FRONT RANGE TRAVEL COUNTS: NFRMPO HOUSEHOLD SURVEY

Final Report

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The Front Range Travel Counts Survey (FRTC) is a comprehensive study of the demographic and travel behavior characteristics of Colorado Front Range residents across four MPO regions: North Front Range, Denver, Colorado Springs, and Pueblo (see Figure 1). The objective of the survey effort is to document demographic and travel behavior characteristics across the Front Range in order to support travel demand modeling and answer travel-related questions. The main metric obtained are "trip rates," which are defined as the total number of trips reported at the household and/or person level for a given weekday. The survey data set obtained through this effort will support updates for several regional travel demand models, as well as support the development of new models.

As part of the FRTC, a household travel survey was conducted in all four MPO regions. In addition, supplemental surveys are planned to obtain data regarding commercial travel, travel within the region by non-residents, and travel by alternative modes (such as transit).

This report documents the design, implementation, and results of the FRTC Household Travel Survey within the North Front Range Metropolitan Planning Organization (NFRMPO) region, as shown in Figure 1.

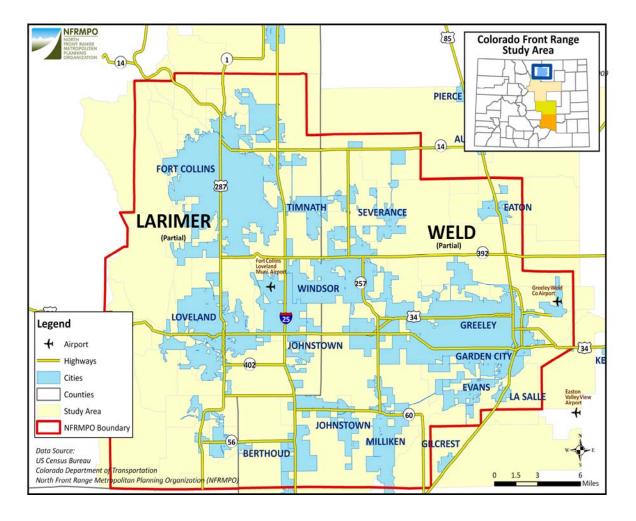


FIGURE 1: NORTH FRONT RANGE STUDY AREA

Throughout all the regions, the FRTC household travel survey was conducted using standard travel survey methods and computer-aided telephone interviewing (CATI) technology. It entailed the collection of activity and travel information for all household members during a specific 24-hour weekday period. The survey relied on the willingness of regional households to (1) provide demographic information about the household, its members, and its vehicles and (2) have all household members record all travel-related details for a specific 24-hour period, including information for all locations visited, trip purpose, mode, and travel times. Incentives were offered to targeted, hard-to-reach demographic groups (low-income, households comprised of one person who works, and large households) in order to minimize unit non-response and provide a more representative data set.

Survey work began with a pilot in Spring 2009, followed by the North Front Range survey effort in Fall 2009. The other MPO regions were surveyed in Spring 2010. For the North Front Range survey effort, regional households recorded travel August 24 through November 6, 2009. In total, 2,125 households were recruited to participate in the study, and 1,505 provided complete travel data and are in the final data set. The overall response rate was somewhere in the range of 14% to 51%, with a recruitment rate that was somewhere between 20% and 72% and a 72% retrieval rate.

NuStats conducted this regional household travel survey in association with its affiliate, PTV DataSource. NuStats designed the survey, managed data collection, mailed the travel log packets, processed the data, provided quality control and assurance, and analyzed the survey data. PTV DataSource conducted the telephone interviews and monitored the calls for additional quality control.

This report has two sections: methods and results. The appendices contain the survey materials and questionnaires, as well as a frequency of unweighted responses to both the recruitment and the retrieval questionnaires.



The Front Range Travel Counts (FRTC) household travel survey is comprehensive study of travel behavior throughout the Front Range of Colorado. This report focuses on the study effort for the North Front Range MPO (NFRMPO). This is the northernmost MPO, comprised of portions of Larimer and Weld Counties. As indicated in Figure 1 above, this includes the communities of Fort Collins, Greeley, Evans, and Loveland.

The NFRMPO survey was conducted over a nine-month period, from March to November 2009. The general progression of the effort began in Spring 2009 with the design stage, where the data elements to support modeling and other desired analyses were identified and used to design the recruitment and retrieval questionnaires as well as the 24-hour travel diary provided to respondents to record their travel. At the same time that consideration was given to what would be collected, equal attention was given to who would be surveyed. This was used to formalize a sampling plan that would provide sufficient samples in desired proportions to support sub-regional modeling.

Once the design work was completed, a pilot test was conducted in late Spring 2009 to assess respondent reaction to the survey and to confirm that the survey questions would yield the desired data. Subsequent to the pilot test, the full study data collection began in the North Front Range MPO region, as noted above. As the travel data was collected, they were processed and subjected to a series of quality assurance tests, as documented in the FRTC Quality Control Plan. The final task was to create the weighting factors that would adjust the data with regard to geographic and demographic distribution.

This section of the report provides details about the methodology used to conduct the survey through the stages described above. It concludes with documentation on the development of the weights for use with the final data set. Within each section, the methods used, as well as the outcomes from those methods, are discussed.

SURVEY DESIGN

The goal of the study was to collect data from a minimum of 11,200 regional households, of which at least 1,500 households were to be from the NFRMPO region. The overall sample size, as well as that for the NFRMPO region, were set by the partner agencies, taking into account modeling needs, analysis plans, and available budget. The NFRMPO goal was achieved, and the final NFRMPO data set contains demographic and trip information for all members of 1,505 households.

The survey employed a generally accepted research method for documenting household travel behavior, in which all household members recorded all trips for a specified 24-hour period (focusing on weekdays, with each "travel day" beginning at 3 a.m. and ending at 2:59 a.m.) using a specially designed travel diary. In the survey materials and interview scripts, respondents were assured that their responses would be kept confidential and that their responses would be analyzed in the aggregate only. As a result, the data files were structured such that a 7-digit unique identifier ("sample number") is provided to link each household's data together across the files and documentation prepared to ensure the public use data files would be stripped of all identifying information prior to its release.

Households were randomly assigned to non-Holiday weekdays for recording their travel (Monday-Friday). The final distribution of households by day of week is shown in Table 1, which shows a fairly equal distribution of completed households among the days of the week.

Day of Week	Frequency	Percent
Monday	320	21.3%
Tuesday	279	18.5%
Wednesday	317	21.1%
Thursday	297	19.7%
Friday	292	19.4%
Total	1,505	100.0%

TABLE 1: DISTRIBUTION OF HOUSEHOLDS BY DAY OF WEEK

Source: FRTC / NFRMPO Region, unweighted.

The following variables were obtained during the survey effort:

1) Household Data - Core household characteristics included the following:

- Geocoded household address,
- Household size,
- Household vehicle ownership and parking location when at home,
- Household bicycle ownership,
- Household income,
- Household ethnicity
- Residence type,
- Owner/renter status,
- Details regarding length of tenure, and if less than 5 years at current location, prior home location and reasons for moving,
- Indication of whether the household members use transit regularly or walks/bike to work/school,
- Day and date of travel, and
- Summary variables that indicated the number of trips made by household members, the number of workers and students, and the number of licensed drivers in the household.

2) *Person Data* – Demographic information was collected for all household members to help explain the impact of household dynamics on personal travel in the region. The person-level variables are:

- Age and gender of all household members,
- Relationship among household members,
- Disability status and type (following the American Community Survey design),
- Licensed Driver status (age 16+),
- Transit pass ownership (age 14+), type, and cost,
- Employment status (age 16+) or categorization of primary activity if not employed,
- If employed: for the primary job: geocoded work address, occupation, # hours worked per week, typical mode to work, telecommuting, whether the employer of the respondent provided transit pass and/or parking, length of time employed at that location and, if prior work location was in the Front Range region, where that work was located, carpool/vanpool participation, schedule flexibility,
- If employed: for the second job: geocoded work address, and # hours worked per week,
- Level of education attainment,
- Student status,
- If student: Geocoded school address, typical mode to school, type of school attended and if college student, number of days attend school (physically and on-line),
- A summary of the number of trips recorded or an explanation for non-travel if applicable.
- Details regarding the type of interview, the use of the diary, whether the day was typical for the respondent, and what type of traffic congestion encountered.

3) Vehicle data - The recruitment instrument included questions about the vehicles available to the household:

- Year,
- Make,

- Model,
- Body,
- Fuel type,
- Ownership status,
- Fleet composition questions including when vehicle was acquired, whether vehicle was a replacement or addition, and year/make/model of vehicle that was replaced,
- Whether vehicle was used on travel day and an explanation for non-use, if applicable.

4) *Trip data* –Trip data was collected for each household member during the retrieval interview. This data is the primary source of information to support the data needs of the travel demand model and analysis in mode choice, origin-destination patterns, and transportation facility use. Trip data collected included the following:

- An anchor point for the start of the day and to provide the origin information for the first trip of the 24-hour period (pinpointing the location of each household member at 3 a.m.),
- Geocoded address information for each location visited throughout the 24-hour period,
- Trip start and end times,
- Travel party size and composition,
- Travel mode,
 - If personal auto was used, an indication of which household vehicle was used
 - If personal auto was used, parking information
 - If transit was used, the number of transfers made, the bus fare, and bus pass information
 - For non-auto trips, the respondent perspective of parking costs (to determine if that had an influence on mode choice)
- Activity at place (trip purpose), and
- Summary variables to provide trip and activity duration.

SAMPLE DESIGN

Equally important as the decision of what to obtain during the survey is from whom to obtain that data. The objective was to provide a data set representative of the region's population and travel patterns. As such, the sample design for the study needed to guide the collection of data such that the resultant data set would include adequate representation of households by geography as well as the key demographics of household size and household workers.

The general approach was that of a random population sample, proportionate across the study area and with oversampling of the hard-to-reach demographic groups including low-income, Hispanics, large households, and 1-person/worker households. Socioeconomic stratifications were also used, in which household size and employment status of the members in the household were stratified into the following strata:

- 1-person worker households
- 1-person non-worker households
- 2-person households with at least one worker
- 2-person non-worker households
- 3-or-more person households

The stratified sampling method assumed the following:

- 1. <u>Study Universe</u>: The survey universe was defined as all households within Larimer County and portions of Weld County.¹ The study universe comprises 135,249 households.
- 2. <u>Sampling Frame</u>: A multi-sampling frame was used that combined the strengths of two sampling frames addressed-based frame and listed Random Digit Dial (RDD) frame. The address-based sample was randomly drawn from a current listing of all deliverable city and rural route residential postal addresses for the study area as contained in a direct mail database maintained by ADVO, Inc. The RDD sample was randomly generated by deriving unique blocks based on area code, exchange, and the 4th and 5th digits of known telephone number (e.g., 303-927-12). The last two digits were randomly generated, and each number was purged against known business listings and pre-dialed to purge non-working numbers.
- 3. <u>Target Number of Completes</u>: For the full study, the goal was to obtain travel data from 1,500 households.

The desired socio-economic distribution, according to the 2000 Census, is reflected in Table 2; the actual distribution of households in the final data set compared to the target numbers is in Table 3. During the course of the study, the distribution of recruited and retrieved households was monitored, and areas that were under-represented were targeted to attempt a distribution similar to the Census. The final distribution mirrored that of the 2000 Census fairly well, considering the age of the census data and the economic fluctuations of 2008 and 2009.

Demographic	Total Households	Percent of Total	Target Households	
1-person/worker	18,480	13.4%	201	
1-person/non-worker	12,918	9.4%	141	
2-person/worker	38,380	27.9%	419	
2-person/non-worker	10,006	7.3%	109	
3-person plus	57,722	42.0%	630	
Total	137,506	100.0%	1,500	

TABLE 2:	SOCIO-ECONOMIC STRATIFICATION
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Source: Census 2000, weighted

 TABLE 3: ACTUAL DISTRIBUTION OF PARTICIPATING HOUSEHOLDS

Demographic	Target	Actual	Percent of Goal
1-person/worker	201	241	119.9%
1-person/non-worker	141	116	82.3%
2-person/worker	419	536	127.9%
2-person/non-worker	109	78	71.6%
3-person plus	630	534	84.8%
Total	1,500	1,505	100.0%

Source: FRTC/NFRMPO Region, unweighted.

A distribution of all households sampled to participate in the study is shown in Figure 2. These are households that were randomly selected to participate in the survey. Ultimately, 1,505 households completed the entire study (their travel data was retrieved and passed all quality control checks). These "retrieved" households are shown geographically in Figure 3.

¹ The remainder of Weld County was outside the NFRMPO planning boundaries and thus not included in this effort.

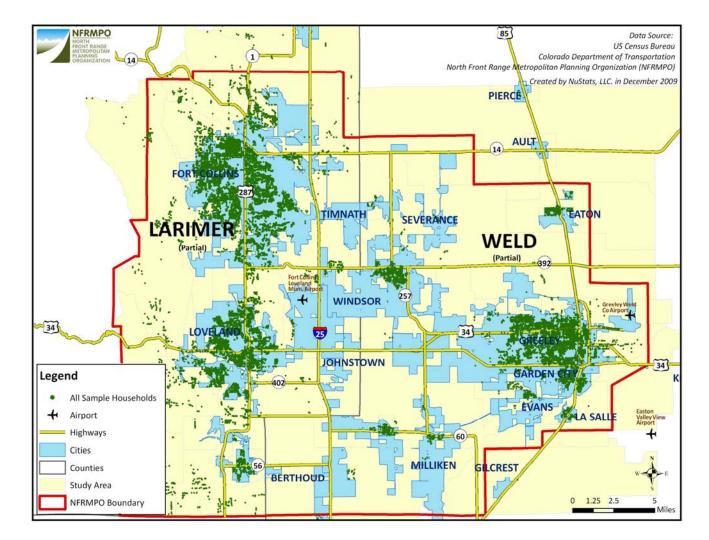
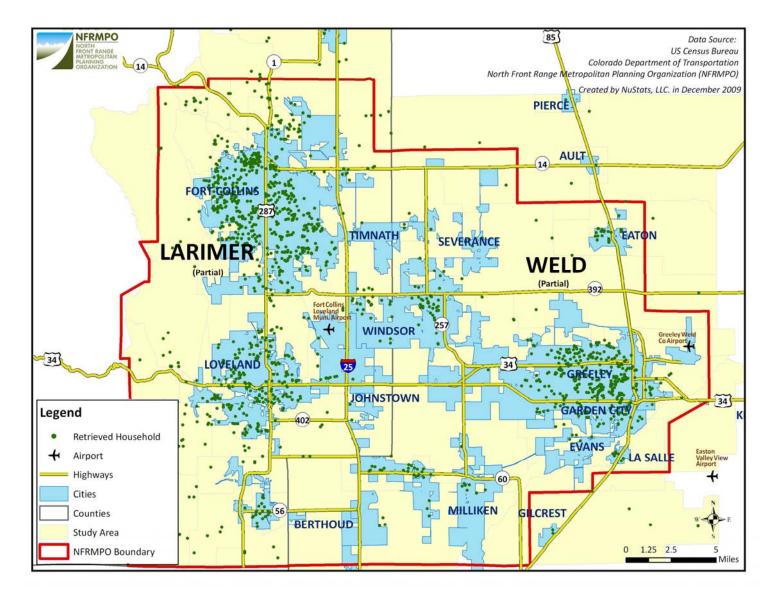


FIGURE 2: SAMPLED HOUSEHOLD LOCATIONS

FIGURE 3: RETRIEVED HOUSEHOLD LOCATIONS



PILOT TEST

The pilot for the entire Front Range survey effort was conducted in the Spring of 2009. The purpose of the pilot phase of the study was to develop and test survey instruments and materials in order to assess respondent reaction and budget assumptions, in preparation for the full study effort. The three main objectives of the pilot phase were:

- 1. To test the core materials to ensure they are applicable and understood by all respondent groups despite differences in geography and demographics.
- 2. To identify variances, if any, between participation rates across regions.
- 3. To program and test the core programs and processes.

For the pilot data collection effort, the goal was to recruit 152 households from across the Front Range in order to assess how many would fully complete the survey. The focus included four geographic areas: a general area (selected to provide a benchmark for "typical" households in the full study) and three target areas (selected to provide insights into the low-income, minority, and military populations). To that end, the data collection team recruited 150 households. Complete and usable travel data were obtained from 102 households.

Prior to the start of the pilot test, evaluation criteria were developed to allow for an objective assessment of instruments, procedures, and processes. The pilot report focused on that objective assessment. The pilot test was designed as a "dress rehearsal" and allowed for the full evaluation of the survey procedures from sample generation to data file preparation. Overall, the pilot test was successful in terms of the procedures and collection of necessary data. These conclusions focus on three main areas: respondent participation, data, and methods.

- Respondent Participation. The production and overall levels of recruitment show good levels of participation at the aggregate level. However, when you consider different groups of respondents, variation does suggest possible cost implications. With regards to recruitment, the retrieval rates suggest that some groups are easy to recruit, but they do not follow through. At the same time, other groups are more difficult to recruit, but when they commit, they fully complete the study. Full study recruitment estimates will be adjusted to reflect this (with the results of the "general" group guiding the effort more than for the special population groups included in the survey).
- 2) **Data.** With a few exceptions related to the need for programming adjustments, the data appear solid and sufficient to support the intended uses. A detailed review of the transit data shows that the materials and computer-aided telephone interviewing (CATI) programs are collecting the transit trip segments at the level of detail desired. Item non-response was highest for the new questions (hours worked at main and secondary jobs and year vehicle was acquired). Often, item non-response is correlated with the respondent's interpretation of question relevancy if these data items are kept in the survey, relevancy to the survey effort should be provided to the interviewers to help to mitigate item non-response.
- 3) **Methods.** The retrieval program was slightly longer than budgeted and should be shortened. In addition, the mail option is important for including some households in the study. All respondents should receive the study brochure in the diary packets.

DATA COLLECTION

Data collection activities for the NFRMPO survey began in August and continued through November 2009. These activities centered around five main stages: advance notification, recruitment, placement of materials, travel data retrieval, and processing. The details regarding each stage are provided in this section.

Advance Notification. A study letter and brochure were mailed to 1,500 households prior to the recruitment call. This mailing served as advance notification to the household that it had been randomly selected and would be receiving a call regarding the study; they were also provided the option of calling PTV DataSource to participate in the study. It provided information about the study sponsor, introduced PTV DataSource as the company that would be contacting them, and provided the web site address and a telephone number where additional information could be obtained. The letter and study brochure are included in Appendix A.

Recruitment. The recruitment interview was administered using a computer-assisted telephone interviewing (CATI) program. Each sampled household was telephoned by an interviewer to invite them to participate in the study. If the household agreed, demographic information was collected including income, household size, vehicle ownership, and other household characteristics. In addition, demographic characteristics were obtained for each member of the household such as age, gender, and employment and school status (see Appendix B for the recruitment questionnaire).

The recruitment calls began on August 12 and continued through October 25, securing participation from a total of 2,125 households. Over the course of the recruitment effort, 27,459 telephone numbers were called. Of these:

- 2,963 (10.8%) resulted in contact with <u>eligible</u> households.
- 4,707 (17.1%) were determined to be <u>ineligible</u> (non-working, non-household or non-voice lines), and
- 19,789 (72.1%) were unable to be classified as eligible or ineligible.

Of the <u>eligible</u> households reached, 2,125 of the 2,963 agreed to participate in the study (71.7%). The average length of the recruitment call was 20.6 minutes. It took an average of 2.7 call attempts to reach a household for recruitment. Table 4 shows the average interview length and the average number of call attempts it took to reach each household based on household size. As indicated in that table, the larger the household, the longer the interview length. The table also shows that it took fewer call attempts to reach households with fewer members.

Household Size	Ν	Interview Length	# Attempts
1 person	456	14.5 min	2.3
2 persons	817	19.5 min	2.6
3 persons	313	22.9 min	2.7
4+ persons	539	26.1 min	2.9
Total	2,125	20.6 min	2.7

TABLE 4: RECRUITMENT INTERVIEW LENGTH AND CONTACTS

The recruitment instrument performed well. From a data quality point of view, item non-response is an important issue. This is defined as those instances where the respondent did not answer a survey question, either because they did not know the answer or refused to provide it. This is determined through a review of unweighted responses to all survey questions. As evidenced by the unweighted frequency of responses to the recruitment questionnaire contained in Appendix C, item non-response was marginal for this survey effort. A summary of the item non-response associated with the recruitment questionnaire are listed below. Each bullet includes the variable as well as the level of non-response.

- Home ownership status (0.1%)
- Length of time lived at current location (0.1%)
- Location of last home (0.3%)
- Factors influencing decision to move residence location (0.2%)
- Count of cellular phones in household (0.6%)
- Count of home telephone numbers in household (0.4%)
- Household income (7.4%)
- Where vehicle is parked at home (0.1%)
- Vehicle year (1.9%)
- Vehicle make (0.4%)
- Vehicle body (0.1%)
- Vehicle fuel type (0.1%)
- Vehicle ownership (0.1%)
- When acquired (2.3%)
- Vehicle a replacement or addition (0.1%)
- Age (1.7%)
- Disability (0.3%)
- Disability license (0.1%)
- Hispanic Origin (0.5%)
- Ethnicity (1.1%)
- Licensed Driver Status (0.1%)
- Transit Pass (0.4%)
- Employment Status (0.1%)
- Hours worked (1.2%)
- Volunteer status (0.1%)
- Primary Activity if not employed (0.1%)
- Occupation (0.6%)
- Length of time at this work site (0.8%)
- Last position in Front Range (0.5%)
- Typical Mode to Work (0.1%)
- Employer pays for parking (0.1%)
- Flexibility of work schedule (0.5%)
- Hours worked at 2nd job (0.5%)
- Educational Attainment (0.4%)
- Typical Mode to School (0.2%)
- Number of days attend school (college students) (0.1%)
- Number of days attend school on-line (college students) (0.2%)

Packet Mailout. The day following recruitment, the demographic information was processed into the master data set, and packets were assembled for each recruited households. These packets included a cover letter, travel diary, sample travel log, and a postage-paid envelope to return the completed logs after the retrieval interview (see Appendix D). Travel days were scheduled 7 to 10 days after recruitment to allow for sufficient time for packets to reach the households using First-Class mail.

Reminder Call. The night prior to the assigned travel day, reminder calls were made to the households. This reminder call served three key purposes:

- 1. Confirm that the household received the packet and answer any questions respondents might have about using the log to track their travel.
- 2. Schedule an appointment to conduct the retrieval interview.
- 3. Increase the likelihood that the household will follow through with recording their travel by reiterating the importance of the study and the household's commitment to participate.

For those instances where an answering machine was reached, the interviewers left brief messages that referenced a toll-free number for respondents to call if they had questions.

Retrieval. The day after an assigned travel day or at an agreed-upon time, telephone calls were made to retrieve the travel data recorded by each eligible household member in his/her travel diary. The interviews were guided using CATI programs of the retrieval instrument (see Appendix E). The average interview length was 33.9 minutes, and it took 6.5 call attempts to reach each household, on average.

Household Size	Ν	Interview Length	# Attempts
1 person	357	20.3 min	5.5
2 persons	614	30.4 min	6.1
3 persons	212	39.4 min	7.2
4+ persons	322	51.4 min	7.9
Total	1505	33.9 min	6.5

TABLE 5: RETRIEVAL INTERVIEW LENGTH AND CONTACTS

Travel days were assigned beginning August 24 and continued through November 6. Retrieval interviews began on August 25 and continued through November 16. Data were collected from all household members for the 1,505 households that completed the study. This is a retrieval rate of 70.8% (1,505 retrieved / 2,125 recruited).

To determine the overall response rate for the study, two different approaches are used. First, the participation by eligible households is calculated as the number of recruited households (2,125) divided by all eligible households (2,963). So of all eligible households, 72% agreed to participate in the study. Another measure is one that considers all recruits as a proportion of eligible sample plus a proportion of the sample for which eligibility could not be determined. According to that calculation, the recruitment rate is 20%, but this understates the recruitment rate as it considers sample that might be eligible but not that the eligible sample would result in completed surveys. As a result, the true recruitment rate lies somewhere in between 20% and 72%. The overall response rate for the study is determined by multiplying the recruitment rate by the retrieval rate (71.1%). For this study, the response rate is somewhere between 14% and 51%.

The retrieval instrument had minimal item non-response. As indicated in the unweighted frequencies contained in Appendix F to this report, the retrieval variable that experienced the highest item non-response was the question that asked the respondents who drove to a non-home location whether they parked on-site or off-site. This question experienced 0.8% item non-response.

Processing. Data processing took place throughout the study, beginning with the creation of the advance notification mailout, continuing with the release of sample for recruitment, processing recruitment data for the respondent mailout, appending the retrieval data to the master tables, and performing initial quality control measures on the data. A master control file tracked the progress of each household through the various survey stages, with codes to allow immediate identification of problem cases that were not

progressing according to schedule, as well as confirmation that cleared cases moved along as appropriate. A complete list of data checks is detailed in the FRTC Quality Control Plan. Example data checks from that more comprehensive list include the following:

- Data range checks to ensure data were inside the expected ranges for each variable and that there was agreement across data files (for example, if the household had 4 persons and 2 vehicles, there should be 4 records in the person file and 2 records in the vehicle file).
- If a person reported no travel, the household was flagged for manual review to confirm the reason for non-travel was appropriate based on the demographic characteristics of the household member. Those cases where the reason for non-travel was suspect or did not make sense within the context of the available demographic information were flagged and returned to PTV DataSource for confirmation or replacement.
- Within the travel data itself, several items were checked. The following are examples of conditions researched within the trip data:
 - Did each trip begin and end at a different location? Loop trips (those that have the same origin and destination) might be neighborhood walks, which were treated as at-home non-work activities rather than a trip.
 - Did each person return home at the end of the travel day? If not, did the final recorded destination make sense within the context of the household and person characteristics?
 - For all instances where a respondent reported traveling with other household members, was the shared trip reported for all other household members?
 - For all trips with "auto-driver" as the reported mode, was the respondent a licensed driver?
 - For all trips reported as "auto-passenger," did another household member report the same trip as an auto-driver? If not, did the passenger report riding in a non-household vehicle with at least one other person making the trip?

Real-Time Geocoding with Trip Tracer. All trip-ends and habitual addresses were geocoded during the retrieval telephone interview using the Trip Tracer software. The Trip Tracer software was designed to provide interviewers with study area details (road names, landmark references). Interviewers used this additional detail to confirm respondent-reported locations in real time. An additional benefit of the use of the Trip Tracer software was that once the interview was completed, full address information, with matching x/y coordinates, for 100% of the locations, was immediately available. The availability of the location data at the x/y coordinate level means that data users can map to various geographies (such as traffic analysis zones or census tracts, using GIS software.

