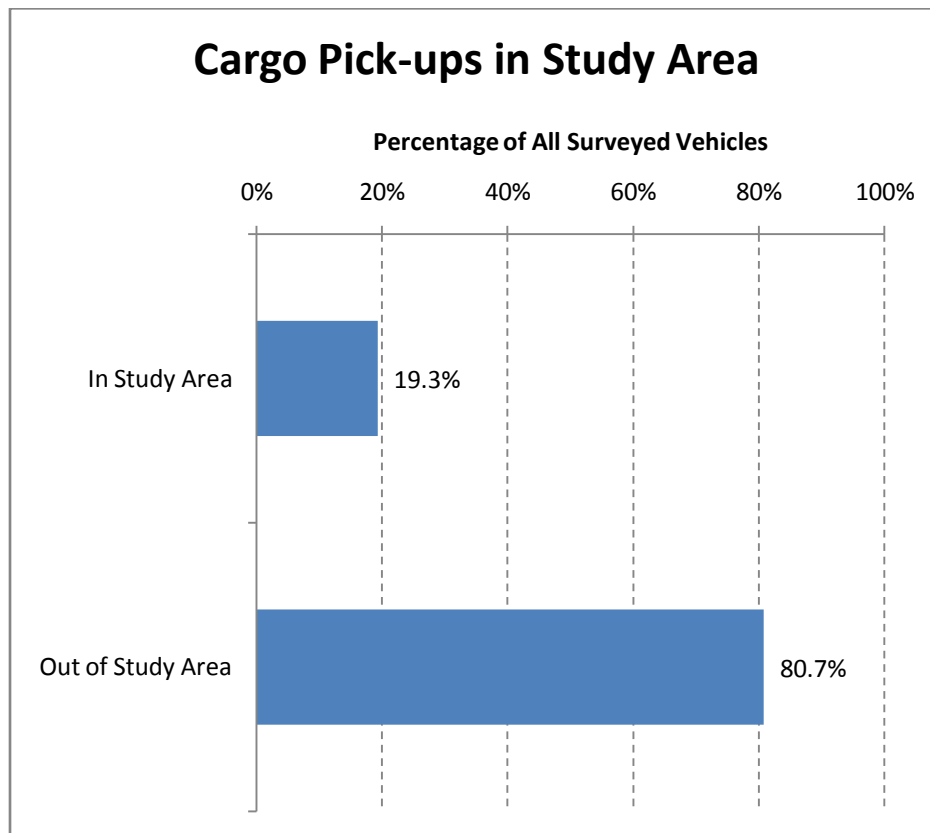


FIGURE 7 – TOP 10 CARGO DROP-OFF LOCATIONS

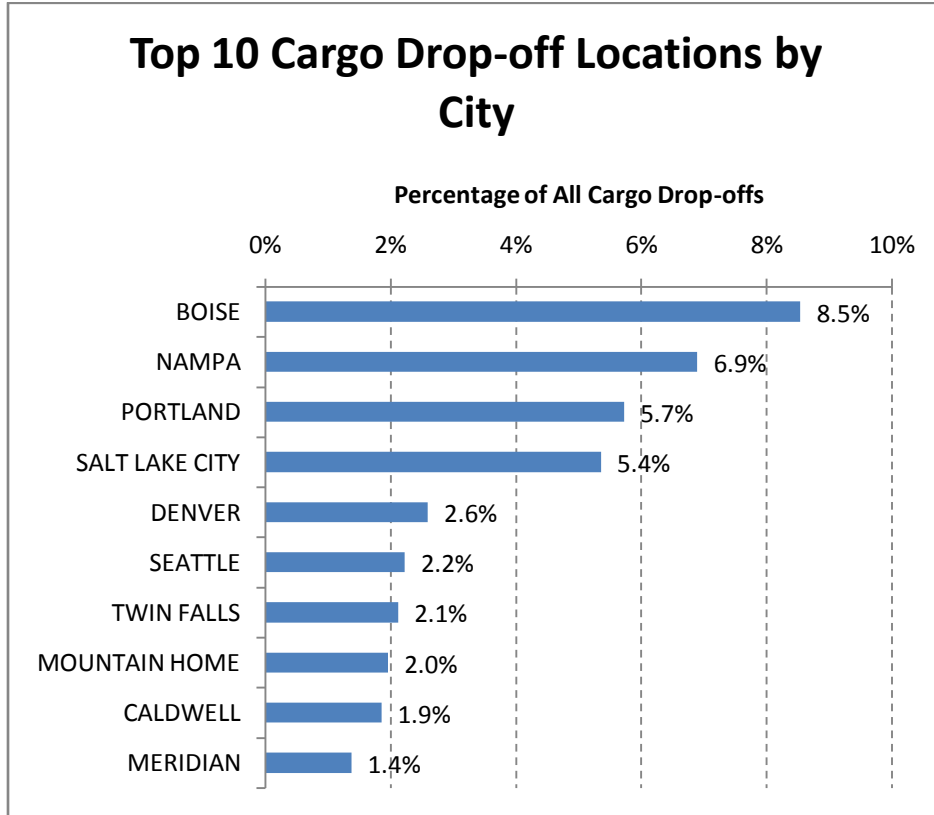


FIGURE 8 – CARGO DROP-OFFS IN STUDY AREA

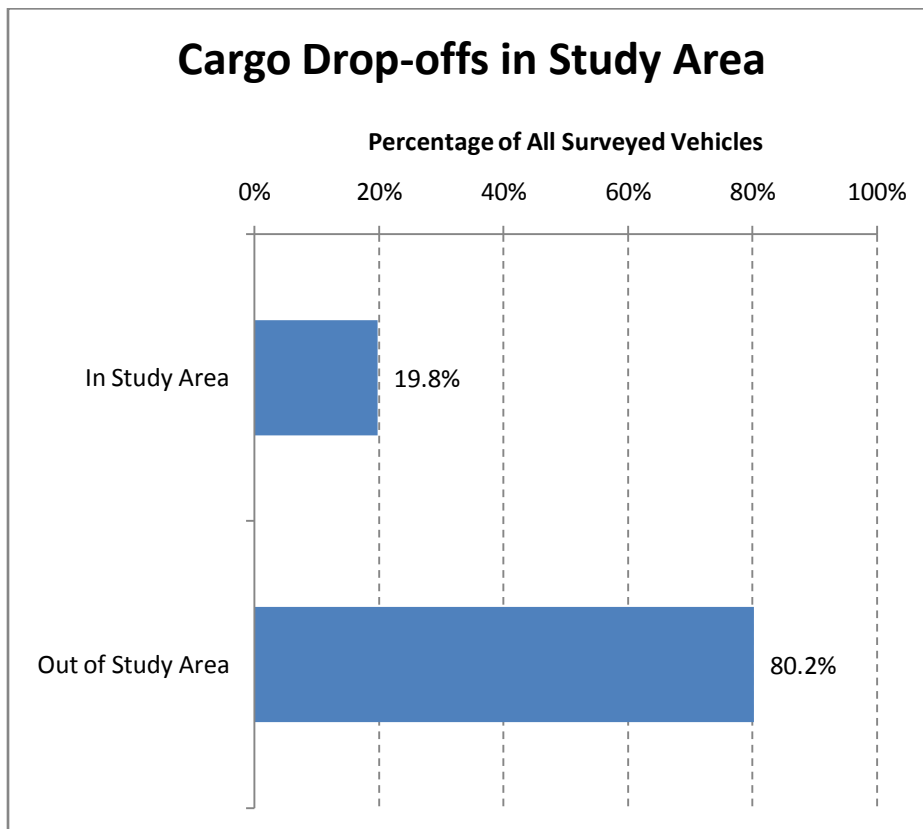


FIGURE 9 – TOP 10 CARGO DESTINATION BY CITY

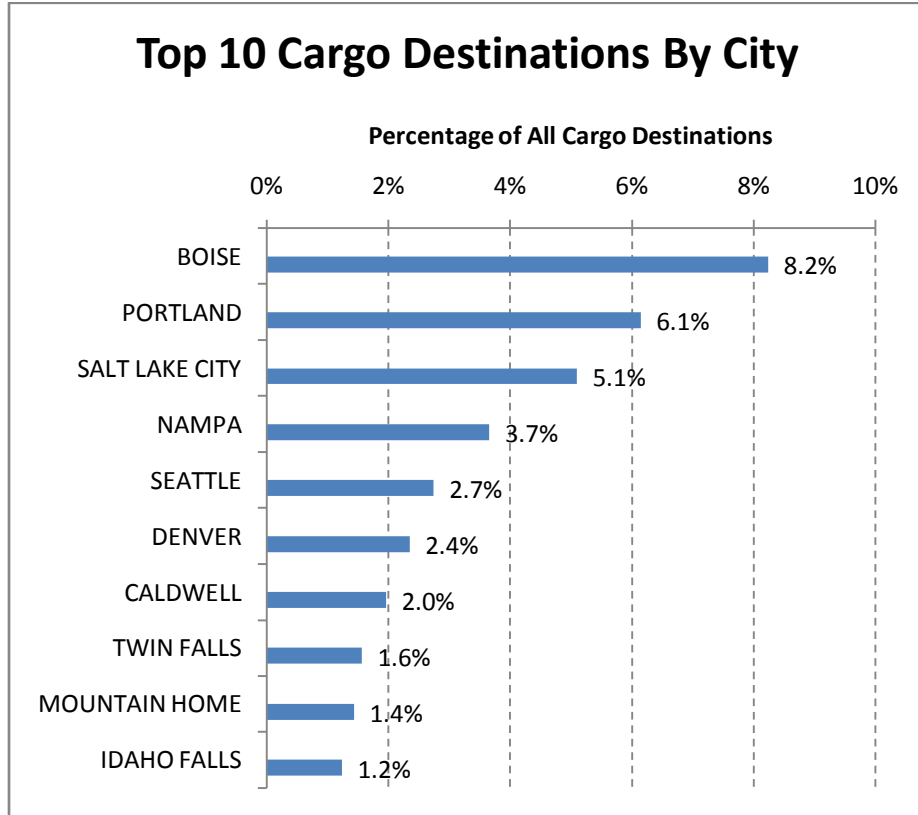


FIGURE 10 – CARGO DESTINATIONS IN STUDY AREA

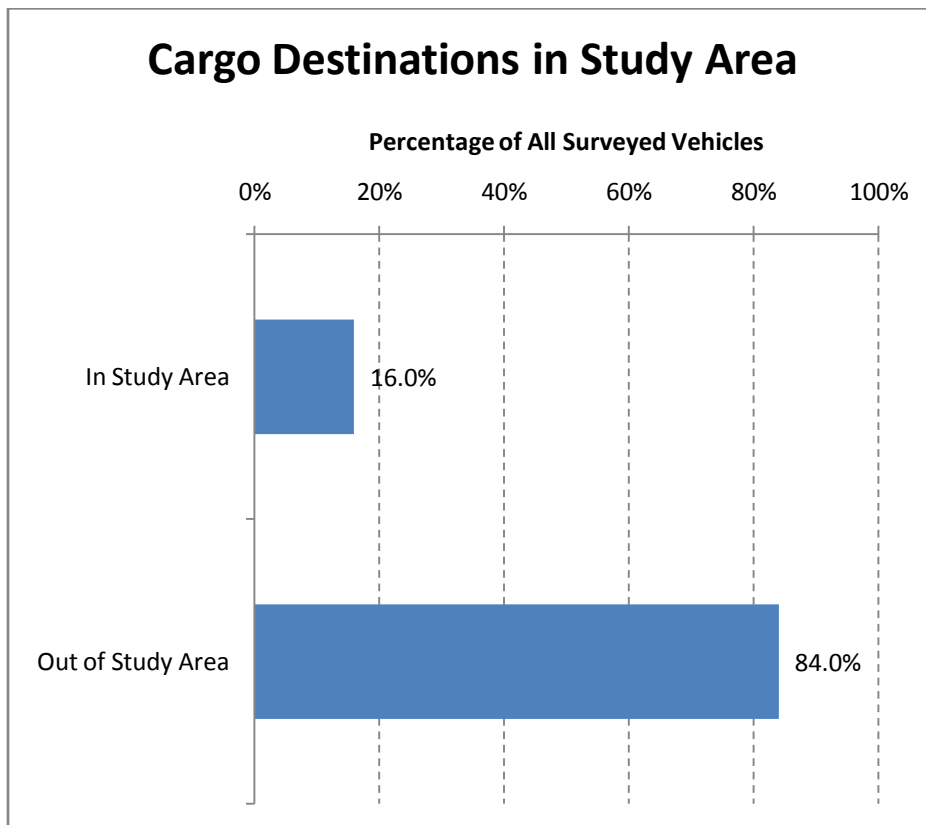


FIGURE 11 - CARGO RELATED STOPS IN STUDY AREA

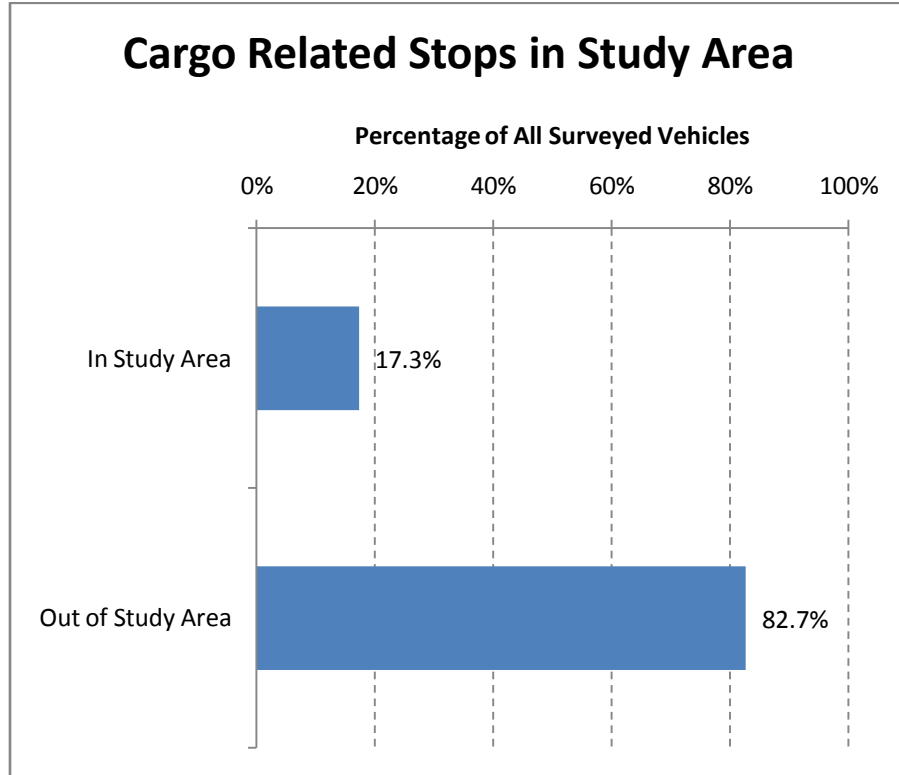


FIGURE 12 – CARGO STOP IN STUDY AREA

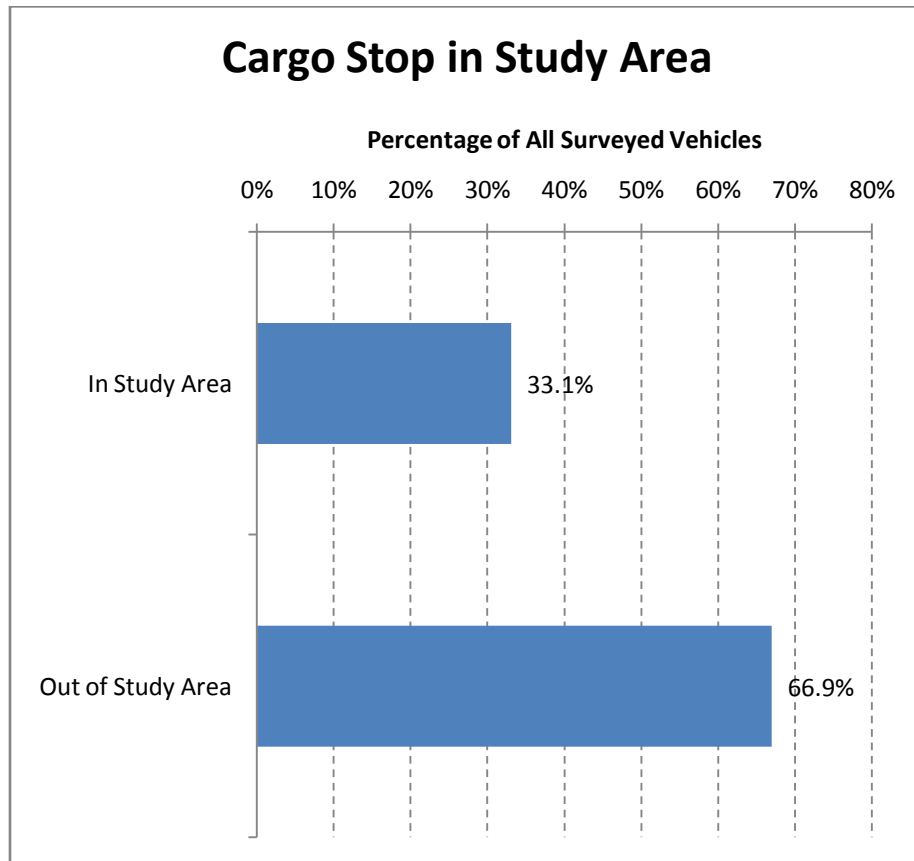


FIGURE 13 – CARGO PICK-UP LOCATIONS BY TYPE

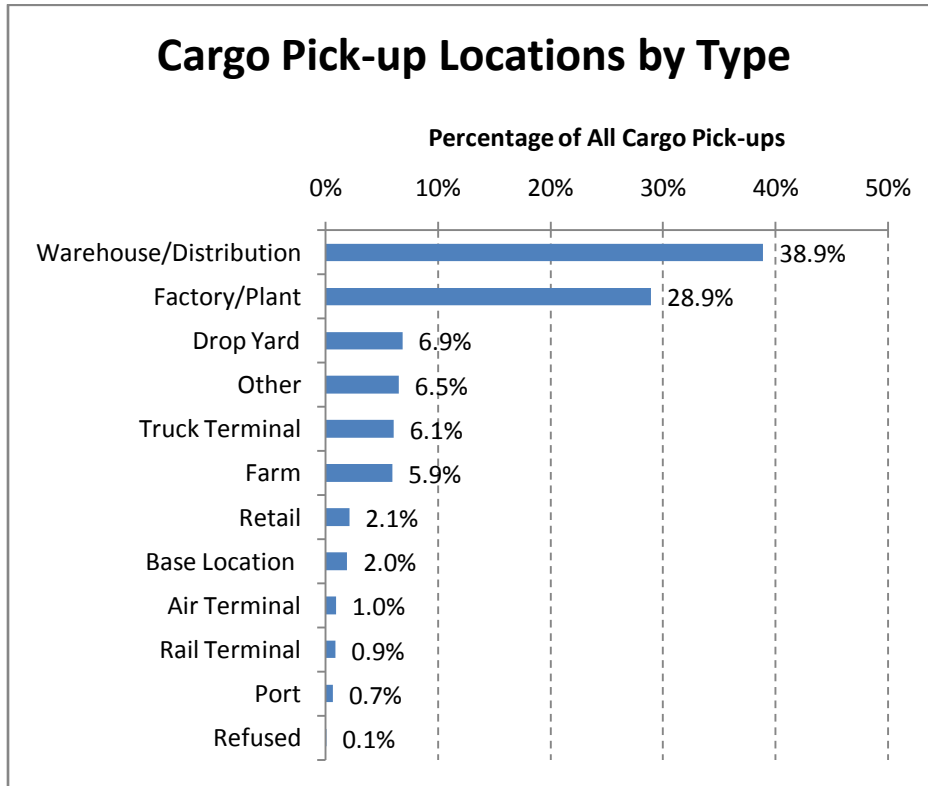


FIGURE 14 – CARGO PICK-UP TRANSFERS BY TYPE

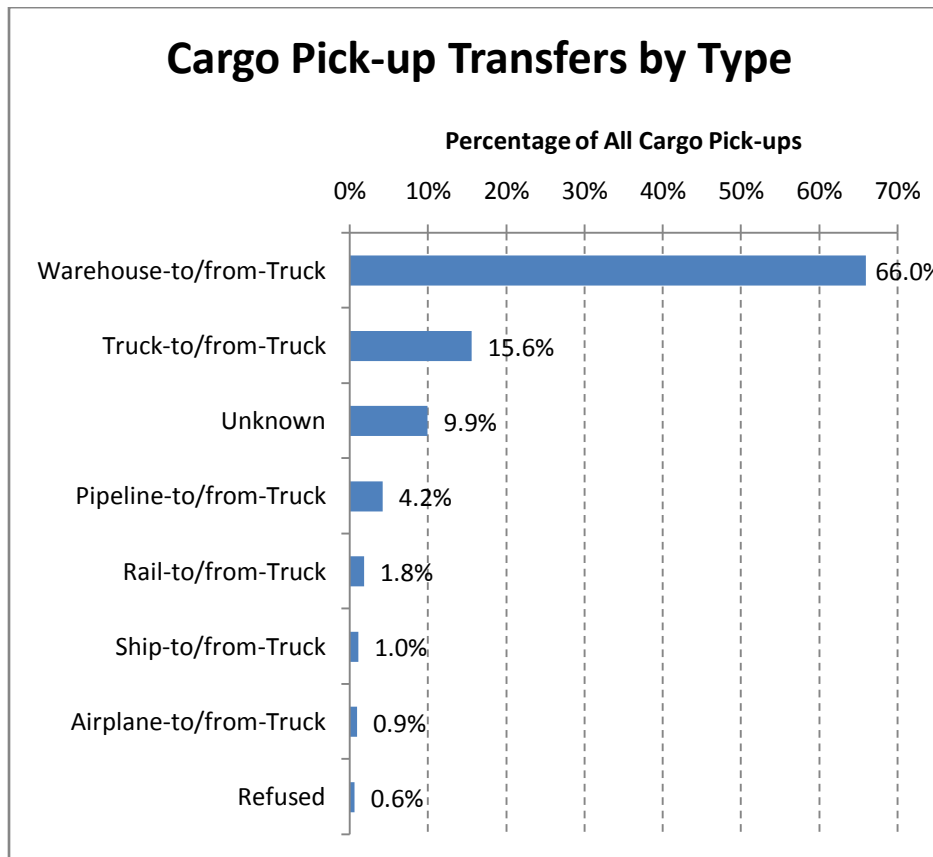


FIGURE 15 – CARGO DROP-OFF LOCATIONS BY TYPE

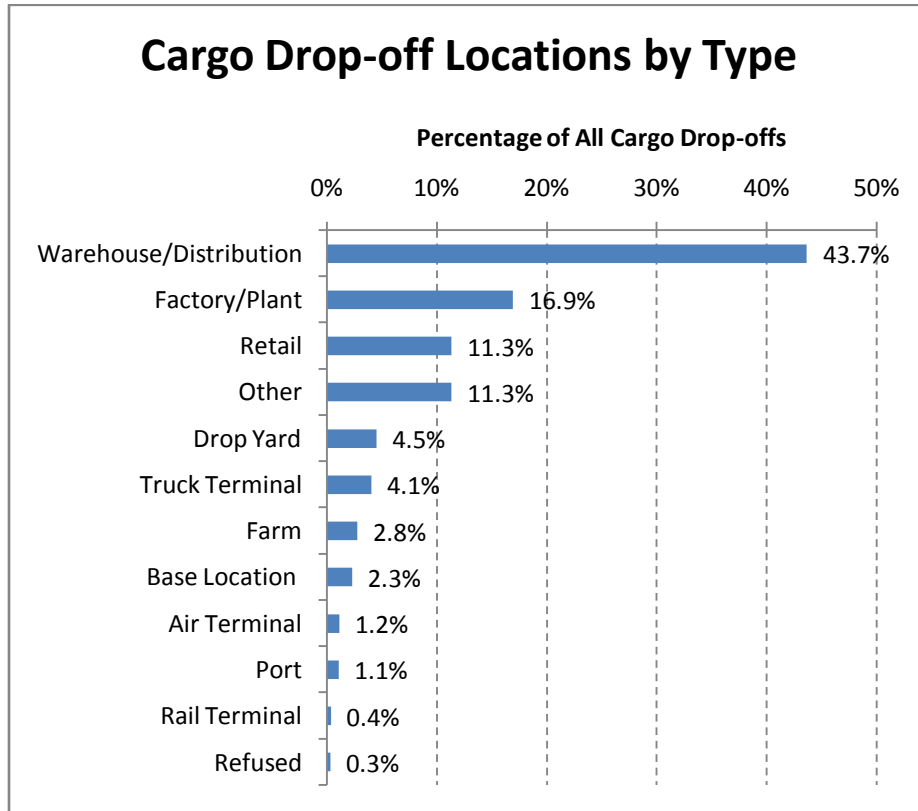


FIGURE 16 – CARGO DROP-OFF TRANSFERS BY TYPE

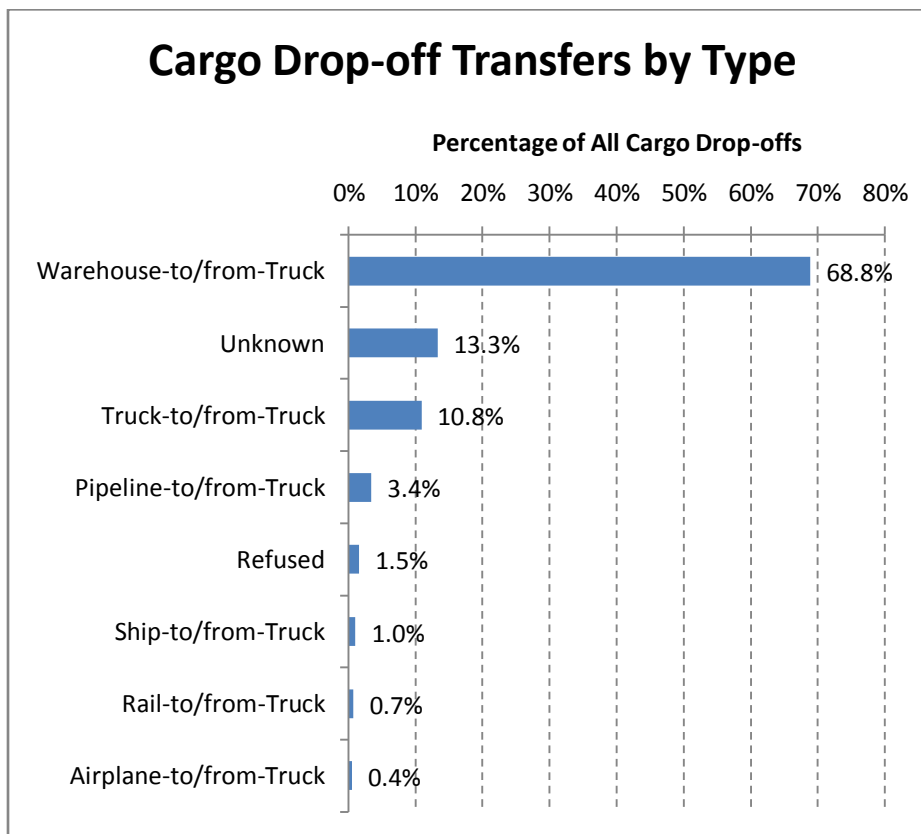
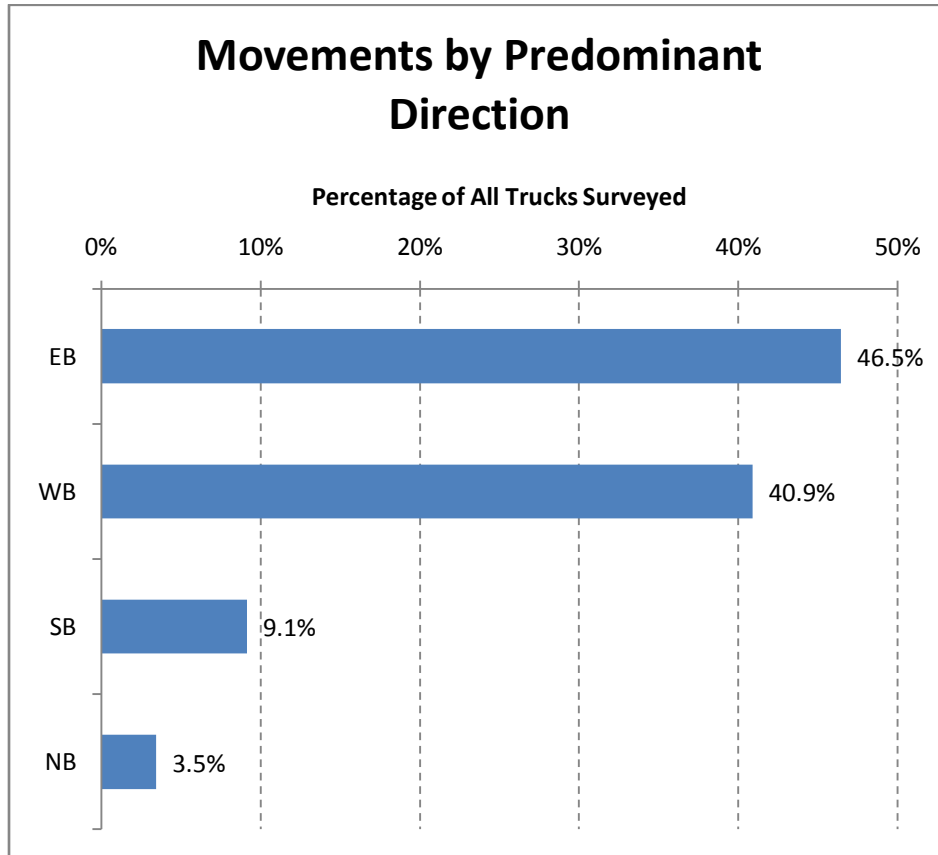


FIGURE 17 – TRUCK MOVEMENTS BY PREDOMINANT DIRECTION





# Video License Plate - Methodology

The license plate capture summarized in this report took place on October 23, 2007. The methods used to design and conduct the study are summarized in this section. This includes survey design, site selection, data collection, and data processing.

## SURVEY DESIGN

The first step in the license plate capture element of the project was to finalize data needs and review the locations for the video license plate capture. The project objectives and modeling needs were reviewed in order to ensure that the external survey would collect the necessary elements. The elements in Table 2 were identified for the external travel survey:

TABLE 2 - EXTERNAL SURVEY DATA ELEMENTS

DATA ELEMENTS
Unique Identifier
Station Number(s)
Direction(s) of Travel
Survey Date
Survey Time
License Plate Number
Commercial or Non-Commercial Status
Station Specific Traffic Counts

## SITE SELECTION

The nine roadways selected for the video license plate capture and daily traffic counts are shown in Table 3. The 2007 counts reflect traffic for the 24-hour period surrounding the video license plate survey effort.

TABLE 3 - EXTERNAL SURVEY STATIONS

NUMBER	STATION	2007 TRAFFIC COUNT
1	SH 16 North	9,728
2	SH 55 North	7,090
3	SH 21 North	4,532
4	IH 84 East	20,983
5	SH 45 South	1,987
6	SH 55 South	7,007
7	US 95 South	5,799
8	US 95 North	4,284
9	IH 84 West	18,841
<b>Total</b>		80,251

Prior to the kick-off meeting in October 2007, the Alliance Project Manager (PM) inspected the selected sites in preparation for data collection. The site inspection was necessary to plan for camera placement, roadway geometrics, and surveyor safety. The ideal location for each station would be on the actual external cordon line, but due to roadway designs, variations in the number of travel lanes, and safety considerations, the video location was sometimes moved to achieve the highest quality capture of license plates on the activity day. The Alliance PM discussed site selection criteria and presented the ideal

TABLE 4 - EXTERNAL SURVEY STATION LOCATIONS

NUMBER	STATION	LOCATION
1	SH 16 North	Ada/Gem County line
2	SH 55 North	Ada/Boise County line
3	SH 21 East	Simco Road
4	IH 84 East	Ada/Elmore County line
5	SH 45 South	Canyon/Owyhee County line
6	SH 55 South	Canyon/Owyhee County line
7	US 95 South	Canyon/Owyhee County line
8	US 95 North	Canyon/Payette County line
9	IH 84 West	Canyon/Payette county line

## DATA COLLECTION

The use of video cameras to capture license plate information is a proven and accepted technology application for external station surveys. Video license plate capture is a passive data collection technique that provides external-through trip information with no interruption or inconvenience to the traveling public. This technique is especially useful in jurisdictions with non-intercept policies or for high volume facilities.

The video license plate capture took place on Tuesday, October 23, 2007 from 8:00 a.m. to 6:30 p.m. Daylight hours for that particular day ran from 8:08 a.m. to 6:49 p.m., however, good quality video depends on the amount and angle of sunlight. Many of the unreadable plates were due to poor light conditions at the beginning or end of the survey period.

Prior to the survey date, Alliance prepared each site. Site preparation included obtaining permits from ITD, distribution of barrels and bases, pavement marking, locating the permanent Automatic Traffic Recorders (ATRs) and placing additional temporary traffic count equipment where necessary. Alliance conducted the video license plate collection using digital video cameras inside of standard traffic barrels snapped into placed on a heavy rubber base. The barrels have a hatch cut out of the leading side of the barrel to access the camera and a rectangle cut out of the following side of the barrel for video capture. This technique draws little attention and, therefore no interruption to the traveling public.

Pavement markings are utilized to indicate barrel placement and framing. Each lane of traffic, inbound and outbound, is in the view of one camera. Paint is placed on the shoulder to indicate barrel placement and then on the roadway to indicate camera framing. Paint is also placed on the roadway to indicate a unique station/barrel number to insure that the proper barrel and videotapes/camera channels are used to record that lane of traffic.

Prior to conducting the survey, local field personnel were hired and trained. The training included instruction on roadway safety, camera operation, unit set up and positioning, and conduct in the field. Field personnel were informed about the project, its purpose, and provided information about what to do when someone stops to make inquiries, including law enforcement personnel.

On the survey date, all field personnel were present at each site and set up was completed in time for data collection to begin by 8:00 a.m. The Alliance PM and Assistant Project Manager (APM) circulated among the sites throughout the day to address potential issues, check camera framing, collect travel time information to be used during the EE trip table creation, and check temporary traffic counter tubes and operation. The data collection effort was completed on October 23, 2007 without incident.

## DATA PROCESSING AND QUALITY CONTROL

Data reduction is accomplished in three steps; 1) digital videotapes are transferred to a special server and processed to remove the 'air', 2) all captured plates are processed through optical character recognition (OCR) software to create a database of probable plate numbers and timestamps, 3) the OCR database of

plates is manually reviewed against the video and plate numbers are corrected or transcribed as needed and the vehicle classification information is added to the database, and 4) ten percent of all plates are randomly checked for accuracy.

In the first step, the videotapes are transferred to the server specifically designed to accommodate high storage applications such as video transcription. During transfer, motion sensor technology is applied to remove the 'air', or dead time (those portions of the video that have no activity).

To accommodate and expedite manual video transcription, Alliance developed a custom transcription tool. The tool also serves a quality control/assurance function. The transcription interface is designed to allow the transcriber to flip through images of a vehicle until a clear image of the license plate is visible. The OCR data associated with the image is shown in tabular form below the image. The plate is compared to the OCR data and corrected as necessary; a vehicle classification is given, commercial or noncommercial; and the image filename and frame number is saved along with the transcription.

Throughout the transcription process, a supervisor monitors progress. Alliance has developed tracking tools to monitor transcription rates and spot check quality. Once initial transcription is completed, ten percent of the entire database and accompanying video is randomly reviewed for quality assurance.

In addition to the transcription work completed on the video captures, Alliance downloaded the ATR traffic count information for each location, which was processed for later use in expanding the license plate matches to create external to external (EE) trip tables.

## VIDEO LICENSE PLATE (VLP) - DATA SUMMARY

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During the video license plate external station survey, data was collected to provide information on the number and classification of vehicles traveling through the study area. These vehicle movements are referred to as External-to-External (EE) trips. Video was collected for each lane and each direction at nine locations providing access to or egress from the study area. Traffic count data was also collected from permanent traffic (ATR) counters or temporary tube counters near each location for each direction. Finally, travel times from each external station to every other external station were collected to determine the threshold for EE trips.

### VIDEO LICENSE PLATE DATA

A total of 51,118 plates were recorded during the survey day. The transcription process resulted in the following:

- ✓ 51,118 plates captured
- ✓ 46,758 plates fully transcribed (91.5%)
- ✓ 3,560 plates partially transcribed (7.0%)
- ✓ 800 plates were unrecognizable (1.5%)

Of the 51,118 captured plates, 98.5% were either fully or partially transcribed. It is important to note two facts: 1) partial transcription is defined as one or more unrecognizable characters, and 2) unrecognizable is defined as no visible plate. Partial transcriptions where one or more characters are unreadable are marked with an asterisk. Partial plates are run through the matching process using the asterisk as a wild card. Unrecognizable plates include those that are completely obscured, temporary dealer plates, or those that are simply missing.

Plates were also classified according to commercial or non-commercial vehicle type using the Federal Highway Administration (FHWA) Scheme F classification. Scheme F classifies vehicles into one of 13 categories from motorcycles up to multi-trailer trucks with 7 or more axles. A listing and diagram of the classification scheme is provided in Appendix B. Non-commercial vehicles included classes 1-4 and commercial vehicles included classes 5-13.

Table 5 provides the total number of captures by site by direction (inbound or outbound) along with a breakdown by classification: commercial or non-commercial.

TABLE 5 - TOTAL LICENSE PLATE CAPTURES BY STATION

<b>All Vehicles</b>			
<b>Site</b>	<b>Direction</b>		<b>Grand Total</b>
	<b>Inbound</b>	<b>Outbound</b>	
1-SH 16 North	3,791	4,901	8,692
2-SH 55 North	2,053	1,969	4,022
3-SH 21 East	1,955	1,992	3,947
4-IH 84 East	3,822	3,288	7,110
5-SH 45 South	938	1,149	2,087
6-SH 55 South	2,448	3,635	6,083
7-US 95 South	1,911	2,663	4,574
8-US 95 North	2,154	1,574	3,728
9-IH 84 West	6,205	4,670	10,875
Total	25,277	25,841	51,118
<b>Non-Commercial</b>			
<b>Site</b>	<b>Direction</b>		<b>Grand Total</b>
	<b>Inbound</b>	<b>Outbound</b>	
1-SH 16 North	3,600	4,685	8,285
2-SH 55 North	1,911	1,852	3,763
3-SH 21 East	1,802	1,868	3,670
4-IH 84 East	2,971	2,473	5,444
5-SH 45 South	805	1,006	1,811
6-SH 55 South	2,221	3,180	5,401
7-US 95 South	1,658	2,292	3,950
8-US 95 North	1,711	1,270	2,981
9-IH 84 West	4,383	3,573	7,956
Total	21,062	22,199	43,261
<b>Commercial</b>			
<b>Site</b>	<b>Direction</b>		<b>Grand Total</b>
	<b>Inbound</b>	<b>Outbound</b>	
1-SH 16 North	191	216	407
2-SH 55 North	142	117	259
3-SH 21 East	153	124	277
4-IH 84 East	851	815	1,666
5-SH 45 South	133	143	276
6-SH 55 South	227	455	682
7-US 95 South	253	371	624
8-US 95 North	443	304	747
9-IH 84 West	1,822	1,097	2,919
Total	4,215	3,642	7,857

Once the transcription was completed, the plates were processed through a database query to determine the total number of matching plates by site and time period. A total of 948 matches were found for all sites combined. Table 6 shows the number of EE matches by site for all vehicles and for non-commercial (495) and commercial vehicles (454).

TABLE 6 - EE PLATE MATCHES BY STATION (TOTAL, COMMERCIAL, NON-COMMERCIAL)

	All Vehicles									
EE Plate Count	Destination									Grand Total
Origin	1	2	3	4	5	6	7	8	9	
1-SH 16 North				4	3	2	1			10
2-SH 55 North			1	2		4			4	11
3-SH 21 East	1			5					1	7
4-IH 84 East	5	6	3			4	7		422	447
5-SH 45 South	2	2							2	6
6-SH 55 South	2	3		2	2				3	12
7-US 95 South	2			1				122		125
8-US 95 North							78			78
9-IH 84 West			1	245	3	1	2			252
Grand Total	12	11	5	259	8	11	88	122	432	948
	Non-Commercial									
EE Plate Count	Destination									Grand Total
Origin	1	2	3	4	5	6	7	8	9	
1-SH 16 North				4	1	2	1			8
2-SH 55 North			1	2		4				7
3-SH 21 East	1			4					1	6
4-IH 84 East	5	6	3			4	4		213	235
5-SH 45 South									2	2
6-SH 55 South	2	3		2	2				3	12
7-US 95 South								77		77
8-US 95 North							50			50
9-IH 84 West			1	91	3	1	2			98
Grand Total	8	9	5	103	6	11	57	77	219	495
	Commercial									
EE Plate Count	Destination									Grand Total
Origin	1	2	3	4	5	6	7	8	9	
1-SH 16 North					3					3
2-SH 55 North									4	4
3-SH 21 East				1						1
4-IH 84 East							3		209	212
5-SH 45 South	2	2								4
6-SH 55 South										0
7-US 95 South	2			1				45		48
8-US 95 North							28			28
9-IH 84 West				154						154
Grand Total	4	2	0	156	3	0	31	45	213	454

## TRAFFIC COUNT DATA

Temporary tube counters were used to collect traffic count data at sites 5 and 6. Counts from permanent ATR locations maintained by ITD were obtained for the remaining sites. The total count for all nine stations was 80,251 vehicles. Table 7 shows the traffic counts by site and direction for commercial, non-commercial, and total vehicles.

TABLE 7 - TRAFFIC COUNTS BY STATION, DIRECTION AND CLASSIFICATION

Site	Commercial		Non-Commercial		Total		Total
	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound	
1	249	213	4,634	4,632	4,883	4,845	9,728
1-SH 55 North	231	213	3,269	3,378	3,499	3,591	7,090
2-SH 21 East	172	144	2,043	2,173	2,215	2,317	4,532
3-IH 84 East	2,234	2,694	7,882	8,173	10,116	10,867	20,983
4-SH 45 South	141	125	841	880	982	1,005	1,987
5-SH 55 South	326	431	3,242	3,008	3,568	3,439	7,007
6-US 95 South	375	404	2,530	2,490	2,905	2,894	5,799
7-US 95 North	452	403	1,748	1,681	2,200	2,084	4,284
8-IH 84 West	2,785	2,163	6,853	7,040	9,638	9,203	18,841
Total	6,965	6,790	33,042	33,455	40,006	40,245	80,251

Detailed traffic count data for each station are provided in Appendix E.

## TRAVEL TIME DATA

In order to determine the threshold for each external-through movement, travel time data was collected. On the survey day, the Alliance PM and APM collected travel time data while circulating to each of the sites. These travel time runs were used to determine an average travel time from each site to every other site.

Average travel times from each site to every other site are provided in Table 8.

TABLE 8 - AVERAGE TRAVEL TIMES FOR EACH STATION (IN MINUTES)

Origin	Destination								
	1	2	3	4	5	6	7	8	9
1-SH 16 North	0	27	52	54	52	46	47	50	33
2-SH 55 North	27	0	48	50	57	53	54	60	44
3-SH 21 East	52	48	0	34	62	59	65	71	56
4-IH 84 East	54	50	34	0	64	61	67	73	57
5-SH 45 South	52	57	62	64	0	35	50	58	43
6-SH 55 South	46	53	59	61	35	0	17	38	28
7-US 95 South	47	54	65	67	50	17	0	22	27
8-US 95 North	50	60	71	73	58	38	22	0	33
9-IH 84 West	33	44	56	57	43	28	27	33	0

## EXTERNAL TO EXTERNAL (EE) TRIP TABLE EXPANSION

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The ultimate purpose of the video license plate data collection effort is to provide an external to external (EE) trip table for use in the regional travel demand model. To this end, the license plate, traffic count, and station-to-station travel time information are necessary. The following pages outline the methodology for expanding the observed data to the Daylight Period, Overnight Period, and 24-Hour EE trip tables.

