2017 Billings-Yellowstone County Household Travel Survey

Final Report

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Prepared for:
Billings-Yellowstone County MPO
2825, 3rd Avenue North
4th Floor
Billings, MT 59102

Prepared by:
Westat
An Employee-Owned Research Corporation®
1600 Research Boulevard
Rockville, Maryland 20850-3129
(301) 251-1500

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Executive Summary 1

The 2017 Billings / Yellowstone County Household Travel Survey (HTS) was sponsored by the Billings Yellowstone County Metropolitan Planning Organization (B-YCMPO) with support from the Montana Department of Transportation (MDT). The survey was undertaken with the purpose of understanding the demographics and travel behavior of residents of Billings and Yellowstone County. Westat, Inc. were hired to collect and analyze the data.

The design and implementation of the survey occurred in early 2017 with data collection during the spring of 2017. City of Billings staff established a target of 1,100 households after discussions with Westat. Travel dates were scheduled beginning on May 2, 2017 and running through June 8, 2017. It was agreed that a compressed window for data collection would be required to avoid travel dates falling into summer break, and to avoid a two-stage data collection. Households were assigned travel on Tuesday through Thursday so that unusual travel on Monday and Friday could be avoided. Billings planners are developing a model for typical travel, and the choice to exclude Monday and Friday supports this data use. Households were asked to report all travel by all household members over the age of 4 during a single 24-hour period.

State-of-the-art methodologies were applied with emphasis on the use of web-based tools for reporting travel and household data. Westat's smartphone app was offered to all households as a means to collect GPS-based travel data and confirm their travel details. Westat invited a total of 20,000 households to participate, of which 1,721 agreed to take part. From that total, 1,066 completed travel reporting for all household members and were cleared through all logic and consistency checks before being delivered for use in model development.

The dataset provides a rich resource for understanding the travel behavior of residents in the region. Selected characteristics which describe the data are provided as follows:

- A typical surveyed household in the region makes 7.9 trips a day and a typical person makes 3.86 trips per day.
    - After applying weights, the average number of household trips rises to 8.6 per day and the average person trip rate falls to 3.75
- The majority of trips made (89.7 percent) in the region are as the driver or passenger of an automobile, van or truck
- Non-motorized trips (by bike or walking) account for 6.9 percent of the total
- Trips made using a private vehicle take 15.6 minutes and covered 5.7 miles on average compared to transit trips which take 23.4 minutes and covered 2.8 miles.
- Work trips take an average of 16 minutes in the region
- The average distance traveled was 5.3 miles
- Work trips account for 13.7 percent of all trips made in the region
- Trips not categorized as work, school, shopping, or recreational account for 22.5 percent of all trips made (these include escorting minors, and non-mandatory errands and maintenance activities).

2 Survey Methods

Survey Design

Survey Modes and Participant Support

This HTS project was designed as a two-stage survey to collect complete travel for all members of a household during a single, 24-hour period. Invitations were delivered in the form of a letter explaining the survey's importance and providing participants with instructions on how to complete the first stage of the survey. The letters were signed by the The Mayor of the City of Billings as well as the Chair of the Yellowstone County Comission. Households were provided a personal identification number (PIN) and encouraged to enter it via the public website developed for the project in order to complete the first stage of the survey. Two postcards were sent as reminders, each of which also contained the PIN. A toll-free telephone number was also provided for participants and monitored by trained helpdesk staff during normal business hours. A participation incentive of $15 was offered in the initial and reminder invitations. All households were also offered the chance to win a $500 gift card.

During the first stage of the survey, travel dates were randomly assigned to a Tuesday, Wednesday, or Thursday falling during non-holiday periods between May 2 and June 8. The distribution of travel dates by day of week is shown in Table 1.

Table 1. Distribution of travel dates

Travel Day	Weighted	Surveyed
Tuesday	33.83%	33.96%
Wednesday	33.41%	34.33%
Thursday	32.76%	31.71%

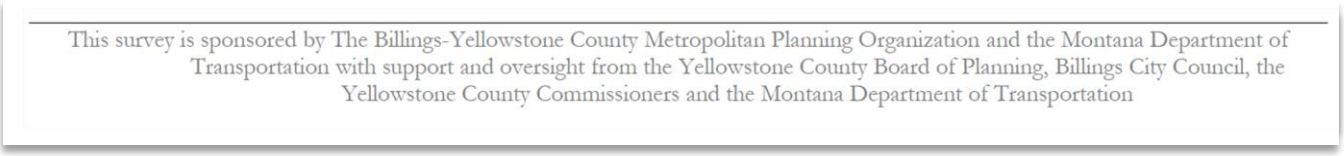
Households were provided with text, email, and interactive voice response (IVR) confirmation messages throughout the various stages of the study, including instructions on how to download the Daily Travel smartphone app or paper logs. After the travel date, further reminders via text, email, and IVR were sent encouraging online travel reporting and providing the hotline number for support as needed.

Public Outreach

Careful consideration was given to the branding of the survey. It was important that the mailed materials provided recipients with knowledge of agencies involved in the process. As such, rather than developing a project specific logo, the B-YCMPO and MDT logos were used together (Figures 1) and all printed correspondence included a footer listing the names of the counties and cities in the region (Figure 2).

Figure 1. Study Name Paired with Agency Logos

Figure 2. Letterhead footer



The public website utilized a responsive design to optimize for display on mobile devices including tablets and smartphones as well as desktops and laptops/personal computers. The site utilized a custom color scheme and provided transportation related, public use images from the region to aide in providing proper context for site visitors. A description of the survey and frequently asked questions were accessible and a contact page allowed for sending an email to the project team. Project staff at the City of Billings drafted and distributed a press release.

Sample Design

The sample design was conceived with the goal of collecting a data set representative of the region with coverage of the regional population and travel patterns. The region was defined as Yellowstone County which contains the City of Billings. A single-stage stratified sample of addresses was utilized and selected from an address-based sampling (ABS) frame maintained by Marketing Systems Group (MSG).

Stratification

Typically, household travel surveys utilize an approach to stratification with two groups: one group containing addresses in Census tracts with a high density of "hard-to-reach households" (e.g., large households, low income, or vehicle insufficient households) and the other group comprising the remaining Census tracts. However, exploration of data from the most recent 5 year average American Community Survey (ACS) revealed insufficient differences in density between tracts needed for effective oversampling. Thus the single-stage stratified sample.

Sample Size and Selection

Table 2 shows the number of households sampled and released within the county and the sampling goal. The sampling goal represents the target number of complete. The goal was assigned to allow for adequate representation of responding households.

Table 2. Sample Distributions

Category	Count
Total Households*	61,442
Sampled	30,000
Released	20,000
% Released	66.70%
Goal	1,100

*Count of households within the county per 2009-2013 ACS 5-year estimates.

Figures 3 and 4 show the location of the final delivered home locations in the survey with summary statistics on sampled and recruited records. The map shows the concentration of sampled addresses in and near to the City of Billings, MT.

Figure 3. Study Area with Home Locations for Final Delivered Households[1]

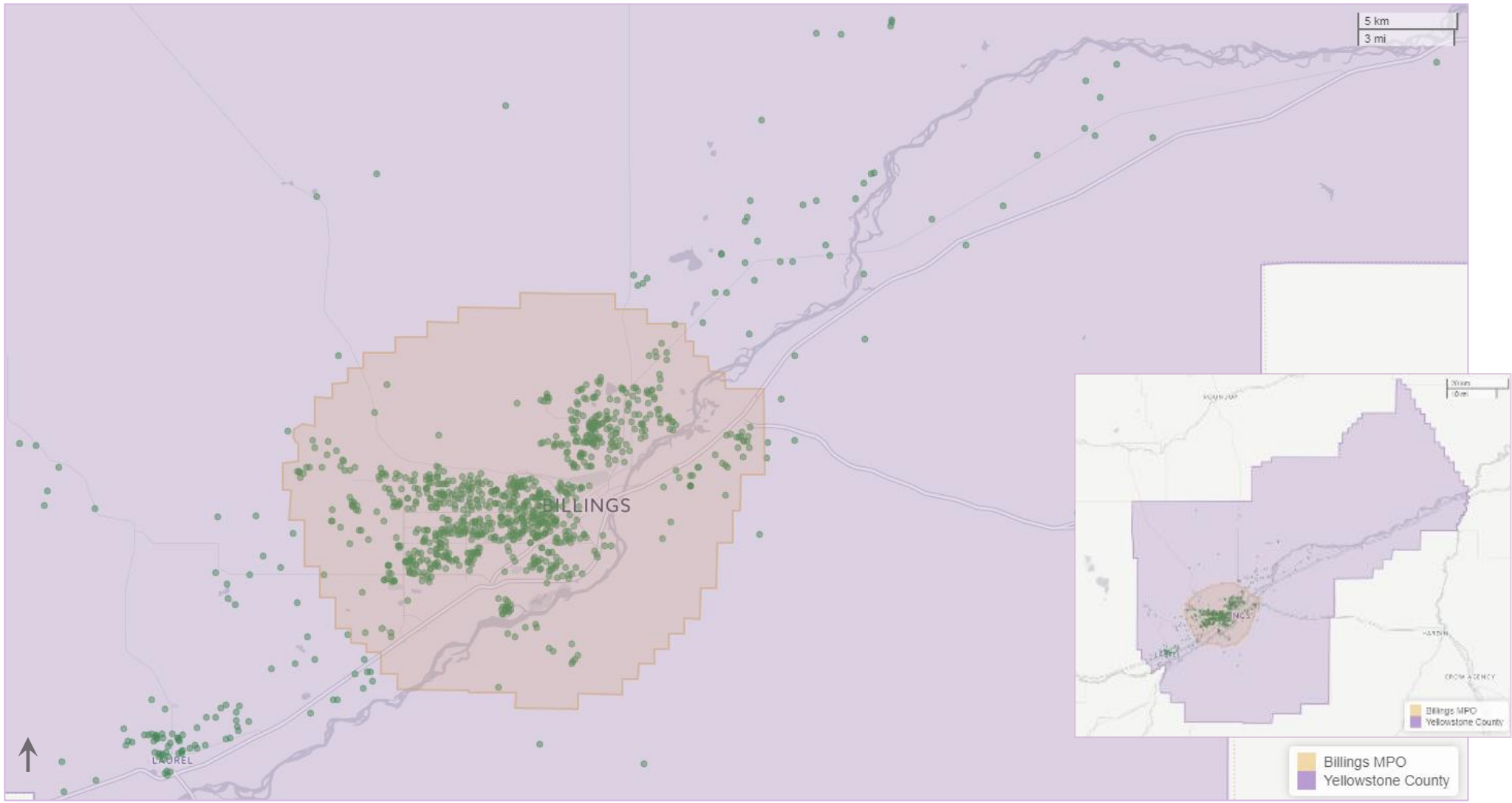
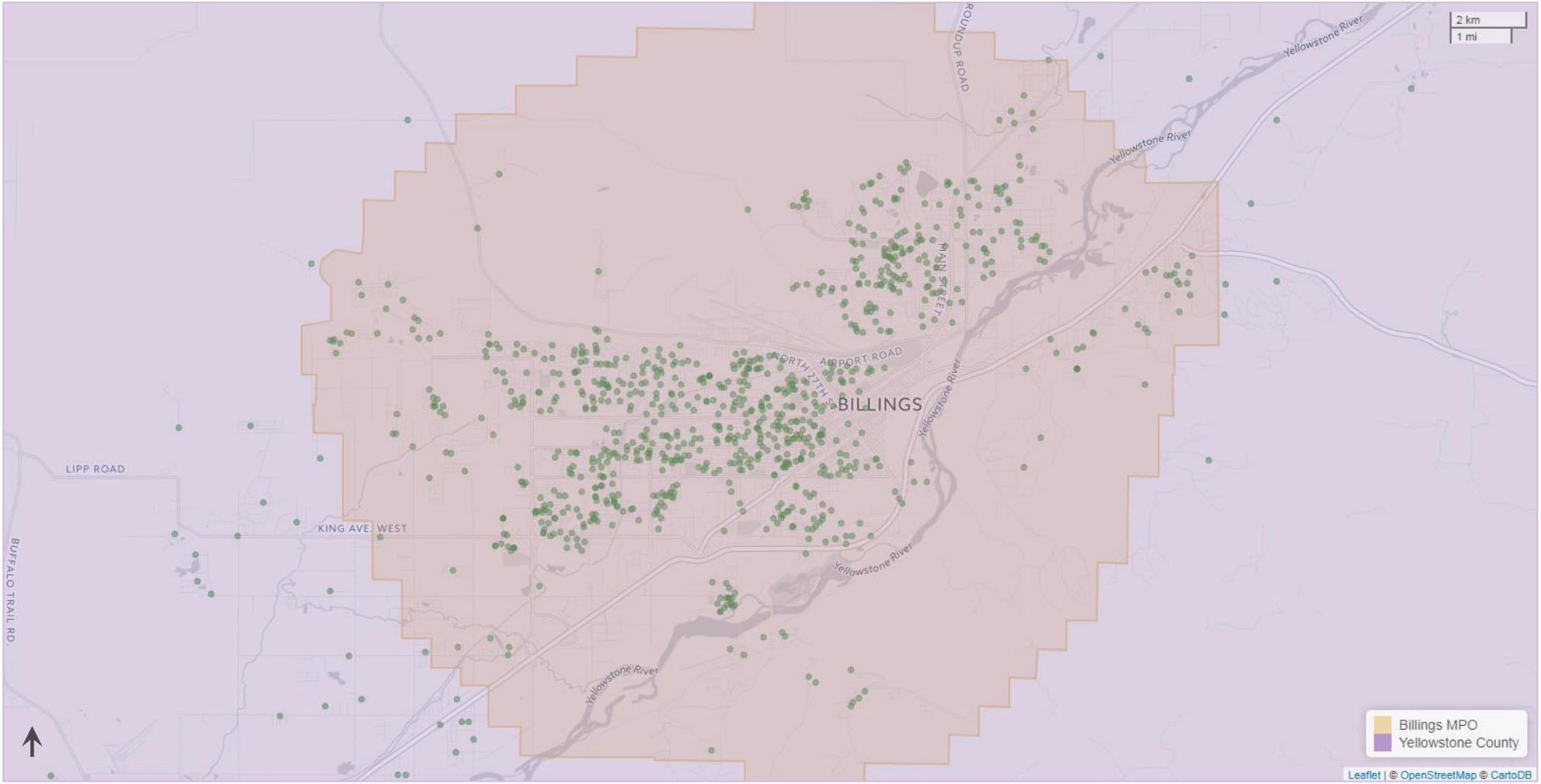


Figure 4. Study Area with Home Locations for Final Delivered Households



[1] Complete_Households_map.html

Data Collection

Process Summary

Data collection began in May of 2017 and concluded in June 2017. The data collection process was executed in four general stages including:

1. Mail-out of invitations to join
2. Recruitment
3. Travel data reporting
4. Post-processing and review

Details for each step and notable aspects are shown in Table 3. Additional analysis and statistics are provided in ensuing sub-sections regarding item non-response and the data processing step.

Table 3. Data Collection Process Description

Stage	Description	Noteworthy
Invitation to Join	• Mailing of Advance Letters and two postcards on 1 week intervals • Mailed to non-named residents for all sampled and released addresses • Provided information on survey effort, sponsors, and description of Westat • Provided a PIN with directions to website and helpdesk hotline	• Mailed 20,000 invitations on April 20, 2017 • Mailed 1st reminder postcard
Recruitment	• Recruitment began on April 24th and continued through June 6th • Recruitment was conducted mostly via web-based surveys (1,712 and 87.3%) • Collected data for each household and household member as noted in Table 2 • 20 percent of households with all members older than 65; a HH size of two or less, and 1 or more HH vehicles were disqualified • Assigned a travel date based on preassigned weekday (Tuesday-Thursday only) • Collected additional contact information for automated reminders including email address, text message phone number, and preference on receipt of IVR calls • Households were invited to use the Daily App Smartphone Application to record and confirm their travel	• 1,721 households completed recruitment • All Households were instructed to download the Daily Travel App or to download travel logs to record their travel.

Table 4. Data Collection Process Description (Conitnued)

Stage	Description	Noteworthy
Travel Data Reporting	• On the day before the assigned travel date, text message, email, and IVR reminders were sent • Travel dates were assigned beginning on May 2nd and running through June 8th • Retrieval efforts began on May 3rd and continued through June 16th	• 1,067 Households completed the retrieval stage • The retrieval rate of 61.9% (1,067 retrieved / 1,721 recruited) was lower than expected (75% budgeted)
Processing	• All households which completed travel reporting were subjected to 45 separate logic checks (Table 8). • Failed checks were reviewed by an analyst • Unresolved issues were forwarded to research for follow-up	• 408 households were reviewed (38 percent) • 197 reviewed households were flagged for research (18 percent) • 1,066 total households were cleared for delivery

Data Elements

The list of items collected in the recruitment and retrieval stage are shown in Table 5. They represent the end-result of collaboration between staff from B-YMPO, MDT, and Westat. The collaborative generation of data elements ensured that the final list of data elements would meet the needs of the model as well as any additional analysis plans for which the data will be used.

Table 5. Data Elements Collected

Household Variables	Person Variables	Trip/Place/Location Variables
Size	Age	Location name
Lifecycle	Gender	Address of location
Income	Race	Activity duration (calculated)
# of children	Hispanic origin	Trip duration
# of people with a disability	Person disability	Arrival time
# of driver's license holders	Type(s) of disability	Departure time
# of students	Educational attainment	Travel distance in miles
# of trips	License	Trip purpose
# of vehicles	Relationship to person 1	Secondary trip purpose
# of workers	Reason for no trips	Longitude/latitude
Home ownership status	Person reporting travel (Proxy)	Travel mode
Residence type	Total count of person trips	Party size
Travel day of week	Employment status	List of household members on trip
Assigned travel day	Employed	# of Household members on trip
	Employer industry	# Of non-household members on trip
	Number of jobs	Reason given for longer than usual trip
	Hours worked per week	
	Compressed work week	
	Ability to change work schedule	
	Telecommuting offered	
	Telecommuting days per week	
	Mode of transport to work	
	Carpool to work	
	Work place location	
	Work days	
	Volunteer status	
	Volunteer frequency	
	Student status	
	Current level of school	
	Online-only school	
	Home schooled	
	Mode of transport to school	

Daily Travel Smartphone Application

At the end of the recruitment survey, households were given the option to record travel using Westat's smartphone application for household travel survey data collection. Use of the smartphone app to record travel day information was offered to all households. All households members 13 years or older were eligible to use the smartphone app.