DATA WEIGHTING

As discussed earlier, the sample design was crafted to enable the collection of data from a representative and randomly selected sample of households from the region. Demographic and geographic targets were used to guide data collection with the goal of having a final data set that reflected the 2000 Census population proportions. Although the sample was randomly selected, not all sampled households agreed to participate, nor did all households that agreed to participate actually complete the study. This resulted in a non-response bias in the data set.

To correct for this, the final data set includes analytical weights computed at the household level. These weights adjust the relative importance of responses to reflect the different probabilities of selection of respondents and align the sample distributions to population distributions, thereby improving coverage and precision.

Sampling Weight. The first stage in developing the household weight was to adjust for the different probabilities of selection of respondents based on the sampling frames from which they were drawn. The sampling weight reflects the probability of selection of a telephone number or an address from the sampling frame. Considering the dual sampling framework employed in this study, separate sampling weights were calculated for the cell phone RDD, listed residential, and the address-based sampling frames. Specifically, the sampling weight for a sampling unit ij in the sampling frame, denoted as $W_{\rm res} = r$.

 $W_{ij,SampFr}$, is simply the reciprocal of the selection probability of the sampling unit.

$$W_{ij,SampFr} = \frac{1}{\text{Prob}_{ij,SampFr}}$$

where,

- Sampling unit *ij* is an address in the listed residential or address-based sampling frame, and
- Sampling frame ^{SampFr} is either the listed residential or the address-based sampling frame.

Raking Adjustment. Raking improves the reliability of the survey estimates. Hence, raking adjustments were used to align the weighted sample to the 2000 Census data using raking variables. In particular, the aforementioned weights were adjusted so that the sums of the adjusted weights are equal to known population totals from Census for certain subgroups of the population defined by demographic characteristics and geographic variables. The variables used for raking at the household level are as follows:

- Area of residence,
- Household size,
- Total Number of Workers in the households, and
- Household Income.

The raking procedure is based on an iterative proportional fitting procedure and involves simultaneous ratio adjustments to two or more marginal distributions of the population counts. The raking procedure is carried out in a sequence of adjustments. First, the base weights are adjusted to one marginal distribution and then to the second marginal distribution, and so on. One sequence of adjustments to the marginal distributions is known as a cycle or iteration. The procedure is repeated until convergence is achieved.

Table 6 shows the survey and Census population distribution by demographic and geographic raking variables for the NFRMPO area. A comparison of the unweighted difference and weighted difference between the survey data and the census indicates that the raking procedure has aligned the sample statistics to the population statistics.

Characteristic	Unweighted Data	Weighted Data	Cansus Data
Area of Residence	Unweighted Data	Weighted Data	Census Data
	41.4%	40.6%	40.6%
Larimer County – Fort Collins			
Larimer County – Loveland	16.1%	17.5%	17.5%
Larimer County – Remainder	10.2%	7.7%	7.7%
Weld County – Greeley/Evans	22.7%	24.7%	24.7%
Weld County – Other	9.6%	9.5%	9.5%
Household Size			
1	23.7%	22.3%	22.4%
2	40.8%	35.6%	35.5%
3	14.1%	16.5%	16.5%
4 or more	21.4%	25.6%	25.6%
Household Workers			
0	13.7%	9.0%	9.0%
1	34.5%	25.7%	25.7%
2	45.6%	52.9%	52.9%
3 or more	6.2%	12.4%	12.4%
Household Income*			
\$0 - \$29,999	14.5%	30.7%	30.7%
\$30,000 - \$49,999	18.0%	23.4%	23.4%
\$50,000 - \$74,999	23.2%	21.7%	21.7%
\$75,000 - \$99,999	17.5%	11.8%	11.8%
\$100,000 +	26.8%	12.4%	12.4%
Residence Type			
Single family	85.8%	86.2%	78.1%
All other types	14.2%	13.8%	21.9%

TABLE 6: RAKING ADJUSTMENT AT HOUSEHOLD LEVEL

*Income was imputed for those cases where it was not provided by the respondent using a hot-deck imputation process that considered household size, household vehicles, household workers, and residence type.

Final Household Weight. The final analytic weight is simply the product of sampling weight and raking adjustment. This weight was normalized to represent the number of survey respondents in the study.



A total of 1,505 households in the NFRMPO region completed the Front Range Travel Counts (FRTC) survey. These households provided details about their 3,686 household members, including age, gender, disability status, and employment and student status. They provided the year, make, and model for each of their 3,337 vehicles. In addition, they willingly provided trip destinations, travel times, travel modes, and the reasons for making 14,631 trips during a 24-hour period. In all, the households reported an average of 9.72 daily household trips and 3.97 daily person trips.

The purpose of this section is to summarize the characteristics of participating households. This begins by a review of the household members, which serves to inform differences in their travel behavior, as is presented in the second section of this chapter. Details about their trip characteristics comprise the third section, followed by a more detailed look at mode choice. This chapter concludes with a review of the travel times reported by respondents, including travel destinations during specific time periods.

RESPONDENT SUMMARY

The 1,505 households had an average of 2.58 persons each. Households in the outlying Weld County were the largest (3.19 persons), while those in Greeley/Evans were the smallest (2.48 persons on average).

	Area					
		Greeley/Evans	Loveland	Other Larimer	Other Weld	Total
Household Size	n=611	n=263	n=116	County n=372	County n=143	n=1,505
1 Person	24.9%	26.3%	29.9%	16.7%	11.9%	22.3%
2 Persons	32.7%	37.4%	27.4%	46.9%	21.0%	35.5%
3 Persons	19.0%	11.5%	16.2%	14.3%	21.0%	16.5%
4+ Persons	23.4%	24.8%	26.5%	22.1%	46.2%	25.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Average	2.52	2.48	2.62	2.51	3.19	2.58

TABLE R-1: HOUSEHOLD SIZE BY AREA

Source: Front Range Travel Counts – NFRMPO HH Survey, weighted.

With regard to household vehicle ownership, the regional average was 2.22 vehicles per household. As with household size, households with the most vehicles were in the outlying counties, while those in Greeley/Evans had the smallest reported fleet sizes.

		Area								
		Greeley/Evans	Loveland	Other Larimer	Other Weld	Total				
Household Vehicles	n=611	n=263	n=116	County n=372	County n=143	n=1,505				
0 Vehicles	2.8%	5.7%	1.7%	0.0%	0.0%	2.3%				
1 Vehicle	31.4%	25.5%	31.6%	14.2%	10.5%	24.2%				
2 Vehicles	41.4%	46.4%	36.8%	34.9%	39.2%	40.1%				
3+ Vehicles	24.4%	22.4%	29.9%	50.8%	50.3%	33.5%				
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Average	1.98	1.93	2.11	2.69	2.61	2.22				

According to the detailed information provided for each household vehicle, most of the households own vehicles manufactured before 2004.

		Area							
	Fort Collins	Greeley/Evans	Loveland	Other Larimer	Other Weld	Total			
Vehicle Year	n=1210	n=507	n=245	County n=1000	County n=373	n=3,337			
Before 1995	22.3%	21.7%	21.0%	18.3%	17.1%	20.4%			
1995-1999	26.2%	30.6%	19.8%	20.6%	24.1%	24.5%			
2000-2004	26.4%	23.5%	33.7%	29.6%	30.2%	27.9%			
2005	6.4%	4.1%	5.3%	5.7%	7.2%	5.8%			
2006	4.9%	5.1%	3.7%	9.7%	6.7%	6.5%			
2007	4.2%	4.9%	7.8%	5.3%	7.0%	5.2%			
2008	2.6%	5.1%	3.7%	8.4%	3.5%	4.9%			
2009	2.2%	2.6%	1.6%	0.4%	3.2%	1.8%			
2010	0.3%	0.0%	0.4%	0.0%	0.0%	0.1%			
Refused	4.5%	2.4%	2.9%	2.1%	1.1%	3.0%			
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Average	1998	1998	1999	1999	1999	1999			

TABLE R-3: FLEET AGE BY AREA

Source: Front Range Travel Counts - NFRMPO HH Survey, weighted.

Virtually all households had at least one licensed driver, with the regional average at 1.92 licensed drivers per household.

		Area							
HH Licensed	Fort Collins	Greeley/Evans	Loveland	Other Larimer	Other Weld	Total			
Drivers	n=611	n=263	n=116	County n=372	County n=143	n=1,505			
0	1.6%	3.4%	2.6%	0.0%	0.0%	1.5%			
1	26.6%	32.3%	30.2%	19.6%	15.4%	25.1%			
2	56.7%	52.9%	50.9%	64.5%	58.7%	57.7%			
3+	15.1%	11.4%	16.4%	15.9%	25.9%	15.8%			
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Average	1.89	1.73	1.83	2.03	2.19	1.92			

TABLE R-4: HOUSEHOLD LICENSED DRIVERS BY AREA

Source: Front Range Travel Counts – NFRMPO HH Survey, weighted.

Forty percent of regional households reported having at least one member that was a student. Households in Weld County had a higher proportion of student members than households in other areas. Those in outlying Larimer County reported the lowest proportion of students.

	Area								
	Fort Collins	Greeley/Evans	Loveland	Other Larimer	Other Weld	Total			
HH Workers	n=611	n=263	n=116	County n=372	County n=143	n=1,505			
0 Students	58.3%	66.9%	59.5%	65.5%	43.4%	60.2%			
1 Students	17.8%	12.9%	17.2%	20.5%	25.9%	18.4%			
2+ Students	23.9%	20.2%	23.3%	14.0%	30.7%	21.4%			
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Average	0.76	0.68	0.80	0.52	1.00	0.71			

TABLE R-5: HOUSEHOLD STUDENTS BY AREA

Households in outlying Weld County also reported the highest proportion of workers in the household as compared to the other areas. Households in Greeley/Evans reported the lowest average number of workers per household.

		Area								
	Fort Collins	Greeley/Evans	Loveland	Other Larimer	Other Weld	Total				
HH Workers	n=611	n=263	n=116	County n=372	County n=143	n=1,505				
0 Workers	9.5%	13.3%	9.4%	6.7%	4.9%	9.0%				
1 Worker	27.7%	29.5%	32.5%	21.2%	16.8%	25.7%				
2+Workers	62.8%	57.2%	58.1%	72.0%	78.3%	65.2%				
Total	100.0%	100.0%	100.0%	100.0%	100.%	100.0%				
Average	1.67	1.54	1.61	1.79	2.03	1.71				

TABLE R-6: HOUSEHOLD WORKERS BY AREA

Source: Front Range Travel Counts - NFRMPO HH Survey, weighted.

Households in the outlying Larimer and Weld Counties reported higher incomes, on average, than those in the cities.

		Area							
	Fort Collins	Greeley/Evans	Loveland	Other Larimer	Other Weld	Total			
HH Income	n=611	n=263	n=116	County n=372	County n=143	n=1,505			
< \$15,000	8.2%	7.6%	7.7%	2.7%	4.9%	6.4%			
\$15,000 - < \$20,000	9.0%	6.5%	9.4%	2.4%	1.4%	6.3%			
\$20,000 - <\$30,000	15.7%	25.9%	17.1%	19.7%	10.5%	18.1%			
\$30,000 - <\$40,000	10.2%	15.2%	12.0%	8.1%	9.1%	10.6%			
\$40,000 - < \$50,000	12.0%	14.4%	12.8%	8.1%	25.9%	12.8%			
\$50,000 - < \$60,000	6.9%	6.1%	9.4%	9.7%	4.9%	7.5%			
\$60,000 - < \$75,000	14.6%	12.2%	10.3%	14.6%	19.6%	14.3%			
\$75,000 - < \$100,000	10.8%	6.1%	11.1%	16.8%	14.7%	11.8%			
\$100,000 - < \$135,000	6.9%	3.8%	6.0%	7.6%	2.8%	6.1%			
\$135,000 - < \$150,000	2.3%	1.5%	1.7%	4.1%	2.8%	2.6%			
\$150,000 +	3.4%	0.8%	2.6%	6.2%	3.5%	3.6%			
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Average	\$40k -< \$50k	\$40k -< \$50k	\$40k -< \$50k	\$50k -< \$60k	\$50k -< \$60k	\$40k -< \$50k			

TABLE R-7: HOUSEHOLD INCOME BY AREA

Source: Front Range Travel Counts - NFRMPO HH Survey, weighted.

Income imputed as documented in Technical Memo on Weighting.

Seven percent of regional households indicated they were of Hispanic origin. Hispanic households were more likely to be found in Greeley/Evans and outlying Weld County.

TABLE R-8: HOUSEHOLD	HISPANIC ORIGIN BY AREA
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		Area						
	Fort Collins	Greeley/Evans	Other Larimer	Other Weld	Total			
Hispanic Origin	n=611	n=263	n=116	County n=372	County n=143	n=1,505		
Hispanic	5.2%	18.6%	2.6%	2.7%	10.6%	7.2%		
Non-Hispanic	94.3%	81.0%	96.6%	97.0%	88.0%	92.2%		
Refused	0.5%	0.4%	0.9%	0.3%	1.4%	0.5%		
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

Most households (95%) were not of minority descent. Households in Greeley/Evans were most likely to report being of a non-white ethnic background.

	Area						
	Fort Collins	Greeley/Evans	Loveland	Other Larimer	Other Weld	Total	
Ethnicity	n=611	n=263	n=116	County n=372	County n=143	n=1,505	
White	94.4%	90.5%	94.9%	99.2%	97.9%	95.3%	
African American	0.2%	0.4%	0.0%	0.0%	0.0%	0.1%	
American Indian or Alaska Native	0.2%	0.8%	0.9%	0.0%	0.0%	0.3%	
Asian	1.0%	0.4%	0.0%	0.0%	0.0%	0.5%	
Other	3.3%	7.2%	1.7%	0.3%	2.1%	3.0%	
Refused	1.0%	0.8%	2.6%	0.5%	0.0%	0.9%	
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

TABLE R-9: HOUSEHOLD ETHNICITY BY AREA

Source: Front Range Travel Counts - NFRMPO HH Survey, weighted.

Most respondent households own their own home (86%). Renters were more prevalent in Greeley/Evans and Loveland, as compared to the rest of the areas.

TABLE R-10:	HOME O	WNERSHIP	BY A REA
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		Area								
	Fort Collins	rt Collins Greeley/Evans Loveland Other Larimer Other Weld Tot								
HH Ownership	n=611	n=263	n=116	County n=372	County n=143	n=1,505				
Owned/Mortgaged	82.7%	76.5%	80.2%	97.0%	95.8%	86.2%				
Not Owned	17.3%	23.5%	19.9%	3.0%	4.2%	13.8%				
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				

Source: Front Range Travel Counts – NFRMPO HH Survey, weighted. "Not Owned" includes one case in Loveland where ownership was refused.

Two-thirds of households in the region reported owning at least one bicycle, with an overall average of 1.87 bikes per household. Households in Fort Collins reported higher-than-average bike ownership (2.18 bikes per household). Bicycle ownership levels were lowest in Greeley/Evans.

		Area							
	Fort Collins	Greeley/Evans	Loveland	Other Larimer	Other Weld	Total			
HH Bicycles	n=611	n=263	n=116	County n=372	County n=143	n=1,505			
0	26.4%	46.4%	39.3%	27.4%	34.0%	31.9%			
1	14.6%	16.7%	19.7%	19.4%	16.0%	16.7%			
2	26.0%	19.8%	14.5%	25.8%	22.2%	23.6%			
3+	33.1%	17.1%	26.5%	27.4%	27.8%	27.9%			
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Average	2.18	1.32	1.60	1.86	1.85	1.87			

TABLE R-11: HOUSEHOLD BICYCLES BY AREA

One-fourth of households in the North Front Range region indicated that someone in the household typically walked or biked to work/school at least once a week. This was highest in Fort Collins (35%) and lowest in the outlying Larimer and Weld County areas.

TABLE R-12: HOUSEHOLD MEMBERS WALK OR BIKE TO WORK/SCHOOL AT LEAST ONCE PER WEEK BY AREA

		Area						
	Fort Collins	Greeley/Evans	Loveland	Other Larimer	Other Weld	Total		
Travel	n=611	n=263	n=116	County n=372	County n=143	n=1,505		
Yes	35.4%	20.5%	21.6%	14.2%	13.9%	24.4%		
No	64.6%	79.5%	78.4%	85.8%	86.1%	75.6%		
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

Source: Front Range Travel Counts - NFRMPO HH Survey, weighted.

Fewer households reported using transit at least once a week. Overall, only 7% of participating households indicated they used transit at least once a week. Reported usage was highest in Greeley/Evans and lowest in the outlying Larimer and Weld County areas.

TABLE R-13: HOUSEHOLDS USE TRANSIT AT LEAST ONCE PER WEEK BY AREA

		Area						
	Fort Collins	Greeley/Evans	Loveland	Other Larimer	Other Weld	Total		
Used Transit	n=611	n=263	n=116	County n=372	County n=143	n=1,505		
Yes	6.9%	12.2%	8.6%	3.8%	2.1%	6.7%		
No	93.1%	87.8%	91.4%	96.2%	97.9%	93.3%		
Total	100.0%	100.0%	100.0%	100.0%	100.%	100.0%		

Source: Front Range Travel Counts - NFRMPO HH Survey, weighted.

Person Characteristics. The distribution of respondents by gender was fairly consistent across the region. As shown in Figure R-1, 47% of respondents were male and 53% were female.

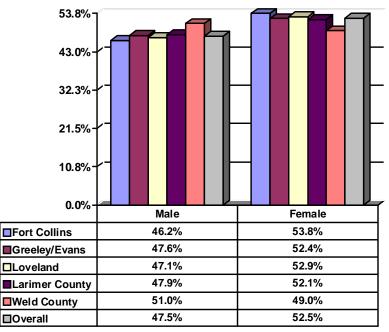


FIGURE R-1: RESPONDENT GENDER BY AREA

Source: Front Range Travel Counts - NFRMPO HH Survey, weighted. Excludes respondents that did not provide Gender.

Eighty percent of those participating in the survey were over age 16. Children were most likely to be reported in households in Loveland and the outlying Weld County area. Seniors were most prevalent in Greeley/Evans. In general, young adults (age 20-24) were under-represented in this study, and the elderly (age 55+) were slightly over-represented, as compared to 2000 Census distributions.

		Area						
	Fort Collins	Greeley/Evans	Loveland	Other Larimer	Other Weld	Total		
Age	n=1443	n=614	n=287	County n=868	County n=413	n=3,625		
Under 16	18.5%	20.0%	26.5%	18.2%	24.0%	19.9%		
16-19	7.5%	4.6%	6.6%	3.8%	4.6%	5.7%		
20-24	5.8%	3.3%	1.0%	3.3%	5.8%	4.4%		
25-34	8.6%	6.4%	11.5%	9.2%	6.8%	8.4%		
35-44	11.7%	10.7%	10.1%	9.1%	18.4%	11.6%		
45-54	21.4%	19.4%	12.5%	15.7%	15.0%	18.3%		
55-64	13.3%	18.7%	18.5%	30.4%	15.7%	19.0%		
65 and older	13.2%	16.9%	13.2%	10.3%	9.7%	12.7%		
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
Average	39.30	42.97	37.57	41.91	36.64	40.10		

TABLE R-14: RESPONDENT AGE BY AREA

Source: Front Range Travel Counts - NFRMPO HH Survey, weighted. Excludes cases where age was not provided.

The survey design followed the American Community Survey approach to documenting disability levels in the region. This entailed asking a series of questions about the presence of specific disabilities for each household member (see Appendix the questions). If at least one disability was present, the household member was identified as being "disabled" for this summary. Approximately one in ten respondents indicated they had some type of disability (10%), which is consistent with an estimate of 11% disability according to the American Community Survey for the same general geographic region.² Respondents in Greeley/Evans reported the highest disability rate at 19% of respondents. Those in outlying Larimer County reported the lowest disability rate at 5% of respondents.

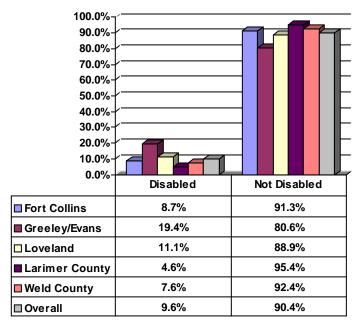


FIGURE R-2: DISABILITY STATUS BY AREA

² American Community Survey estimate derived from the 3-year (2005-2007) ACS database with a geography of the Fort Collins-Loveland MSA (the lowest level geography for which disability data was available) using American Fact Finder at <u>www.census.gov</u>, as summarized in the Table DP3YR-2. Note that the disability question used in the survey is from the 2008 ACS but data are not yet available from that source for a direct comparison.

The majority of respondents age 16 or older (94%) were licensed to drive. Licensure rates were highest in outlying Larimer County (99%). They were lowest in Greeley/Evans (87%).

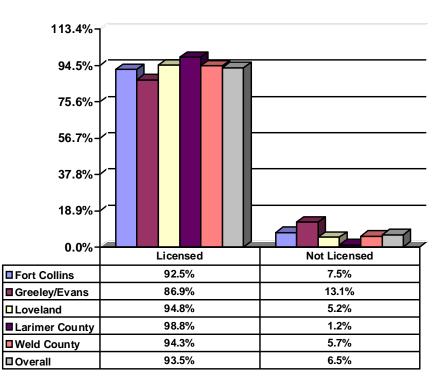


FIGURE R-3: LICENSED DRIVER STATUS BY AREA

Respondents were asked if they held a transit pass for any provider in the Front Range region. About 4% of adults indicated they did hold a transit pass. This level was highest in Fort Collins (7% reporting holding a transit pass) and lowest in outlying Larimer County (less than 1%).

		Area						
	Fort Collins	Greeley/Evans	Loveland	Other Larimer	Other Weld	Total		
Transit Pass	n=1175	n=490	n=211	County n=709	County n=315	n=2900		
Yes	7.2%	2.1%	3.2%	0.5%	1.7%	3.8%		
No/Don't Know/Refused	92.8%	97.9%	96.8%	99.5%	98.3%	96.2%		
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

Of all respondents age 16 and older, most (83%) were employed in a paying job or held a regular volunteer position. Employment levels were highest in outlying Larimer and Weld Counties (87-88%) and lowest in Greeley/Evans (78%). Figure R-5 is a map of all work locations reported by these employed respondents.

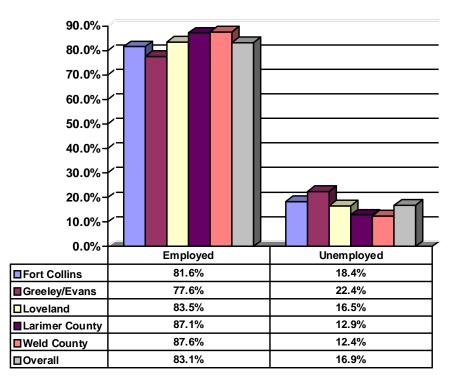
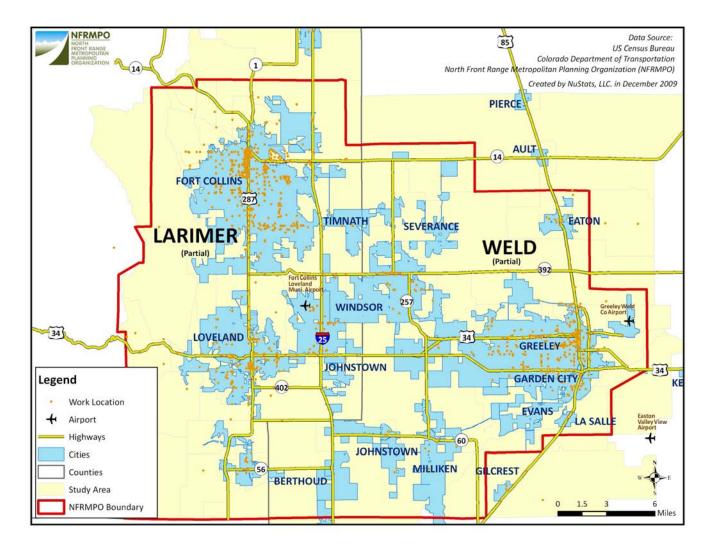


FIGURE R-4: EMPLOYMENT STATUS BY AREA

FIGURE R-5: WORK LOCATIONS



Most employees and volunteers commute to their work location by auto (85% as driver, 5% as passenger). An additional 6% indicate they travel by bike, with 3% indicating they walk to work. Non-motorized commutes were highest in Fort Collins (17% by walk or bike) and lowest in the outlying counties.

	Area						
	Fort Collins	Greeley/Evans	Loveland	Other Larimer	Other Weld	Total	
Work Mode	n=820	n=356	n=146	County n=538	County n=228	n=2088	
Walk	3.7%	5.1%	2.1%	3.2%	1.8%	3.4%	
Bike	13.3%	4.2%	0.7%	0.6%	0.9%	6.2%	
Auto/van/truck driver	76.7%	82.0%	89.7%	93.9%	90.8%	84.5%	
Auto/van/truck passenger	4.4%	8.1%	6.2%	2.2%	6.1%	4.8%	
Local Bus	0.7%	0.6%	1.4%	0.0%	0.0%	0.5%	
Express Bus	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Other/Don't Know/ Refused	1.2%	0.0%	0.0%	0.2%	0.4%	0.6%	
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

TABLE R-16: PRIMARY MODE TO WORK BY AREA

Source: Front Range Travel Counts - NFRMPO HH Survey, weighted.

For employed and volunteer respondents, 94% reported that their employer provides parking at work for no charge.

TABLE R-17: EMPLOYER PROVIDES PARKING BY AREA

		Area						
		Greeley/Evans	Loveland	Other Larimer	Other Weld	Total		
Employer Provides Parking	n=965	n=386	n=178	County n=632	County n=277	n=2438		
Yes	89.6%	95.1%	97.8%	98.4%	96.4%	94.1%		
No/Don't Know/Refused	10.3%	4.9%	2.2%	1.6%	3.6%	5.9%		
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

Source: Front Range Travel Counts - NFRMPO HH Survey, weighted.

Only 1% of all employed or volunteer respondents reported that they have an employer-provided transit pass (provided for free). Fort Collins workers had the highest reported proportion of 3%, while less than 1% of Loveland and Weld County workers reported having one.

TABLE R-18: EMPLOYER PROVIDES TRA	NSIT PASS BY AREA
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		Area						
Employer Provides	Fort Collins	Greeley/Evans	Loveland	Other Larimer	Other Weld	Total		
Transit Pass	n=965	n=386			County n=276	n=2438		
Yes	3.0%	1.1%	0.9%	1.8%	0.4%	1.4%		
No	97.0%	98.9%	99.1%	98.2%	99.6%	98.6%		
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

Among those adults who do not work, most (38%) are retired or a student (22%). Retirees were most prevalent in Greeley/Evans (53%), and students were most prevalent in Fort Collins and outlying Larimer and Weld Counties.