To move from raw data elements to an EE trip table requires several steps:

1. Determine station-to-station travel time thresholds. The thresholds determining what would be considered an EE trip for this study were taken from the average station-to-station travel times displayed above. Alliance analyzed the travel times and determined that the threshold for an EE trip would be set at the average station-to-station travel time plus 10 minutes during the off-peak or over-night periods and plus 15 minutes for either the a.m. or p.m. peak periods.
2. Convert the observed EE license plate matches to percentages of through trips per hour. The observed time periods were from 8:00 a.m. – 6:00 p.m. Although data collection continued until past 6:30 p.m., a cutoff of 6:00 p.m. was used for matched plates based on the travel time information. The through trip percentages were based on the inbound traffic for each station to every other station compared to the count at that station for that time period. Since no actual plates were collected during the overnight time period, the daytime percentages were used as a surrogate.
3. Apply the real traffic counts by time period to the percentages of EE trips for each inbound station by time period. During this step, expanded EE trip tables are developed by time period.
4. Convert the expanded time of day trip tables to a weighted time of day EE trip percentage table. The aggregated time periods for each inbound station must be divided by the total counts at each station to obtain a properly weighted time of day EE trip percentage table.

Tables 9 through 11 show the results of the expansion process. The tables are based on the traffic counts, which were used in adjusting and expanding the observed EE percentages to expanded EE trips for each Origin-Destination (O-D) pair. During the expansion process, the mechanical (ATR) counts are compared to the observed count from the transcription of the video license plate data. Temporary tube counters were used to collect traffic count data at sites 5 and 6. Counts from permanent ATR locations maintained by ITD were obtained for the remaining sites. Adjustments are made to reconcile the mechanical count with the observed count. The adjustment and expansion process takes into consideration that the observed matched plates and observed count from the video may not contain all vehicles, especially in the early part of the a.m. period and the latter part of the p.m. period and when tape changes were being made. The counts shown in Tables 9, 10, and 11 reflect the control totals used for the expansion of the plate match percentages at each location.

The daytime expansion counts reflect the period during which license plate video was be collected. This is the time period used to develop the O-D plate matches percentages between all locations (EE trips). The overnight expansion counts represent the time period during which no video was collected. The counts are used in conjunction with the EE percentages to develop on overnight EE trip table.



TABLE 9 - 24-HOUR EXPANSION COUNTS

<b>All Vehicles</b>			
<b>Site</b>	<b>Direction</b>		<b>Total</b>
	<b>Inbound</b>	<b>Outbound</b>	
1-SH 16 North	4,883	4,845	9,728
2-SH 55 North	3,499	3,591	7,090
3-SH 21 East	2,215	2,317	4,532
4-IH 84 East	10,116	10,867	20,983
5-SH 45 South	982	1,005	1,987
6-SH 55 South	3,568	3,439	7,007
7-US 95 South	2,905	2,894	5,799
8-US 95 North	2,200	2,084	4,284
9-IH 84 West	9,638	9,203	18,841
Total	40,006	40,245	80,251
<b>Non-Commercial</b>			
<b>Site</b>	<b>Direction</b>		<b>Total</b>
	<b>Inbound</b>	<b>Outbound</b>	
1-SH 16 North	4,634	4,632	9,266
2-SH 55 North	3,269	3,378	6,647
3-SH 21 East	2,043	2,173	4,216
4-IH 84 East	7,882	8,173	16,055
5-SH 45 South	841	880	1,721
6-SH 55 South	3,242	3,008	6,250
7-US 95 South	2,530	2,490	5,020
8-US 95 North	1,748	1,681	3,429
9-IH 84 West	6,853	7,040	13,893
Total	33,042	33,455	66,497
<b>Commercial</b>			
<b>Site</b>	<b>Direction</b>		<b>Total</b>
	<b>Inbound</b>	<b>Outbound</b>	
1-SH 16 North	249	213	462
2-SH 55 North	231	213	444
3-SH 21 East	172	144	316
4-IH 84 East	2,234	2,694	4,928
5-SH 45 South	141	125	266
6-SH 55 South	326	431	757
7-US 95 South	375	404	779
8-US 95 North	452	403	855
9-IH 84 West	2,785	2,163	4,948
Total	6,965	6,790	13,755

TABLE 10 - DAYTIME EXPANSION COUNTS (8 A.M. TO 6 P.M.)

<b>All Vehicles</b>			
<b>Site</b>	<b>Direction</b>		<b>Total</b>
	<b>Inbound</b>	<b>Outbound</b>	
1-SH 16 North	2,713	2,692	5,405
2-SH 55 North	2,424	2,488	4,912
3-SH 21 East	1,300	1,360	2,660
4-IH 84 East	6,431	6,908	13,339
5-SH 45 South	614	628	1,242
6-SH 55 South	2,257	2,175	4,432
7-US 95 South	1,844	1,837	3,681
8-US 95 North	1,439	1,363	2,802
9-IH 84 West	6,028	5,756	11,784
Total	25,050	25,207	50,257
<b>Non-Commercial</b>			
<b>Site</b>	<b>Direction</b>		<b>Total</b>
	<b>Inbound</b>	<b>Outbound</b>	
1-SH 16 North	2,574	2,573	5,147
2-SH 55 North	2,268	2,344	4,612
3-SH 21 East	1,199	1,275	2,474
4-IH 84 East	5,018	5,203	10,221
5-SH 45 South	524	548	1,072
6-SH 55 South	2,052	1,904	3,956
7-US 95 South	1,611	1,586	3,197
8-US 95 North	1,143	1,099	2,242
9-IH 84 West	4,302	4,419	8,721
Total	20,691	20,951	41,642
<b>Commercial</b>			
<b>Site</b>	<b>Direction</b>		<b>Total</b>
	<b>Inbound</b>	<b>Outbound</b>	
1-SH 16 North	139	119	258
2-SH 55 North	157	145	302
3-SH 21 East	101	85	186
4-IH 84 East	1,413	1,704	3,117
5-SH 45 South	90	80	170
6-SH 55 South	205	271	476
7-US 95 South	233	251	484
8-US 95 North	296	264	560
9-IH 84 West	1,726	1,341	3,067
Total	4,360	4,260	8,620

TABLE 11 - OVERNIGHT EXPANSION COUNTS (6 P.M. TO 8 A.M.)

<b>All Vehicles</b>			
<b>Site</b>	<b>Direction</b>		<b>Total</b>
	<b>Inbound</b>	<b>Outbound</b>	
1-SH 16 North	2,170	2,153	4,323
2-SH 55 North	1,075	1,103	2,178
3-SH 21 East	915	957	1,872
4-IH 84 East	3,685	3,959	7,644
5-SH 45 South	368	377	745
6-SH 55 South	1,311	1,264	2,575
7-US 95 South	1,061	1,057	2,118
8-US 95 North	761	721	1,482
9-IH 84 West	3,610	3,447	7,057
Total	14,956	15,038	29,994
<b>Non-Commercial</b>			
<b>Site</b>	<b>Direction</b>		<b>Total</b>
	<b>Inbound</b>	<b>Outbound</b>	
1-SH 16 North	2,060	2,059	4,119
2-SH 55 North	1,001	1,034	2,035
3-SH 21 East	844	898	1,742
4-IH 84 East	2,864	2,970	5,834
5-SH 45 South	317	332	649
6-SH 55 South	1,190	1,104	2,294
7-US 95 South	919	904	1,823
8-US 95 North	605	582	1,187
9-IH 84 West	2,551	2,621	5,172
Total	12,351	12,504	24,855
<b>Commercial</b>			
<b>Site</b>	<b>Direction</b>		<b>Total</b>
	<b>Inbound</b>	<b>Outbound</b>	
1-SH 16 North	110	94	204
2-SH 55 North	74	68	142
3-SH 21 East	71	59	130
4-IH 84 East	821	990	1,811
5-SH 45 South	51	45	96
6-SH 55 South	121	160	281
7-US 95 South	142	153	295
8-US 95 North	156	139	295
9-IH 84 West	1,059	822	1,881
Total	2,605	2,530	5,135

The "24-Hour Expanded EE Trip Table for all Stations" is generated using the trip rates for each origin-destination pair, vehicle class, and time period applied to the expansion counts for the inbound direction for each site. The 24-hour values are an aggregation of the periods (Daytime and Overnight). An example of the aggregation process is provided in Appendix D.

Expanded trip tables for the Daytime and Overnight periods are also provided.

TABLE 12 - 24-HOUR EXPANDED EE TRIP TABLE FOR ALL STATIONS

All Vehicles										
EE Plate Count	Destination									Grand Total
Origin	1	2	3	4	5	6	7	8	9	
1-SH 16 North				7	7	4	2			20
2-SH 55 North			1	3		6			6	16
3-SH 21 East	2			9					2	13
4-IH 84 East	8	10	4			6	11		665	704
5-SH 45 South	3	3							3	9
6-SH 55 South	3	5		3	3				5	19
7-US 95 South	3			2				193		198
8-US 95 North							119			119
9-IH 84 West			2	393	5	2	3			405
Grand Total	19	18	7	417	15	18	135	193	681	1,503
Non-Commercial										
EE Plate Count	Destination									Grand Total
Origin	1	2	3	4	5	6	7	8	9	
1-SH 16 North				7	2	4	2			15
2-SH 55 North			1	3		6				10
3-SH 21 East	2			7					2	11
4-IH 84 East	8	10	4			6	6		335	369
5-SH 45 South									3	3
6-SH 55 South	3	5		3	3				5	19
7-US 95 South								121		121
8-US 95 North							76			76
9-IH 84 West			2	145	5	2	3			157
Grand Total	13	15	7	165	10	18	87	121	345	781
Commercial										
EE Plate Count	Destination									Grand Total
Origin	1	2	3	4	5	6	7	8	9	
1-SH 16 North					5					5
2-SH 55 North									6	6
3-SH 21 East				2						2
4-IH 84 East							5		330	335
5-SH 45 South	3	3								6
6-SH 55 South										0
7-US 95 South	3			2				72		77
8-US 95 North							43			43
9-IH 84 West				248						248
Grand Total	6	3	0	252	5	0	48	72	336	722

TABLE 13 - DAYTIME PERIOD EXPANDED EE TRIP TABLE FOR ALL STATIONS

All Vehicles										
EE Plate Count	Destination									Grand Total
Origin	1	2	3	4	5	6	7	8	9	
1-SH 16 North				4	4	2	1			11
2-SH 55 North			1	2		4			4	11
3-SH 21 East	1			5					1	7
4-IH 84 East	5	6	3			4	7		422	447
5-SH 45 South	2	2							2	6
6-SH 55 South	2	3		2	2				3	12
7-US 95 South	2			1				122		125
8-US 95 North							78			78
9-IH 84 West			1	245	3	1	2			252
Grand Total	12	11	5	259	9	11	88	122	432	949
Non-Commercial										
EE Plate Count	Destination									Grand Total
Origin	1	2	3	4	5	6	7	8	9	
1-SH 16 North				4	1	2	1			8
2-SH 55 North			1	2		4				7
3-SH 21 East	1			4					1	6
4-IH 84 East	5	6	3			4	4		213	235
5-SH 45 South									2	2
6-SH 55 South	2	3		2	2				3	12
7-US 95 South								77		77
8-US 95 North							50			50
9-IH 84 West			1	91	3	1	2			98
Grand Total	8	9	5	103	6	11	57	77	219	495
Commercial										
EE Plate Count	Destination									Grand Total
Origin	1	2	3	4	5	6	7	8	9	
1-SH 16 North					3					3
2-SH 55 North									4	4
3-SH 21 East				1						1
4-IH 84 East							3		209	212
5-SH 45 South	2	2								4
6-SH 55 South										0
7-US 95 South	2			1				45		48
8-US 95 North							28			28
9-IH 84 West				154						154
Grand Total	4	2	0	156	3	0	31	45	213	454

TABLE 14 - OVERNIGHT PERIOD EXPANDED EE TRIP TABLE FOR ALL STATIONS

All Vehicles										
EE Plate Count	Destination									Grand Total
Origin	1	2	3	4	5	6	7	8	9	
1-SH 16 North				3	3	2	1			9
2-SH 55 North				1		2			2	5
3-SH 21 East	1			4					1	6
4-IH 84 East	3	4	1			2	4		243	257
5-SH 45 South	1	1							1	3
6-SH 55 South	1	2		1	1				2	7
7-US 95 South	1			1				71		73
8-US 95 North							41			41
9-IH 84 West			1	148	2	1	1			153
Grand Total	7	7	2	158	6	7	47	71	249	554
Non-Commercial										
EE Plate Count	Destination									Grand Total
Origin	1	2	3	4	5	6	7	8	9	
1-SH 16 North				3	1	2	1			7
2-SH 55 North				1		2				3
3-SH 21 East	1			3					1	5
4-IH 84 East	3	4	1			2	2		122	134
5-SH 45 South									1	1
6-SH 55 South	1	2		1	1				2	7
7-US 95 South								44		44
8-US 95 North							26			26
9-IH 84 West			1	54	2	1	1			59
Grand Total	5	6	2	62	4	7	30	44	126	286
Commercial										
EE Plate Count	Destination									Grand Total
Origin	1	2	3	4	5	6	7	8	9	
1-SH 16 North					2					2
2-SH 55 North									2	2
3-SH 21 East				1						1
4-IH 84 East							2		121	123
5-SH 45 South	1	1								2
6-SH 55 South										0
7-US 95 South	1			1				27		29
8-US 95 North							15			15
9-IH 84 West				94						94
Grand Total	2	1	0	96	2	0	17	27	123	268

The "Effective 24-hour EE Percentages" presented in Table 15 are calculated using the 24-hour EE trip table (Table 12) and the 24-hour expansion inbound count (Table 9) for each station. It is important to note that the percentages are aggregated time period counts that are then divided by the total external license plate count at that station. This insures that the percentages are properly weighted. The percentages in the grand total column represent all through trips (inbound direction) as a percentage of the total trips entering the study area (inbound direction) at that site. An example of the expansion process is provided in Appendix D.

External-external percentages for the Daytime and Overnight Periods are also provided.

TABLE 15 - EFFECTIVE 24-HOUR EE PERCENTAGES BY STATION

All Vehicles										
EE Plate Count	Destination									Grand Total*
Origin	1	2	3	4	5	6	7	8	9	
1-SH 16 North				0.1%	0.1%	0.1%	0.0%			0.4%
2-SH 55 North			0.0%	0.1%		0.2%			0.2%	0.5%
3-SH 21 East	0.1%			0.4%					0.1%	0.6%
4-IH 84 East	0.1%	0.1%	0.0%			0.1%	0.1%		6.6%	6.9%
5-SH 45 South	0.3%	0.3%							0.3%	0.8%
6-SH 55 South	0.1%	0.1%		0.1%	0.1%				0.1%	0.5%
7-US 95 South	0.1%			0.1%				6.6%		6.8%
8-US 95 North							5.4%			5.4%
9-IH 84 West			0.0%	4.1%	0.1%	0.0%	0.0%			4.2%
Non-Commercial										
EE Plate Count	Destination									Grand Total*
Origin	1	2	3	4	5	6	7	8	9	
1-SH 16 North				0.2%	0.0%	0.1%	0.0%			0.3%
2-SH 55 North			0.0%	0.1%		0.2%				0.3%
3-SH 21 East	0.1%			0.3%					0.1%	0.5%
4-IH 84 East	0.1%	0.1%	0.1%			0.1%	0.1%		4.3%	4.7%
5-SH 45 South									0.4%	0.4%
6-SH 55 South	0.1%	0.2%		0.1%	0.1%				0.2%	0.6%
7-US 95 South								4.8%		4.8%
8-US 95 North							4.3%			4.3%
9-IH 84 West			0.0%	2.1%	0.1%	0.0%	0.0%			2.3%
Commercial										
EE Plate Count	Destination									Grand Total*
Origin	1	2	3	4	5	6	7	8	9	
1-SH 16 North					2.0%					2.0%
2-SH 55 North									2.6%	2.6%
3-SH 21 East				1.2%						1.2%
4-IH 84 East							0.2%		14.8%	15.0%
5-SH 45 South	2.1%	2.1%								3.5%
6-SH 55 South										0.0%
7-US 95 South	0.8%			0.5%				19.2%		20.5%
8-US 95 North							9.5%			9.5%
9-IH 84 West				8.9%						8.9%

\*Note: Grand Total may not match the sum of the rows due to rounding and the low percentage rates.

TABLE 16 - DAYTIME PERIOD EE PERCENTAGES BY STATION

All Vehicles										
EE Plate Count	Destination									Grand Total*
Origin	1	2	3	4	5	6	7	8	9	
1-SH 16 North				0.1%	0.1%	0.1%	0.0%			0.4%
2-SH 55 North			0.0%	0.1%		0.2%			0.2%	0.5%
3-SH 21 East	0.1%			0.4%					0.1%	0.5%
4-IH 84 East	0.1%	0.1%	0.0%			0.1%	0.1%		6.6%	6.9%
5-SH 45 South	0.3%	0.3%							0.3%	0.8%
6-SH 55 South	0.1%	0.1%		0.1%	0.1%				0.1%	0.5%
7-US 95 South	0.1%			0.1%				6.6%		6.8%
8-US 95 North							5.4%			5.4%
9-IH 84 West			0.0%	4.1%	0.0%	0.0%	0.0%			4.2%
Non-Commercial										
EE Plate Count	Destination									Grand Total*
Origin	1	2	3	4	5	6	7	8	9	
1-SH 16 North				0.2%	0.0%	0.1%	0.0%			0.3%
2-SH 55 North			0.0%	0.1%		0.2%				0.3%
3-SH 21 East	0.1%			0.3%					0.1%	0.5%
4-IH 84 East	0.1%	0.1%	0.1%			0.1%	0.1%		4.2%	4.7%
5-SH 45 South									0.4%	0.4%
6-SH 55 South	0.1%	0.1%		0.1%	0.1%				0.1%	0.5%
7-US 95 South								4.8%		4.8%
8-US 95 North							4.4%			4.4%
9-IH 84 West			0.0%	2.1%	0.1%	0.0%	0.0%			2.3%
Commercial										
EE Plate Count	Destination									Grand Total*
Origin	1	2	3	4	5	6	7	8	9	
1-SH 16 North					2.2%					2.2%
2-SH 55 North									2.5%	2.5%
3-SH 21 East				1.0%						1.0%
4-IH 84 East							0.2%		14.8%	15.0%
5-SH 45 South	2.2%	2.2%								3.3%
6-SH 55 South										0.0%
7-US 95 South	0.9%			0.4%				19.3%		20.6%
8-US 95 North							9.5%			9.5%
9-IH 84 West				8.9%						8.9%

\*Note: Grand Total may not match the sum of the rows due to rounding and the low percentage rates.



TABLE 17 - OVERNIGHT PERIOD EE PERCENTAGES BY STATION

All Vehicles										
EE Plate Count	Destination									Grand Total*
Origin	1	2	3	4	5	6	7	8	9	
1-SH 16 North				0.1%	0.1%	0.1%	0.0%			0.4%
2-SH 55 North				0.1%		0.2%			0.2%	0.5%
3-SH 21 East	0.1%			0.4%					0.1%	0.7%
4-IH 84 East	0.1%	0.1%	0.0%			0.1%	0.1%		6.6%	7.0%
5-SH 45 South	0.3%	0.3%							0.3%	0.8%
6-SH 55 South	0.1%	0.2%		0.1%	0.1%				0.2%	0.5%
7-US 95 South	0.1%			0.1%				6.7%		6.9%
8-US 95 North							5.4%			5.4%
9-IH 84 West			0.0%	4.1%	0.1%	0.0%	0.0%			4.2%
Non-Commercial										
EE Plate Count	Destination									Grand Total*
Origin	1	2	3	4	5	6	7	8	9	
1-SH 16 North				0.1%	0.0%	0.1%	0.0%			0.3%
2-SH 55 North				0.1%		0.2%				0.3%
3-SH 21 East	0.1%			0.4%					0.1%	0.6%
4-IH 84 East	0.1%	0.1%	0.0%			0.1%	0.1%		4.3%	4.7%
5-SH 45 South									0.3%	0.3%
6-SH 55 South	0.1%	0.2%		0.1%	0.1%				0.2%	0.6%
7-US 95 South								4.8%		4.8%
8-US 95 North							4.3%			4.3%
9-IH 84 West			0.0%	2.1%	0.1%	0.0%	0.0%			2.3%
Commercial										
EE Plate Count	Destination									Grand Total*
Origin	1	2	3	4	5	6	7	8	9	
1-SH 16 North					1.8%					1.8%
2-SH 55 North									2.7%	2.7%
3-SH 21 East				1.4%						1.4%
4-IH 84 East							0.2%		14.7%	15.0%
5-SH 45 South	2.0%	2.0%								3.9%
6-SH 55 South										
7-US 95 South	0.7%			0.7%				19.0%		20.4%
8-US 95 North							9.6%			9.6%
9-IH 84 West				8.9%						8.9%

\*Note: Grand Total may not match the sum of the rows due to rounding and the low percentage rates.

## CONCLUSIONS

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The purpose of this study was to provide vital inputs to the regional transportation planning and travel demand modeling process. Additional and more recent inputs provide COMPASS with the ability to be more responsive to the evolving transportation planning needs of the region.

The commercial vehicle survey (CVS) provided valuable information on the internal and external trip making characteristics of commercial vehicles in the study area; however, the primary focus was on the characteristics of trips within the study or originating within the study area. This data collection effort included recruiting businesses throughout the study area that have commercial vehicles that transport goods or make commercial trips related to services. To ensure the results were statistically representative of the metropolitan area as a whole and each of the three subgroups identified earlier, the survey was to be administered to a minimum of 1,000 vehicles. Completed surveys were obtained from a total of 1,128 vehicles.

Additionally, the commercial vehicle intercept surveys conducted at ports of entry and truck stops provided information on commercial trips that fell into three primary categories: a) those trips coming into the study area, which originated outside the area; b) those trips that had originated outside the study area and were returning to a base location within the study area; or c) those commercial trips that were simply passing through the study area, often referred to as EE (external-external) trips. A total of 2,234 completed surveys were collected (1,751 at the ports of entry and 483 at truck stops within the study area).

Finally, the video license plate (VLP) capture, also referred to as the external station survey, provided specific information on the external to external (EE) trips for both commercial and non-commercial vehicles. The external station survey focused on nine roadways that provide the main points of access and egress into and out of the study area (commonly referred to as external stations). A total of 51,118 license plates were captured and of those, 46,758 were fully transcribed, for a transcription rate of 91.5%. The 24-hour traffic counts recorded for the day of the survey totaled 80,251 vehicles, with over 64% of the counted vehicles being recorded during the survey period. External-External trip tables were successfully developed for both commercial and non-commercial vehicles for the nine external stations surveyed.

# APPENDIX A – MAP OF STUDY AREA AND EXTERNAL STATIONS










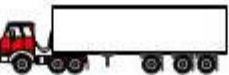
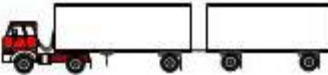
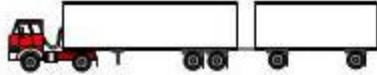
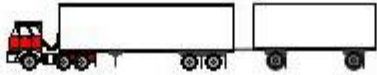
## STUDY AREA AND SITE LOCATION MAP



# APPENDIX B – FHWA SCHEME F VEHICLE CLASSIFICATION

FHWA SCHEME F VEHICLE CLASSIFICATION

CLASS	DESCRIPTION
1	Motorcycles
2	Passenger Cars
3	Other Two-Axle, Four-Tire Single Unit Vehicles
4	Buses
5	Two-Axle, Six-Tire, Single-Unit Trucks
6	Three-Axle Single-Unit Trucks
7	Four or More Axle Single-Unit Trucks
8	Four or Fewer Axle Single-Trailer Trucks
9	Five-Axle Single-Trailer Trucks
10	Six or More Axle Single-Trailer Trucks
11	Five or fewer Axle Multi-Trailer Trucks
12	Six-Axle Multi-Trailer Trucks
13	Seven or More Axle Multi-Trailer Trucks

1 Motorcycles 	2 Passenger Cars 	3 Two Axle, 4 Tire Single Units 	4 Buses 
5 Two Axle, Six Tire Single Unit 	6 Three Axle Single Units 	7 Four or More Axle Single Units 	8 Four or Less Axle Single Trailers 
9 Five Axle Single Trailers 	10 Seven or More Axle Single Trailers 	11 Five or Less Axle Multi-Trailers 	
12 Six Axle Multi-Trailers 	13 Seven or More Axle Multi-Trailers 		

FHWA SCHEME F VEHICLE CLASSIFICATION

# APPENDIX C – INTERCEPT SURVEY INSTRUMENT

## COMPASS COMMERCIAL VEHICLE SURVEY

Station # \_\_\_\_\_ Survey Date \_\_\_\_\_



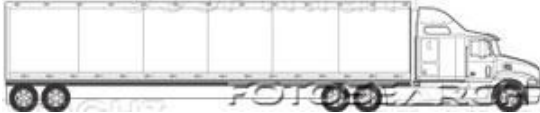


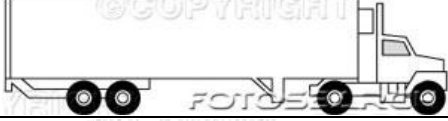


Station Name/Location \_\_\_\_\_ Interviewer \_\_\_\_\_

For each vehicle you collect:

	Vehicle 1	Vehicle 2	Vehicle 3
1. Time. (circle a.m. or p.m.)	_____ a.m. _____ p.m.	_____ a.m. _____ p.m.	_____ a.m. _____ p.m.
2. Number of vehicle axles.			
3. What is the Gross Vehicle Weight (GVW) of your vehicle?			
4. Trailer type. (See trailer options)			
5. Carrier.			
6. What is the cargo? (Choose from cargo codes) If empty, answer questions 9a, 10, 11, & 13a.			
7. How full is the load you are carrying? (As a percentage of total trailer or weight capacity)			
8. Did your cargo originate outside of Idaho? (Canada, Washington, Oregon, Nevada, etc) If 'Yes,' question 8a, otherwise question 9.	<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
8a. Where did cargo originate (City/State)?			
9. Where did you pick up your load? (Place/address or nearest intersection and city)			
9a. Where did you pick up trailer or drop off load? (Place/address or nearest intersection/city)			
10. What was the type of location where you picked up cargo? (See location types)			
11. If location type was warehouse or terminal, what is the name & phone number of that place?			

12. What was your load transferred from at that location? (Choose from transfer codes)			
13. Where will you drop your cargo? (Place/address or nearest intersection and city)			
13a. Where is your next cargo related destination? (Place/address or nearest intersection and city)			
14. What is the type of location where you will drop off your cargo? (See location types)			
15. What will the load be transferred to at that location? (See transfer codes)			
16. What is your cargo's final destination? (Place/address or nearest intersection and city)			
17. Direction of Travel. (circle one)	EB   WB   NB   SB	EB   WB   NB   SB	EB   WB   NB   SB

Trailer  
Type  
Options:

1) Single Unit	
2) Single Unit with trailer	
3) Semi Box Unit	
4) Flatbed	
5) Tanker	
6) Reefer	
7) Container	
8) Semi Multi Unit	
9) Other	

Location Types:

- |                   |                 |                           |
|-------------------|-----------------|---------------------------|
| 1) Port           | 2) Drop Yard    | 3) Rail Terminal          |
| 4) Truck Terminal | 5) Air Terminal | 6) Warehouse/Distribution |
| 7) Factory/Plant  | 8) Farm         | 9) Retail                 |
| 10) Base Location | 11) Other       | 99) Refused               |

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                |                           |

- |                                   |   |
|-----------------------------------|---|
| 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 D – EXPANSION CALCULATION EXAMPLE

---

**Daytime EE Trips**

Non-Commercial  
Commercial  
All Vehicles

Origin	Destination									Grand Total
	1	2	3	4	5	6	7	8	9	
4	5	6	3			4	4		213	234
4							3		209	212
4	5	6	3			4	7		422	446

**Exerpt from: "TABLE 13 - DAYTIME PERIOD EXPANDED EE TRIP TABLE FOR ALL STATIONS"**

- 1 EE trips between Site 4 and all other sites from License Plate Matches
- 2 EE trips between Site 4 and all other sites from License Plate Matches
- 3 Sum of values in Rows 1 & 2

**Daytime Traffic Count**

Non-Commercial  
Commercial  
All Vehicles

Site	Inbound
4	5,018
4	1,413
4	6,431

**Exerpt from: "TABLE 10 - DAYTIME EXPANSION COUNTS (8 A.M. TO 6 P.M.)"**

- 4 Vehicle count during video capture period (daytime)
- 5 Vehicle count during video capture period (daytime)
- 6 Sum of values in Rows 4 & 5

**Daytime EE %**

Non-Commercial  
Commercial  
All Vehicles

Origin	Destination									Grand Total
	1	2	3	4	5	6	7	8	9	
4	0.1%	0.1%	0.1%			0.1%	0.1%		4.2%	4.7%
4							0.2%		14.8%	15.0%
4	0.1%	0.1%	0.0%			0.1%	0.1%		6.6%	6.9%

**Excerpt from: "TABLE 16 - DAYTIME PERIOD EE PERCENTAGES BY STATION"**

- 7 EE trip % between Site 4 and all other sites [(Row 1 values) / (Row 4 value)]
- 8 EE trip % between Site 4 and all other sites [(Row 2 values) / (Row 5 value)]
- 9 EE trip % between Site 4 and all other sites [(Row 3 values) / (Row 6 value)]

**Overnight Traffic Count**

Non-Commercial  
Commercial  
All Vehicles

Site	Inbound
4	2,864
4	821
4	3,685

**Exerpt from: "TABLE 11 - OVERNIGHT EXPANSION COUNTS (6 P.M. TO 8 A.M.)"**

- 10 Vehicle count during non-video capture period (overnight)
- 11 Vehicle count during non-video capture period (overnight)
- 12 Sum of values in Rows 4 & 5

**Overnight EE Trips**

Non-Commercial  
Commercial  
All Vehicles

Origin	Destination									Grand Total
	1	2	3	4	5	6	7	8	9	
4	3	4	1			2	2		122	134
4							2		121	123
4	3	4	1			2	4		243	257

**Exerpt from: "TABLE 14 - OVERNIGHT PERIOD EXPANDED EE TRIP TABLE FOR ALL STATIONS"**

- 13 EE trips between Site 4 and all other sites [(Row 7 values) x (Row 10 value)]
- 14 EE trips between Site 4 and all other sites [(Row 8 values) x (Row 11 value)]
- 15 Sum of values in Rows 13 & 14

**24-Hour EE Trips**

Non-Commercial  
Commercial  
All Vehicles

Origin	Destination									Grand Total
	1	2	3	4	5	6	7	8	9	
4	8	10	4			6	6		335	369
4							5		330	335
4	8	10	4			6	11		665	704

**Exerpt from: "TABLE 12 - 24-HOUR EXPANDED EE TRIP TABLE FOR ALL STATIONS"**

- 16 Sum of values in Rows 1 & 13
- 17 Sum of values in Rows 2 & 14
- 18 Sum of values in Rows 16 & 17

**24-Hour Traffic Count**

Non-Commercial  
Commercial  
All Vehicles

Site	Inbound
4	7,882
4	2,234
4	10,116

**Exerpt from: "TABLE 9 - 24-HOUR EXPANSION COUNTS"**

- 19 Vehicle count during 24-hour period
- 20 Vehicle count during 24-hour period
- 21 Sum of values in Rows 19 & 20

**24-Hour EE %**

Non-Commercial  
Commercial  
All Vehicles

Origin	Destination									Grand Total
	1	2	3	4	5	6	7	8	9	
4	0.1%	0.1%	0.1%			0.1%	0.1%		4.3%	4.7%
4							0.2%		14.8%	15.0%
4	0.1%	0.1%	0.0%			0.1%	0.1%		6.6%	7.0%

**Exerpt from: "TABLE 15 - EFFECTIVE 24-HOUR EE PERCENTAGES BY STATION"**

- 22 EE trip % between Site 4 and all other sites [(Row 16 values) / (Row 19 value)]
- 23 EE trip % between Site 4 and all other sites [(Row 17 values) / (Row 20 value)]
- 24 EE trip % between Site 4 and all other sites [(Row 18 values) / (Row 21 value)]

## APPENDIX E – TIME OF DAY COUNTS

---

Station # 274  
 Route: SH-16  
 Segment Code and Milepost: 001390 005.040  
 .26 Miles South of Roseway Lane (Firebird)

Idaho Transportation Department  
 Hourly Traffic Volume Report By Direction

County: Ada  
 District: 03  
 Ascending Direction: North

October 2007

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total		
<b>1 Mon</b>																											
Ascending	25	7	5	10	18	29	83	163	183	211	223	192	224	300	299	400	553	607	466	237	182	140	82	46	4685		
Descending	11	5	11	32	90	278	603	560	347	298	254	242	258	268	239	284	229	228	155	110	99	68	32	22	4723		
Combined	36	12	16	42	108	307	686	723	530	509	477	434	482	568	538	684	782	835	621	347	281	208	114	68	9408		
<b>2 Tue</b>																											
Ascending	29	13	10	7	8	23	94	168	184	170	156	195	205	250	281	471	600	647	523	247	192	171	97	74	4815		
Descending	7	6	9	29	92	274	636	593	378	329	268	247	243	236	224	264	260	278	186	136	99	67	40	13	4914		
Combined	36	19	19	36	100	297	730	761	562	499	424	442	448	486	505	735	860	925	709	383	291	238	137	87	9729		
<b>3 Wed</b>																											
Ascending	22	15	14	9	14	29	101	157	186	184	193	178	223	275	297	423	568	642	483	255	194	168	129	74	4833		
Descending	5	5	8	28	86	281	644	593	403	298	275	255	236	231	244	266	260	248	181	130	112	73	46	11	4919		
Combined	27	20	22	37	100	310	745	750	589	482	468	433	459	506	541	689	828	890	664	385	306	241	175	85	9752		
<b>4 Thu</b>																											
Ascending	33	15	13	11	11	25	73	194	198	169	192	217	226	288	269	436	606	644	532	284	229	202	142	75	5084		
Descending	9	5	14	30	87	276	587	608	347	317	313	277	280	296	270	277	244	276	191	135	108	67	53	28	5095		
Combined	42	20	27	41	98	301	660	802	545	486	505	494	506	584	539	713	850	920	723	419	337	269	195	103	10179		
<b>5 Fri</b>																											
Ascending	35	27	22	11	13	28	60	151	170	169	186	236	257	313	397	473	548	589	533	285	217	187	148	99	5154		
Descending	11	9	8	33	81	240	584	521	366	324	327	294	271	307	279	261	237	280	218	167	101	86	76	39	5120		
Combined	46	36	30	44	94	268	644	672	536	493	513	530	528	620	676	734	785	869	751	452	318	273	224	138	10274		
<b>6 Sat</b>																											
Ascending	63	26	16	11	9	28	38	111	166	224	285	313	341	328	302	342	322	327	278	234	192	171	121	104	4352		
Descending	19	8	8	15	40	56	116	173	212	283	334	283	342	335	306	322	330	355	281	261	145	92	81	43	4440		
Combined	82	34	24	26	49	84	154	284	378	507	619	596	683	663	608	664	652	682	559	495	337	263	202	147	8792		
<b>7 Sun</b>																											
Ascending	68	25	16	22	12	14	41	42	90	144	172	168	253	257	258	275	253	272	218	200	135	156	134	43	3268		
Descending	21	15	4	14	18	44	74	58	127	195	223	247	254	281	292	305	277	281	208	157	124	84	54	20	3377		
Combined	89	40	20	36	30	58	115	100	217	339	395	415	507	538	550	580	530	553	426	357	259	240	188	63	6645		
<b>8 Mon</b>																											
Ascending	30	11	12	8	14	24	78	174	163	181	196	195	199	247	291	451	574	601	429	243	172	128	94	91	4606		
Descending	9	6	11	31	71	229	554	523	366	300	306	261	283	223	220	225	261	247	191	151	94	48	30	15	4655		
Combined	39	17	23	39	85	253	632	697	529	481	502	456	482	470	511	676	835	848	620	394	266	176	124	106	9261		

AM and PM peak hours boxed.

Station # 274

Route: SH-16

Segment Code and Milepost: 001390 005.040

.26 Miles South of Roseway Lane (Firebird)

Idaho Transportation Department  
Hourly Traffic Volume Report By Direction

County: Ada

District: 03

Ascending Direction: North

October 2007

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total		
<b>9 Tue</b>																											
Ascending	31	16	11	6	12	34	84	185	196	168	181	201	221	239	294	435	545	680	549	264	207	174	105	54	4892		
Descending	9	7	5	30	86	274	624	612	393	309	242	234	260	248	221	266	249	234	190	145	95	60	36	17	4846		
Combined	40	23	16	36	98	308	708	797	589	477	423	435	481	487	515	701	794	914	739	409	302	234	141	71	9738		
<b>10 Wed</b>																											
Ascending	25	19	13	14	19	67	115	175	168	158	140	179	205	239	318	434	556	621	494	257	192	155	95	64	4722		
Descending	9	10	8	22	97	271	593	587	371	283	236	250	248	264	258	274	213	247	179	121	114	75	34	19	4783		
Combined	34	29	21	36	116	338	708	762	539	441	376	429	453	503	576	708	769	868	673	378	306	230	129	83	9505		
<b>11 Thu</b>																											
Ascending	23	15	16	7	16	38	80	166	192	179	172	180	203	258	297	422	600	705	534	258	206	169	116	66	4918		
Descending	7	6	14	28	86	265	594	596	394	336	287	245	249	248	210	258	229	216	208	152	144	107	42	17	4938		
Combined	30	21	30	35	102	303	674	762	586	515	459	425	452	506	507	680	829	921	742	410	350	276	158	83	9856		
<b>12 Fri</b>																											
Ascending	43	16	13	12	12	37	96	156	156	167	186	179	241	269	334	445	584	583	478	302	196	201	228	122	5056		
Descending	13	7	12	38	82	236	572	551	347	304	268	261	286	256	265	255	285	307	243	162	110	80	62	26	5028		
Combined	56	23	25	50	94	273	668	707	503	471	454	440	527	525	599	700	869	890	721	464	306	281	290	148	10084		
<b>13 Sat</b>																											
Ascending	63	22	13	15	27	63	87	119	151	205	205	263	306	326	354	364	361	320	264	215	204	187	177	116	4427		
Descending	15	14	17	19	34	68	134	176	224	301	329	360	375	314	303	327	284	314	276	186	169	126	65	48	4478		
Combined	78	36	30	34	61	131	221	295	375	506	534	623	681	640	657	691	645	634	540	401	373	313	242	164	8905		
<b>14 Sun</b>																											
Ascending	52	36	15	9	8	36	54	58	83	104	142	183	253	248	247	281	238	251	225	178	138	103	115	94	3151		
Descending	20	18	7	13	18	53	78	70	97	180	209	202	250	271	322	345	280	245	185	194	139	81	85	17	3379		
Combined	72	54	22	22	26	89	132	128	180	284	351	385	503	519	569	626	518	496	410	372	277	184	200	111	6530		
<b>15 Mon</b>																											
Ascending	28	13	2	4	14	30	76	163	191	155	167	166	203	270	286	393	562	668	472	261	166	144	85	56	4575		
Descending	9	10	10	24	87	258	620	607	365	291	279	258	248	217	254	273	217	205	174	150	94	62	38	14	4764		
Combined	37	23	12	28	101	288	696	770	556	446	446	424	451	487	540	666	779	873	646	411	260	206	123	70	9339		
<b>16 Tue</b>																											
Ascending	22	17	7	8	21	29	95	184	183	196	201	225	245	248	300	413	605	711	534	252	191	152	97	66	5002		
Descending	7	5	11	29	91	258	620	648	367	332	258	221	265	268	242	235	289	264	174	159	116	73	35	11	4978		
Combined	29	22	18	37	112	287	715	832	550	528	459	446	510	516	542	648	894	975	708	411	307	225	132	77	9980		

AM and PM peak hours boxed.

Creation Date: 12/21/2007 16:09

Station # 274

Route: SH-16

Segment Code and Milepost: 001390 005.040

.26 Miles South of Roseway Lane (Firebird)

Idaho Transportation Department  
Hourly Traffic Volume Report By Direction

County: Ada

District: 03

Ascending Direction: North

October 2007

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total		
<b>17 Wed</b>																											
Ascending	31	13	6	12	23	32	81	180	208	194	199	223	223	243	295	419	596	673	573	262	196	181	116	62	5041		
Descending	8	4	8	24	91	282	617	611	379	283	266	229	207	234	255	215	300	279	231	217	154	88	51	25	5058		
Combined	39	17	14	36	114	314	698	791	587	477	465	452	430	477	550	634	896	952	804	479	350	269	167	87	10099		
<b>18 Thu</b>																											
Ascending	27	20	19	9	21	44	94	183	228	199	194	180	216	297	300	451	626	648	505	248	213	173	123	71	5089		
Descending	12	6	11	22	95	264	623	618	369	296	251	274	248	276	277	279	238	252	206	144	129	132	64	26	5112		
Combined	39	26	30	31	116	308	717	801	597	495	445	454	464	573	577	730	864	900	711	392	342	305	187	97	10201		
<b>19 Fri</b>																											
Ascending	43	20	13	9	13	39	90	170	248	182	180	228	266	303	420	499	583	608	526	275	230	198	188	108	5439		
Descending	13	9	8	28	83	268	551	535	339	301	284	297	310	279	300	328	292	346	238	181	149	100	79	38	5356		
Combined	56	29	21	37	96	307	641	705	587	483	464	525	576	582	720	827	875	954	764	456	379	298	267	146	10795		
<b>20 Sat</b>																											
Ascending	59	28	16	12	19	62	78	142	258	248	252	295	300	315	317	360	437	384	333	205	206	188	128	106	4748		
Descending	23	13	15	15	48	81	124	141	175	247	297	341	337	307	307	359	323	277	261	231	252	268	178	95	4715		
Combined	82	41	31	27	67	143	202	283	433	495	549	636	637	622	624	719	760	661	594	436	458	456	306	201	9463		
<b>21 Sun</b>																											
Ascending	76	18	17	13	15	53	67	146	151	134	140	198	252	308	259	274	265	287	242	174	134	79	61	36	3399		
Descending	41	28	15	17	18	49	60	66	115	206	230	244	268	296	314	369	378	342	282	245	173	94	51	22	3923		
Combined	117	46	32	30	33	102	127	212	266	340	370	442	520	604	573	643	643	629	524	419	307	173	112	58	7322		
<b>22 Mon</b>																											
Ascending	21	9	5	5	14	36	75	162	173	151	201	172	210	224	285	421	579	643	480	233	177	134	82	63	4555		
Descending	8	14	12	25	93	266	608	625	399	312	244	245	241	226	221	223	260	235	172	124	110	41	37	10	4751		
Combined	29	23	17	30	107	302	683	787	572	463	445	417	451	450	506	644	839	878	652	357	287	175	119	73	9306		
<b>23 Tue</b>																											
Ascending	26	19	12	5	14	36	76	190	174	197	205	188	215	267	294	425	580	680	478	234	197	183	103	47	4845		
Descending	4	6	14	33	84	273	636	578	384	285	256	259	239	256	256	221	300	257	194	127	94	74	38	15	4883		
Combined	30	25	26	38	98	309	712	768	558	482	461	447	454	523	550	646	880	937	672	361	291	257	141	62	9728		
<b>24 Wed</b>																											
Ascending	34	23	13	12	15	41	104	183	198	178	203	176	205	254	268	426	548	670	491	262	193	137	94	59	4787		
Descending	6	8	9	23	106	264	574	633	349	260	244	242	249	246	217	247	251	265	202	121	106	72	47	25	4766		
Combined	40	31	22	35	121	305	678	816	547	438	447	418	454	500	485	673	799	935	693	383	299	209	141	84	9553		

AM and PM peak hours boxed.