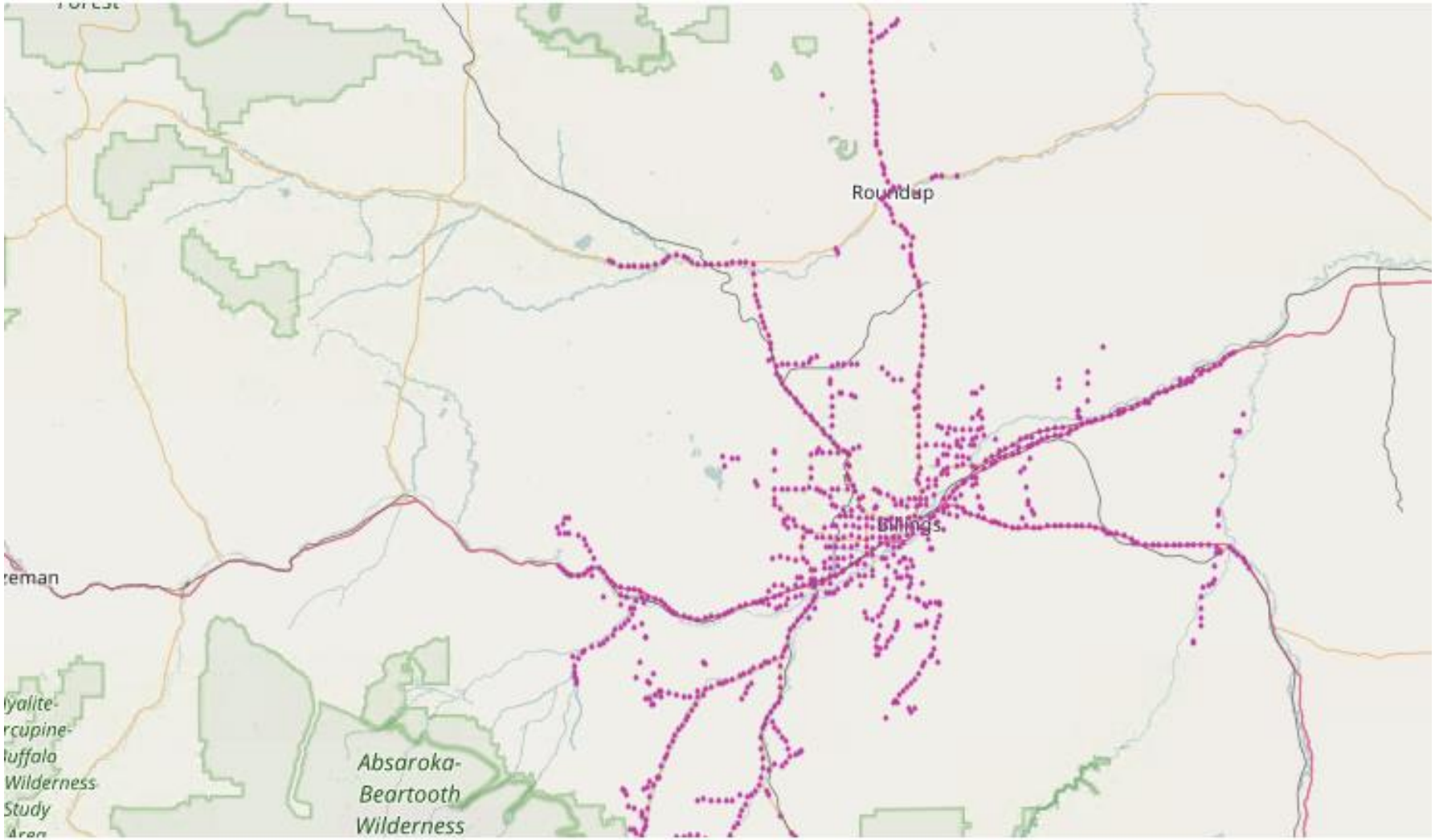
Households that opted to use the smartphone application were provided a link to the DailyTravel app website with links to the Apple App Store and the Android Google Play store. They were given instructions to install the app and log in using the household PIN, provided in the invitation letter and all reminders. Once logged in, each household member selected themselves on their respective smartphone thereby linking device and data collected on it to the appropriate household member. Households reminders provided opportunities for participants to opt into using the smartphone app for data collection regardless of how they responded to the smartphone usage question the first stage survey.

Household members using the smartphone app were asked to use the app to collect GPS locations and confirm place details on the assigned travel date and to continue collecting data for another 6 days, for a total of 7 days of GPS-based travel data. Once the app was installed and authenticated using the PIN, the GPS data was collected regardless of if the user interacted with the application. However, many participants continued to confirm places and place details throughout the full 7 days.

Smartphone Usage

In total, 932 participants downloaded and initialized the app, of these 546 collected travel data for seven days and 352 confirmed all details on all captured places for the week. The majority of the smartphone participants used iPhones (57%) and iPhone users showed higher retrieval rates when compared with Android users. The apps collected and uploaded 6 million GPS points and 87,511 places. The map in **Error! Reference source not found.** shows an aggregation of the c aptured GPS points on the Billings region.

Figure 5. Representation of Captured GPS points from the Daily Travel Apps



Item Non-response

The level of non-response for this survey was lower than seen in other recent household travel surveys. This is primarily attributed to an evolution in the web-based design of the survey. Where as in older surveys, options for 'I don't know' and 'I prefer not to answer' were displayed for every question, the design for this survey only displayed those choices if a participant left a field blank and attempted to advance to the next question. When this occurred, a prompt appeared asking if the participant intended to answer or wanted to select one of the non-response options. The underlying assumption behind this design change is that it better simulates a CATI survey wherein interviewers are trained not to read the text for the choices 'Don't know' and 'Refused' but can select those choices when a respondent indicates either response.

Recruitment

Item non-responses in the recruitment stage is often critical because the variables collected in this step are used for weighting and expansion as well as other central analysis and tasks conducted using the dataset. Table 6 shows the variables which had the highest percent of item non-response in the recruitment survey. The first variable regarding age range was only asked 12 times out of 2,351 people (because the remainder provided an age to the general age question). The age range question was refused six times. The two questions with the highest number of non-responses in the recruitment survey were 'household income' and 'age of person' with 17 (1.56 percent) and 12 (0.51 percent) non-responses provided.

Table 6. Item Non-response for Recruitment Questions

Description	Percent Non-response	Total Asked	Total Non-responses
Age range as follow-up to age refusal	50%	12	6
Household income	1.595%	1066	17
Race of household respondent/other household members	1.063%	2351	25
Hispanic status of household respondent/other household members	0.638%	2351	15
Age of household respondent/other household members	0.51%	2351	12
Typical travel mode to school	0.505%	396	2
Current grade level of students	0.43%	465	2
Relationship of person to household respondent	0.389%	1285	5
Home ownership	0.281%	1066	3
Gender of household respondent/other household members	0.213%	2351	5
Industry of employer	0.082%	1221	1
Current number of jobs	0.081%	1227	1

Retrieval

Item non-response in the travel reporting stage is also a critical element because the variables collected in the travel reporting stage are critical to the quality of the model being developed. In retrieval, the highest count of non-responses were seen in the secondary trip purpose question. The follow-up question to income had the highest overall share of non-response at almost 46 percent but this question was only asked to the 15 households who had already refused the first income question. In total, only 7 of 1,066 households refused to provide an income response.

Table 7. Item Non-response for Retrieval/Travel Characteristic Questions

Description	Percent Non-response	Total Asked	Total Non-Responses
Reason for no trips	2.801%	357	10
Origin Secondary Trip Purpose	0.047%	8425	4
Travel Mode	0.036%	8423	3
Household income follow-up (asked if refused in recruitment)	46.67%	15	7
Trip Purpose	0.036%	8421	3
Secondary trip purpose	0.024%	8420	2
Primary trip purpose	0.024%	8426	2

Data Quality Control and Assurance

The data quality control and assurance plan (QA/QC) for the survey involved three stages of oversight. In the first, simple and complex rules were enforced within the survey instruments. In the second stage, complex logic checks were run and reviewed after completion of the survey. Finally, research calls were made to clarify unresolved errors.

During the survey, the programmed instrument conducts general checks on responses for valid ranges and correct datatypes, and more specific checks like proper relationship statuses and proper sequencing of place arrival and departure times. In the travel reporting stage, distances and travel times are computed and speeds are compared to thresholds for mode of travel. Trips that violate the assumptions of minimum or maximum travel speeds are then asked to clarify or confirm their reported times, modes and locations. If no changes are made in this process, a final 'reason' for the long or illogical trip time is collected.

Table 8 and Table 9 provide the list of checks that are used to review households after the retrieval survey completes. Acronyms used in the table include the following:

- tbw – Trip Builder Web – the web-based travel collection software used in the survey
- wgs – Web GeoSurvey – the web-based survey platform used to collect non-travel data

An analyst team reviews all checks that fail from this list and assess the validity of the failed check. If a minor correction was apparent and could be made, it was done. These included minor shared travel discrepancies e.g., where it was obvious that one person forgot to add another as a companion but all members of the trip leave from one place and arrive at another within a few minutes of each-other. For cases that could not be clarified, telephone follow-up attempts were made in order to clarify responses with participants.

Table 8. Stage 2 QA/QC Checks for Household and Person Characteristics

CheckID	Level	Check Description
1	household	Household size does not match the number of people.
3	household	Home location is missing full_address""
4	household	Home location not named Home
6	household	Home location geocoded with bad address street or missing address component.
9	household	Household vehicle roster answers in tbw are different from wgs.
10	household	Household answers in tbw are different from wgs.
101	person	Person Missing lifecycle information: AGE or AAGE
102	person	Person Missing lifecycle information: Schooling
104	person	Person has no places associated with them.
106	person	Person has no travel but is missing reason for not travelling (NOGOWHY).
107	person	Work location geocoded without address
108	person	School location geocoded without address.
109	person	Person's first or last place is not their Home location.
117	person	Person is under 5 years old and reported places.
118	person	Person roster answers in tbw are different from wgs.
119	person	Person's completion flag is not set. Please ensure that all participants which can be complete are showing up as `Finished` in tbw.

Table 9. Stage 2 QA/QC Checks for Place Characteristics

CheckID	Level	Check Description
200	place	Place has a person number that does not exist in the persons table.
201	place	Place's location is not geocoded
202	place	Place does not have a location
203	place	Place is missing travel mode information
204	place	Place is missing trip purpose information
205	place	Place's departure time is before its arrival time (left before arriving)
206	place	Place's arrival time is before the previous place's departure time (arrived before leaving)
207	place	Place where multiple household members went but did not report each other or disagree on the household members in the party.
208	place	Place passenger without driver
209	place	Place where multiple household members went but persons disagree on the party size.
210	place	This shared place has more than one driver in the party.
212	place	Place travel speed too slow for travel mode
214	place	Place lists household member on trip, but other household member does not report matching place.
215	place	Person reported traveling alone in an automobile but is under the age of 15
216	place	Transit trip too short (less than 5 min duration)
217	place	Place travel time too long
218	place	Place speed too fast
220	place	Location geocoded without address
221	place	Traveled with a household member but MODE does not match.
223	place	Traveled with a household member but origin (previous ADDR or departure time) does not match.
225	place	Traveled together but report different locations for the same place (coordinates match in space though).
228	place	Place's location may be an incorrect duplicate (e.g. Smiths-2")"
230	place	Location's geocode precision is not good enough. Current precision:
231	place	Place has the same address and/or coordinates as previous place.
238	place	Place has address component with non-supported special character.
239	place	Place is suspiciously close to habitual work or school location.
240	place	Non-home location looks suspiciously like home location and is short distance from home. Change to original home location when appropriate.
241	place	Person not at a common work location for work related purpose.
242	place	Person not at a common school location for school related purpose.

Weighting and Expansion

As discussed in the Sample Design section earlier, the selection of the sample was intended to result in the collection of a random, representative dataset from the region with 5-year ACS averages as benchmarks. However, survey data collection rarely yields a totally representative sample due to differential response rates by various population subgroups, item non-response, and other factors. To mitigate the difference in the results between survey respondents and the population, weights are constructed and assigned to records in a survey data set so the data can be expanded to represent the population of interest as closely as possible. The weights are usually developed in a series of stages to compensate for unequal selection probabilities, nonresponse, non-coverage, and sampling fluctuations from known population values. The use of raw or unweighted survey data will result in biased analyses, especially if the sample will be selected with unequal probabilities which is often the case when targeting hard-to-reach populations or when the responding sample is very different from the survey population. The steps in the weighting process were as follows.

- Construction of base weights (the reciprocal of the probability of selection of each sampled address);
- Adjustment for non-response at the household-level;
- Raking Adjustment of the household weights to achieve consistency with characteristics for the full population of households in the study area (achieved by raking the non-response adjusted weights to independent household-level figures for the study area—raking can be thought of as multivariate post-stratification). This is the final household weight;
- Assignment of the final household weights to all responding persons within completed households;
- Person-level raking. This is the final person weight; and,
- Construction of the trip weights.

Raking at the Household Level

The raking process for HTS included four "dimensions." The weights were adjusted to equal the totals within the cells for each dimension in an iterative process, until the process converges, and every dimension's cell totals equaled the independent control totals. The dimensions at the household weighting-level included the metrics covered in Table 10 through Table 13.

Note: throughout this report, proportions with a '*' indicate that the value is calculated using 20 or fewer observations and as such, analysis using these figure should be undertaken with caution.

Table 10. Household Size by Number of Household Workers

	Weighted	Surveyed
1 Person		
0 Workers	12.58%	11.07%
1 Worker	16.74%	18.2%
2 Person		
0 Workers	10.28%	12.95%
1 Worker	11.95%	13.51%
2 Workers	14.64%	18.01%
3 Person		
0 Workers	0.8% *	0.56% *
1 Worker	3.93%	3%
2 Workers	7.56%	6.19%
3 Workers	1.32% *	1.22% *
4+ Person		
0 Workers	0.79% *	0.47% *
1 Worker	5.06%	3.56%
2 Workers	11.88%	9.47%
3 Workers	2.21% *	1.5% *
4+ Workers	0.26% *	0.28% *

Table 11. Household Size by Number of Household Vehicles

	Weighted	Surveyed
1 Person		
0 Vehicles	3.15% *	0.75% *
1 Vehicle	19.42%	19.42%
2 Vehicles	5.41%	6.19%
3+ Vehicles	1.35%	2.91%
2 Person		
0 Vehicles	1.72% *	0.38% *
1 Vehicle	6.38%	6.47%
2 Vehicles	18.14%	18.86%
3+ Vehicles	10.62%	18.76%
3 Person		
0 Vehicles	0.2% *	0.09% *
1 Vehicle	2.2% *	1.31% *
2 Vehicles	4.75%	3.85%
3+ Vehicles	6.47%	5.72%
4+ Person		
0 Vehicles	0% *	0% *
1 Vehicle	2.26% *	1.22% *
2 Vehicles	7.91%	6%
3+ Vehicles	10.02%	8.07%

Table 12. Number of Workers by Number of Household Vehicles

	Weighted	Surveyed
0 Workers		
0 Vehicles	3.4% *	0.84% *
1 Vehicle	11.01%	9.66%
2 Vehicles	7.38%	8.63%
3 Vehicles	1.58%	3.38%
4+ Vehicles	1.08% *	2.53% *
1 Worker		
0 Vehicles	1.48% *	0.28% *
1 Vehicle	16.89%	16.51%
2 Vehicles	12.81%	12.38%
3 Vehicles	4.38%	5.91%
4+ Vehicles	2.13%	3.19%
2 Workers		
0 Vehicles	0.2% *	0.09% *
1 Vehicle	2.23% *	2.16% *
2 Vehicles	15.87%	13.79%
3 Vehicles	9.76%	10.41%
4+ Vehicles	6.03%	7.22%
3+ Workers		
0 Vehicles	0% *	0% *
1 Vehicle	0.15% *	0.09% *
2 Vehicles	0.15% *	0.09% *
3 Vehicles	1.43% *	1.22% *
4+ Vehicles	2.07% *	1.59% *

Table 13 shows surveyed household incomes diverged from ACS figures in the higher income categories with an under-representation of households earning less than $30,000 and an over-representation earning $50,000 or more. Weighting was able to adjust these results into close alignment with ACS.

Table 13. Household Income; Surveyed and Weighted versus ACS

Household Income	Weighted	Surveyed	ACS
I prefer not to answer	1.41% *	1.59% *	0.00%
Less than $10,000	5.41% *	2.63% *	5.40%
$10,000 to $14,999	5.91%	3.38%	5.90%
$15,000 to $24,999	10.91%	7.98%	10.90%
$25,000 to $34,999	9.76%	12.19%	9.90%
$35,000 to $49,999	14.68%	16.60%	14.90%
$50,000 to $74,999	19.07%	22.33%	19.40%
$75,000 to $99,999	12.71%	14.63%	13.00%
$100,000 to $149,999	12.23%	13.70%	12.50%
$150,000 to $199,999	4.00%	2.81%	4.00%
$200,000 or more	3.89% *	2.16% *	4.00%

Raking at the Person Level

For the same reasons raking will be used at the household-level (improved reliability, reduction of potential bias, and to achieve consistency with known population counts), a raking procedure will be used at the person-level as well. Survey weights of responding persons will be adjusted so that the sum of the weights of the responding persons equaled the corresponding independent control totals for selected demographic characteristics in the study area population. The independent control totals for these dimensions will be derived from the 2014 5-year estimates from the American Community Survey (ACS). The dimensions used at the person-level are covered in Table 14 which shows the surveyed, weighted and ACS 5-year average for Sex, Age and Race.

Taking a look at the responses for Sex, we see that the surveyed households had a slightly disproportionate share of female participants when compared to ACS benchmarks. It is also apparent that the surveyed households were slightly over-represented in the age ranges from 50 to 79 as compared to the population. Finally, responses to race showed an over-representation of White respondents with moderate under-representation in all other categories.

Table 14. Person Characteristics; Surveyed and Weighted versus ACS

Sex	Weighted	Surveyed	ACS
I prefer not to answer	1.79%	1.62%	0.00%
Male	48.18%	45.17%	49.1%
Female	50.03%	53.21%	50.9%
Age	**Weighted**	**Surveyed**	**ACS**
Under 5 years	8.52%	7.02%	6.5%
5 to 9 years	7.11%	6.21%	7.1%
10 to 14 years	4.94%	4.64%	6.3%
15 to 19 years	4.69%	4.59%	6.1%
20 to 24 years	3.26%	3.06%	6.3%
25 to 34 years	16.52%	14.72%	13.9%
35 to 44 years	13%	11.31%	12.1%
45 to 54 years	12.15%	10.21%	13.4%
55 to 64 years	14.37%	15.99%	13.4%
65 to 74 years	10.19%	15.14%	8.2%
75 to 84 years	3.59%	5.15%	4.6%
85 years and over	1.15%	1.45%	2.2%
Don't Know/Refused	0.5% *	0.51% *	0.0%
Race	**Weighted**	**Surveyed**	**ACS**
I prefer not to answer	0.77% *	0.68% *	0.00%
White	88.60%	91.54%	90.69%
African American, Black	0.84% *	0.60% *	0.70%
Asian	1.13% *	0.81% *	0.74%
American Indian, Alaskan Native	3.20%	1.79%	4.36%
Native Hawaiian or Pacific Islander	0.39% *	0.3% *	0.06%
Multiracial	3.72%	2.93%	2.43%
Some other race	1.35%	1.36%	1.03%

Table 15 shows basic household attributes for surveyed and weighted results with ACS 5-year proportions for benchmarking. It is apparent that the survey had an under-representation of 1 person households and an over-representation of 2 person households. The survey sample also had slightly fewer 0-worker households, with more vehicles than the ACS population estimates and collected a higher proportion of homeowners that the population.