	Area						
	Fort Collins	Greeley/Evans	Loveland	Other Larimer	Other Weld	Total	
Primary Activity	n=217	n=111	n=35	County n=94	County n=39	n=497	
Retired	34.4%	53.2%	37.1%	37.2%	20.0%	38.2%	
Disabled/on disability status	9.6%	13.5%	5.7%	6.4%	2.5%	9.0%	
Homemaker	7.8%	11.7%	11.4%	9.6%	42.5%	12.0%	
Unemployed but seeking	10.1%	9.0%	37.1%	34.0%	10.0%	16.3%	
Unemployed not seeking	4.1%	2.7%	0.0%	0.0%	0.0%	2.4%	
Student	33.0%	9.9%	8.6%	11.7%	25.0%	21.5%	
Other	0.9%	0.0%	0.0%	1.1%	0.0%	0.6%	
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

TABLE R-19: PRIMARY ACTIVITY OF UNEMPLOYED RESPONDENTS BY AREA

Source: Front Range Travel Counts – NFRMPO HH Survey, weighted.

With regards to levels of educational attainment, 28% of NFRMPO area residents do not have a high school diploma (this includes children as well as adults). Thirty-seven percent of residents have a bachelor's degree or higher. Educational levels were higher in Fort Collins and outlying Larimer County, and lowest in outlying Weld County.

		County					
	Fort Collins	Greeley/Evans	Loveland	Other Larimer	Other Weld	Total	
Education Level	n=1460	n=620	n=289	County n=884	County n=433	n=3,686	
Not a high school graduate	26.7%	31.5%	30.0%	21.4%	35.9%	27.6%	
High school graduate (diploma or GED)	11.2%	15.0%	12.1%	12.4%	20.5%	13.3%	
Some college, but no degree	12.1%	16.5%	16.6%	15.8%	15.2%	14.4%	
Associate or technical school degree	6.4%	6.9%	7.2%	6.8%	6.0%	6.6%	
Bachelor's or undergraduate degree	23.0%	16.5%	18.6%	20.4%	17.7%	20.3%	
Graduate degree	20.3%	12.3%	14.8%	22.7%	4.6%	17.2%	
Other/Don't Know/Refused	0.3%	1.5%	0.7%	0.5%	0.0%	0.6%	
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

TABLE R-20: EDUCATIONAL ATTAINMENT BY AREA

Twenty-eight percent of respondents reported being a student. Student levels were higher in outlying Weld County, Fort Collins, and Loveland. The levels were lowest in outlying Larimer County.

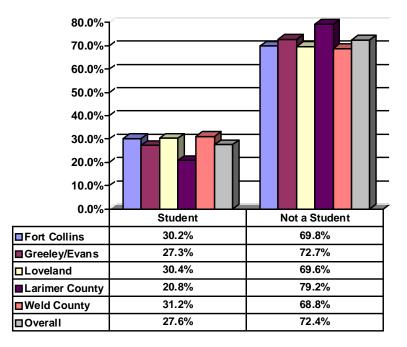


FIGURE R-6: STUDENT STATUS BY AREA

Summary. The household characteristics did vary based on the area of residence within the NFRMPO modeling area. These demographic variations affect the travel behavior summaries and are important to keep in mind while reviewing the following sections.

- <u>Fort Collins.</u> Fort Collins households reported smaller household sizes than average as well as fewer vehicles, but an average number of workers per household. These households reported the highest levels of non-motorized travel in a typical week and the highest levels of holding a transit pass. Household members had higher-than-average education levels, and more students per household than the other areas.
- <u>Greeley/Evans.</u> Households in the Greeley/Evans area were the most different from the other four areas. Comprised more of retirees and minorities, these households were smaller, with fewer vehicles, fewer students, fewer workers, lower incomes, and highest disability rates. This area had higher rental rates, and respondents were more likely to hold a transit pass.
- <u>Loveland</u>. Loveland households generally tended towards average characteristics for the region. They reported somewhat lower household sizes and workers per household, but higher-thanaverage renters and above average transit usage. They also reported good levels of nonmotorized travel.
- <u>Larimer County.</u> Households in outlying Larimer County were smaller than most, but reported the most vehicles. They had the highest licensure rate, lowest levels of disability, above average workers per household, were the least diverse, and had the higher income levels in the area.
- <u>Weld County.</u> Respondents in Weld County were similar to those in Larimer County, except that they had lower education rates and more Hispanic households than average. They were younger, had more students, and reported the largest household size.

TRAVEL BEHAVIOR

The previous section provided a summary of the demographic characteristics for the participating households. The variations among participating households based on the area of residence suggest that travel behavior also varies throughout the region. The purpose of this section is to review the travel behavior reported by the 1,505 participating households in order to document the extent to which the travel behavior does vary. This includes summaries of trip rates by the different household and person characteristics for each area of the region, as well as for the total study area. All results in this section use weighted data.

Household Travel. Of the 1,505 participating households, 5% reported making no travel on the assigned travel day, which is well within the standard of a 0-trip household rate not to exceed 10% and is a strong indicator of data quality. Of those households that did report travel, most reported making 10 trips or less (68%), but 11% reported making more than 20 trips during their assigned 24-hour period.

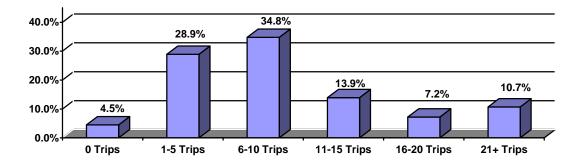


FIGURE R-7: HOUSEHOLD TRIP VOLUME (AGGREGATE)

The average household daily trip rate was 9.70 trips (weighted), while the average daily person trip rate was 3.76 trips (weighted). The rates did vary by area, as shown in Figure R-8.

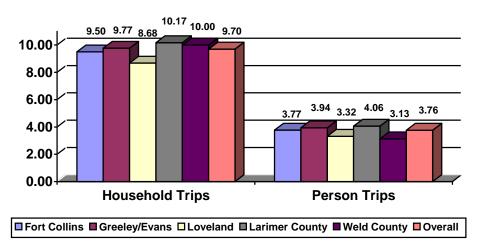


FIGURE R-8: AVERAGE TRIP RATES BY AREA

The average number of reported daily household trips increased as household size increased, as expected. Figure R-9 shows the average household trip rate for one-person households was 4.00, while households with four or more members took 17 trips on average.

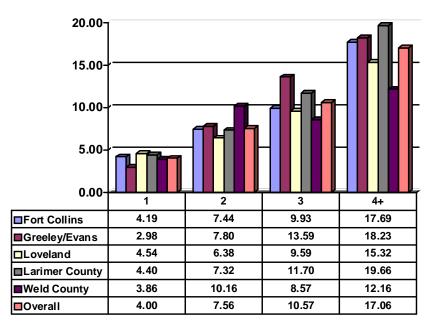
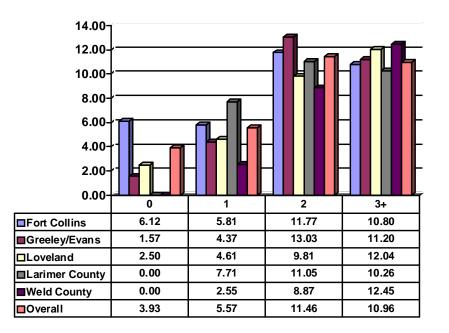


FIGURE R-9: AVERAGE HOUSEHOLD TRIP RATES BY HOUSEHOLD SIZE AND AREA

The rate of household travel also increased as vehicle ownership increased. Households with no vehicles reported taking 3.93 trips on their travel day, while households with one vehicle reported 5.57 trips. Households in outlying Weld County with three or more vehicles reported the highest number of trips, 12.45.

FIGURE R-10: AVERAGE HOUSEHOLD TRIP RATES BY HOUSEHOLD VEHICLES AND AREA



The average daily household trip rate by the demographic groups is shown in Table R-21. The larger households made the most trips during their travel day, 14.52.

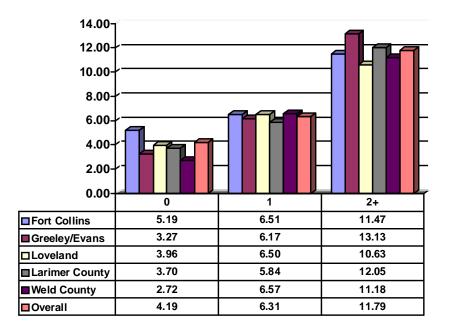
Demographic	Trip Rate
1-person worker	4.39
1-person non-worker	3.09
2-person worker	7.61
2-person non-worker	6.45
3+ persons	14.52
Total	9.70

TABLE R-21: TRIP RATES FOR HOUSEHOLD SIZE BY NUMBER OF HOUSEHOLD WORKERS

Source: Front Range Travel Counts – NFRMPO HH Survey, weighted.

Overall, households with 2 or more workers reported nearly three times the number of trips as those with no workers (11.79 and 4.19, respectively). The lowest level of trip-making was reported by 0-worker households in outlying Weld County (2.72 trips).

FIGURE R-11: AVERAGE HOUSEHOLD TRIP RATES BY HOUSEHOLD WORKERS AND AREA



Generally, household trip rates across the region increased as income increased, as shown in Table R-22. Households earning less than \$15,000 had the lowest rates at 5.80 trips per household, while households making at least \$50,000 traveled at least twice that amount.

	Area									
	Fort Collins	Greeley/Evans	Loveland	Other Larimer	Other Weld	Total				
HH Income	n=611	n=263	n=116	County n=372	County n=143	n=1,505				
< \$15,000	7.44	4.95	5.21	2.40	2.33	5.80				
\$15,000 - < \$20,000	4.65	4.93	5.29	2.00	0.42	4.40				
\$20,000 - <\$30,000	7.57	4.84	5.51	6.43	13.08	6.73				
\$30,000 - <\$40,000	5.04	11.13	7.94	9.41	10.33	8.09				
\$40,000 - < \$50,000	9.72	15.09	8.13	6.52	6.83	9.59				
\$50,000 - < \$60,000	11.35	9.28	15.33	18.76	5.08	13.45				
\$60,000 - < \$75,000	11.89	13.93	9.47	10.35	13.88	11.92				
\$75,000 - < \$100,000	13.20	14.70	9.48	14.54	12.40	13.43				
\$100,000 - < \$135,000	14.71	12.52	12.79	8.77	12.66	12.39				
\$135,000 - < \$150,000	10.76	15.12	12.58	13.34	12.96	12.53				
\$150,000 +	11.64	12.28	14.58	8.46	10.41	10.38				
Total	9.50	9.77	8.68	10.17	10.00	9.70				

 TABLE R-22: AVERAGE HOUSEHOLD TRIP RATES FOR HOUSEHOLD INCOME AND AREA

Source: Front Range Travel Counts - NFRMPO HH Survey, weighted.

Finally, average daily household trip rates by home ownership type are examined in Figure R-12. Overall, respondents that owned their home tended to report four more trips on average than those that rented.

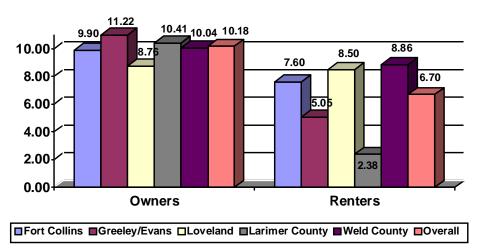


FIGURE R-12: AVERAGE HOUSEHOLD TRIP RATES BY HOME OWNERSHIP AND AREA

Note: Less than 30 observations of Renters in Loveland, Larimer, and Weld County - interpret results with caution.

Person Travel. The 1,505 participating households had 3,686 members who reported travel. The average daily person trip rate for these respondents was 3.76 (weighted). The following table summarizes the average daily person trip rates for those household members. As indicated in Table R-23:

- **Gender.** On average, women reported significantly more trips than men did. This was consistent across all five areas.
- Age. Age played a significant role on person trip rates across the region. Overall, respondents 20-24 years old traveled the least with 2.33 reported trips, while 25 to 54-year-olds traveled the most with an average of 4.06 trips.
- Licensed to Drive. Licensed drivers (age 16+) reported making one more trip, on average, than non-licensed drivers.
- Worker Status. Respondents who were employed reported more trips than those who were unemployed. This ranged from 0.7 more trips in Fort Collins to almost 2 full trips more in outlying Larimer County.
- **Student Status**. Throughout the region, non-students reported higher travel than students with the exception of outlying Larimer County.

		Area								
		Fort Collins	Greeley/Evans	Loveland	Other Larimer	Other Weld	Total			
		n=1460	n=620	n=289	County n=884	County n=433	n=3,686			
Gender	Male	3.57	3.72	2.79	3.94	3.00	3.55			
	Female	3.96	4.14	3.79	4.16	3.28	3.95			
Age	< 20	3.40	3.28	2.77	4.43	2.95	3.47			
	20 - 24	2.53	3.38*	3.81*	1.98*	1.01*	2.33			
	25 - 54	3.97	4.86	3.42	4.27	3.32	4.06			
	55 - 64	4.12	3.64	4.10	3.63	4.28	3.86			
	65+	4.02	3.37	3.34	4.44	2.60	3.76			
	-	Area								
		Fort Collins	Greeley/Evans	Loveland	Other Larimer	Other Weld	Total			
		n=1183	n=496	n=213	County n=726	County n=316	n=2,933			
Licensed to Drive	Yes	4.00	4.43	3.58	3.94	3.44	3.96			
	No	2.72	1.91	2.67*	4.58*	0.72*	2.35			
Worker Status	Yes	4.03	4.52	3.68	4.20	3.42	4.06			
	No	3.35	2.62	2.81	2.30	2.27	2.87			
	=	Area								
		Fort Collins	Greeley/Evans	Loveland	Other Larimer	Other Weld	Total			
		n=1460	n=620	n=289	County n=884	County n=433	n=3,686			
Student Status	Yes	3.43	3.71	2.79	4.24	2.86	3.49			
	No	3.92	4.02	3.55	4.01	3.26	3.86			
Overall		3.77	3.94	3.32	4.06	3.13	3.76			

TABLE R-23: AVERAGE DAILY PERSON TRIP RATES BY AREA

Source: Front Range Travel Counts - NFRMPO HH Survey, weighted. *fewer than 30 observations

TRIP CHARACTERISTICS

Participants in the NFRMPO Front Range Travel Counts Survey recorded a total of 14,467 trips (weighted) during the course of the study. While the previous section focused on the characteristics of the travelers, the purpose of this section is to present the characteristics of the trips themselves. Trip data includes the main reason for travel, mode, and origin-destination flows by trip purpose. In addition, details specific to transit-using households and those reporting non-motorized travel are presented.

Of the 14,467 trips recorded, nearly one-third (34%) were to return home for non-work-related activities. Other frequently reported reasons for traveling included for work (11%), routine shopping (9%), and attending class (6%). A map of all trip destinations located within the study area is shown in Figure R-13. For details on origins and destinations of travel, see Appendix G.

The average reported trip length averaged 16.8 minutes. The longest trips were loop-trips (usually for exercise), which lasted almost 40 minutes. Other trip purposes that had longer trip durations were visiting friends and relatives (34 minutes), trips for outdoor recreation/entertainment (23 minutes), and business-related travel (20 minutes). The shortest trips made were for drive through activities such as a bank, ATM, or fast food (10 minutes).

			Avg. Trip Duration		
Main Reason for Traveling	Ν	%	(minutes)		
Working at home	127	0.9%	14.16		
Shop at home	0	0.0%			
On-line school at home	7	0.0%	8.80		
All other at home activities	4920	34.0%	17.17		
Work/job	1637	11.3%	19.34		
All other activities at work	70	0.5%	17.82		
Attending class	790	5.5%	15.53		
All other activities at school	92	0.6%	11.75		
Change of mode/transportation	354	2.4%	15.43		
Dropped off passenger from car	566	3.9%	12.95		
Picked up passenger from car	557	3.8%	14.60		
Drive through	88	0.6%	9.93		
Other – travel related	37	0.3%	10.97		
Work/business related	618	4.3%	20.36		
Service private vehicle	160	1.1%	13.21		
Routine shopping (groceries, clothing, etc)	1236	8.5%	12.50		
Shopping for major purchases or specialty items	91	0.6%	18.35		
Household errands (bank, dry cleaning, etc)	475	3.3%	11.18		
Personal business (attorney, accountant, etc)	241	1.7%	16.86		
Eat meal outside of home	577	4.0%	12.09		
Health care (doctor, dentist)	224	1.5%	18.59		
Civic/religious activities	196	1.4%	14.89		
Outdoor recreation/entertainment	254	1.8%	23.18		
Indoor recreation/entertainment	516	3.6%	16.42		
Visit friends/relatives	435	3.0%	33.89		
Loop trip	18	0.1%	38.74		
Other	180	1.2%	14.33		
Total	14467	100.0%	16.76		
Source: Front Pange Travel Counts NED					

Source: Front Range Travel Counts - NFRMPO HH Survey, weighted.

The following tables detail trip purpose by area of residence and reported travel mode.

Main Reason for Traveling	Fort Collins n=5751	Greeley/Evans n=2548	Loveland n=1001	Other Larimer County n=3746	Other Weld County n=1418	Total n=14,464
Working at home	1.2%	0.9%	0.7%	0.5%	1.0%	.9%
Shop at home	0.0%	0.0%	0.0%	0.0%	0.0%	.0%
Dn-line school at home	0.1%	0.0%	0.0%	0.0%	0.0%	.0%
All other at home activities	34.3%	35.1%	35.8%	32.1%	34.6%	34.0%
Work/job	10.7%	11.5%	9.5%	12.1%	12.6%	11.3%
All other activities at work	0.5%	0.6%	0.5%	0.3%	0.4%	.5%
Attending class	5.6%	5.4%	7.0%	4.1%	7.7%	5.5%
All other activities at school	0.6%	1.1%	0.4%	0.6%	0.1%	.6%
Change of mode/transportation	3.7%	1.3%	1.5%	1.8%	2.0%	2.4%
Dropped off passenger from car	3.5%	4.0%	4.4%	4.2%	4.6%	3.9%
Picked up passenger from car	3.1%	5.6%	3.9%	4.2%	2.9%	3.8%
Drive through	0.5%	1.1%	0.4%	0.6%	0.5%	.6%
Other – travel related	0.2%	0.3%	0.9%	0.2%	0.0%	.3%
Work/business related	3.8%	4.5%	4.6%	4.5%	5.1%	4.3%
Service private vehicle	0.8%	1.5%	1.2%	1.4%	0.8%	1.1%
Routine shopping (groceries, clothing, etc)	8.2%	6.3%	9.1%	10.3%	8.7%	8.5%
Shopping for major purchases or specialty items	0.7%	0.6%	0.4%	0.6%	0.6%	.6%
Household errands (bank, dry cleaning, etc)	3.7%	2.6%	2.1%	3.4%	3.6%	3.3%
Personal business (attorney, accountant, etc)	1.8%	1.6%	1.6%	1.8%	1.0%	1.7%
Eat meal outside of home	3.0%	4.4%	3.3%	5.4%	3.7%	4.0%
Health care (doctor, dentist)	1.8%	1.0%	1.4%	1.5%	1.9%	1.5%
Civic/religious activities	1.0%	2.0%	1.6%	1.2%	1.6%	1.4%
Dutdoor recreation/entertainment	2.5%	1.8%	1.6%	1.0%	1.1%	1.8%
ndoor recreation/entertainment	4.6%	1.9%	2.7%	3.7%	2.8%	3.6%
/isit friends/relatives	3.2%	3.7%	4.3%	2.2%	2.3%	3.0%
loop trip	0.3%	0.0%	0.0%	0.0%	0.0%	.1%
Dther	0.8%	1.0%	1.2%	2.4%	0.6%	1.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE R-25: PRIMARY REASONS FOR TRAVELING BY AREA

Source: Front Range Travel Counts - NFRMPO HH Survey, weighted.

		I NEASONS FU					
Main Reason for Traveling	Auto (Driver) n=9445	Auto (Passenger) n=3132	Transit n=84	Walk n=1011	Bike n=443	Other n=354	Total n=14,469
Working at home	1.2%	0.0%	0.0%	1.6%	0.5%	0.0%	0.9%
Shop at home	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
On-line school at home	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%
All other at home activities	33.8%	36.3%	0.0%	31.8%	39.7%	25.7%	34.0%
Work/job	14.8%	3.0%	0.0%	4.6%	22.6%	0.0%	11.3%
All other activities at work	0.6%	0.1%	0.0%	0.7%	0.0%	0.0%	0.5%
Attending class	1.5%	10.7%	0.0%	10.6%	9.0%	48.0%	5.5%
All other activities at school	0.2%	1.7%	0.0%	1.0%	0.0%	1.7%	0.6%
Change of mode/transportation	0.5%	1.7%	89.3%	12.9%	1.1%	13.0%	2.4%
Dropped off passenger from car	4.6%	3.8%	1.2%	0.7%	0.0%	2.5%	3.9%
Picked up passenger from car	4.5%	3.7%	0.0%	1.3%	0.2%	0.0%	3.8%
Drive through	0.8%	0.5%	0.0%	0.2%	0.0%	0.0%	0.6%
Other – travel related	0.1%	0.1%	0.0%	2.0%	0.0%	0.0%	0.3%
Work/business related	6.0%	0.3%	0.0%	1.9%	4.1%	0.3%	4.3%
Service private vehicle	1.5%	0.5%	0.0%	0.7%	0.0%	0.0%	1.1%
Routine shopping (groceries, clothing, etc)	9.5%	9.2%	1.2%	4.5%	1.4%	0.3%	8.5%
Shopping for major purchases or specialty items	0.8%	0.4%	0.0%	0.1%	0.2%	0.0%	0.6%
Household errands (bank, dry cleaning, etc)	4.2%	1.6%	0.0%	2.3%	0.7%	0.0%	3.3%
Personal business (attorney, accountant, etc)	1.7%	1.7%	1.2%	2.0%	0.5%	0.6%	1.7%
Eat meal outside of home	3.4%	6.2%	0.0%	3.8%	4.7%	0.8%	4.0%
Health care (doctor, dentist)	1.7%	1.7%	0.0%	0.5%	0.2%	0.0%	1.5%
Civic/religious activities	1.5%	1.5%	0.0%	0.8%	0.5%	0.0%	1.4%
Outdoor recreation/entertainment	1.0%	2.6%	0.0%	5.2%	4.3%	2.0%	1.8%
Indoor recreation/entertainment	2.9%	5.6%	1.2%	3.5%	5.2%	0.8%	3.6%
Visit friends/relatives	2.4%	4.0%	0.0%	5.4%	4.5%	4.0%	3.0%
Loop trip	0.0%	0.0%	0.0%	1.5%	0.7%	0.0%	0.1%
Other	0.8%	3.2%	6.0%	0.3%	0.0%	0.3%	1.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE R-26: PRIMARY REASONS FOR TRAVELING BY MODE

Source: Front Range Travel Counts - NFRMPO HH Survey, weighted.

The average trip distance in miles between origin and destination was 5.58 miles. The longest trips were for visiting friends and relatives (22 miles), related to transit travel (intermediate changes of mode -9 miles), and work related (8.5 miles). The shortest trips were for shopping or drive throughs (<2 miles), and returning home to perform on-line school activities (2 miles).

In terms of relative position of the destinations or trip ends as compared to the home location, the destinations within four miles of home were those associated with trip purposes of using a drive through, attending class, returning home to work for pay, and other miscellaneous activities. Those destinations within five miles of work were also for miscellaneous activities: school-related activities (for self or a household member), loop trips, returning home for on-line school activities, and other unspecified activities.

Main Reason for Traveling	N	%	Avg. Distance Traveled from Origin to Destination	Avg. Distance from Home to non-Home Location*	Avg. Distance from Work to non-Work Location*
Working at home	127	0.9%	4.06	3.24	11.87
Shop at home	0	0.0%	1.66**	N/A	5.49**
On-line school at home	7	0.0%	2.03	N/A	4.23
All other at home activities	4920	34.0%	5.30	176.79**	7.02
Work/job	1637	11.3%	7.14	8.13	8.51
All other activities at work	70	0.5%	5.82	5.38	17.83
Attending class	790	5.5%	2.59	2.89	6.20
All other activities at school	92	0.6%	3.72	4.08	0.93
Change of mode/transportation	354	2.4%	9.37	10.35	20.93
Dropped off passenger from car	566	3.9%	4.36	4.18	6.32
Picked up passenger from car	557	3.8%	3.47	4.32	6.59
Drive through	88	0.6%	1.80	3.96	7.38
Other – travel related	37	0.3%	2.71	3.57	4.94
Work/business related	618	4.3%	8.48	10.81	10.79
Service private vehicle	160	1.1%	5.44	5.72	9.29
Routine shopping (groceries, clothing, etc)	1236	8.5%	2.76	4.29	5.42
Shopping for major purchases or specialty items	91	0.6%	6.15	6.13	7.89
Household errands (bank, dry cleaning, etc)	475	3.3%	2.34	4.82	4.90
Personal business (attorney, accountant, etc)	241	1.7%	5.50	6.78	7.33
Eat meal outside of home	577	4.0%	3.10	7.04	7.16
Health care (doctor, dentist)	224	1.5%	6.39	7.87	9.29
Civic/religious activities	196	1.4%	5.13	6.70	10.15
Outdoor recreation/entertainment	254	1.8%	6.60	8.06	16.78
Indoor recreation/entertainment	516	3.6%	4.80	5.69	7.39
Visit friends/relatives	435	3.0%	22.43	23.81	19.60
Loop trip	18	0.1%	N/A	N/A	3.97**
Other	180	1.2%	5.37	8.19	17.39
Total	14467	100.0%	5.58	7.20	8.08

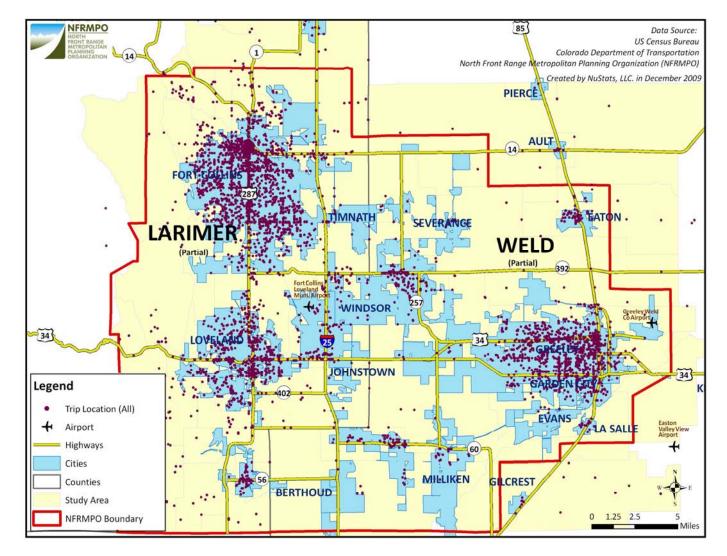
TABLE R-27: AVERAGE DISTANCES

Source: Front Range Travel Counts - NFRMPO HH Survey, weighted. Distance measured in miles.