Creation Date: 12/21/2007 16:09

Station # 274

Route: SH-16

Segment Code and Milepost: 001390 005.040

.26 Miles South of Roseway Lane (Firebird)

Idaho Transportation Department  
Hourly Traffic Volume Report By Direction

County: Ada

District: 03

Ascending Direction: North

October 2007

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total		
<b>25 Thu</b>																											
Ascending	36	17	11	12	20	36	84	186	194	180	193	191	222	230	262	404	594	630	506	243	176	188	130	54	4799		
Descending	7	8	10	24	101	258	563	616	354	298	284	256	277	241	250	251	242	309	216	131	89	69	32	9	4895		
Combined	43	25	21	36	121	294	647	802	548	478	477	447	499	471	512	655	836	939	722	374	265	257	162	63	9694		
<b>26 Fri</b>																											
Ascending	32	26	8	7	19	42	95	164	166	163	187	194	243	286	380	418	571	640	523	308	179	187	167	114	5119		
Descending	7	11	9	24	85	240	551	535	354	333	279	256	262	289	262	256	277	283	252	173	126	113	120	32	5129		
Combined	39	37	17	31	104	282	646	699	520	496	466	450	505	575	642	674	848	923	775	481	305	300	287	146	10248		
<b>27 Sat</b>																											
Ascending	77	24	17	16	21	47	47	109	155	159	177	209	252	301	320	362	346	358	294	250	191	167	186	158	4243		
Descending	18	15	10	21	29	76	125	162	231	255	307	350	290	294	272	307	300	310	296	199	152	109	86	37	4251		
Combined	95	39	27	37	50	123	172	271	386	414	484	559	542	595	592	669	646	668	590	449	343	276	272	195	8494		
<b>28 Sun</b>																											
Ascending	89	38	34	18	10	25	27	39	74	106	129	172	227	234	261	284	278	247	244	214	163	93	68	39	3113		
Descending	31	20	14	16	22	42	59	78	107	162	215	209	225	289	276	255	278	247	220	160	114	71	56	23	3189		
Combined	120	58	48	34	32	67	86	117	181	268	344	381	452	523	537	539	556	494	464	374	277	164	124	62	6302		
<b>29 Mon</b>																											
Ascending	19	4	9	6	12	34	77	167	161	161	160	159	217	229	290	428	573	636	473	240	176	145	109	50	4535		
Descending	8	7	9	31	83	265	608	581	363	294	266	241	228	268	241	234	271	229	190	102	87	37	26	19	4688		
Combined	27	11	18	37	95	299	685	748	524	455	426	400	445	497	531	662	844	865	663	342	263	182	135	69	9223		
<b>30 Tue</b>																											
Ascending	22	26	9	6	13	37	89	162	188	176	156	194	213	235	250	419	573	619	501	267	196	152	112	66	4681		
Descending	2	5	14	20	83	282	629	576	363	291	249	242	238	260	249	244	261	225	159	136	103	73	36	18	4758		
Combined	24	31	23	26	96	319	718	738	551	467	405	436	451	495	499	663	834	844	660	403	299	225	148	84	9439		
<b>31 Wed</b>																											
Ascending	30	16	15	14	13	41	66	175	173	173	165	170	232	236	272	433	621	646	500	193	190	215	130	65	4784		
Descending	6	4	8	27	89	258	622	599	378	281	258	226	220	252	250	243	280	261	198	127	95	73	72	36	4863		
Combined	36	20	23	41	102	299	688	774	551	454	423	396	452	488	522	676	901	907	698	320	285	288	202	101	9647		
<b>Average</b>																											
Ascending	39	19	13	10	15	37	78	152	174	174	185	201	235	268	300	403	511	556	441	245	188	162	121	76	4604		
Descending	12	9	10	25	73	211	470	465	315	283	269	260	264	267	261	273	271	269	212	159	122	86	57	25	4670		
Combined	51	29	23	35	88	247	548	618	489	457	454	460	500	535	561	676	782	825	653	404	311	248	179	101	9274		

AM and PM peak hours boxed.

Creation Date: 12/21/2007 16:09

Station # 010  
 Route: SH-55  
 Segment Code and Milepost: 001990 047.830  
 3.3 Miles North of Jct SH-44 (Dry Creek)

Idaho Transportation Department  
 Hourly Traffic Volume Report By Direction

County: Ada  
 District: 03  
 Ascending Direction: North

October 2007

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total	
<b>1 Mon</b>																										
Ascending	14	9	8	23	33	108	164	206	224	204	181	177	170	214	221	210	268	292	204	116	75	49	38	19	3227	
Descending	20	4	6	8	24	79	157	213	200	200	228	237	240	244	228	254	207	180	179	124	81	45	28	11	3197	
Combined	34	13	14	31	57	187	321	419	424	404	409	414	410	458	449	464	475	472	383	240	156	94	66	30	6424	
<b>2 Tue</b>																										
Ascending	14	10	8	8	21	56	152	273	258	257	221	191	214	195	213	239	255	243	186	143	92	78	44	18	3389	
Descending	13	1	6	8	23	79	165	188	193	184	220	207	216	238	243	268	238	362	229	161	82	54	33	14	3425	
Combined	27	11	14	16	44	135	317	461	451	441	441	398	430	433	456	507	493	605	415	304	174	132	77	32	6814	
<b>3 Wed</b>																										
Ascending	15	6	7	15	16	49	162	234	252	250	178	167	207	197	241	262	335	332	237	170	124	82	44	29	3611	
Descending	10	1	6	9	18	92	163	202	176	192	199	205	232	211	260	303	287	283	219	185	103	58	49	21	3484	
Combined	25	7	13	24	34	141	325	436	428	442	377	372	439	408	501	565	622	615	456	355	227	140	93	50	7095	
<b>4 Thu</b>																										
Ascending	7	7	9	5	19	51	168	269	277	287	272	250	284	277	289	302	332	367	273	184	123	85	52	28	4217	
Descending	8	8	8	11	19	77	170	191	194	181	209	235	244	266	269	330	309	272	283	166	117	62	52	35	3716	
Combined	15	15	17	16	38	128	338	460	471	468	481	485	528	543	558	632	641	639	556	350	240	147	104	63	7933	
<b>5 Fri</b>																										
Ascending	15	7	11	12	24	54	165	232	246	270	318	323	313	418	414	473	542	509	479	272	169	103	77	36	5482	
Descending	15	5	7	9	17	57	136	165	166	184	212	290	269	290	335	370	358	378	273	244	167	101	53	36	4137	
Combined	30	12	18	21	41	111	301	397	412	454	530	613	582	708	749	843	900	887	752	516	336	204	130	72	9619	
<b>6 Sat</b>																										
Ascending	21	16	8	11	23	46	127	238	298	410	466	375	348	358	273	297	252	246	203	132	103	100	44	28	4423	
Descending	24	11	2	10	7	16	32	63	100	144	240	273	300	338	351	362	382	372	334	247	211	126	90	56	4091	
Combined	45	27	10	21	30	62	159	301	398	554	706	648	648	696	624	659	634	618	537	379	314	226	134	84	8514	
<b>7 Sun</b>																										
Ascending	18	16	9	3	7	20	80	119	205	206	306	286	286	310	268	236	235	171	152	108	107	79	55	25	3307	
Descending	22	10	10	10	6	22	35	35	72	140	227	315	471	570	667	587	660	585	463	319	224	147	62	27	5686	
Combined	40	26	19	13	13	42	115	154	277	346	533	601	757	880	935	823	895	756	615	427	331	226	117	52	8993	
<b>8 Mon</b>																										
Ascending	16	2	6	21	35	121	216	294	286	326	290	254	248	230	236	242	285	284	186	122	76	62	41	37	3916	
Descending	15	10	5	7	27	75	141	192	192	176	260	229	259	289	288	358	335	338	272	185	121	68	27	26	3895	
Combined	31	12	11	28	62	196	357	486	478	502	550	483	507	519	524	600	620	622	458	307	197	130	68	63	7811	

AM and PM peak hours boxed.

Creation Date: 12/21/2007 15:37



Station # 010  
 Route: SH-55  
 Segment Code and Milepost: 001990 047.830  
 3.3 Miles North of Jct SH-44 (Dry Creek)

Idaho Transportation Department  
 Hourly Traffic Volume Report By Direction

County: Ada  
 District: 03  
 Ascending Direction: North

October 2007

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total	
<b>9 Tue</b>																										
Ascending	18	9	8	8	24	68	198	304	275	328	270	258	261	240	259	233	309	299	236	150	129	92	32	21	4029	
Descending	13	9	5	10	25	82	151	217	184	175	213	211	249	224	274	302	311	334	260	155	94	64	34	19	3615	
Combined	31	18	13	18	49	150	349	521	459	503	483	469	510	464	533	535	620	633	496	305	223	156	66	40	7644	
<b>10 Wed</b>																										
Ascending	11	6	11	19	45	139	232	305	255	249	226	206	197	189	195	236	277	277	221	128	92	57	36	22	3631	
Descending	10	4	5	12	19	73	139	201	199	183	195	221	216	238	298	339	301	313	198	153	119	70	45	15	3566	
Combined	21	10	16	31	64	212	371	506	454	432	421	427	413	427	493	575	578	590	419	281	211	127	81	37	7197	
<b>11 Thu</b>																										
Ascending	12	14	9	14	26	81	210	296	260	245	247	195	234	206	251	294	305	302	269	156	104	65	55	22	3872	
Descending	5	3	6	15	23	80	150	187	155	179	207	211	238	226	264	298	338	321	266	198	111	86	50	23	3640	
Combined	17	17	15	29	49	161	360	483	415	424	454	406	472	432	515	592	643	623	535	354	215	151	105	45	7512	
<b>12 Fri</b>																										
Ascending	15	10	11	13	25	70	188	299	338	373	283	273	344	382	429	508	571	637	543	307	150	108	74	43	5994	
Descending	19	11	4	11	20	62	146	188	193	188	214	267	270	281	365	329	401	174	395	296	151	93	81	41	4200	
Combined	34	21	15	24	45	132	334	487	531	561	497	540	614	663	794	837	972	811	938	603	301	201	155	84	10194	
<b>13 Sat</b>																										
Ascending	36	21	13	15	37	150	213	282	359	415	480	436	395	382	315	298	256	232	186	148	116	89	52	38	4964	
Descending	15	5	7	12	11	24	57	62	119	171	219	248	270	333	370	352	403	409	342	316	203	154	73	38	4213	
Combined	51	26	20	27	48	174	270	344	478	586	699	684	665	715	685	650	659	641	528	464	319	243	125	76	9177	
<b>14 Sun</b>																										
Ascending	28	17	9	8	21	80	110	124	183	260	344	306	309	335	303	202	233	190	170	132	96	54	96	43	3653	
Descending	26	18	7	8	8	18	41	33	76	153	217	327	386	554	665	611	662	640	448	360	243	151	67	41	5760	
Combined	54	35	16	16	29	98	151	157	259	413	561	633	695	889	968	813	895	830	618	492	339	205	163	84	9413	
<b>15 Mon</b>																										
Ascending	12	7	9	26	57	141	224	311	330	325	258	282	258	243	269	235	307	291	215	128	81	56	32	13	4110	
Descending	16	9	7	9	28	85	172	189	204	209	262	263	237	265	312	355	340	322	247	209	142	68	50	14	4014	
Combined	28	16	16	35	85	226	396	500	534	534	520	545	495	508	581	590	647	613	462	337	223	124	82	27	8124	
<b>16 Tue</b>																										
Ascending	11	6	4	6	21	67	192	278	265	245	221	207	182	219	252	267	271	280	194	125	80	55	34	21	3503	
Descending	16	7	7	9	16	72	177	202	186	195	230	229	222	233	259	323	319	308	271	170	109	60	39	20	3679	
Combined	27	13	11	15	37	139	369	480	451	440	451	436	404	452	511	590	590	588	465	295	189	115	73	41	7182	

AM and PM peak hours boxed.

Creation Date: 12/21/2007 15:37

Station # 010  
 Route: SH-55  
 Segment Code and Milepost: 001990 047.830  
 3.3 Miles North of Jct SH-44 (Dry Creek)

Idaho Transportation Department  
 Hourly Traffic Volume Report By Direction

County: Ada  
 District: 03  
 Ascending Direction: North

October 2007

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total		
<b>17 Wed</b>																											
Ascending	8	6	10	12	15	59	173	270	274	239	196	211	214	207	219	207	317	275	183	148	88	68	31	21	3451		
Descending	11	8	3	9	17	75	140	205	189	227	231	243	245	243	265	297	328	301	214	184	106	46	43	34	3664		
Combined	19	14	13	21	32	134	313	475	463	466	427	454	459	450	484	504	645	576	397	332	194	114	74	55	7115		
<b>18 Thu</b>																											
Ascending	17	6	6	18	20	59	173	260	262	241	194	198	194	203	232	264	301	296	231	133	87	82	32	27	3536		
Descending	6	5	6	9	25	66	152	212	204	199	224	225	251	295	296	311	312	284	229	168	86	58	23	19	3665		
Combined	23	11	12	27	45	125	325	472	466	440	418	423	445	498	528	575	613	580	460	301	173	140	55	46	7201		
<b>19 Fri</b>																											
Ascending	12	6	8	8	22	61	139	237	229	322	239	260	294	338	344	398	511	487	426	236	141	72	74	41	4905		
Descending	12	1	6	10	18	59	149	191	160	175	221	319	400	276	331	345	326	267	245	151	116	84	45	24	3931		
Combined	24	7	14	18	40	120	288	428	389	497	460	579	694	614	675	743	837	754	671	387	257	156	119	65	8836		
<b>20 Sat</b>																											
Ascending	21	16	7	10	24	79	135	181	225	256	372	258	292	315	305	270	251	210	134	118	85	83	51	25	3723		
Descending	13	7	7	7	5	16	36	53	97	143	192	260	298	336	331	303	350	245	226	162	150	104	65	41	3447		
Combined	34	23	14	17	29	95	171	234	322	399	564	518	590	651	636	573	601	455	360	280	235	187	116	66	7170		
<b>21 Sun</b>																											
Ascending	21	9	6	17	20	70	118	113	139	228	292	278	250	348	244	238	222	192	166	113	73	50	37	22	3266		
Descending	18	17	9	9	7	20	24	29	54	125	167	263	386	551	567	553	710	540	512	323	253	139	60	24	5360		
Combined	39	26	15	26	27	90	142	142	193	353	459	541	636	899	811	791	932	732	678	436	326	189	97	46	8626		
<b>22 Mon</b>																											
Ascending	8	8	8	22	34	101	205	274	271	234	246	185	190	224	218	218	300	288	195	125	95	57	40	23	3569		
Descending	14	7	5	13	19	86	179	214	200	180	196	229	225	218	249	290	322	242	239	145	104	66	33	14	3489		
Combined	22	15	13	35	53	187	384	488	471	414	442	414	415	442	467	508	622	530	434	270	199	123	73	37	7058		
<b>23 Tue</b>																											
Ascending	21	5	4	15	18	61	222	293	247	277	216	189	238	206	220	253	281	282	182	146	90	65	35	25	3591		
Descending	9	3	4	8	18	70	169	180	182	201	198	239	207	209	230	336	316	306	223	164	115	64	37	11	3499		
Combined	30	8	8	23	36	131	391	473	429	478	414	428	445	415	450	589	597	588	405	310	205	129	72	36	7090		
<b>24 Wed</b>																											
Ascending	14	5	9	11	23	62	154	298	276	273	235	216	229	201	221	281	287	273	196	135	93	62	42	13	3609		
Descending	13	13	4	7	12	73	151	213	179	185	194	221	200	232	259	295	335	347	269	171	115	60	45	14	3607		
Combined	27	18	13	18	35	135	305	511	455	458	429	437	429	433	480	576	622	620	465	306	208	122	87	27	7216		

AM and PM peak hours boxed.

Creation Date: 12/21/2007 15:37

Station # 010  
 Route: SH-55  
 Segment Code and Milepost: 001990 047.830  
 3.3 Miles North of Jct SH-44 (Dry Creek)

Idaho Transportation Department  
 Hourly Traffic Volume Report By Direction

County: Ada  
 District: 03  
 Ascending Direction: North

October 2007

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total	
<b>25 Thu</b>																										
Ascending	16	8	6	11	22	70	170	296	265	258	242	215	221	221	239	245	300	306	241	177	119	80	43	22	3793	
Descending	4	6	4	11	24	83	149	194	178	193	199	226	223	216	253	313	361	342	240	173	93	58	44	20	3607	
Combined	20	14	10	22	46	153	319	490	443	451	441	441	444	437	492	558	661	648	481	350	212	138	87	42	7400	
<b>26 Fri</b>																										
Ascending	12	9	7	13	34	66	190	299	235	223	259	242	286	325	345	441	544	558	398	230	126	101	64	53	5060	
Descending	13	8	7	9	19	52	144	173	180	229	226	202	238	274	291	344	375	400	250	217	118	108	57	27	3961	
Combined	25	17	14	22	53	118	334	472	415	452	485	444	524	599	636	785	919	958	648	447	244	209	121	80	9021	
<b>27 Sat</b>																										
Ascending	21	14	17	15	39	123	195	245	236	360	423	304	332	385	258	252	240	236	165	128	92	82	63	37	4262	
Descending	10	9	3	12	11	28	32	60	99	151	206	245	286	329	328	320	440	394	293	234	235	135	69	38	3967	
Combined	31	23	20	27	50	151	227	305	335	511	629	549	618	714	586	572	680	630	458	362	327	217	132	75	8229	
<b>28 Sun</b>																										
Ascending	22	20	17	14	19	67	77	127	142	199	254	254	247	300	244	210	201	182	153	121	78	55	31	18	3052	
Descending	17	9	9	4	7	21	30	27	65	104	174	302	333	422	535	549	621	545	500	327	219	138	47	29	5034	
Combined	39	29	26	18	26	88	107	154	207	303	428	556	580	722	779	759	822	727	653	448	297	193	78	47	8086	
<b>29 Mon</b>																										
Ascending	3	5	15	19	35	114	213	320	306	284	200	206	215	214	214	258	269	305	182	103	75	56	27	14	3652	
Descending	16	0	5	13	24	91	179	211	181	184	213	227	253	237	254	392	308	277	247	146	107	61	37	14	3677	
Combined	19	5	20	32	59	205	392	531	487	468	413	433	468	451	468	650	577	582	429	249	182	117	64	28	7329	
<b>30 Tue</b>																										
Ascending	20	4	7	8	20	76	180	270	235	222	178	188	152	170	208	251	251	274	196	124	89	87	60	26	3296	
Descending	12	6	3	9	14	81	149	189	168	205	196	216	243	218	245	262	279	266	196	132	115	72	39	16	3331	
Combined	32	10	10	17	34	157	329	459	403	427	374	404	395	388	453	513	530	540	392	256	204	159	99	42	6627	
<b>31 Wed</b>																										
Ascending	10	9	8	15	15	66	178	262	242	183	169	147	195	192	212	218	249	276	179	95	111	80	52	27	3190	
Descending	10	6	7	9	20	86	166	193	159	190	194	192	212	211	261	311	300	236	332	138	94	56	34	13	3430	
Combined	20	15	15	24	35	152	344	455	401	373	363	339	407	403	473	529	549	512	511	233	205	136	86	40	6620	
<b>Average</b>																										
Ascending	16	9	9	13	26	79	172	252	255	273	267	243	252	266	263	275	308	303	232	150	102	74	48	27	3912	
Descending	14	7	6	10	17	61	125	157	158	179	212	244	268	292	327	354	372	341	287	204	139	86	49	25	3935	
Combined	29	17	15	23	43	140	297	409	413	451	479	488	520	558	590	629	680	644	519	354	241	160	97	52	7847	

AM and PM peak hours boxed.

Creation Date: 12/21/2007 15:37

Station # 103  
 Route: SH-21  
 Segment Code and Milepost: 002141 003.069  
 0.4 Miles S.W. of Old SH-21 (Diversion Dam)

Idaho Transportation Department  
 Hourly Traffic Volume Report By Direction

County: Ada  
 District: 03  
 Ascending Direction: East

October 2007

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total	
<b>1 Mon</b>																										
Ascending	7	3	5	2	2	12	68	80	113	75	68	94	118	97	145	145	226	313	213	98	65	44	24	9	2026	
Descending	7	8	4	10	23	77	186	262	140	106	107	121	96	119	110	140	132	143	93	55	34	25	10	7	2015	
Combined	14	11	9	12	25	89	254	342	253	181	175	215	214	216	255	285	358	456	306	153	99	69	34	16	4041	
<b>2 Tue</b>																										
Ascending	12	5	5	3	6	13	66	89	126	114	107	109	109	105	132	194	214	279	207	104	74	64	28	15	2180	
Descending	3	3	4	11	27	85	202	304	185	109	101	113	117	122	101	131	118	181	108	77	33	28	12	7	2182	
Combined	15	8	9	14	33	98	268	393	311	223	208	222	226	227	233	325	332	460	315	181	107	92	40	22	4362	
<b>3 Wed</b>																										
Ascending	7	5	4	4	5	18	67	104	125	97	93	115	98	108	127	177	224	346	228	105	60	55	39	23	2234	
Descending	6	7	3	7	25	87	216	253	146	93	115	115	101	133	119	161	153	129	86	54	49	30	13	8	2109	
Combined	13	12	7	11	30	105	283	357	271	190	208	230	199	241	246	338	377	475	314	159	109	85	52	31	4343	
<b>4 Thu</b>																										
Ascending	17	7	6	4	4	16	57	104	101	117	143	164	136	137	142	194	220	345	187	115	68	77	37	23	2421	
Descending	10	5	7	6	26	88	192	259	144	117	109	117	132	131	123	150	153	135	94	90	47	32	10	9	2186	
Combined	27	12	13	10	30	104	249	363	245	234	252	281	268	268	265	344	373	480	281	205	115	109	47	32	4607	
<b>5 Fri</b>																										
Ascending	7	6	4	14	14	36	65	101	108	112	120	137	150	137	175	221	254	343	248	136	94	68	33	34	2617	
Descending	6	2	10	10	17	70	176	242	150	109	135	154	132	148	131	150	150	150	100	88	48	58	32	17	2285	
Combined	13	8	14	24	31	106	241	343	258	221	255	291	282	285	306	371	404	493	348	224	142	126	65	51	4902	
<b>6 Sat</b>																										
Ascending	10	14	11	6	9	22	55	89	105	168	148	172	156	180	160	170	163	177	131	92	75	65	31	31	2240	
Descending	14	6	5	10	12	30	33	46	85	84	116	123	120	155	151	176	175	181	146	134	76	53	47	20	1998	
Combined	24	20	16	16	21	52	88	135	190	252	264	295	276	335	311	346	338	358	277	226	151	118	78	51	4238	
<b>7 Sun</b>																										
Ascending	21	10	2	7	9	15	37	48	73	112	137	197	185	184	162	140	149	137	100	57	55	41	37	20	1935	
Descending	15	4	8	5	8	24	19	26	63	80	115	130	140	208	207	204	242	227	149	122	75	49	26	8	2154	
Combined	36	14	10	12	17	39	56	74	136	192	252	327	325	392	369	344	391	364	249	179	130	90	63	28	4089	
<b>8 Mon</b>																										
Ascending	10	4	3	2	4	17	60	87	97	144	111	129	141	131	129	197	223	307	175	90	56	40	37	23	2217	
Descending	1	4	4	9	31	77	178	260	153	112	111	131	128	141	140	134	123	139	101	80	37	20	8	11	2133	
Combined	11	8	7	11	35	94	238	347	250	256	222	260	269	272	269	331	346	446	276	170	93	60	45	34	4350	

AM and PM peak hours boxed.

Creation Date: 12/21/2007 15:53

Station # 103

Route: SH-21

Segment Code and Milepost: 002141 003.069

0.4 Miles S.W. of Old SH-21 (Diversion Dam)

Idaho Transportation Department  
Hourly Traffic Volume Report By Direction

County: Ada

District: 03

Ascending Direction: East

October 2007

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total	
<b>9 Tue</b>																										
Ascending	15	8	6	1	3	16	83	120	117	124	140	127	133	120	146	206	228	310	201	107	94	60	46	27	2438	
Descending	7	3	2	7	28	90	185	269	182	122	100	123	111	112	126	142	170	151	110	94	49	24	12	12	2231	
Combined	22	11	8	8	31	106	268	389	299	246	240	250	244	232	272	348	398	461	311	201	143	84	58	39	4669	
<b>10 Wed</b>																										
Ascending	8	13	9	17	41	87	130	113	119	115	112	94	106	128	141	152	228	311	210	88	86	65	42	9	2424	
Descending	5	4	3	8	17	74	208	288	156	101	98	124	127	113	127	170	156	139	130	85	70	28	18	19	2268	
Combined	13	17	12	25	58	161	338	401	275	216	210	218	233	241	268	322	384	450	340	173	156	93	60	28	4692	
<b>11 Thu</b>																										
Ascending	10	4	11	5	8	32	92	120	113	120	97	123	133	139	129	196	259	327	176	128	78	64	39	19	2422	
Descending	8	5	5	9	22	86	204	283	155	103	107	121	171	128	175	141	173	158	113	93	78	26	7	1	2372	
Combined	18	9	16	14	30	118	296	403	268	223	204	244	304	267	304	337	432	485	289	221	156	90	46	20	4794	
<b>12 Fri</b>																										
Ascending	17	6	5	9	10	33	83	124	121	126	128	122	114	149	187	223	271	354	268	157	96	83	59	41	2786	
Descending	3	9	3	10	17	61	196	258	185	120	106	150	175	147	171	137	171	167	108	87	64	35	19	12	2411	
Combined	20	15	8	19	27	94	279	382	306	246	234	272	289	296	358	360	442	521	376	244	160	118	78	53	5197	
<b>13 Sat</b>																										
Ascending	31	10	15	12	33	85	121	120	96	145	173	186	224	220	205	210	205	145	152	98	59	60	36	35	2678	
Descending	14	9	8	8	11	25	57	60	107	133	156	156	185	168	172	204	213	200	192	167	119	70	37	18	2489	
Combined	45	19	23	20	44	110	178	180	203	278	329	342	411	388	377	414	418	345	344	265	178	130	73	53	5167	
<b>14 Sun</b>																										
Ascending	17	15	9	11	21	36	84	70	76	105	153	178	167	222	186	145	131	127	124	59	44	36	49	21	2086	
Descending	6	5	4	5	9	28	38	41	52	83	120	158	191	233	243	254	242	237	199	167	90	37	41	16	2499	
Combined	23	20	13	16	30	64	122	111	128	188	273	336	358	455	429	399	373	364	323	226	134	73	90	37	4585	
<b>15 Mon</b>																										
Ascending	10	3	3	1	9	31	80	108	124	122	119	128	136	103	135	161	240	300	217	99	62	65	31	11	2298	
Descending	4	4	2	10	15	81	206	268	164	99	104	134	137	110	141	153	152	171	123	88	62	20	16	4	2268	
Combined	14	7	5	11	24	112	286	376	288	221	223	262	273	213	276	314	392	471	340	187	124	85	47	15	4566	
<b>16 Tue</b>																										
Ascending	10	6	3	4	6	24	87	107	84	113	81	106	89	117	126	194	241	324	174	108	67	66	21	22	2180	
Descending	6	2	4	11	13	78	208	303	174	104	101	110	121	113	94	165	143	159	87	79	44	28	16	9	2172	
Combined	16	8	7	15	19	102	295	410	258	217	182	216	210	230	220	359	384	483	261	187	111	94	37	31	4352	

AM and PM peak hours boxed.

Creation Date: 12/21/2007 15:53

Station # 103  
 Route: SH-21  
 Segment Code and Milepost: 002141 003.069  
 0.4 Miles S.W. of Old SH-21 (Diversion Dam)

Idaho Transportation Department  
 Hourly Traffic Volume Report By Direction

County: Ada  
 District: 03  
 Ascending Direction: East

October 2007

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total	
<b>17 Wed</b>																										
Ascending	6	8	2	5	5	33	85	143	110	94	97	111	96	119	112	195	250	309	196	101	66	65	22	22	2252	
Descending	3	0	2	6	17	82	211	281	152	111	106	111	118	117	124	126	131	149	87	76	54	22	14	11	2111	
Combined	9	8	4	11	22	115	296	424	262	205	203	222	214	236	236	321	381	458	283	177	120	87	36	33	4363	
<b>18 Thu</b>																										
Ascending	16	6	5	2	7	36	83	119	112	99	93	81	93	106	127	185	221	288	183	95	68	54	29	20	2128	
Descending	4	3	4	10	17	89	192	271	172	112	103	94	126	137	125	141	154	116	66	59	37	22	12	5	2071	
Combined	20	9	9	12	24	125	275	390	284	211	196	175	219	243	252	326	375	404	249	154	105	76	41	25	4199	
<b>19 Fri</b>																										
Ascending	6	10	5	5	5	36	67	113	97	94	96	123	103	128	131	223	232	310	269	132	94	61	52	26	2418	
Descending	6	3	1	3	7	68	189	263	154	108	122	143	188	121	113	128	128	128	97	87	39	35	44	17	2192	
Combined	12	13	6	8	12	104	256	376	251	202	218	266	291	249	244	351	360	438	366	219	133	96	96	43	4610	
<b>20 Sat</b>																										
Ascending	21	17	7	5	21	80	113	91	78	115	155	193	160	182	167	169	156	122	117	90	50	65	42	37	2253	
Descending	10	6	6	2	10	32	28	49	117	95	127	152	153	181	175	173	160	157	140	107	83	43	27	17	2050	
Combined	31	23	13	7	31	112	141	140	195	210	282	345	313	363	342	342	316	279	257	197	133	108	69	54	4303	
<b>21 Sun</b>																										
Ascending	17	15	9	9	26	62	125	88	74	141	147	148	158	191	168	150	129	125	109	89	45	36	25	14	2100	
Descending	14	8	9	10	6	31	28	28	62	67	103	123	158	190	204	220	217	233	166	128	100	47	21	9	2182	
Combined	31	23	18	19	32	93	153	116	136	208	250	271	316	381	372	370	346	358	275	217	145	83	46	23	4282	
<b>22 Mon</b>																										
Ascending	7	4	2	4	7	20	83	116	107	96	121	125	104	108	130	189	230	325	197	97	58	45	24	14	2213	
Descending	4	4	5	10	19	89	201	272	164	82	102	115	139	122	122	156	131	153	102	84	36	28	12	6	2158	
Combined	11	8	7	14	26	109	284	388	271	178	223	240	243	230	252	345	361	478	299	181	94	73	36	20	4371	
<b>23 Tue</b>																										
Ascending	7	8	6	3	6	29	97	120	97	106	116	108	122	126	131	179	246	325	203	104	85	53	24	16	2317	
Descending	5	2	5	6	21	89	201	278	149	101	100	107	125	130	145	147	165	131	121	84	62	16	16	9	2215	
Combined	12	10	11	9	27	118	298	398	246	207	216	215	247	256	276	326	411	456	324	188	147	69	40	25	4532	
<b>24 Wed</b>																										
Ascending	7	5	7	3	8	30	83	129	121	120	104	107	119	122	142	215	266	331	174	101	99	53	28	27	2401	
Descending	5	2	2	10	18	79	202	262	172	95	105	134	135	138	124	143	165	155	119	99	43	40	16	10	2273	
Combined	12	7	9	13	26	109	285	391	293	215	209	241	254	260	266	358	431	486	293	200	142	93	44	37	4674	

AM and PM peak hours boxed.

Creation Date: 12/21/2007 15:53

Station # 103  
 Route: SH-21  
 Segment Code and Milepost: 002141 003.069  
 0.4 Miles S.W. of Old SH-21 (Diversion Dam)

Idaho Transportation Department  
 Hourly Traffic Volume Report By Direction

County: Ada  
 District: 03  
 Ascending Direction: East

October 2007

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total	
<b>25 Thu</b>																										
Ascending	14	7	5	8	12	43	95	116	99	104	100	96	118	141	123	189	243	350	188	101	96	67	27	24	2366	
Descending	1	6	4	9	17	84	170	281	150	110	103	109	116	120	131	141	131	142	120	73	55	37	18	9	2137	
Combined	15	13	9	17	29	127	265	397	249	214	203	205	234	261	254	330	374	492	308	174	151	104	45	33	4503	
<b>26 Fri</b>																										
Ascending	7	8	6	2	11	42	91	136	93	127	94	110	117	157	166	216	259	342	228	127	79	79	70	54	2621	
Descending	5	1	2	10	15	66	177	256	146	112	111	129	137	131	160	140	185	152	111	97	46	37	24	12	2262	
Combined	12	9	8	12	26	108	268	392	239	239	205	239	254	288	326	356	444	494	339	224	125	116	94	66	4883	
<b>27 Sat</b>																										
Ascending	15	13	9	10	24	143	193	130	123	168	147	139	186	178	188	198	169	158	107	105	60	57	49	26	2595	
Descending	14	6	5	2	14	34	37	61	105	101	130	155	185	199	186	201	208	219	192	176	88	59	40	24	2441	
Combined	29	19	14	12	38	177	230	191	228	269	277	294	371	377	374	399	377	377	299	281	148	116	89	50	5036	
<b>28 Sun</b>																										
Ascending	23	11	13	3	23	69	122	95	93	103	129	147	180	201	155	141	131	111	102	75	26	30	26	9	2018	
Descending	15	5	10	6	13	23	26	29	73	91	118	144	172	200	200	237	249	231	199	172	73	37	17	9	2349	
Combined	38	16	23	9	36	92	148	124	166	194	247	291	352	401	355	378	380	342	301	247	99	67	43	18	4367	
<b>29 Mon</b>																										
Ascending	8	5	4	2	14	35	88	128	121	107	89	105	113	107	137	198	253	306	171	81	52	33	26	14	2197	
Descending	2	1	6	9	21	87	196	280	154	96	97	141	118	124	132	173	120	139	103	115	48	19	15	15	2211	
Combined	10	6	10	11	35	122	284	408	275	203	186	246	231	231	269	371	373	445	274	196	100	52	41	29	4408	
<b>30 Tue</b>																										
Ascending	7	5	7	5	14	39	128	119	108	116	91	114	117	146	144	197	264	305	193	77	77	48	44	21	2386	
Descending	2	2	4	11	17	76	201	279	147	98	118	119	112	111	132	137	150	137	116	136	67	34	23	9	2238	
Combined	9	7	11	16	31	115	329	398	255	214	209	233	229	257	276	334	414	442	309	213	144	82	67	30	4624	
<b>31 Wed</b>																										
Ascending	7	1	3	6	12	40	135	157	112	106	109	114	119	149	179	217	306	306	176	100	133	93	55	20	2655	
Descending	4	1	5	6	22	84	205	290	151	97	101	128	138	123	155	162	198	173	116	106	49	31	14	9	2368	
Combined	11	2	8	12	34	124	340	447	263	203	210	242	257	272	334	379	504	479	292	206	182	124	69	29	5023	
<b>Average</b>																										
Ascending	12	8	6	6	12	40	91	109	105	116	117	129	132	143	149	187	220	273	181	101	72	58	37	23	2326	
Descending	7	4	5	8	17	67	154	213	139	102	111	129	139	143	147	162	166	164	122	102	60	35	21	11	2227	
Combined	19	12	11	14	29	107	245	322	244	218	228	258	271	286	296	349	387	437	304	202	131	92	57	34	4553	

AM and PM peak hours boxed.

Creation Date: 12/21/2007 15:53

Station # 087

Route: I-84

Segment Code and Milepost: 001010 062.069

Blacks Creek RA

Idaho Transportation Department  
Hourly Traffic Volume Report By Direction

County: Ada

District: 03

Ascending Direction: Southeast

October 2007

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total		
<b>1 Mon</b>																											
Ascending	87	67	57	64	123	235	513	438	576	563	617	568	555	617	664	732	787	766	572	416	337	300	208	169	10031		
Descending	143	119	73	61	101	218	432	667	520	515	619	616	636	683	667	700	782	688	600	412	333	226	205	131	10147		
Combined	230	186	130	125	224	453	945	1105	1096	1078	1236	1184	1191	1300	1331	1432	1569	1454	1172	828	670	526	413	300	20178		
<b>2 Tue</b>																											
Ascending	141	66	83	82	126	252	496	539	588	728	605	630	631	617	654	830	858	833	621	434	391	296	228	153	10882		
Descending	84	69	65	63	122	222	412	610	489	531	542	593	633	565	624	673	786	758	581	429	343	267	197	129	9787		
Combined	225	135	148	145	248	474	908	1149	1077	1259	1147	1223	1264	1182	1278	1503	1644	1591	1202	863	734	563	425	282	20669		
<b>3 Wed</b>																											
Ascending	130	106	72	82	112	226	464	466	642	670	656	584	659	754	779	848	991	938	700	567	429	340	257	143	11615		
Descending	72	85	62	63	128	210	380	617	487	547	580	618	614	671	757	787	897	869	715	572	421	354	232	150	10888		
Combined	202	191	134	145	240	436	844	1083	1129	1217	1236	1202	1273	1425	1536	1635	1888	1807	1415	1139	850	694	489	293	22503		
<b>4 Thu</b>																											
Ascending	112	100	92	67	121	231	510	575	710	786	831	795	811	811	883	910	953	973	696	537	434	360	304	180	12782		
Descending	127	75	68	93	122	229	429	676	559	596	678	744	735	715	808	816	918	883	767	528	423	349	236	201	11775		
Combined	239	175	160	160	243	460	939	1251	1269	1382	1509	1539	1546	1526	1691	1726	1871	1856	1463	1065	857	709	540	381	24557		
<b>5 Fri</b>																											
Ascending	127	95	119	110	132	223	491	498	639	780	829	901	851	854	961	1120	1276	1319	1070	695	481	430	328	221	14550		
Descending	112	81	80	73	122	231	381	591	514	608	695	797	818	810	956	928	989	1036	842	688	584	501	342	218	12997		
Combined	239	176	199	183	254	454	872	1089	1153	1388	1524	1698	1669	1664	1917	2048	2265	2355	1912	1383	1065	931	670	439	27547		
<b>6 Sat</b>																											
Ascending	192	128	116	89	115	164	335	410	544	722	767	793	816	799	807	835	805	756	748	561	525	441	280	221	11969		
Descending	125	104	78	93	76	124	144	245	310	497	656	852	980	843	855	831	818	854	641	576	455	365	261	218	11001		
Combined	317	232	194	182	191	288	479	655	854	1219	1423	1645	1796	1642	1662	1666	1623	1610	1389	1137	980	806	541	439	22970		
<b>7 Sun</b>																											
Ascending	136	82	78	76	67	81	199	260	422	550	592	689	784	839	913	800	819	819	669	471	421	459	315	224	10765		
Descending	131	97	77	69	71	116	113	171	260	423	550	734	840	947	1128	1202	1134	1155	1057	824	665	517	342	237	12860		
Combined	267	179	155	145	138	197	312	431	682	973	1142	1423	1624	1786	2041	2002	1953	1974	1726	1295	1086	976	657	461	23625		
<b>8 Mon</b>																											
Ascending	100	54	54	55	119	254	428	464	570	626	617	622	673	660	733	727	826	836	620	460	339	322	291	268	10718		
Descending	131	91	72	73	89	197	356	563	468	560	659	757	738	741	856	799	882	814	646	489	388	316	193	142	11020		
Combined	231	145	126	128	208	451	784	1027	1038	1186	1276	1379	1411	1401	1589	1526	1708	1650	1266	949	727	638	484	410	21738		

AM and PM peak hours boxed.

Creation Date: 12/21/2007 16:12



Station # 087

Route: I-84

Segment Code and Milepost: 001010 062.069

Blacks Creek RA

Idaho Transportation Department  
Hourly Traffic Volume Report By Direction

County: Ada

District: 03

Ascending Direction: Southeast

October 2007

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<b>9 Tue</b>																										
Ascending	163	114	78	77	115	259	520	546	617	706	704	687	691	671	753	781	866	826	659	489	402	312	225	161	11422	
Descending	108	73	73	67	112	216	398	630	462	585	597	633	591	640	705	720	760	764	585	412	306	275	189	147	10048	
Combined	271	187	151	144	227	475	918	1176	1079	1291	1301	1320	1282	1311	1458	1501	1626	1590	1244	901	708	587	414	308	21470	
<b>10 Wed</b>																										
Ascending	150	74	78	66	159	293	524	530	585	677	658	646	635	659	701	835	879	818	619	400	451	323	202	158	11120	
Descending	103	59	72	67	101	205	383	592	508	536	614	621	664	669	692	792	773	809	688	458	367	320	255	158	10506	
Combined	253	133	150	133	260	498	907	1122	1093	1213	1272	1267	1299	1328	1393	1627	1652	1627	1307	858	818	643	457	316	21626	
<b>11 Thu</b>																										
Ascending	120	114	65	73	136	246	461	496	554	689	674	649	655	753	781	870	980	919	638	483	443	374	286	178	11637	
Descending	128	96	86	66	130	229	397	667	536	597	623	673	689	740	707	802	904	904	739	600	487	350	261	180	11591	
Combined	248	210	151	139	266	475	858	1163	1090	1286	1297	1322	1344	1493	1488	1672	1884	1823	1377	1083	930	724	547	358	23228	
<b>12 Fri</b>																										
Ascending	157	96	101	81	124	239	443	475	578	715	691	743	717	835	853	957	1086	1035	975	680	472	403	423	277	13156	
Descending	133	112	76	87	123	243	418	594	508	559	625	676	694	751	818	955	920	960	892	686	520	415	305	209	12279	
Combined	290	208	177	168	247	482	861	1069	1086	1274	1316	1419	1411	1586	1671	1912	2006	1995	1867	1366	992	818	728	486	25435	
<b>13 Sat</b>																										
Ascending	194	117	111	95	134	258	340	415	578	685	705	772	748	808	861	816	858	765	735	615	457	427	326	206	12026	
Descending	139	101	82	61	98	147	235	273	392	578	692	801	804	881	849	833	747	761	627	626	552	395	283	203	11160	
Combined	333	218	193	156	232	405	575	688	970	1263	1397	1573	1552	1689	1710	1649	1605	1526	1362	1241	1009	822	609	409	23186	
<b>14 Sun</b>																										
Ascending	189	109	105	56	77	145	246	287	328	505	642	680	729	757	855	897	889	797	737	533	401	353	388	248	10953	
Descending	148	94	96	74	63	116	162	176	246	395	602	732	873	933	978	1021	1047	1017	856	706	614	513	315	197	11974	
Combined	337	203	201	130	140	261	408	463	574	900	1244	1412	1602	1690	1833	1918	1936	1814	1593	1239	1015	866	703	445	22927	
<b>15 Mon</b>																										
Ascending	112	79	58	79	117	267	488	492	597	681	672	630	666	609	739	751	886	850	581	409	398	286	228	202	10877	
Descending	106	100	87	64	116	215	431	615	492	536	556	656	679	690	674	778	773	790	555	487	381	268	172	163	10384	
Combined	218	179	145	143	233	482	919	1107	1089	1217	1228	1286	1345	1299	1413	1529	1659	1640	1136	896	779	554	400	365	21261	
<b>16 Tue</b>																										
Ascending	137	83	97	81	125	226	466	436	610	651	654	631	671	678	721	786	859	835	621	455	399	374	238	192	11026	
Descending	93	81	65	83	128	234	440	636	508	548	552	574	630	670	681	721	777	777	612	472	329	235	159	150	10155	
Combined	230	164	162	164	253	460	906	1072	1118	1199	1206	1205	1301	1348	1402	1507	1636	1612	1233	927	728	609	397	342	21181	

AM and PM peak hours boxed.