Table 15. Household Characteristics; Surveyed and Weighted versus ACS

Household Size	Weighted	Surveyed	ACS
1	29.32%	29.27%	30.00%
2	36.87%	44.47%	35.90%
3	13.62%	10.98%	13.60%
4+	20.19%	15.29%	20.50%
Household Worker	**Weighted**	**Surveyed**	**ACS**
0	24.45%	25.05%	24.41%
1	37.68%	38.27%	37.60%
2	34.08%	33.68%	31.87%
3+	3.79%	3.00%	6.12%
Household Vehicle	**Weighted**	**Surveyed**	**ACS**
0	5.07% *	1.22% *	5.08%
1	30.27%	28.42%	30.29%
2	36.21%	34.9%	36.20%
3	17.15%	20.92%	17.95%
4+	11.3%	14.54%	10.48%
Home Ownership	**Weighted**	**Surveyed**	**ACS**
I dont know	0.04% *	0.09% *	0.00%
Own	67.29%	77.20%	68.27%
Rent	31.43%	21.29%	31.72%
Other	1.25% *	1.41% *	0.00%

Trip Weights and Rates

Trip weights were generated by multiplying the final person weight by 156 to represent the number of person-made trips on any given weekday (Tuesday – Thursday) within a year. These weights should be used to expand the data to the survey population. Trip rates were calculated by dividing the sum of trips by the sum of households or persons in the survey.

Survey Response Rates

Of the 20,000 households invited to join the HTS, 1,721 agreed to participate. Of these, 1,066 were cleared and delivered translating to a 8.6% recruitment rate, a 61.9% retrieval rate, and a 5.3%

participation rate. These rates were lower than expected, especially in the travel reporting stage, resulting in a lower number of complete households than the targeted 1,100.

Survey Results 3

The 1,066 households and 2,351 people who participated in the Billings - Yellowstone County Household Travel Survey reported data about their household characteristics as well as their daily travel. In all, households reported data for 8,445 trips. The following sections provide summary analysis of the demographic and travel characteristics not already covered in prior tables. These tables show weighted and unweighted results.

Table 16. Summary Survey Results

	Weighted	Surveyed
Households	138,096	1,066
People	363,936	2,351
Total Trips	1,281,090	8,445
Average HH Trips	8.03	7.92
Average Person Trips	3.43	3.59

Demographic Characteristics

The following section shows household-level characteristics. Table 17 shows the share of households by household size. The share of 2 person households were over-represented in the surveyed sample and large households were underrepresented. The weighted values represent household size distributions which match closely to the control values provided by the U.S. Census via the American Community Survey.

Table 17. Household Size

Household Size	Weighted	Surveyed
1	29.32%	29.27%
2	36.87%	44.47%
3	13.62%	10.98%
4+	20.19%	15.29%

Table 18 shows the share of households by the number of vehicles available.Households with zero vehicles are rare and hard to reach in the region, and so the raw number of observations of these households are small and conclusions drawn from their travel should be considered carefully.

Table 18. Household Vehicles

Household Vehicles	Weighted	Surveyed
0	5.07% *	1.22% *
1	30.27%	28.42%
2	36.21%	34.9%
3+	28.45%	35.46%

Table 19 shows the share of households by the number of workers in a household. About one quarter of households in the region have no member who is currently employed.

Table 19. Household Workers

Household Workers	Weighted	Surveyed
0	24.45%	25.05%
1	37.68%	38.27%
2	34.08%	33.68%
3+	3.79%	3%

Table 20 shows the distribution of households by household income.

Table 20. Household Income

Household Income	Weighted	Surveyed
I prefer not to answer	1.41% *	1.59% *
Less than $10,000	5.41% *	2.63% *
$10,000 to $14,999	5.91%	3.38%
$15,000 to $19,999	4.40%	3.38%
$20,000 to $24,999	6.51%	4.60%
$25,000 to $29,999	4.74%	5.72%
$30,000 to $34,999	5.02%	6.47%
$35,000 to $39,999	4.39%	4.97%
$40,000 to $44,999	5.36%	5.72%
$45,000 to $49,999	4.93%	5.91%
$50,000 to $59,999	7.61%	9.1%
$60,000 to $74,999	11.46%	13.23%
$75,000 to $99,999	12.71%	14.63%
$100,000 to $124,999	9.25%	10.51%
$125,000 to $149,999	2.98%	3.19%
$150,000 to $199,999	4.00%	2.81%
$200,000 or more	3.89% *	2.16% *

In Table 21, we see the largest proportion of surveyed households own a home with a mortgage.

Table 21. Home Ownership

Home Ownership	Weighted	Surveyed
I dont know	0.04% *	0.09% *
Own without mortgage	24.85%	31.89%
Own with mortgage	42.44%	45.31%
Rent	31.43%	21.29%
Occupied without payment of rent	0.69% *	0.75% *
Some other arrangement	0.56% *	0.66% *

Table 22 shows that after participants who classify as *White* the next most reported race is *Multiracial*.

Table 22. Respondent Race

Race	Weighted	Surveyed
I prefer not to answer	0.77% *	0.68% *
White	88.6%	91.54%
African American, Black	0.84% *	0.6% *
Asian	1.13% *	0.81% *
American Indian, Alaskan Native	3.2%	1.79%
Native Hawaiian or Pacific Islander	0.39% *	0.3% *
Multiracial	3.72%	2.93%
Some other race	1.35%	1.36%

Table 23 shows the distribution of respondents by age bins.

Table 23. Respondent Age

Age	Weighted	Surveyed
<20	25.26%	22.46%
20 - 24	3.26%	3.06%
25 - 54	41.67%	36.24%
55 - 59	8.18%	7.95%
60 - 64	6.19%	8.04%
65+	14.94%	21.74%
Dont Know/Refused	0.5% *	0.51% *

Travel Characteristics

The travel characteristics of the surveyed households are presented in Figure 6 and in Table 24 through Table 30. Data is presented by aggregating and averaging trips made by people to the household level for the region as a whole. All references to trips in the following sections should be interpreted as person trips (as opposed to vehicle trips).

Household Trip Rates

Figure 6 shows the frequency of surveyed households by the count of trips reported. Most households reported between 6 and 10 trips on their travel day. Table 24 confirms this range with a weighted average household trip rate of 8.59. The orange brackets on each bar represent the error in the esitmates. In this example, the statistical difference between the count of households making 1-5 trips and 6-10 trips is indiscernable because the error bars overlap.

Figure 6. Volume of Household Trips

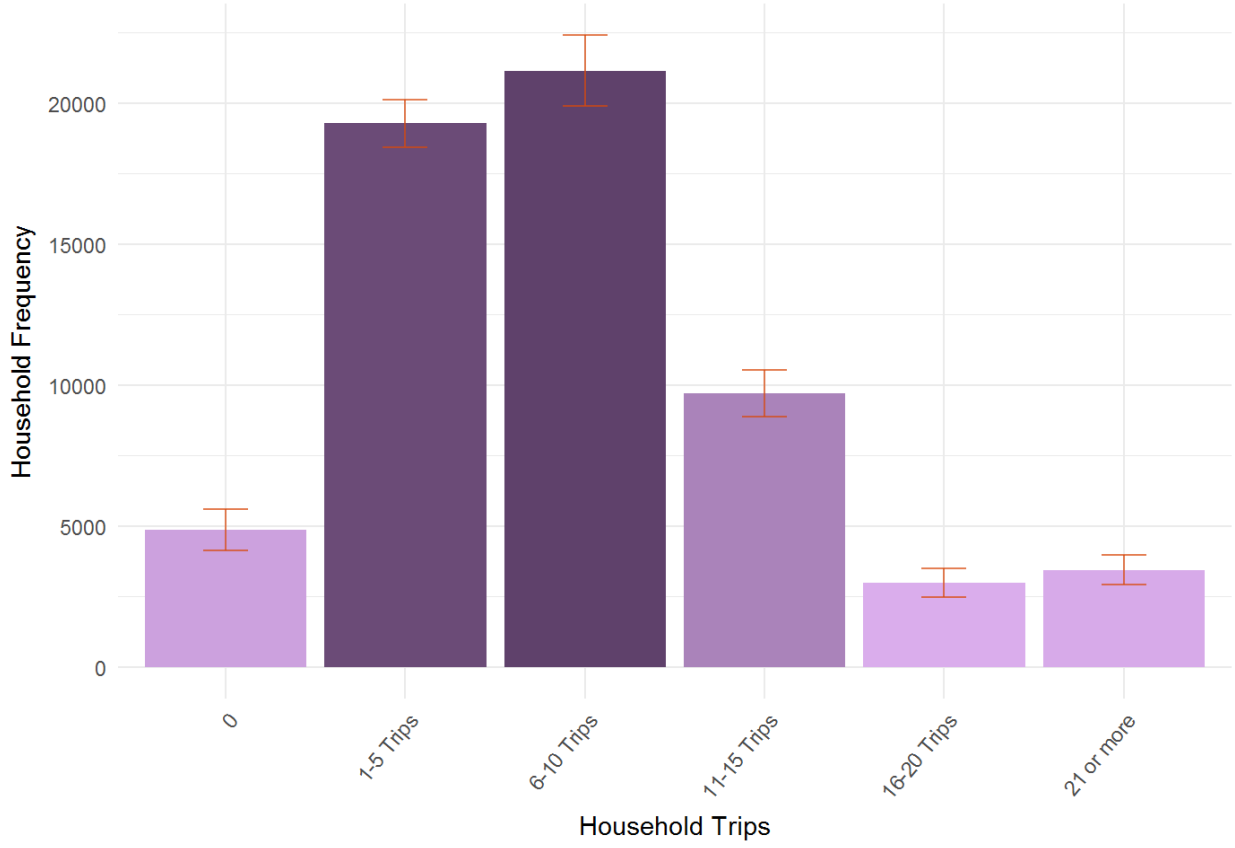


Table 24. Household Trip Rates

Weighted	Standard Error	Surveyed	Number
8.59187	0.2367449	7.922139	8,445

Table 25 shows the average household trip rates grouped by household size and number of available household vehicles. As expected, the households with fewer vehicles and fewer people make fewer trips. Households with few or any vehicles are rare in the region which is evident by the low numbers of zero vehicle households in every household category.

Table 25. Household Trip Rates by Household Size by Household Vehicles

	Weighted	Std. Error	Surveyed
1 Person			
0 Vehicles	2.74 *	1.50 *	2.62 *
1 Vehicle	4.54	0.24	4.53
2 Vehicles	5.25	0.49	5.06
3+ Vehicles	5.36	0.76	4.84
2 Person			
0 Vehicles	9.05	2.01	8
1 Vehicle	7.95	0.7	7.54
2 Vehicles	7.69	0.48	7.45
3+ Vehicles	8.58	0.42	8.04
3 Person			
0 Vehicles	0 *	0 *	0 *
1 Vehicle	6.59	1.48	7.21
2 Vehicles	8.5	1.51	8.27
3+ Vehicles	11.56	1.01	10.05
4+ Person			
0 Vehicles	0 *	0 *	0 *
1 Vehicle	13.21	2.73	14.23
2 Vehicles	13.44	1.19	12.84
3+ Vehicles	16.38	1.56	14.94

Table 26 shows the rates of trip making by household size. Table 27 shows the number of available vehicles. In Table 28 the trip rates by count of household workers are shown.

Table 26. Household Trip Rates by Household Size

Household Size	Weighted	Std. Error	Surveyed
1	4.51	0.23	4.62
2	8.06	0.31	7.72
3	9.52	0.81	9
4+	14.87	0.92	14.06

Table 27. Household Trip Rates by Household Vehicles

Household Vehicles	Weighted	Std. Error	Surveyed
0	4.78	1.77	4.08
1	6.05	0.29	5.75
2	8.69	0.34	8.05
3+	11.85	0.6	9.67

Table 28. Household Trip Rates by Household Workers

Household Workers	Weighted	Std. Error	Surveyed
0	6.18	0.41	6.91
1	7.18	0.43	6.41
2	11	0.46	9.81
3	16.07	1.56	13.83
4	21.66	12.01	19.33

Table 29 shows the general effect of income on average household trips rates where we see lower incomes with lower trip rates and higher incomes trending toward higher trip rates.

Table 29. Household Trip Rates by Household Income

Household Income	Weighted	Std. Error	Surveyed
I prefer not to answer	7.32	1.33	6.82
Less than $10,000	5.43	0.75	5.68
$10,000 to $14,999	5.29	1.19	4.92
$15,000 to $19,999	5.17	0.73	4.94
$20,000 to $24,999	6.21	1.41	5.88
$25,000 to $29,999	8.98	1.28	7.7
$30,000 to $34,999	6.53	0.59	6.17
$35,000 to $39,999	6.78	0.9	6.36
$40,000 to $44,999	6.75	0.88	6.43
$45,000 to $49,999	8.02	1.44	7.52
$50,000 to $59,999	8.69	0.74	7.72
$60,000 to $74,999	9.43	0.93	8.65
$75,000 to $99,999	11.04	0.76	9.91
$100,000 to $124,999	10.12	0.86	9.03
$125,000 to $149,999	14.01	2.19	11.56
$150,000 to $199,999	10.63	1.83	8.9
$200,000 or more	13.28	2.78	10.52

Table 30 shows that home ownership generally correlates to higher trip rates when compared to households who rent.

Table 30. Household Trip Rates by Home Ownership

Home Ownership	Weighted	Std. Error	Surveyed
I dont know	4.79 *	0 *	4.00 *
Own without mortgage	7.87	0.53	7.29
Own with mortgage	10.54	0.47	9.05
Rent	6.59	0.52	6.53
Occupied without payment of rent	7.96	3.12	7.88
Some other arrangement	7.35 *	3.55 *	6.67 *

Person Trip Rates

The following section provides analysis of trip activity at the person-level. Average person trip rates are presented and aggregated to a range of person-level characteristics including gender, age, race, licensure, and person type. Person types used in this analysis include full-time and part-time workers, university students, retirees, non-workers, driving-aged children, non-driving-aged children, and preschool children. Figure 7 shows the share of persons by type.

Figure 7. Person Types

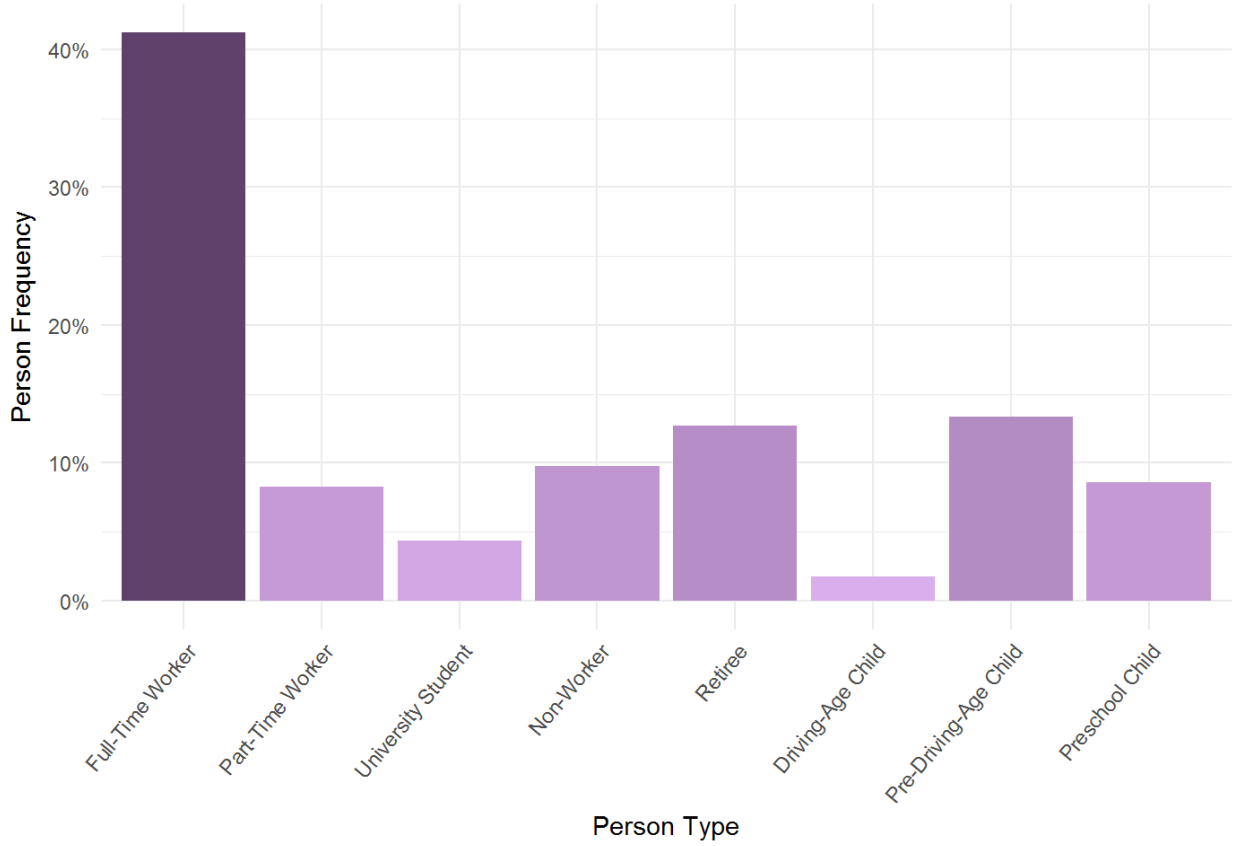


Table 31. Person Trip Rates

Weighted	Standard Error	Surveyed	Number
3.754531	0.09411951	3.86322	8,445

by age bin.

Table 32 shows that across the region, female respondents tended to have slightly higher average trip rates than male respondents. Table 33 shows average trip rates by age bin.

Table 32. Person Trip Rates by Gender

Sex	Weighted	Std. Error	Surveyed
I prefer not to answer	3.52	0.66	3.79
Male	3.37	0.12	3.49
Female	4.14	0.12	4.19

Table 33. Person Trip Rates by Age

Age	Weighted	Std. Error	Surveyed
5 to 9 years	2.96	0.25	3.00
10 to 14 years	2.62	0.21	2.66
15 to 19 years	3.03	0.28	2.99
20 to 24 years	2.69	0.31	2.72
25 to 34 years	3.84	0.21	4.07
35 to 44 years	4.38	0.22	4.51
45 to 54 years	4.00	0.34	3.91
55 to 64 years	4.12	0.26	4.23
65 to 74 years	3.98	0.19	4.11
75 to 84 years	3.82	0.44	3.97
85 years and over	2.30	0.46	2.50

Table 34 shows the average trips made by the race of the participant with notable differences across races.