*These are not traveled distances – only calculated distances from the home/work location to the destination of each reported trip to a non-home/non-work location.

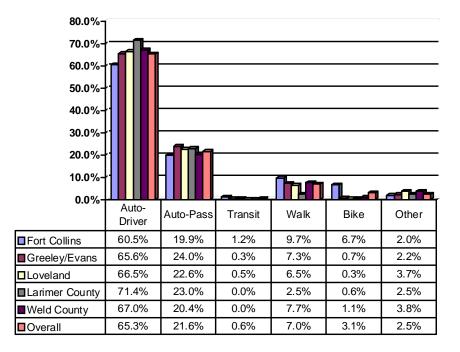
**Less than 30 observations – interpret with caution

FIGURE R-13: ALL TRIP DESTINATIONS



MODE CHOICE

In addition to recording trip purpose and location information, respondents were asked to record the mode of travel they used to make each trip. The distribution of trips by mode is shown in Figure R-14. As indicated, auto was the dominant mode throughout the region, accounting for 87% of all trips (65% as drivers and 22% as passengers). Approximately 10% of trips were made by non-motorized modes, and less than 1% of reported trips were made by public transit.



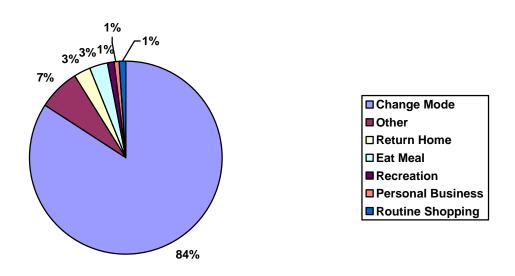


Trip duration varied by mode and region. As shown in Table R-28, the average trip length was 16.76 minutes. Overall, walk trips were the shortest, taking only 10.49 minutes on average, while school bus trips took the longest at 23.97 minutes. Respondents from the outlying Larimer and Weld Counties reported longer trips (18 and 19 minutes respectively), while those in Fort Collins reported the shortest trip durations of 15 minutes, on average.

	Area					
	Fort Collins	Greeley/Evans	Loveland	Other Larimer	Other Weld	Total
Mode	n=5751	n=2549	n=1001	County n=3747	County n=1419	n=14467
Walk	11.10	10.60	5.89	12.46	8.27	10.49
Bike	17.85	35.26*	26.69*	55.42*	32.73*	20.95
Auto/van/truck driver	14.58	16.24	17.37	18.55	19.62	16.70
Auto/van/truck passenger	16.00	24.80	14.69	14.68	17.30	17.38
Local Bus	18.27*	14.98*	5.00*			17.95
Express Bus		22.73*				22.73*
Train	6.00*		7.33*			7.04*
Dial-a-ride/paratransit	73.00*	5.38*	10.00*			16.20*
Taxi				16.00*		16.00*
School bus	21.04	19.89	19.77	25.62	33.84	23.97
Other	136.48*		100.00*			133.37*
Total	15.02	18.06	16.11	17.89	18.95	16.76

Source: Front Range Travel Counts - NFRMPO HH Survey, weighted. Duration in minutes. *fewer than 30 observations

Travel by Transit. Of the 1,505 households that participated in the study, 24 households (weighted) reported using transit on the assigned travel day. In total, those 24 households reported 91 unlinked transit trips. This means that intermediate stops to transfer (i.e., from another mode to transit, from one type of transit to another, or within the same transit mode – such as transferring from one bus to another) are all captured as trip purposes for transit trips. As shown in Figure R-15, these transfers dominated the reason for travel. Since respondents were instructed to record each address visited as a separate "place," it was expected that most transit trips would be to transfer. For example, a trip from home to work via transit by bus then light rail was actually recorded as four places: walk to bus stop, transfer to bus, transfer to light rail, walk to work. In this example, two of those trips would be reflected in the figure below, both with a purpose of "change mode." Those few cases where the reason for the transit trip was something other than "change mode" are trips where the final leg of the transit trip dropped the rider off exactly at their destination and there was no egress trip.





As shown in Figures R-16 and R-17, transit-using households were mainly located in Fort Collins, although some lived in Loveland and Greeley. The trip destinations were mainly in these same cities.

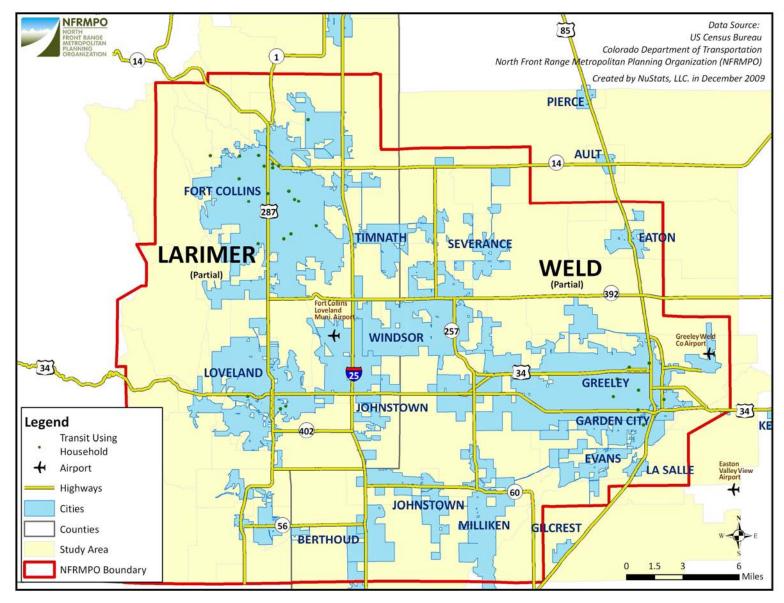


FIGURE R-16: LOCATIONS OF TRANSIT-USING HOUSEHOLDS

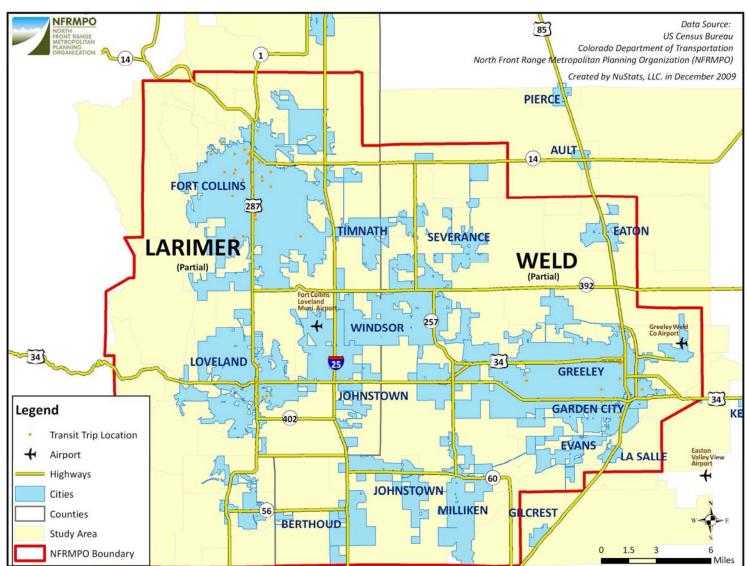


FIGURE R-17: TRANSIT DESTINATIONS

The following is a summary of household characteristics for these 24 transit-using households. The households tended to be smaller and have fewer vehicles available to them. Most reported low incomes. Most transit trips were reported on Mondays and Fridays.

CHARACTERISTIC	FREQUENCY	PERCENT
Household Size	-	
1	11	44.5%
2	5	20.5%
3	1	3.6%
4+	8	31.4%
Household Vehicles		
0	10	42.2%
1	5	20.7%
2	4	18.6%
3+	4	18.5%
Household Workers		
0	6	26.4%
1	10	41.6%
2+	8	32.0%
Household Income		
< \$15,000	12	48.2%
\$15,000 - < \$19,000	2	8.6%
\$20,000 - <\$30,000	2	6.6%
\$30,000 - <\$40,000	0	1.2%*
\$40,000 - < \$50,000	0	0.0%
\$50,000 - < \$60,000	1	3.3%
\$60,000 - < \$75,000	2	8.8%
\$75,000 - < \$100,000	3	11.2%
\$100,000 - < \$135,000	2	7.9%
\$135,000 - < \$150,000	1	3.9%
\$150,000 +	0	0.3%*
Residence Type		
Single family	15	60.8%
Duplex	0	1.0%
Building with 3 or more apartments	6	26.6%
Mobile Home	3	11.5%
Home Ownership		
Owned/mortgaged	15	61.4%
Rented	9	38.6%
Area		
Fort Collins	20	81.0%
Greeley/Evans	3	11.8%
Loveland	2	7.2%
Larimer County	0	0.0%
Weld County	0	0.0%
Day of Week		
Monday	9	35.6%
Tuesday	3	11.9%
Wednesday	3	12.3%
Thursday	1	2.1%
	1	2.170

TABLE R-29: TRANSIT-USING HOUSEHOLD CHARACTERISTICS

Source: Front Range Travel Counts – NFRMPO HH Survey, weighted. Totals for each variable vary due to SPSS rounding.

*indicates at least one case is present but SPSS rounded that count down to zero

Non-Motorized Travel. The final data set includes 1,455 trips (weighted) by walking and bike, reported by 364 households (weighted). The average walk trip lasted 11 minutes, and the average bike trip lasted 21 minutes. Walk trips were primarily associated with returning home (32%), changing mode of travel (13%) and attending class (11%). Bike trips were also to return home (23%), but also to go to work (23%) and attend class (9%).

Main Activity		Walk			Bike	
	Frequency	Percent		Frequency	Percent	Duration
Work at home	16	1.6%	5.42	2	0.5%	22.19
On-line school	2	0.2%	1.62	0	0.0%	
All other home	322	31.9%	10.68	176	39.7%	21.46
Work	47	4.7%	8.66	100	22.5%	18.02
Other act at work	7	0.7%	6.66	0	0.0%	
Attend class	107	10.6%	12.03	40	9.0%	22.41
Other act/school	10	0.9%	5.30	0	0.0%	5.00
Change mode	130	12.8%	7.31	5	1.1%	21.49
Drop off	7	0.7%	5.97	0	0.0%	
Pick up	13	1.3%	4.53	1	0.2%	7.03
Drive through	2	0.2%	14.33	0	0.1%	40.00
Other travel	20	2.0%	7.76	0	0.0%	
Work related	19	1.9%	4.70	18	4.0%	10.77
Service private vehicle	7	0.6%	3.99	0	0.0%	
Routine shopping	46	4.6%	11.26	6	1.2%	10.44
Major shopping	1	0.1%	14.72	1	0.3%	16.72
HH errands	23	2.3%	6.89	3	0.6%	6.20
Personal business	20	2.0%	11.31	2	0.5%	16.07
Eat meal out	38	3.7%	6.43	21	4.8%	22.04
Health care	5	0.5%	12.68	1	0.3%	22.71
Civic/religious	8	0.8%	10.40	2	0.4%	17.46
Outdoor recreation	53	5.2%	14.90	19	4.3%	32.07
Indoor recreation	35	3.5%	9.91	23	5.2%	23.07
Visit friends/family	55	5.4%	16.42	20	4.6%	29.25
Loop trip	15	1.5%	42.88	3	0.7%	20.00
Other	3	0.3%	5.80	0	0.0%	
Total	1011	100.0%	10.57	444	100.0%	20.95

TABLE R-30: REASON FOR NON-MOTORIZED TRAVEL AND TRIP DURATION

Source: Front Range Travel Counts - NFRMPO HH Survey, weighted. Mean Trip Duration reported in minutes.

To understand the distribution of non-motorized travel throughout the region, Table R-31 shows the distribution of non-motorized trips by geography, as well as the number of non-motorized trips reported by households living in each region.

Area	# HH	% HH	# Trips	% Trips
Fort Collins	216	59.3%	947	65.1%
Greeley/Evans	57	15.6%	201	13.8%
Loveland	17	4.8%	68	4.6%
Larimer County	34	9.3%	114	7.9%
Weld County	40	10.9%	125	8.6%
Total	364	100.0%	1455	100.0%

TABLE R-31: NON-MOTORIZED TRAVEL THROUGHOUT THE REGION

In terms of characteristics of the 364 households for which walk or bike trips were reported, these households tended to be have more occupants than the regional average, and more workers living in each one. These households tended to report living in owner-occupied single-family dwellings and own at least one bicycle. Non-motorized trips tended to be reported equally throughout the week, except for Thursdays. See Figure R-18 for a map of the non-motorized trips.

CHARACTERISTIC	FREQUENCY	PERCENT
Household Size		
1	53	14.7%
2	94	26.0%
3	65	17.8%
4+	151	41.6%
Household Vehicles		
0	17	4.6
1	101	27.8
2	146	40.0
3+	100	27.6
Household Workers		
0	21	5.9%
1	64	17.6%
2+	279	76.6%
Household Income		
\$0 - \$14,999	21	5.7%
\$15,000 - \$19,999	27	7.4%
\$20,000 - \$29,999	51	14.2%
\$30,000 - \$39,999	36	9.9%
\$40,000 - \$49,999	41	11.2%
\$50,000 - \$59,999	24	6.6%
\$60,000 - \$74,999	64	17.7%
\$75,000 - \$99,999	58	15.8%
\$100,000 - \$134,999	24	6.5%
\$135,000 - \$149,999	7	2.0%
\$150,000 - More	11	3.1%
Residence Type		
Single family	299	82.2%
Duplex	19	5.2%
Building with 3 or more apartments	41	11.2%
Mobile home	5	1.4%
Home Ownership		
Owned/mortgaged	300	82.4%
Rented	64	17.6%
Day of Week	0.	1,10,0
Monday	73	20.1%
Tuesday	73	20.1%
Wednesday	89	24.4%
Thursday	46	12.5%
Friday	83	22.8%
Household Bikes	00	22.070
0	76	20.8%
1	66	18.0%
2	59	16.2%
2 3+	163	45.0%
urce: Front Range Travel Counts – NFR		

 TABLE R-32: CHARACTERISTICS OF HOUSEHOLDS REPORTING NON-MOTORIZED TRAVEL

Source: Front Range Travel Counts - NFRMPO HH Survey, weighted.

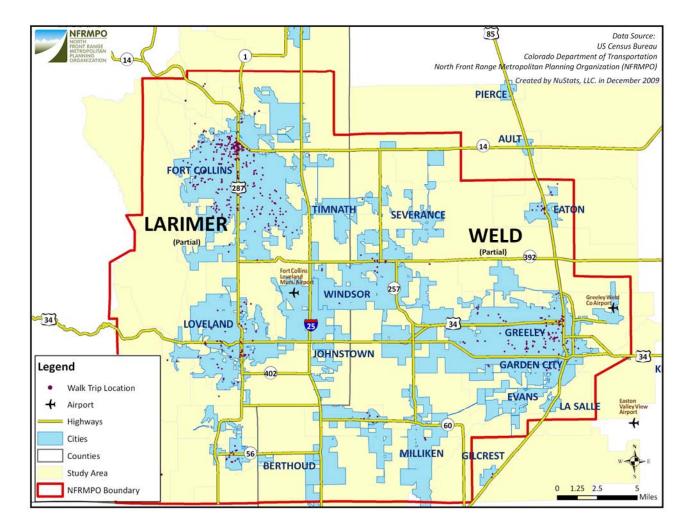
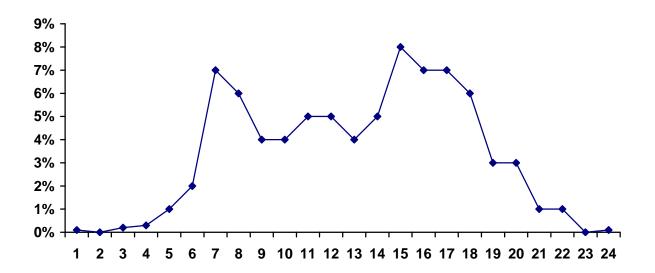


FIGURE R-18: WALK DESTINATIONS

TRAVEL TIMES

As part of the Front Range Travel Counts Survey, respondents were asked to record the arrival and departure times for all locations visited during the designated 24-hour travel period. All travel days began at 3 a.m. and ended at 2:59 a.m. the next day. As shown in Figure R-19, most trip departures took place during daylight hours. Morning travel peaked at 7 a.m. (7% of all trip departures), then declined slightly until the PM peak occurred at 3 p.m.





The departure times can be grouped into time slots, representing travel in the morning, mid-day, afternoon, evening, and late at night. The following is a distribution of trips based on these travel time categories. Almost 40% of all travel occurred between the mid-day hours of 10 a.m. to 3:59 p.m., while 24% and 29% of all travel occurred from 6 a.m. to 9:59 a.m. and 4 to 7:59 pm, respectively. Figures R-21 through R-25 show the travel destinations throughout the day, within these same time periods.

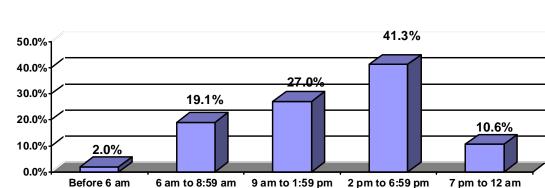


FIGURE R-20: TRAVEL BY TIME OF DAY

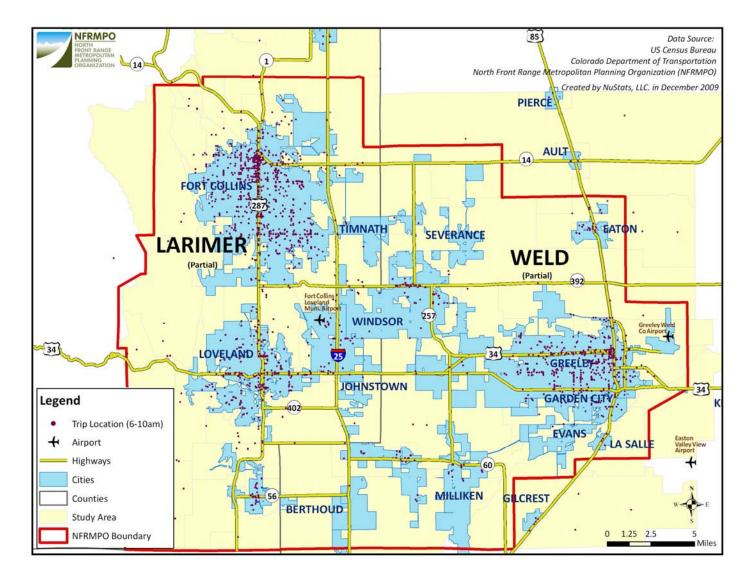


FIGURE R-21: DESTINATIONS VISITED BETWEEN 6 AM AND 9:59 AM

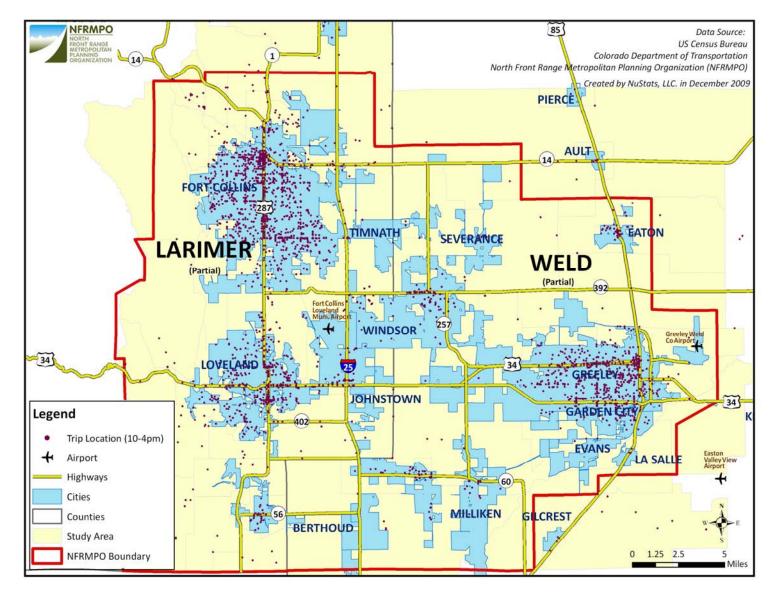


FIGURE R-22: DESTINATIONS VISITED BETWEEN 10 AM AND 3:59 PM

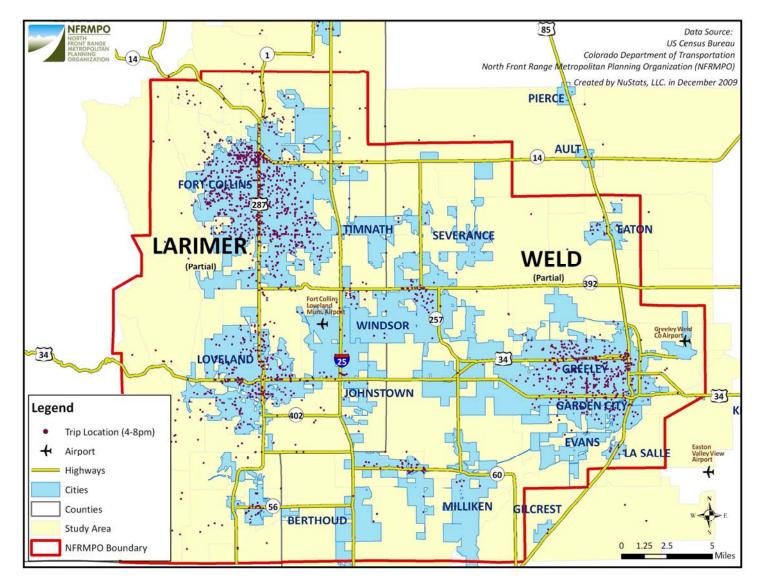


FIGURE R-23: DESTINATIONS VISITED BETWEEN 4 PM AND 7:59 PM

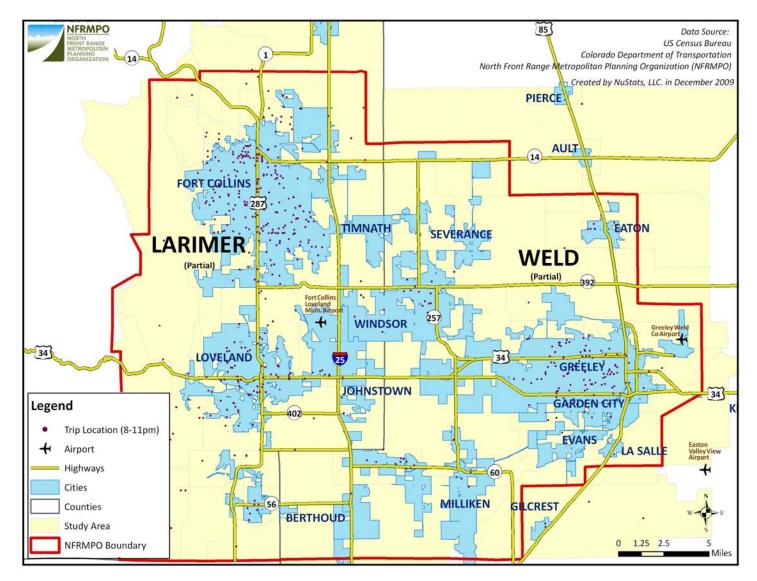


FIGURE R-24: DESTINATIONS VISITED BETWEEN 8 PM AND 10:59 PM

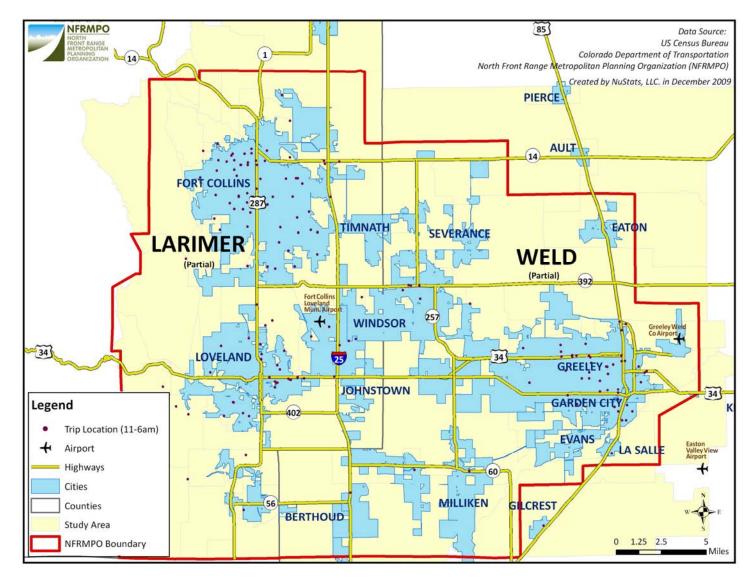


FIGURE R-25: DESTINATIONS TRAVELED TO BETWEEN 11 PM AND 5:59 AM

The proportion of trips by time of day among the areas was fairly consistent. Figure R-25 shows the overall distribution of travel by time of day for each area.

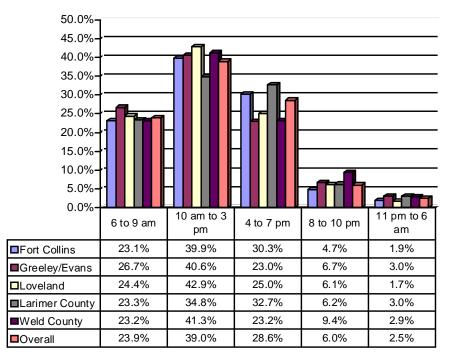


FIGURE R-26: TRAVEL BY TIME OF DAY AND AREA

Figure R-26 shows the distribution of travel by mode by these same time periods. As indicated, the "other" travel in the morning peak is largely school bus travel, balanced by the increased passenger travel in the afternoon.