Creation Date: 12/21/2007 16:12

Station # 087

Route: I-84

Segment Code and Milepost: 001010 062.069

Blacks Creek RA

Idaho Transportation Department  
Hourly Traffic Volume Report By Direction

County: Ada

District: 03

Ascending Direction: Southeast

October 2007

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total	
<b>17 Wed</b>																										
Ascending	122	112	81	94	129	230	439	523	594	679	703	702	679	695	792	810	946	860	584	476	352	302	225	188	11319	
Descending	101	58	66	76	114	221	402	634	449	523	594	596	584	630	704	710	757	841	618	549	400	297	240	173	10337	
Combined	223	170	147	170	243	451	841	1157	1043	1202	1299	1298	1263	1325	1496	1520	1703	1701	1202	1025	752	599	465	361	21656	
<b>18 Thu</b>																										
Ascending	126	83	88	74	132	234	436	528	613	644	675	714	644	688	720	767	927	932	646	487	396	319	263	197	11333	
Descending	112	104	84	76	117	243	451	658	566	574	647	663	715	668	774	798	876	859	664	523	386	299	213	130	11200	
Combined	238	187	172	150	249	477	887	1186	1179	1218	1322	1377	1359	1356	1494	1565	1803	1791	1310	1010	782	618	476	327	22533	
<b>19 Fri</b>																										
Ascending	136	98	94	86	119	237	433	492	524	657	741	709	746	784	872	991	1158	1034	1030	668	438	424	341	221	13033	
Descending	105	104	73	65	121	217	405	604	481	565	584	682	678	693	847	967	870	880	824	632	470	380	322	228	11797	
Combined	241	202	167	151	240	454	838	1096	1005	1222	1325	1391	1424	1477	1719	1958	2028	1914	1854	1300	908	804	663	449	24830	
<b>20 Sat</b>																										
Ascending	150	129	107	81	143	232	351	400	493	614	687	701	700	730	729	790	783	647	685	567	442	390	320	200	11071	
Descending	125	91	80	68	91	146	162	231	335	495	665	786	757	763	773	766	788	700	674	521	383	322	253	172	10147	
Combined	275	220	187	149	234	378	513	631	828	1109	1352	1487	1457	1493	1502	1556	1571	1347	1359	1088	825	712	573	372	21218	
<b>21 Sun</b>																										
Ascending	126	80	56	67	85	167	267	265	341	421	603	660	636	738	856	831	841	745	674	469	395	256	191	130	9900	
Descending	131	110	86	59	71	116	143	163	245	333	575	673	704	881	870	884	964	926	887	749	574	425	286	208	11063	
Combined	257	190	142	126	156	283	410	428	586	754	1178	1333	1340	1619	1726	1715	1805	1671	1561	1218	969	681	477	338	20963	
<b>22 Mon</b>																										
Ascending	75	42	50	68	118	233	409	475	628	552	616	620	549	552	616	712	850	803	582	437	318	284	231	166	9986	
Descending	127	88	89	76	104	243	441	641	488	544	602	644	750	675	764	778	762	774	588	506	330	255	194	148	10611	
Combined	202	130	139	144	222	476	850	1116	1116	1096	1218	1264	1299	1227	1380	1490	1612	1577	1170	943	648	539	425	314	20597	
<b>23 Tue</b>																										
Ascending	100	102	62	85	130	212	414	515	626	631	620	620	669	682	678	810	887	907	572	463	384	308	226	164	10867	
Descending	85	81	60	62	98	218	449	667	528	518	606	647	628	646	691	752	706	709	569	462	351	238	204	141	10116	
Combined	185	183	122	147	228	430	863	1182	1154	1149	1226	1267	1297	1328	1369	1562	1593	1616	1141	925	735	546	430	305	20983	
<b>24 Wed</b>																										
Ascending	127	76	82	83	129	229	422	485	587	653	648	631	647	637	716	804	831	827	567	442	356	332	235	147	10693	
Descending	77	76	51	68	105	203	464	674	530	511	565	642	671	641	721	744	815	785	637	496	394	301	216	140	10527	
Combined	204	152	133	151	234	432	886	1159	1117	1164	1213	1273	1318	1278	1437	1548	1646	1612	1204	938	750	633	451	287	21220	

AM and PM peak hours boxed.

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Blacks Creek RA

Idaho Transportation Department  
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County: Ada

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October 2007

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<b>25 Thu</b>																										
Ascending	120	107	75	73	133	248	408	474	567	590	655	677	621	714	748	849	872	972	648	479	382	345	230	187	1174	
Descending	107	70	65	63	121	243	450	621	551	648	607	631	638	690	709	763	812	808	659	544	387	304	219	174	10884	
Combined	227	177	140	136	254	491	858	1095	1118	1238	1262	1308	1259	1404	1457	1612	1684	1780	1307	1023	769	649	449	361	22058	
<b>26 Fri</b>																										
Ascending	113	84	96	80	145	260	489	553	582	639	717	745	826	881	967	1003	1182	1175	826	596	486	419	329	292	13485	
Descending	113	106	63	85	111	242	469	644	523	559	600	712	741	747	876	944	1000	906	874	689	525	401	323	240	12493	
Combined	226	190	159	165	256	502	958	1197	1105	1198	1317	1457	1567	1628	1843	1947	2182	2081	1700	1285	1011	820	652	532	25978	
<b>27 Sat</b>																										
Ascending	157	124	106	84	125	275	395	435	558	621	697	693	751	748	700	794	783	749	735	581	422	355	321	227	11436	
Descending	139	100	68	85	88	118	157	245	400	492	645	772	793	728	781	816	772	799	675	619	529	369	246	200	10636	
Combined	296	224	174	169	213	393	552	680	958	1113	1342	1465	1544	1476	1481	1610	1555	1548	1410	1200	951	724	567	427	22072	
<b>28 Sun</b>																										
Ascending	170	96	77	67	90	123	232	249	346	411	549	641	699	730	783	846	869	775	722	499	351	231	163	142	9861	
Descending	134	190	83	73	135	125	139	230	440	477	636	753	860	804	898	955	953	873	749	560	405	265	170	115	11022	
Combined	304	286	160	140	225	248	371	479	786	888	1185	1394	1559	1534	1681	1801	1822	1648	1471	1059	756	496	333	257	20883	
<b>29 Mon</b>																										
Ascending	82	49	52	62	115	251	497	496	537	580	548	545	602	589	604	706	787	848	533	425	328	273	194	152	9855	
Descending	103	73	80	111	214	429	631	459	523	560	576	646	602	651	665	757	737	584	436	334	238	195	127	90	9821	
Combined	185	122	132	173	329	680	1128	955	1060	1140	1124	1191	1204	1240	1269	1463	1524	1432	969	759	566	468	321	242	19676	
<b>30 Tue</b>																										
Ascending	127	89	91	75	115	243	482	551	563	592	637	605	616	623	705	767	854	865	589	466	362	304	270	186	10777	
Descending	71	71	77	120	228	440	642	445	514	545	547	581	618	607	679	771	737	553	459	321	257	155	131	132	9701	
Combined	198	160	168	195	343	683	1124	996	1077	1137	1184	1186	1234	1230	1384	1538	1591	1418	1048	787	619	459	401	318	20478	
<b>31 Wed</b>																										
Ascending	128	96	86	76	101	230	443	457	560	601	611	625	642	638	639	768	796	826	517	385	307	247	249	158	10186	
Descending	79	64	64	112	209	428	625	494	494	537	533	562	572	646	673	809	821	575	406	318	256	165	134	107	9683	
Combined	207	160	150	188	310	658	1068	951	1054	1138	1144	1187	1214	1284	1312	1577	1617	1401	923	703	563	412	383	265	19869	
<b>Average</b>																										
Ascending	132	92	83	77	120	226	421	459	557	633	665	674	688	715	767	830	903	873	683	505	403	342	268	192	11307	
Descending	113	91	74	76	117	219	372	508	462	532	607	680	707	723	780	825	848	820	681	542	421	324	233	169	10923	
Combined	245	183	157	153	237	445	793	966	1019	1165	1272	1354	1395	1438	1547	1655	1750	1692	1364	1046	824	665	501	361	22230	

AM and PM peak hours boxed.

Creation Date: 12/21/2007 16:12

Station # 187  
 Route: US-95  
 Segment Code and Milepost: 001540 037.075  
 1.35 Miles S. of Jct SH-19 (Homedale)

Idaho Transportation Department  
 Hourly Traffic Volume Report By Direction

County: Owyhee  
 District: 03  
 Ascending Direction: North

October 2007

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total	
<b>1 Mon</b>																										
Ascending	11	5	8	7	28	88	201	251	202	149	161	228	202	167	190	205	203	189	153	114	75	48	27	16	2928	
Descending	15	6	10	8	14	41	77	172	143	152	162	154	182	183	253	216	239	293	215	122	82	66	55	23	2883	
Combined	26	11	18	15	42	129	278	423	345	301	323	382	384	350	443	421	442	482	368	236	157	114	82	39	5811	
<b>2 Tue</b>																										
Ascending	10	8	8	12	25	99	196	294	171	158	143	199	177	196	184	224	227	209	190	151	129	63	42	29	3144	
Descending	11	8	7	6	17	59	75	174	159	146	172	166	203	181	206	241	282	301	267	139	124	72	63	31	3110	
Combined	21	16	15	18	42	158	271	468	330	304	315	365	380	377	390	465	509	510	457	290	253	135	105	60	6254	
<b>3 Wed</b>																										
Ascending	20	9	8	11	29	91	193	280	176	169	179	156	182	195	198	252	218	211	185	139	120	70	44	21	3156	
Descending	14	14	9	8	13	46	79	181	143	171	147	160	191	195	217	232	253	298	253	147	113	109	71	27	3091	
Combined	34	23	17	19	42	137	272	461	319	340	326	316	373	390	415	484	471	509	438	286	233	179	115	48	6247	
<b>4 Thu</b>																										
Ascending	19	10	12	14	26	107	191	249	177	184	173	219	197	221	192	189	247	212	149	141	164	129	41	31	3294	
Descending	17	8	7	8	21	51	74	145	147	157	177	176	199	229	203	238	247	327	301	163	119	81	55	27	3177	
Combined	36	18	19	22	47	158	265	394	324	341	350	395	396	450	395	427	494	539	450	304	283	210	96	58	6471	
<b>5 Fri</b>																										
Ascending	14	10	13	9	34	92	156	246	173	165	214	194	189	188	203	263	238	227	192	118	87	58	50	35	3168	
Descending	22	12	6	14	19	45	53	158	144	137	175	188	173	217	209	249	255	278	212	168	122	89	97	38	3080	
Combined	36	22	19	23	53	137	209	404	317	302	389	382	362	405	412	512	493	505	404	286	209	147	147	73	6248	
<b>6 Sat</b>																										
Ascending	31	13	14	9	21	37	84	99	126	174	165	190	151	202	148	164	189	177	143	121	83	84	59	44	2528	
Descending	24	13	15	10	19	29	38	102	114	173	163	171	179	167	186	168	158	195	181	124	121	86	56	46	2538	
Combined	55	26	29	19	40	66	122	201	240	347	328	361	330	369	334	332	347	372	324	245	204	170	115	90	5066	
<b>7 Sun</b>																										
Ascending	25	23	11	7	17	28	27	41	71	118	117	134	183	175	157	139	144	177	113	143	93	63	38	29	2073	
Descending	30	19	18	9	6	9	28	35	63	124	140	120	168	175	135	127	182	156	121	113	86	68	53	18	2003	
Combined	55	42	29	16	23	37	55	76	134	242	257	254	351	350	292	266	326	333	234	256	179	131	91	47	4076	
<b>8 Mon</b>																										
Ascending	10	7	7	10	26	78	166	242	201	177	170	185	170	177	192	220	224	215	160	138	92	58	40	22	2987	
Descending	19	7	7	7	13	39	61	176	154	149	163	182	188	167	213	207	243	264	231	133	119	81	48	21	2892	
Combined	29	14	14	17	39	117	227	418	355	326	333	367	358	344	405	427	467	479	391	271	211	139	88	43	5879	

AM and PM peak hours boxed.

Creation Date: 12/21/2007 15:59

Station # 187  
 Route: US-95  
 Segment Code and Milepost: 001540 037.075  
 1.35 Miles S. of Jct SH-19 (Homedale)

Idaho Transportation Department  
 Hourly Traffic Volume Report By Direction

County: Owyhee  
 District: 03  
 Ascending Direction: North

October 2007

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total	
<b>9 Tue</b>																										
Ascending	14	11	5	11	30	95	179	302	174	206	153	171	206	176	189	242	215	217	206	160	88	92	38	21	3201	
Descending	14	6	5	12	20	50	78	183	176	149	169	185	186	175	183	243	277	324	260	141	127	90	59	23	3135	
Combined	28	17	10	23	50	145	257	485	350	355	322	356	392	351	372	485	492	541	466	301	215	182	97	44	6336	
<b>10 Wed</b>																										
Ascending	11	9	10	11	28	87	166	287	188	172	141	188	200	193	183	240	203	193	163	128	114	57	36	15	3023	
Descending	17	13	7	8	24	38	66	188	177	119	160	161	206	195	194	265	269	290	231	130	97	75	44	30	3004	
Combined	28	22	17	19	52	125	232	475	365	291	301	349	406	388	377	505	472	483	394	258	211	132	80	45	6027	
<b>11 Thu</b>																										
Ascending	11	6	8	11	24	84	158	293	180	147	156	170	177	190	177	215	217	237	196	152	67	73	37	18	3004	
Descending	11	11	5	4	23	39	69	179	163	155	131	176	156	147	204	223	257	296	232	153	113	79	46	30	2902	
Combined	22	17	13	15	47	123	227	472	343	302	287	346	333	337	381	438	474	533	428	305	180	152	83	48	5906	
<b>12 Fri</b>																										
Ascending	17	9	9	12	25	77	152	287	193	162	189	197	195	191	223	246	227	235	237	178	89	60	47	32	3289	
Descending	19	6	3	15	22	38	66	173	166	132	179	195	201	182	212	252	254	286	244	150	108	101	110	45	3159	
Combined	36	15	12	27	47	115	218	460	359	294	368	392	396	373	435	498	481	521	481	328	197	161	157	77	6448	
<b>13 Sat</b>																										
Ascending	24	12	13	13	23	35	62	112	131	159	184	197	202	187	175	175	203	192	157	127	108	80	43	20	2634	
Descending	34	15	6	15	18	33	60	85	115	172	182	184	165	145	190	189	191	143	148	153	118	78	75	52	2566	
Combined	58	27	19	28	41	68	122	197	246	331	366	381	367	332	365	364	394	335	305	280	226	158	118	72	5200	
<b>14 Sun</b>																										
Ascending	32	18	9	10	18	29	28	45	75	101	126	131	191	166	153	173	167	141	133	132	87	57	36	17	2075	
Descending	31	25	9	13	12	18	32	30	79	156	150	125	151	195	155	146	146	177	164	127	100	48	32	31	2152	
Combined	63	43	18	23	30	47	60	75	154	257	276	256	342	361	308	319	313	318	297	259	187	105	68	48	4227	
<b>15 Mon</b>																										
Ascending	14	11	6	9	31	79	168	290	186	165	151	197	179	184	222	221	222	190	145	114	80	44	28	19	2955	
Descending	13	8	12	8	14	34	66	191	168	152	176	177	208	175	228	232	235	271	219	119	98	64	47	27	2942	
Combined	27	19	18	17	45	113	234	481	354	317	327	374	387	359	450	453	457	461	364	233	178	108	75	46	5897	
<b>16 Tue</b>																										
Ascending	12	8	8	10	21	85	173	302	158	129	144	164	176	167	175	236	225	216	152	114	70	52	22	16	2835	
Descending	19	11	6	11	18	53	53	172	138	142	154	170	199	168	200	209	236	267	238	154	105	60	33	28	2844	
Combined	31	19	14	21	39	138	226	474	296	271	298	334	375	335	375	445	461	483	390	268	175	112	55	44	5679	

AM and PM peak hours boxed.

Creation Date: 12/21/2007 15:59

Station # 187  
 Route: US-95  
 Segment Code and Milepost: 001540 037.075  
 1.35 Miles S. of Jct SH-19 (Homedale)

Idaho Transportation Department  
 Hourly Traffic Volume Report By Direction

County: Owyhee  
 District: 03  
 Ascending Direction: North

October 2007

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total	
<b>17 Wed</b>																										
Ascending	13	7	3	13	28	90	168	307	161	159	170	169	185	139	170	215	186	203	134	137	78	63	26	12	2836	
Descending	9	7	6	8	21	41	67	154	166	136	156	159	192	170	211	241	236	271	233	145	94	90	46	20	2879	
Combined	22	14	9	21	49	131	235	461	327	295	326	328	377	309	381	456	422	474	367	282	172	153	72	32	5715	
<b>18 Thu</b>																										
Ascending	15	15	7	5	31	83	167	286	163	149	150	181	183	179	193	210	190	206	129	94	48	50	31	22	2787	
Descending	8	11	7	9	19	48	51	176	149	117	172	166	183	173	232	207	238	243	204	126	79	54	39	20	2731	
Combined	23	26	14	14	50	131	218	462	312	266	322	347	366	352	425	417	428	449	333	220	127	104	70	42	5518	
<b>19 Fri</b>																										
Ascending	7	9	8	12	34	75	141	273	172	144	181	195	179	201	228	231	210	210	125	125	87	90	39	22	2998	
Descending	16	12	9	11	22	48	62	153	126	125	171	185	209	191	244	263	252	273	203	137	84	53	52	32	2933	
Combined	23	21	17	23	56	123	203	426	298	269	352	380	388	392	472	494	462	483	328	262	171	143	91	54	5931	
<b>20 Sat</b>																										
Ascending	15	17	7	9	22	43	67	66	69	137	181	173	170	174	180	186	176	129	128	125	89	73	38	55	2329	
Descending	32	16	10	14	20	33	32	68	91	155	139	150	181	172	163	172	168	169	157	123	99	65	57	47	2333	
Combined	47	33	17	23	42	76	99	134	160	292	320	323	351	346	343	358	344	298	285	248	188	138	95	102	4662	
<b>21 Sun</b>																										
Ascending	24	16	9	8	17	34	32	26	57	117	102	144	196	164	160	144	152	152	236	130	86	59	32	18	2115	
Descending	34	10	12	4	11	28	27	44	92	124	149	163	175	181	177	186	154	149	137	115	98	61	38	21	2190	
Combined	58	26	21	12	28	62	59	70	149	241	251	307	371	345	337	330	306	301	373	245	184	120	70	39	4305	
<b>22 Mon</b>																										
Ascending	12	4	3	10	35	84	169	274	179	143	146	189	181	146	185	222	202	208	151	120	65	47	22	18	2815	
Descending	19	6	7	4	16	38	61	167	148	157	162	172	177	163	203	220	246	289	229	132	80	64	38	36	2834	
Combined	31	10	10	14	51	122	230	441	327	300	308	361	358	309	388	442	448	497	380	252	145	111	60	54	5649	
<b>23 Tue</b>																										
Ascending	5	10	4	14	25	83	170	286	165	150	152	176	171	190	165	246	215	214	155	136	77	51	31	14	2905	
Descending	15	9	5	8	20	38	70	180	170	144	147	179	168	169	205	225	248	283	255	138	95	66	36	21	2894	
Combined	20	19	9	22	45	121	240	466	335	294	299	355	339	359	370	471	463	497	410	274	172	117	67	35	5799	
<b>24 Wed</b>																										
Ascending	14	12	5	11	32	75	179	301	156	170	177	193	155	163	185	253	192	273	160	110	90	59	28	20	3013	
Descending	16	14	9	10	25	36	67	186	160	125	167	170	183	177	194	254	237	272	202	158	144	68	47	29	2950	
Combined	30	26	14	21	57	111	246	487	316	295	344	363	338	340	379	507	429	545	362	268	234	127	75	49	5963	

AM and PM peak hours boxed.

Creation Date: 12/21/2007 15:59

Station # 187  
 Route: US-95  
 Segment Code and Milepost: 001540 037.075  
 1.35 Miles S. of Jct SH-19 (Homedale)

Idaho Transportation Department  
 Hourly Traffic Volume Report By Direction

County: Owyhee  
 District: 03  
 Ascending Direction: North

October 2007

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total	
<b>25 Thu</b>																										
Ascending	14	9	13	11	34	83	175	290	168	169	165	160	179	193	183	227	217	218	186	127	83	47	36	21	3008	
Descending	21	7	11	15	25	45	72	184	133	139	144	175	207	200	197	218	266	329	230	146	91	63	31	24	2973	
Combined	35	16	24	26	59	128	247	474	301	308	309	335	386	393	380	445	483	547	416	273	174	110	67	45	5981	
<b>26 Fri</b>																										
Ascending	18	10	10	11	31	78	160	257	174	177	185	177	183	182	177	238	202	242	191	137	97	53	40	31	3061	
Descending	20	9	11	8	24	42	55	158	156	156	149	161	154	171	236	220	255	292	257	147	95	76	59	41	2952	
Combined	38	19	21	19	55	120	215	415	330	333	334	338	337	353	413	458	457	534	448	284	192	129	99	72	6013	
<b>27 Sat</b>																										
Ascending	27	14	10	13	19	27	60	88	85	147	172	169	188	169	140	154	181	141	147	133	108	67	51	36	2346	
Descending	30	18	15	16	19	33	45	78	82	119	139	188	185	184	199	172	187	173	143	127	84	60	48	48	2392	
Combined	57	32	25	29	38	60	105	166	167	266	311	357	373	353	339	326	368	314	290	260	192	127	99	84	4738	
<b>28 Sun</b>																										
Ascending	18	23	6	6	8	23	24	32	49	102	127	124	195	159	153	152	148	150	156	118	65	54	34	16	1942	
Descending	32	19	5	7	19	17	27	41	77	98	145	127	168	135	143	142	151	152	139	102	88	49	35	14	1932	
Combined	50	42	11	13	27	40	51	73	126	200	272	251	363	294	296	294	299	302	295	220	153	103	69	30	3874	
<b>29 Mon</b>																										
Ascending	17	9	4	15	27	84	168	294	178	165	155	165	194	175	156	204	198	210	131	109	73	35	18	22	2806	
Descending	8	6	5	7	18	36	58	171	168	121	154	189	185	167	201	213	223	271	228	121	56	56	43	27	2732	
Combined	25	15	9	22	45	120	226	465	346	286	309	354	379	342	357	417	421	481	359	230	129	91	61	49	5538	
<b>30 Tue</b>																										
Ascending	9	10	6	11	30	86	157	292	167	135	144	170	157	185	187	212	214	200	154	100	79	56	39	16	2816	
Descending	12	8	7	8	19	42	53	169	155	135	157	174	180	180	186	217	252	272	230	119	100	56	33	33	2797	
Combined	21	18	13	19	49	128	210	461	322	270	301	344	337	365	373	429	466	472	384	219	179	112	72	49	5613	
<b>31 Wed</b>																										
Ascending	10	8	5	8	30	80	160	248	182	141	142	175	158	192	187	233	216	223	155	115	99	94	36	18	2915	
Descending	20	5	8	6	14	45	58	155	168	140	138	158	185	182	217	246	237	304	204	125	85	83	60	27	2870	
Combined	30	13	13	14	44	125	218	403	350	281	280	333	343	374	404	479	453	527	359	240	184	177	96	45	5785	
<b>Average</b>																										
Ascending	16	11	8	10	26	72	139	224	152	153	159	177	182	180	181	211	202	201	162	129	89	64	36	23	2806	
Descending	19	11	8	9	18	38	57	143	138	141	158	168	183	178	200	214	228	255	212	135	101	71	52	30	2770	
Combined	35	22	16	20	44	110	196	367	290	294	316	345	366	358	381	425	430	456	374	264	190	135	88	54	5576	

AM and PM peak hours boxed.

Creation Date: 12/21/2007 15:59

Station # 111  
 Route: US-95  
 Segment Code and Milepost: 001540 056.002  
 2.4 Miles North of Jct US-20/26 (Parma)

Idaho Transportation Department  
 Hourly Traffic Volume Report By Direction

County: Payette  
 District: 03  
 Ascending Direction: North

October 2007

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total		
<b>1 Mon</b>																											
Ascending	5	7	8	0	18	35	96	173	111	92	117	140	132	128	109	160	174	159	118	75	67	36	30	19	2009		
Descending	8	9	4	4	6	36	86	150	88	93	111	131	128	130	144	173	184	184	128	90	52	63	45	19	2068		
Combined	13	16	12	4	24	71	182	323	199	185	228	271	260	258	253	333	358	345	246	165	119	99	75	38	4077		
<b>2 Tue</b>																											
Ascending	6	7	6	12	16	34	96	184	119	106	118	118	111	133	128	169	203	170	136	103	71	84	28	25	2183		
Descending	9	7	5	6	11	35	99	155	94	86	97	126	123	136	163	195	230	231	141	101	73	71	36	30	2260		
Combined	15	14	11	18	27	69	195	339	213	192	215	244	234	269	291	364	433	401	277	204	144	155	64	55	4443		
<b>3 Wed</b>																											
Ascending	14	6	9	6	15	34	97	182	112	113	128	123	130	135	139	154	183	175	121	71	67	66	28	23	2131		
Descending	14	15	5	5	10	38	101	175	110	97	108	117	127	132	166	162	179	208	145	103	86	66	34	19	2222		
Combined	28	21	14	11	25	72	198	357	222	210	236	240	257	267	305	316	362	383	266	174	153	132	62	42	4353		
<b>4 Thu</b>																											
Ascending	11	3	9	9	15	33	83	172	132	117	143	150	119	168	138	171	170	179	141	93	102	74	42	25	2299		
Descending	15	13	10	4	15	46	100	138	102	107	111	120	151	140	174	149	168	229	138	136	82	70	45	31	2294		
Combined	26	16	19	13	30	79	183	310	234	224	254	270	270	308	312	320	338	408	279	229	184	144	87	56	4593		
<b>5 Fri</b>																											
Ascending	13	6	11	10	11	39	81	178	150	126	146	149	164	131	146	158	194	185	159	88	64	73	44	27	2353		
Descending	10	8	7	7	12	36	95	143	97	105	137	136	134	127	177	196	176	187	150	104	101	90	88	40	2363		
Combined	23	14	18	17	23	75	176	321	247	231	283	285	298	258	323	354	370	372	309	192	165	163	132	67	4716		
<b>6 Sat</b>																											
Ascending	14	10	9	7	11	25	45	78	93	137	144	122	139	146	125	137	145	126	111	82	86	58	37	24	1911		
Descending	16	12	13	8	14	31	51	76	84	101	101	143	122	131	133	154	147	132	125	109	79	69	52	35	1938		
Combined	30	22	22	15	25	56	96	154	177	238	245	265	261	277	258	291	292	258	236	191	165	127	89	59	3849		
<b>7 Sun</b>																											
Ascending	18	6	8	7	16	13	25	34	55	106	125	124	130	106	120	129	108	113	97	83	68	45	38	16	1590		
Descending	30	11	8	10	11	13	18	32	51	88	77	91	146	144	141	138	139	131	120	86	71	36	31	17	1640		
Combined	48	17	16	17	27	26	43	66	106	194	202	215	276	250	261	267	247	244	217	169	139	81	69	33	3230		
<b>8 Mon</b>																											
Ascending	7	4	7	8	17	37	87	183	109	137	132	127	151	120	124	146	166	174	109	113	64	47	33	21	2123		
Descending	15	5	3	6	12	32	87	173	108	101	113	103	125	121	159	144	192	176	139	90	76	59	36	26	2101		
Combined	22	9	10	14	29	69	174	356	217	238	245	230	276	241	283	290	358	350	248	203	140	106	69	47	4224		

AM and PM peak hours boxed.

Creation Date: 12/21/2007 15:54



Station # 111  
 Route: US-95  
 Segment Code and Milepost: 001540 056.002  
 2.4 Miles North of Jct US-20/26 (Parma)

Idaho Transportation Department  
 Hourly Traffic Volume Report By Direction

County: Payette  
 District: 03  
 Ascending Direction: North

October 2007

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total		
<b>9 Tue</b>																											
Ascending	12	8	12	4	21	34	106	188	104	137	138	115	116	132	161	165	182	208	124	101	72	55	44	22	2261		
Descending	18	6	8	8	17	32	105	161	97	104	118	103	118	137	143	179	182	208	156	121	81	64	29	21	2216		
Combined	30	14	20	12	38	66	211	349	201	241	256	218	234	269	304	344	364	416	280	222	153	119	73	43	4477		
<b>10 Wed</b>																											
Ascending	5	4	9	7	27	51	106	216	115	118	96	126	91	130	142	176	200	165	132	71	62	38	26	16	2129		
Descending	16	7	3	7	10	31	104	162	114	115	99	123	114	121	163	195	184	178	143	84	106	58	38	23	2198		
Combined	21	11	12	14	37	82	210	378	229	233	195	249	205	251	305	371	384	343	275	155	168	96	64	39	4327		
<b>11 Thu</b>																											
Ascending	5	4	10	5	18	42	75	191	112	111	117	134	123	119	123	185	205	188	135	90	74	56	30	27	2179		
Descending	14	8	4	4	8	28	85	163	106	82	97	111	123	123	125	171	168	210	162	103	89	77	36	30	2127		
Combined	19	12	14	9	26	70	160	354	218	193	214	245	246	242	248	356	373	398	297	193	163	133	66	57	4306		
<b>12 Fri</b>																											
Ascending	9	13	12	9	6	42	90	171	134	122	140	121	159	131	169	184	208	174	182	109	80	48	48	27	2388		
Descending	18	11	7	2	12	27	90	145	96	93	115	155	115	144	152	217	188	189	141	111	74	131	68	39	2340		
Combined	27	24	19	11	18	69	180	316	230	215	255	276	274	275	321	401	396	363	323	220	154	179	116	66	4728		
<b>13 Sat</b>																											
Ascending	11	12	7	10	16	30	51	65	113	155	109	139	140	128	129	103	120	105	118	98	71	61	36	20	1847		
Descending	15	13	13	10	10	16	54	60	78	82	106	145	119	130	118	170	161	125	117	106	99	56	48	43	1894		
Combined	26	25	20	20	26	46	105	125	191	237	215	284	259	258	247	273	281	230	235	204	170	117	84	63	3741		
<b>14 Sun</b>																											
Ascending	15	8	9	0	15	22	38	22	66	93	102	114	146	127	109	114	117	99	84	76	55	40	24	21	1516		
Descending	31	15	7	12	11	17	30	33	64	99	93	106	130	165	133	145	146	157	107	86	76	56	39	20	1778		
Combined	46	23	16	12	26	39	68	55	130	192	195	220	276	292	242	259	263	256	191	162	131	96	63	41	3294		
<b>15 Mon</b>																											
Ascending	8	6	2	4	23	44	115	185	129	122	117	117	133	133	153	153	212	167	103	65	55	48	22	25	2141		
Descending	13	7	2	8	9	30	107	159	89	94	127	141	125	145	172	163	173	195	134	101	60	70	47	30	2201		
Combined	21	13	4	12	32	74	222	344	218	216	244	258	258	278	325	316	385	362	237	166	115	118	69	55	4342		
<b>16 Tue</b>																											
Ascending	5	4	7	7	13	42	94	203	102	115	130	126	110	135	153	210	186	206	120	105	55	33	21	24	2206		
Descending	17	4	8	9	14	36	111	151	111	102	98	139	132	147	133	206	207	198	183	110	86	58	46	25	2331		
Combined	22	8	15	16	27	78	205	354	213	217	228	265	242	282	286	416	393	404	303	215	141	91	67	49	4537		

AM and PM peak hours boxed.

Creation Date: 12/21/2007 15:54

Station # 111  
 Route: US-95  
 Segment Code and Milepost: 001540 056.002  
 2.4 Miles North of Jct US-20/26 (Parma)

Idaho Transportation Department  
 Hourly Traffic Volume Report By Direction

County: Payette  
 District: 03  
 Ascending Direction: North

October 2007

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total	
<b>17 Wed</b>																										
Ascending	7	5	10	6	17	35	84	190	123	127	119	126	116	129	118	194	189	179	121	71	75	49	28	21	2139	
Descending	22	7	5	5	12	36	105	164	121	106	109	112	101	124	155	183	181	183	165	112	94	90	43	17	2252	
Combined	29	12	15	11	29	71	189	354	244	233	228	238	217	253	273	377	370	362	286	183	169	139	71	38	4391	
<b>18 Thu</b>																										
Ascending	7	4	5	4	15	36	90	185	108	100	131	155	121	124	140	157	214	190	110	53	41	46	25	27	2088	
Descending	14	9	8	4	12	34	95	175	101	98	102	117	134	146	147	171	172	153	107	90	65	60	40	32	2086	
Combined	21	13	13	8	27	70	185	360	209	198	233	272	255	270	287	328	386	343	217	143	106	106	65	59	4174	
<b>19 Fri</b>																										
Ascending	7	3	11	7	14	41	78	174	131	118	116	164	138	139	158	182	179	177	113	90	55	49	47	27	2218	
Descending	13	6	8	7	16	37	85	140	100	108	105	128	144	165	165	201	192	175	130	100	79	58	38	43	2243	
Combined	20	9	19	14	30	78	163	314	231	226	221	292	282	304	323	383	371	352	243	190	134	107	85	70	4461	
<b>20 Sat</b>																										
Ascending	10	9	9	7	21	32	48	73	86	112	114	146	138	136	146	140	134	103	90	77	56	44	33	42	1806	
Descending	19	11	3	11	17	18	46	56	84	71	115	131	124	128	132	145	143	122	98	106	80	66	34	39	1799	
Combined	29	20	12	18	38	50	94	129	170	183	229	277	262	264	278	285	277	225	188	183	136	110	67	81	3605	
<b>21 Sun</b>																										
Ascending	18	8	13	4	13	32	40	37	59	98	97	103	123	112	98	119	104	99	96	86	54	44	30	16	1503	
Descending	26	11	6	4	9	16	22	24	60	83	86	101	131	136	115	143	161	121	102	96	75	42	37	19	1626	
Combined	44	19	19	8	22	48	62	61	119	181	183	204	254	248	213	262	265	220	198	182	129	86	67	35	3129	
<b>22 Mon</b>																										
Ascending	6	7	3	5	20	37	91	172	124	112	119	137	133	117	150	180	179	178	114	74	64	42	21	16	2101	
Descending	11	6	3	6	7	28	105	161	84	113	152	138	138	150	137	174	188	184	138	108	71	51	45	24	2222	
Combined	17	13	6	11	27	65	196	333	208	225	271	275	271	267	287	354	367	362	252	182	135	93	66	40	4323	
<b>23 Tue</b>																										
Ascending	9	4	7	8	18	44	86	182	128	123	114	133	112	125	153	179	189	166	109	77	42	30	34	12	2084	
Descending	20	6	1	9	14	28	101	157	102	125	91	127	141	128	156	201	191	177	130	103	71	60	31	30	2200	
Combined	29	10	8	17	32	72	187	339	230	248	205	260	253	253	309	380	380	343	239	180	113	90	65	42	4284	
<b>24 Wed</b>																										
Ascending	4	9	8	9	14	41	93	189	121	117	131	143	123	114	121	154	188	182	120	70	61	50	19	18	2099	
Descending	13	7	3	1	7	36	98	151	99	101	110	112	121	132	149	162	203	196	138	96	79	61	36	22	2133	
Combined	17	16	11	10	21	77	191	340	220	218	241	255	244	246	270	316	391	378	258	166	140	111	55	40	4232	

AM and PM peak hours boxed.

Creation Date: 12/21/2007 15:54

Station # 111  
 Route: US-95  
 Segment Code and Milepost: 001540 056.002  
 2.4 Miles North of Jct US-20/26 (Parma)

Idaho Transportation Department  
 Hourly Traffic Volume Report By Direction

County: Payette  
 District: 03  
 Ascending Direction: North

October 2007

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total	
<b>25 Thu</b>																										
Ascending	11	4	12	12	18	43	77	180	122	132	102	131	104	130	100	165	181	162	119	82	67	34	22	25	2035	
Descending	5	8	7	8	21	33	92	164	93	101	141	107	122	137	153	165	159	158	124	86	64	52	42	26	2068	
Combined	16	12	19	20	39	76	169	344	215	233	243	238	226	267	253	330	340	320	243	168	131	86	64	51	4103	
<b>26 Fri</b>																										
Ascending	12	9	13	7	18	43	84	148	109	110	132	146	154	139	115	173	173	151	131	73	63	43	43	35	2124	
Descending	15	6	8	9	15	38	74	146	84	115	107	103	149	138	142	145	155	190	157	105	84	60	46	138	2229	
Combined	27	15	21	16	33	81	158	294	193	225	239	249	303	277	257	318	328	341	288	178	147	103	89	173	4353	
<b>27 Sat</b>																										
Ascending	16	15	8	8	15	18	44	48	85	89	124	105	109	115	121	122	124	102	106	92	58	49	31	33	1637	
Descending	96	81	46	25	32	14	42	50	74	78	97	100	126	124	114	155	119	129	134	115	75	65	30	23	1944	
Combined	112	96	54	33	47	32	86	98	159	167	221	205	235	239	235	277	243	231	240	207	133	114	61	56	3581	
<b>28 Sun</b>																										
Ascending	20	15	5	5	9	20	19	28	48	83	88	95	121	96	104	120	106	87	86	77	50	44	22	12	1360	
Descending	23	11	12	4	11	15	16	27	54	76	76	89	104	112	125	141	136	146	115	79	68	38	29	13	1520	
Combined	43	26	17	9	20	35	35	55	102	159	164	184	225	208	229	261	242	233	201	156	118	82	51	25	2880	
<b>29 Mon</b>																										
Ascending	5	5	3	6	21	47	99	181	116	118	125	107	122	110	132	177	167	140	103	66	66	38	26	18	1998	
Descending	14	6	4	8	9	26	105	157	85	84	120	115	126	120	137	190	176	178	132	95	61	55	39	27	2069	
Combined	19	11	7	14	30	73	204	338	201	202	245	222	248	230	269	367	343	318	235	161	127	93	65	45	4067	
<b>30 Tue</b>																										
Ascending	8	7	6	8	17	51	86	173	106	103	110	109	128	101	118	198	177	146	104	59	58	44	27	19	1963	
Descending	6	9	6	11	10	27	96	157	84	92	114	132	133	114	144	169	172	195	128	118	85	56	42	17	2117	
Combined	14	16	12	19	27	78	182	330	190	195	224	241	261	215	262	367	349	341	232	177	143	100	69	36	4080	
<b>31 Wed</b>																										
Ascending	6	7	7	7	18	44	78	181	102	109	111	135	127	129	139	164	184	156	112	62	65	57	36	21	2057	
Descending	11	7	5	9	11	31	93	151	89	92	89	109	114	126	165	208	195	182	116	90	89	85	46	23	2136	
Combined	17	14	12	16	29	75	171	332	191	201	200	244	241	255	304	372	379	338	228	152	154	142	82	44	4193	
<b>Average</b>																										
Ascending	10	7	8	7	16	36	77	147	107	115	120	128	128	126	132	159	170	155	117	82	64	49	31	23	2015	
Descending	18	11	7	7	12	29	81	128	90	97	107	120	127	134	146	171	173	175	134	101	78	64	42	30	2084	
Combined	28	18	16	14	29	65	157	275	198	211	228	248	255	260	278	331	343	330	251	183	143	113	73	53	4100	

AM and PM peak hours boxed.

Creation Date: 12/21/2007 15:54

Station # 123

Route: I-84

Segment Code and Milepost: 001010 014.900

2.0 Miles S.E. of Black Canyon IC (Black Canyon)

Idaho Transportation Department  
Hourly Traffic Volume Report By Direction

County: Payette

District: 03

Ascending Direction: Southeast

October 2007

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total	
<b>1 Mon</b>																										
Ascending	111	65	50	64	84	215	403	373	407	461	477	513	559	608	606	673	674	768	568	424	351	275	244	138	9111	
Descending	75	98	77	60	99	165	316	568	560	628	602	595	616	608	613	648	692	668	443	363	330	260	170	135	9389	
Combined	186	163	127	124	183	380	719	941	967	1089	1079	1108	1175	1216	1219	1321	1366	1436	1011	787	681	535	414	273	18500	
<b>2 Tue</b>																										
Ascending	101	85	81	96	123	268	424	464	474	516	578	590	604	597	639	736	776	737	572	422	371	269	186	139	9848	
Descending	81	50	54	62	82	180	356	575	537	514	558	567	517	546	585	647	649	681	501	353	264	280	186	111	8936	
Combined	182	135	135	158	205	448	780	1039	1011	1030	1136	1157	1121	1143	1224	1383	1425	1418	1073	775	635	549	372	250	18784	
<b>3 Wed</b>																										
Ascending	111	78	78	66	113	261	428	488	481	491	535	548	663	658	695	666	753	736	625	446	423	323	213	133	10012	
Descending	67	57	60	51	88	187	335	530	564	545	576	587	513	645	632	668	733	789	636	390	326	284	229	139	9631	
Combined	178	135	138	117	201	448	763	1018	1045	1036	1111	1135	1176	1303	1327	1334	1486	1525	1261	836	749	607	442	272	19643	
<b>4 Thu</b>																										
Ascending	127	80	63	75	123	263	461	495	468	561	608	602	643	693	698	772	803	811	636	479	417	347	249	173	10647	
Descending	81	68	78	86	108	202	360	631	600	596	742	677	625	739	694	756	733	721	634	461	370	367	244	173	10746	
Combined	208	148	141	161	231	465	821	1126	1068	1157	1350	1279	1268	1432	1392	1528	1536	1532	1270	940	787	714	493	346	21393	
<b>5 Fri</b>																										
Ascending	140	96	92	80	117	263	429	474	461	568	685	560	565	560	823	1131	967	904	718	555	493	422	333	240	11676	
Descending	107	73	79	58	97	209	335	588	623	654	725	680	757	757	767	771	797	858	736	508	417	379	290	181	11446	
Combined	247	169	171	138	214	472	764	1062	1084	1222	1410	1240	1322	1317	1590	1902	1764	1762	1454	1063	910	801	623	421	23122	
<b>6 Sat</b>																										
Ascending	168	107	84	78	85	104	202	281	387	553	638	741	716	729	721	715	705	713	604	520	449	329	272	173	10074	
Descending	115	91	82	60	76	137	232	371	405	561	589	602	593	701	601	596	613	591	528	463	377	329	236	179	9128	
Combined	283	198	166	138	161	241	434	652	792	1114	1227	1343	1309	1430	1322	1311	1318	1304	1132	983	826	658	508	352	19202	
<b>7 Sun</b>																										
Ascending	119	76	73	58	55	73	99	135	230	302	478	554	654	666	755	827	831	770	698	597	523	301	258	173	9305	
Descending	93	88	61	58	76	112	152	222	320	497	588	537	647	676	648	646	641	649	549	443	382	367	252	140	8844	
Combined	212	164	134	116	131	185	251	357	550	799	1066	1091	1301	1342	1403	1473	1472	1419	1247	1040	905	668	510	313	18149	
<b>8 Mon</b>																										
Ascending	114	68	66	54	100	225	364	426	388	473	487	555	561	610	634	707	779	816	589	461	405	290	221	141	9534	
Descending	99	62	59	58	116	149	334	565	575	659	652	667	665	590	696	673	631	650	522	399	288	270	197	210	9786	
Combined	213	130	125	112	216	374	698	991	963	1132	1139	1222	1226	1200	1330	1380	1410	1466	1111	860	693	560	418	351	19320	

AM and PM peak hours boxed.