Table 34. Person Trip Rates by Race

Race	Weighted	Std. Error	Surveyed
I prefer not to answer	1.29	0.54	1.44
White	3.54	0.11	3.68
African American, Black	3.09	0.63	3.21
Asian	2.95	0.39	2.84
American Indian, Alaskan Native	2.65	0.9	2.69
Native Hawaiian or Pacific Islander	2.86 *	1.24 *	3.00 *
Multiracial	2.63	0.5	2.88
Some other race	2.49	0.73	2.48

Table 35 shows the trip rates for licensed and un-licensed people. Trips rates for the unlicensed are 1.5 trips per day lower than for licensed partipants.

Table 35. Person Trip Rates by Driver's License Status

License	Weighted	Std. Error	Surveyed
Not Ascertained	2.79	0.18	2.82
Yes	4.03	0.11	4.1
No	2.51	0.52	2.26

Table 36 shows average trip rates by person type. Part-time workers take an average of .5 more trips per day than the next highest rate (full-time workers).

Table 36. Person Trip Rates by Person Type

Person Type	Weighted	Std. Error	Surveyed
Full-Time Worker	3.99	0.12	4.09
Part-Time Worker	4.49	0.28	4.41
University Student	3.54	0.37	3.83
Non-Worker	3.44	0.35	3.40
Retiree	3.77	0.24	3.98
Driving-Age Child	3.61	0.35	3.74
Pre-Driving-Age Child	2.84	0.17	2.87

Trip Characteristics

The data presented in the following tables and figures represents the classification of all trip making activity aggregated into one of seven categories as defined in Table 37. A trip here refers to the individual segments of each movement from one place to another, e.g., from home to the gas station (HBSH) or from work to home (HBW).

Table 37. Trip Type Definitions Used in Analysis

Category	Acronym	Description
Home-Based Work	HBW	Trips that start at home and end at work, or vice versa
Home-Based School	HBSC	Trips made by daycare, preschool, to K-12 students that start at home and end at school, or vice versa
Home-Based University	HBU	Trips made by university students that start at home and end at school, or vice versa
Home-Based Shop	HBSH	Trips that start at home and end at a shopping location, or vice versa
Home-Based Social or Recreational	HBSR	Trips that start at home and end at a recreational location, or vice versa
Home-Based Other	HBO	All other trips that start at home and do not end at one of the first five location types, or start at a location not covered by the first five location types and end at home.
Non-Home-Based Work	NHBW	Trips that start somewhere other than home and end at work, or vice versa
Non-Home-Based Other	NHBO	Trips that start somewhere other than home and end at a non- work location, or vice versa

Table 38 shows trip counts, average rates, average durations, and average distances and trip type. Cells with a * indicate that 20 or fewer observations exist and the resulting average rates, times, and distances should be used with caution.

Table 38. Count, Frequency, Trip Rate, Average Minutes, and Average Distances by Type

Row Labels	Trips	Frequency	Trip Rate	Distance	Duration
Other	55	0.65%	0.055	1.86	22.56
HBW	1,060	12.57%	1.06	5.76	18.85
HBSC	275	3.26%	0.275	3.11	33.81
HBU	6	0.07%	0.006	26.96	30.00
HBSH	888	10.53%	0.888	3.92	13.93
HBSR	734	8.71%	0.734	6.34	17.01
HBO	2,410	28.58%	2.41	5.99	16.19
NHBW	776	9.20%	0.776	4.61	13.67
NHBO	2,227	26.41%	2.227	5.19	14.35
Grand Total	**8,431**	**100.00%**	**8.431**	**5.33**	**16.27**

Travel Times

The following tables and figures show data collected about the time of trip making during the 24-hour travel period. Figure **8** shows trips grouped by departure time in five time slots. The time slots have been grouped with the same starting points as the single 24-hour travel day that participants report, spanning from 3:00 AM to 2:59 AM the following morning.

Figure 8. Departure Times by Time of Day

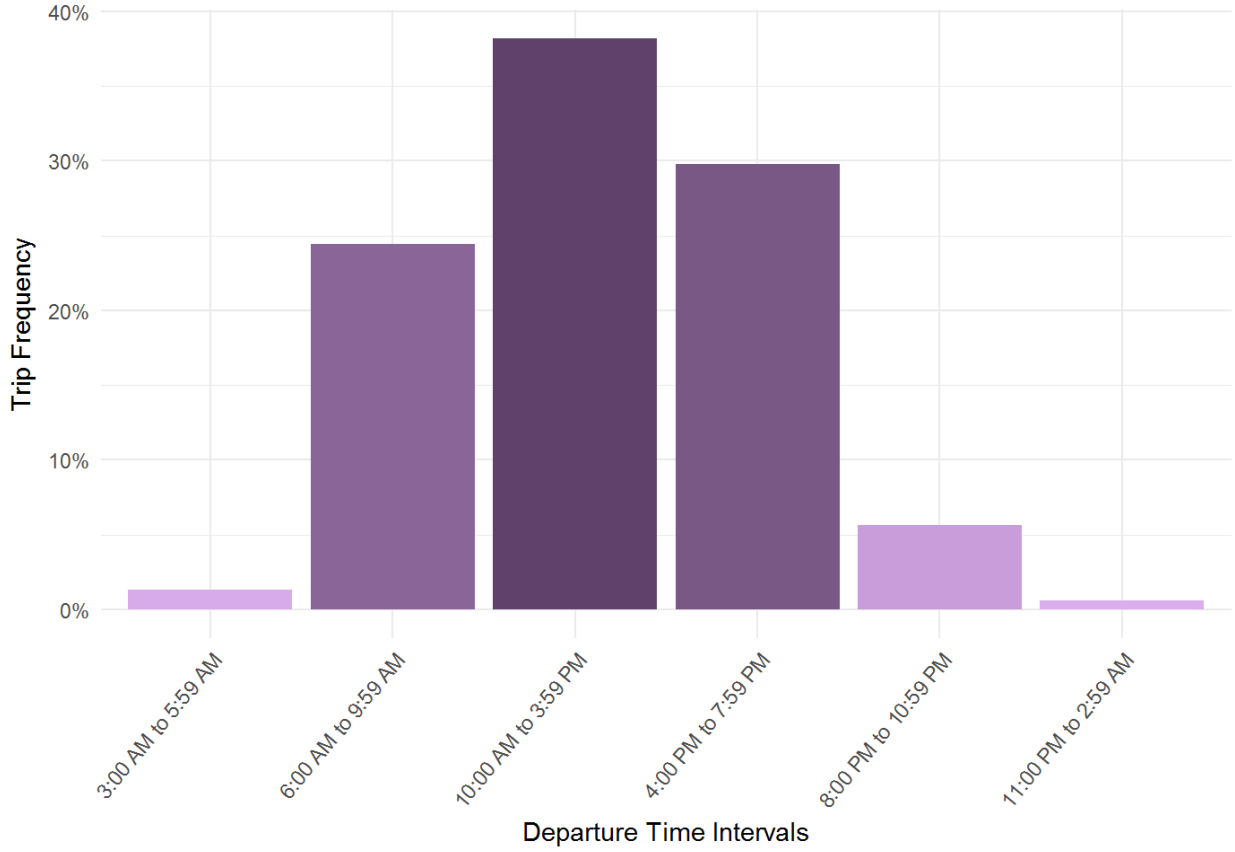
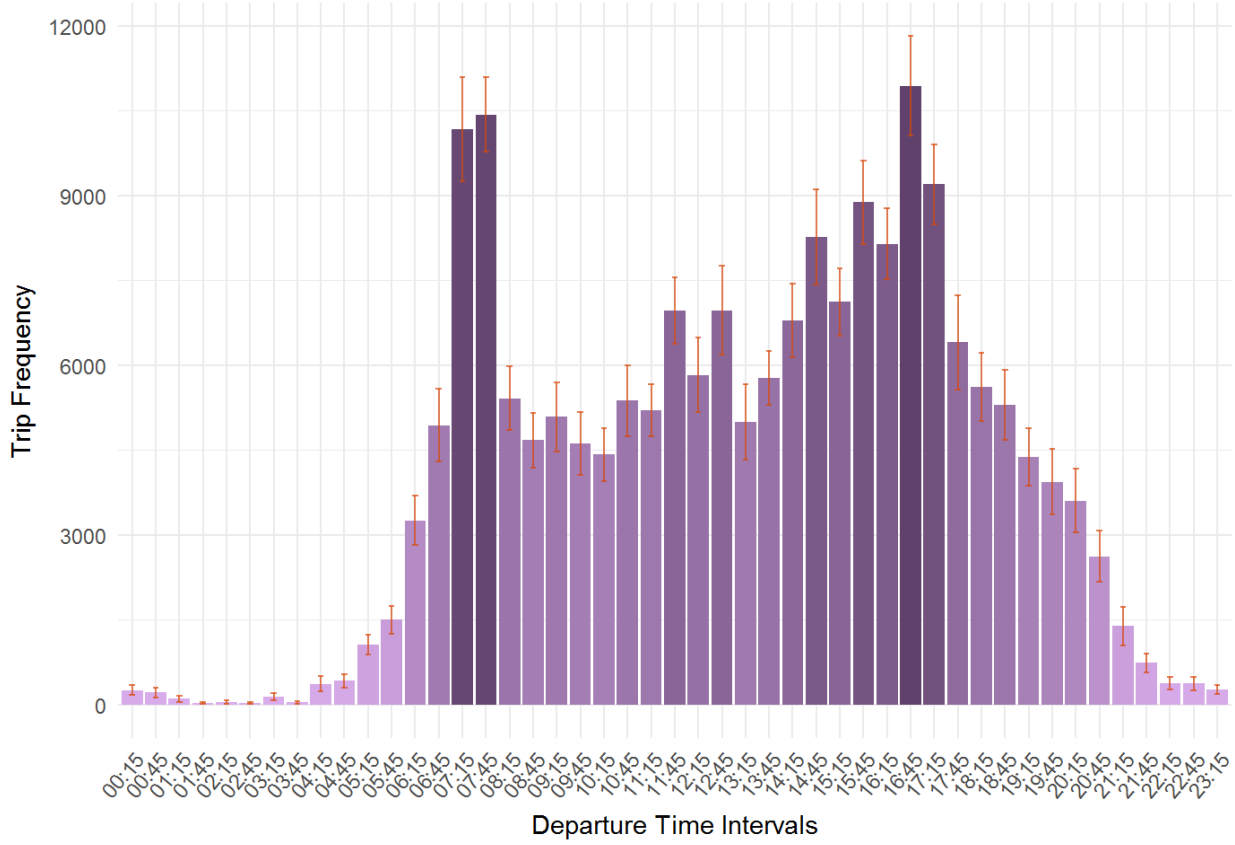


Figure 9 shows the raw counts of departure times aggregated to 15 minute intervals and reveals peaks during the morning commute and again around 4:45 PM. There is also a small peak around the lunch hour between 11:45 AM and 12:00 PM.

Figure 9. Departure Times – Raw Counts (weighted counts divided by 1000)



Mode Choice

The following section provides analysis for surveyed mode choice using average trip duration and average trip distance for comparison. Typical versus Actual work and school modes are also presented. Table 39 shows the share of modes used by surveyed households. Nearly 90% of trips made in the region utilize a private vehicle as either a driver or passenger. In Table 40, the average trip duration in minutes for each mode is presented. Average commute times using public transit were 23.4 minutes whereas private vehcle trips took an average of 15.64 minutes (as the driver) and 17.41 minutes (as a passenger).

Table 39. Mode Share

Mode	Weighted	Surveyed
Not Ascertained	0.21% *	0.26% *
Walk	5.36%	4.54%
Bicycle	1.57%	1.26%
Motorcycle / moped	0.17% *	0.24% *
Auto / van / truck (as the driver)	71.96%	74.13%
Auto / van / truck (as the passenger)	17.78%	17.22%
Carpool / vanpool	0.48%	0.45%
School bus	1.03%	0.98%
MET Public transit - local bus	1.03%	0.45%
Private bus or shuttle	0.05% *	0.05% *
Airplane	0.04% *	0.02% *
Something Else	0.3%	0.41%

Table 40. Average Trip Duration (in minutes) by Mode

Mode	Weighted	Std. Error	Surveyed
Not Ascertained	61.73 *	47.09 *	73.27 *
Walk	11.98	0.91	12.05
Bicycle	41.07	25.32	30.44
Motorcycle / moped	16.99 *	12.81 *	19.5 *
Auto / van / truck (as the driver)	15.64	0.8	15.63
Auto / van / truck (as the passenger)	17.41	2.92	16.65
Carpool / vanpool	18.75	4.67	17.5
School bus	19.72	2.77	21.27
MET Public transit - local bus	23.4	6.42	24.55
Private bus or shuttle	47.62 *	38.64 *	40.5 *
Airplane	64 *	0 *	64 *
Something Else	55.82	29.56	45.34

Table 41 shows the average trip distance in miles for all modes. The averages for modes where the count of trips is low (less than 1 percent of trips denoted by a * in the cell) result in some inflation to distances and times and analysis using these modes should be undertaken with caution.

Table 41. Average Trip Distance (in miles) by Mode

Mode	Weighted	Std. Error	Surveyed
Not Ascertained	4.71 *	1.52 *	5.36 *
Walk	0.48	0.07	0.54
Bicycle	1.83	0.27	1.74
Motorcycle / moped	4.92 *	8.46 *	5.57 *
Auto / van / truck (as the driver)	5.71	0.34	5.7
Auto / van / truck (as the passenger)	4.57	0.47	4.74
Carpool / vanpool	10.31	4.7	9.08
School bus	2.73	0.4	2.84
MET Public transit - local bus	2.79	0.97	3.86
Private bus or shuttle	9.86 *	7.23 *	8.45 *
Airplane	213.86 *	0 *	213.86 *
Something Else	13.33	8.14	15.57

Table 42 shows the combinations of actual work modes used on the travel day versus the reported typical work mode (collected during the recruitment survey). The table highlights cells in gray to show cases where the reported and typical mode are the same. 93.9 percent of people had an actual mode matching their reported typical mode to work. In 86.53 percent of the reporting cases, the typical mode to work was 'Driver' and the mode used on the travel day to go to work was also 'Driver'. The mode 'Carpool/Vanpool' had no typical users who actually used the mode on their travel day.

Table 42. Actual versus Typical Work Mode

	Typical Work Mode							
Actual Work Mode	Driver	Passenger	Bike	Walk	Motorcycle	Carpool	MET Transit	Grand Total
Driver	86.53%	0.39%	0.68%	0.19%		0.10%		87.89%
Passenger	2.33%	1.26%		0.19%	0.19%	0.29%		4.26%
BIKE	0.78%		0.87%					1.65%
WALK	3.78%	0.10%	0.29%	0.58%			0.29%	5.04%
Motorcycle	0.19%				0.10%			0.29%
Carpool	0.19%					0.19%		0.39%
MET Transit	0.19%						0.19%	0.39%
Private Bus							0.10%	0.10%
Total	93.99%	1.74%	1.84%	0.97%	0.29%	0.58%	0.58%	100.00%

Table 43 shows a similar analysis for school trips. 74.9 percent of trips were made using the typical mode reported in recruitment and 42.98 percent of these were as the passenger in a household vehicle. A total of 14.89 percent of people in the recruit survey reported using a school bus for typical school travel but 16.17 percent actually used the mode on their travel day.

Table 43. Actual versus Typical School Mode

	Typical School Mode							
Actual School Mode	Passenger	Driver	School Bus	Walk	Carpool	Public Transit	Bike	Grand Total
Passenger	42.98%	0.85%	3.40%	1.28%	2.55%		0.43%	51.49%
Driver	6.81%	16.17%	0.43%					23.40%
School Bus	4.68%	0.43%	10.21%	0.43%	0.43%			16.17%
Walk	0.85%			4.26%				5.11%
Carpool	0.85%				0.85%			1.70%
Public Transit						0.43%		0.43%
Bike	0.85%		0.85%					1.70%
Total	57.02%	17.45%	14.89%	5.96%	3.83%	0.43%	0.43%	100.00%

Conclusion 4

The 2017 Billings - Yellowstone County Household Travel Survey achieved good responses from a randomly selected sample of households in the region. A total of 1,066 households; 2,351 people; and 10,629 trips were collected. These data provide a rich resource for analysis of travel behavior in the City of Billings and Yellowstone County. The quality assurance and controls completed on the final delivered households indicates the quality of the data will meet the expectations of data users for the purpose of model development.

The final recruitment rate of 8.6 percent was better than expected indicating that the materials and presentation of the survey was effective. Retrieval rates for reported travel data were anticipated to be around 75 percent. The achieved rate of 61.9 percent was 13 percent lower than this anticipated rate. Westat recommends inclusion of a cash pre-incentive in the next iteration of this survey. Research shows a significant improvement in response when a small cash incentive is included during the invitation to complete a survey.

The data collected with this survey will not only support model development in the region. Air quality and emissions projections, analysis of travel mode choices, and other types of analysis will be among the many possible ways in which this dataset can be used for general planning needs.