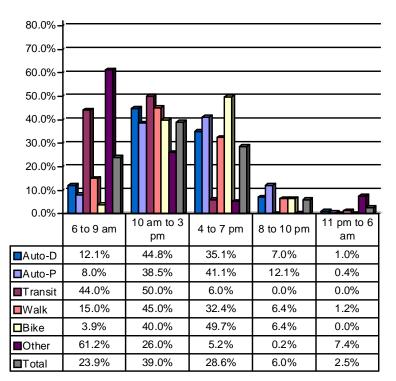


FIGURE R-27: TRAVEL BY TIME OF DAY AND MODE



APPENDIX A: ADVANCE NOTIFICATION MATERIALS

FIGURE A1: ADVANCE LETTER

	Front Range Travel Counts Where Ya Going?
Dea	Colorado Front Range Resident:
You Hou	you concerned about traffic, air quality, access to jobs and quality of life in the Front Range region? are part of a small group of households selected to participate in the Colorado Front Range sehold Travel Survey. Your participation in this survey will help identify where highway, street, ic transit, and bicycle and pedestrian facility improvements will be made in the Front Range.
Rang Area Tran peop	survey is a joint effort between the Denver Regional Council of Governments, the North Front ge Metropolitan Planning Organization, the Pikes Peak Area Council of Governments, the Pueblo Council of Governments, the Regional Transportation District, the Colorado Department of sportation, and the Federal Highway Administration. The purpose is to understand how and why ble travel in the Front Range region, to aid in forecasting future travel patterns and to define sportation improvements.
mak spec need	eloping transportation plans relies on data about travel and trips. It is important to know how people e travel decisions as part of their daily activities. Indicating what you do and where you go on a ific day helps the region identify its transportation needs and determine how best to meet those is in the future. Children's activities are important as well. Inside this packet, you will find a hure that explains the project and how to participate.
Data usec com	survey is being conducted by NuStats, a professional research company, and its affiliate PTV Source. NuStats ensures that all information collected will be held strictly confidential and will be I for this research project only. The information from your household will be used only in bination with data from other participating households. Your name will never be attached to your onses.
www	u have questions related to this survey, please visit the survey website at unustats.com/FrontRange, call the toll-free survey hotline at 1-888-222-7734, or contact Julie sche of NuStats at 1-800-447-8287, ext. 2241 (e-mail jpaasche@nustats.com).
	nk you in advance for participating in this important project. Your responses will help ensure our sportation system continues to meet the needs of Colorado's Front Range residents.
1:	Bell Retter fr.
	Ritter, Jr. ernor

FIGURE A2: STUDY BROCHURE



What is Front Range Travel Counts?

The Front Range Travel Counts collects information about WHERE you go, HOW you get there, and WHAT you do when you get there to help understand how well our roads, highways, and transit systems are working.

And most importantly, the information is used to help plan for future improvements!



Confidentiality We respect your privacy and promise to protect it. The information your household provides will be kept strictly confidential.

How do you participate?

Step 1

Telephone Interview

In the next few days, you will receive a phone call between 5 and 9 p.m. from NuStats, a professional research company, and their affiliate PTV DataSource. The interviewer will first answer any questions you have about the survey and then will collect information about your household such as the number of people, their ages and race/ethnicity, where they work or go to school, and the number and type of vehicles you own.

This information is important because it helps to ensure that the survey represents all different types of households in your area.



Record your Travel and Activities on an Assigned Day

We will mail you instructions and personalized travel diaries for each person in your household. These diaries should be used by each person to record all the places they visit and stops they make on an assigned date. We ask that a parent or guardian fill out the diaries for any children under age 12.



Provide your Travel Information by Phone or Mail

An interviewer will call you after your travel day to collect your travel information. Ideally, they would like to speak directly to each person age 16 or older. You may also call us toll-free at 1-888-222-7734 at a convenient time for you. Or, simply return your completed diaries to us in the postage-paid envelope.





APPENDIX B: RECRUITMENT QUESTIONNAIRE

Front Range Travel Counts Survey-NFRMPO - Recruitment Interview

Version: Draft 8/6/09 Notes:

- Items in ALL CAPS are programmer/interviewer notes or response codes that are not read to the respondent.
- Items appearing in caps with brackets such as [AGENCY] denote merge fields where the actual information to be read may vary across respondents or other special programming notes.
- Items in upper and lower case (unless otherwise noted) are read to the respondent verbatim.
- The numbering of the choice sets may sometimes not be continuous. This is because we use standard codes for response categories of "other specify", don't know, and refused.
- "DK" and "RF" are abbreviations for "Don't Know" and "Refused". Sometimes these appear together, other times separate, depending on the variable.

INTRODUCTION - NON-CELL/NON-PASSIVE SAMPLE

Hi –I'm calling on behalf of [<AGENCY>] and the Colorado Department of Transportation about the Front Range Travel Counts survey that's being conducted in your area. You may have seen a recent newspaper article about this study.

May I speak with an adult who is age 18 or older?

ADULT ON PHONE: In this study, we're interviewing households throughout the Colorado Front Range about their travel behavior. Your participation in this survey will help planners improve transportation in Colorado by learning how local residents travel in and around the state.

INTRODUCTION – CELL SAMPLE

Hi, I apologize for calling your cell phone but it's important. My name is _____. I'm calling on behalf of [<AGENCY>] and the Colorado Department of Transportation to invite you to be interviewed about your daily travel. The information we're asking for will help improve transportation throughout the Colorado Front Range and we really need to include people that have cell phones. Is this a good time to talk?

IF THEY SAY NO, IT'S NOT SAFE TO TALK: I can call you at a landline number when it's convenient to you. What is the number? When would you like me to call?

IF THEY SAY THIS IS NOT A CELL PHONE, CONTINUE WITH THE SURVEY

IF THEY MENTION COST OF THEIR CELL MINUTES: We will reimburse you \$5 to cover the cost of being on your cell phone for the interview. [PROGRAMMER NOTE: include CFLAG variable to track when this is offered]

IF ASKED, "HOW DID YOU GET THIS NUMBER?" A computer randomly generated a list of possible phone numbers. We do this because we need to talk with people who have listed and unlisted phone numbers, including cell phones, in order to be sure we have a random sample of Front Range residents for this survey.

IF NEEDED: This is not a sales call and I will not be asking for donations of any kind.

Screener Questions – asked of everyone

S0 [non-cell sample] I show that you live in [CTFIP]. Is this correct? IF NOT, what county do you live in? [cell sample FORCE: What county do you live in?] TERMINATE IF NOT IN STUDY AREA.

08069 Larimer County

- 08123 Weld County
- 99997 Other specify (TERMINATE)
- S1 Do you or any members of your household use transit on a regular basis during the week? [RIBUS]
 - 1 YES
 - 2 NO
 - 9 DK/RF
- S2 Do you or any members of your household walk or bike to work or school at least once a week? [WABIK]
 - 1 YES
 - 2 NO
 - 9 DK/RF
- V1 And how many motor vehicles are owned, leased, or available for regular use by the people who currently live in your household? Please be sure to include motorcycles, mopeds, and RVs. [HHVEH]
 ENTER NUMBER
 98...DON'T KNOW → TERMINATE

99...REFUSED → TERMINATE

H1. How many people, including yourself, live in your home? [HHSIZ]

NOTE TO INTERVIEWER: INCLUDE IN THIS NUMBER FOSTER CHILDREN, ROOMERS, HOUSEMATES, PEOPLE LIVING HERE MOST OF THE TIME WHILE WORKING, EVEN IF THEY HAVE ANOTHER PLACE TO LIVE, HOUSEHOLD MEMBERS ON ACTIVE DUTY. DO NOT INCLUDE COLLEGE STUDENTS LIVING AWAY WHILE ATTENDING COLLEGE OR PEOPLE WHO LIVE AT ANOTHER PLACE MOST OF THE TIME.

ENTER NUMBER 98...DON'T KNOW → TERMINATE 99...REFUSED → TERMINATE

H1a And of these, how many are employed full-time or part-time in a paid working position? HHMEM – used to track hhsize/worker goals.

Thank you. The second part of this study is to understand why, when, and where people travel in the region. To do this, we're asking households to record their travel for a 24-hour period. If you could help us with this study, we'd like to ask you some questions about your household today to make sure that we're talking to all types of households in the region. Then we will ask for some details about each person in your household in order to prepare personalized diaries, which we'd mail to you. After you record your local travel and activities for the assigned travel period, we will call back to collect your information. Everything asked is for research purposes only and will be held in strict confidence.

- S3 Are you interested in helping improve the future of transportation in your area by recording your household's travel for this study?
 - 1 AGREE TO PARTICIPATE
 - 2 REFUSAL RECORD VERBATIM REMARKS

VEHICLE ROSTER (ZERO VEHICLE HOUSEHOLDS SKIP TO BIKES)

V1-V4 Earlier, you indicated that you had [HHVEH] vehicles. I have a few questions about each of these vehicles. Let's start with the vehicle that is driven the most. What is the make, model, and year of this vehicle?

PROGRAMMING NOTE: SHOW MATRIX ON SCREEN

VEH # [VEHNO]	V2 [MAKE]	V3 [MODEL]	V4 [YEAR]
---------------	-----------	------------	-----------

01

02

03

04

V5 [For each vehicle] And is this a/an? [BODY]

- 1 Car, sedan, or station wagon?
- 2 Van (ANY TYPE)
- 3 SUV
- 4 Pick-up Truck
- 5 Other kind of truck
- 6 RV
- 7 Motorcycle,
- 97 Or something else (SPECIFY)?
- 99 REFUSED

V6 [For each vehicle] What type of fuel does it take? [FUEL]

- 1 Gas
- 2 Diesel
- 3 Hybrid
- 4 Flex Fuel
- 7 Other, SPECIFY

V7 [For all vehicles] And is this vehicle owned, leased, or employer provided? [VHOWN]

- 1 Owned
- 2 Leased
- 3 Employer Provided
- 7 Other, Specify
- 8 Don't Know
- 9 Refused
- V8 [If VHOWN=1 or 2] When did you acquire this vehicle? [WHEN] ENTER YEAR [RANGE 1901-2010]
- V9 [If VHOWN=1 or 2] And was the purchase or lease of this vehicle a replacement of a vehicle you used to have, or did it add to the number of vehicles available to your household? [VREPL]
 - 1 Replacement
 - 2 Addition
 - 8 DON'T KNOW

- 9 REFUSED
- V10 [IF VREPL=1] What was the year, make and model of the vehicle that this one replaced? [PVYR]. [PVMK], [PVMD]
- V11 [FOR ALL VEHICLES] When you are home, where is this vehicle parked? [VEHPK]
 - 1 Garage
 - 2 Driveway
 - 3 On the Street
 - 4 In a Parking Lot
 - 7 Other, SPECIFY
 - 9 DK/RF
- V12 [FOR ALL VEHICLES] Do you have to pay for parking at home? [VEHHP]
 - 1 YES
 - 2 NO
 - 9 DK/RF
- V12a [IF VEHHP=1] How much do you have to pay to park at home? COST [VPCST] PER UNIT [VPUNT]
 - 1 Per Day
 - 2 Per Week
 - 3 Per Month
 - 4 Per Semester
 - 5 Per Year
 - 7 OTHER SPECIFY
 - 8 DON'T KNOW
 - 9 REFUSED

HOUSEHOLD ROSTER (PART 1)

- H2 How many bicycles does your household own and use on a regular basis? [BIKES]
 ENTER NUMBER
 98...DON'T KNOW
 99...REFUSED
- H3 Which best describes your home? [RESTY] (note these are the ACS categories)
 - 1 Single family unit
 - 2 Duplex
 - 3 Building with 3 or more apartments [CONDO, APARTMENT, ETC]
 - 4 Mobile home
 - 7 Or something else? SPECIFY
 - 9 REFUSED

H4 Is your home owned or rented? [OWN]

- 1 Owned/Mortgaged
- 2 Rented
- 7 Other, Specify
- 9 Refused

H5 How long have you lived at this location? [HLIVE]

- 1 Less than 1 year
- 2 At least 1 year but less than 2 years
- 3 At least 2 years but less than 5 years
- 4 At least 5 years but less than 10 years
- 5 10 or more years
- 9 Refused

[IF LIVED AT CURRENT ADDRESS LESS THAN 5 YEARS (HLIVE<4), ASK H6-H6d, ELSE SKIP TO CPLNS]

H6 Where did you live before this? [BFCIT] [BFSTA] [BFZIP] CITY, STATE, ZIP [PROGRAMMER NOTE: ALLOW RF, RF, 99999]

- H6b What type of home was this? [BFRES]
 - 1 Single family unit
 - 2 Duplex
 - 3 Building with 3 or more apartments [CONDO, APARTMENT, ETC]
 - 4 Mobile home
 - 7 Or something else? SPECIFY
 - 9 REFUSED

H6c Which of the following factors influenced your decision to move? MULTIPLE RESPONSE [BFMOV]

- 1 Change in marital status?
- 2 Change in the number of persons in the household? (IF YES, did it increase or decrease?)
- 3 To reduce overall household expenses?
- 4 Change in household income (IF YES, did it increase or decrease?)
- 5 A change of employment status?
- 6 A change in workplace location?
- 7 Desired a different house
- 8 Desired a different location
- 9 Change in ability of a household worker to work from home part-time or full-time
- 97 Something else (specify)
- 98 DON'T KŇOW
- 99 REFUSED

H6d [IF MORE THAN ONE FACTOR SELECTED IN H6c] Of these, which was the most important in deciding to move? [BFTOP] DK/RF not an option here

H7 Since we are conducting this survey by telephone, I have some questions about the telephones in your household. How many cellular telephone numbers do members of your household have? [CPLNS]
 ENTER NUMBER
 98...DON'T KNOW
 99...REFUSED

- H8 [IF CPLNS>0: "Not counting the cellular phones,"] How many home telephone numbers does your household have? [IF NEEDED: This includes only land-lines but excludes cellular phones.] [PHLNS]
 ENTER NUMBER
 98...DON'T KNOW
 99...REFUSED
- H10 And to ensure your household properly represents others in the region, can you tell me if your total household income for 2008 for all sources before taxes was above or below \$60,000?

H10a[IF BELOW \$60,000] Is it above or below \$20,000? H10b If below \$20,000, Is it above or below \$15,000? IF BELOW \$15,000, INCOME=1 IF AT/ABOVE \$15,000, INCOME=2

- H10c [If at/above \$20,000] Is it above or below \$40,000? IF BELOW \$40,000, Is it above or below \$30,000? IF BELOW \$30,000, INCOME=3 IF AT/ABOVE \$30,000, INCOME=4
- H10d [If at/above \$40,000] Is it above or below \$50,000? IF BELOW \$50,000, INCOME=5 IF AT/ABOVE \$50,000, INCOME=6

H10e [IF AT/ABOVE \$60,000] Is it above or below \$100,000? IF BELOW \$100,000, Is it above or below \$75,000? IF BELOW \$75,000, INCOME=7 IF AT/ABOVE \$75,000, INCOME=8

> H10f [If at/above \$100,000] Is it above or below \$150,000? IF BELOW \$150,000, Is it above or below \$135,000? IF BELOW \$135,000, INCOME=9 IF AT/ABOVE \$135,000, INCOME=10

> > IF AT/ABOVE \$150,000, INCOME=11

IF REFUSED: I appreciate your concerns about providing this information, but I only need to properly identify your household as belonging to one of the following categories: [INCOM]

- 1 \$0 \$14,999
- 2 \$15,000 \$19,999
- 3 \$20,000 \$29,999
- 4 \$30,000 to \$39,999
- 5 \$40,000 to \$49,999
- 6 \$50,000 to \$59,999
- 7 \$60,000 to \$74,999
- 8 \$75,000 to \$99,999
- 9 \$100,000 to \$134,999
- 10 \$135,000 to \$149,999
- 11 \$150,000 or more
- 99 Refused

PERSON ROSTER

Now I need to get some information about each household member. Earlier you indicated that there were <HHSIZ> persons in your household. First I need the names for each person in the household.

[IF HHSIZE=2] What is the first name of the other person living in your home?

[IF HHSIZE>2] What is the first name of the next person in your home, from oldest to youngest? IF RELUCTANT: Initials are okay at this point.

- P1 What is this person's gender? [GENDE] (recorded by observation for the main respondent)
 - 1 Male
 - 2 Female
 - 9 RF
- P2 What is your/this person's age? [AGE] ENTER AGE 99...REFUSED
- P3 IF AGE = 99: Many of our questions about this person are based on his/her age. Can you tell me if NAME is at least 16 years of age? [AGEB]
 - 1 Under 16
 - 2 Age 16+
 - 9 REFUSED [PROGRAMMER NOTE: IF AGEB=9, TREAT AS AGE 16+ (AGEB=2)]

P3 [DON'T ASK FOR RESPONDENT] How is this person related to you? [RELAT]

- 0 REFERENCE PERSON [CAN'T USE FOR OTHER HH MEMBERS]
- 1 SPOUSE/PARTNER/SIGNIFICANT OTHER
- 2 CHILD
- 3 PARENT
- 4 GRANDPARENT
- 5 GRANDCHILD
- 6 OTHER RELATED
- 7 NOT RELATED
- 9 REFUSED

P4 [IF PERNO=1, DATA STORED IN HH FILE] Are you of Hispanic, Latino or Spanish origin? [HISP]

- 1 YES
- 2 NO
- 9 DKRF

P5 [IF PERNO=1, DATA STORED IN HH FILE] And which of the following best describes your race? [RACE].

- 1 White
- 2 Black or African American
- 3 American Indian or Alaska Native
- 4 Asian
- 7 or some other race? SPECIFY [O_RACE]
- 9 Refused

P6a Is this person deaf or does he/she have serious difficulty hearing? [DIS1]

- 1 Yes
- 2 No
- 8 DON'T KNOW
- 9 REFUSED

P6b Is this person blind or does he/she have serious difficulty seeing even when wearing glasses? [DIS2]

- 1 Yes
- 2 No
- 8 DON'T KNOW
- 9 REFUSED

P6c [AGE>4 or AGE=DK/RF] Because of a physical, mental or emotional condition, does this person have serious difficulty concentrating, remembering, or making decisions? [DIS3]

- 1 Yes
- 2 No
- 8 DON'T KNOW
- 9 REFUSED

P6d [AGE>4 or AGE=DK/RF] Does this person have serious difficulty walking or climbing stairs? [DIS4]

- 1 Yes
- 2 No
- 8 DON'T KNOW
- 9 REFUSED

P6e [AGE>4 or AGE=DK/RF] Does this person have difficultly dressing or bathing? [DIS5]

- 1 Yes
- 2 No
- 8 DON'T KNOW
- 9 REFUSED

P6f [AGE>14 or AGE=DK/RF] Because of a physical, mental, or emotional condition, does this person have difficulty doing errands alone such as visiting a doctor's office or shopping? [DIS6]

- 1 Yes
- 2 No
- 8 DON'T KNOW
- 9 REFUSED

COMPUTE DISAB=1 (YES) if YES to any DIS1-DIS6 – else DISAB=2 (No)

- P6g [IF DISAB=1] And does this person have any of the following? MULTIPLE RESPONSE [DSLIC]
 - 1 A disabled license plate or mirror hangtag
 - 2 A registration to use special transit services for persons with disability
 - 3 None of the Above
 - 7 OTHER, Specify
 - 8 DK
 - 9 RF

- P10 [AGE=14+] Does NAME have a transit pass? [TRANS]
 - 1 YES
 - 2 NO
 - 9 DK/RF
- P10a [IF TRANS=1] What type of pass is it? [TPTYP]
 - 1 Day Pass
 - 2 Ticketbook containing a set amount of rides
 - 3 Monthly Unlimited Pass
 - 4 An Annual Unlimited Pass
 - 5 An Eco, Neighborhood or PassFort Pass
 - 6 A College Pass
 - 7 A FREX (Front Range Express Commuter Bus) Pass
 - 97 Other, Specify
 - 99 DK/RF
- P10b [IF TRANS =1]How much did you pay for it? COST [TPCST] PER UNIT [TPUNT]
 - 1 Per Day
 - 2 Per Week
 - 3 Per Month
 - 4 Per Semester
 - 5 Per Year
 - 7 OTHER SPECIFY
 - 8 DON'T KNOW
 - 9 REFUSED

M1 [AGENCY = PPACG] Do you now, or have you ever, served in the US Military? [MILSV]

- 1 YES CURRENTLY SERVING
- 2 YES NOT CURRENTLY SERVING
- 3 NO
- 8 DON"T KNOW
- 9 REFUSED
- M2 [IF MILSV<3] How many years have you served? [MILYR] ENTER YEARS
 - 98 DK
 - 99 RF

PROGRAMMER NOTE: IF UNDER AGE 16, SKIP TO EDUCA

P9 Does NAME have a valid driver's license? [LIC]

- 1 YES
- 2 NO
 - 9 DK/RF
- P11 Are YOU employed, either full-time or part-time? [EMPLY] AS NEEDED, CLARIFY WE ARE ONLY INTERESTED for this guestion IN THEIR MAIN EMPLOYMENT STATUS (MAIN JOB)
 - 1 YES
 - 2 NO
 - 9 DK/RF

- P11a IF EMPLY=1: How many hours a week do you work at this job? [HOURS] INTERVIEWER NOTE: IN THIS QUESTION, WE ARE ONLY INTERESTED IN HOURS WORKED AT THIS MAIN JOB.
 - 98 DK
 - 99 RF
- P11b IF EMPLY=1: [SAME SCREEN AS HOURS] Of these hours, how many do you work from home on a regular basis (IF NEEDED: often referred to as Telecommuting)? [TCHRS] [TCHRS MUST BE =< HOURS]
 - 98 DK
 - 99 RF
- P12 [IF EMPLY>1] Does NAME do any type of volunteer work on a regular basis? [VOLUN] 1 YES – TREAT AS EMPLOYED
 - 2 NO
 - ע אס עאס א
 - 9 DK/RF

PROGRAMMING NOTE: CALCULATE WORKS=1 IF EMPLY=1 OR VOLUN=1, ELSE WORKS=2 (NULL IF AGE<16)

P13 [IF EMPLY>1 AND VOLN>1] Which of the following best describes NAME's status? [PRIMA] 1 Retired.

- Disabled / On Disability Status,
- 3 Homemaker,
- 4 Unemployed but looking for work.
- 5 Unemployed and not looking for work, or
- 6 a Student?
- 7 OTHER (specify)
- 9 REFUSED

Work-Related Data – WORKS=1 (REST SKIP TO SCHOOL SECTION)

If VOLN=1 read: For this next series of questions, please answer them based on NAME's volunteer position.

W1 [IF EMPLY=1] How many jobs does NAME have? Please include all paid positions that he/she works on a regular basis. [JOBS]

_ # Jobs (MUST BE AT LEAST ONE. CANNOT BE DK/RF)

IF MORE THAN ONE JOB: For this next series of questions, please consider only NAME's primary job.

W2. What is your/his/her occupation? [OCCUP] ENTER VERBATIM

- W3 And is NAME'S work address fixed (IF NEEDED: i.e, NAME typically travels to the same address for work), is it at your home, or does it vary from day to day or week to week? [WLOC]
 - 1 FIXED

2 HOME 3 VARIES

Note: DK/RF NOT AN OPTION FOR THIS QUESTION!

W4 We're interested in [workplace/volunteer] locations because travel to [work/volunteer] activity often affects other daily activities and travel. What is the name of this person's [employer/volunteer location]? [WNAME]

Note for Interviewers: For each workplace, we need to know what type of PLACE it is (grocery store, book store, manufacturing plant, bank, school, etc.). Obtain the best place name possible. If the place name is not self-descriptive (i.e., Safeway Grocery Store), then probe for type of place and add that to the place name (Tattered Cover Book Store).

LOOK UP IN MPO-PROVIDED LIST. IF ON LIST, CONFIRM ADDRESS, ENTER EMPLOYER ID INTO [EMPID] FIELD.

IF SELF-EMPLOYED, ENTER NAME OF COMPANY IF AVAILABLE, ELSE ENTER 'SELF-EMPLOYED' IN [WNAME]

W4A [IF WLOC=1] What is the address of your workplace? [IF WLOC=3] What is the address of the place you worked at most recently? [WADDR] [WCITY][WSTAT] [WZIP] [INTERVIEWER NOTE: HABITUALS ARE REQUIRED FOR DATA DELIVERY]

- W4B [IF REFUSED WADDR] Can you tell me the nearest cross streets of this work location? [WXSTR] city, state, zip [INTERVIEWER NOTE: HABITUALS ARE REQUIRED FOR DATA DELIVERY]
- W5 [IF WLOC<3 AND EMPLY=1] How long have you worked at this location? [WLIVE]
 - 1 Less than 1 year
 - 2 At least 1 year but less than 2 years
 - 3 At least 2 years but less than 5 years
 - 4 At least 5 years but less than 10 years
 - 5 10 or more years
 - 9 Refused

W6 [IF WLIVE<4] Was your last work location in the Front Range region? [WPIFR]

- 1 YES
- 2 NO
- 9 DK/RF

W7 [IF WPIFR=1] What is the name of your previous employer? [BFNAM]

LOOK UP IN MPO-PROVIDED LIST. IF ON LIST, CONFIRM ADDRESS, ENTER EMPLOYER ID INTO [BFEID] FIELD.

IF NOT ON LIST, OBTAIN [BFADD]

W7A [IF WLIVE<4] What city and state was that? [BFCIT] [BFSTA]

W8 How does this person normally get to work/their volunteer activity? [WMODE]

- 1 Walk
- 2 Bike
- 3 Auto / van/ truck driver
- 4 Auto / van / truck passenger
- 5 Local Bus
- 6 Express Bus
- 7 Train
- 8 Light Rail
- 9 Dial-a-ride/paratransit
- 10 Taxi
- 97 OTHER (specify)
- 98 DON"T KNOW
- 99 REFUSED

W9 Does NAME's employer provide you parking free of charge? [EPARK]

- 1 YES
- 2 NO
- 8 DK
- 9 RF

W9A [IF EPARK>1] Regardless of how NAME typically gets to work, if HE/SHE were to drive and park, how much would it cost to park at HIS/HER work?