Creation Date: 12/21/2007 15:55

Station # 123

Route: I-84

Segment Code and Milepost: 001010 014.900

2.0 Miles S.E. of Black Canyon IC (Black Canyon)

Idaho Transportation Department  
Hourly Traffic Volume Report By Direction

County: Payette

District: 03

Ascending Direction: Southeast

October 2007

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total	
<b>9 Tue</b>																										
Ascending	121	75	82	87	129	282	452	473	484	562	548	608	606	634	637	675	692	742	595	446	420	287	222	147	10006	
Descending	103	68	56	66	73	178	369	616	571	577	616	580	591	579	662	760	695	643	537	414	321	275	215	120	9685	
Combined	224	143	138	153	202	460	821	1089	1055	1139	1164	1188	1197	1213	1299	1435	1387	1385	1132	860	741	562	437	267	19691	
<b>10 Wed</b>																										
Ascending	109	84	68	88	121	294	418	485	460	510	526	583	570	626	649	748	719	769	581	445	375	289	203	159	9879	
Descending	69	68	68	86	109	213	355	556	525	533	522	567	561	512	630	621	638	563	445	377	493	299	198	155	9163	
Combined	178	152	136	174	230	507	773	1041	985	1043	1048	1150	1131	1138	1279	1369	1357	1332	1026	822	868	588	401	314	19042	
<b>11 Thu</b>																										
Ascending	140	74	59	74	116	256	445	514	473	544	534	601	662	656	673	735	761	832	635	486	403	368	233	200	10474	
Descending	101	67	64	65	100	196	370	588	558	597	694	627	590	664	610	663	699	734	608	426	368	315	224	169	10097	
Combined	241	141	123	139	216	452	815	1102	1031	1141	1228	1228	1252	1320	1283	1398	1460	1566	1243	912	771	683	457	369	20571	
<b>12 Fri</b>																										
Ascending	135	102	84	89	126	283	400	469	515	556	587	669	719	730	780	837	890	899	674	517	456	420	330	235	11502	
Descending	103	81	64	75	95	192	323	567	536	623	621	663	661	675	697	755	777	815	736	516	378	325	314	221	10813	
Combined	238	183	148	164	221	475	723	1036	1051	1179	1208	1332	1380	1405	1477	1592	1667	1714	1410	1033	834	745	644	456	22315	
<b>13 Sat</b>																										
Ascending	157	126	98	74	113	115	206	291	455	538	670	703	721	781	682	757	792	671	591	502	416	387	266	171	10283	
Descending	111	87	80	59	132	205	268	348	386	546	560	563	608	573	627	628	662	570	507	464	409	335	289	200	9217	
Combined	268	213	178	133	245	320	474	639	841	1084	1230	1266	1329	1354	1309	1385	1454	1241	1098	966	825	722	555	371	19500	
<b>14 Sun</b>																										
Ascending	120	95	65	36	67	73	111	141	195	338	430	479	612	708	753	796	798	676	632	525	432	316	225	172	8795	
Descending	141	110	72	71	70	136	193	259	317	432	491	671	634	639	679	611	687	605	548	426	286	285	279	222	8864	
Combined	261	205	137	107	137	209	304	400	512	770	921	1150	1246	1347	1432	1407	1485	1281	1180	951	718	601	504	394	17659	
<b>15 Mon</b>																										
Ascending	79	61	56	53	103	230	437	406	368	460	490	533	542	609	648	707	746	653	572	428	372	395	240	157	9345	
Descending	106	72	58	82	96	215	367	597	568	543	653	580	590	607	602	679	703	716	536	400	343	252	187	121	9673	
Combined	185	133	114	135	199	445	804	1003	936	1003	1143	1113	1132	1216	1250	1386	1449	1369	1108	828	715	647	427	278	19018	
<b>16 Tue</b>																										
Ascending	111	105	88	76	130	254	455	460	488	570	552	580	687	632	629	729	780	725	606	437	409	294	213	139	10149	
Descending	106	57	52	63	87	179	377	561	545	548	574	557	553	559	564	645	664	676	501	411	338	256	197	110	9180	
Combined	217	162	140	139	217	433	832	1021	1033	1118	1126	1137	1240	1191	1193	1374	1444	1401	1107	848	747	550	410	249	19329	

AM and PM peak hours boxed.

Creation Date: 12/21/2007 15:55

Station # 123

Route: I-84

Segment Code and Milepost: 001010 014.900

2.0 Miles S.E. of Black Canyon IC (Black Canyon)

Idaho Transportation Department  
Hourly Traffic Volume Report By Direction

County: Payette

District: 03

Ascending Direction: Southeast

October 2007

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total	
<b>17 Wed</b>																										
Ascending	137	93	81	87	129	277	453	503	490	560	541	573	636	620	687	659	752	708	604	390	343	287	219	143	9972	
Descending	95	66	58	57	86	168	352	606	489	564	535	531	556	568	647	681	639	624	497	413	321	348	193	133	9227	
Combined	232	159	139	144	215	445	805	1109	979	1124	1076	1104	1192	1188	1334	1340	1391	1332	1101	803	664	635	412	276	19199	
<b>18 Thu</b>																										
Ascending	92	101	53	74	144	275	456	482	448	561	525	552	653	664	598	682	767	735	590	400	375	307	241	155	9930	
Descending	105	66	66	60	89	190	370	577	595	622	626	651	571	654	562	686	648	688	553	393	351	274	200	107	9704	
Combined	197	167	119	134	233	465	826	1059	1043	1183	1151	1203	1224	1318	1160	1368	1415	1423	1143	793	726	581	441	262	19634	
<b>19 Fri</b>																										
Ascending	129	94	71	81	121	261	404	450	464	504	557	666	661	728	746	740	863	802	632	513	467	423	310	178	10865	
Descending	90	67	76	72	71	190	345	551	528	500	601	593	606	697	713	773	752	822	720	438	337	312	244	187	10285	
Combined	219	161	147	153	192	451	749	1001	992	1004	1158	1259	1267	1425	1459	1513	1615	1624	1352	951	804	735	554	365	21150	
<b>20 Sat</b>																										
Ascending	185	98	77	85	103	125	197	261	401	534	618	737	712	730	691	622	654	615	568	423	435	309	247	180	9607	
Descending	115	61	71	53	92	162	203	288	395	441	497	578	558	614	586	683	654	646	517	482	386	367	272	194	8915	
Combined	300	159	148	138	195	287	400	549	796	975	1115	1315	1270	1344	1277	1305	1308	1261	1085	905	821	676	519	374	18522	
<b>21 Sun</b>																										
Ascending	116	78	68	54	54	79	96	104	193	325	397	466	596	599	665	733	689	747	634	523	440	343	218	110	8327	
Descending	106	79	66	62	66	131	190	234	354	460	543	677	640	656	650	694	613	534	508	379	306	253	159	127	8487	
Combined	222	157	134	116	120	210	286	338	547	785	940	1143	1236	1255	1315	1427	1302	1281	1142	902	746	596	377	237	16814	
<b>22 Mon</b>																										
Ascending	78	65	66	62	91	230	404	447	385	414	479	498	529	529	604	681	707	633	548	396	286	263	200	131	8726	
Descending	87	66	59	78	94	172	337	539	567	546	613	533	594	608	626	639	638	653	538	406	319	252	191	125	9280	
Combined	165	131	125	140	185	402	741	986	952	960	1092	1031	1123	1137	1230	1320	1345	1286	1086	802	605	515	391	256	18006	
<b>23 Tue</b>																										
Ascending	124	76	68	88	126	264	479	478	459	527	525	604	587	548	654	670	733	721	535	373	344	285	217	153	9638	
Descending	79	67	54	59	85	159	369	576	543	536	575	546	559	623	617	662	619	613	501	378	361	287	180	155	9203	
Combined	203	143	122	147	211	423	848	1054	1002	1063	1100	1150	1146	1171	1271	1332	1352	1334	1036	751	705	572	397	308	18841	
<b>24 Wed</b>																										
Ascending	104	85	62	78	127	260	451	476	500	532	553	532	626	624	626	664	702	701	511	413	359	287	205	138	9616	
Descending	85	61	64	63	93	181	344	586	590	541	569	564	579	586	631	639	664	657	548	440	307	299	185	141	9417	
Combined	189	146	126	141	220	441	795	1062	1090	1073	1122	1096	1205	1210	1257	1303	1366	1358	1059	853	666	586	390	279	19033	

AM and PM peak hours boxed.

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<b>25 Thu</b>																										
Ascending	123	74	87	100	146	257	477	472	485	547	598	579	586	604	717	656	749	742	575	435	377	307	231	159	10083	
Descending	129	71	78	71	104	179	358	624	562	640	600	602	598	597	610	681	737	707	583	385	369	302	205	152	9944	
Combined	252	145	165	171	250	436	835	1096	1047	1187	1198	1181	1184	1201	1327	1337	1486	1449	1158	820	746	609	436	311	20027	
<b>26 Fri</b>																										
Ascending	125	106	90	81	138	253	427	445	496	530	639	683	692	709	747	794	842	839	665	501	412	364	341	74	10993	
Descending	110	79	65	75	95	181	328	572	557	638	581	599	634	617	696	755	806	711	668	447	421	341	264	241	10481	
Combined	235	185	155	156	233	434	755	1017	1053	1168	1220	1282	1326	1326	1443	1549	1648	1550	1333	948	833	705	605	315	21474	
<b>27 Sat</b>																										
Ascending	41	43	50	63	130	132	204	290	423	522	619	684	673	688	722	658	737	700	574	449	388	324	217	174	9505	
Descending	125	69	67	74	109	148	246	312	385	439	523	527	547	492	570	571	606	572	567	396	427	306	334	221	8633	
Combined	166	112	117	137	239	280	450	602	808	961	1142	1211	1220	1180	1292	1229	1343	1272	1141	845	815	630	551	395	18138	
<b>28 Sun</b>																										
Ascending	111	83	70	65	55	66	93	153	207	298	411	454	545	579	647	689	693	661	627	488	415	288	248	139	8085	
Descending	143	105	72	83	88	113	167	220	271	438	481	558	581	603	632	640	629	546	540	439	316	255	170	96	8186	
Combined	254	188	142	148	143	179	260	373	478	736	892	1012	1126	1182	1279	1329	1322	1207	1167	927	731	543	418	235	16271	
<b>29 Mon</b>																										
Ascending	78	71	43	62	92	227	414	426	406	438	480	536	549	561	587	674	702	666	505	402	300	239	192	156	8806	
Descending	90	86	64	69	93	166	367	548	564	590	567	538	618	546	566	548	586	632	522	437	302	233	184	111	9027	
Combined	168	157	107	131	185	393	781	974	970	1028	1047	1074	1167	1107	1153	1222	1288	1298	1027	839	602	472	376	267	17833	
<b>30 Tue</b>																										
Ascending	116	99	68	84	132	291	451	488	493	532	563	597	588	600	626	672	741	684	523	400	346	260	209	171	9734	
Descending	80	74	56	70	95	152	358	554	504	566	543	523	477	564	574	526	637	656	477	350	271	267	219	141	8734	
Combined	196	173	124	154	227	443	809	1042	997	1098	1106	1120	1065	1164	1200	1198	1378	1340	1000	750	617	527	428	312	18468	
<b>31 Wed</b>																										
Ascending	112	99	73	80	124	279	425	478	439	522	526	576	568	611	658	699	705	700	508	362	339	316	215	153	9567	
Descending	88	63	58	77	84	156	340	580	574	525	502	488	521	539	557	590	651	626	530	304	293	297	236	131	8810	
Combined	200	162	131	157	208	435	765	1058	1013	1047	1028	1064	1089	1150	1215	1289	1356	1326	1038	666	632	613	451	284	18377	
<b>Average</b>																										
Ascending	117	85	71	74	110	217	360	398	420	495	544	586	622	642	677	726	758	738	597	457	398	320	239	158	9809	
Descending	100	73	66	67	92	171	313	500	505	552	584	588	592	614	630	662	674	665	556	416	348	299	224	156	9449	
Combined	217	159	137	141	202	388	674	898	926	1047	1128	1174	1214	1256	1308	1388	1432	1403	1153	873	746	619	463	315	19259	

AM and PM peak hours boxed.

Creation Date: 12/21/2007 15:55

# TREASURE VALLEY TRUCK FREIGHT TRAVEL SURVEY

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COMPASS REPORT No. 11-2008

## COMMERCIAL VEHICLE SURVEY FINAL REPORT

PREPARED FOR  
**COMMUNITY PLANNING ASSOCIATION OF SOUTHWEST IDAHO  
(COMPASS)**

PREPARED BY



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IN ASSOCIATION WITH

The logo for ETC Institute, Inc. features the letters "ETC" in a large, bold, serif font. The "E" is blue, the "T" is red, and the "C" is blue. Below the letters is a thick red horizontal bar.

ETC Institute, Inc.  
725 W. Frontier Circle  
Olathe, KS 66061



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Data collection is an essential element in the transportation planning and modeling process. The Community Planning Association of Southwest Idaho (COMPASS) is the designated Metropolitan Planning Organization (MPO) for the Ada and Canyon County area. The purpose of this study was to provide vital inputs to that regional transportation planning and travel demand modeling process and to improve the accuracy of the travel demand modeling processes. Improved inputs provide COMPASS with the ability to be more responsive to the evolving transportation planning needs of the region.

This report documents the design, implementation, and results of the **Commercial Vehicle Survey** component of the Treasure Valley Truck Freight Study. The complete study included multiple data collection and analysis elements:

1. **Commercial vehicle survey**
  - a. **Commercial vehicle base location information**
  - b. **Commercial vehicle travel surveys**
2. Commercial vehicle intercept surveys
  - a. Intercepts at the two major Ports of Entry (POE)
  - b. Intercepts at many of the regions truck stops
3. External station survey with video license plate capture at nine (9) locations
  - a. I-84 East @ Ada/Elmore County line
  - b. I-84 West @ Canyon/Payette county line
  - c. US 95 South @ Canyon/Owyhee County line
  - d. US 95 North @ Canyon/Payette County line
  - e. SH 55 South @ Canyon/Owyhee County line
  - f. SH 55 North @ Ada/Boise County line
  - g. SH 16 North @ Ada/Gem County line
  - h. SH 21 East @ Ada/Boise County line
  - i. SH 45 South @ Canyon/Owyhee County line
4. Data expansion
  - a. **Trip length frequencies for commercial vehicles**
  - b. **Trip generation characteristics for commercial vehicle**
  - c. External-External (EE) trip table for both commercial and noncommercial vehicles

The commercial vehicle survey (CVS) provided valuable information on the internal and external trip making characteristics of commercial vehicles in the study area; however, the primary focus was on those trip making characteristics within the study area or originating within the study area. This data collection effort included recruiting businesses throughout the study area that have commercial vehicles that transport goods or make commercial trips related to services.

## OVERVIEW

---

The primary objective for conducting the 2008 Commercial Vehicle Survey was to gather accurate travel data from commercial vehicles operating in the Boise-Nampa metropolitan area to update regional travel demand models. A wide range of data was gathered, including:

- Origins and destinations of commercial vehicle trips in the region
- Trip production rates by commercial vehicles
- Trip distribution by time of day
- Length of trips
- Vehicle occupancy
- Type of cargo transported

The universe for the survey consisted of all organizations, public and private, which have commercial vehicles in the metropolitan Boise – Nampa area.

This report contains:

- A summary of the methodology and major findings
- Charts and graphs of major findings from the survey
- A description of the sampling plan
- Copies of the survey materials
- Tables that show the results for most questions on the survey

## SELECTING THE SAMPLE

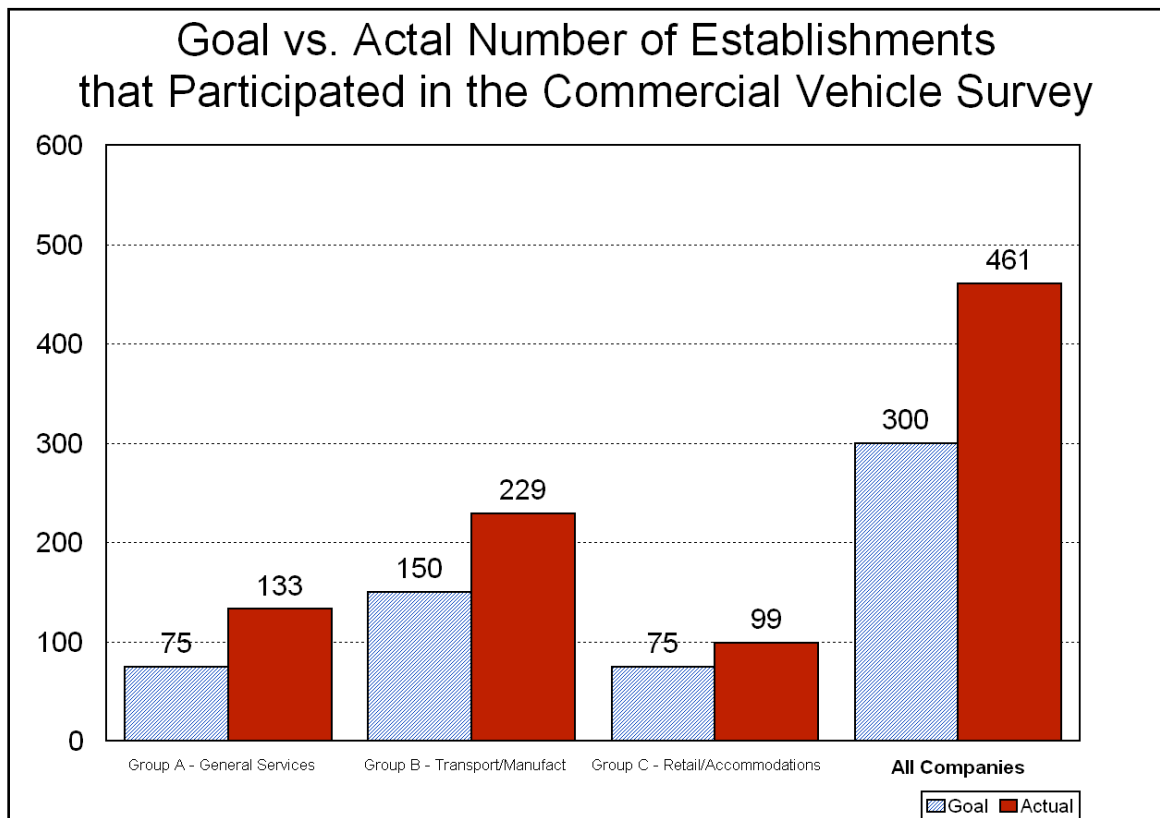
The sample was stratified to ensure that a representative sample of trips was obtained from each of three major groups of organizations:

- ✓ Group A – General Services Establishments with NAICS codes of 51, 52, 53, 54, 55, 56, 61, 62, and 81.
  - 51 Information
  - 52 Finance and Insurance
  - 53 Real Estate and Rental and Leasing
  - 54 Professional, Scientific and Technical Services
  - 55 Management of Companies and Enterprises
  - 56 Administrative and Support and Waste Management and Remediation Services
  - 61 Educational Services
  - 62 Health Care and Social Assistance
  - 81 Other Services (except Public Administration)
  
- ✓ Group B – Transportation, Warehousing, and Manufacturing Establishments with NAICS codes of 11, 21, 22, 23, 31, 33, 42, 48, and 49.
  - 11 Agriculture, Forestry, Fishing, and Hunting
  - 21 Mining
  - 22 Utilities
  - 23 Construction
  - 31-33 Manufacturing
  - 42 Wholesale Trade

- 48-49 Transportation and Warehousing
- ✓ Group C – Retail and Accommodations Establishments with NAICS codes of 44, 45, 71, and 72.
  - 44-45 Retail Trade
  - 71 Arts, Entertainment and Recreation
  - 72 Accommodation and Food Services

The goal was to obtain completed surveys from a total of 1,000 vehicles from 300 organizations in the region, including a minimum of 75 General Service establishments (Group A), 150 Transportation, Warehousing, and Manufacturing establishments (Group B), and 75 Retail/Accommodations establishments (Group C). The actual number of completed surveys was 1,128 from 461 different establishments. The goals for each sampling group were exceeded as shown in Figure 1.

FIGURE 1 – BUSINESS ESTABLISHMENT PARTICIPATION



### DESIGNING THE SURVEY

ETC Institute and Alliance Transportation group worked with COMPASS staff to develop the commercial vehicle survey instrument. The survey was designed to be a 24-hour travel diary that was kept for a representative cross-section of vehicles by each of the establishments that agreed to participate in the survey. The survey recruitment script and travel diary were structured and worded to allow participants to answer the questions easily.

The travel survey mail-out package included the following materials:

- A general information letter explaining the survey.

- A travel survey for a representative sample of vehicles from each establishment based on the number and types of vehicles that were owned or leased by the organization at the place that was contacted to participate in the survey.
- Travel-day reminder sheet.
- Postage-paid return envelope.
- Contact name and toll free number in the event that the organization had questions or concerns.

Copies of the survey instruments and supporting materials are provided in Appendices A and B of this report.

### **PILOT SURVEY**

ETC Institute conducted a pilot survey during November and early December 2007 with 31 commercial establishments in the study area to assess and evaluate the methods, materials, and processes in conducting the survey. The pilot survey included a complete pretest and evaluation of the full survey, including:

- Sample generation
- Telephone recruitment
- Survey mail-out
- Reminder call
- Retrieval call
- Data entry
- Trip geocoding
- Edit checks
- **Response rate of establishments agreeing to participate in the survey via telephone recruitment:** Thirty-eight percent (38%) or 38 of the 100 establishments that were initially contacted during the pilot test agreed to participate.
- **Proportion of recruited establishments that actually participated:** Of the 38 establishments that initially agreed to participate, 82% or 31 of the 38 establishments actually provided complete travel survey data.
- **Adequacy of survey forms and scripts for recruitment and retrieval:** No problems were identified with the design of survey forms. Most participants indicated that the surveys were easy to understand.
- **Use of edit check programs to test data input and file structure for errors:** ETC Institute tested the database that was prepared from the pilot test with an edit check program to test the logic and completeness of the responses. The overall quality of the data was determined to be very good.

### **CONDUCTING THE COMMERCIAL VEHICLE SURVEY**

One factor that can greatly influence the quality of data collected is the percentage of establishments recruited that actually participate in the survey. A low response rate can inherently bias the survey results. Consequently, a great deal of emphasis was placed on measures that would maximize the response rate to the survey.

Based on the results of the pilot survey, ETC Institute recruited 600 establishments from Ada and Canyon counties to participate in the survey. The goal was to obtain a total of 1,000 completed travel diaries which are kept for multiple vehicles per establishment.

As a result of the thorough recruitment and aggressive follow-up procedures used by ETC Institute, the actual participation rate was 76.8%. A total of 461 of the 600 establishments that were recruited provided 1,128 complete and useable surveys.

### ***BUILDING AWARENESS OF THE COMMERCIAL VEHICLE SURVEY***

Given the private nature of the data to be collected, public awareness was an important factor to the success of the survey. Persons who participated in the pilot survey indicated that the initial letter from COMPASS was important because they knew the survey was legitimate.

ETC Institute and Alliance Transportation Group worked with COMPASS to develop and administer an awareness campaign to inform the community about the commercial vehicle survey. The campaign involved a two-tiered strategy.

- Tier 1: General Awareness: This tier involved building general awareness about the study in the region through newspaper and other general media sources. Press releases were sent by COMPASS to newspapers, radio stations, and television stations in the region. Prior to the survey, articles were published in area newspapers to promote the survey.
- Tier 2: Detailed Awareness. The second tier involved direct communication with each of the establishments that were recruited to participate in the study. ETC Institute worked with COMPASS to design a direct mailing that included an advance notification letter and step-by-step instructions. In addition, ETC Institute established a toll-free number that allowed establishments in the study area to contact ETC Institute if they had questions about the study.

### ***SURVEY ADMINISTRATION PROCEDURES***

Of the 600 establishments that were selected at random to participate in the survey, 461 participated in the survey between February 2008 and April 2008. These 461 establishments provided completed travel diaries for a total of 1,128 vehicles. The major elements of the survey administration process are briefly described below:

- Pre-notification Letter. ETC Institute mailed a pre-notification letter to all establishments that were randomly selected to participate in the survey.
- Initial Solicitation. A few days after the pre-notification letters were mailed, ETC Institute called each establishment, to solicit their participation in the survey. Bilingual interviewers were used to ensure Spanish speaking organizations were represented in the survey. If an establishment agreed to participate, ETC Institute confirmed the address, the name of the contact person, company, and vehicle related data. This data included, but was not limited to, the following:
  - Number and types of commercial vehicles owned/leased by the organization at the place that was contacted.
  - Number of employees
  - Type of business
  - Vehicle Information – make, model, etc.
  - Hours of operation

Information that was gathered from each of the participating organizations was entered into the Company Database as soon as the establishment was recruited. Each establishment that was recruited was assigned a unique record number that allowed ETC Institute to monitor the organization's participation in the survey throughout the survey administration process.

- Mailing Travel Packets. Following the recruitment call, ETC Institute mailed establishments that agreed to participate in the survey travel survey packets for a representative cross-section of vehicles. In order to ensure that a single company or establishment was not over-represented in the survey, a limited number of surveys were sent to each organization that agreed to participate.

The number of diaries that were sent was based on the number of vehicles that were owned/leased by the established as shown below.

<u>Total # Vehicles</u>	<u># Diaries Sent</u>
1	1
2-3	up to 2
5-7	up to 4
8-10	up to 5
11-14	up to 6
15-19	up to 8
20+	up to 10

- **Reminder Calls.** ETC Institute placed a reminder call to each establishment the day before they were scheduled to begin the travel survey. The pre-travel day reminder call was used to confirm the organization's participation and reception of survey packet. The call was also used to (1) review the procedures for recording travel information to ensure participants understood the importance of recording specific addresses, (2) answer any questions that the company may have regarding the survey, (3) schedule a call-back time for the data retrieval call, (4) stress the importance of the survey, and (5) emphasize the anonymity of the data provided.
- **Data Retrieval.** ETC Institute placed a follow-up call at a pre-arranged callback time within two days after travel diary activity was scheduled. This call was used to retrieve trip data. After the activity and organizational information had been obtained over the phone, each organization was asked to return their travel surveys by mail in the postage-paid envelope provided in the survey packet. When the packets were received, ETC Institute reviewed the information on the travel diaries that were returned by mail to ensure they matched the data provided by phone. If there were discrepancies, ETC Institute called the establishment back to clarify any missing or unclear information.

## **VERIFYING AND EDITING SURVEY DATA**

ETC Institute prepared three data files for the commercial vehicle survey including:

- Company Information file
- Vehicle Information file
- Activity/Trip Information file

ETC Institute conducted data processing and geocoding activities concurrently with the data collection task.

As data were compiled into the database, they were edited and corrected. A data analyst from ETC Institute conducted ongoing verification of this aggregate, cumulative data file. ETC used an automated program to perform routine and customized quality checks on the data to confirm that submitted data met logic and completeness standards. The edit check program was used to check the following:

- Data range checks to ensure data are not outside the expected ranges
- Data checks for missing data
- Consistency between arrival and departure times

## **PROCESSING AND GEOCODING METHODOLOGY**

The objective of this task was to geocode the survey responses by company address, addresses where vehicles were garaged, and trip destination addresses to study area polygon layers including counties, zip codes, and traffic analysis zones. The geocoding process built a spatial (x, y coordinate) database of the survey information supporting the development of trip generation rates and trip distribution parameters to be used in COMPASS's regional travel demand model.



**Pre-Processing of Survey Record.** ETC Institute used several iterative data integrity checks and applied corrections before actual geocoding was conducted. This included standard checks for duplicate records and corrections to the spelling of street names and zip codes as well as a number of specialized write-queries designed to identify and fix any suspect data. This process of data preparation resulted in the high quality of the survey databases.

**Geocoding Process.** ETC Institute used a suite of modern software tools such as TransCAD, ArcView, Manifold GIS, and several custom geocoding and quality control engines to locate the survey records. Longitude and latitude were coded to an address, intersection, or site specific place name to within an accuracy of 1000 feet using a minimum of four and desired six decimal places. The key activities comprising the process and the approach to the geocoding process include:

- Developing consistent initial data coding (recording) requirements
- Acquiring and preparing suitable location reference GIS layers
- Geocoding the initial (pretest) results against the best reference layers
- Merging all trip survey responses into a single database
- Preparing survey responses for geocoding
- Iteratively geocoding survey records and verifying match (hit) rates
- Modifying geocoding process and reference data as needed to increase total matches

Geocoding logic checks were performed on the survey database against the reference theme address database to check for inconsistencies. Any records that were not compatible with the source database were flagged for inspection.

The basic process for geocoding the data involved the following steps: First, trip end addresses with zip codes were coded. This included the subset of trip end addresses that corresponded to the household addresses (trips ending at HOME). Next, an attempt to geocode the remaining (unmatched) trip end addresses was made by making use of the geocoding software's ability to use location indices in place of zip codes to locate valid addresses. For each record, the geocoding engine tried to locate the trip end address by parsing through the street network within the state/city specified for the address. The remaining (unmatched) records were then further processed in small batches (address modifications/cleanup, intersection address format cleanup, manual geocoding to highway addresses and landmarks/businesses).

TransCAD was used as the main geocoding engine for the more complex portions of the database. While ArcView (now ArcGIS) was used as the primary geocoding tool where reference address layers were of high quality, additional coding flexibility was often needed for more complex or voluminous data sets. Upon satisfactory completion of the geocoding process, ETC Institute provided COMPASS with a complete set of all geocoded data files.

## MAJOR FINDINGS

Some of the major findings from the commercial vehicle survey are described below. Additional tabular data results are provided in Appendix C.

**Cities where commercial vehicle trips ended.** The top four cities where trips made by commercial vehicles in the region ended are listed below based on the percentage of all trips that ended in that city.

- Boise - 46.7%
- Nampa - 16.2%
- Meridian - 13.9%
- Caldwell - 9.2%

**Zip codes where commercial vehicle trips ended.** The top five zip codes where trips made by commercial vehicles in the region ended are listed below based on the percentage of all trips that ended in that zip code.

- 83642 - 11.5%
- 83709 - 8.3%
- 83605 - 7.5%
- 83706 - 7.2%
- 83702 - 6.7%

**Routes used by commercial vehicles to get to their destination.** Participants in the survey were asked to record the major route that they used to get to each destination. The 10 routes that were most frequently used are listed below based on the percentage of all trips that involved a significant portion of their travel on the route.

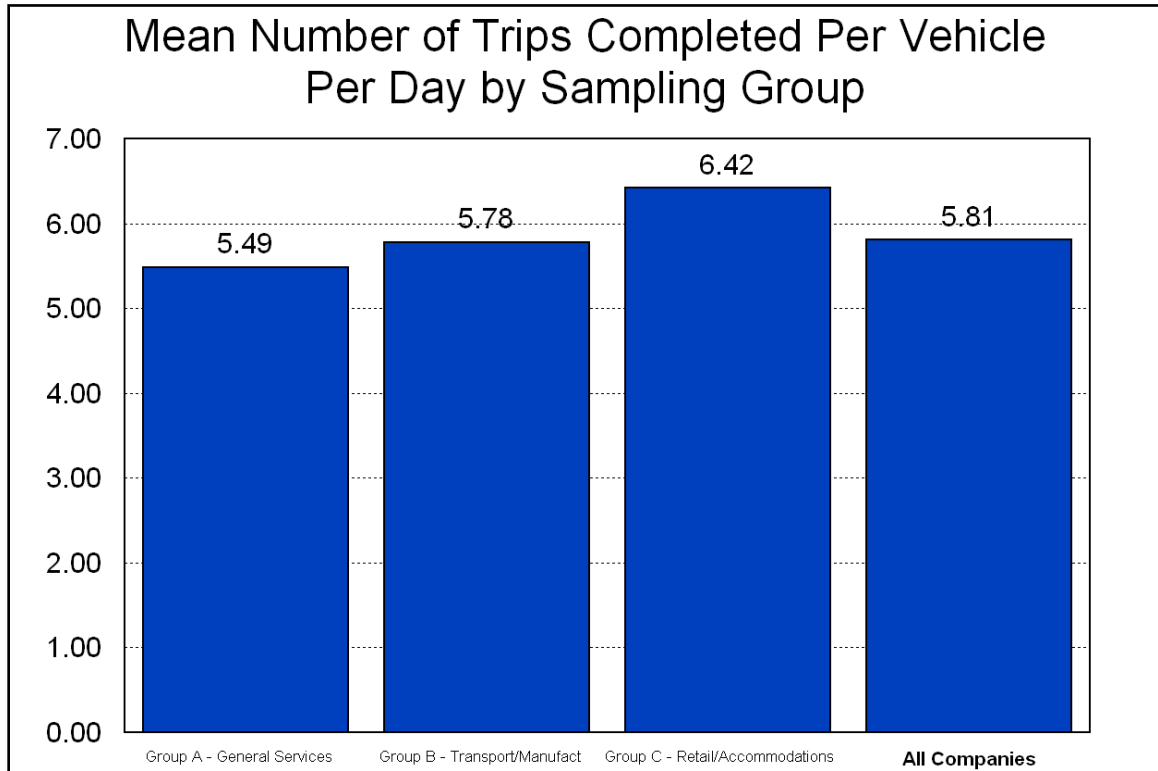
- I-84 - 12.1%
- Chinden Boulevard - 3.3%
- State Street - 3.3%
- Franklin Road or Boulevard- 3.2% (many drivers did not distinguish which route, so totals were merged)
- Eagle Road - 2.7%
- Fairview Avenue - 2.5%
- Overland Road – 2.0%
- Cole Road - 1.5%
- Cloverdale Road - 1.1%
- Emerald Street- 1.1%

**When commercial vehicle trips were completed.**

- Midnight and 6am. (1.1% of all commercial vehicle trips)
- Between 6am and 9am (18% of all trips)
- Between 9am and noon (31.7% of all trips)
- Between noon and 3pm (26.6% of all trips)
- Between 3pm and 6pm (18.2% of all trips)
- Between 6pm and midnight (4.1% of trips)

**Raw Daily Commercial Vehicle Trip Rates.** A total of 6,555 commercial vehicle trips were completed by the 1,128 vehicles that participated in the survey. This resulted in a trip generation rate of 5.81 commercial vehicle trips per day per vehicle. The actual number of trips that were completed varied by sampling group. Commercial vehicles in Group C (retail/accommodations) completed the most trips per day. Commercial vehicles in Group A (general services) completed the fewest trips per day. The raw sample trip rates for each of the three sampling groups is shown in Figure 2.

FIGURE 2 – MEAN NUMBER OF TRIPS COMPLETED BY SAMPLING GROUP



**Total Commercial Vehicle Trips.** Following the travel diary survey, a supplemental survey was conducted to collect information regarding vehicle fleet composition and daily vehicle utilization within each of the three sampling groups. An additional 439 companies (Group A – 125 companies; Group B – 143 companies; Group C – 171 companies) participated in this survey. Copies of the supplemental survey instrument and tabular data results are provided in Appendices D and E.

Trip rates by sampling group and vehicle class from the travel diary survey were expanded using the vehicle fleet composition and daily fleet utilization data obtained from the supplemental survey to develop an estimate of total commercial vehicle trips per day. The number of companies in each of the three sampling groups is based on Dun and Bradstreet data as of January 2008. Trip end location information from travel diary survey was then used to estimate the number of trip ends located inside the study area (internal trips) and outside the study area (internal-external trips). Table 1 shows the estimated total number of trips completed per day for companies in each of the three sampling groups along with an estimated number of all trips completed by all commercial vehicles in the region on a typical workday. Detailed expansion by sampling group and vehicle classification is provided in Appendix F.

TABLE 1 – ESTIMATED TRIP GENERATION BY SAMPLING GROUP

<b>Travel Characteristic</b>	<b>Group A – General Services</b>	<b>Group B – Transportation / Manufacturing</b>	<b>Group C – Retail / Accommodation</b>	<b>Overall</b>
Mean # Trips/Day Per Vehicle	5.84	5.04	6.60	6.35
Mean # Vehicles Per Company	3.28	5.77	1.07	3.23
Vehicle Utilization Rate Per Company	0.829	0.767	0.781	0.787
Estimated Number of Trips Completed Per Company Per Day	15.9	22.3	5.5	16.1
Estimated # of Companies in Ada/Canyon Counties	11,601	7,164	3,905	22,670
Estimated Number of Total Commercial Vehicle Trips Per Day	184,212	159,930	21,556	365,698
Percentage of Trip Ends in Study Area	90.6%	89.6%	94.8%	90.4%
Estimated Number of Total Internal Commercial Vehicle Trips Per Day	166,901	143,284	20,432	330,617