Appendix A. Attitudical Questions

	Strongly Disagree		Disagree		Undecided		Agree		Strongly Agree	
	Weighted	Surveyed	Weighted	Surveyed	Weighted	Surveyed	Weighted	Surveyed	Weighted	Surveyed
Billings roadways are congested at morning and evening rush hours.	0.99% *	0.84% *	9.52%	9.19%	5.09%	5.25%	58.31%	59.76%	25.94%	24.86%
Congestion is when I am surrounded by vehicles on the road, but all the vehicles are still traveling at a reasonable speed.	6.36%	5.82%	46.31%	47.28%	9.67%	8.82%	33.94%	34.71%	3.72%	3.38%
Congestion is when I have to drive below the speed limit because of other vehicles around me.	1.42% *	1.22% *	11.66%	12.1%	7.42%	7.41%	57.13%	59.29%	22.36%	19.98%
Congestion is when I have to sit through more than one cycle at a traffic light.	0.77% *	0.75% *	4.35%	4.5%	3.89% *	2.63% *	41.53%	42.78%	49.21%	49.16%
Given that current transportation needs are greater than the amount of money available to address them, I support paying more taxes or fees for transportation system improvements.	10.56%	10.13%	14.97%	16.7%	31.46%	31.14%	34.75%	34.62%	8.26%	7.41%
It should be a high priority to add and improve public transit (bus) services in the Billings area	5.34%	4.97%	17.1%	17.64%	27.71%	29.46%	29.65%	31.33%	20.09%	16.51%

	Strongly Disagree		Disagree		Undecided		Agree		Strongly Agree	
	Weighted	Surveyed	Weighted	Surveyed	Weighted	Surveyed	Weighted	Surveyed	Weighted	Surveyed
It should be a high priority to add and improve bicycle facilities, like bicycle lanes, trails/paths, and racks	11.48%	11.63%	17.2%	18.2%	19.92%	19.98%	28.77%	30.02%	22.53%	20.08%
It should be a high priority to add and improve pedestrian facilities, like sidewalks, trails/paths, and crosswalks	4.16%	4.22%	11.03%	11.73%	15.48%	15.85%	40.99%	43.06%	28.24%	25.05%
It should be a high priority to add and improve roadways for vehicles	1.38% *	1.03% *	4.35%	4.13%	9.48%	9.1%	51.98%	55.07%	32.71%	30.58%

If I knew I would encounter N minutes of congestion on my way to or from work, I would choose an alternate route. **(CONGCHOICE)**

	Weighted	Weighted %	Std. Error	Surveyed	Surveyed %
Less than 3 minutes	2,204.78	3.6%	448.33	35	3.3%
5 minutes	11,797.04	19.2%	1,300.66	210	19.7%
10 minutes	22,399.34	36.5%	1,091.76	395	37.1%
15 minutes	15,023.33	24.5%	833.6	255	23.9%
20 minutes	5,115.30	8.3%	611.93	89	8.3%
More than 20 minutes	3,861.13	6.3%	683.2	65	6.1%
Other:_____	1041.08 *	1.7% *	375.73 *	17 *	1.6% *

If taxes or fees were raised to improve transportation in the Billings area, what would you want to see the additional revenues used for? (Select all that apply) **(TAXES)**

	Weighted	Weighted %	Std. Error	Surveyed	Surveyed %
Maintain our existing transportation corridors, including streets, roads, sidewalks, bike lanes, and crosswalks	44256.51	26%	1098.42	783	27%
Build new transportation corridors	21547.34	13%	1160.2	384	13%
Widen existing transportation corridors	27607.47	17%	1019.83	505	17%
Improve public transit (bus)	15188.84	9%	1136.55	255	9%
Improve bicycle facilities, such as trails/paths and lanes	14213.07	9%	1235.3	234	8%
Improve pedestrian facilities, such as sidewalks and crosswalks	16795.51	10%	1100.51	258	9%
Improve safety and reduce crashes	27498.82	16%	1265.34	485	17%

How comfortable are you, if at all, travelling through roundabouts in the Billings area, whether you are driving, walking, or biking? (**ROUNDABOUTFEEL**)

	Weighted	Weighted %	Std. Error	Surveyed	Surveyed %
I dont know	56.12 *	0.10%*	57.6 *	1 *	0.10%*
I prefer not to answer	63.46 *	0.10%*	481 *	3 *	0.30%*
Very comfortable	29898.43	50.00%	1400.36	515	49.80%
Somewhat comfortable	15034.67	25.10%	1294.99	268	25.90%
Neither comfortable nor uncomfortable	3965.43	6.60%	642.61	68	6.60%
Somewhat uncomfortable	5260.43	8.80%	701.65	91	8.80%
Very uncomfortable	5540.94	9.30%	731.71	89	8.60%

Which type of intersection in the Billings area do you generally think is easier to get through, whether you are driving, walking, or biking? (**INTERSECTION**)

	Weighted	Weighted %	Std. Error	Surveyed	Surveyed %
I dont know	56.12 *	0.10%*	57.6 *	1 *	0.10%*
I prefer not to answer	63.46 *	0.10%*	481 *	3 *	0.30%*
Intersection with a roundabout	20819.88	34.80%	1306.02	369	35.70%
Intersection with stop signs (4-way stop or 2-way stop)	4370.92	7.30%	544.02	87	8.40%
Intersection with a traffic light (stop light)	32332.67	54.10%	1713.69	542	52.40%
Uncontrolled intersections (no stop signs, traffic lights, or roundabouts)	2176.43	3.60%	504.91	33	3.20%

How many days did you ride a bicycle in the last 30 days? (**BIKETRIPS**)

	Weighted	Weighted %	Std. Error	Surveyed	Surveyed %
I dont know	369.65 *	0.60%*	150.75 *	8 *	0.80%*
I prefer not to answer	235.6 *	0.40%*	472.87 *	6 *	0.60%*
0	47595.1	79.50%	975.52	825	79.60%
1	2982.2	5.00%	502.56	46	4.40%
2	1659.46	2.80%	349.29	30	2.90%
3	1047.54 *	1.80%*	280.61 *	17 *	1.60%*
4	918.92 *	1.50%*	351.1 *	13 *	1.30%*
5	1854.06	3.10%	349.48	32	3.10%
6	353.94 *	0.60%*	160.07 *	6 *	0.60%*
7	175.2 *	0.30%*	101.39 *	3 *	0.30%*
8	228.75 *	0.40%*	128.87 *	4 *	0.40%*
9	75.76 *	0.10%*	60.26 *	2 *	0.20%*
10	753.46 *	1.30%*	226.71 *	15 *	1.40%*
12	282.42 *	0.50%*	160.18 *	4 *	0.40%*
13	25.11 *	0.00%*	25.35 *	1 *	0.10%*
15	326.93 *	0.50%*	163.5 *	6 *	0.60%*
18	31.94 *	0.10%*	32.09 *	1 *	0.10%*
20	569.78 *	1.00%*	202.68 *	10 *	1.00%*
25	195.33 *	0.30%*	99.35 *	4 *	0.40%*
28	120.58 *	0.20%*	84.66 *	2 *	0.20%*
30	38.98 *	0.10%*	39.39 *	1 *	0.10%*

What was the primary reason for you to ride a bicycle over the last 30 days? (**BIKEREASON**)

	Weighted	Weighted%	Std. Error	Surveyed	Surveyed %
I dont know	493.73 *	0.80%*	231.76 *	7 *	0.70%*
I prefer not to answer	302.02 *	0.50%*	483.88 *	6 *	0.60%*
Commuting to work or school	1592.41 *	2.70%*	367.77 *	27 *	2.60%*
Recreation	4755.28	7.90%	721.75	80	7.70%
Exercise/for my health	4138.12	6.90%	635.66	77	7.40%
Personal errands (to the store, post office, and so on)	1346.88 *	2.30%*	401.09 *	20 *	1.90%*
Required for my job	165.57 *	0.30%*	118.5 *	2 *	0.20%*
Didnt bicycle	47046.71	78.60%	982.18	817	78.90%

When you ride a bicycle, is it mostly on… (**BIKETERRAIN**)

	Weighted	Weighted %	Std. Error	Surveyed	Surveyed
I dont know	123.84 *	0.20%*	76.44 *	3 *	0.30%*
I prefer not to answer	224.08 *	0.40%*	451.19 *	5 *	0.50%*
Bike lanes on paved roads	4900.26	8.20%	754.58	83	8.00%
Shoulders of paved roads	4065.67	6.80%	484.96	77	7.40%
Paved roads, not on shoulders or lined bike lanes (riding in the same lane as cars or other vehicles)	3359.14	5.60%	705.61	62	6.00%
Bike paths, walking paths, or trails (defined as paths where cars are not allowed to drive)	6102.29	10.20%	644.15	107	10.30%
Unpaved roads (for example dirt, gravel, sand)	1173.01 *	2.00%*	310.5 *	21 *	2.00%*
Sidewalks	4027.68	6.70%	709.72	51	4.90%
Didnt bicycle	35864.75	59.90%	979.68	627	60.50%

What keeps you, if anything, from riding a bicycle more often? Select all that apply. (**NOBIKEWHY**)

	Weighted	Weighted %	Std. Error	Surveyed	Surveyed %
Personal health or disability	7726.26	7.00%	875.88	127	7.10%
Lack of safe / comfortable bicycle facilities	8722.79	7.90%	949.4	149	8.40%
Weather	12147.35	11.00%	1196.36	215	12.10%
Safety while biking next to / with cars	13448.48	12.20%	1059.1	227	12.80%
Safety while biking through intersections	8248.43	7.50%	843.74	139	7.80%
Work schedule, family obligations	10967.07	9.90%	1266.65	181	10.20%
Distance to destination is too far	10833.01	9.80%	867.48	189	10.60%
Needing to carry bulky items	4903.96	6.40%	672.9	81	6.20%
Not interested in bicycling	11492.37	10.40%	983	216	12.10%
Nothing keeps me from riding more often	2448.03	2.22%	478.28	48	2.52%
No bicycle available	16175.36	14.65%	971.41	269	14.12%

How many of the last 30 days did you use public transit? (**TRANSTRIPS**)

	Weighted	Weighted %	Std. Error	Surveyed	Surveyed %
I dont know	288.75 *	.5%*	133.88 *	5 *	0.50%*
I prefer not to answer	137.72 *	.2%*	470.67 *	5 *	0.50%*
0	56623.86	94.7%	706.87	995	96.10%
1	250.54 *	.40%*	113.05 *	5 *	0.50%*
2	721.53 *	1.2%*	372.53 *	7 *	0.70%*
3	58.78 *	.1%*	60.03 *	1 *	0.10%*
4	50.94 *	.1%*	51.65 *	1 *	0.10%*
5	142.5 *	.20%*	83.89 *	3 *	0.30%*
6	273.56 *	.5%*	204.73 *	3 *	0.30%*
8	70.32 *	.1%*	79.22 *	1 *	0.10%*
9	298.65 *	.5%*	318.26 *	1 *	0.10%*
12	330.41 *	.6%*	305.84 *	2 *	0.20%*
15	360.57 *	.6%*	232.22 *	4 *	0.40%*
18	42.42 *	.1%*	42.87 *	1 *	0.10%*
26	168.92 *	.3%*	181.82 *	1 *	0.10%*

What keeps you, if anything, from using public transit more often? Select all that apply. (**NOPUBTRANSWHY**)

	Weighted	Weighted %	Std. Error	Surveyed	Surveyed %
Bus doesnt go where I need it to go	15628.45	20.30%	1274.29	264	20.30%
Bus doesnt run when I need it to	12730.88	16.50%	1008.83	214	16.50%
Work schedule, family obligations	12267.51	15.90%	1156.56	213	16.40%
Personal health or disability	2688.56	3.50%	636.31	34	2.60%
Weather	955.67 *	1.20%*	289.19 *	17 *	1.30%*
Safety	1463.56 *	1.90%*	398.36 *	20 *	1.50%*
Distance to bus stop is too far	7741.29	10.10%	1592.47	138	10.60%
Needing to carry bulky items	4903.96	6.37%	672.90	81	6.24%
Nothing keeps me from using public transit more often	18563.79	24.13%	1708.84	317	24.42%

Appendix B. Final Recruitment Script

General Documentation Notes:

- Numbered orange heading lines indicate a new screen
- Blue heading lines indicate a new variable or skip logic
- "Type" indicates the type of variable that will be collected
    - SelectSingle – Select one option from list provided
    - SelectMultiple – Select multiple option from list provided
    - NumberEntry – Number field within the range provided
    - TextEntry – Open text field
    - CalendarDropDown – Select a date from a calendar provided
    - Computed- Calculate variable used in recalls
- ProgrammerNote provides the logic for when the question will be presented
- In CATI instruments, the text in ALL CAPS is for instruction to the CATI interviewer and is not to be read out loud
- Text that is wrapped with square brackets and preceded by a dollar sign '$' denotes situations where the text varies based on roster row number and other context, e.g., [$ARE_YOU] will be replaced with either "are you" or "is John Jr."
- Exit interview language (e.g. thank you screens) are found at the end of the document

METADATA

HOTLINE_NUMBER

TYPE: Computed

CASE WHEN 1=1 THEN 1 ELSE 2 END

ATEXT	AVALUE
1-855-631-2701	1
	2

NOTE: Do not store in history

ENDSURVEY

TYPE: SelectSingle

ProgrammerNote: Displayed ONLY if recruitment has closed. Initiationmode=WEB, DOW flags to be set.

QTEXT:

WEB	CATI
Welcome to the Billings Yellowstone County Household Travel Survey. We appreciate your interest in participating in the survey; however, we have completed the survey and we are no longer accepting additional participants at this time. Please feel free to share your opinions about transportation in your region with us via our "contact us" page at "www.BigSkyDailyTravel.com/ContactUs.aspx" or by calling [$HOTLINE_NUMBER]. You will be taken back to the survey homepage by clicking 'CONTINUE'. 	

ATEXT:

WEB	CATI	AVALUE	BRANCH
CONTINUE		1	END

Branch

CONDITION	BRANCH
INITIATIONMODE=CATI	SINTRO1
INITIATIONMODE=WEB	AGEVER

Introduction

1. SINTRO1

SINTRO1_REC
TYPE: SelectSingle
ProgrammerNote: INITIATIONMODE=CATI
QTEXT:

CASE WHEN INOUT = outbound THEN 1 ELSE 2 END

ATEXT	AVALUE
Hello, my name is [INTERVIEWER_NAME]. I am calling about the Billings Yellowstone County Household Travel Survey being conducted by the City of Billings, Yellowstone County and the Montana Department of Transportation. Your household has been randomly selected to be part of this important survey about transportation in your area. Are you a member of this household and at least 18 years old?	1
Hello, my name is [INTERVIEWER_NAME]. Thank you for calling to be part of the Billings Yellowstone County Household Travel Survey being conducted by the City of Billings, Yellowstone County and the Montana Department of Transportation. Before we begin the survey I need to confirm that you are a member of this household and at least 18 years old?	**2**

SINTRO1
TYPE: SelectSingle
ProgrammerNote: INITIATIONMODE=CATI
QTEXT:

WEB	CATI
	[$SINTRO1_REC]

ATEXT:

WEB	CATI	AVALUE	BRANCH
	YES, RESPONDENT IS AT LEAST 18 AND A HOUSEHOLD MEMBER	1	INTRO1
	NO, RESPONDENT IS EITHER NOT AT LEAST 18 OR A NOT HOUSEHOLD MEMBER	2	A2
	ANSWERING MACHINE	101	READMSG
	NONWORKING, DISCONNECTED, CHANGED	102	RESULT

A2

Do not store in history

A2
TYPE: SelectSingle
ProgrammerNote:
QTEXT:

WEB	CATI
	May I please speak with a household member who is at least 18 years old? [IF NEEDED: Household members are people who think of the household as their primary residence. It includes people who usually stay in the household but are temporarily away on business, vacation, or in the hospital. It does not include someone just visiting, such as a college student who normally lives away at school.

ATEXT:

WEB	CATI	AVALUE	BRANCH
	AVAILABLE	1	SINTRO1
	NOT AVAILABLE AT THIS TIME	2	ADULT_SET
	THERE ARE NONE	3	A3_SET
	GO TO RESULT	4	RESULT

AGEVER

Do not store in history

AGEVER
TYPE: SelectSingle
ProgrammerNote: INITIATIONMODE=WEB
QTEXT:

WEB	CATI
Before we start the survey, please confirm that you are a member of this household who is at least 18 years old.	

ATEXT:

WEB	CATI	AVALUE	BRANCH
Yes, I am at least 18 and a household member		1	INTRO1
No, I am not at least 18		2	A3_SET
I am not a household member		3	A3_SET

A3_SET

INT_A3_SET
TYPE: Calculated
ProgrammerNote:

=302

A3

Do not store in history

INT_A3

TYPE: SelectSingle

ProgrammerNote:

QTEXT:

WEB	CATI
Is there at least one person 18 or older living at this address?	Is there at least one person over 18 living at this address? IF RESPONDENT IS A CHILD, ASK FOR AN OLDER HOUSEHOLD MEMBER.

ATEXT:

WEB	CATI	AVALUE	BRANCH
No one living at this address is 18 or older	NO ONE LIVING IN HH IS 18 OR OLDER	606	NOADULT_SET
Yes, there is at least one person 18 or older living at this address, but they are not available	THERE ARE HHMS 18 OR OLDER BUT NOT AVAILABLE NOW	302	ADULT_SET
Yes, there is at least one person 18 or older living at this address and they are available to continue the survey now	THERE ARE HHM 18 OR OLDER AVAILABLE NOW	102	INTRO1

INTRO1

INTRO1
TYPE: SelectSingle
QTEXT:

WEB	CATI
Thank you for your interest in the Billings Yellowstone County Household Travel Survey. The research is is sponsored by The Billings-Yellowstone County Metropolitan Planning Organization and the Montana Department of Transportation with support and oversight from the Yellowstone County Board of Planning, Billings City Council, and the Yellowstone County Commissioners . • As part of this study, we are asking the people in your household to keep track of all the places they go by installing and using the DailyTravel smartphone application. • The app will prompt you to fill in or confirm details of each trip you make throughout your assigned travel day. • People in your home using the smartphone app will be asked to use the app for 7 days. This should take about 5 minutes per day for each person using the app. • People in your home without a smartphone should take part by recording every place they go on a travel log, then entering those places online. • Whether you use the app or report by your travel by web or phone, as a thank you, your household will receive $15.. Your participation will qualify your household for a drawing of a $500 gift card. br> Your participation is voluntary, and your answers will be confidential as required by law. There are no foreseeable risks to your participation in this survey. If you have questions about your rights and welfare as a research participant, please call the Westat Human Subjects Protections office at 1-888-920-7631. Please leave a message with your full name, the name of the research study that you are calling about--the Billing Yellowstone Count household Travel Survey, and a phone number beginning with the area code. Someone will return your call as soon as possible.	• The study we are conducting is about how people get around in the Billings Yellowstone county area. As part of this study, we are asking the people in your household to keep track of all the places they go by installing and using the DailyTravel smartphone application • The app will prompt you to fill in or confirm details of each trip you make throughout your assigned travel day • People in your home using the Smartphone app will be asked to use the app for 7 days • People in your home without a smartphone should take part by recording every place they go on a travel log, then entering those places online. • Whether you use the app or report by your travel by web or phone, as a thank you, your household will receive $15.. Your participation will qualify your household for a drawing of a $500 gift cards. Your participation is voluntary, and your answers will be confidential as required by law. [IF NEEDED: Good transportation facilities and services are essential for access to jobs, schools, health care, and other important daily activities. To keep our area moving, we need data on how, when, where, and why people travel. This information helps leadership make important decisions about how and where to invest your federal and state gas taxes. Your participation will help us better plan for future transportation needs in your community.] There are no foreseeable risks to your participation in this survey. If you have questions about your rights and welfare as a research participant, please call the Westat Human Subjects Protections office at 1-888-920-7631. Please leave a message with your full name, the name of the research study that you are calling about--the Billing Yellowstone Count household Travel Survey, and a phone number beginning with the area code. Someone will return your call as soon as possible

ATEXT:

WEB	CATI	AVALUE	BRANCH
Continue with survey	Continue with survey	100	HHSIZ

HHSIZ

DQ_ACTIVE

TYPE: Calculated

NOTE: If 'retiree household' screening needs to be disabled, the CASE statement should be updated to CASE WHEN 1=1 THEN 0 ELSE 1 END

CASE WHEN 1=1 THEN 1 ELSE 0 END

ATEXT	AVALUE
Active	1
Inactive	2

DQ_RECALL

TYPE: Calculated

NOTE:

CASE WHEN [$DQ_ACTIVE]=1 THEN 1 ELSE 2 END

ATEXT	AVALUE
The following questions are being asked to make sure that we have different types of households participating in the survey. We need to make sure that the responses we get are similar to the population of the Billings Yellowstone County area. 	1
Let's start with some general questions about your household. These questions are being asked to make sure that we have different types of households participating in the survey. We need to make sure that the responses we get are similar to the population of the Billings Yellowstone County area. First,	2

HHSIZ

TYPE: NumberEntry (1-12)

ProgrammerNote: Asked Always

QTEXT:

WEB	CATI
[$DQ_RECALL]Including yourself, how many people live in your home?	[$DQ_RECALL]Including yourself, how many people live in your home?