COST [WPRKC] PER UNIT [WPRKU]

- 1 Per Day
- 2 Per Week
- 3 Per Month
- 4 Per Semester
- 5 Per Year
- 7 OTHER SPECIFY
- 8 DON'T KNOW
- 9 REFUSED

W10 Does your employer provide NAME with a transit pass at no charge? [TPASS]

- 1 YES
- 2 NO
- 8 DK
- 9 RF
- W11 [IF AGENCY=NFRMPO] Do you carpool or vanpool to work at least once a month? [WCPVP]
 - 1 YES CARPOOL
 - 2 YES VANPOOL
 - 3 YES BOTH
 - 4 NO
 - 8 DK
 - 9 RF

W11A [WCPVP<4] Is it a formal or informal carpool/vanpool program? [FCPVP]

- 1 FORMAL (Arvilla could you provide the names of some formal programs?)
- 2 INFORMAL INCLUDES CARPOOLS COMPRISED OF FAMILY MEMBERS
- 7 OTHER, SPECIFY

W11B [FCPVP=1] What program do you participate in? VERBATIM

W12 Which of the following statements best describes NAME'S work schedule? [SCHED]

- 1 no flexibility in my work schedule
- 2 some flexibility in my work schedule
- 3 pretty much free to adjust schedule
- 9 DK/RF

W13 [IF JOBS>1] Earlier you mentioned that you work more than one job. How many hours a week do you work at your 2nd workplace? [HOUR2] (INTERVIEWER NOTE: IF NEEDED, THE JOB THAT YOU WORK THE MOST AFTER YOUR MAIN JOB]

- 97 DK
- 98 RF

W14 [IF JOBS>1] And at your 2nd job (IF NEEDED: THE JOB THAT YOU WORK THE MOST AFTER YOUR MAIN JOB], is your work address fixed (i.e, you typically travel to the same address for work), is it at your home, or does it vary from day to day or week to week? [WLOC2]

1 FIXED

2 HOME

3 VARIES

Note: DK/RF NOT AN OPTION FOR THIS QUESTION!

W15 What is the name of YOUR employer at YOUR 2nd workplace? [WNAM2]

LOOK UP IN MPO-PROVIDED LIST. IF ON LIST, CONFIRM ADDRESS, ENTER EMPLOYER ID INTO [EMP2] FIELD.

IF SELF-EMPLOYED, ENTER NAME OF COMPANY IF AVAILABLE, ELSE ENTER 'SELF-EMPLOYED' IN [WNAM2]

W15A [IF WLOC2=1] What is the address of your 2nd workplace?

[IF WLOC2=3] What is the address of the place you worked at most recently for your 2nd job? [WADD2] [WCIT2][WSTA2] [WZIP2] [INTERVIEWER NOTE: HABITUALS ARE REQUIRED FOR DATA DELIVERY]

W15B [IF REFUSED WADD2] Can you tell me the nearest cross streets of this second work location? [WXST2] city, state, zip [INTERVIEWER NOTE: HABITUALS ARE REQUIRED FOR DATA DELIVERY]

School-Related Data – Ask of all HH members

- C1 What is the highest degree or level of school you've completed? [EDUCA]
 - 1 Not a high school graduate, 12th grade or less (THIS INCLUDES VERY YOUNG CHILDREN TOO)
 - 2 High school graduate (high school diploma or GED)
 - 3 Some college credit but no degree
 - 4 Associate or technical school degree
 - 5 Bachelor's or undergraduate degree
 - 6 Graduate degree (includes professional degree like MD, DDs, JD)
 - 7 OTHER, SPECIFY
 - 9 DK/RF

- C2 Is this person currently enrolled in any type of school, including [if age<6 "daycare"], technical school, or university? IF AGE 18+, FOLLOW UP WITH: IS THAT FULL-TIME OR PART-TIME? [STUDE]
 - 1 YES FULL TIME
 - 2 YES PART TIME
 - 3 NO
 - 9 DK/RF

C3 What school grade or level does this person attend? [SCHOL]

- 1 Daycare
- 2 nursery school, pre-school
- 3 Kindergarten to Grade 8
- 4 Grade 9 to 12
- 5 Technical/Vocation School
- 6 2-year college (Community College)
- 7 4-year college or university
- 8 Graduate school/professional
- 97 OTHER, SPECIFY
- 99 DK/RF
- C4 And is this person home-schooled? [SLOC]
 - 1 YES
 - 2 NO
 - 9 DON'T KNOW/ REFUSED (treat as NOT HOMESCHOOLED)
- C5 [SLOC>1] What is the name of YOUR school? LOOK UP LIST. [SNAME]
- C5A [SLOC>1] What is the address of this school? [SADDR][SCITY][SSTAT][SZIP] [INTERVIEWER NOTE: HABITUALS ARE REQUIRED FOR DATA DELIVERY]
- C5B [IF REFUSED SADDR] Can you tell me the nearest cross streets of this school? [SXSTR] city, state, zip [INTERVIEWER NOTE: HABITUALS ARE REQUIRED FOR DATA DELIVERY]
- C6 [SLOC>1] How does this person normally get to school? [SMODE]
 - 1 Walk
 - 2 Bike
 - 3 Auto / van/ truck driver
 - 4 Auto / van / truck passenger
 - 5 Local Bus
 - 6 Express Bus
 - 7 Train
 - 8 Light Rail
 - 9 Dial-a-ride/paratransit
 - 10 Taxi
 - 11 School Bus
 - 97 OTHER (specify)"
 - 98 DON"T KNOW
 - 99 REFUSED

C7 [IF SCHOL=5 THROUGH 8] IF UNIVERSITY STUDENT: In a typical week, how many days do you go to school?

98 DK

99 RF

C8 [IF SCHOL=5 THROUGH 8] IF UNIVERSITY STUDENT: In a typical week, how many days do you do on-line classes?

98 DK

99 RF

HOUSEHOLD ROSTER PART 2

D1 Understanding your household's travel and activities is very important for improving transportation in your area. We will send you a diary for each member of your household to keep track of your travel and activities for 24 hours on [DAY AND DATE]. 1 YES

2 NO – Well, let's try a different time. How about [ALT DAY AND DATE].

ENTER ASSIGNMENT NUMBER [ASSN]

PROGRAMMING NOTE: SHOW 6 ASSN DAYS FOR SCHEDULING PURPOSES

[PRN10] We are offering <INAMT> in appreciation of your efforts, but only if EVERYONE in your household completes a travel diary and reports your travel information by <[ASN10]>. Once all your travel information is complete and confirmed for EVERYONE in your household, we will mail you a check.

D2 To whom should we address the envelope? [CONFIRM LISTED NAME/IMPORTED OR OBTAIN NEW}

FIRST NAME_____ LAST NAME_____ 9 REFUSED --> INDICATE THAT INFORMATION IS NECESSARY, IF STILL REFUSE, TERMINATE

D3 In order to mail the diaries to you, I need your address. [IF LISTED SAMPLE, CONFIRM ADDRESS, IF UNLISTED: OBTAIN

MAILING ADDRESS HERE

D4 Is this also where you live? IF NOT, OBTAIN PHYSICAL ADDRESS

- D5 We will mail the diaries to you in a few days and will call you again on [REMIND DATE] to make sure you have received the packet and to answer any questions. Then we will call to ask about your travel and activities on [BEGDATE]. When would be the best time to reach you? OBTAIN DAY AND TIME
- D6 And should we call you at this telephone number or is there a different phone number where you would prefer to be called?
 - 1 This number
 - 2 Different number ____ ____ ____

D7 When we call back to collect your travel and activities, we will not ask to speak to anyone under 16 years old, but we would like to ask about their travel. Who would be the best person to give that information? ENTER PERSON NUMBER.

CONCLUSION

Thank you for participating in the Front Range Travel Counts Survey. Please tell the other members of your household how important their participation is for the success of the study. We look forward to talking with you again. If you have any questions or comments, you can reach us at **888-222-7734.** Thank you and have a good day/night.



S0 [non-cell sample] I show that you live in [CTFIP]. Is this correct? IF NOT, what county do you live in? [cell sample FORCE: What county do you live in?] TERMINATE IF NOT IN STUDY AREA.

County		G	eographic Are	а		Total
	Fort Collins (Larimer County)	Greeley/Evans (Weld County)	Loveland (Larimer County)	Remainder (Larimer County)	Other (Weld County - partial)	
Larimer	623	0	243	153	0	1019
Weld	0	341	0	0	145	486
Total	623	341	243	153	145	1505

S1 Do you or any members of your household use transit on a regular basis during the week? [RIBUS]

		G	eographic Area	a		Total
	Fort Collins (Larimer County)	Greeley/Evans (Weld County)	Loveland (Larimer County)	Remainder (Larimer County)	Other (Weld County - partial)	
Yes	44	29	18	6	6	103
No	579	312	225	147	139	1402
Total	623	341	243	153	145	1505

S2 Do you or any members of your household walk or bike to work or school at least once a week? [WABIK]

		Geographic Area				Total
	Fort Collins (Larimer County)	Greeley/Evans (Weld County)	Loveland (Larimer County)	Remainder (Larimer County)	Other (Weld County - partial)	
Yes	240	65	45	28	21	399
No	383	276	198	125	124	1106
Total	623	341	243	153	145	1505

V1 And how many motor vehicles are owned, leased, or available for regular use by the people who currently live in your household? Please be sure to include motorcycles, mopeds, and RVs. [HHVEH] ENTER NUMBER

		G	eographic Area	a		Total
	Fort Collins (Larimer County)	Greeley/Evans (Weld County)	Loveland (Larimer County)	Remainder (Larimer County)	Other (Weld County - partial)	
0	12	13	6	0	0	31
1	169	83	62	20	15	349
2	285	143	87	66	60	641
3	109	71	60	36	39	315
4	34	20	22	20	20	116
5	6	8	4	8	7	33
6	3	2	1	2	1	9
7	4	1	1	1	3	10
8	1	0	0	0	0	1
Total	623	341	243	153	145	1505

H1. How many people, including yourself, live in your home? [HHSIZ]

		G	eographic Are	а		
	Fort Collins (Larimer County)	Greeley/Evans (Weld County)	Loveland (Larimer County)	Remainder (Larimer County)	Other (Weld County - partial)	Total
1	157	94	60	26	20	357
2	243	136	99	79	57	614
3	101	43	27	20	21	212
4	85	40	33	15	27	200
5	23	20	18	10	15	86
6	7	3	5	2	5	22
7	4	3	1	1	0	9
8	3	2	0	0	0	5
Total	623	341	243	153	145	1505

H1a And of these, how many are employed full-time or part-time in a paid working position? HHMEM – used to track hhsize/worker goals.

		G	eographic Area	a		
	Fort Collins (Larimer County)	Greeley/Evans (Weld County)	Loveland (Larimer County)	Remainder (Larimer County)	Other (Weld County - partial)	Total
0	74	58	43	16	15	206
1	217	135	79	46	42	519
2	292	133	106	82	73	686
3	35	12	14	7	12	80
4	4	3	1	2	3	13
5	1	0	0	0	0	1
Total	623	341	243	153	145	1505

VEHICLE ROSTER (ZERO VEHICLE HOUSEHOLDS SKIP TO BIKES)

V1-V4 Earlier, you indicated that you had [HHVEH] vehicles. I have a few questions about each of these vehicles. Let's start with the vehicle that is driven the most. What is the make, model, and year of this vehicle?

PROGRAMMING NOTE: SHOW MATRIX ON SCREEN

VEH # [VEHNO] V2 [MAKE] V3 [MODEL] V4 [YEAR]

	Frequency	Percent
Before 1990	334	10.0%
1990-1994	327	9.8%
1995-1999	724	21.7%
2000-2004	1019	30.5%
2005	230	6.9%
2006	183	5.5%
2007	201	6.0%
2008	157	4.7%
2009	89	2.7%
2010	7	0.2%
DK/RF	66	2.0%
Total	3337	100.0%

V5 [For each vehicle] And is this a/an? [BODY]

	Frequency	Percent
Car/Sedan	1594	47.8
Van	304	9.1
SUV	625	18.7
Pick-up Truck	627	18.8
Other Truck	25	.7
RV	20	.6
Motorcycle	117	3.5
Other	23	.7
Refused	2	.1
Total	3337	100.0

V6 [For each vehicle] What type of fuel does it take? [FUEL]

	Frequency	Percent
Gas	3172	95.1
Diesel	96	2.9
Hybrid	50	1.5
Flex Fuel	14	.4
Other	1	.0
Don't Know	2	.1
Refused	2	.1
Total	3337	100.0

V7 [For all vehicles] And is this vehicle owned, leased, or employer provided? [VHOWN]

- 4 Owned
- 5 Leased
- 6 Employer Provided
- 7 Other, Specify
- 10 Don't Know
- 11 Refused

	Frequency	Percent
Owned	3251	97.4
Leased	26	.8
Employer Provided	56	1.7
Refused	4	.1
Total	3337	100.0

V8 [If VHOWN=1 or 2] When did you acquire this vehicle? [WHEN] ENTER YEAR [RANGE 1901-2010]

	Frequency	Percent	
Before 1990	98	2.9%	
1990-1994	133	3.9%	
1995-1999	385	11.3%	
2000-2004	999	29.4%	
2005	276	8.1%	
2006	324	9.5%	
2007	372	10.9%	
2008	352	10.3%	
2009	261	7.7%	
2010	137	4.0%	
DK/RF	66	1.9%	
Total	3403	100.0%	

V9 [If VHOWN=1 or 2] And was the purchase or lease of this vehicle a replacement of a vehicle you used to have, or did it add to the number of vehicles available to your household? [VREPL]

	Frequency	Valid Percent
Replacement	2184	66.6
Addition	1076	32.8
Don't Know	14	.4
Refused	3	.1
Total	3277	100.0

V11 [FOR ALL VEHICLES] When you are home, where is this vehicle parked? [VEHPK]

	Frequency	Valid Percent
Garage	887	60.2
Driveway	308	20.9
On the Street	61	4.1
In a Parking Lot	55	3.7
Other	162	11.0
Refused	1	.1
Total	1474	100.0

V12 [FOR ALL VEHICLES] Do you have to pay for parking at home? [VEHHP]

	Frequency	Valid Percent
Yes	5	.3
No	1469	99.7
Total	1474	100.0

HOUSEHOLD ROSTER (PART 1)

H2 How many bicycles does your household own and use on a regular basis? [BIKES] ENTER NUMBER

		Geographic Area				
	Fort Collins (Larimer County)	Greeley/Evans (Weld County)	Loveland (Larimer	Remainder (Larimer	Other (Weld County - partial)	Total
0	1		County)	County)		
0	150	166	90	45	44	495
1	97	47	41	28	22	235
2	161	66	50	32	40	349
3	77	28	24	16	14	159
4	67	18	21	16	15	137
5	34	9	10	6	5	64
6	18	2	5	5	3	33
7	9	1	1	2	1	14
8	7	2	1	2	1	13
10	2	0	0	1	0	3
12	1	1	0	0	0	2
20	0	1	0	0	0	1
Total	623	341	243	153	145	1505

H3 Which best describes your home? [RESTY] (note – these are the ACS categories) Count

		Geographic Area				Total
	Fort Collins (Larimer County)	Greeley/Evans (Weld County)	Loveland (Larimer County)	Remainder (Larimer County)	Other (Weld County - partial)	
Single Family Unit	527	281	195	149	139	1291
Duplex	24	13	20	3	0	60
Multi-family Uni	t 54	38	21	0	4	117
Mobile Home	18	9	7	1	2	37
Total	623	341	243	153	145	1505

H4 Is your home owned or rented? [OWN]

	Geographic Area				Total	
	Fort Collins (Larimer County)	Greeley/Evans (Weld County)	Loveland (Larimer County)	Remainder (Larimer County)	Other (Weld County - partial)	
Owned	564	290	201	149	140	1344
Rented	59	51	40	4	5	159
Refused	0	0	2	0	0	2
Total	623	341	243	153	145	1505

H5 How long have you lived at this location? [HLIVE]

- 6 Less than 1 year
- 7 At least 1 year but less than 2 years
- 8 At least 2 years but less than 5 years
- 9 At least 5 years but less than 10 years
- 10 10 or more years
- 9 Refused

hlive * Geographic Area Crosstabulation

Count						
	Geographic Area					Total
	Fort Collins (Larimer County)	Greeley/Evans (Weld County)	Loveland (Larimer County)	Remainder (Larimer County)	Other (Weld County - partial)	
< 1 year	23	18	7	5	6	59
1 - <2 years	30	18	14	2	5	69
2-<5 years	87	51	45	23	22	228
5-<10 years	151	91	66	39	50	397
10+ years	332	162	111	84	62	751
Refused	0	1	0	0	0	1
Total	623	341	243	153	145	1505

H10 And to ensure your household properly represents others in the region, can you tell me if your total household income for 2008 for all sources before taxes was above or below \$60,000?

		Geographic Area				Total
	Fort Collins (Larimer County)	Greeley/Evans (Weld County)	Loveland (Larimer County)	Remainder (Larimer County)	Other (Weld County - partial)	
\$0 - \$14,999	19	21	16	4	3	63
\$15,000 - \$19,999	23	18	12	1	2	56
\$20,000 - \$29,999	34	31	20	8	4	97
\$30,000 - \$39,999	46	36	17	11	7	117
\$40,000 - \$49,999	46	31	21	10	15	123
\$50,000 - \$59,999	48	24	18	12	8	110
\$60,000 - \$74,999	83	48	24	23	22	200
\$75,000 - \$99,999	88	44	37	27	34	230
\$100,000 - \$134,999	95	45	29	22	16	207
\$135,000 - \$149,999	39	9	11	6	7	72
\$150,000 - More	60	14	13	17	14	118
Refused	42	20	25	12	13	112
Total	623	341	243	153	145	1505

PERSON ROSTER

P1 What is this person's gender? [GENDE] (recorded by observation for the main respondent)

	Frequency	Percent
Male	1764	47.9
Female	1914	51.9
Refused	8	.2
Total	3686	100.0

P3 [DON'T ASK FOR RESPONDENT] How is this person related to you? [RELAT]

	Frequency	Percent
Self	1505	40.8
Spouse	1025	27.8
Child	1041	28.2
Parent	20	.5
Grandparen t	5	.1
Grandchild	32	.9
Other Related	33	.9
Other not related	25	.7
Total	3686	100.0

P4 [IF PERNO=1, DATA STORED IN HH FILE] Are you of Hispanic, Latino or Spanish origin? [HISP]

	Frequency	Percent
Yes	77	5.1
No	1420	94.4
Refused	8	.5
Total	1505	100.0

P5 [IF PERNO=1, DATA STORED IN HH FILE] And which of the following best describes your race? [RACE].

	Frequency	Percent
White	1419	94.3
Black	3	.2
Native American	8	.5
Asian	8	.5
Other	51	3.4
Refused	16	1.1
Total	1505	100.0

P6a Is this person deaf or does he/she have serious difficulty hearing? [DIS1] Г Т

	Frequency	Percent
Yes	155	4.2
No	3521	95.5
Don't Know	2	.1
Refused	8	.2
Total	3686	100.0

P6b Is this person blind or does he/she have serious difficulty seeing even when wearing glasses? [DIS2]

	Frequency	Percent
Yes	62	1.7
No	3615	98.1
Don't Know	1	.0
Refused	8	.2
Total	3686	100.0

P6c [AGE>4 or AGE=DK/RF] Because of a physical, mental or emotional condition, does this person have serious difficulty concentrating, remembering, or making decisions? [DIS3]

	Frequency	Percent
Yes	79	2.2
No	3431	97.5
Don't Know	2	.1
Refused	8	.2
Total	3520	100.0

P6d [AGE>4 or AGE=DK/RF] Does this person have serious difficulty walking or climbing stairs? [DIS4]

	Frequency	Percent
Yes	192	5.5
No	3319	94.3
Don't Know	1	.0
Refused	8	.2
Total	3520	100.0

P6e [AGE>4 or AGE=DK/RF] Does this person have difficultly dressing or bathing? [DIS5]

	Frequency	Percent
Yes	34	1.0
No	3477	98.8
Don't Know	1	.0
Refused	8	.2
Total	3520	100.0

P6f [AGE>14 or AGE=DK/RF] Because of a physical, mental, or emotional condition, does this person have difficulty doing errands alone such as visiting a doctor's office or shopping? [DIS6]

	Frequency	Valid Percent
Yes	74	2.5
No	2911	97.2
Don't Know	1	.0
Refused	9	.3
Total	2995	100.0

COMPUTE DISAB=1 (YES) if YES to any DIS1-DIS6 – else DISAB=2 (No)

Disabled?	Frequency	Percent
Yes	366	9.9
No	3320	90.1
Total	3686	100.0

P10 [AGE=14+] Does NAME have a transit pass? [TRANS]

- 3 YES
- 4 NO
- 9 DK/RF

TRANS

	Frequency	Valid Percent
Yes	111	3.6
No	2931	95.9
Refused	13	.4
Total	3055	100.0

P10a [IF TRANS=1] What type of pass is it? [TPTYP]

	Frequency	Valid Percent
Day Pass	4	3.6
Ticketbo ok	7	6.3
Monthly	8	7.2
Annual	30	27.0
Special	3	2.7
College	12	10.8
FREX	2	1.8
Other	32	28.8
Refused	13	11.7
Total	111	100.0

PROGRAMMER NOTE: IF UNDER AGE 16, SKIP TO EDUCA

P9 Does NAME have a valid driver's license? [LIC]

	Frequency	Valid Percent
Yes	2770	95.2
No	138	4.7
Refused	2	.1
Total	2910	100.0

P11 Are YOU employed, either full-time or part-time? [EMPLY] AS NEEDED, CLARIFY WE ARE ONLY INTERESTED for this question IN THEIR MAIN EMPLOYMENT STATUS (MAIN JOB)

	Frequency	Valid Percent
Yes	1940	66.7
No	968	33.3
Refused	2	.1
Total	2910	100.0

P11a IF EMPLY=1: How many hours a week do you work at this job? [HOURS]

P11b IF EMPLY=1: [SAME SCREEN AS HOURS] Of these hours, how many do you work from home on a regular basis (IF NEEDED: often referred to as Telecommuting)? [TCHRS] Descriptive Statistics

	Ν	Minimum	Maximum	Mean	Std. Deviation
HOURS	1897	1	120	38.18	14.651
TCHRS	1894	0	100	6.59	13.488

P12 [IF EMPLY>1] Does NAME do any type of volunteer work on a regular basis? [VOLUN]

	Frequency	Valid Percent
Yes	248	25.6
No	719	74.1
Refused	3	.3
Total	970	100.0

PROGRAMMING NOTE: CALCULATE WORKS=1 IF EMPLY=1 OR VOLUN=1, ELSE WORKS=2 (NULL IF AGE<16)

	Frequency	Valid Percent
Works	2188	75.2
Does not work	722	24.8
Total	2910	100.0

P13 [IF EMPLY>1 AND VOLN>1] Which of the following best describes NAME's status? [PRIMA]

	_	
	Frequency	Valid Percent
Retired	340	47.1
Disabled	65	9.0
Homemaker	99	13.7
Unemployed – looking	85	11.8
Unemployed – not looking	17	2.4
Student	110	15.2
Other	2	.3
Refused	4	.6
Total	722	100.0

Work-Related Data – WORKS=1 (REST SKIP TO SCHOOL SECTION)

W1 [IF EMPLY=1] How many jobs does NAME have? Please include all paid positions that he/she works on a regular basis. [JOBS]

	Ν	Minimum	Maximum	Mean	Std. Deviation
JOBS	2188	1	5	1.14	.454
Valid N (listwise)	2188				

W3 And is NAME'S work address fixed (IF NEEDED: i.e, NAME typically travels to the same address for work), is it at your home, or does it vary from day to day or week to week? [WLOC]

· · · · ·		
	Frequency	Valid Percent
Fixed	1609	73.5
Home	298	13.6
Varied	281	12.8
Total	2188	100.0

W5 [IF WLOC<3 AND EMPLY=1] How long have you worked at this location? [WLIVE]

	Frequency	Valid Percent
< 1 year	210	11.0
1 - < 2 years	179	9.4
2 - < 5 years	401	21.0
5 - < 10 years	433	22.7
10+ years	656	34.4
Refused	28	1.5
Total	1907	100.0

W6 [IF WLIVE<4] Was your last work location in the Front Range region? [WPIFR]

	Frequency	Valid Percent
Yes	511	64.7
No	259	32.8
Refused	20	2.5
Total	790	100.0

W8 How does this person normally get to work/their volunteer activity? [WMODE]

	Frequency	Valid Percent
Walk	52	2.8
Bike	116	6.1
Auto-D	1647	87.1
Auto-P	47	2.5
Local Bus	8	.4
Express Bus	1	.1
Other	17	.9
Don't Know	2	.1
Total	1890	100.0

W9 Does NAME's employer provide you parking free of charge? [EPARK]

	Frequency	Valid Percent
Yes	2061	94.2
No	120	5.5
Don't know	2	.1
Refused	5	.2
Total	2188	100.0

	Frequency	Valid Percent
Yes	58	2.7
No	2044	93.4
Don't know	80	3.7
Refused	6	.3
Total	2188	100.0

W10 Does your employer provide NAME with a transit pass at no charge? [TPASS]

W11 [IF AGENCY=NFRMPO] Do you carpool or vanpool to work at least once a month? [WCPVP]

	Frequency	Valid Percent
-	Troquonoy	Valia i oroont
Yes, Carpool	205	9.4
Yes, Vanpool	17	.8
Yes, Both	7	.3
No	1941	88.7
Don't know	12	.5
Refused	6	.3
Total	2188	100.0

W11A [WCPVP<4] Is it a formal or informal carpool/vanpool program? [FCPVP]

	Frequency	Valid Percent
Formal	12	5.2
Informal	217	94.8
Total	229	100.0

W12 Which of the following statements best describes NAME'S work schedule? [SCHED]

	Frequency	Valid Percent
No flexibility	572	26.1
Some flexibility	895	40.9
Full flexibility	702	32.1
Refused	19	.9
Total	2188	100.0

W13 [IF JOBS>1] Earlier you mentioned that you work more than one job. How many hours a week do you work at your 2nd workplace? [HOUR2]

	N	Minimum	Maximum	Mean	Std. Deviation
HOUR2	206	1	50	9.70	8.925
Valid N (listwise)	206				

School-Related Data – Ask of all HH members

		_
	Frequency	Percent
Not HS Graduate	953	25.9
HS Graduate	399	10.8
Some college (no degree)	447	12.1
Associate/Technical degree	231	6.3
Bachelors degree	862	23.4
Graduate degree	774	21.0
Other	4	.1
Refused	16	.4
Total	3686	100.0

C1 What is the highest degree or level of school you've completed? [EDUCA]

C2 Is this person currently enrolled in any type of school, including [if age<6 "daycare"], technical school, or university? IF AGE 18+, FOLLOW UP WITH: IS THAT FULL-TIME OR PART-TIME? [STUDE]

	Frequency	Percent
Yes, Full time	760	20.6
Yes, Part time	207	5.6
No	2719	73.8
Total	3686	100.0

C3 What school grade or level does this person attend? [SCHOL]

	Frequency	Valid Percent
Daycare	28	2.9
Pre-school	49	5.1
K – 8	477	49.3
9 – 12	228	23.6
Technical/Vocati onal	7	.7
2-year College	62	6.4
4-year College	70	7.2
Graduate school	43	4.4
Other	2	.2
Refused	1	.1
Total	967	100.0

C4 And is this person home-schooled? [SLOC]

	Frequency	Valid Percent
Yes	79	8.2
No	888	91.8
Total	967	100.0

	Frequency	Valid Percent
Walk	99	11.1
Bike	73	8.2
Auto-D	172	19.4
Auto-P	364	41.0
Local Bus	8	.9
Express Bus	3	.3
School Bus	150	16.9
Other	14	1.6
Don't Know	2	.2
Refused	3	.3
Total	888	100.0

C6 [SLOC>1] How does this person normally get to school? [SMODE]

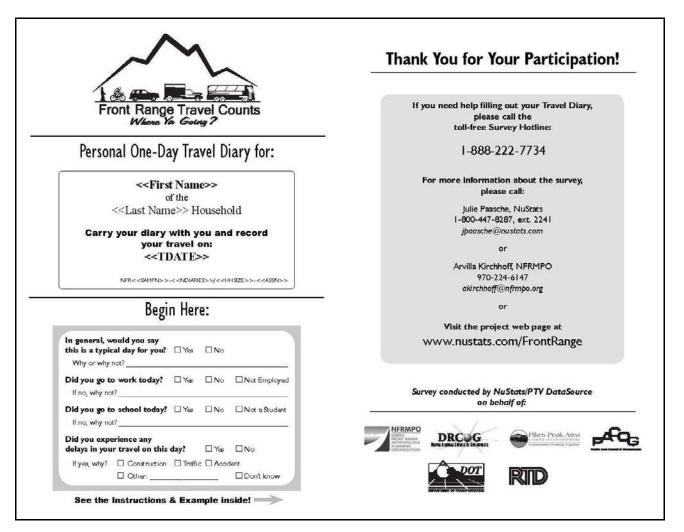
- C7 [IF SCHOL=5 THROUGH 8] IF UNIVERSITY STUDENT: In a typical week, how many days do you go to school?
- C8 [IF SCHOL=5 THROUGH 8] IF UNIVERSITY STUDENT: In a typical week, how many days do you do on-line classes?