FIGURE 3 – PARTICIPATION BY TYPE OF COMPANY

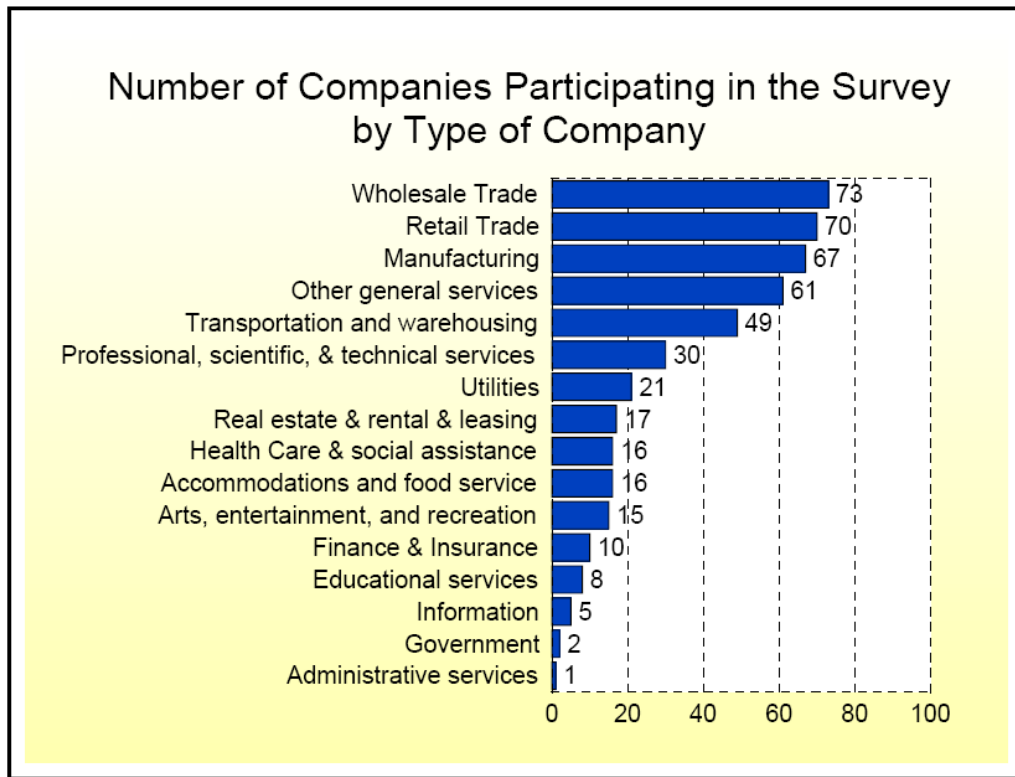


FIGURE 4 – DISTRIBUTION OF COMPANIES BY SAMPLING GROUP

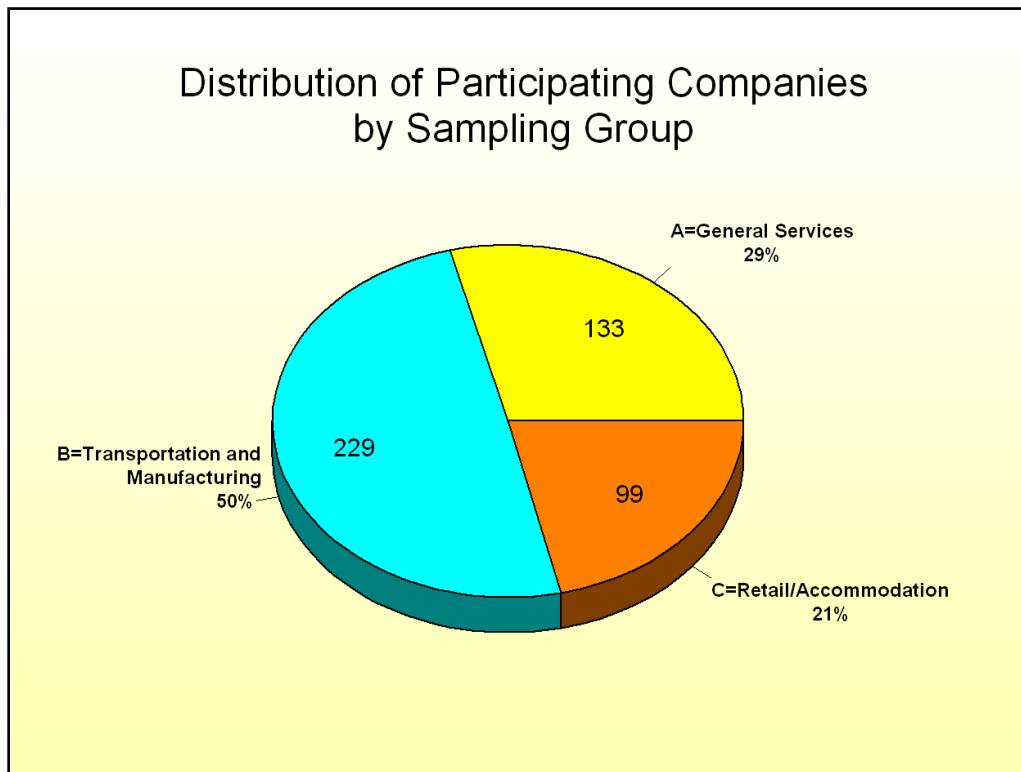


FIGURE 5 – AVERAGE NUMBER OF VEHICLE PER COMPANY BY SAMPLING GROUP

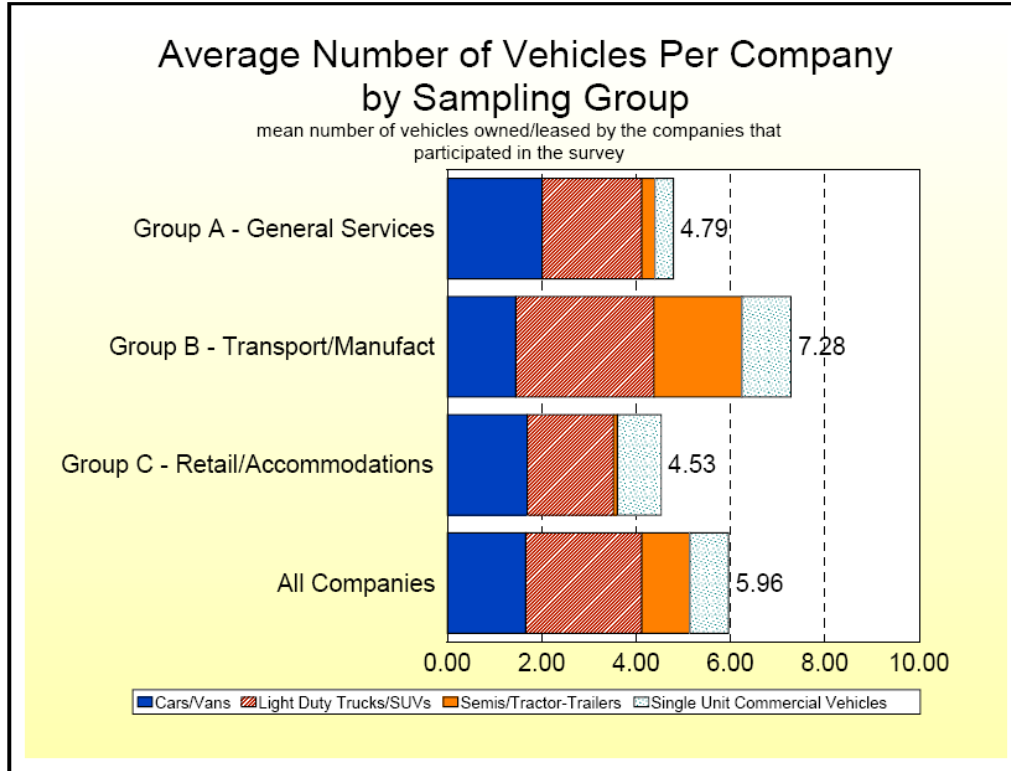


FIGURE 6 – TOTAL NUMBER OF PARTICIPATING VEHICLES BY SAMPLING GROUP

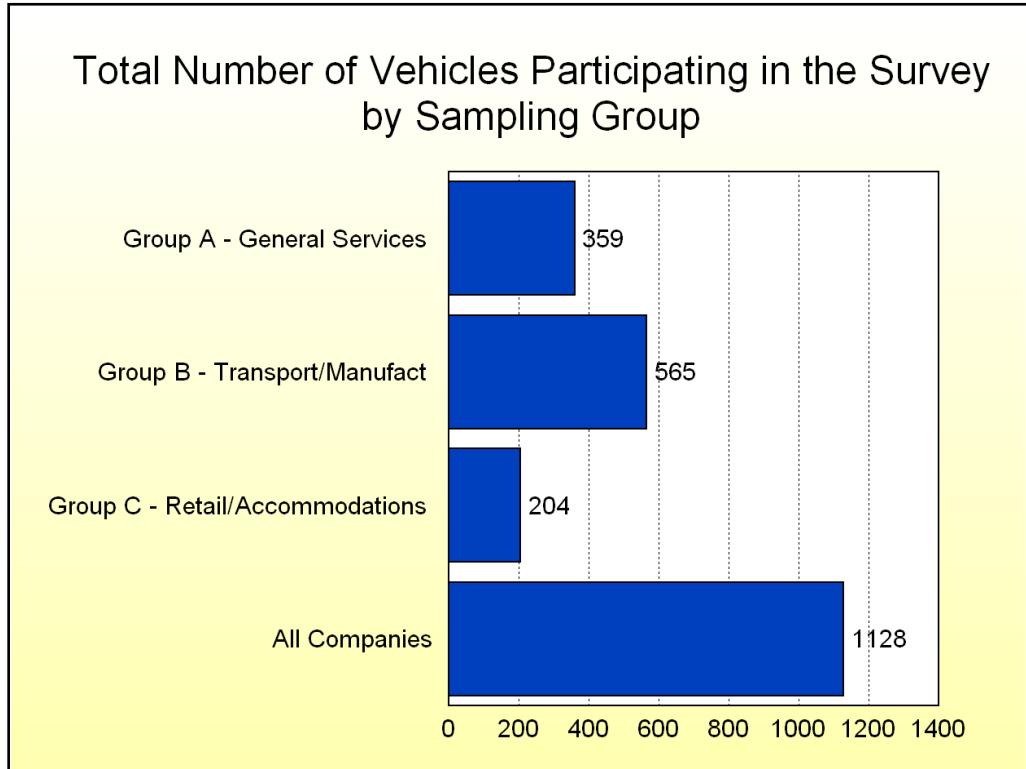


FIGURE 7 – TOTAL NUMBER OF PARTICIPATING VEHICLES BY VEHICLE TYPE

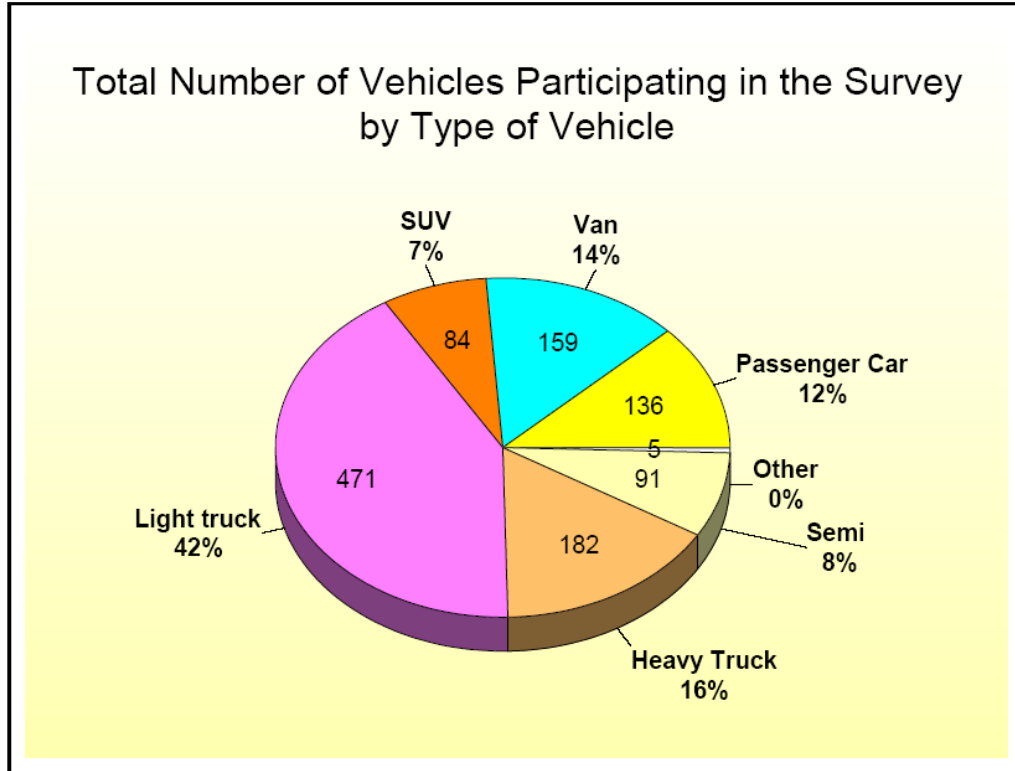


FIGURE 8 – STATE OF VEHICLE REGISTRATION

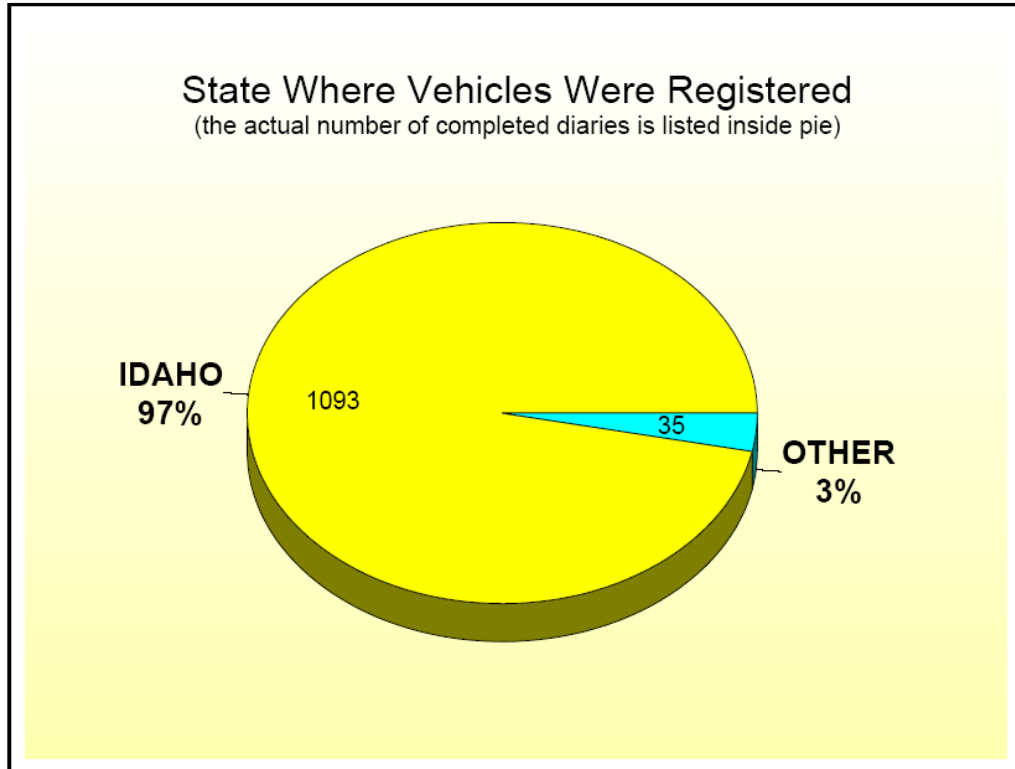


FIGURE 9 – AVERAGE NUMBER OF COMPLETED SURVEYS PER COMPANY BY SAMPLING GROUP

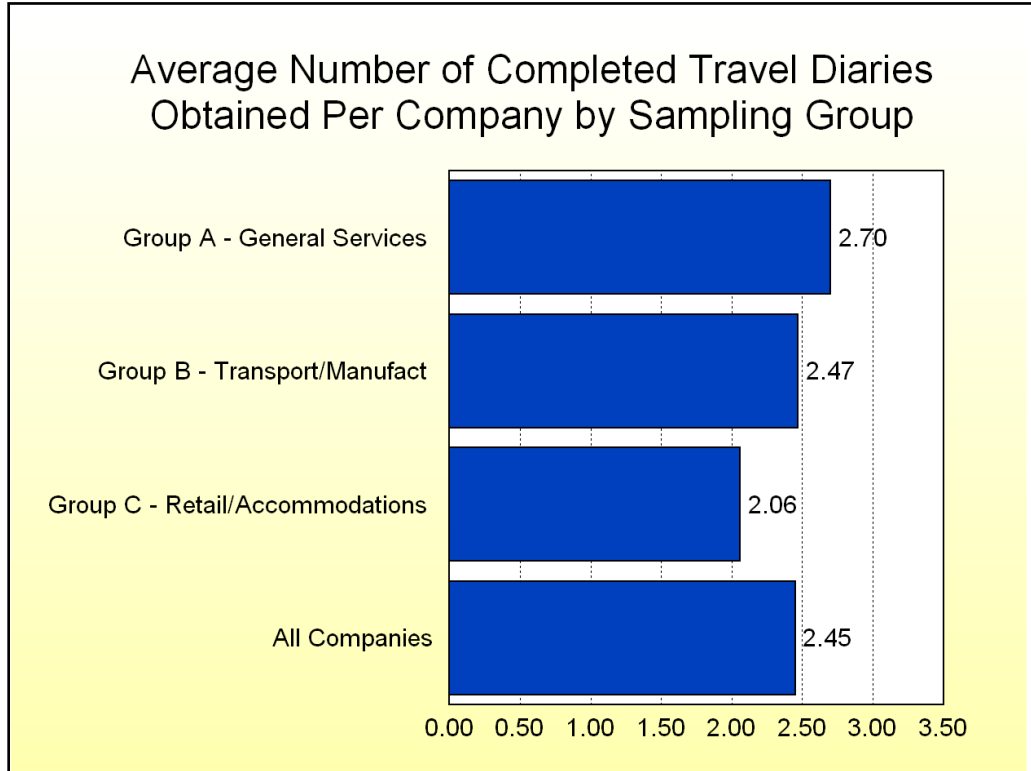


FIGURE 10 – MEAN NUMBER OF COMPLETED TRIPS PER VEHICLE BY SAMPLING GROUP

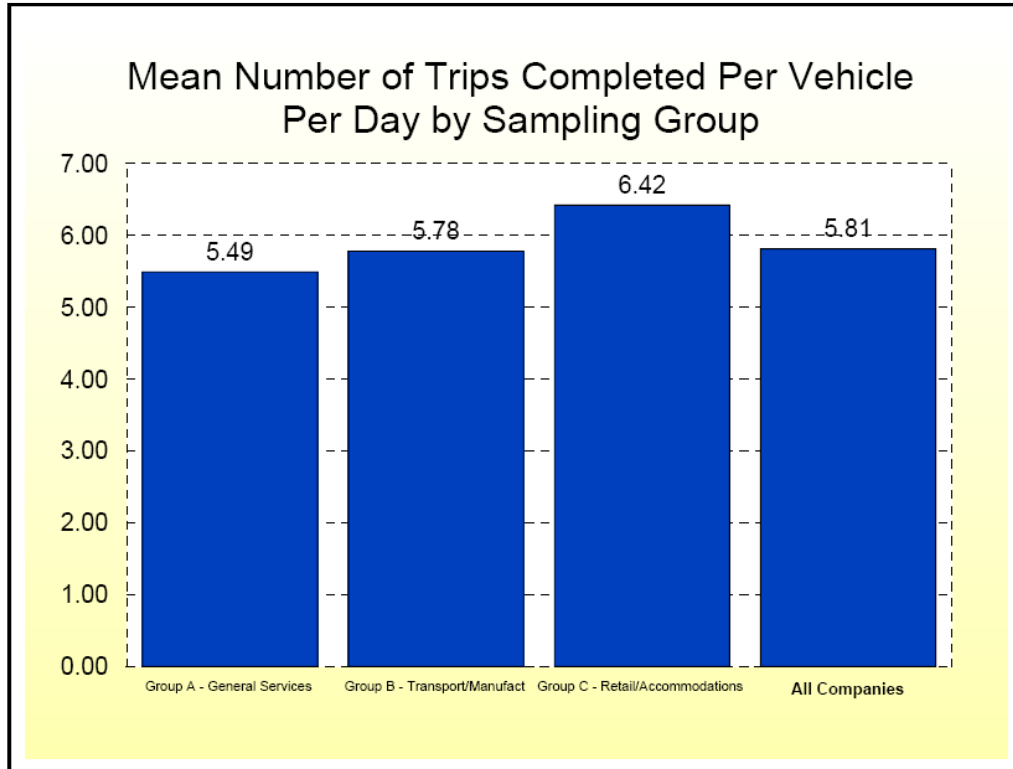




FIGURE 11 – ESTIMATED NUMBER OF COMPLETED TRIPS PER COMPANY BY SAMPLING GROUP

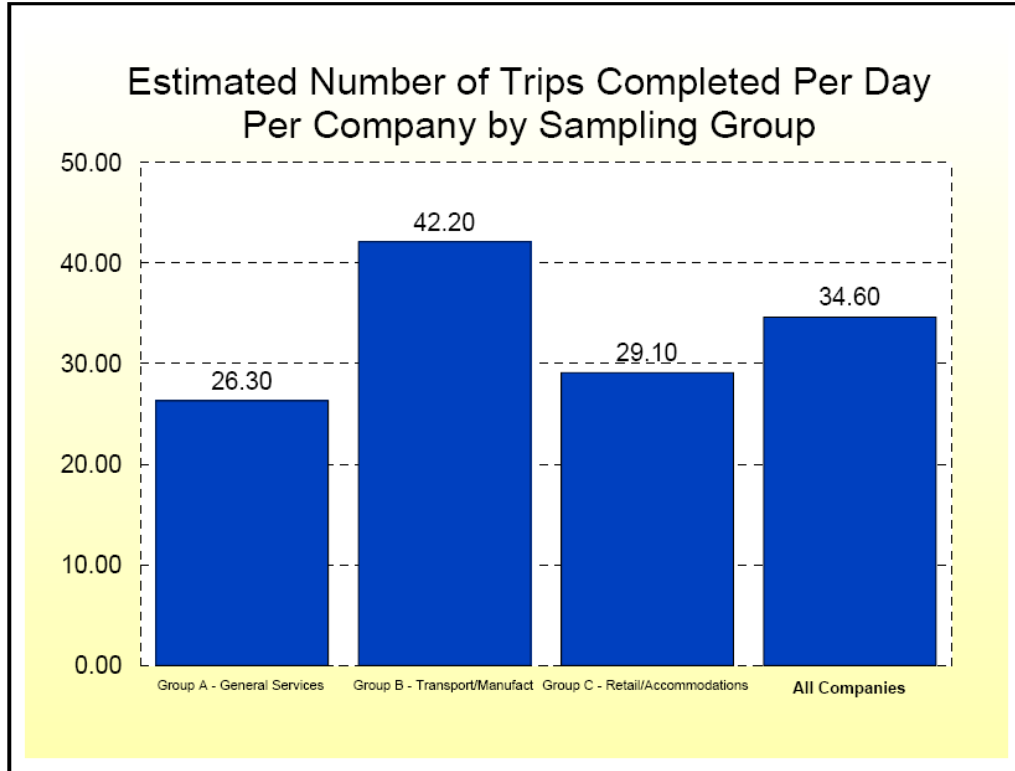


FIGURE 12 – TOP 10 DESTINATIONS BY CITY

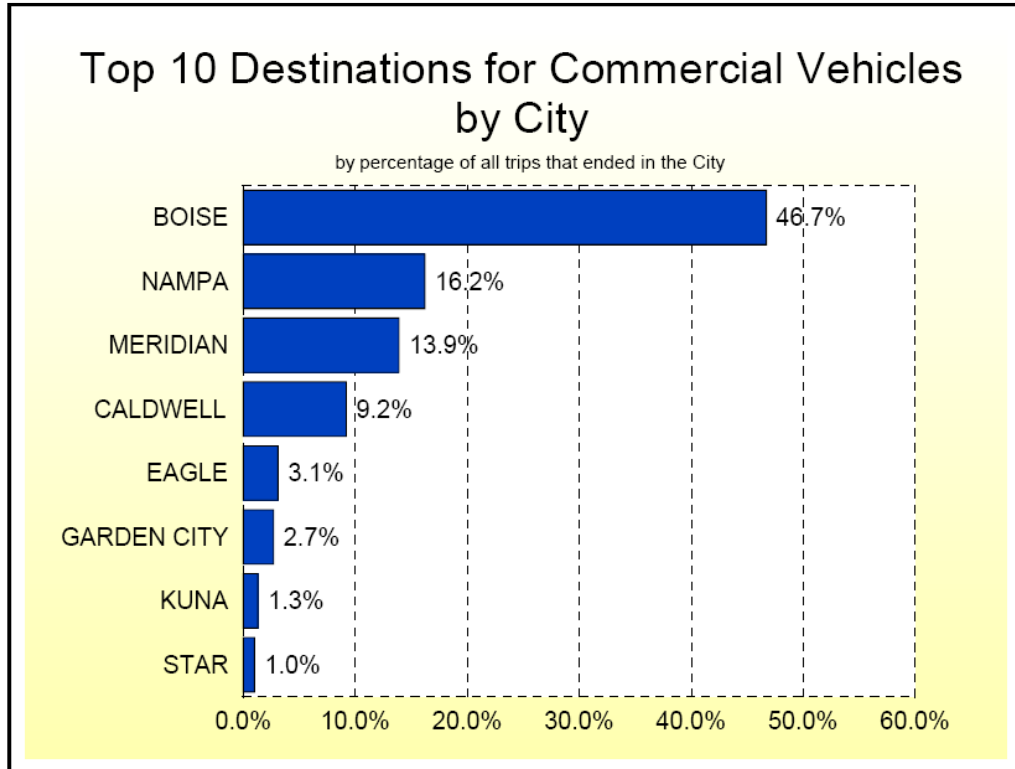


FIGURE 13 – TOP 10 DESTINATIONS BY ZIP CODE

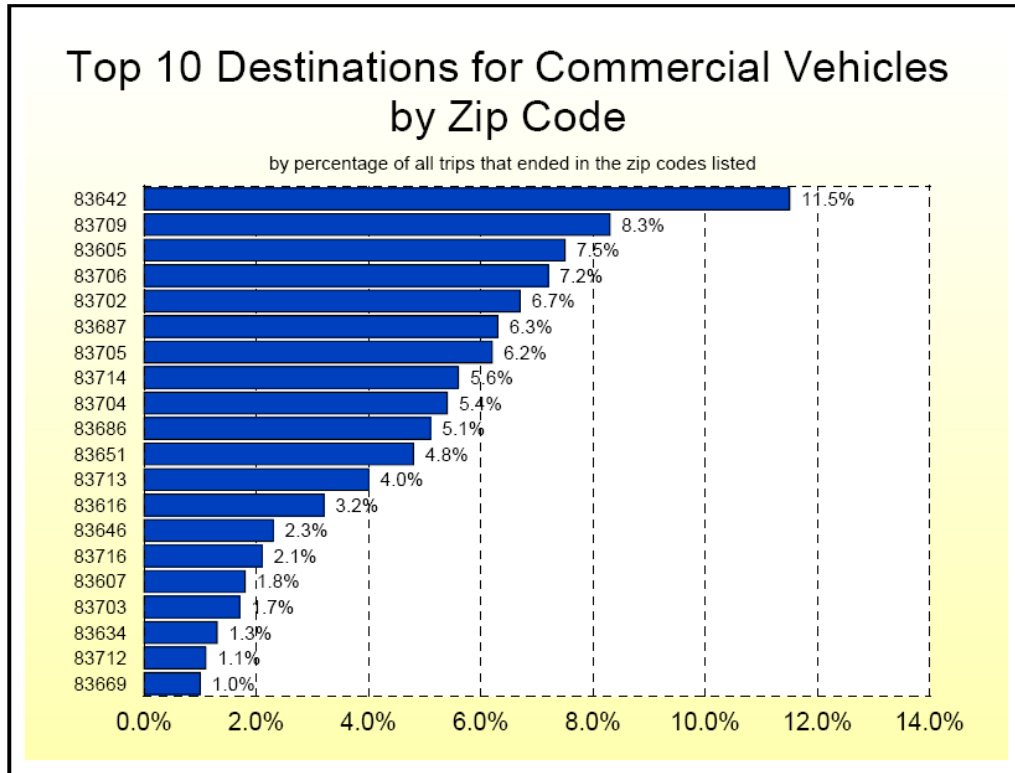


FIGURE 14 – REGIONAL ZIP CODE MAP

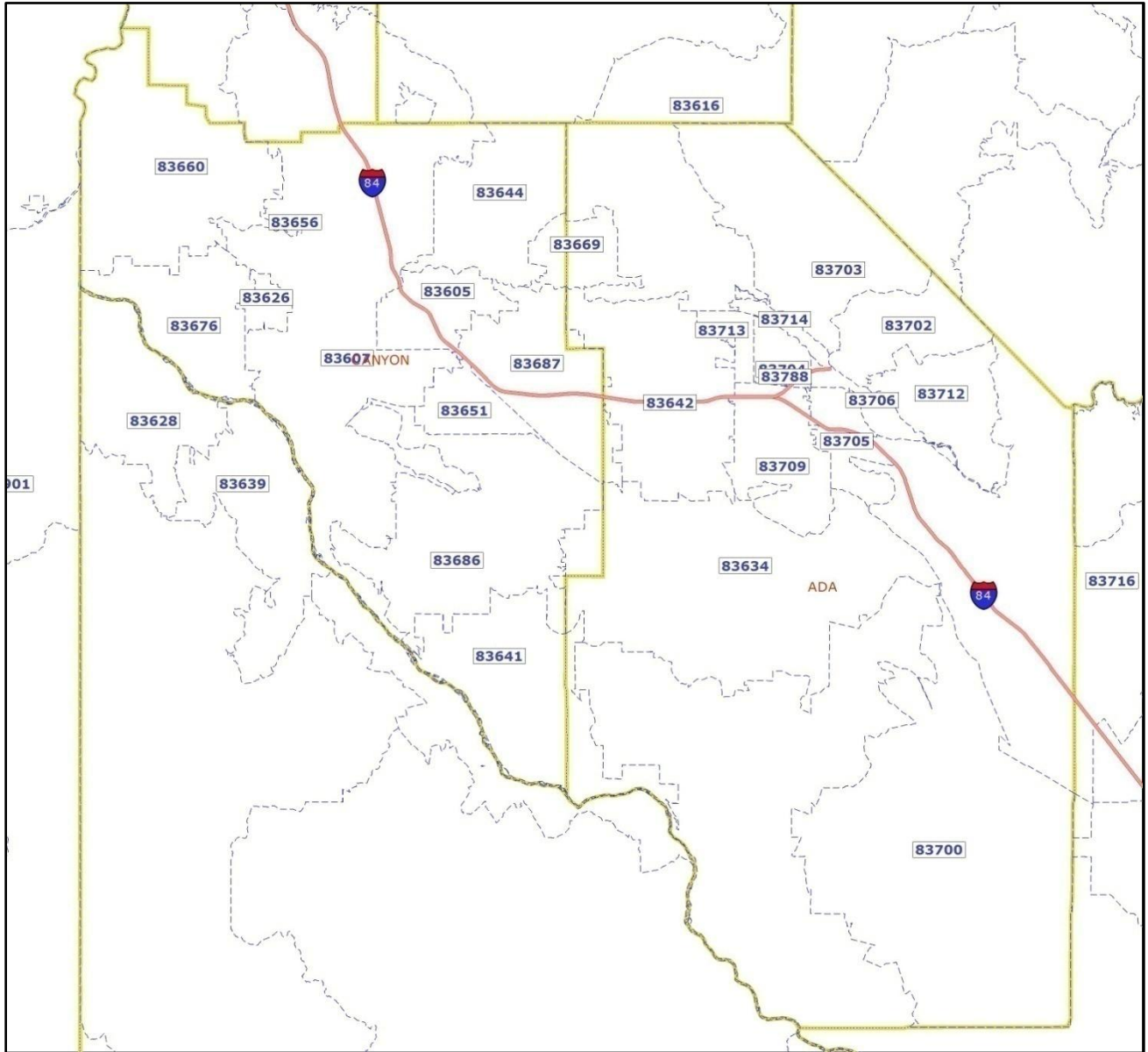


FIGURE 15 – TYPE OF PLACE AT TRIP END

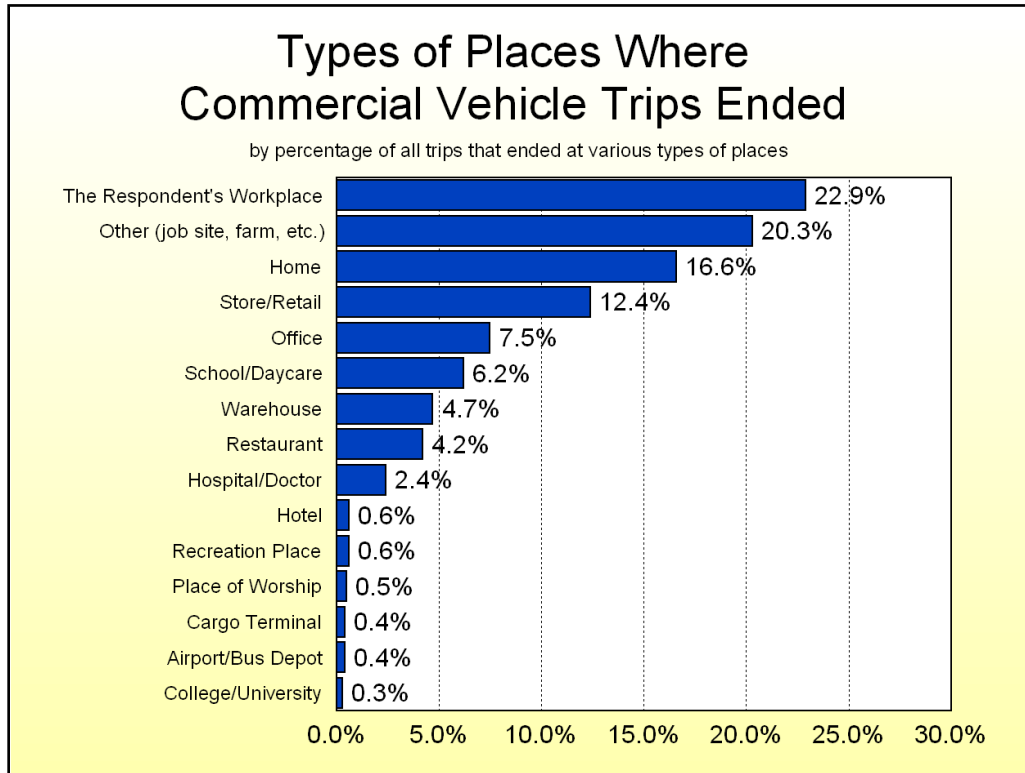


FIGURE 16 – TOP 15 ROUTES USED DURING TRIP

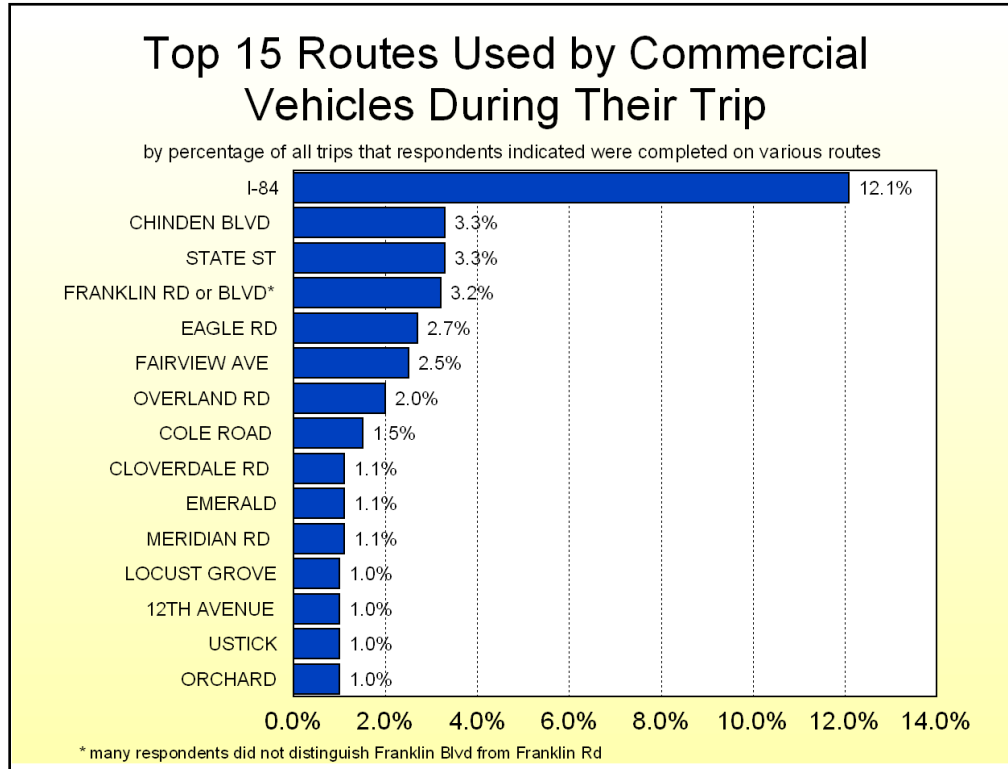


FIGURE 17 – TIME OF DAY DISTRIBUTION OF COMPLETED TRIPS

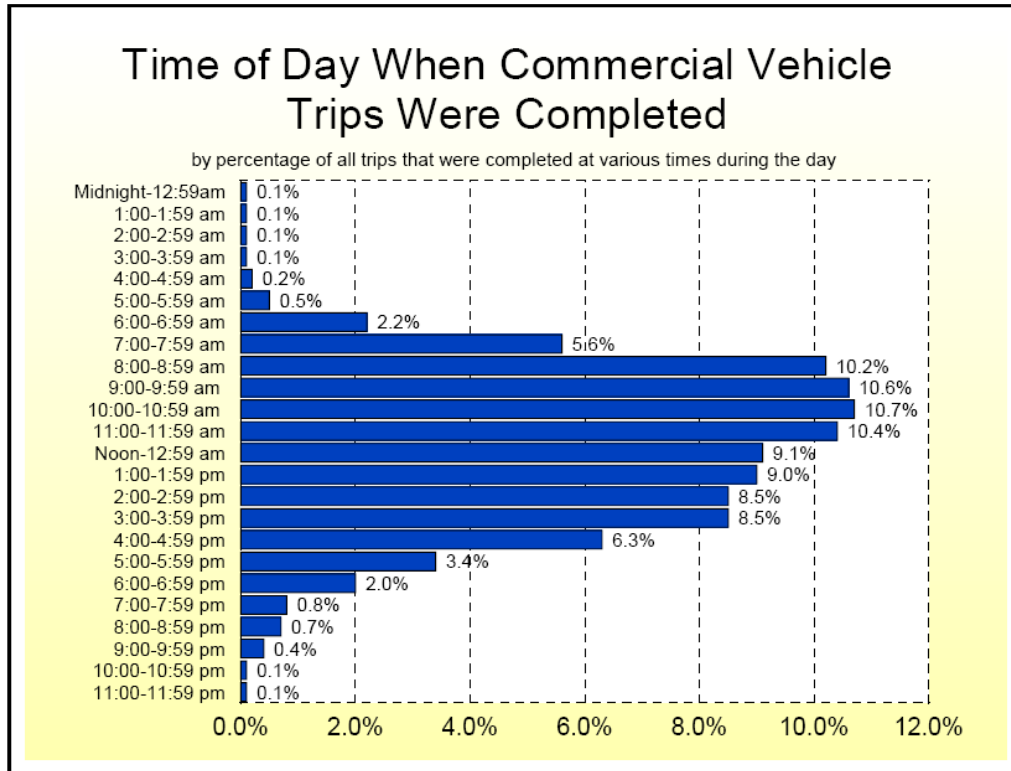
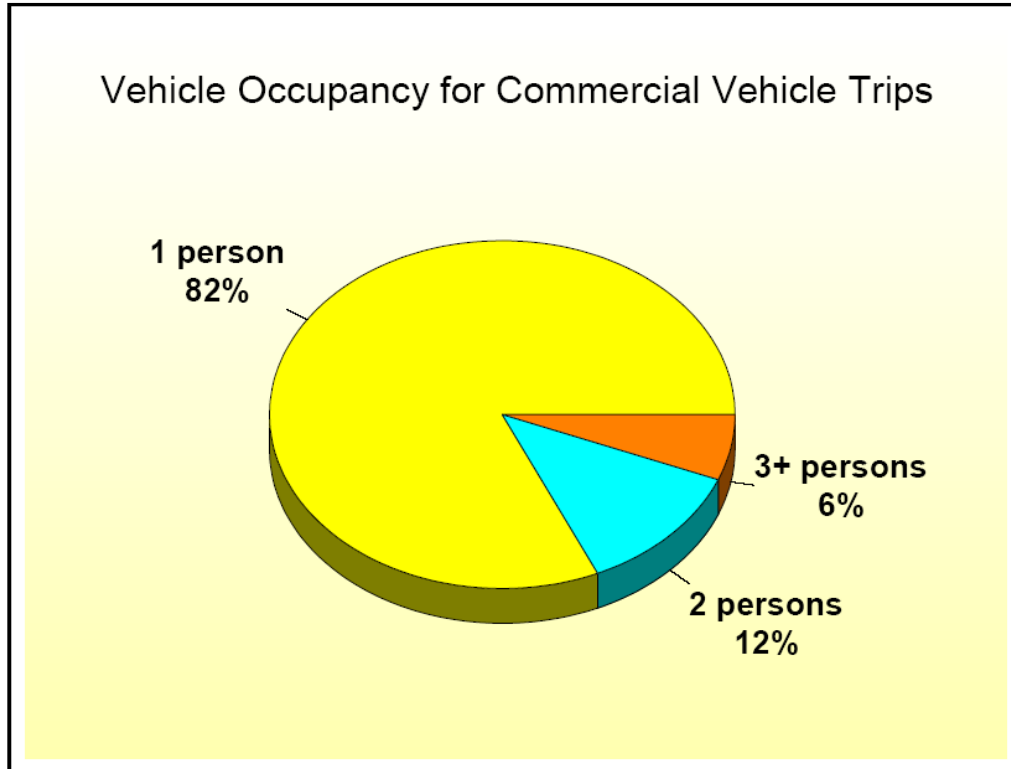


FIGURE 18 – VEHICLE OCCUPANCY DISTRIBUTION



## **SAMPLING PLAN**

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### **PURPOSE**

The primary purpose of the Commercial Vehicle Travel Survey was to gather travel data regarding vehicles, persons, and freight in the COMPASS metropolitan area.

Key elements of the Commercial Vehicle Survey involved the collection of the following types of data from commercial vehicles in the Boise area:

- Gathering origins and destinations for trips completed by commercial vehicle over a 24-hour period
- geocoding the trip origins and destinations
- gather data on vehicle classifications
- gathering data regarding the time of travel
- gather data about the types of cargo being transported by commercial vehicles in the region
- collecting other information as needed.

### **GEOGRAPHIC SCOPE OF THE SURVEY**

The sample frame consisted of all public and private commercial vehicles operating in the in the planning area for COMPASS. This included Ada and Canyon counties

### **DEMOGRAPHIC CHARACTERISTICS OF COMMERCE IN THE BOISE AREA**

Since the type and quantity of commercial vehicles in the region were likely to vary based on industry type, the sample was designed to obtain a representative cross-section of commercial vehicles from each of three groups.

Table 2 shows the total number of establishments in the 2-county Boise City - Nampa Metropolitan Statistical Area (MSA) by NAICS and the total number of employees in each category based on data that was provided by Dunn and Bradstreet as of January 2008. In order to ensure good representation from all commercial establishments in the region, the sampling plan for this project was designed as a stratified random sample of three groups of industries.

TABLE 2 – COMMERCIAL BUSINESS DISTRIBUTION BY NAICS

**Distribution of Commercial Businesses in the COMPASS REGION by NAICS**

Source: Dun and Bradstreet (January 2008)

NAICS	Description	Total Companies
<b>GROUP 1</b>	<b>GENERAL SERVICES</b>	
51	Information	444
52	Finance & insurance	1157
53	Real estate & rental & leasing	1156
54	Professional, scientific, & technical services	2725
55	Management of companies & enterprises (not published for metro areas)	40
56	Administrative & support & waste management & remediation service	1659
61	Educational services	427
62	Health care & social assistance	1677
81	Other services (except public administration)	2316
	<b>Subtotal Group 1</b>	<b>11601</b>
<b>GROUP 2</b>	<b>TRANSPORTATION / MANUFACTURING</b>	
21	Mining (not published for metro areas)	25
22	Utilities	65
23	Construction (not published for metro areas)	3137
31-33	Manufacturing	1216
42	Wholesale trade	1234
48-49	Transportation & warehousing	662
11	Agricultural	825
	<b>Subtotal Group 2</b>	<b>7164</b>
<b>GROUP 3</b>	<b>RETAIL /ACCOMMODATION / ENTERTAINMENT</b>	
44-45	Retail trade	2580
71	Arts, entertainment, & recreation	408
72	Accommodation & food services	917
	<b>Subtotal Group 3</b>	<b>3905</b>
	<b>TOTAL COMPANIES IN THE REGION</b>	<b>22670</b>

**SAMPLING GROUPS**

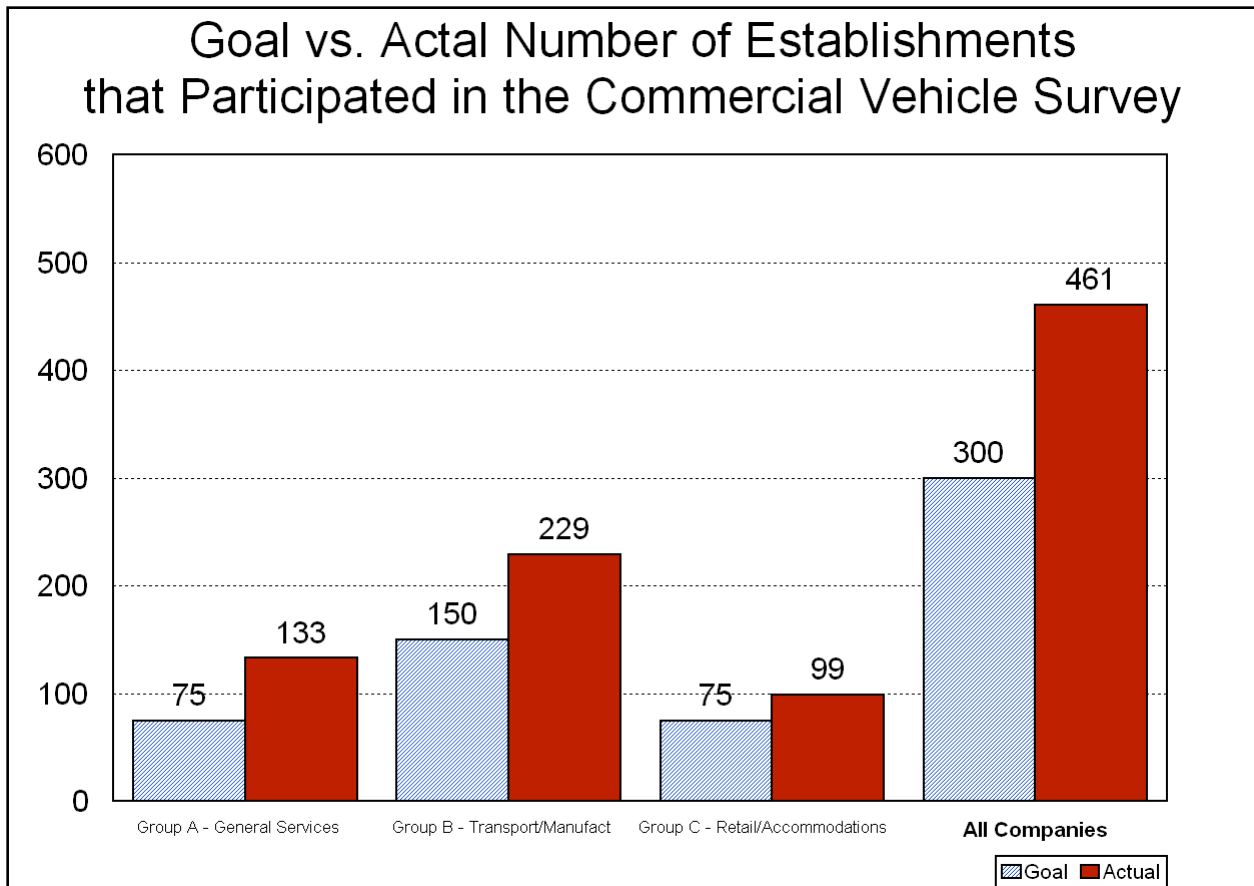
For the purposes of developing the sampling plan for this study, the NAICS categories were collapsed into three major groups. The three groups are briefly described below.

- Group 1: General Services. This included all employers, public and private, from the following NAICS code categories: 51, 52, 53, 54, 55, 56, 61, 62, and 81 (see the table above for a description of these codes). Group 1 included mostly professional service firms, educational institutions, hospitals, and governmental organizations (excluding transit agencies). There were a total of 11,601 establishments in this group.
- Group 2: Transportation/Manufacturing. This included all employers, public and private, from the following NAICS code categories: 11, 21, 22, 23, 31, 33, 42, 48, 49 (see the table above for a description of these codes). Group 2 included transportation, manufacturing and wholesale distribution companies including: trucking firms, moving companies, delivery services, warehouse distribution facilities, etc. There were a total of 7,164 establishments in this group.
- Group 3: Retail/Accommodations. This included all employers, public and private, from the following NAICS code categories: 44, 45, 71, and 72 (see the table on the previous page for a description of these codes). Group 3 included mostly restaurants, hotels/motels, home heating oil distributors, retail catalog distributors, sightseeing bus/tour operators, casino shuttles, home newspaper distributors, etc. There were a total of 3,905 establishments in this group.

The sample for the commercial vehicle survey was stratified to ensure that a statistically representative sample of commercial vehicles was obtained from each of these three groups. The goal was to administer the survey to approximately 75-100 organizations in groups A and C and to a total of 150-200 organizations in group B for a total of 300-400 establishments from the region. The actual number

of establishments that participated in the survey was 461, and the sampling goals were exceeding in all areas as shown in Figure 19.

FIGURE 19 - BUSINESS ESTABLISHMENT PARTICIPATION



#### TYPES OF VEHICLES THAT WERE INCLUDED

Vehicles were eligible to be selected for the survey if they were owned or operated by the private companies, non-profit organizations, and/or public agencies that were selected for the survey.

#### SAMPLE SIZE

To ensure the results were statistically representative of the metropolitan area as a whole and each of the three subgroups identified earlier, the survey was to be administered to a minimum of 1,000 vehicles. Completed surveys were obtained from a total of 1,128 vehicles.

The overall sample of 1,128 completed surveys has a precision of at least +/-2.8% at the 95% level of confidence.