ATEXT:

WEB	CATI	AVALUE	BRANCH
NumberEntry	NumberEntry	HHSIZ IN (1-12) AND DQ_ACTIVE=1	HHAGES
NumberEntry	NumberEntry	HHSIZ IN (1-12) AND DQ_ACTIVE=2	HHVEH
I prefer not to answer	REFUSED	-7	+1
I don't know	DON'T KNOW	-8	+1

HHCONV_SET

INT_HHCONV_SET
TYPE: Calculated
ProgrammerNote: If respondent doesn't supply an actual number to HHSIZ (HHSIZ IN (-7, -8)) set disposition to "Initial Refusal" (500). A response to INT_HHCONV will overwrite INT_HHCONV_SET.
QTEXT:

=500

INT_HHCONV

INT_HHCONV
TYPE: SelectSingle
ProgrammerNote: Asked if respondent doesn't supply a positive number to HHSIZ (HHSIZ IN (-7, -8)
QTEXT:

WEB	CATI
The reason we ask about the number of people living in your household is because this information is directly related to the types and number of trips that households make and because it helps us understand the travel patterns and needs of the community. Without a response, we cannot continue the survey. Will you reconsider and tell us how many people, including yourself, live in your home?	The reason we ask about the number of people living in your household is because this information is directly related to the types and number of trips that households make and because it helps us understand the travel patterns and needs of the community. Without a response, we cannot continue the survey. Will you please tell us, how many people, including yourself, live in your home?

ATEXT:

WEB	CATI	AVALUE	BRANCH
Yes	RESPONDENT AGREES TO PROVIDE THE NUMBER OF HH MEMBERS	102	HHSIZ
No (quit the survey)	RESPONDENT REFUSES TO PROVIDE THE NUMBER OF HH MEMBERS	500	THANK04

HHAGES

AGERANGE1
TYPE: NumberEntry (0-12)
QTEXT

WEB	CATI
How many people in your household are between 0 and 17 years old?	How many people in your household are between 0 and 17 years old?

AGERANGE2
TYPE: NumberEntry (0-12)
QTEXT

WEB	CATI
How many between 18 and 44?	How many between 18 and 44?

AGERANGE3
TYPE: NumberEntry (0-12)
QTEXT

WEB	CATI
How many between 45 and 64?	How many between 45 and 64?

AGERANGE4
TYPE: NumberEntry (0-12)
QTEXT

WEB	CATI
How many are 65 or older?	How many are 65 or older?

HHAGERCHK

HHAGER
Type: Computed

AGERANGE1+AGERANGE2+AGERANGE3+AGERANGE4

AGERANGECHECK
TYPE: COMPUTED

CASE WHEN HHAGER<>HHSIZ THEN 1 ELSE 2 END

ATEXT	AVALUE	
The number of people you reported isn't equal to your household size.	1	HHAGEDIFF
Number of people are equal to HHSIZE	2	HHVEH

HHAGEDIFF

HHAGEDIFF
Type: SelectSingle
QTEXT:

WEB	CATI
The number of people you reported in each age group is different than the number you told us are in your household. Please select which needs to be corrected below.	The number of people you reported in each age group you reported is [$HHAGER] which is different than the number you told us are in your household [$HHSIZ]. Which do we need to correct?

ATEXT:

WEB	CATI	AVALUE	BRANCH
Household size: [$HHSIZ]	HOUSEHOLD SIZE: [$HHSIZ]	1	HHSIZ
Total from the ranges: [$HHAGER]	RANGE TOTAL: [$HHAGER]	2	HHAGES

HHVEH

HHVEH
TYPE: NumberEntry (0-12)
ProgrammerNote: Asked Always
QTEXT:

WEB	CATI
How many motor vehicles are owned, leased, or available for regular use by the people who live in your household? Please be sure to include motorcycles, mopeds and RVs.	How many motor vehicles are owned, leased, or available for regular use by the people who live in your household? Please be sure to include motorcycles, mopeds and RVs.

ATEXT:

WEB	CATI	AVALUE	BRANCH
NumberEntry	NumberEntry	0-12	DQCHECKS
I prefer not to answer	REFUSED	-7	+1
I do not know	DON'T KNOW	-8	+1

VEHCONV_SET

INT_VEHCONV_SET

TYPE: Calculated

ProgrammerNote: If respondent doesn't supply an actual number to HHVEH (HHVEH IN (-7, -8)) set disposition to "Initial Refusal" (500). A response to VEHCONV will overwrite INT_VEHCONV_SET.

QTEXT:

=500

VEHCONV

INT_VEHCONV

Type: SelectSingle

ProgrammerNote: Asked if respondent doesn't supply an actual number to HHVEH (HHVEH IN (-7, -8))

QTEXT:

WEB	CATI
Knowing how many vehicles are available to households in the survey is important for transportation planners because this information is related to the types of trips that people make and because it helps us understand the travel patterns and needs of the community. Without a response to this question, we cannot continue the survey. Will you reconsider and tell us, how many motor vehicles are owned, leased, or available for regular use by the people who live in your household? Please be sure to include motorcycles, mopeds and RVs.	Knowing how many vehicles are available to households in the survey is important for transportation planners because this information is related to the types of trips that people make and because it helps us understand the travel patterns and needs of the community. Without a response to this question, we cannot continue the survey. Will you please tell us, how many motor vehicles are owned, leased, or available for regular use by the people who live in your household? Please be sure to include motorcycles, mopeds and RVs.

ATEXT:

WEB	CATI	AVALUE	BRANCH
Yes	RESPONDENT AGREES TO PROVIDE THE NUMBER OF VEHICLES	102	HHVEH
No (quit the survey)	RESPONDENT CHOOSES TO QUIT THE SURVEY	500	THANK04

DQCHECKS

TALLY

TYPE: Calculated

NOTE: This question is evaluating if we have a household with 1 or more vehicles or fewer than 3 people. If both of those conditions are false AND none of the household members are under 65 years of age, the household will be deemed a candidate to be disqualified. This will allow larger households, and households with 0 vehicles to still participate even if they are elderly or retired.

CASE WHEN (HHSIZ<=2 AND HHVEH>0) AND (agerange1=0 AND agerange2=0 AND agerange3=0 AND agerange4>=1) THEN 1 ELSE 2 END

ATEXT	AVALUE
Candidate for Disqualification – All Age 65+, 2-or-less HHSIZ, and 1+ HHVEH	1
Qualified	2

DQ_DICE_ROLL
TYPE: Calculated
NOTE: Don't evaluate if this question already has a value (is not null).

Generate a random number from 1 to 1000 (include both 1 and 1000 in the set)

DQ_EVALUATION
TYPE: Calculated
NOTE: This question will commit a random number generation between 1 and 1000 and then disqualify any whose generated number is under 200.

CASE WHEN TALLY=1 AND DQ_DICE_ROLL<=200 THEN 1 ELSE 2 END

ATEXT	AVALUE	BRANCH
Disqualified	1	INT_DQ_SET
Qualified	2	ADD_CHECK

INT_DQ_SET

INT_DQ_SET
TYPE: Calculated

=606

DQ_MESSAGE

DQ_MESSAGE
TYPE: TextEntry
ProgrammerNote: Max character limit or 5,000.

WEB	CATI
Thank you for your responses. We have more than enough households similar to yours already so we do not need you to continue. If there are particular things you want to share about transportation in your region, you can provide them below. If you have any questions, please call the hotline number: [$HOTLINE_NUMBER]	Thank you for your responses. The program is telling me that we have enough households similar to yours already so we do not need to continue with the remainder of this survey. Before I end the call, I would be happy to record your concerns about transportation issues in your region. Is there anything you would like me to convey to transportation planners who use this data? ENTER VERBATIM TEXT BELOW IF NEEDED: PARTICIPANT MAY ASK ABOUT THEIR INCENTIVE. IF SO FORWARD THE CASE TO YOUR SUPERVISOR. IF YOUR SUPERVISOR IS UNAVAILABLE TELL THE PARTICIPANT THAT A SUPERVISOR WILL CONTACT THEM ABOUT THE INCENTIVE AS SOON AS POSSIBLE.

Branch

Condition	Branch
ELSE	END

CONGESTION_PRIORITY

CONGESTPRIORITY

TYPE: SelectSingle
Programmer Note: Asked if $R=1
QTEXT:

The following questions will ask your opinions on transportation needs and planning in your region.

For each statement below, indicate to what degree you agree or disagree. On a scale of Stronly Disagree, Disagree, Undecided, Agree, or Strongly Agree.

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
CONGESTION1 Billings roadways are congested at morning and evening rush hours.					
CONGESTION2 Congestion is when I am surrounded by vehicles on the road, but all the vehicles are still traveling at a reasonable speed.					
CONGESTION3 Congestion is when I have to drive below the speed limit because of other vehicles around me.					
CONGESTION4 Congestion is when I have to sit through more than one cycle at a traffic light.					
FUNDING Given that current transportation needs are greater than the amount of money available to address them, I support paying more taxes or fees for transportation system improvements.					
PRIORITY1 It should be a high priority to add and improve public transit (bus) services in the Billings area					
PRIORITY2 It should be a high priority to add and improve bicycle facilities, like bicycle lanes, trails/paths, and racks					
PRIORITY3 It should be a high priority to add and improve pedestrian facilities, like sidewalks, trails/paths, and crosswalks					
PRIORITY4 It should be a high priority to add and improve roadways for vehicles					

CONGESTIONCHOICE

CONGCHOICE

TYPE: SelectSingle
Programmer Note: Asked if $R=1
QTEXT:

If I knew I would encounter _____ minutes of congestion on my way to or from work, I would chose an alternate route.

ATEXT:

WEB	CATI	AVALUE
Less than 3 minutes	LESS THAN 3 MINUTES	1
5 minutes	5 MINUTES	2
10 minutes	10 MINUTES	3
15 minutes	15 MINUTES	4
20 minutes	20 MINUTES	5
More than 20 minutes	MORE THAN 20 MINUTES	6
Other:_____	OTHER:_____	97
I prefer not to answer	REFUSED	-7
I don’t know	DON'T KNOW	-8

CONGESTION_O

TYPE: TextEntry

ProgrammerNote: Asked if respondent responds Other to CONGESTIONCHOICE (CONGESTIONCHOICE=97)

QTEXT:

Please describe…

TAXES

TYPE: SelectSingle

Programmer Note: Asked if $R=1

QTEXT:

If taxes or fees were raised to improve transportation in the Billings area, what would you want to see the additional revenues used for?

ATEXT:

WEB	CATI	AVALUE
Maintain our existing transportation corridors, including streets, roads, sidewalks, bike lanes, and crosswalks	MAINTAIN OUR EXISTING TRANSPORTATION CORRIDORS, INCLUDING STREETS, ROADS, SIDEWALKS, BIKE LANES, AND CROSSWALKS	1
Build new transportation corridors	BUILD NEW TRANSPORTATION CORRIDORS	2
Widen existing transportation corridors	WIDEN EXISTING TRANSPORTATION CORRIDORS	3
Improve public transit (bus)	IMPROVE PUBLIC TRANSIT (BUS)	4
Improve bicycle facilities, such as trails/paths and lanes	IMPROVE BICYCLE FACILITIES, SUCH AS TRAILS/PATHS AND IANES	5
Improve pedestrian facilities, such as sidewalks and crosswalks	IMPROVE PEDESTRIAN FACILITIES, SUCH AS SIDEWALKS AND CROSSWALKS	6
Improve safety and reduce crashes	IMPROVE SAFETY AND REDUCE CRASHES	7
Don't know	DON'T KNOW	97

ADD_CHECK

QUALIFIED

TYPE: Label

WEB	CATI
In the next steps, we will confirm details about you and where you reside, and if applicable, where you work or go to school.	In the next steps, we will confirm details about you and where you reside, and if applicable, where you work or go to school.

CHGADDPHYS

TYPE: SelectSingle

ProgrammerNote: Asked if addresses is not a PO Box (POBOXFLAG=0)

QTEXT:

WEB	CATI
First, we need to confirm your address. Do you live at… [$BASESTRT][$BASEAPT] [$BASECITY], [$BASESTAT] [$BASEZIP]	Next, I need to confirm your address. Do you live at… [$BASESTRT][$BASEAPT] [$BASECITY], [$BASESTAT] [$BASEZIP]

ATEXT:

WEB	CATI	AVALUE	BRANCH
Yes	YES	1	ADD_CHECK3
No, the apartment number is incorrect	NO, THE APARTMENT NUMBER IS INCORRECT	2	ADD_CHECK2
No, the zip code is incorrect	NO, THE ZIP CODE IS INCORRECT	3	ADD_CHECK2
No, both the apartment number and zip code are incorrect	NO, BOTH THE APARTMENT NUMBER AND ZIP CODE ARE INCORRECT	4	ADD_CHECK2
No, this is not my address	NO, THIS IS NOT RESPONDENT'S ADDRESS	5	ADD_CHECK3
I prefer not to answer	REFUSED	-7	THANK02
I don't know	DON'T KNOW	-8	THANK02

CHADDBOX

TYPE: SelectSingle

ProgrammerNote: Asked if address is a PO Box (POBOXFLAG=1)

QTEXT:

WEB	CATI
The P.O. BOX mailing address we have on file for you is: [BASESTRT] [BASECITY], [BASESTAT] [BASEZIP] br> Is this correct?	The P.O. BOX mailing address we have on file for you is: [BASESTRT] [BASECITY], [BASESTAT] [BASEZIP] br> Is this correct?

ATEXT:

WEB	CATI	AVALUE	BRANCH
Yes	YES	1	ADD_CHECK3
No, this is not my address	NO, THIS IS NOT RESPONDENT'S ADDRESS	5	ADD_CHECK3

WEB	CATI	AVALUE	BRANCH
I prefer not to answer	REFUSED	-7	THANK02
I don’t know	DON'T KNOW	-8	THANK02

ADD_CHECK2

CHGADD1

TYPE: TextEntry (10 characters)
ProgrammerNote: Asked if apt number or both apt number and zip code are incorrect (CHGADD in (2,4))
QTEXT:

WEB	CATI
What is your correct apartment number?	What is your correct apartment number?

CHGADD2

Type: TextEntry (5 characters)
ProgrammerNote: Asked if zip code or both zip code and apt number are incorrect (CHGADD in (3,4))
QTEXT:

WEB	CATI
What is your correct zip code?	What is your correct zip code?

ADD_CHECK3

HGEOCODE

TYPE: GeoCodeAddress
ProgrammerNote: Asked if sample address is a PO BOX (POBOXFLAG=1) or CHADDPHYS=5 or MATCHSTATUS NOT IN (MP,MA) or INT_THANK02=603
QTEXT:

WEB	CATI
Because this is a survey about where and how people travel, we need to record the physical address of your home. What is the street address of your home?	SEARCH FOR AND CONFIRM THE LOCATION ON THE MAP ON THE RIGHT Because this is a survey about where and how people travel, we need to record the physical address of your home. [ENTER ADDRESS] [IF NEEDED: I am now using a google mapping tool to map your address – the tool places your address on the map near: (DESCRIBE PLACEMENT) Does that sound like the correct location?]

NOTE: Write address from sample import –or- HGEOCODE (if asked) to TBW. Include GEOCODE_TYPE in write-out.

POBOX1

HASPOBOX

Type: SelectSingle

ProgrammerNote: Not a PO Box in the sampled address (POBOXFLAG=0).

QTEXT:

WEB	CATI
Do you also use a P.O. Box to receive personal mail?	Do you also use a P.O. Box to receive personal mail?

ATEXT:

WEB	CATI	AVALUE	BRANCH
Yes	YES	1	POBOX2
No	NO	2	HOMEOWN

POBOX2

PB_NUMBER

Type: TextEntry

ProgrammerNote: Asked if respondent has both sampled address and PO Box (HASPOBOX=1)

QTEXT:

What is your P.O. Box address?

P.O. BOX NUMBER: [PB_NUMBER]

PB_CITY

Type: TextEntry

ProgrammerNote: Asked if respondent has both sampled address and PO Box (HASPOBOX=1)

QTEXT:

CITY: [PB_CITY]

PB_STATE

Type: TextEntry

ProgrammerNote: Asked if respondent has both sampled address and PO Box (HASPOBOX=1)

QTEXT:

STATE: [PB_STATE]

PB_ZIP

Type: TextEntry

ProgrammerNote: Asked if respondent has both sampled address and PO Box (HASPOBOX=1)

QTEXT:

ZIP: [PB_ZIP]

POBOX

Type: Calculated

ProgrammerNote: Asked if respondent has both sampled address and PO Box (HASPOBOX=1)

QTEXT:

|| 'PO BOX ' || '[$PBNUMBER]' || ', ' || '[$PBCITY]' || ', ' || '[$PBSTATE]' || '[$PBZIP]'

HOMEOWN

HOMEOWN

TYPE: SelectSingle
Programmer Note:
QTEXT:

WEB	CATI
Do you own or rent your home?	Do you…

ATEXT:

WEB	CATI	AVALUE
Own without mortgage	Own your home without a mortgage,	1
Own with mortgage	Own your home with a mortgage,	2
Rent	Rent your home,	3
Occupied without payment of rent	Occupy your home without payment of rent,	4
Some other arrangement	or some other arrangement?	97
I prefer not to answer	REFUSED	-7
I don’t know	DON'T KNOW	-8

HOMEOWN_O

TYPE: TextEntry
ProgrammerNote: Asked if respondent responds Other,Specify to HOMEOWN (HOMEOWN=97)
QTEXT:

Please describe your arrangement.