	Ν	Minimum	Maximum	Mean	Std. Deviation
SDAYS	178	0	7	3.19	1.799
OLDAY	173	0	7	.85	1.756
Valid N (listwise)	172				



FIGURE D1: RESPONDENT LETTER CONTAINED IN DIARY MATERIALS

	Front Range Travel Counts Where Ya Going?
Dear	Colorado Front Range Resident:
You a Hous	ou concerned about traffic, air quality, access to jobs and quality of life in the Front Range region? are part of a small group of households selected to participate in the Colorado Front Range ehold Travel Survey. Your participation in this survey will help identify where highway, street, c transit, and bicycle and pedestrian facility improvements will be made in the Front Range.
Rang Area Trans peopl	survey is a joint effort between the Denver Regional Council of Governments, the North Front the Metropolitan Planning Organization, the Pikes Peak Area Council of Governments, the Pueblo Council of Governments, the Regional Transportation District, the Colorado Department of sportation, and the Federal Highway Administration. The purpose is to understand how and why le travel in the Front Range region, to aid in forecasting future travel patterns and to define portation improvements.
make speci needs	loping transportation plans relies on data about travel and trips. It is important to know how people travel decisions as part of their daily activities. Indicating what you do and where you go on a fic day helps the region identify its transportation needs and determine how best to meet those s in the future. Children's activities are important as well. Inside this packet, you will find easy-to- ravel diaries for everyone in your household and a brochure that explains the project.
Datas used comb	survey is being conducted by NuStats, a professional research company, and its affiliate PTV Source. NuStats ensures that all information collected will be held strictly confidential and will be for this research project only. The information from your household will be used only in bination with data from other participating households. Your name will never be attached to your onses.
www.	have questions related to this survey, please visit the survey website at nustats.com/FrontRange, call the toll-free survey hotline at 1-888-222-7734, or contact Julie che of NuStats at 1-800-447-8287, ext. 2241 (e-mail jpaasche@nustats.com).
	k you in advance for participating in this important project. Your responses will help ensure our portation system continues to meet the needs of Colorado's Front Range residents.
Since Bill R Gove	Bell Retter fr.
0010	



Diary Instr Jse this diary to record information about A ssigned travel day beginning at 3 a.m. (or wi 2:59 a.m. the next day (or when you go to sle ipecifically, tell us the:	LL the PLACES you visit on your then you wake up) and ending at		PLACE PLACE?	Day Care Center	itop lace
	What is a PLACE?		Name of Other Place OR Transit stop 901 Main St.	Type of Place (restaurant, bookstore, etc	.)
 PLACES you visit. The place name and type, exact address and/or cross-streets, A PLACE is any location you travel to, whether it's for just a few minutes (such as a gas station, drive-thru 	o, whether it's for just a few minutes such as a gas station, drive-thru		Street address OR nearest cross-streets Anytown City	CO 9999 State Zip	9
city, state, and zip are all critical s for assessing areas with traffic a	vindow, dropping your child off at chool, etc.) or for many hours (work, ttending a sporting event, etc.)	B	What TIME did you ARRIVE? (Exact tim	re)7:32 ⊠am	🗆 pm
congestion.		C	HOW did you TRAVEL there? (Write co	de from LIST 1 on flap) Code	: 3
IF YOU RIDE THE BUS/TRAIN C please record EACH bus stop, train meeting place where you get on o	station, or carpool/vanpool	D1	How many people traveled with you? (DON'T include yourself)	D2 Of those, how many were household members?	°1
meeting place where you get on o	on as a separate i LACE.	E1	If traveled by AUTO/TRUCK/VAN:	E2 If by PUBLIC TRANSI	T:
 EXACT TIMES you arrive and leave (Arrival time is defined as when you walk the departure time is when you walk ou 	k in the door at each PLACE and		Which household vehicle did you use? Make/Model: Toyota Camry Did not use a household vehicle	What was the Route/Line?	
 How you TRAVELED to each place (codes are on the flap of this diary). 	e. Write the code from LIST 1		Did you get out of your vehicle? X Yes No (drive-thru, drop off)pick up)	How much did you pay for t Cash: \$	this trip?
 Other travel information. Question other people were in your travel part members of your household. Question 	y, and of those, how many were		If yes, where did you park? X Parking lot Street Parking garage Other: Driveway or residential garage	If you used a pass, what typ	e?
depending on how you traveled.			What are the nearest cross-streets to this parking location?	How much did the pass cos	t?
 ACTIVITIES or what you did at ea LIST 2 (codes are on the flap of this di 			Main St. & E. Broadway	\$per	
the main activity you did and then wr			How much did you pay to park? \$ per X Did not pay		
eep your completed Travel Diaries by		200			
ollect the information, or you can call or anyone who is unable to complete a dia dult complete the diary for them. Thank y	ry, we ask that a parent or other	E3	If you DID NOT travel by Auto/Truck What would you have had to pay for parking if you had driven to this place?	k/Van:	
Confidentic We respect your privacy and promise t	o protect it. The information	F	What ACTIVITIES did you do there? (Write code from LIST 2 on flap)	Main activity (code): 10 Other activity (code):	
your household provides will be k	ept strictly confidential. vey Hotline: 1-888-222-7734	G	What TIME did you LEAVE? 7: (Please record exact time)	46 X am □ pm → Nex PLA □ Did not leave → DOP	CE



APPENDIX E: RETRIEVAL QUESTIONNAIRE

Front Range Travel Counts Survey-NFRMPO - Retrieval Interview

Version: Draft 8/4/09

Note #1 for Interviewers: If ALL members of the household are unrelated AND as many of the other HH members as possible. NON-RELATED HH will be flagged and interviewer will know prior to calling the household if this is a non-related hh

Note #2 for Interviewers: Obtain details for all trips, even those that are work-related or for work purposes. This includes trips made by commercial drivers as well as work-related deliveries, errands, etc. Basically, all respondents should record ALL trips that they make.

Note #3 for Interviewers: For each non-home location visited, we need to know what type of PLACE it is (grocery store, book store, manufacturing plant, bank, school, etc.). Obtain the best place name possible. If the place name is not self-descriptive (i.e., Safeway Grocery Store), then probe for type of place and add that to the place name (Tattered Cover Book Store).

Note #4 for Interviewers: Arrival time is defined as the time the respondent walks in the door at each place and the departure time is when the respondent walks out the door of each place.

Introduction

Hi – this is _____ and I'm calling about the Front Range Travel Counts Survey. We recently spoke with [FNAME] and are calling back now to complete the interview.

E1. You are [informant's name or initials]. [INDICATE IF TRIP INFORMATION IS BEING PROVIDED BY THE INFORMANT OR BY PROXY. [PROXY]

INFORMANT1PROXY2Enter PERNO of Person Reporting

E2. Last week, we spoke with you about the travel survey and sent you a diary to record your travel and activities on [ASSN]. I'd like to collect your information now.

[PROGRAMMER NOTE: SHOW TEXT IF HOUSEHOLD QUALIFIES FOR INCENTIVE]. Just a reminder, your household is being offered <INAMT> to thank you for your participation in this study. If EVERYONE in the household completes the study with valid travel information, we will send your household <INAMT> in the next 6-8 weeks.

First, demographic information is verified: HHSIZ, household member characteristics (age, worker status, student status), and household vehicle info (year, make, model), and INCOM is re-asked if it was refused in recruitment.

PROGRAMMER NOTE: THIS SHOULD BE MODIFIED TO DO THE FOLLOWING: WHERE THE INTERVIEWER STARTS WILL TAKE HIM THROUGH THE DIFFERENT SECTIONS UNTIL THE END. FOR EXAMPLE, IF HE CHOOSES "UPDATE PERSONAL INFORMATION", #1, IT SHOULD TAKE HIM THROUGH #2 EMPLOYMENT INFORMATION, THEN #3 STUDENT INFORMATION. IF HE CHOOSES #2, IT WILL TAKE HIM ONLY THROUGH #2 AND #3. AND SO ON.

Verify Habituals (Home, Work, School) [INTERVIEWER NOTE: HABITUALS REQUIRED FOR DATA DELIVERY] [INTERVIEWER NOTE: REMEMBER TO COPY HABITUALS TO HOTLIST]

- E3 [IF NOT PROXY INTERVIEW] In general, would you say that ASSN was a typical day for you? [TYPDY] [INTERVIEWER NOTE: PROBE: Did all workers work? Did all students go to school?] Yes/No – if no, why not? [O_TYPDY]
 - E4 [IF NOT PROXY INTERVIEW] Was most of your travel and activities for this day planned in advance or did you change your plans as the day progressed? [TYPPL] IF CHANGED PLANS, what happened that caused the change in plans? [O_TYPPL]

E5 [IF NOT PROXY INTERVIEW AND AGENCY=NFRMPO] Did you experience any delays in your travel on this day? (For example, construction, congestion, accident, railroad crossings, etc.) [TDELY] IF YES, what was the cause for the delay(s)?

E6. Now I'd like to talk about the travel and activities [this person] recorded in the diary we sent. Did [NAME] complete the travel diary? [CMPLG]

- 1 YES [COMPLETED]
- 2 NO [NOT COMPLETED] \rightarrow GO TO TOTPL
- 3 DID NOT RECEIVE MATERIALS → GO TO TOTPL
 - DON'T KNOW \rightarrow GO TO TOTPL
- 9 REFUSED- → GO TO TOTPL
- E7. [if CMPLG=yes] Do you have [the/this person's] completed diary with you now? [IF NEEDED: I can wait while you get it.]
 - 1 YES
 - 2 NO
 - 9 REFUSED

8

 \rightarrow SAY: Let's continue with the interview anyway. Please try to recall the information as best as you can.

BEGIN TRIP COLLECTION

- T1 How many total places did<YOU >visit over the course of the travel day? [TOTPL]
- T2 IF PLACE 1: Okay, where were you at 3 am on [ASSN]? [PTYPE] OTHERWISE: Where did you go next?
 - 1 Home
 - 2 Primary Job
 - 3 Second Job
 - 4 School
 - 5 Transit Stop
 - 6 Other Place (Specify)

ADDRESS INFORMATION CAPTURED IN TRIP TRACER

[INTERVIEWER NOTE: PLACE NAME SHOULD INCLUDE INFORMATION DESCRIBING THE PLACE IF IT IS UNCERTAIN. EXAMPLE: "Tattered Cover" SHOULD BE "Tattered Cover Bookstore". ASK "What type of place is this?" IF YOU DO NOT KNOW THE TYPE OF THE PLACE]

LOCATION NAME: What was that place? [PNAME] ADDR: What is the street address of that place? And the city? Is that in Colorado? Do you know the zip code?

- T3 [IF PLANO>1] Did you/NAME make any stops along your travel to [home/work/school/this place], such as a quick errand, to stop for fuel, pick up food, or to pick up drop off a friend or family member?
 - 1 Yes –collect unreported trip info.
 - 2 No CONTINUE COLLECTING CURRENT TRIP
- T4 What time did you arrive there? MILITARY TIME [ARRTM]
- **T5 TRIP DURATION CALCULATED**

T6. How did you get there? [MODE] [NOTE: MODE LIST WILL BE CHANGED FOR FULL STUDY]

- 1 Walk
- 2 Bike
- 3 Auto / van/ truck driver
- 4 Auto / van / truck passenger
- 5 Local Bus
- 6 Express Bus
- 7 Train
- 8 Light Rail
- 9 Dial-a-ride/paratransit
- 10 Taxi
- 11 School Bus
- 97 OTHER (specify)"

(DK/RF INVALID – MUST HAVE MODE FOR ALL TRIPS (REGARDLESS OF MODE) [TOTTR]

- T8 How many others traveled with<YOU2 >? NOT INCLUDING THIS RESPONDENT [PARTY]
- T9 [IF T8 >0] Of these, how many were household members? [HHMEM]
- T10 [IF T9>0] Who were the household members (enter PERNO) [PERTP]

COMPUTE NON-HH MEMBERS [NONHH] COMPUTE [TOTTR] = PARTY + 1 IF MODE=3 OR 4: A1 Which vehicle did<YOU >use? [VEHNO] ENTER HH VEH NUMBER OR 97 FOR NON-HH VEHICLE

- A2 Did you get out of your vehicle at this place ? [SKIP IF PTYPE=1] [DYGOV] 1 YES
 - 2 NO [would be appropriate for dropping off passengers, drive through, etc.]

[PROGRAMMER NOTE: Ask the parking-related questions for auto driver only]

A4 [IF DYGOV=1 and MODE=3] Did you park at this destination or off-site? [PLOC]

- 1 AT THIS DESTINATION
- 2 OFF SITE
- 9 DK/RF

A6 [If PLOC=NO] What are the nearest cross streets to this location? [PXSTR] [INTERVIEWER COLLECT DUMMY WAYPOINT] [PXSTR]

- A3 [IF DYGOV=1] Which of the follow best describes the place you parked? [PRKTY]
 - 1 Parking Lot
 - 2 Parking Garage
 - 3 Street
 - 4 Driveway or Residential garage
 - 7 Or something else (SPECIFY)
 - 8 DON'T KNOW
 - 9 REFUSED

A7 [IF NOT HOME and DYGOV=1 and PRKTY <>4] Did you pay to park? [PAYPK]

- 1 YES
- 2 NO
- 9 DK/RF

A5 [IF PAYPK=1] How much did you pay to park? [PKAMT]

Amount per unit [PKUNT]

- 1 Per Hour
- 2 Per Day
- 3 Per Week
- 4 Per Month
- 5 Per Semester
- 6 Per Year
- 8 DON'T KNOW
- 9 REFUSED

IF TRANSIT: [IF MODE=5, 6, 7, 8 OR 9].

- R1 How many buses or trains did you use to make this trip? [TRANSIT] NOTE: IF TRANSIT>1, REMIND RESPONDENT THAT WE WILL CAPTURE EACH LEG OF THE TRANSIT TRIP AS A SEPARATE TRIP, BEGINNING WITH ACCESS TO TRANSIT AND ENDING WITH THE TRIP FROM TRANSIT TO THE DESTINATION.
- R2 IF NEEDED: For the first bus or rail you took, What was the route/line? (LIST) [ROUTE]
 - Did you pay with cash or did you use a pass? [FARE]
 - 1 CASH \rightarrow "How much did <YOU> pay?" \qquad [FAREC]
 - 2 USED PASS

R3

[PROGRAMMER NOTE: IMPORT TRANS, TPTYP, TPCST, AND TPUNT FROM RECRUITMENT. IF FARE=2 and TRANS=2 or 9, THEN ASK THE FOLLOWING:]

P10a [IF FARE=2 and TRANS=2 or 9] What type of pass is it? [BUSPS]

- 1 Day Pass
- 2 Ticketbook containing a set amount of rides
- 3 Monthly Unlimited Pass
- 4 An Annual Unlimited Pass
- 5 An Eco, Neighborhood or PassFort Pass
- 6 A College Pass
- 7 A FREX (Front Range Express Commuter Bus) Pass
- 97 Other, Specify
- 99 DK/RF

P10b [IF FARE=2 and TRANS=2 or 9] How much did you pay for it? COST [BPFAR] PER UNIT [FRBAS]

- 1 Per Day
- 2 Per Week
- 3 Per Month
- 4 Per Semester
- 5 Per Year
- 7 OTHER SPECIFY
- 8 DON'T KNOW
- 9 REFUSED
- X1 [PROGRAMMER NOTE: ASK FOR ALL NON-AUTO MODES IF NON-PROXY INTERVIEW AND FOR ALL NON-HOME DESTINATIONS] What would you have had to pay for parking if you had driven to this destination? [WOPYP]

Amount per unit [ESBAS] PARKING FARE UNITS

- 0 FREE
- 1 Per Hour
- 2 Per Day
- 3 Per Week
- 4 Per Month
- 5 Per Semester
- 6 Per Year
- 8 DON'T KNOW
- 9 REFUSED

ALL MODES:

- T12. What was<YOUR >your main activity there? [TPURP]
- T13 And what else did you do there? [TPUR2]

Lists for TPURP and TPUR2 AT MY HOME:

- 1 WORKING AT HOME (for pay)
- 2 SHOPPING (on-line, catalog, or by phone)
- 3 ON-LINE SCHOOL ACTIVITIES
- 4 ALL OTHER AT HOME ACTIVITIES

AT MY WORK/VOLUNTEER LOCATION:

- 5 WORK/JOB
- 6 ALL OTHER ACTIVITIES AT WORK

AT MY SCHOOL:

- 7 ATTENDING CLASS
- 8 ALL OTHER ACTIVITIES AT SCHOOL

WHILE TRAVELING

- 9 CHANGE TYPE OF TRANSPORTATION/TRANSFER
- 10 DROPPED OFF PASSENGER FROM CAR
- 11 PICKED UP PASSENGER FROM CAR
- 12 DRIVE THROUGH (ATM, BANK, FAST FOOD, ETC).
- 13 OTHER SPECIFY

AT OTHER PLACES

- 14 WORK/BUSINESS RELATED
- 15 SERVICE PRIVATE VEHICLE (GAS, OIL LUBE, ETC)
- 16 ROUTINE SHOPPING (GROCÈRIES, CLOTHING, CÓNVENIENCE STORE, HH MAINTENANCE)
- 17 SHOPPING FOR MAJOR PURCHASES OR SPECIALTY ITEMS (APPLIANCES, ELECTRONICS, NEW VEHICLE, MAJOR HH REPAIRS
- 18 HOUSEHOLD ERRANDS (BANK, DRY CLEANING, ETC.)
- 19 PERSONAL BUSINESS (VISIT GOVERNMENT OFFICE, ATTORNEY, ACCOUNTANT)
- 20 EAT MEAL OUTSIDE OF HOME (but not at a friend/relative home.)
- 21 HEALTH CARE (DOCTOR, DENTIST)
- 22 CIVIC/RELIGIOUS ACTIVITIES
- 23 OUTDOOR RECREATION/ENTERTAINMENT
- 24 INDOOR RECREATION/ENTERTAINMENT
- 25 VISIT FRIENDS/RELATIVES
- 96 LOOP TRIP (for interviewer only not listed in diary)
- 97 OTHER, SPECIFY

T14. IF LAST PLACE OF THE DAY, ENTER 0259. OTHERWISE: What time did <YOU> leave for the next place? ENTER IN MILITARY TIME [DEPTM]

IF REPORTED NO TRAVEL

T15. So,<YOU >made no trips, including for work or school? [NOGO] [INTERVIEWER NOTE: REFER PARTICIPANT TO FRONT OF DIARY IF NEEDED]

TRUE: Why not? (USE LIST)

- 1 PERSONALLY SICK
- 2 CARETAKING SICK KIDS
- 3 CARETAKING SICK OTHER
- 4 HOME-BOUND ELDERLY OR DISABLED
- 5 WORKED AT HOME FOR PAY
- 6 WORKED AROUND HOME (NOT FOR PAY)
- 7 OUT OF AREA
- 97 OTHER, SPECIFY

FALSE OBTAIN TRAVEL

AT END OF SURVEY, CHECK TO SEE IF ALL HH VEHICLES WERE USED, IF NOT: V1 Did anyone drive the [VEHICLE YEAR, MAKE, MODEL] on TRAVEL DAY? [CNTV]

- 1 YES
- 2 NO Why not? [O_CNTV]
- 9 REFUSED

CONCLUSION

Thank you for participating in the Front Range Travel Counts Survey. At this point, I wish to reiterate how important your participation was for the success of the study.

If contacted, would you be willing to participate in any future surveys? [FUTURE]

- 1 YES
- 2 NO

If you have any questions or comments, you can reach us at [888-222-7734]. Thank you and have a good day/night.



E1. You are [informant's name or initials]. [INDICATE IF TRIP INFORMATION IS BEING PROVIDED BY THE INFORMANT OR BY PROXY. [PROXY]

	Frequency	Percent
In Person	2152	58.4
Proxy	1534	41.6
Total	3686	100.0

E3 [IF NOT PROXY INTERVIEW] In general, would you say that ASSN was a typical day for you? [TYPDY] [INTERVIEWER NOTE: PROBE: Did all workers work? Did all students go to school?]

	Frequency	Valid Percent
Yes	1682	78.2
No	470	21.8
Total	2152	100.0

E4 [IF NOT PROXY INTERVIEW] Was most of your travel and activities for this day planned in advance or did you change your plans as the day progressed? [TYPPL]

	Frequency	Valid Percent
Planned	1191	55.3
Not Planned	179	8.3
Don't Know	782	36.3
Total	2152	100.0

E5[IF NOT PROXY INTERVIEW AND AGENCY=NFRMPO] Did you experience any delays in your travel on this day? (For example, construction, congestion, accident, railroad crossings, etc.)

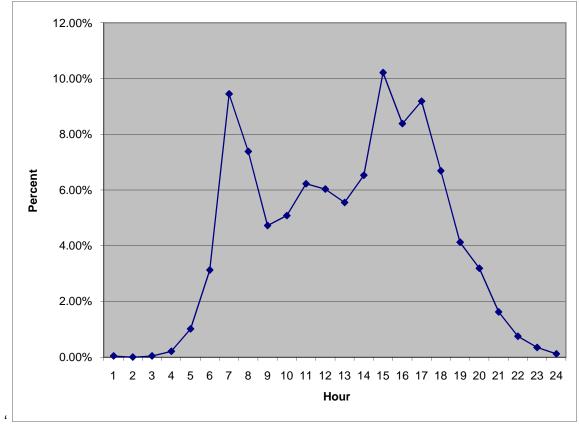
		Frequency	Valid Percent
Valid	Yes	321	14.9
	No	1740	80.9
	Refused	91	4.2
	Total	2152	100.0

E6. Now I'd like to talk about the travel and activities [this person] recorded in the diary we sent. Did [NAME] complete the travel diary? [CMPLG]

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	3082	83.6	83.6	83.6
No	604	16.4	16.4	100.0
Total	3686	100.0	100.0	

BEGIN TRIP COLLECTION

- T1 How many total places did<YOU >visit over the course of the travel day? [TOTPL] 18,317 places, 14,631 trips. Average daily household trip rate is 9.72 / Average daily person trip rate is 3.97.
- T2 IF PLACE 1: Okay, where were you at 3 am on [ASSN]? [PTYPE] OTHERWISE: Where did you go next? Home – 3608 of 3686 places (97.8%) Non-Home – 78 of 3686 places (2.2%)
- T4 What time did you arrive there? MILITARY TIME [ARRTM]



T5 TRIP DURATION CALCULATED

	Ν	Minimum	Maximum	Mean	Std. Deviation
trpdur	14631	1	660	16.09	19.362
Valid N (listwise)	14631				

T6. How did you get there? [MODE]

	Frequency	Valid Percent
Walk	932	6.4
Bike	421	2.9
Auto-D	9703	66.3
Auto-P	3229	22.1
Local Bus	58	.4
Express Bus	5	.0
Train	4	.0
Light Rail	7	.0
Taxi	1	.0
School Bus	264	1.8
Other	7	.0
Total	14631	100.0

How many others traveled with<YOU2 >? NOT INCLUDING THIS RESPONDENT [PARTY] [IF T8 >0] Of these, how many were household members? [HHMEM]

	Ν	Minimum	Maximum	Mean	Std. Deviation
tottr	14631	1	9	1.80	1.284
hhmem	14631	0	7	.57	.942
nonhh	14631	0	8	.23	.899
Valid N (listwise)	14631				

IF MODE=3 OR 4:

A1 Which vehicle did<YOU >use? [VEHNO]

	Frequency	Valid Percent
1	7494	57.9
2	3820	29.5
3	779	6.0
4	150	1.2
5	40	.3
7	8	.1
Non HH Vehicle	641	5.0
Total	12932	100.0

A2 Did you get out of your vehicle at this place ? [SKIP IF PTYPE=1] [DYGOV]

	Frequency	Valid Percent
Yes	7346	86.6
No	1138	13.4
Total	8484	100.0

[PROGRAMMER NOTE: Ask the parking-related questions for auto driver only] A4 [IF DYGOV=1 and MODE=3] Did you park at this destination or off-site? [PLOC]

	Frequency	Valid Percent
At Destination	5450	97.3
Off Site	9	.2
Refused	144	2.6
Total	5603	100.0

A3 [IF DYGOV=1] Which of the follow best describes the place you parked? [PRKTY]

	Frequency	Valid Percent
Parking Lot	4374	78.1
ParkingGarage	62	1.1
Street	633	11.3
Driveway/Garage	330	5.9
Other	125	2.2
Don't Know	54	1.0
Refused	25	.4
Total	5603	100.0

A7 [IF NOT HOME and DYGOV=1 and PRKTY <>4] Did you pay to park? [PAYPK]

	Frequency	Valid Percent
Yes	89	1.7
No	5082	96.4
Refused	102	1.9
Total	5273	100.0

IF TRANSIT: [IF MODE=5, 6, 7, 8 OR 9].