#### SOURCE OF THE SAMPLE

The research team selected the sample from **Dun and Bradstreet (DNB)**. Dun and Bradstreet is one of the world's leading providers of business and employment data. The major advantages of DNB's database were that (1) the sample could be drawn by NAICS code which made it easier to ensure that the sample was representative of the employment categories that were identified for model, (2) contact



information (name, addresses, and phone numbers) was very reliable, and (3) vehicles that were not registered in Idaho, but operate in the Boise area were included in the sample.

## **SURVEY DESIGN**

The survey instrument had two parts. Part I (Recruitment Script) was used to gather information about the organization that owns/operates the vehicle. Part II (Travel Diary) was used to gather vehicle and trip information from the vehicles that are selected to participate in the survey.

Copies of each of these survey instruments are provided in the Appendices A and B of this report.

## **DATA THAT WAS GATHERED DURING THE INITIAL RECRUITMENT**

Information that was gathered during the initial recruitment included the “basic” and “vehicle classification” listed below:

### Basic Data

- Name/phone number of the contact for the organization
- NAICS code for the organization that agreed to participate in the survey
- Travel Day
- Travel Date
- Company or Name of Owner
- Street Address of location where vehicle is normally garaged
- City State ZIP of the location where the vehicle is normally garaged
- Vehicle Make
- Vehicle Model
- Name of driver (if available)
- Periods of the year that the organization may have seasonal freight or traffic peaks
- Hours that the company typically has drivers making deliveries and/or using company vehicles

### **VEHICLE CLASSIFICATION DATA**

In addition to the information listed above, the contact for the organization was asked to provide the total number of vehicles that are owned or leased by the company at the location that was contacted. The organization was also asked to provide the total number of vehicles in each of the following categories:

- Passenger Cars/Vans
- Light duty truck
- Single Unit 2-axle (6 wheels)
- Single Unit 3-axle (10 wheels)
- Single Unit 4-axle (14 wheels)
- Semi (all Tractor-Trailer combinations)

### **DATA GATHERED FROM THE TRAVEL DIARY**

The travel diary has been designed to capture vehicle information on the first page and up to 15 trips on the subsequent pages. Additional sheets were provided for vehicles that complete more than 15 trips.

Also, vehicle manifests were requested, when available, to supplement data gathered from the travel diary.

***The types of trip information that were gathered on the travel diary included:***

- The place the vehicle was located at 2:00 a.m. on the assigned travel day
- Street address (or nearest intersection) of location where vehicle began travel on travel day
- Name of each place visited
- Address including city, state, and zip OR Nearest street intersection or Landmark
- Arrival Time
- Departure Time
- Purpose of Trip
- Type of place
- Type of Cargo
- Number of passengers

***Primary Type of Place Options Included:***

- Office Building
- Retail / Shopping
- Industrial/Manufacturing
- Medical / Hospital
- School
- Government
- Residential
- Other

## CONCLUSIONS

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The purpose of this study was to provide vital inputs to the regional transportation planning and travel demand modeling process and to improve the travel demand modeling processes. Additional and more recent inputs provide COMPASS with the ability to be more responsive to the evolving transportation planning needs of the region.

The commercial vehicle survey (CVS) provided valuable information on the internal and external trip making characteristics of commercial vehicles in the study area; however, the primary focus was on the characteristics of trips within the study or originating within the study area. This data collection effort included recruiting businesses throughout the study area that have commercial vehicles that transport goods or make commercial trips related to services. To ensure the results were statistically representative of the metropolitan area as a whole and each of the three subgroups identified earlier, the survey was to be administered to a minimum of 1,000 vehicles. Completed surveys were obtained from a total of 1,128 vehicles.

**APPENDIX A – PART I (RECRUITMENT SCRIPT)**

---

Company#: \_\_\_\_\_

**COMPASS Commercial Vehicle Survey**  
**(Phone Recruitment Script)**

Date: \_\_\_\_\_ Interviewer: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_

NAICS Code from Sample: \_\_\_\_\_

This is \_\_\_\_\_. I'm calling for the Community Planning Association of Southwest Idaho and the Idaho Transportation Department. **We are not selling anything.** The reason I am calling is that we need input from (type of business - commercial, government, non-profit) organizations in the region to plan transportation improvements in Ada and Canyon Counties.

Are you familiar with vehicles that are owned or leased by your organization?

If YES - Continue

If No: Ask to speak to the appropriate person. And Repeat Introduction.

---

*Once you get the correct person:*

Your organization was selected at random to participate in a commercial vehicle travel survey. You may remember receiving a letter about this study in the mail recently. The study was also in the news. The results of the survey will be used to plan new and improved transportation services for Ada and Canyon Counties.

Would you be willing to help us by answering a few questions. All of the information you provide will be kept **completely confidential**.

**PART I: Vehicle Information:**

Can you tell me approximately how many of the following types of vehicles are currently owned or leased by your organization at your location. Do not include vehicles that are garaged at other locations in the region (if they have other locations, we will track those locations separately).

1. How many passenger cars or vans does the organization have? \_\_\_\_\_
2. How many light duty trucks or SUV's does the organization have? \_\_\_\_\_
3. How many Semis or Tractor/Trailer combinations does the organization have? \_\_\_\_\_
4. Does the organization have any single unit commercial vehicles, such a moving trucks, delivery trucks, tow trucks, or other commercial vehicles? YES NO

If YES: How many of each of the following does the organization have?

- 4a. Single Unit with 2-axles? \_\_\_\_\_
- 4b. Single Unit with 3-axles? \_\_\_\_\_
- 4c. Single Unit just 4-axles? \_\_\_\_\_

**PART II: Company Information:**

Next, I would like to get some information about your organization to be sure our sample is representative of the all commercial, government, and non-profit organizations in the region.

5. Approximately how many employees does your organization employ at this location (where the vehicles above are garaged)?

\_\_\_\_\_

6. **And which of the following best describes your organization?** (or ask the respondent to describe what their organization does and check the appropriate item below).

**Group 1: General Services**

- \_\_\_(11) Finance & insurance
- \_\_\_(12) Real estate & rental & leasing
- \_\_\_(13) Professional, scientific, & technical services
- \_\_\_(14) Administrative services
- \_\_\_(15) Educational services
- \_\_\_(16) Information
- \_\_\_(17) Health care & social assistance
- \_\_\_(18) Government
- \_\_\_(19) Other general services:\_\_\_\_\_

**Group 2: Transportation/Manufacturing**

- \_\_\_(21) Wholesale trade
- \_\_\_(22) Transportation & warehousing
- \_\_\_(23) Utilities
- \_\_\_(24) Manufacturing

**Group 3: Retail/Accommodations**

- \_\_\_(31) Retail trade
- \_\_\_(32) Arts, entertainment, & recreation
- \_\_\_(33) Accommodation & foodservices

7. **What are you typical hours of operation Monday thru Friday?**

**Time Open:** \_\_\_\_\_ **Time Close:** \_\_\_\_\_

8. **Are there any months during the year when your organization is making a significantly higher number of shipments or deliveries?**

- \_\_\_(1) YES: **Which months?** Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
- \_\_\_(2) NO

**PART III: Recruitment for Travel Diaries**

A key element of our study involves gathering information about travel patterns of specific vehicles in Ada and Canyon Counties. By studying the origins and destinations of commercial vehicle in the area, we can do a better job of planning transportation improvements for the region. Your participation would involve having employees who drive your organization’s vehicles keep a simple travel log for one day where they would record each destination they visit. [IF NEEDED - As our way of saying thank you, we will send you \$10 for each properly completed diary that is returned (up to a maximum of 10 diaries)]

Do you think you could help us distribute and collect the travel diaries.

**May I get your complete mailing address so that we can mail the diaries to you?**

9. What is your name? NAME of person: \_\_\_\_\_

10. Company/Organization Name: \_\_\_\_\_

11. \_\_\_\_\_  
*Street or Rural Route (w/Box #)* *Apartment # (if applicable)*

12. \_\_\_\_\_ *ID* 13. \_\_\_\_\_ ... 14. \_\_\_\_\_  
*City State Zip County*

15. Phone Number: \_\_\_\_\_

We will mail travel diaries to you in a few days. Since you have \_\_\_\_\_ vehicles (number of vehicles reported earlier), would it be all right if we sent you diaries for \_\_\_\_ vehicles (use the chart below NOT TO EXCEED 10 vehicles from any one location).

<u>Total # Vehicles</u>	<u># Diaries to Send</u>	
1 .....	1	
2-3 .....	up to 2	
5-7 .....	up to 4	TOTAL DIARIES SENT: _____
8-10 .....	up to 5	
11-14.....	up to 6	
15-19.....	up to 8	
20+ .....	up to 10	

When you receive the diaries, just follow the directions. It is very important that each diary stay with a specific vehicle, so if you change drivers during the day, have the first driver leave the diary with the next driver. After you have completed the diaries, please return them to us as soon as possible in the postage-paid envelope that will be provided.

Before I end this call, do you have any questions?

We appreciate your help. If you have questions, please call toll-free at 888-801-5368.

I'll follow-up with you in a few days to be sure you receive the travel diaries and answer any questions.

**APPENDIX B – PART II (TRAVEL DIARY)**

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Vehicle ID#: \_\_\_\_\_

Questions: Call 1-888-801-5368

**2007 COMPASS REGIONAL COMMERCIAL VEHICLE TRAVEL DIARY**

**TRAVEL DAY:** Month: \_\_\_\_\_ Date: \_\_\_\_\_

**VEHICLE INFORMATION:**

1. **Organization/Company (or Name of Owner):** \_\_\_\_\_
2. **Address where this vehicle is normally garaged:** Street: \_\_\_\_\_  
City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_ Zip code: \_\_\_\_\_
3. **Name(s)/contract information for vehicle operator(s) on the travel day in case we need to clarify some of the information provided: OPERATOR**
  - 1: **Name:** \_\_\_\_\_ **Phone:** \_\_\_\_\_ **Hours Operated This Vehicle:** \_\_\_\_\_
  - OPERATOR 2: Name:** \_\_\_\_\_ **Phone:** \_\_\_\_\_ **Hours Operated This Vehicle:** \_\_\_\_\_
  - OPERATOR 3: Name:** \_\_\_\_\_ **Phone:** \_\_\_\_\_ **Hours Operated This Vehicle:** \_\_\_\_\_
4. **Vehicle Description (circle one):** Passenger Car/Van/SUV    Light Duty Truck    Heavy Truck (2-Axles, 6 wheels)  
Heavy Truck (3-Axles, 10 wheels)    Heavy Truck (4-Axles, 14 wheels)    Semi (all tractor/trailer combinations)    Other: \_\_\_\_\_
5. **Vehicle Make:** \_\_\_\_\_
6. **Vehicle Model:** \_\_\_\_\_
7. **Gross Vehicle Weight (unloaded):** \_\_\_\_\_
8. **Odometer at Beginning of Travel Day:** \_\_\_\_\_
9. **Vehicle License Plate Number:** \_\_\_\_\_
10. **State Where Vehicle Is Registered:** \_\_\_\_\_
11. **Was this vehicle parked at the location in Question #2 above at 2:00 a.m. on your travel day? YES NO**

**If NO, please provide the address where this vehicle was parked at 2:00 a.m. on your travel day:**

**Name of Place:** \_\_\_\_\_

**Street Address:** \_\_\_\_\_

**City:** \_\_\_\_\_ **State:** \_\_\_\_\_ **Zip:** \_\_\_\_\_ **County:** \_\_\_\_\_

**What type of place is this (e.g., home, restaurant, warehouse, office, etc.):** \_\_\_\_\_

**GENERAL INSTRUCTIONS:** On the following pages, **please record ALL the places this vehicle visits** on your assigned travel day for a 24-hour period beginning at 2 a.m. Be sure to record the location of every stop you make even if it is very brief, such as stopping at a convenience store or picking up someone on your way to another destination. If this vehicle is driven by more than one person, each person should record his/her trips on the travel diary. Accuracy is very important, so please take time to record all information, especially the address, as legibly and completely as possible. If you have questions, please call us at 1-888-801-5368.



Trip #	WHERE did this trip END?	TYPE OF PLACE (circle one)	PURPOSE of Trip and ROUTE Taken (Circle one)	TIME (to the nearest minute)	TYPE OF CARGO (Circle one)	NUMBER IN VEHICLE (include yourself)
#1  Where is the FIRST place this vehicle went after 2am today?	_____ Name or Description of Place  _____ Address (or nearest intersection) include suffix (St., Ave., lane, etc.)  _____ State City _____  _____ County _____ Zip (if known) _____	<b>01 Your Workplace</b> 02 Store/Retail 03 Restaurant 04 School/Daycare 05 Hospital/Doctor 06 Recreation Place 07 Office 08 Home 09 Place of Worship 10 College/University 11 Hotel 12 Warehouse 13 Cargo Terminal 14 Airport/Bus Depot 15 Other: _____	<b>What was the purpose of this trip?</b> (1) Return to your work place (2) Delivery (3) Pick-up (4) Pick-up and Delivery (5) Maintenance (fuel, oil, etc.) (6) Driver Needs (lunch, etc.) (7) Other Business (8) Other Non-Business  <b>List One of the Major Routes Used for this Trip:</b> _____	What time did this trip <u>START</u> ?  Time: _____ Circle one: AM PM  What time did this trip <u>END</u> ?  Time: _____ Circle one: AM PM	<b>What type of cargo did you carry?</b> Be specific. Write "NONE" if you did not transport cargo?   <b>How Full Was This Vehicle?</b> <b>(Circle one)</b> 00 Empty 01 1/4 full 02 1/2 full 03 3/4 full 04 full	
#2  The next place this vehicle went was:	_____ Name or Description of Place  _____ Address (or nearest intersection) include suffix (St., Ave., lane, etc.)  _____ State City _____  _____ County _____ Zip (if known) _____	<b>01 Your Workplace</b> 02 Store/Retail 03 Restaurant 04 School/Daycare 05 Hospital/Doctor 06 Recreation Place 07 Office 08 Home 09 Place of Worship 10 College/University 11 Hotel 12 Warehouse 13 Cargo Terminal 14 Airport/Bus Depot 15 Other: _____	<b>What was the purpose of this trip?</b> (1) Return to your work place (2) Delivery (3) Pick-up (4) Pick-up and Delivery (5) Maintenance (fuel, oil, etc.) (6) Driver Needs (lunch, etc.) (7) Other Business (8) Other Non-Business  <b>List One of the Major Routes Used for this Trip:</b> _____	What time did this trip <u>START</u> ?  Time: _____ Circle one: AM PM  What time did this trip <u>END</u> ?  Time: _____ Circle one: AM PM	<b>What type of cargo did you carry?</b> Be specific. Write "NONE" if you did not transport cargo?   <b>How Full Was This Vehicle?</b> <b>(Circle one)</b> 00 Empty 01 1/4 full 02 1/2 full 03 3/4 full 04 full	
#3  The next place this vehicle went was:	_____ Name or Description of Place  _____ Address (or nearest intersection) include suffix (St., Ave., lane, etc.)  _____ State City _____  _____ County _____ Zip (if known) _____	<b>01 Your Workplace</b> 02 Store/Retail 03 Restaurant 04 School/Daycare 05 Hospital/Doctor 06 Recreation Place 07 Office 08 Home 09 Place of Worship 10 College/University 11 Hotel 12 Warehouse 13 Cargo Terminal 14 Airport/Bus Depot 15 Other: _____	<b>What was the purpose of this trip?</b> (1) Return to your work place (2) Delivery (3) Pick-up (4) Pick-up and Delivery (5) Maintenance (fuel, oil, etc.) (6) Driver Needs (lunch, etc.) (7) Other Business (8) Other Non-Business  <b>List One of the Major Routes Used for this Trip:</b> _____	What time did this trip <u>START</u> ?  Time: _____ Circle one: AM PM  What time did this trip <u>END</u> ?  Time: _____ Circle one: AM PM	<b>What type of cargo did you carry?</b> Be specific. Write "NONE" if you did not transport cargo?   <b>How Full Was This Vehicle?</b> <b>(Circle one)</b> 00 Empty 01 1/4 full 02 1/2 full 03 3/4 full 04 full	

Trip #	WHERE did this trip END?	TYPE OF PLACE (circle one)	PURPOSE of Trip and ROUTE Taken (Circle one)	TIME (to the nearest minute)	TYPE OF CARGO (Circle one)	NUMBER IN VEHICLE (include yourself)
#4  The next place this vehicle went was:	_____ Name or Description of Place  _____ Address (or nearest intersection) include suffix (St., Ave., lane, etc.)  _____ State City _____  _____ County _____ Zip (if known) _____	<b>01 Your Workplace</b> 02 Store/Retail 03 Restaurant 04 School/Daycare 05 Hospital/Doctor 06 Recreation Place 07 Office 08 Home 09 Place of Worship 10 College/University 11 Hotel 12 Warehouse 13 Cargo Terminal 14 Airport/Bus Depot 15 Other: _____	<b>What was the purpose of this trip?</b> (1) Return to your work place (2) Delivery (3) Pick-up (4) Pick-up and Delivery (5) Maintenance (fuel, oil, etc.) (6) Driver Needs (lunch, etc.) (7) Other Business (8) Other Non-Business  <b>List One of the Major Routes Used for this Trip:</b> _____	What time did this trip <b>START</b> ?  Time: _____ Circle one: AM PM  What time did this trip <b>END</b> ?  Time: _____ Circle one: AM PM	<b>What type of cargo did you carry?</b> Be specific. Write "NONE" if you did not transport cargo?      <b>How Full Was This Vehicle?</b> (Circle one) 00 Empty 01 1/4 full 02 1/2 full 03 3/4 full 04 full	
#5  The next place this vehicle went was:	_____ Name or Description of Place  _____ Address (or nearest intersection) include suffix (St., Ave., lane, etc.)  _____ State City _____  _____ County _____ Zip (if known) _____	<b>01 Your Workplace</b> 02 Store/Retail 03 Restaurant 04 School/Daycare 05 Hospital/Doctor 06 Recreation Place 07 Office 08 Home 09 Place of Worship 10 College/University 11 Hotel 12 Warehouse 13 Cargo Terminal 14 Airport/Bus Depot 15 Other: _____	<b>What was the purpose of this trip?</b> (1) Return to your work place (2) Delivery (3) Pick-up (4) Pick-up and Delivery (5) Maintenance (fuel, oil, etc.) (6) Driver Needs (lunch, etc.) (7) Other Business (8) Other Non-Business  <b>List One of the Major Routes Used for this Trip:</b> _____	What time did this trip <b>START</b> ?  Time: _____ Circle one: AM PM  What time did this trip <b>END</b> ?  Time: _____ Circle one: AM PM	<b>What type of cargo did you carry?</b> Be specific. Write "NONE" if you did not transport cargo?      <b>How Full Was This Vehicle?</b> (Circle one) 00 Empty 01 1/4 full 02 1/2 full 03 3/4 full 04 full	
#6  The next place this vehicle went was:	_____ Name or Description of Place  _____ Address (or nearest intersection) include suffix (St., Ave., lane, etc.)  _____ State City _____  _____ County _____ Zip (if known) _____	<b>01 Your Workplace</b> 02 Store/Retail 03 Restaurant 04 School/Daycare 05 Hospital/Doctor 06 Recreation Place 07 Office 08 Home 09 Place of Worship 10 College/University 11 Hotel 12 Warehouse 13 Cargo Terminal 14 Airport/Bus Depot 15 Other: _____	<b>What was the purpose of this trip?</b> (1) Return to your work place (2) Delivery (3) Pick-up (4) Pick-up and Delivery (5) Maintenance (fuel, oil, etc.) (6) Driver Needs (lunch, etc.) (7) Other Business (8) Other Non-Business  <b>List One of the Major Routes Used for this Trip:</b> _____	What time did this trip <b>START</b> ?  Time: _____ Circle one: AM PM  What time did this trip <b>END</b> ?  Time: _____ Circle one: AM PM	<b>What type of cargo did you carry?</b> Be specific. Write "NONE" if you did not transport cargo?      <b>How Full Was This Vehicle?</b> (Circle one) 00 Empty 01 1/4 full 02 1/2 full 03 3/4 full 04 full	

Trip #	WHERE did this trip END?	TYPE OF PLACE (circle one)	PURPOSE of Trip and ROUTE Taken (Circle one)	TIME (to the nearest minute)	TYPE OF CARGO (Circle one)	NUMBER IN VEHICLE (include yourself)
#7  The next place this vehicle went was:	_____ Name or Description of Place  _____ Address (or nearest intersection) include suffix (St., Ave., lane, etc.)  _____ State City _____  _____ County _____ Zip (if known) _____	<b>01 Your Workplace</b> 02 Store/Retail 03 Restaurant 04 School/Daycare 05 Hospital/Doctor 06 Recreation Place 07 Office 08 Home 09 Place of Worship 10 College/University 11 Hotel 12 Warehouse 13 Cargo Terminal 14 Airport/Bus Depot 15 Other: _____	<b>What was the purpose of this trip?</b> (1) Return to your work place (2) Delivery (3) Pick-up (4) Pick-up and Delivery (5) Maintenance (fuel, oil, etc.) (6) Driver Needs (lunch, etc.) (7) Other Business (8) Other Non-Business  <b>List One of the Major Routes Used for this Trip:</b> _____	What time did this trip <u>START</u> ?  Time: _____ Circle one: AM PM  What time did this trip <u>END</u> ?  Time: _____ Circle one: AM PM	<b>What type of cargo did you carry?</b> Be specific. Write "NONE" if you did not transport cargo?  <b>How Full Was This Vehicle?</b> <b>(Circle one)</b> 00 Empty 01 1/4 full 02 1/2 full 03 3/4 full 04 full	
#8  The next place this vehicle went was:	_____ Name or Description of Place  _____ Address (or nearest intersection) include suffix (St., Ave., lane, etc.)  _____ State City _____  _____ County _____ Zip (if known) _____	<b>01 Your Workplace</b> 02 Store/Retail 03 Restaurant 04 School/Daycare 05 Hospital/Doctor 06 Recreation Place 07 Office 08 Home 09 Place of Worship 10 College/University 11 Hotel 12 Warehouse 13 Cargo Terminal 14 Airport/Bus Depot 15 Other: _____	<b>What was the purpose of this trip?</b> (1) Return to your work place (2) Delivery (3) Pick-up (4) Pick-up and Delivery (5) Maintenance (fuel, oil, etc.) (6) Driver Needs (lunch, etc.) (7) Other Business (8) Other Non-Business  <b>List One of the Major Routes Used for this Trip:</b> _____	What time did this trip <u>START</u> ?  Time: _____ Circle one: AM PM  What time did this trip <u>END</u> ?  Time: _____ Circle one: AM PM	<b>What type of cargo did you carry?</b> Be specific. Write "NONE" if you did not transport cargo?  <b>How Full Was This Vehicle?</b> <b>(Circle one)</b> 00 Empty 01 1/4 full 02 1/2 full 03 3/4 full 04 full	
#9  The next place this vehicle went was:	_____ Name or Description of Place  _____ Address (or nearest intersection) include suffix (St., Ave., lane, etc.)  _____ State City _____  _____ County _____ Zip (if known) _____	<b>01 Your Workplace</b> 02 Store/Retail 03 Restaurant 04 School/Daycare 05 Hospital/Doctor 06 Recreation Place 07 Office 08 Home 09 Place of Worship 10 College/University 11 Hotel 12 Warehouse 13 Cargo Terminal 14 Airport/Bus Depot 15 Other: _____	<b>What was the purpose of this trip?</b> (1) Return to your work place (2) Delivery (3) Pick-up (4) Pick-up and Delivery (5) Maintenance (fuel, oil, etc.) (6) Driver Needs (lunch, etc.) (7) Other Business (8) Other Non-Business  <b>List One of the Major Routes Used for this Trip:</b> _____	What time did this trip <u>START</u> ?  Time: _____ Circle one: AM PM  What time did this trip <u>END</u> ?  Time: _____ Circle one: AM PM	<b>What type of cargo did you carry?</b> Be specific. Write "NONE" if you did not transport cargo?  <b>How Full Was This Vehicle?</b> <b>(Circle one)</b> 00 Empty 01 1/4 full 02 1/2 full 03 3/4 full 04 full	

Trip #	WHERE did this trip END?	TYPE OF PLACE (circle one)	PURPOSE of Trip and ROUTE Taken (Circle one)	TIME (to the nearest minute)	TYPE OF CARGO (Circle one)	NUMBER IN VEHICLE (include yourself)
#10  The next place this vehicle went was:	_____ Name or Description of Place  _____ Address (or nearest intersection) include suffix (St., Ave., lane, etc.)  _____ City State  _____ County Zip (if known)	<b>01 Your Workplace</b> 02 Store/Retail 03 Restaurant 04 School/Daycare 05 Hospital/Doctor 06 Recreation Place 07 Office 08 Home 09 Place of Worship 10 College/University 11 Hotel 12 Warehouse 13 Cargo Terminal 14 Airport/Bus Depot 15 Other: _____	<b>What was the purpose of this trip?</b> (1) Return to your work place (2) Delivery (3) Pick-up (4) Pick-up and Delivery (5) Maintenance (fuel, oil, etc.) (6) Driver Needs (lunch, etc.) (7) Other Business (8) Other Non-Business  <b>List One of the Major Routes Used for this Trip:</b> _____	What time did this trip <b>START</b> ?  Time: _____ Circle one: AM PM  What time did this trip <b>END</b> ?  Time: _____ Circle one: AM PM	<b>What type of cargo did you carry?</b> Be specific. Write "NONE" if you did not transport cargo?    <b>How Full Was This Vehicle?</b> (Circle one) 00 Empty 01 1/4 full 02 1/2 full 03 3/4 full 04 full	
#11  The next place this vehicle went was:	_____ Name or Description of Place  _____ Address (or nearest intersection) include suffix (St., Ave., lane, etc.)  _____ City State  _____ County Zip (if known)	<b>01 Your Workplace</b> 02 Store/Retail 03 Restaurant 04 School/Daycare 05 Hospital/Doctor 06 Recreation Place 07 Office 08 Home 09 Place of Worship 10 College/University 11 Hotel 12 Warehouse 13 Cargo Terminal 14 Airport/Bus Depot 15 Other: _____	<b>What was the purpose of this trip?</b> (1) Return to your work place (2) Delivery (3) Pick-up (4) Pick-up and Delivery (5) Maintenance (fuel, oil, etc.) (6) Driver Needs (lunch, etc.) (7) Other Business (8) Other Non-Business  <b>List One of the Major Routes Used for this Trip:</b> _____	What time did this trip <b>START</b> ?  Time: _____ Circle one: AM PM  What time did this trip <b>END</b> ?  Time: _____ Circle one: AM PM	<b>What type of cargo did you carry?</b> Be specific. Write "NONE" if you did not transport cargo?    <b>How Full Was This Vehicle?</b> (Circle one) 00 Empty 01 1/4 full 02 1/2 full 03 3/4 full 04 full	
#12  The next place this vehicle went was:	_____ Name or Description of Place  _____ Address (or nearest intersection) include suffix (St., Ave., lane, etc.)  _____ City State  _____ County Zip (if known)	<b>01 Your Workplace</b> 02 Store/Retail 03 Restaurant 04 School/Daycare 05 Hospital/Doctor 06 Recreation Place 07 Office 08 Home 09 Place of Worship 10 College/University 11 Hotel 12 Warehouse 13 Cargo Terminal 14 Airport/Bus Depot 15 Other: _____	<b>What was the purpose of this trip?</b> (1) Return to your work place (2) Delivery (3) Pick-up (4) Pick-up and Delivery (5) Maintenance (fuel, oil, etc.) (6) Driver Needs (lunch, etc.) (7) Other Business (8) Other Non-Business  <b>List One of the Major Routes Used for this Trip:</b> _____	What time did this trip <b>START</b> ?  Time: _____ Circle one: AM PM  What time did this trip <b>END</b> ?  Time: _____ Circle one: AM PM	<b>What type of cargo did you carry?</b> Be specific. Write "NONE" if you did not transport cargo?    <b>How Full Was This Vehicle?</b> (Circle one) 00 Empty 01 1/4 full 02 1/2 full 03 3/4 full 04 full	

Trip #	WHERE did this trip END?	TYPE OF PLACE (circle one)	PURPOSE of Trip and ROUTE Taken (Circle one)	TIME (to the nearest minute)	TYPE OF CARGO (Circle one)	NUMBER IN VEHICLE (include yourself)
#13  The next place this vehicle went was:	_____ Name or Description of Place  _____ Address (or nearest intersection) include suffix (St., Ave., lane, etc.)  _____ State City _____  _____ County _____ Zip (if known) _____	<b>01 Your Workplace</b> 02 Store/Retail 03 Restaurant 04 School/Daycare 05 Hospital/Doctor 06 Recreation Place 07 Office 08 Home 09 Place of Worship 10 College/University 11 Hotel 12 Warehouse 13 Cargo Terminal 14 Airport/Bus Depot 15 Other: _____	<b>What was the purpose of this trip?</b> (1) Return to your work place (2) Delivery (3) Pick-up (4) Pick-up and Delivery (5) Maintenance (fuel, oil, etc.) (6) Driver Needs (lunch, etc.) (7) Other Business (8) Other Non-Business  <b>List One of the Major Routes Used for this Trip:</b> _____	What time did this trip <u>START</u> ?  Time: _____ Circle one: AM PM  What time did this trip <u>END</u> ?  Time: _____ Circle one: AM PM	<b>What type of cargo did you carry?</b> Be specific. Write "NONE" if you did not transport cargo?   <b>How Full Was This Vehicle?</b> <b>(Circle one)</b> 00 Empty 01 1/4 full 02 1/2 full 03 3/4 full 04 full	
#14  The next place this vehicle went was:	_____ Name or Description of Place  _____ Address (or nearest intersection) include suffix (St., Ave., lane, etc.)  _____ State City _____  _____ County _____ Zip (if known) _____	<b>01 Your Workplace</b> 02 Store/Retail 03 Restaurant 04 School/Daycare 05 Hospital/Doctor 06 Recreation Place 07 Office 08 Home 09 Place of Worship 10 College/University 11 Hotel 12 Warehouse 13 Cargo Terminal 14 Airport/Bus Depot 15 Other: _____	<b>What was the purpose of this trip?</b> (1) Return to your work place (2) Delivery (3) Pick-up (4) Pick-up and Delivery (5) Maintenance (fuel, oil, etc.) (6) Driver Needs (lunch, etc.) (7) Other Business (8) Other Non-Business  <b>List One of the Major Routes Used for this Trip:</b> _____	What time did this trip <u>START</u> ?  Time: _____ Circle one: AM PM  What time did this trip <u>END</u> ?  Time: _____ Circle one: AM PM	<b>What type of cargo did you carry?</b> Be specific. Write "NONE" if you did not transport cargo?   <b>How Full Was This Vehicle?</b> <b>(Circle one)</b> 00 Empty 01 1/4 full 02 1/2 full 03 3/4 full 04 full	
#15  The next place this vehicle went was:	_____ Name or Description of Place  _____ Address (or nearest intersection) include suffix (St., Ave., lane, etc.)  _____ State City _____  _____ County _____ Zip (if known) _____	<b>01 Your Workplace</b> 02 Store/Retail 03 Restaurant 04 School/Daycare 05 Hospital/Doctor 06 Recreation Place 07 Office 08 Home 09 Place of Worship 10 College/University 11 Hotel 12 Warehouse 13 Cargo Terminal 14 Airport/Bus Depot 15 Other: _____	<b>What was the purpose of this trip?</b> (1) Return to your work place (2) Delivery (3) Pick-up (4) Pick-up and Delivery (5) Maintenance (fuel, oil, etc.) (6) Driver Needs (lunch, etc.) (7) Other Business (8) Other Non-Business  <b>List One of the Major Routes Used for this Trip:</b> _____	What time did this trip <u>START</u> ?  Time: _____ Circle one: AM PM  What time did this trip <u>END</u> ?  Time: _____ Circle one: AM PM	<b>What type of cargo did you carry?</b> Be specific. Write "NONE" if you did not transport cargo?   <b>How Full Was This Vehicle?</b> <b>(Circle one)</b> 00 Empty 01 1/4 full 02 1/2 full 03 3/4 full 04 full	

Additional Sheets Provided if more than 15 trips are completed.

Trip #	WHERE did this trip END?	TYPE OF PLACE (circle one)	PURPOSE of Trip and ROUTE Taken (Circle one)	TIME (to the nearest minute)	TYPE OF CARGO (Circle one)	NUMBER IN VEHICLE (include yourself)
#_____  The next place this vehicle went was:	_____ Name or Description of Place  _____ Address (or nearest intersection) include suffix (St., Ave., lane, etc.)  _____ City _____ State  _____ County _____ Zip (if known)	<b>01 Your Workplace</b> 02 Store/Retail 03 Restaurant 04 School/Daycare 05 Hospital/Doctor 06 Recreation Place 07 Office 08 Home 09 Place of Worship 10 College/University 11 Hotel 12 Warehouse 13 Cargo Terminal 14 Airport/Bus Depot 15 Other: _____	<b>What was the purpose of this trip?</b> (1) Return to your work place (2) Delivery (3) Pick-up (4) Pick-up and Delivery (5) Maintenance (fuel, oil, etc.) (6) Driver Needs (lunch, etc.) (7) Other Business (8) Other Non-Business  <b>List One of the Major Routes Used for this Trip:</b> _____	What time did this trip <u>START</u> ?  Time: _____ Circle one: AM PM  What time did this trip <u>END</u> ?  Time: _____ Circle one: AM PM	<b>What type of cargo did you carry?</b> Be specific. Write "NONE" if you did not transport cargo?   <b>How Full Was This Vehicle? (Circle one)</b> 00 Empty 01 1/4 full 02 1/2 full 03 3/4 full 04 full	
#_____  The next place this vehicle went was:	_____ Name or Description of Place  _____ Address (or nearest intersection) include suffix (St., Ave., lane, etc.)  _____ City _____ State  _____ County _____ Zip (if known)	<b>01 Your Workplace</b> 02 Store/Retail 03 Restaurant 04 School/Daycare 05 Hospital/Doctor 06 Recreation Place 07 Office 08 Home 09 Place of Worship 10 College/University 11 Hotel 12 Warehouse 13 Cargo Terminal 14 Airport/Bus Depot 15 Other: _____	<b>What was the purpose of this trip?</b> (1) Return to your work place (2) Delivery (3) Pick-up (4) Pick-up and Delivery (5) Maintenance (fuel, oil, etc.) (6) Driver Needs (lunch, etc.) (7) Other Business (8) Other Non-Business  <b>List One of the Major Routes Used for this Trip:</b> _____	What time did this trip <u>START</u> ?  Time: _____ Circle one: AM PM  What time did this trip <u>END</u> ?  Time: _____ Circle one: AM PM	<b>What type of cargo did you carry?</b> Be specific. Write "NONE" if you did not transport cargo?   <b>How Full Was This Vehicle? (Circle one)</b> 00 Empty 01 1/4 full 02 1/2 full 03 3/4 full 04 full	
#_____  The next place this vehicle went was:	_____ Name or Description of Place  _____ Address (or nearest intersection) include suffix (St., Ave., lane, etc.)  _____ City _____ State  _____ County _____ Zip (if known)	<b>01 Your Workplace</b> 02 Store/Retail 03 Restaurant 04 School/Daycare 05 Hospital/Doctor 06 Recreation Place 07 Office 08 Home 09 Place of Worship 10 College/University 11 Hotel 12 Warehouse 13 Cargo Terminal 14 Airport/Bus Depot 15 Other: _____	<b>What was the purpose of this trip?</b> (1) Return to your work place (2) Delivery (3) Pick-up (4) Pick-up and Delivery (5) Maintenance (fuel, oil, etc.) (6) Driver Needs (lunch, etc.) (7) Other Business (8) Other Non-Business  <b>List One of the Major Routes Used for this Trip:</b> _____	What time did this trip <u>START</u> ?  Time: _____ Circle one: AM PM  What time did this trip <u>END</u> ?  Time: _____ Circle one: AM PM	<b>What type of cargo did you carry?</b> Be specific. Write "NONE" if you did not transport cargo?   <b>How Full Was This Vehicle? (Circle one)</b> 00 Empty 01 1/4 full 02 1/2 full 03 3/4 full 04 full	

<b>PART I: COMPANY/ORGANIZATIONAL INFORMATION</b>
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**SAMPLE GROUP**

<u>Sample Group</u>	<u>Number</u>	<u>Percent</u>
A=General Services	133	28.9 %
B=Transportation/Manufacturing	229	49.7 %
C=Retail/Accommodations	99	21.5 %
Total	461	100.0 %

**NAICS CODE**

<u>NAICS Code</u>	<u>Number</u>	<u>Percent</u>
111150	2	0.4 %
111339	1	0.2 %
111422	1	0.2 %
111998	6	1.3 %
112112	1	0.2 %
115112	1	0.2 %
115114	1	0.2 %
115210	5	1.1 %
212325	1	0.2 %
221310	2	0.4 %
221320	2	0.4 %
236115	2	0.4 %
236116	4	0.9 %
236117	1	0.2 %
236118	3	0.7 %
236220	4	0.9 %
237110	2	0.4 %
237310	3	0.7 %
238110	1	0.2 %
238120	1	0.2 %
238130	2	0.4 %
238160	1	0.2 %
238210	7	1.5 %
238220	6	1.3 %
238310	3	0.7 %
238320	2	0.4 %
238340	1	0.2 %
238350	1	0.2 %
238910	4	0.9 %
238990	3	0.7 %
311411	1	0.2 %
311611	1	0.2 %
311811	1	0.2 %
311812	1	0.2 %
312130	1	0.2 %
314999	1	0.2 %
315228	1	0.2 %
321911	2	0.4 %
321918	1	0.2 %
321920	2	0.4 %
321991	1	0.2 %
322110	1	0.2 %



**NAICS CODE (continued)**

<u>NAICS Code</u>	<u>Number</u>	<u>Percent</u>
322121	1	0.2 %
322130	1	0.2 %
323110	4	0.9 %
324122	1	0.2 %
325312	1	0.2 %
325910	1	0.2 %
326191	2	0.4 %
326199	1	0.2 %
327390	1	0.2 %
327410	1	0.2 %
327991	1	0.2 %
332111	1	0.2 %
332112	1	0.2 %
332312	2	0.4 %
332313	2	0.4 %
332710	2	0.4 %
332722	1	0.2 %
333120	2	0.4 %
333315	1	0.2 %
333924	1	0.2 %
333999	1	0.2 %
334290	1	0.2 %
334419	1	0.2 %
335313	1	0.2 %
336120	1	0.2 %
336211	1	0.2 %
336399	1	0.2 %
337110	2	0.4 %
337212	1	0.2 %
337215	1	0.2 %
339116	4	0.9 %
339950	4	0.9 %
423120	5	1.1 %
423210	1	0.2 %
423310	7	1.5 %
423320	1	0.2 %
423390	1	0.2 %
423420	3	0.7 %
423450	1	0.2 %
423490	2	0.4 %
423610	7	1.5 %

**NAICS CODE (continued)**

<u>NAICS Code</u>	<u>Number</u>	<u>Percent</u>
423690	2	0.4 %
423710	2	0.4 %
423730	1	0.2 %
423740	1	0.2 %
423810	2	0.4 %
423820	1	0.2 %
423830	5	1.1 %
423840	4	0.9 %
423910	1	0.2 %
423920	1	0.2 %
423990	2	0.4 %
424110	2	0.4 %
424120	1	0.2 %
424430	1	0.2 %
424470	1	0.2 %
424490	1	0.2 %
424520	1	0.2 %
424610	2	0.4 %
424690	1	0.2 %
424720	3	0.7 %
424910	3	0.7 %
424920	1	0.2 %
424950	2	0.4 %
441110	5	1.1 %
441120	1	0.2 %
441210	2	0.4 %
441310	4	0.9 %
442110	4	0.9 %
442210	1	0.2 %
443111	2	0.4 %
443112	2	0.4 %
443120	4	0.9 %
443130	1	0.2 %
444110	4	0.9 %
444120	2	0.4 %
444130	4	0.9 %
444190	3	0.7 %
444220	2	0.4 %
445110	2	0.4 %
445291	2	0.4 %
445299	1	0.2 %
446110	3	0.7 %

**NAICS CODE (continued)**

<u>NAICS Code</u>	<u>Number</u>	<u>Percent</u>
446191	1	0.2 %
446199	1	0.2 %
447190	2	0.4 %
448140	1	0.2 %
448190	2	0.4 %
451120	1	0.2 %
451211	2	0.4 %
452111	1	0.2 %
452990	1	0.2 %
453110	8	1.7 %
453210	1	0.2 %
453220	1	0.2 %
453930	2	0.4 %
453998	5	1.1 %
454113	1	0.2 %
454210	1	0.2 %
484110	6	1.3 %
484121	5	1.1 %
484210	1	0.2 %
484230	3	0.7 %
484820	1	0.2 %
485210	1	0.2 %
485999	1	0.2 %
488119	1	0.2 %
488190	1	0.2 %
488410	3	0.7 %
491110	2	0.4 %
493110	2	0.4 %
493120	1	0.2 %
493130	1	0.2 %
511120	1	0.2 %
511210	2	0.4 %
512110	3	0.7 %
515112	2	0.4 %
515120	2	0.4 %
517110	1	0.2 %
517210	1	0.2 %
517919	1	0.2 %

**NAICS CODE (continued)**

<u>NAICS Code</u>	<u>Number</u>	<u>Percent</u>
518210	3	0.7 %
519120	1	0.2 %
522298	1	0.2 %
523110	1	0.2 %
523930	1	0.2 %
523991	1	0.2 %
524210	6	1.3 %
524298	1	0.2 %
531120	1	0.2 %
531210	10	2.2 %
531320	3	0.7 %
532299	2	0.4 %
532412	3	0.7 %
532490	1	0.2 %
541310	1	0.2 %
541330	4	0.9 %
541370	1	0.2 %
541410	1	0.2 %
541430	1	0.2 %
541511	1	0.2 %
541551	1	0.2 %
541618	1	0.2 %
541620	1	0.2 %
541940	1	0.2 %
541990	1	0.2 %
551112	2	0.4 %
561110	1	0.2 %
561422	1	0.2 %
561491	1	0.2 %
561499	3	0.7 %
561622	1	0.2 %
561720	5	1.1 %
561730	3	0.7 %
561740	1	0.2 %
561990	1	0.2 %
562910	1	0.2 %
611110	3	0.7 %
611310	1	0.2 %
611519	1	0.2 %
611620	3	0.7 %
611692	1	0.2 %

**NAICS CODE (continued)**

<u>NAICS Code</u>	<u>Number</u>	<u>Percent</u>
611699	1	0.2 %
611710	1	0.2 %
621111	1	0.2 %
621610	2	0.4 %
623110	5	1.1 %
623220	1	0.2 %
624120	1	0.2 %
624230	1	0.2 %
624410	6	1.3 %
711190	2	0.4 %
711211	1	0.2 %
711310	1	0.2 %
711410	1	0.2 %
711510	1	0.2 %
712110	2	0.4 %
712130	1	0.2 %
713910	1	0.2 %
713940	1	0.2 %
721110	3	0.7 %
721199	1	0.2 %
722110	1	0.2 %
722211	1	0.2 %
722320	2	0.4 %
722410	1	0.2 %
811118	2	0.4 %
811121	1	0.2 %
811212	1	0.2 %
811310	2	0.4 %
811412	2	0.4 %
811420	1	0.2 %
812220	1	0.2 %
813110	3	0.7 %
813212	1	0.2 %
813410	2	0.4 %
813910	1	0.2 %
813930	1	0.2 %
Total	461	100.0 %

**How many passenger cars or vans does the organization have?**

<u>1.Number of cars or van</u>	<u>Number</u>	<u>Percent</u>
0	207	44.9 %
1	135	29.3 %
2	52	11.3 %
3	19	4.1 %
4	12	2.6 %
5	6	1.3 %
6	8	1.7 %
7	6	1.3 %
8	1	0.2 %
9	2	0.4 %
10	3	0.7 %
11	1	0.2 %
12	1	0.2 %
15	3	0.7 %
20	1	0.2 %
22	1	0.2 %
30	1	0.2 %
50	1	0.2 %
55	1	0.2 %
Total	461	100.0 %