RESTY

TYPE: SelectSingle
ProgrammerNote: Always
QTEXT:

WEB	CATI
Do you live in a…	Do you live in a…

ATEXT:

WEB	CATI	AVALUE
Single-family detached house,	Single-family detached house,	1
Single-family attached house (duplex/townhouse/rowhouse),	Single-family attached house (duplex/townhouse/rowhouse),	2
An apartment or condo,	An apartment or condo,	3
Manufactured Home or Trailer,	Manufactured Home or Trailer,	4
Boat, RV, Van,	Boat, RV, Van,	5
Dorm Room, Fraternity or Sorority House, or	Dorm Room, Fraternity or Sorority House, or	6
Some other type of housing?	Some other type of housing?	97
I prefer not to answer	REFUSED	-7
I don’t know	DON'T KNOW	-8

RESTY_O
TYPE: TextEntry
QTEXT:

Please describe…

HHINC

HHINC

TYPE: SelectSingle
ProgrammerNote: Asked Always
QTEXT:

WEB	CATI
In surveys like these, households are sometimes grouped according to income. Because income is related to how, when and why people go from place to place, and because we want to be sure to include all types of households in our survey, please identify which category represents your total household income for last year.	In surveys like these, households are sometimes grouped according to income. Because income is related to how, when and why people go from place to place, and because we want to be sure to include all types of households in our survey, I need to ask your total household income for 2015. I am going to read a list of income ranges. Please stop me when I get to yours:

ATEXT:

WEB	CATI	AVALUE
Less than $10,000	Less than $10,000	1
$10,000 to $14,999	$10,000 to $14,999	2
$15,000 to $19,999	$15,000 to $19,999	3
$20,000 to $24,999	$20,000 to $24,999	4
$25,000 to $29,999	$25,000 to $29,999	5
$30,000 to $34,999	$30,000 to $34,999	6
$35,000 to $39,999	$35,000 to $39,999	7
$40,000 to $44,999	$40,000 to $44,999	8
$45,000 to $49,999	$45,000 to $49,999	9
$50,000 to $59,999	$50,000 to $59,999	10
$60,000 to $74,999	$60,000 to $74,999	11
$75,000 to $99,999	$75,000 to $99,999	12
$100,000 to $124,999	$100,000 to $124,999	13
$125,000 to $149,999	$125,000 to $149,999	14
$150,000 to $199,999	$150,000 to $199,999	15
$200,000 or more	$200,000 or more	16
I prefer not to answer	REFUSED	-7
I don’t know	DON’T KNOW	-8

Page branch: [$HHVEH]>=1->PVEHICLESTART; ELSE->PPERSONSTART

Begin Vehicle Roster

VEHICLESTART

VEHNO
TYPE: Computed
QTEXT:

query:[$R]

NEW_NEXT
TYPE: Computed
QASKEDIF: HHVEH>=1

query: CASE WHEN [$R]=1 THEN 1 ELSE 2 END

ATEXT:

WEB = CATI ATEXT	AVALUE
newest	1
next newest	2

YEAR_MAKE
HEADING: Reporting on vehicle [VEHNO]

VEHYEAR
TYPE: NumberEntry
Range: 1900 - 2017
ProgrammerNote: Asked if HH reports having at least one vehicle
QASKEDIF: HHVEH>=1

WEB	CATI
Now, we would like you to tell us about each of the vehicles available to the people that live in your household. What's the year of the [$NEW_NEXT] vehicle?	Now, we would like you to tell us about each of the vehicles available to the people that live in your household. What's the year of the [$NEW_NEXT] vehicle?

ATEXT:

WEB ATEXT	CATI ATEXT	AVALUE
ENTER YEAR	ENTER YEAR	
I don’t know	DON’T KNOW	-8
I prefer not to answer	REFUSED	-7

MAKE

TYPE: DropDown. Dynamic list will auto-filter as respondent types in MAKE.
ProgrammerNote: Asked if HH reports having at least one vehicle
QASKEDIF: HHVEH>=1
QTEXT:

WEB	CATI
What is the make of this vehicle? *Click and type below to quickly find the make:*	What is the make of this vehicle? CLICK AND TYPE BELOW TO QUICKLY FIND THE MAKE:

ATEXT

WEB	CATI	AVALUE
MAKE	MAKE	OPEN
Something else	SOMETHING ELSE	997
I don't know	DON'T KNOW	-8
I prefer not to answer	REFUSED	-7

MAKE_O

TYPE: TextEntry
ProgrammerNote: Asked if respondent responds "Something else" to MAKE
QASKEDIF: MAKE=997
AREQUIREDIF: MAKE=997
MaxLength: 50
QTEXT:

WEB	CATI
Please describe the make of this vehicle.	Please describe the make of this vehicle.

ATEXT

WEB	CATI	AVALUE
Enter Text	Enter Text	OPEN

MAKETEXT

TYPE: Computed
ProgrammerNote:
STYLE: query: CASE WHEN [$MAKE:C]<>997 THEN 1 ELSE 2 END

ATEXT	AVALUE
[$MAKE]	1
[$MAKE_O]	2

This section will have a banner containing [$YEAR] [$ MAKE].

MODEL

MODEL

TYPE: DropDown. Dynamic list will auto-filter as respondent types in MODEL.
ProgrammerNote: Asked if HH reports having at least one vehicle
QASKEDIF: HHVEH>=1
QTEXT:

WEB	CATI
What is the model of this vehicle? *Click and type below to quickly find the model:*	What is the model of this vehicle? CLICK AND TYPE BELOW TO QUICKLY FIND THE MODEL:

ATEXT

WEB	CATI	AVALUE
MODEL	MODEL	OPEN
Something else	SOMETHING ELSE	99997
I don't know	DON'T KNOW	-8
I prefer not to answer	REFUSED	-7

MODEL_O

TYPE: TextEntry
ProgrammerNote: Asked if respondent responds "Something else" to MODEL
QASKEDIF: MODEL=99997
AREQUIREDIF: MODEL=99997
MaxLength: 50
QTEXT:

WEB	CATI
Please describe the model of this vehicle.	Please describe the model of this vehicle.

ATEXT

WEB	CATI	AVALUE
ENTER TEXT	ENTER TEXT	OPEN

MODELTEXT

TYPE: Computed
ProgrammerNote:
STYLE: query: CASE WHEN [$MODEL:C]<>99997 THEN 1 ELSE 2 END

ATEXT	AVALUE
[$MODEL]	1
[$MODEL_O]	2

VMORE

HHVEH_SO_FAR
TYPE: Computed

query: GREATEST([$HHVEH], [$VEHNO])

HHVEH_LIST_SO_FAR
TYPE: Computed

query: CASE WHEN [$R] >= 1 THEN '[$VEHYEARTEXT:R1] [$MAKETEXT:QR1] [$MODELTEXT:QR1]
' ELSE '' END
|| CASE WHEN [$R] >= 2 THEN '[$VEHYEARTEXT:R2] [$MAKETEXT:QR2] [$MODELTEXT:QR2]
' ELSE '' END
|| CASE WHEN [$R] >= 3 THEN '[$VEHYEARTEXT:R3] [$MAKETEXT:QR3] [$MODELTEXT:QR3]
' ELSE '' END
|| CASE WHEN [$R] >= 4 THEN '[$VEHYEARTEXT:R4] [$MAKETEXT:QR4] [$MODELTEXT:QR4]
' ELSE '' END
|| CASE WHEN [$R] >= 5 THEN '[$VEHYEARTEXT:R5] [$MAKETEXT:QR5] [$MODELTEXT:QR5]
' ELSE '' END
|| CASE WHEN [$R] >= 6 THEN '[$VEHYEARTEXT:R6] [$MAKETEXT:QR6] [$MODELTEXT:QR6]
' ELSE '' END
|| CASE WHEN [$R] >= 7 THEN '[$VEHYEARTEXT:R7] [$MAKETEXT:QR7] [$MODELTEXT:QR7]
' ELSE '' END
|| CASE WHEN [$R] >= 8 THEN '[$VEHYEARTEXT:R8] [$MAKETEXT:QR8] [$MODELTEXT:QR8]
' ELSE '' END
|| CASE WHEN [$R] >= 9 THEN '[$VEHYEARTEXT:R9] [$MAKETEXT:QR9] [$MODELTEXT:QR9]
' ELSE '' END
|| CASE WHEN [$R] >= 10 THEN '[$VEHYEARTEXT:R10] [$MAKETEXT:QR10] [$MODELTEXT:QR10]
' ELSE '' END
|| CASE WHEN [$R] >= 11 THEN '[$VEHYEARTEXT:R11] [$MAKETEXT:QR11] [$MODELTEXT:QR11]
' ELSE '' END
|| CASE WHEN [$R] >= 12 THEN '[$VEHYEARTEXT:R12] [$MAKETEXT:QR12] [$MODELTEXT:QR12]
' ELSE '' END

VMORE
TYPE: SelectSingle
ProgrammerNote: Asked if the vehicle number is greater than or equal to number of household vehicles. Vehicle write out to TBW.
QASKEDIF: VEHNO>=HHVEH
QTEXT:

WEB	CATI
You have reported [$VEHNO] of [$HHVEH] vehicles. Have you included every vehicle?	You have reported [$VEHNO] of [$HHVEH] vehicles. Have you included every vehicle?

ATEXT

WEB	CATI	AVALUE
More to report	MORE TO REPORT	1
Done reporting vehicles	DONE REPORTING VEHICLES	2

HHVEH_LIST_SO_FAR_LABEL
TYPE: LabelOnly
QTEXT:

WEB = CATI QTEXT
The following Vehicles have already been reported: (YEAR MAKE MODEL)   [$HHVEH_LIST_SO_FAR]

VEHICLE_END

ISFINALVEH
TYPE: Computed

query: CASE WHEN [$R] >= [$HHVEH] AND [$VMORE:C]=2 THEN 1 ELSE 0 END

Page branch: [$R] >= 12->PVEHICLE_DETAILS;
[$R] < [$HHVEH] OR [$VMORE2:C]=1->PVEHICLESTART+;
ELSE->PVEHICLE_DETAILS

End Vehicle Roster

THE VEHICLE ROSTER WILL RETURN TO YEAR UNTIL ALL VEHICLES ARE COMPLETE AND THEN CONTINUE TO THE VEHICLE DETAILS ROSTER.

BEGIN VEHICLE DETAILS

This section will have a banner containing [$YEAR] [$MAKE] [$MODEL].

VEHICLE_DETAILS

VEHTYPE
TYPE: SelectSingle
ProgrammerNote: Asked about each vehicle reported. Autocode this if known from responses to MAKE and MODEL.
QASKEDIF: HHVEH>=1

WEB QTEXT = CATI QTEXT
What type of vehicle is the [$YEAR] [$MAKE] [$MODEL]?

WEB ATEXT	CATI ATEXT	AVALUE
Automobile/Car/Station Wagon	AUTOMOBILE/CAR/STATION WAGON	1
Van (Mini/Cargo/Passenger)	VAN (MINI/CARGO/PASSENGER)	2
SUV (Santa Fe, Tahoe, Jeep, etc.)	SUV (SANTA FE, TAHOE, JEEP, ETC.)	3
Pickup Truck	PICKUP TRUCK	4
Other Truck	OTHER TRUCK	5
RV (Recreational Vehicle)	RV (RECREATIONAL VEHICLE)	6
Motorcycle/Motorbike	MOTORCYCLE/MOTORBIKE	7
Something Else	SOMETHING ELSE	97
I don’t know	DON’T KNOW	-8
I prefer not to answer	REFUSED	-7

VEHTYPE_O
TYPE: TextEntry
ProgrammerNote: Asked if respondent responds "Something else" to VEHTYPE
QASKEDIF: VEHTYPE=97
AREQUIREDIF: VEHTYPE=97
MaxLength: 50

WEB QTEXT = CATI QTEXT

Please describe the type of vehicle.

ATEXT	AVALUE
ENTER TEXT	

FUEL
TYPE: SelectSingle
ProgrammerNote: Asked about each vehicle reported
QASKEDIF: HHVEH>=1

WEB QTEXT = CATI QTEXT

What type of fuel does it run on?

WEB ATEXT	CATI ATEXT	AVALUE
Gas	GAS	1
Diesel	DIESEL	2
Hybrid, electric or alternative fuel	HYBRID, ELECTRIC OR ALTERNATIVE FUEL	3
Some other fuel	SOME OTHER FUEL	97
I don't know	DON'T KNOW	-8
I prefer not to answer	REFUSED	-7

FUEL_O
TYPE: TextEntry
ProgrammerNote: Asked if respondent responds "Something else" to FUEL
QASKEDIF: FUEL=97
AREQUIREDIF: FUEL=97
MaxLength: 25

WEB QTEXT = CATI QTEXT

Please describe what type of fuel it runs on.

ATEXT	AVALUE
ENTER TEXT	

Begin Person Roster

PERSONSTART

STARTING
TYPE: Computed

CASE WHEN [$R]=1 THEN 1 ELSE 2 END

TEXT	CODE
Now, we are going to ask some details about each person living in your household, starting with you….	1
	2

YOUR_NEXT
TYPE: Computed

CASE WHEN $R=1 THEN 1 ELSE 2 END

TEXT	CODE
your	1
the next person's	2

AGE_COMPUTED
TYPE: Computed

CASE WHEN [$R]=1 THEN 1 ELSE 2 END

TEXT	CODE
	1
Enter '0' for any child who is under one year old.	2

PERSON1

FNAME
TYPE: TextEntry
ProgrammerNote: Asked Always
QTEXT:

WEB	CATI
[$STARTING]What is [$YOUR_NEXT] first name? NOTE: We ask for names only so we can make sure we ask the right questions of everyone. You can use initials, abbreviations, or nicknames if you want. We just ask that no two are the same and that what you use is meaningful to each of you.	[$STARTING]What is [$YOUR_NEXT] first name? [IF NEEDED: We ask for names only so we can make sure we ask the right questions of everyone. You can use initials, abbreviations, or nicknames if you want. We just ask that no two are the same and that what you use is meaningful to each of you.]

ARE_YOU
TYPE: Computed

CASE WHEN $R=1 THEN 1 ELSE 2 END

TEXT	CODE
are you	1
is [$FNAME]	2

ARE_YOU_CAP
TYPE: Computed

CASE WHEN $R=1 THEN 1 ELSE 2 END

TEXT	CODE
Are you	1

TEXT	CODE
Is [$FNAME]	2

DO_YOU_CAP

TYPE: Computed

CASE WHEN $R=1 THEN 1 ELSE 2 END

TEXT	CODE
Do you	1
Does [$FNAME]	2

DO_YOU

TYPE: Computed

CASE WHEN $R=1 THEN 1 ELSE 2 END

TEXT	CODE
do you	1
does [$FNAME]	2

YOUR

TYPE: Computed

CASE WHEN $R=1 THEN 1 ELSE 2 END

TEXT	CODE
your	1
[$FNAME]’s	2

YOU_ARE

TYPE: Computed

CASE WHEN $R=1 THEN 1 ELSE 2 END

TEXT	CODE
you are	1
[$FNAME] is	2

PERSON_PEOPLE

TYPE: Calculated

CASE WHEN HHSIZ=1 THEN 1 ELSE 2 END

TEXT	CODE
person	1
people	2

PERSONAGE

AGE

TYPE: NumberEntry (0-110)

ProgrammerNote: Asked Always
QTEXT:

WEB	CATI
How old [$ARE_YOU]? [$AGE_COMPUTED]	How old [$ARE_YOU]? [$AGE_COMPUTED]

ATEXT:

WEB	CATI	AVALUE	BRANCH
NumberEntry	NumberEntry	0	PERSONAGECHECK
NumberEntry	NumberEntry	1-17	AND $R=1 PERSONAGECHECK
NumberEntry	NumberEntry	1-17	AND $R>1, THEN RELATE
NumberEntry	NumberEntry	18-110	RELATE
I prefer not to answer	REFUSED	-7	PERSON3
I don't know	DON'T KNOW	-8	PERSON3

PERSONAGECHECK

AGECHECK
TYPE: SelectSingle
ProgrammerNote: Asked if subject AGE is "0" (AGE=0) and $R>1
QTEXT:

WEB	CATI
You just reported that [$FNAME] is 0 years old. Please confirm that this is a child under one year old.	You just reported that [$FNAME] is 0 years old. Please confirm that this is a child under one year old.

ATEXT:

WEB	CATI	AVALUE	BRANCH
Yes, this person is an infant	YES, SUBJECT IS UNDER ONE YEAR OLD	1	RELATE
No, this person is not an infant	NO, SUBJECT IS NOT UNDER ONE YEAR OLD	2	PERSONAGE

AGECHECK2
TYPE: SelectSingle
ProgrammerNote: Asked if subject AGE is <18 AND $R=1
QTEXT:

WEB	CATI
You just reported that you are under 18 years old but earlier, you confirmed you were at least 18. Please confirm that you are under 18…	You just reported that you are under 18 years old but earlier, you confirmed you were at least 18. Please confirm that you are under 18.

ATEXT:

WEB	CATI	AVALUE	BRANCH
Yes, I am under 18	YES, UNDER 18	1	ADULT
No, I need to fix my age	NO, FIX AGE	2	PERSONAGE

PERSON3

AAGE
TYPE: SelectSingle

ProgrammerNote: Asked if respondent doesn't supply an actual number for AGE (AGE IN (-7, -8))
QTEXT:

WEB	CATI
Because we want to make sure to ask questions that are age appropriate, in which age group [$DO_YOU] belong?	We want to make sure to ask questions that are age appropriate. Stop me when you hear the age group that [$YOU_ARE] a part of…

ATEXT:

WEB	CATI	AVALUE	BRANCH
0-4 years old	0-4 years old	1	IF $R=1 THEN +1 ELSE RELATE
5-12 years old	5-12 years old	2	IF $R=1 THEN +1 ELSE RELATE
13-15 years old	13-15 years old	3	IF $R=1 THEN +1 ELSE RELATE
16-17 years old	16-17 years old	4	IF $R=1 THEN +1 ELSE RELATE
18-44 years old	18-44 years old	5	RELATE
45-64 years old	45-64 years old	6	RELATE
65 years old or older	65 years old or older	7	RELATE
I prefer not to answer	REFUSED	-7	PERSON3B
I don't know	DON'T KNOW	-8	PERSON3B

PERSONAGECHECK2

AGECHECK3
TYPE: SelectSingle
ProgrammerNote: Asked if subject AAGE IN (1,2,3,4) AND $R=1
QTEXT:

WEB	CATI
You just reported that you are under 18 years old but earlier, you confirmed you were at least 18. Please confirm that you are under 18…	You just reported that you are under 18 years old but earlier, you confirmed you were at least 18. Please confirm that you are under 18…

ATEXT:

WEB	CATI	AVALUE	BRANCH
Yes, I am under 18	YES, UNDER 18	1	ADULT_SET
No, I need to fix my age	NO, FIX AGE	2	PERSON3

PERSON3B

AGE18
TYPE: SelectSingle
ProgrammerNote: Asked if respondent is not person one and doesn't supply a response to Age Category ([$R]>1 and AAGE IN (-7, -8)
QTEXT:

WEB	CATI
[$ARE_YOU_CAP] 18 years of age or older?	[$ARE_YOU_CAP] 18 years of age or older?

ATEXT:

WEB	CATI	AVALUE
Yes, 18 or older	YES, 18 OR OLDER	1
No, under 18	NO, UNDER 18	2
I prefer not to answer	REFUSED	-7
I don't know	DON'T KNOW	-8

RELATE

SEX

TYPE: SelectSingle

ProgrammerNote: Asked Always

QTEXT:

WEB	CATI
[$ARE_YOU_CAP] male or female?	[IF SEX IS OBVIOUS CODE, ELSE ASK] [$ARE_YOU_CAP] male or female?