R3 Did you pay with cash or did you use a pass? [FARE]

CASH → "How much did <YOU> pay?" \$_____ [FAREC]
 USED PASS

	Frequency	Valid Percent
Cash	16	21.6
Pass	58	78.4
Total	74	100.0

ALL MODES:

T12. What was<YOUR >your main activity there? [TPURP]

	Frequency	Percent
Work at Home	224	1.2
Shop from Home	4	.0
On-Line School Activities	27	.1
All other Home Activities	8346	45.6
Work	1615	8.8
All other at work activities	61	.3
Attending Class	726	4.0
All other at school activities	86	.5
Change Mode	310	1.7
Drop off someone	651	3.6
Pick up someone	590	3.2
Drive through	127	.7
Other travel activity	38	.2
Work related	616	3.4
Service vehicle	201	1.1
Routing shopping	1217	6.6
Major shopping	106	.6
Household errands	438	2.4
Personal business	287	1.6
Eat meal (outside home)	642	3.5
Health care	263	1.4
Civic/religious	237	1.3
Outdoor recreation	280	1.5
Indoor recreation	551	3.0
Visit friends/relatives	469	2.6
Loop trip	22	.1
Other	183	1.0
Total	18317	100.0

If contacted, would you be willing to participate in any future surveys? [FUTURE]

	Frequency	Percent
Yes	894	59.4
No	611	40.6
Total	1505	100.0



APPENDIX G: ANALYSIS OF TRIP DESTINATIONS – 2009 SURVEY DATA

Table G-1 CITIES where trips ENDED (ENTIRE REGION)

Table G-1 CITIES where trips	ENDED (ENTIR	KE KEGIUN
<u>CITY</u>	<u>Number</u>	<u>%</u>
FORT COLLINS	6673	45.6%
GREELEY	2812	19.2%
LOVELAND	2486	17.0%
WINDSOR	433	3.0%
BERTHOUD	268	1.8%
JOHNSTOWN	255	1.7%
EVANS	253	1.7%
EATON	204	1.4%
DENVER	186	1.3%
LONGMONT	151	1.0%
WELLINGTON	141	1.0%
BOULDER	137	0.9%
MILLIKEN	116	0.8%
LAPORTE	48	0.3%
LA SALLE	45	0.3%
BROOMFIELD	21	0.1%
AULT	20	0.1%
ESTES PARK	18	0.1%
GILCREST	18	0.1%
PIERCE	15	0.1%
KELIM	13	0.1%
AURORA	12	0.1%
ELWELL	12	0.1%
ENGLEWOOD	12	0.1%
FORT LUPTON	12	0.1%
PLATTEVILLE	12	0.1%
ARVADA	11	0.1%
BELLVUE	11	0.1%
LARIMER	11	0.1%
COLORADO SPRINGS	10	0.1%
BRIGHTON	9	0.1%
FORT MORGAN	9	0.1%
HAMBERT	9	0.1%
TIMNATH	9	0.1%
WHEAT RIDGE	9	0.1%
CHEYENNE	8	0.1%
GILLETTE	8	0.1%
SEVERANCE	8	0.1%
WESTMINSTER	8	0.1%
NUNN	7	0.0%
VAIL	7	0.0%
EAGLE	5	0.0%
BASALT	4	0.0%

COMMERCE CITY	4	0.0%
ELM	4	0.0%
GARDEN CITY	4	0.0%
GOLDEN	4	0.0%
GOULD	4	0.0%
HARMONY	4	0.0%
KERSEY	4	0.0%
LOUISVILLE	4	0.0%
MEAD	4	0.0%
ALLENSPARK	3	0.0%
GLEASON	3	0.0%
LITTLETON	3	0.0%
LUCERNE	3	0.0%
ROSEDALE	3	0.0%
SALT LAKE CITY	3	0.0%
STERLING	3	0.0%
BLACK HAWK	2	0.0%
CHEYENNE WELLS	2	0.0%
CRAIG	2	0.0%
DILLON	2	0.0%
ERIE	2	0.0%
FARMERS	2	0.0%
FRISCO	2	0.0%
GEORGETOWN	2	0.0%
GLENWOOD SPRINGS	2	0.0%
HENDERSON	2	0.0%
IDAHO SPRINGS	2	0.0%
	2	
KERNS		0.0%
LOGAN	2	0.0%
SILVERTHORNE	2	0.0%
WALDEN	2	0.0%
ATLANTA	1	0.0%
ATWOOD	1	0.0%
BENNETT	1	0.0%
BIG ELK MEADOWS	1	0.0%
BIG SPRINGS	1	0.0%
BRECKENRIDGE	1	0.0%
BRIGGSDALE	1	0.0%
BRUSH	1	0.0%
BURBANK	1	0.0%
CARR	1	0.0%
CASPER	1	0.0%
CASTLE ROCK	1	0.0%
COWDREY	1	0.0%
DACONO	1	0.0%
DRAKE	1	0.0%
LA JUNTA	1	0.0%
LAFAYETTE	1	0.0%
LARAMIE	1	0.0%
LOG LANE VILLAGE	1	0.0%
LOS ANGELES	1	0.0%
LYONS	1	0.0%
ORCHARD	1	0.0%

RED FEATHER LAKES	1	0.0%
RINN	1	0.0%
THORNTON	1	0.0%
TRINIDAD	1	0.0%
WIGGINS	1	0.0%
WOODLAND PARK	1	0.0%
Total	14631	100.0%

Table G-2 CITIES where trips ENDED (FORT COLLINS RESIDENTS ONLY)

Table G-2 CITIES where trips		
City FORT COLLINS	Frequency 5673	Percent 02.2%
LOVELAND		92.2%
	175	2.8%
DENVER	59	1.0%
WINDSOR	35	0.6%
BOULDER	33	0.5%
GREELEY	32	0.5%
LAPORTE	24	0.4%
LONGMONT	15	0.2%
WELLINGTON	12	0.2%
ESTES PARK	9	0.1%
CHEYENNE	7	0.1%
BROOMFIELD	6	0.1%
LARIMER	5	0.1%
WESTMINSTER	5	0.1%
ARVADA	4	0.1%
BASALT	4	0.1%
BERTHOUD	4	0.1%
GOULD	4	0.1%
HARMONY	4	0.1%
ALLENSPARK	3	0.0%
BELLVUE	3	0.0%
ENGLEWOOD	3	0.0%
JOHNSTOWN	3	0.0%
MEAD	3	0.0%
SALT LAKE CITY	3	0.0%
BLACK HAWK	2	0.0%
GLENWOOD SPRINGS	2	0.0%
ATLANTA	1	0.0%
AULT	1	0.0%
AURORA	1	0.0%
BIG ELK MEADOWS	1	0.0%
BRIGGSDALE	1	0.0%
BRIGHTON	1	0.0%
BURBANK	1	0.0%
CASPER	1	0.0%
COMMERCE CITY	1	0.0%
CRAIG	1	0.0%
ERIE	1	0.0%
GILCREST	1	0.0%
GLEASON	1	0.0%
GOLDEN	1	0.0%
LA SALLE	1	0.0%
LARAMIE	1	0.0%
LOGAN	1	0.0%
LOUISVILLE	1	0.0%
ORCHARD	1	0.0%
STERLING	1	0.0%
TIMNATH	1	0.0%
TRINIDAD	1	0.0%
WHEAT RIDGE	1	0.0%
Total	6155	100.0%

Table G-3 CITIES where trips CITY	Frequency	Percent
GREELEY	2538	81.3%
EVANS	243	7.8%
FORT COLLINS	63	2.0%
DENVER	60	1.9%
LOVELAND	44	1.9%
WINDSOR	29	0.9%
EATON	15	0.5%
BOULDER	13	0.4%
FORT MORGAN	9	0.4%
GILLETTE	8	0.3%
JOHNSTOWN	8	0.3%
VAIL	8	0.3%
AULT	5	0.2%
BRIGHTON	5	
GILCREST	5	0.2%
	5	0.2%
WHEAT RIDGE		0.2%
AURORA	4	0.1%
FORT LUPTON	4	0.1%
LA SALLE	4	0.1%
MILLIKEN	4	0.1%
ARVADA	3	0.1%
EAGLE	3	0.1%
ELM	3	0.1%
LITTLETON	3	0.1%
LONGMONT	3	0.1%
PLATTEVILLE	3	0.1%
BERTHOUD	2	0.1%
BROOMFIELD	2	0.1%
CHEYENNE WELLS	2	0.1%
KERSEY	2	0.1%
NUNN	2	0.1%
ROSEDALE	2	0.1%
STERLING	2	0.1%
ATWOOD	1	0.0%
BENNETT	1	0.0%
BIG SPRINGS	1	0.0%
BRUSH	1	0.0%
CARR	1	0.0%
CHEYENNE	1	0.0%
DACONO	1	0.0%
ENGLEWOOD	1	0.0%
ESTES PARK	1	0.0%
GLEASON	1	0.0%
GOLDEN	1	0.0%
HENDERSON	1	0.0%
LOG LANE VILLAGE	1	0.0%
LOGAN	1	0.0%
RED FEATHER LAKES	1	0.0%
RINN	1	0.0%
THORNTON	1	0.0%
WELLINGTON	1	0.0%

Table G-3 CITIES where trips ENDED (GREELEY-EVANS RESIDENTS ONLY)

WIGGINS	1	0.0%
Total	3122	100.0%

Table G-4 CITIES where trips ENDED (LOVELAND RESIDENTS ONLY)

Frequency	Percent
1780	76.6%
275	11.8%
49	2.1%
43	1.8%
36	1.5%
32	1.4%
24	1.0%
15	0.6%
13	0.6%
13	0.6%
7	0.3%
5	0.2%
4	0.2%
2	0.1%
2	0.1%
2	0.1%
2	0.1%
2	0.1%
2	0.1%
2	0.1%
1	0.0%
1	0.0%
1	0.0%
1	0.0%
1	0.0%
1	0.0%
1	0.0%
1	0.0%
1	0.0%
1	0.0%
1	0.0%
1	0.0%
1	0.0%
1	0.0%
1	0.0%
2325	100.0%
	Frequency 1780 275 49 43 36 32 24 15 13 13 7 5 4 2 2 2 2 2 2 2 2 2 2 2 2 2

Table G-5 CITIES where trips ENDED (OTHER LARIMER COUNTY RESIDENTS ONLY)

City	Frequency	Percent
FORT COLLINS	544	35.6%
LOVELAND	404	26.4%
BERTHOUD	237	15.5%
WELLINGTON	126	8.2%
LONGMONT	50	3.3%
BOULDER	46	3.0%
LAPORTE	24	1.6%
GREELEY	19	1.2%
DENVER	15	1.0%
WINDSOR	11	0.7%
COLORADO SPRINGS	8	0.5%
BELLVUE	7	0.5%
TIMNATH	7	0.5%
ESTES PARK	5	0.3%
JOHNSTOWN	5	0.3%
LARIMER	4	0.2%
EATON	3	0.2%
AURORA	2	0.1%
WALDEN	2	0.1%
WESTMINSTER	2	0.1%
BRIGHTON	1	0.1%
BROOMFIELD	1	0.1%
CRAIG	1	0.1%
DRAKE	1	0.1%
GOLDEN	1	0.1%
LOUISVILLE	1	0.1%
LYONS	1	0.1%
MEAD	1	0.1%
MILLIKEN	1	0.1%
Total	1530	100.0%

Table G-6 CITIES where trips ENDED (OTHER WELD COUNTY RESIDENTS ONLY)

City	Frequency	Percent
WINDSOR	315	21.0%
JOHNSTOWN	224	14.9%
GREELEY	187	12.5%
EATON	187	12.3%
FORT COLLINS	118	8.0%
MILLIKEN	109	7.3%
LOVELAND	83	5.5%
LO VELAND LA SALLE	40	2.7%
LA SALLE	40 34	2.7%
DENVER	28	1.9%
BOULDER	15	1.0%
PIERCE	15	1.0%
AULT	13	0.9%
BERTHOUD	14	0.8%
ELWELL	12	0.8%
GILCREST	12	0.8%
EVANS	12	0.8%
HAMBERT	9	0.6%
FORT LUPTON	8	0.5%
SEVERANCE	8	0.5%
PLATTEVILLE	7	0.5%
ENGLEWOOD	6	0.5%
BROOMFIELD	5	0.4%
NUNN	5	0.3%
GARDEN CITY	4	0.3%
LUCERNE	3	0.2%
COLORADO SPRINGS	2	0.1%
COMMERCE CITY	2	0.1%
DILLON	2	0.1%
EAGLE	2	0.1%
FARMERS	2	0.1%
IDAHO SPRINGS	2	0.1%
KERNS	2	0.1%
BELLVUE	- 1	0.1%
BRECKENRIDGE	1	0.1%
BRIGHTON	1	0.1%
CASTLE ROCK	1	0.1%
COWDREY	1	0.1%
ELM	1	0.1%
ESTES PARK	1	0.1%
FRISCO	1	0.1%
HENDERSON	1	0.1%
KERSEY	1	0.1%
LA JUNTA	1	0.1%
LOUISVILLE	1	0.1%
ROSEDALE	1	0.1%
SILVERTHORNE	1	0.1%
WELLINGTON	1	0.1%
WHEAT RIDGE	1	0.1%
Total	1499	100.0%

Table G-7 CITIES where trips to WORK ENDED (ENTIRE REGION)

Table 6 7 CITIES where trips		
City	Frequency	
FORT COLLINS	739	46.3%
GREELEY	292	18.2%
LOVELAND	206	12.9%
WINDSOR	51	3.2%
LONGMONT	50	3.1%
BOULDER	49	3.1%
DENVER	34	2.1%
EVANS	28	1.8%
BERTHOUD	15	0.9%
EATON	15	0.9%
MILLIKEN	15	0.9%
JOHNSTOWN	11	0.7%
BROOMFIELD	10	0.6%
WELLINGTON	10	0.6%
GILCREST	7	0.4%
AURORA	6	0.4%
CHEYENNE	6	0.4%
FORT LUPTON	6	0.4%
LA SALLE	5	0.3%
ENGLEWOOD	4	0.3%
ESTES PARK	4	0.3%
ARVADA	3	0.2%
BRIGHTON	3	0.2%
LOUISVILLE	3	0.2%
LUCERNE	3	0.2%
PLATTEVILLE	3	0.2%
AULT	2	0.1%
GOLDEN	2	0.1%
LAPORTE	2	0.1%
WESTMINSTER	2	0.1%
COLORADO SPRINGS	1	0.1%
COMMERCE CITY	1	0.1%
HENDERSON	1	0.1%
LARAMIE	1	0.1%
LARIMER	1	0.1%
LOGAN	1	0.1%
MEAD	1	0.1%
RINN	1	0.1%
SEVERANCE	1	0.1%
STERLING	1	0.1%
TIMNATH	1	0.1%
Total	1597	100.0%

Table G-8 CITIES where trips to WORK ENDED (FORT COLLINS RESIDENTS ONLY)

City	Frequency	Percent
FORT COLLINS	564	83.4%
LOVELAND	51	7.5%
WINDSOR	13	1.9%
BOULDER	7	1.0%
GREELEY	7	1.0%
CHEYENNE	6	0.9%
DENVER	5	0.7%
LONGMONT	5	0.7%
WELLINGTON	3	0.4%
BROOMFIELD	2	0.3%
LAPORTE	2	0.3%
AURORA	1	0.1%
BRIGHTON	1	0.1%
ENGLEWOOD	1	0.1%
ESTES PARK	1	0.1%
GILCREST	1	0.1%
JOHNSTOWN	1	0.1%
LARAMIE	1	0.1%
LARIMER	1	0.1%
LOGAN	1	0.1%
LOUISVILLE	1	0.1%
TIMNATH	1	0.1%
Total	676	100.0%

City	Frequency	
GREELEY	234	66.4%
EVANS	25	7.1%
FORT COLLINS	22	6.3%
DENVER	15	4.3%
LOVELAND	13	3.7%
WINDSOR	11	3.1%
BOULDER	6	1.7%
EATON	4	1.1%
GILCREST	3	0.9%
LONGMONT	3	0.9%
FORT LUPTON	2	0.6%
MILLIKEN	2	0.6%
ARVADA	1	0.3%
AURORA	1	0.3%
BERTHOUD	1	0.3%
BRIGHTON	1	0.3%
GOLDEN	1	0.3%
JOHNSTOWN	1	0.3%
LA SALLE	1	0.3%
PLATTEVILLE	1	0.3%
RINN	1	0.3%
STERLING	1	0.3%
WELLINGTON	1	0.3%
Total	351	100.0%

Table G-9 CITIES where trips to WORK ENDED (GREELEY-EVANS RESIDENTS ONLY)

Table G-10 CITIES where trips to WORK ENDED (LOVELAND RESIDENTS ONLY)

City	Frequency	Percent
LOVELAND	100	45.9%
FORT COLLINS	49	22.5%
LONGMONT	21	9.6%
GREELEY	12	5.5%
BOULDER	11	5.0%
BERTHOUD	5	2.3%
DENVER	5	2.3%
BROOMFIELD	4	1.8%
AURORA	3	1.4%
ARVADA	2	0.9%
MILLIKEN	2	0.9%
PLATTEVILLE	2	0.9%
ENGLEWOOD	1	0.5%
WINDSOR	1	0.5%
Total	218	100.0%

Table G-11 CITIES where trips to WORK ENDED (OTHER LARIMER COUNTY RESIDENTS ONLY)

City	Frequency	Percent
FORT COLLINS	66	39.1%
LOVELAND	30	17.8%
LONGMONT	18	10.7%
BOULDER	16	9.5%
BERTHOUD	9	5.3%
GREELEY	6	3.6%
WELLINGTON	5	3.0%
DENVER	3	1.8%
ESTES PARK	3	1.8%
WINDSOR	3	1.8%
WESTMINSTER	2	1.2%
AURORA	1	0.6%
BRIGHTON	1	0.6%
BROOMFIELD	1	0.6%
GOLDEN	1	0.6%
JOHNSTOWN	1	0.6%
LOUISVILLE	1	0.6%
MEAD	1	0.6%
MILLIKEN	1	0.6%
Total	169	100.0%

Table G-12 CITIES where trips to WORK ENDED (OTHER WELD COUNTY RESIDENTS ONLY)

City	Frequency	Percent	
FORT COLLINS	38		20.8%

GREELEY	33	18.0%
WINDSOR	23	12.6%
LOVELAND	12	6.6%
EATON	11	6.0%
MILLIKEN	10	5.5%
BOULDER	9	4.9%
JOHNSTOWN	8	4.4%
DENVER	6	3.3%
LA SALLE	4	2.2%
FORT LUPTON	4	2.2%
LUCERNE	3	1.6%
LONGMONT	3	1.6%
GILCREST	3	1.6%
EVANS	3	1.6%
BROOMFIELD	3	1.6%
ENGLEWOOD	2	1.1%
AULT	2	1.1%
WELLINGTON	1	0.5%
SEVERANCE	1	0.5%
LOUISVILLE	1	0.5%
HENDERSON	1	0.5%
COMMERCE CITY	1	0.5%
COLORADO SPRINGS	1	0.5%
Total	183	100.0%

Table G-13 CITIES where trips to SHOP ENDED (ENTIRE REGION)

Table G-13 CITIES where trips to SHOP	ENDED (EN	TIRE REC
City	Frequency	Percent
FORT COLLINS	964	46.1%
GREELEY	419	20.0%
LOVELAND	392	18.7%
WINDSOR	53	2.5%
LONGMONT	41	2.0%
BOULDER	31	1.5%
WELLINGTON	31	1.5%
DENVER	27	1.3%
EVANS	27	1.3%
JOHNSTOWN	17	0.8%
EATON	14	0.7%
LA SALLE	9	0.4%
LAPORTE	9	0.4%
BERTHOUD	5	0.2%
ENGLEWOOD	5	0.2%
WHEAT RIDGE	5	0.2%
AULT	3	0.1%
MILLIKEN	3	0.1%
WESTMINSTER	3	0.1%
LARIMER	3	0.1%
AURORA	2	0.1%
BROOMFIELD	2	0.1%
ELM	2	0.1%
FORT LUPTON	2	0.1%
GLENWOOD SPRINGS	2	0.1%
IDAHO SPRINGS	2	0.1%
KELIM	2	0.1%
MEAD	2	0.1%
PLATTEVILLE	2	0.1%
VAIL	2	0.1%
ARVADA	1	0.0%
BENNETT	1	0.0%
BRECKENRIDGE	1	0.0%
CHEYENNE	1	0.0%
EAGLE	1	0.0%
FORT MORGAN	1	0.0%
GOLDEN	1	0.0%
LITTLETON	1	0.0%
KERSEY	1	0.0%
ROSEDALE	1	0.0%
STERLING	1	0.0%
Total	2092	100.0%

Table G-14 CITIES where trips to SHOP ENDED (FORT COLLINS RESIDENTS ONLY)

	-	
City	Frequency	Percent
FORT COLLINS	774	89.2%
LOVELAND	37	4.3%
BOULDER	10	1.2%
DENVER	7	0.8%
GREELEY	7	0.8%
LONGMONT	7	0.8%
LAPORTE	6	0.7%
WINDSOR	4	0.5%
WESTMINSTER	3	0.3%
ENGLEWOOD	2	0.2%
GLENWOOD		
SPRINGS	2	0.2%
LARIMER	2	0.2%
MEAD	2	0.2%
ARVADA	1	0.1%
BROOMFIELD	1	0.1%
CHEYENNE	1	0.1%
GOLDEN	1	0.1%
WELLINGTON	1	0.1%
Total	868	100.0%

Table G-15 CITIES where trips to SHOP ENDED (GREELEY-EVANS RESIDENTS ONLY)

City	Frequency	Percent
GREELEY	358	81.7%
EVANS	25	5.7%
FORT COLLINS	15	3.4%
LOVELAND	9	2.1%
DENVER	7	1.6%
WHEAT RIDGE	4	0.9%
LA SALLE	3	0.7%
AULT	2	0.5%
ELM	2	0.5%
VAIL	2	0.5%
WINDSOR	2	0.5%
AURORA	1	0.2%
BENNETT	1	0.2%
EAGLE	1	0.2%
FORT MORGAN	1	0.2%
LITTLETON	1	0.2%
KERSEY	1	0.2%
PLATTEVILLE	1	0.2%
ROSEDALE	1	0.2%
STERLING	1	0.2%
Total	438	100.0%

Table G-16 CITIES where trips to SHOP ENDED (LOVELAND RESIDENTS ONLY)

City	Frequency	Percent
LOVELAND	255	73.7%
FORT COLLINS	50	14.5%
WINDSOR	9	2.6%
DENVER	7	2.0%
GREELEY	6	1.7%
LONGMONT	6	1.7%
BOULDER	5	1.4%
JOHNSTOWN	4	1.2%
KELIM	2	0.6%
BROOMFIELD	1	0.3%
WHEAT RIDGE	1	0.3%
Total	346	100.0%

Table G-17 CITIES where trips to SHOP ENDED (OTHER LARIMER COUNTY RESIDENTS ONLY)

City	Frequency	Percent
FORT COLLINS	106	42.6%
LOVELAND	68	27.3%
WELLINGTON	30	12.0%
LONGMONT	13	5.2%
BOULDER	12	4.8%
DENVER	4	1.6%
JOHNSTOWN	4	1.6%
BERTHOUD	3	1.2%
LAPORTE	3	1.2%
GREELEY	2	0.8%
WINDSOR	2	0.8%
AURORA	1	0.4%
LARIMER	1	0.4%
Total	249	100.0%

Table G-18 CITIES where trips to SHOP ENDED (OTHER WELD COUNTY RESIDENTS ONLY)

City	Frequency	Percent
GREELEY	46	24.1%
WINDSOR	36	18.8%
LOVELAND	23	12.0%
FORT COLLINS	19	9.9%
LONGMONT	15	7.9%
EATON	14	7.3%
JOHNSTOWN	9	4.7%
LA SALLE	6	3.1%
BOULDER	4	2.1%
ENGLEWOOD	3	1.6%
MILLIKEN	3	1.6%
BERTHOUD	2	1.0%
DENVER	2	1.0%
EVANS	2	1.0%
FORT LUPTON	2	1.0%
IDAHO SPRINGS	2	1.0%
AULT	1	0.5%
BRECKENRIDGE	1	0.5%
PLATTEVILLE	1	0.5%
Total	191	100.0%

Table G-19 CITIES where trips to MEDICAL/DENTAL ended (ENTIRE REGION)

-	L	
City	Frequency	Percent
FORT COLLINS	132	50.8%
LOVELAND	52	20.0%
GREELEY	49	18.8%
DENVER	11	4.2%
LONGMONT	4	1.5%
WINDSOR	4	1.5%
CHEYENNE WELLS	2	0.8%
WELLINGTON	2	0.8%
BERTHOUD	1	0.4%
EVANS	1	0.4%
TIMNATH	1	0.4%
WHEAT RIDGE	1	0.4%
Total	260	100.0%

Table G-20 CITIES where trips to MEDICAL/DENTAL ended (FORT COLLINS RESIDENTS ONLY)

City	Frequency	Percent
FORT COLLINS	100	87.0%
LOVELAND	8	7.0%
DENVER	4	3.5%
GREELEY	1	0.9%
WHEAT RIDGE	1	0.9%
WINDSOR	1	0.9%
Total	115	100.0%

Table G-21 CITIES where trips to MEDICAL/DENTAL ended (GREELEY-EVANS RESIDENTS ONLY)

City	Frequency	Percent
GREELEY	36	80.0%
FORT COLLINS	3	6.7%
CHEYENNE WELLS	2	4.4%
WINDSOR	2	4.4%
EVANS	1	2.2%
LOVELAND	1	2.2%
Total	45	100.0%

Table G-22 CITIES where trips to MEDICAL/DENTAL ended (LOVELAND RESIDENTS ONLY)

City	Frequency	Percent
LOVELAND	35	77.8%
FORT COLLINS	9	20.0%
TIMNATH	1	2.2%
Total	45	100.0%

Table G-23 CITIES where trips to MEDICAL/DENTAL ended (OTHER LARIMER COUNTY RESIDENTS ONLY)

City	Frequency	Percent
FORT COLLINS	15	51.7%
LOVELAND	6	20.7%
LONGMONT	3	10.3%
DENVER	2	6.9%
WELLINGTON	2	6.9%
BERTHOUD	1	3.4%
Total	29	100.0%

Table G-24 CITIES where trips to MEDICAL/DENTAL ended (OTHER WELD COUNTY RESIDENTS ONLY)

City	Frequency	Percent
GREELEY	12	46.2%
DENVER	5	19.2%
FORT COLLINS	5	19.2%
LOVELAND	2	7.7%
LONGMONT	1	3.8%
WINDSOR	1	3.8%
Total	26	100.0%