**ALL COMPANIES**

Mean = 1.66

95 Percent Confidence Interval Around The Mean = 1.26 - 2.06

99 Percent Confidence Interval Around The Mean = 1.13 - 2.19

**GENERAL SERVICES – GROUP A ONLY**

Mean = 2.01

95 Percent Confidence Interval Around The Mean = 1.56 - 2.46

99 Percent Confidence Interval Around The Mean = 1.41 - 2.60

**TRANSPORTATION/MANUFACTURING – GROUP B ONLY**

Mean = 1.45

95 Percent Confidence Interval Around The Mean = 0.85 - 2.04

99 Percent Confidence Interval Around The Mean = 0.67 - 2.22

**RETAIL/ACCOMMODATIONS – GROUP C ONLY**

Mean = 1.69

95 Percent Confidence Interval Around The Mean = 0.55 - 2.82

99 Percent Confidence Interval Around The Mean = 0.20 - 3.17

**How many light duty trucks or SUV's does the organization have?**

<u>2. Number of light duty trucks or SUVs</u>	<u>Number</u>	<u>Percent</u>
0	150	32.5 %
1	121	26.2 %
2	73	15.8 %
3	34	7.4 %
4	25	5.4 %
5	14	3.0 %
6	10	2.2 %
7	7	1.5 %
8	5	1.1 %
9	1	0.2 %
10	3	0.7 %
12	1	0.2 %
13	2	0.4 %
14	1	0.2 %
15	3	0.7 %
20	1	0.2 %
22	1	0.2 %
25	3	0.7 %
28	1	0.2 %
29	1	0.2 %
30	3	0.7 %
46	1	0.2 %
Total	461	100.0 %

**ALL COMPANIES**

Mean = 2.46

95 Percent Confidence Interval Around The Mean = 2.02 - 2.90

99 Percent Confidence Interval Around The Mean = 1.88 - 3.04

**GENERAL SERVICES – GROUP A ONLY**

Mean = 2.11

95 Percent Confidence Interval Around The Mean = 1.35 - 2.88

99 Percent Confidence Interval Around The Mean = 1.11 - 3.12

**TRANSPORTATION/MANUFACTURING – GROUP B ONLY**

Mean = 2.93

95 Percent Confidence Interval Around The Mean = 2.27 - 3.60

99 Percent Confidence Interval Around The Mean = 2.06 - 3.81

**RETAIL/ACCOMMODATIONS – GROUP C ONLY**

Mean = 1.83

95 Percent Confidence Interval Around The Mean = 0.98 - 2.68

99 Percent Confidence Interval Around The Mean = 0.71 - 2.95

**How many Semis or Tractor/Trailer combinations does the organization have?**

<u>3. Number of Semis or Tractor/Trailers</u>	<u>Number</u>	<u>Percent</u>
0	390	84.6 %
1	20	4.3 %
2	22	4.8 %
3	8	1.7 %
4	1	0.2 %
5	5	1.1 %
6	1	0.2 %
7	1	0.2 %
8	1	0.2 %
10	2	0.4 %
12	1	0.2 %
15	1	0.2 %
21	1	0.2 %
23	2	0.4 %
30	2	0.4 %
43	1	0.2 %
55	1	0.2 %
60	1	0.2 %
Total	461	100.0 %

**ALL COMPANIES**

Mean = 1.02

95 Percent Confidence Interval Around The Mean = 0.55 - 1.49

99 Percent Confidence Interval Around The Mean = 0.40 - 1.64

**GENERAL SERVICES – GROUP A ONLY**

Mean = 0.28

95 Percent Confidence Interval Around The Mean = 0.09 - 0.47

99 Percent Confidence Interval Around The Mean = 0.03 - 0.53

**TRANSPORTATION/MANUFACTURING – GROUP B ONLY**

Mean = 1.86

95 Percent Confidence Interval Around The Mean = 0.92 - 2.79

99 Percent Confidence Interval Around The Mean = 0.63 - 3.08

**RETAIL/ACCOMMODATIONS – GROUP C ONLY**

Mean = 0.08

95 Percent Confidence Interval Around The Mean = 0.00 - 0.16

99 Percent Confidence Interval Around The Mean = -0.03 - 0.19



**Does the organization have any single unit commercial vehicles, such as moving trucks, delivery trucks, tow trucks, or other commercial vehicles?**

4. Does the organization have any single unit commercial vehicles	Number	Percent
Yes	115	24.9 %
No	346	75.1 %
Total	461	100.0 %

**ALL COMPANIES**

Mean = 0.56

95 Percent Confidence Interval Around The Mean = 0.39 - 0.73

99 Percent Confidence Interval Around The Mean = 0.34 - 0.78

**GENERAL SERVICES – GROUP A ONLY**

Mean = 0.30

95 Percent Confidence Interval Around The Mean = 0.14 - 0.46

99 Percent Confidence Interval Around The Mean = 0.09 - 0.51

**TRANSPORTATION/MANUFACTURING – GROUP B ONLY**

Mean = 0.62

95 Percent Confidence Interval Around The Mean = 0.42 - 0.81

99 Percent Confidence Interval Around The Mean = 0.35 - 0.88

**RETAIL/ACCOMMODATIONS – GROUP C ONLY**

Mean = 0.78

95 Percent Confidence Interval Around The Mean = 0.19 - 1.37

99 Percent Confidence Interval Around The Mean = 0.01 - 1.55

**ALL COMPANIES**

Mean = 0.25

95 Percent Confidence Interval Around The Mean = 0.11 - 0.39

99 Percent Confidence Interval Around The Mean = 0.07 - 0.43

**GENERAL SERVICES – GROUP A ONLY**

Mean = 0.09

95 Percent Confidence Interval Around The Mean = 0.00 - 0.18

99 Percent Confidence Interval Around The Mean = -0.02 - 0.21

**TRANSPORTATION/MANUFACTURING – GROUP B ONLY**

Mean = 0.40

95 Percent Confidence Interval Around The Mean = 0.15 - 0.65

99 Percent Confidence Interval Around The Mean = 0.07 - 0.73

**RETAIL/ACCOMMODATIONS – GROUP C ONLY**

Mean = 0.13

95 Percent Confidence Interval Around The Mean = -0.11 - 0.37

99 Percent Confidence Interval Around The Mean = -0.18 - 0.44

**ALL COMPANIES**

Mean = 0.01

95 Percent Confidence Interval Around The Mean = 0.00 - 0.03

99 Percent Confidence Interval Around The Mean = -0.01 - 0.03

**GENERAL SERVICES – GROUP A ONLY**

Mean = 0.00

95 Percent Confidence Interval Around The Mean = 0.00 - 0.00

99 Percent Confidence Interval Around The Mean = 0.00 - 0.00

**TRANSPORTATION/MANUFACTURING – GROUP B ONLY**

Mean = 0.02

95 Percent Confidence Interval Around The Mean = -0.01 - 0.04

99 Percent Confidence Interval Around The Mean = -0.02 - 0.05

**RETAIL/ACCOMMODATIONS – GROUP C ONLY**

Mean = 0.02

95 Percent Confidence Interval Around The Mean = -0.02 - 0.06

99 Percent Confidence Interval Around The Mean = -0.03 - 0.07

**Approximately how many employees does your organization employ at the location where the vehicles included in this survey are garaged?**

5. Number of employees per organization	Number	Percent
1-2 employees	72	15.7 %
3-5 employees	88	19.2 %
6-10 employees	117	25.5 %
11-20 employees	81	17.7 %
21-50 employees	58	12.7 %
51-100 employees	29	6.3 %
more than 100 employees	13	2.8 %
Total	458	100.0 %

Not provided = 3

**Which of the following best describes your organization?**

6. General organization description	Number	Percent
Finance & Insurance	10	2.2 %
Real estate & rental & leasing	17	3.7 %
Professional, scientific, & technical services	30	6.5 %
Administrative services	1	0.2 %
Educational services	8	1.7 %
Information	5	1.1 %
Health Care & social assistance	16	3.5 %
Government	2	0.4 %
Other general services	61	13.2 %
Wholesale Trade	73	15.8 %
Transportation and warehousing	49	10.6 %
Utilities	21	4.6 %
Manufacturing	67	14.5 %
Retail Trade	70	15.2 %
Arts, entertainment, and recreation	15	3.3 %
Accommodations and food service	16	3.5 %
Total	461	100.0 %

**What time does your business typically OPEN Monday thru Friday?**

<u>7. Time Open</u>	<u>Number</u>	<u>Percent</u>
Open 24 hours	30	6.6 %
05:00 AM	3	0.7 %
05:30 AM	1	0.2 %
05:45 AM	1	0.2 %
06:00 AM	14	3.1 %
06:30 AM	6	1.3 %
07:00 AM	73	16.0 %
07:30 AM	29	6.3 %
08:00 AM	211	46.2 %
08:15 AM	1	0.2 %
08:30 AM	13	2.8 %
09:00 AM	47	10.3 %
09:30 AM	3	0.7 %
10:00 AM	18	3.9 %
10:30 AM	1	0.2 %
11:00 AM	3	0.7 %
12:00 PM	1	0.2 %
17:00 PM	2	0.4 %
Total	457	100.0 %

Not provided = 4

**What time does your business typically CLOSE Monday thru Friday?**

<u>7. Time Close</u>	<u>Number</u>	<u>Percent</u>
Open 24 hours	29	6.3 %
02:00 AM	1	0.2 %
02:30 AM	1	0.2 %
14:30 PM	1	0.2 %
15:00 PM	5	1.1 %
15:30 PM	5	1.1 %
16:00 PM	17	3.7 %
16:30 PM	25	5.5 %
17:00 PM	231	50.5 %
17:15 PM	1	0.2 %
17:30 PM	30	6.6 %
18:00 PM	67	14.6 %
19:00 PM	16	3.5 %
19:30 PM	2	0.4 %
20:00 PM	9	2.0 %
21:00 PM	8	1.8 %
21:30 PM	1	0.2 %
22:00 PM	2	0.4 %
23:00 PM	4	0.9 %
24:00 PM	2	0.4 %
Total	457	100.0 %

Not provided = 4

## **PART II: VEHICLE INFORMATION**

### **TRAVEL MONTH**

<u>Travel Month</u>	<u>Number</u>	<u>Percent</u>
02=February 2008	199	17.6 %
03=March 2008	682	60.5 %
04=April 2008	247	21.9 %
Total	1128	100.0 %

### **VEHICLE DESCRIPTION**

<u>Vehicle Description</u>	<u>Number</u>	<u>Percent</u>
Passenger Car	136	12.1 %
Van	159	14.1 %
SUV	84	7.4 %
Light truck	471	41.8 %
Heavy Truck (2-Axles, 6 wheels)	131	11.6 %
Heavy truck (3-Axles, 10 wheels)	46	4.1 %
Heavy Truck (4-Axles, 14 wheels)	5	0.4 %
Semi (all tractor/trailer combinations)	91	8.1 %
Other	5	0.4 %
Total	1,128	100.0 %

Heavy Truck (3-Axles, 10 wheels)    Heavy Truck (4-Axles, 14 wheels)    Semi (all tractor/trailer combinations)

## VEHICLE MAKE

<u>Vehicle Make</u>	<u>Number</u>	<u>Percent</u>
ACURA	1	0.1 %
AUDI	1	0.1 %
AUTOCAR	1	0.1 %
BMW	3	0.3 %
BUICK	1	0.1 %
CADILLAC	4	0.4 %
CHEVROLET	198	17.8 %
CHRYSLER	9	0.8 %
COLUMBIA	1	0.1 %
DODGE	95	8.5 %
FORD	353	31.6 %
FREIGHTLINER	29	2.6 %
GMC	82	7.3 %
HINO	2	0.2 %
HONDA	17	1.5 %
HYUNDAI	7	0.6 %
INTERNATIONAL	39	3.5 %
ISUZU	11	1.0 %
JEEP	7	0.6 %
KENWORTH	63	5.6 %
KIA	3	0.3 %
LAND ROVER	2	0.2 %
LEXUS	1	0.1 %
LINCOLN	5	0.4 %
MACK	3	0.3 %
MAZDA	8	0.7 %
MERCURY	3	0.3 %
MINI	16	1.4 %
NISSAN	15	1.3 %
OLDSMOBILE	3	0.3 %
OSH KOSH	4	0.4 %
PETERBILT	25	2.3 %
PLYMOUTH	5	0.4 %
PONTIAC	4	0.4 %
SAAB	1	0.1 %
SATURN	7	0.6 %
STERLING	13	1.2 %
SUBARU	16	1.4 %
SUZUKI	6	0.5 %
THOMAS	1	0.1 %
TOYOTA	43	3.8 %
VOLVO	9	0.8 %
WESTEN STAR	1	0.1 %
Total	1,118	100.0 %

Not provided = 10

**STATE REGISTERED**

<u>State Registered</u>	<u>Number</u>	<u>Percent</u>
CALIFORNIA	1	0.1 %
IDAHO	1,093	97.3 %
ILLINOIS	1	0.1 %
INDIANA	4	0.4 %
MONTANA	13	1.2 %
OHIO	1	0.1 %
OREGON	6	0.5 %
UTAH	3	0.3 %
WASHINGTON	1	0.1 %
Total	1,123	100.0 %

Not provided = 5

## PART III: COMMERCIAL TRIP INFORMATION

The mean value for "Trips Reported Per Company" is the unexpanded mean number of trips per company. It represents the raw number of trips reported by the companies that participated in the survey. Mean trips shown elsewhere in the report are the expanded number of trips per company. The difference between this unexpanded mean and the expanded mean is due to the fact that trip information was not collected from every vehicle.

### **Total Commercial Trips Reported Per Company On Their Assigned Travel Day For ALL COMPANIES Included in the Survey**

<u>Total commercial trips reported per company for all vehicles</u>	Number	Percent
None	50	10.8 %
1-5 trips	135	29.3 %
6-10 trips	106	23.0 %
11-15 trips	47	10.2 %
16-20 trips	33	7.2 %
21-30 trips	40	8.7 %
31 or more trips	50	10.8 %
Total	461	100.0 %

Mean = 14.21 commercial trips per company

95 Percent Confidence Interval Around The Mean = 12.22 - 16.22 trips per company

99 Percent Confidence Interval Around The Mean = 11.59 - 16.85 trips per company

Mean # of TOTAL VEHICLES (all types) per company = 5.96

Mean # of VEHICLES COMPLETING DIARIES per company = 2.45

Trip multiplier per company (TOTAL VEHICLES/VEHICLES COMPLETING DIARIES) = 2.43

### **Total Commercial Trips Reported Per Company On Their Assigned Travel Day For GENERAL SERVICE COMPANIES (GROUP A) ONLY**

<u>Total commercial trips reported per company for all vehicles</u>	Number	Percent
None	15	11.3 %
1-5 trips	37	27.8 %
6-10 trips	24	18.0 %
11-15 trips	19	14.3 %
16-20 trips	10	7.5 %
21-30 trips	12	9.0 %
31 or more trips	16	12.0 %
Total	133	100.0 %

Mean = 14.83

95 Percent Confidence Interval Around The Mean = 11.03 - 18.62

99 Percent Confidence Interval Around The Mean = 9.84 - 19.81

Mean # of TOTAL VEHICLES (all types) per company = 4.79

Mean # of VEHICLES COMPLETING DIARIES per company = 2.70

Trip multiplier per company (TOTAL VEHICLES/VEHICLES COMPLETING DIARIES) = 1.77



**Total Commercial Trips Reported Per Company On Their Assigned Travel Day  
For TRANSPORTATION/MANUFACTURING COMPANIES (GROUP B) ONLY**

<u>Total commercial trips reported per company for all vehicles</u>	<u>Number</u>	<u>Percent</u>
None	27	11.8 %
1-5 trips	62	27.1 %
6-10 trips	53	23.1 %
11-15 trips	23	10.0 %
16-20 trips	18	7.9 %
21-30 trips	21	9.2 %
31 or more trips	25	10.9 %
Total	229	100.0 %

Mean = 14.28

95 Percent Confidence Interval Around The Mean = 11.65 - 16.92

99 Percent Confidence Interval Around The Mean = 10.83 - 17.74

Mean # of TOTAL VEHICLES (all types) per company = 7.28

Mean # of VEHICLES COMPLETING DIARIES per company = 2.47

Trip multiplier per company (TOTAL VEHICLES/VEHICLES COMPLETING DIARIES) = 2.95

**Total Commercial Trips Reported Per Company On Their Assigned Travel Day  
For RETAIL/ACCOMMODATIONS (GROUP C) ONLY**

<u>Total commercial trips reported per company for all vehicles</u>	<u>Number</u>	<u>Percent</u>
None	8	8.1 %
1-5 trips	36	36.4 %
6-10 trips	29	29.3 %
11-15 trips	5	5.1 %
16-20 trips	5	5.1 %
21-30 trips	7	7.1 %
31 or more trips	9	9.1 %
Total	99	100.0 %

Mean = 13.25

95 Percent Confidence Interval Around The Mean = 8.36 - 18.14

99 Percent Confidence Interval Around The Mean = 6.83 - 19.68

Mean # of TOTAL VEHICLES (all types) per company = 4.53

Mean # of VEHICLES COMPLETING DIARIES per company = 2.06

Trip multiplier per company (TOTAL VEHICLES/VEHICLES COMPLETING DIARIES) = 2.20

**Total Number of Commercial Trips Completed PER VEHICLE**

<u>Trip Number</u>	<u>Number</u>	<u>Percent</u>
00 = none	1,127	14.7 %
01	945	12.3 %
02	922	12.0 %
03	764	9.9 %
04	664	8.6 %
05	545	7.1 %
06	445	5.8 %
07	345	4.5 %
08	281	3.7 %
09	237	3.1 %
10	188	2.4 %
11	165	2.1 %
12	132	1.7 %
13	112	1.5 %
14	88	1.1 %
15	78	1.0 %
16	75	1.0 %
17	72	0.9 %
18	64	0.8 %
19	55	0.7 %
20	49	0.6 %
21	43	0.6 %
22	42	0.5 %
23	33	0.4 %
24	30	0.4 %
25	26	0.3 %
26	24	0.3 %
27	23	0.3 %
28	20	0.3 %
29	14	0.2 %
30	13	0.2 %
31	13	0.2 %
32	11	0.1 %
33	9	0.1 %
34	6	0.1 %
35	5	0.1 %
36	5	0.1 %
37	2	0.0 %

**Total Number of Commercial Trips Completed PER VEHICLE - continued**

<u>Trip Number</u>	<u>Number</u>	<u>Percent</u>
38	1	0.0 %
39	1	0.0 %
40	1	0.0 %
41	1	0.0 %
42	1	0.0 %
43	1	0.0 %
44	1	0.0 %
45	1	0.0 %
46	1	0.0 %
47	1	0.0 %
Total	7,682	100.0 %

Mean = 5.81 commercial trips per vehicle

**TOP DESTINATIONS - BY CITY****(By percentage of all trips completed – N=6,555)**

<u>City</u>	<u>Number</u>	<u>Percent</u>
BOISE	3,061	46.7 %
NAMPA	1,064	16.2 %
MERIDIAN	910	13.9 %
CALDWELL	600	9.2 %
EAGLE	202	3.1 %
GARDEN CITY	180	2.7 %
KUNA	87	1.3 %
STAR	65	1.0 %
PARMA	36	0.5 %
ONTARIO	23	0.4 %
MELBA	21	0.3 %
MIDDLETON	20	0.3 %
WILDER	20	0.3 %
MOUNTAIN HOME	18	0.3 %
MARSING	16	0.2 %
HOMEDALE	12	0.2 %
JEROME	12	0.2 %
PAYETTE	12	0.2 %
FRUITLAND	11	0.2 %
EMMETT	11	0.2 %
<u>OTHER (less than 10 trips each)</u>	<u>174</u>	<u>2.6 %</u>
TOTAL	6,555	100.0 %

**TOP DESTINATIONS - BY ZIP CODE**

(By percentage of all trips for which zip code data was provided – N=6,533)

<u>ZIP Code</u>	<u>Number</u>	<u>Percent</u>
83642	750	11.5 %
83709	540	8.3 %
83605	489	7.5 %
83706	473	7.2 %
83702	437	6.7 %
83687	409	6.3 %
83705	405	6.2 %
83714	366	5.6 %
83704	352	5.4 %
83686	331	5.1 %
83651	312	4.8 %
83713	264	4.0 %
83616	208	3.2 %
83646	149	2.3 %
83716	140	2.1 %
83607	120	1.8 %
83703	109	1.7 %
83634	84	1.3 %
83712	69	1.1 %
83669	66	1.0 %
83701	44	0.7 %
83660	36	0.6 %
97914	23	0.4 %
83641	22	0.3 %
83644	21	0.3 %
83647	20	0.3 %
83676	19	0.3 %
83708	15	0.2 %
83639	15	0.2 %
83617	12	0.2 %
83661	12	0.2 %
83338	12	0.2 %
83628	12	0.2 %
83619	11	0.2 %
97913	10	0.2 %
<u>OTHER (less than 10 trips)</u>	<u>176</u>	<u>2.7 %</u>
<u>Total</u>	<u>6,533</u>	<u>100.0 %</u>

Not provided = 22

**TOP DESTINATIONS - BY TYPE OF PLACE**

**(By percentage of all trips for which place data was provided – N=6,548)**

<u>Type of Place</u>	<u>Number</u>	<u>Percent</u>
The Respondent's Workplace	1,498	22.9 %
Other (job site, bank, farm, etc.)	1,332	20.3 %
Home	1,090	16.6 %
Store/Retail	814	12.4 %
Office	489	7.5 %
School/Daycare	405	6.2 %
Warehouse	306	4.7 %
Restaurant	273	4.2 %
Hospital/Doctor	159	2.4 %
Hotel	40	0.6 %
Recreation Place	40	0.6 %
Place of Worship	32	0.5 %
Cargo Terminal	27	0.4 %
Airport/Bus Depot	24	0.4 %
College/University	19	0.3 %
Total	6,548	100.0 %

Not provided = 7

**MOST FREQUENTLY USED ROUTES TO GET FINAL DESTINATION****(By percentage of all trips completed – N=6,555)**

<b>Name of Route</b>	<b>Number</b>	<b>% of Total</b>
I-84	793	12.1 %
CHINDEN BLVD	217	3.3 %
STATE ST	216	3.3 %
FRANKLIN RD/BLVD	210	3.2 %
EAGLE RD	179	2.7 %
FAIRVIEW AVE	166	2.5 %
OVERLAND RD	133	2.0 %
COLE RD	99	1.5 %
CLOVERDALE RD	74	1.1 %
EMERALD ST	74	1.1 %
MERIDIAN RD	72	1.1 %
LOCUST GROVE RD	68	1.0 %
12TH AVE	67	1.0 %
USTICK RD	65	1.0 %
ORCHARD ST	63	1.0 %
BROADWAY AVE	61	0.9 %
HWY 55	60	0.9 %
VICTORY RD	59	0.9 %
FEDERAL WAY	55	0.8 %
I-184	52	0.8 %
VISTA AVE	49	0.8 %
CURTIS RD	44	0.7 %
LAKE SHORE DR	44	0.7 %
CALDWELL BLVD	43	0.7 %
MAIN ST	43	0.7 %
HWY 44	42	0.6 %
MAPLE GROVE RD	41	0.6 %
FIVE MILE RD	38	0.6 %
CHERRY LN	35	0.5 %
GARRITY BLVD	35	0.5 %
GREENHURST RD	35	0.5 %
HWY 20/26	35	0.5 %
KARCHER RD	33	0.5 %
10TH AVE	31	0.5 %
HWY 45	31	0.5 %
11TH AVE	30	0.5 %

**TIME OF DAY TRIPS WERE COMPLETED - MORNING TRIPS**  
**(By percentage of all trips for which trip time data was provided – N=6,551)**

<u>Start time</u>	<u>Number</u>	<u>Percent</u>
Midnight-12:59am	9	0.1 %
1:00-1:59 am	7	0.1 %
2:00-2:59 am	7	0.1 %
3:00-3:59 am	4	0.1 %
4:00-4:59 am	13	0.2 %
5:00-5:59 am	35	0.5 %
6:00-6:59 am	141	2.2 %
7:00-7:59 am	369	5.6 %
8:00-8:59 am	671	10.2 %
9:00-9:59 am	695	10.6 %
10:00-10:59 am	699	10.7 %
11:00-11:59 am	679	10.4 %
Noon-12:59 am	598	9.1 %
1:00-1:59 pm	592	9.0 %
2:00-2:59 pm	559	8.5 %
3:00-3:59 pm	557	8.5 %
4:00-4:59 pm	414	6.3 %
5:00-5:59 pm	225	3.4 %
6:00-6:59 pm	133	2.0 %
7:00-7:59 pm	54	0.8 %
8:00-8:59 pm	45	0.7 %
9:00-9:59 pm	26	0.4 %
10:00-10:59 pm	9	0.1 %
11:00-11:59 pm	10	0.1 %
Total	6,551	100.0 %

Not provided = 4



**TYPE OF CARGO – THE 30 MOST FREQUENTLY MENTIONED ITEMS****(By percentage of all trips completed – N=6,555)**

Type of Cargo	Number	Percent
TOOLS	137	2.1 %
PARTS	88	1.3 %
AUTOMOTIVE PARTS	87	1.3 %
STEEL	82	1.3 %
WATER	60	0.9 %
FOOD	60	0.9 %
ICE	59	0.9 %
FLOWERS	56	0.9 %
MAIL	48	0.7 %
DOCUMENTS	48	0.7 %
AUTO PARTS	47	0.7 %
STATIONERY	46	0.7 %
SUPPLIES	43	0.7 %
LUMBER	37	0.6 %
HORSES	34	0.5 %
PAPER	29	0.4 %
EQUIPMENT	26	0.4 %
TONER	26	0.4 %
DIESEL	25	0.4 %
FURNITURE	22	0.3 %
PROPANE	22	0.3 %
CLEANING SUPPLIES	21	0.3 %
DIRT	20	0.3 %
WINE	18	0.3 %
CAMERA EQUIPMENT	18	0.3 %
HOUSEHOLD	18	0.3 %
MAILBOX STANDS	17	0.3 %
CONCRETE	15	0.2 %
TOOLS & PARTS	15	0.2 %
SIGN PARTS	15	0.2 %

**VEHICLE OCCUPANCY****(By percentage of all trips completed – N=6,555)**

Number in Vehicle	Number	Percent
01=one person	5,348	81.6 %
02=two persons	813	12.4 %
03=three or more persons	394	6.0 %
Total	6,555	100.0 %

Company#: \_\_\_\_\_

**COMPASS Commercial Vehicle Survey**  
**(Follow-up Survey)**

Date: \_\_\_\_\_ Interviewer: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_

NAICS Code from Sample: \_\_\_\_\_

This is \_\_\_\_\_. I'm calling for the Community Planning Association of Southwest Idaho and the Idaho Transportation Department. **We are not selling anything.** The reason I am calling is that we need input from (type of business - commercial, government, non-profit) organizations in the region to plan transportation improvements in Ada and Canyon Counties.

**Are you familiar with vehicles that are owned or leased by your organization?** [EVEN IF THE COMPANY DOES NOT HAVE ANY VEHICLES, THEIR PARTICIPATION IN THIS SURVEY IS IMPORTANT]

**If YES (OR THEY DO NOT HAVE ANY VEHICLES) - Continue**

If No: Ask to speak to the appropriate person. If the company does not have any vehicles, it is still important to get the information below.

---

**Once you get the correct person:**

The reason I am calling today is to gather data about commercial vehicles in Ada and Canyon Counties. You may remember hearing about this study or participating in Phase I of the study earlier this year. **THE SURVEY WILL TAKE LESS THAN 5 MINUTES, and all your responses will remain confidential.**

Can you tell me approximately how many of the following types of vehicles are currently owned or leased by your organization at your location. **AND HOW MANY WERE DRIVEN BY EMPLOYEES OF YOUR COMPANY YESTERDAY OR THE MOST RECENT WEEKDAY.** Do not include vehicles that are garaged at other locations in the region. [EVEN IF THE COMPANY DOES NOT HAVE ANY VEHICLES, THEIR PARTICIPATION IN THIS SURVEY IS IMPORTANT; ENTER '0' for questions 1-4a, 4b, 4c if the company does not have any commercial vehicles]

**1. How many passenger cars or vans does the organization have?**

# passenger cars/vans: \_\_\_\_\_ # driven yesterday: \_\_\_\_\_

**2. How many light duty trucks or SUV's does the organization have?**

# light duty trucks/SUVs: \_\_\_\_\_ # driven yesterday: \_\_\_\_\_

**3. How many Semis or Tractor/Trailer combinations does the organization have?**

# Semis/Tractor Trailer combos: \_\_\_\_\_ # driven yesterday: \_\_\_\_\_

4. Does the organization have any single unit commercial vehicles, such a moving trucks, delivery trucks, tow trucks, or other commercial vehicles? YES NO

If YES: How many of each of the following does the organization have?

- 4a. Single Unit with 2-axes? \_\_\_\_\_  
# vehicles:\_\_\_\_\_ # driven yesterday: \_\_\_\_\_
- 4b. Single Unit with 3-axes?  
# vehicles:\_\_\_\_\_ # driven yesterday: \_\_\_\_\_
- 4c. Single Unit just 4-axes?  
# vehicles:\_\_\_\_\_ # driven yesterday: \_\_\_\_\_

Next, I would like to get some information about your organization to be sure our sample is representative of the all commercial, government, and non-profit organizations in the region.

5. Approximately how many employees does your organization employ at this location (where the vehicles above are garaged)?

\_\_\_\_\_

6. And which of the following best describes your organization? (or ask the respondent to describe what their organization does and check the appropriate item below).

**Group 1: General Services**

- \_\_\_(11) Finance & insurance  
\_\_\_(12) Real estate & rental & leasing  
\_\_\_(13) Professional, scientific, & technical services  
\_\_\_(14) Administrative services  
\_\_\_(15) Educational services  
\_\_\_(16) Information  
\_\_\_(17) Health care & social assistance  
\_\_\_(18) Government  
\_\_\_(19) Other general services:\_\_\_\_\_

**Group 2: Transportation/Manufacturing**

- \_\_\_(21) Wholesale trade  
\_\_\_(22) Transportation & warehousing  
\_\_\_(23) Utilities  
\_\_\_(24) Manufacturing

**Group 3: Retail/Accommodations**

- \_\_\_(31) Retail trade  
\_\_\_(32) Arts, entertainment, & recreation  
\_\_\_(33) Accommodation & foodservices

7. What are your typical hours of operation Monday thru Friday?

Time Open: \_\_\_\_\_ Time Close: \_\_\_\_\_

8. Are there any months during the year when your organization is making a significantly higher number of shipments or deliveries?

\_\_\_(1) YES: Which months? Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

\_\_\_(2) NO

**Before we end the survey, may I get the physical street address for the location of your organization.**

10. *Company/Organization Name:* \_\_\_\_\_

11. \_\_\_\_\_ *Street or Rural Route (w/Box #)* \_\_\_\_\_ *Apartment # (if applicable)*

12. *City:* \_\_\_\_\_

13. *Zip:* \_\_\_\_\_

14. *County:* \_\_\_\_\_

15. *Phone Number:* \_\_\_\_\_

**This Concludes the Survey. THANK YOU FOR YOUR TIME.**

**PART I: COMPANY/ORGANIZATIONAL INFORMATION**

**SAMPLE GROUP**

<u>Sample Group</u>	<u>Number</u>	<u>Percent</u>
General Services	125	28.5 %
Transportation/Manufacturing	143	32.6 %
Retail/Accommodations	171	39.0 %
Total	439	100.0 %

**How many passenger cars or vans does the organization have?**

<u>Q1 How many passenger cars or van</u>	<u>Number</u>	<u>Percent</u>
000	329	74.9 %
001	61	13.9 %
002	18	4.1 %
003	14	3.2 %
004	3	0.7 %
005	3	0.7 %
006	1	0.2 %
007	2	0.5 %
008	1	0.2 %
009	1	0.2 %
010	1	0.2 %
020	1	0.2 %
040	1	0.2 %
044	1	0.2 %
060	1	0.2 %
064	1	0.2 %
Total	439	100.0 %

**ALL COMPANIES**

Mean = 1.00

95 Percent Confidence Interval Around The Mean = 0.52 - 1.49

99 Percent Confidence Interval Around The Mean = 0.36 - 1.65

**GENERAL SERVICES – GROUP A ONLY**

Mean = 2.01

95 Percent Confidence Interval Around The Mean = 0.46 - 3.56

99 Percent Confidence Interval Around The Mean = -0.03 - 4.05

**TRANSPORTATION/MANUFACTURING – GROUP B ONLY**

Mean = 0.86

95 Percent Confidence Interval Around The Mean = 0.27 - 1.45

99 Percent Confidence Interval Around The Mean = 0.09 - 1.63

**RETAIL/ACCOMMODATIONS – GROUP C ONLY**

Mean = 0.39

95 Percent Confidence Interval Around The Mean = 0.22 - 0.56

99 Percent Confidence Interval Around The Mean = 0.17 - 0.61

**How many light duty trucks or SUV's does the organization have?**

<u>Q2 How many light duty trucks or</u>	<u>Number</u>	<u>Percent</u>
000	290	66.1 %
001	55	12.5 %
002	29	6.6 %
003	23	5.2 %
004	13	3.0 %
005	7	1.6 %
006	5	1.1 %
007	1	0.2 %
008	3	0.7 %
009	1	0.2 %
010	4	0.9 %
015	5	1.1 %
016	1	0.2 %
020	1	0.2 %
030	1	0.2 %
Total	439	100.0 %

**ALL COMPANIES**

Mean = 1.18

95 Percent Confidence Interval Around The Mean = 0.91 - 1.46

99 Percent Confidence Interval Around The Mean = 0.83 - 1.54

**GENERAL SERVICES – GROUP A ONLY**

Mean = 0.96

95 Percent Confidence Interval Around The Mean = 0.56 - 1.36

99 Percent Confidence Interval Around The Mean = 0.43 - 1.49

**TRANSPORTATION/MANUFACTURING – GROUP B ONLY**

Mean = 2.24

95 Percent Confidence Interval Around The Mean = 1.55 - 2.94

99 Percent Confidence Interval Around The Mean = 1.33 - 3.16

**RETAIL/ACCOMMODATIONS – GROUP C ONLY**

Mean = 0.46

95 Percent Confidence Interval Around The Mean = 0.28 - 0.64

99 Percent Confidence Interval Around The Mean = 0.23 - 0.70

**How many Semis or Tractor/Trailer combinations does the organization have?**

<u>Q3 How many Semis or Tractor/Trai</u>	<u>Number</u>	<u>Percent</u>
000	410	93.4 %
001	9	2.1 %
002	5	1.1 %
003	4	0.9 %
004	3	0.7 %
005	1	0.2 %
007	2	0.5 %
011	1	0.2 %
012	1	0.2 %
025	1	0.2 %
029	1	0.2 %
070	1	0.2 %
Total	439	100.0 %

**ALL COMPANIES**

Mean = 0.48

95 Percent Confidence Interval Around The Mean = 0.11 - 0.84

99 Percent Confidence Interval Around The Mean = -0.01 - 0.96

**GENERAL SERVICES – GROUP A ONLY**

Mean = 0.05

95 Percent Confidence Interval Around The Mean = -0.01 - 0.11

99 Percent Confidence Interval Around The Mean = -0.03 - 0.12

**TRANSPORTATION/MANUFACTURING – GROUP B ONLY**

Mean = 1.38

95 Percent Confidence Interval Around The Mean = 0.26 - 2.49

99 Percent Confidence Interval Around The Mean = -0.09 - 2.84

**RETAIL/ACCOMMODATIONS – GROUP C ONLY**

Mean = 0.04

95 Percent Confidence Interval Around The Mean = -0.01 - 0.08

99 Percent Confidence Interval Around The Mean = -0.02 - 0.09



**Does the organization have any single unit commercial vehicles, such as moving trucks, delivery trucks, tow trucks, or other commercial vehicles?**

Does the organization have any single unit combinations?	Number	Percent
Yes	54	12.3 %
No	385	87.7 %
Total	439	100.0 %

**Number of Single Units Per Company with 2-axes**

**ALL COMPANIES**

Mean = 0.46

95 Percent Confidence Interval Around The Mean = 0.16 - 0.76

99 Percent Confidence Interval Around The Mean = 0.06 - 0.86

**GENERAL SERVICES – GROUP A ONLY**

Mean = 0.24

95 Percent Confidence Interval Around The Mean = 0.03 - 0.45

99 Percent Confidence Interval Around The Mean = -0.03 - 0.51

**TRANSPORTATION/MANUFACTURING – GROUP B ONLY**

Mean = 1.03

95 Percent Confidence Interval Around The Mean = 0.13 - 1.94

99 Percent Confidence Interval Around The Mean = -0.15 - 2.22

**RETAIL/ACCOMMODATIONS – GROUP C ONLY**

Mean = 0.14

95 Percent Confidence Interval Around The Mean = 0.04 - 0.24

99 Percent Confidence Interval Around The Mean = 0.01 - 0.27

**Number of Single Units Per Company with 3-axes**

**ALL COMPANIES**

Mean = 0.06

95 Percent Confidence Interval Around The Mean = 0.02 - 0.10

99 Percent Confidence Interval Around The Mean = 0.00 - 0.12

**GENERAL SERVICES – GROUP A ONLY**

Mean = 0.02

95 Percent Confidence Interval Around The Mean = -0.02 - 0.07

99 Percent Confidence Interval Around The Mean = -0.04 - 0.09

**TRANSPORTATION/MANUFACTURING – GROUP B ONLY**

Mean = 0.11

95 Percent Confidence Interval Around The Mean = 0.02 - 0.21

99 Percent Confidence Interval Around The Mean = -0.01 - 0.24

**RETAIL/ACCOMMODATIONS – GROUP C ONLY**

Mean = 0.04

95 Percent Confidence Interval Around The Mean = -0.03 - 0.11

99 Percent Confidence Interval Around The Mean = -0.05 - 0.13

**Number of Single Units Per Company with 4-axes**

**ALL COMPANIES**

Mean = 0.05

95 Percent Confidence Interval Around The Mean = -0.01 - 0.10

99 Percent Confidence Interval Around The Mean = -0.02 - 0.11

**GENERAL SERVICES – GROUP A ONLY**

Mean = 0.00

95 Percent Confidence Interval Around The Mean = 0.00 - 0.00

99 Percent Confidence Interval Around The Mean = 0.00 - 0.00

**TRANSPORTATION/MANUFACTURING – GROUP B ONLY**

Mean = 0.14

95 Percent Confidence Interval Around The Mean = -0.02 - 0.30

99 Percent Confidence Interval Around The Mean = -0.07 - 0.35

**RETAIL/ACCOMMODATIONS – GROUP C ONLY**

Mean = 0.00

95 Percent Confidence Interval Around The Mean = 0.00 - 0.00

99 Percent Confidence Interval Around The Mean = 0.00 - 0.00

**Approximately how many employees does your organization employ at the location where the vehicles included in this survey are garaged?**

<u>Q5 Number employees</u>	<u>Number</u>	<u>Percent</u>
1-2 employees	77	17.9 %
3-5 employees	90	20.9 %
6-10 employees	102	23.7 %
11-20 employees	88	20.4 %
21-50 employees	53	12.3 %
51-100 employees	16	3.7 %
<u>more than 100 employees</u>	<u>5</u>	<u>1.2 %</u>
Total	431	100.0 %

Not provided = 8

**Which of the following best describes your organization?**

<u>Q6 Which best describes your organization</u>	<u>Number</u>	<u>Percent</u>
Finance & Insurance	16	3.6 %
Real estate & rental & leasing	10	2.3 %
Professional, scientific, & technical services	28	6.4 %
Administrative services	2	0.5 %
Educational services	8	1.8 %
Information	9	2.1 %
Health Care & social assistance	17	3.9 %
Government	0	0.0 %
Other general services	52	11.8 %
Wholesale Trade	56	12.8 %
Transportation and warehousing	28	6.4 %
Utilities	7	1.6 %
Manufacturing	40	9.1 %
Retail Trade	112	25.5 %
Arts, entertainment, and recreation	10	2.3 %
Accommodations and food service	44	10.0 %
Total	439	100.0 %

**APPENDIX F – TRIP EXPANSION BY SAMPLING GROUP AND  
VEHICLE TYPE**

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	<i>From Primary CVS</i>	<i>From Supplemental CVS</i>	<i>From Supplemental CVS</i>	<i>Calculated</i>	<i>From Dun and Bradstreet</i>	<i>Calculated</i>	<i>From Primary CVS</i>	<i>Calculated</i>
Vehicle Type	Mean # Trips/Day Per Vehicle	Mean # Vehicles Per Company	Vehicle Utilization Rate Per Company	Estimated Number of Trips Completed Per Company Per Day	Estimated # of Companies in Ada/Canyon Counties	Estimated Number of Total Commercial Vehicle Trips Per Day	Percentage of Trip Ends in Study Area	Estimated Number of Total Internal Commercial Vehicle Trips Per Day
<b>GROUP A</b>								
Passenger Cars/Vans	5.54	2.01	0.916	10.2		118,477	0.903	106,983
Light Duty Trucks/SUVs	5.39	0.96	0.767	4.0		46,029	0.918	42,251
Semi or Tractor Trailers	5.42	0.05	0.300	0.1		943	0.892	841
Single Unit 2 Axles	6.74	0.24	1.000	1.6		18,763	0.897	16,826
Single Unit 3 Axles	1.80	0.02	0.000	0.0		-	1.000	-
Single Unit 4+ Axles	0.00	0	1.000	0.0		-	0.000	-
TOTAL	5.84	3.28	0.829	15.9	11,601	184,212	0.906	166,901
<b>GROUP B</b>								
Passenger Cars/Vans	7.37	0.86	0.772	4.9		35,088	0.914	32,055
Light Duty Trucks/SUVs	5.22	2.24	0.801	9.4		67,089	0.942	63,198
Semi or Tractor Trailers	4.61	1.38	0.588	3.7		26,764	0.740	19,805
Single Unit 2 Axles	4.93	1.03	0.500	2.5		18,184	0.933	16,972
Single Unit 3 Axles	8.07	0.11	0.850	0.8		5,405	0.936	5,059
Single Unit 4+ Axles	8.60	0.14	0.858	1.0		7,400	0.837	6,195
TOTAL	5.04	5.77	0.767	22.3	7,164	159,930	0.896	143,284
<b>GROUP C</b>								
Passenger Cars/Vans	7.98	0.39	0.687	2.1		8,347	0.975	8,134
Light Duty Trucks/SUVs	6.00	0.46	0.835	2.3		9,004	0.951	8,566
Semi or Tractor Trailers	5.00	0.04	0.833	0.2		651	0.600	391
Single Unit 2 Axles	6.50	0.14	1.000	0.9		3,554	0.940	3,341
Single Unit 3 Axles	1.82	0.04	0.000	0.0		-	0.900	-
Single Unit 4+ Axles	0.00	0	0.667	0.0		-	0.000	-
TOTAL	6.60	1.07	0.781	5.5	3,905	21,556	0.948	20,432
<b>OVERALL</b>								
Passenger Cars/Vans	8.49	1	0.841	7.1		161,912	0.909	147,172
Light Duty Trucks/SUVs	5.72	1.18	0.798	5.4		122,122	0.934	114,015
Semi or Tractor Trailers	4.54	0.48	0.574	1.3		28,358	0.742	21,037
Single Unit 2 Axles	5.61	0.46	0.692	1.8		40,501	0.917	37,139
Single Unit 3 Axles	4.67	0.06	0.850	0.2		5,405	0.936	5,059
Single Unit 4+ Axles	7.62	0.05	0.856	0.3		7,400	0.837	6,195
TOTAL	6.35	3.23	0.787	16.1	22,670	365,698	0.904	330,617