ATEXT:

WEB	CATI	AVALUE
Male	MALE	1
Female	FEMALE	2
I prefer not to answer	REFUSED	-7
I don't know	DON'T KNOW	-8

RELATE

TYPE: SelectSingle

ProgrammerNote: Asked for People after first respondents $R>1

QTEXT:

WEB	CATI
What is [$FNAME]'s relationship to you? Note: Relationships include biological, adopted and step.	What is [$FNAME]'s relationship to you? [IF NEEDED: Relationships include biological, adopted and step.]

ATEXT:

WEB	CATI	AVALUE	ASHOWNIF
Self	SELF	1	1=0
Spouse/Unmarried partner	SPOUSE/UNMARRIED PARTNER	2	
Son/Daughter	SON/DAUGHTER	3	
Father/Mother	FATHER/MOTHER	4	
Brother/Sister	BROTHER/SISTER	5	
Grandparent	GRANDPARENT	6	
Grandchild	GRANDCHILD	7	
Live-In Help	LIVE-IN HELP	8	
Roommate/Other Non-Related	ROOMMATE/OTHER NON-RELATED	9	

WEB	CATI	AVALUE	ASHOWNIF
Other Related	OTHER RELATED	97	
I prefer not to answer	DON'T KNOW	-7	
I don't know	REFUSED	-8	

RELATE_O
TYPE: TextEntry
ProgrammerNote: Asked for People after first respondents $R>1
QTEXT:

If you said 'other Related', please describe.

LICENSE1

YOUR
TYPE: Computed

CASE WHEN $R=1 THEN 1 WHEN $R>1 AND SEX=1 THEN 2 WHEN $R>1 AND SEX=2 THEN 3 ELSE 4 END

TEXT	CODE
your	1
his	2
her	3
their	4

YOU
TYPE: Computed

CASE WHEN $R=1 THEN 1 WHEN $R>1 AND SEX=1 THEN 2 WHEN $R>1 AND SEX=2 THEN 3 ELSE 4 END

TEXT	CODE
you	1
he	2
she	3
they	4

LIC
TYPE: SelectSingle
ProgrammerNote: Asked if over subject is over 16 (AGE >= 16 or AAGE NOT IN (1,2,3))
QTEXT:

WEB	CATI
[$DO_YOU_CAP] have a valid driver's license?	[$DO_YOU_CAP] have a valid driver's license?

ATEXT:

WEB	CATI	AVALUE	BRANCH
Yes	YES	1	+1
No	NO	2	+1
I prefer not to answer	REFUSED	-7	+1
I don't know	DON'T KNOW	-8	+1

DISAB

DISAB

TYPE: SelectSingle

ProgrammerNote: Asked if over subject is over 16 (AGE >= 16 or AAGE NOT IN (1,2,3))

QTEXT:

WEB	CATI
[$DO_YOU_CAP] have a disability that limits [$YOUR] ability to travel?	[$DO_YOU_CAP] have a disability that limits [$YOUR] ability to travel?

ATEXT:

WEB	CATI	AVALUE	BRANCH
Yes	YES	1	DTYPE
No	NO	2	HISP
I prefer not to answer	REFUSED	-7	HISP
I don’t know	DON’T KNOW	-8	HISP

DTYPE

DTYPE

TYPE: SelectMultiple

ProgrammerNote: Asked if over subject is over 16 (AGE >= 16 or AAGE NOT IN (1,2,3))

QTEXT:

WEB	CATI
What type of disability? [Please select all that apply]	What type of disability? [SELECT ALL THAT APPLY]

ATEXT:

WEB	CATI	AVALUE
Visually Impaired or Blind	Visually Impaired or Blind	1
Hearing Impaired or Deaf	Hearing Impaired or Deaf	2
Cane or Walker	Cane or Walker	3
Wheelchair Non-Transferable	Wheelchair Non-Transferable	4
Wheelchair Transferable	Wheelchair Transferable	5
Mentally or Emotionally Disabled	Mentally or Emotionally Disabled	6
Other(Specify)	Other(Specify)	97
I prefer not to answer	REFUSED	-7
I don’t know	DON’T KNOW	-8

DTYPE_O

TYPE: SelectMultiple

ProgrammerNote: DTYPE=97

QTEXT:

Please Describe

HISP

HISP

TYPE: SelectSingle
ProgrammerNote: Always
QTEXT:

WEB	CATI
[$ARE_YOU_CAP] of Hispanic, Latino, or Spanish origin?	[$ARE_YOU_CAP] of Hispanic, Latino, or Spanish origin?

ATEXT:

WEB	CATI	AVALUE
Yes	YES	1
No	NO	2
Other	OTHER	97
I prefer not to answer	REFUSED	-7
I don't know	DON'T KNOW	-8

HISP_O

TYPE: SelectSingle
ProgrammerNote: HISP = 97
QTEXT:

Please describe.

RACE

TYPE: SelectSingle
ProgrammerNote: Always
QTEXT:

WEB	CATI
Which of the following describes [$YOUR] race?	Which of the following describes [$YOUR] race… [$ARE_YOU]…

ATEXT:

WEB	CATI	AVALUE
White	White,	1
African American, Black	African American, Black,	2
Asian	Asian,	3
American Indian, Alaskan Native	American Indian, Alaskan Native,	4
Native Hawaiian or Pacific Islander	Native Hawaiian or Pacific Islander,	5
Multiracial	Multiracial, or	6
Some other race	Some other race?	97
I prefer not to answer	REFUSED	-7
I don't know	DON'T KNOW	-8

RACE_O

TYPE: SelectSingle

ProgrammerNote: RACE = 97
QTEXT:
Please describe.

SOCIALMEDIA1

SOCIALMEDIA1
TYPE: SelectSingle
Programmer Note: Ask for all adults (18 and over)
QTEXT

[$DO_YOU_CAP] use social media at all?

ATEXT:

WEB	CATI	AVALUE	BRANCH
Yes	YES	1	SOCIALMEDIA2
No	NO	2	SMRTPHN

SOCIALMEDIA2

TYPE: SelectSingle
Programmer Note: Ask for all adults (18 and over)
QTEXT

How often [$DO_YOU] use the following social media options?

VARIABLE NAME	WEB ATEXT = CATI ATEXT	Daily	A few times a week	A few times a month	A few times a year	Never
FACEBOOK	Facebook	1	2	3	4	5
INSTAGRAM	Instagram	1	2	3	4	5
TWITTER	Twitter	1	2	3	4	5
SNAPCHAT	Snapchat	1	2	3	4	5
OSOCIAL	Other service	1	2	3	4	5

OSOCIAL_O
TYPE: TextEntry
ProgrammerNote: Asked if respondent selects something other than never for OSOCIAL "Other service".
AREQUIREDIF: [$OSOCIAL:C] IN (1,2,3,4)
QTEXT:
What other type of service(s) do you use?

ADBLOCK

ADBLOCK

TYPE: SelectSingle
Programmer Note: Ask for all adults (18 and over)
QTEXT:

WEB	CATI
[$DO_YOU_CAP] use or have ad blocking software installed on [$YOUR] browser or mobile phone?	[$DO_YOU_CAP] use or have ad blocking software installed on [$YOUR] browser or mobile phone?

ATEXT:

WEB	CATI	AVALUE	BRANCH
Yes	YES	1	SMRTPHN
No	NO	2	SMRTPHN
I prefer not to answer	REFUSED	-7	SMRTPHN
I don't know	DON'T KNOW	-8	SMRTPHN

SMRTPHN

SMRTPHN

TYPE: SelectSingle
Programmer Note: Skip if person is 12 or younger.
QTEXT:

WEB	CATI
[$DO_YOU_CAP] have a smartphone?	[$DO_YOU_CAP] have a smartphone?

ATEXT:

WEB	CATI	AVALUE	BRANCH
Yes	YES	1	AGE12TO18/SMRTPHN_TEST
No	NO	2	PMORE
I prefer not to answer	REFUSED	-7	PMORE
I don't know	DON'T KNOW	-8	PMORE

(([$AGE] BETWEEN 13 AND 17) OR ([$AGE] IN (-7,-8) AND [$AAGE:C] IN (3, 4))) AND [$SMRTPHN:C]=1->PAGE12TO18;
([$AGE] >= 18 OR ([$AGE] IN (-7,-8) AND [$AAGE:C] IN (5, 6, 7))) AND [$SMRTPHN:C]=1->PSMRTPHN_TEST;
ELSE->PPMORE

AGE12TO18

AGE12TO18

TYPE: SelectSingle
ProgrammerNote: Ask if person is 13 or older but under 18

WEB	CATI
Select "I agree" below to indicate that [$FNAME] has permission from a parent or guardian to download and use the smartphone app.	By saying "I agree" you will indicate that [$FNAME] has permission from a parent or guardian to download and use a smartphone app.

ATEXT:

WEB	CATI	AVALUE	BRANCH
I agree	I AGREE	1	SMRTPHN_TEST
I do not agree	I DO NOT AGREE	2	PMORE

SMRTPHN_TEST

SMRTPHN_TEST

TYPE: SelectSingle
QASKEDIF: $R=1
QTEXT:

WEB	CATI
[$ARE_YOU_CAP] willing to download an app and use it for seven days? Note: The app is supported for iPhone 4s and above (iOS 8.0) and Android 4.4 (KitKat) and above.	[$ARE_YOU_CAP] willing to download an app and use it for seven days? Note: The app is supported for iPhone 4s and above (iOS 8.0) and Android 4.4 (KitKat) and above.

ATEXT:

WEB	CATI	AVALUE	BRANCH
Yes	YES	1	PERSONEMAIL
No	NO	2	PMORE

SMRTPHN_PERNO

TYPE: Computed

CASE WHEN $R=1 THEN 1 ELSE 2 END

TEXT	CODE
Please provide [$YOUR1] email address to receive instructions on downloading and installing the smartphone app.	1
Please provide an email address for [$FNAME] so [$YOU] can decide if [$YOU] want to use the smartphone application. Please be sure to let [$FNAME] know about this survey and that you have agreed to participate.	2

PERSONEMAIL

PERSONEMAIL_DONTMATCH

TYPE: LabelOnly
QASKEDIF: COALESCE([$PERSONEMAIL_CONFIRMATION:C],0)=1
QTEXT:

WEB	CATI
The emails do not match. Please review and edit, then press Next.	The emails do not match. Please review and edit, then press Next.

PERSONEMAIL1

TYPE: TextEntry
ProgrammerNote: Asked Always
FORMAT: NN@NN
AREQUIREDIF: Never
QTEXT:

WEB	CATI
[$SMRTPHN_PERNO]	[$SMRTPHN_PERNO]

ATEXT:

WEB	AVALUE
EMAIL	OPEN – format: NN@NN

PERSONEMAIL2
TYPE: TextEntry
ProgrammerNote: Asked Always. Confirm that the two emails match.
FORMAT: NN@NN
AREQUIREDIF: Never
QTEXT:

WEB	CATI
Re-enter your email address for confirmation	Re-enter the email address for confirmation

ATEXT:

WEB	AVALUE
EMAIL	OPEN – format: NN@NN

PERSONEMAIL_CONFIRMATION

PERSONEMAIL_CONFIRMATION
TYPE: Computed
ProgrammerNote: Asked Always
AREQUIREDIF: Never

query: CASE WHEN COALESCE('[$PERSONEMAIL1:Q]', '') <> COALESCE('[$PERSONEMAIL2:Q]', '') THEN 1 ELSE 2 END

Page branch: COALESCE([$PERSONEMAIL_CONFIRMATION:C],0)=1->PPERSONEMAIL;
ELSE->PPMORE

PMORE

PMORE
TYPE: Computed
ProgrammerNote: Person write-out to TBW.
QTEXT:

CASE WHEN $R<HHSIZ THEN 1 ELSE 2

WEB	AVALUE	BRANCH
More to report	1	PERSONSTART+
Done reporting people	2	PMORE2

PMORE2

PMORE2
TYPE: SelectSingle

ProgrammerNote: Asked if the number of household members is greater than or equal to HHSIZ ($R>=HHSIZ)
QTEXT:

WEB	CATI
So far, you have reported that [$R] [$PERSON_PEOPLE] live in your household. Have we missed anyone else who lives with you?	So far, you have reported that [$R] [$PERSON_PEOPLE] live in your household. Have we missed anyone else who lives with you?

ATEXT:

WEB	CATI	AVALUE	BRANCH
Yes, I need to add more people	RESPONDENT HAS MORE HH MEMBERS TO REPORT	1	PERSONSTART+
No, I do not need to add anyone else	RESPONDENT IS DONE REPORTING PEOPLE	2	HHINC

End Person Roster

Begin Person Work Roster

WORKINTRO

HAVE_HAS
TYPE: Computed
CASE WHEN $R=1 THEN 1 ELSE 2 END

TEXT	CODE
have	1
has	2

YOU_VOLUNTEER
TYPE: Computed
CASE WHEN $R=1 THEN 1 ELSE 2 END

TEXT	CODE
you volunteer	1
[$FNAME] volunteers	2

YOU_TELECOMMUTE
TYPE: Computed
CASE WHEN $R=1 THEN 1 ELSE 2 END

TEXT	CODE
you telecommute	1
[$FNAME] telecommutes	2

YOU_ARE_CAP
TYPE: Computed
CASE WHEN $R=1 THEN 1 ELSE 2 END

TEXT	CODE
You are	1
[$FNAME] is	2

YOU_HAVE_CAP
TYPE: Computed

CASE WHEN $R=1 THEN 1 ELSE 2 END

TEXT	CODE
You have	1
[$FNAME] has	2

I_DO
TYPE: Computed

CASE WHEN $R=1 THEN 1 ELSE 2 END

TEXT	AVALUE
I do	1
[$FNAME] does	2

JOBTEXT
TYPE: Computed

CASE WHEN [$R]=1 THEN 1 ELSE 2 END

TEXT	AVALUE
Now we have some questions about work and school activities. The transportation research community is interested in where people work or go to school because this kind of travel affects other daily travel. 	1
	2

YOU_HAVE
TYPE: Computed

CASE WHEN $R=1 THEN 1 ELSE 2 END

TEXT	CODE
you have	1
[$FNAME] has	2

WORKASK
TYPE: Computed

Note: For work questions, unless otherwise specified, only ask if the following is true:

CASE WHEN (([$AGE]>=16 OR [$AAGE:C] NOT IN (1, 2,3)) THEN 1 ELSE 2 END

TEXT	CODE	PAGEBRANCH
ASK WORK QUESTIONS	1	EMPLY
SKIP WORK QUESTIONS	2	STUDE

EMPLY

EMPLY_ASK
TYPE: SelectSingle
QTEXT:

WEB	CATI
[$JOBTEXT]	[$JOBTEXT] [$ARE_YOU_CAP] employed?

WEB	CATI
[$ARE_YOU_CAP] employed? (Being employed includes doing any work for pay.)	[IF NEEDED: Being employed includes doing any work for pay.]

ATEXT:

WEB	CATI	AVALUE	BRANCH
Yes	YES	1	JOBS
No	NO	2	WKSTAT
I prefer not to answer	REFUSED	-7	JOBS
I don't know	DON'T KNOW	-8	JOBS

JOBS

JOBS

TYPE: NumberEntry (0-9)

QTEXT:

WEB	CATI
How many jobs [$DO_YOU] work?	How many jobs [$DO_YOU] work?

ATEXT:

WEB	CATI	AVALUE	BRANCH
NumberEntry	NumberEntry	0	EMPLOYNOJOB
NumberEntry	NumberEntry	1-9	WPLACE
I prefer not to answer	REFUSED	-7	WKSTAT
I don't know	DON'T KNOW	-8	WKSTAT

PRIMARY

TYPE: Computed

CASE WHEN [JOBS]=1 THEN 1 ELSE 2 END

WEB	AVALUE
primary	1
	2

f

EMPLYNOJOB

EMPLYNOJOB

TYPE: SelectSingle

QTEXT:

WEB	CATI
You just reported that [$YOU_ARE] employed but [$HAVE_HAS] no jobs. Which of the following is correct?	You just reported that [$YOU_ARE] employed but [$HAVE_HAS] no jobs. Which of the following is correct?

ATEXT:

WEB	CATI	AVALUE	BRANCH
[$YOU_ARE_CAP] not employed	[$YOU_ARE_CAP] not employed	1	WKSTAT
[$YOU_HAVE_CAP] at least one job	[$YOU_HAVE_CAP] at least one job	2	JOBS

WKSTAT

WKSTAT
TYPE: SelectSingle
Auto Code Value: IF JOBS>=1 THEN WKSTAT=0
QTEXT:

WEB	CATI
Which of the following best describes [$YOUR] employment status?	Which of the following best describes [$YOUR] employment status?

ATEXT:

WEB	CATI	AVALUE	ASHOWNIF	BRANCH
Worker, including self employed	Worker, including self-employed EMPLOYED	0	NEVER	N/A
Retired	Retired,	1		STUDE
Volunteer	A volunteer,	2		VOLUN_FREQ
Homemaker	A homemaker,	3		STUDE
Unemployed but looking for work	Unemployed, but looking for work,	4		STUDE
Unemployed, not seeking employment	Unemployed, not looking for work,	5		STUDE
Student (part-time or full-time)	A student (PART-TIME OR FULL-TIME),	6		STUDE
Disabled non-worker	A disabled, non-worker, or	7		STUDE
Something else	Something else?	97		STUDE
I prefer not to answer	REFUSED	-7		STUDE
I don't know	DON'TKNOW	-8		STUDE

WKSTAT_O
TYPE: TextEntry
ProgrammerNote: Asked if respondent responds Other,Specify to WKSTAT (WKSTAT=97)
QTEXT:

If you said something else, please describe.

VOLUN_FREQ

VOLUN_FREQ
TYPE: SelectSingle
QTEXT:

WEB	CATI
How many days per week [$DO_YOU] volunteer?	How many days per week [$DO_YOU] volunteer?

ATEXT:

WEB	CATI	AVALUE	BRANCH
1 day a week	1 DAY A WEEK	1	YOUR_EMPLOYER
2 days a week	2 DAYS A WEEK	2	YOUR_EMPLOYER
3 days a week	3 DAYS A WEEK	3	YOUR_EMPLOYER
4 days a week	4 DAYS A WEEK	4	YOUR_EMPLOYER

5 days a week	5 DAYS A WEEK	5	YOUR_EMPLOYER
6 days a week	6 DAYS A WEEK	6	YOUR_EMPLOYER
7 days a week	7 DAYS A WEEK	7	YOUR_EMPLOYER

WPLACE

WORK_PRE
TYPE: Computed

CASE WHEN JOBS=1 THEN 1

WHEN JOBS>1 THEN 2

ELSE 3 END

WEB	AVALUE
	1
The next set of questions are about [$YOUR] PRIMARY place of work… 	2
	3

WPLACE
TYPE: SelectSingle
QTEXT:

WEB	CATI
[$WORK_PRE][$DO_YOU_CAP] go to the same work place every day that [$YOU_WORK]?	[$WORK_PRE][$DO_YOU_CAP] go to the same work place every day that [$YOU_WORK]?

ATEXT:

WEB	CATI	AVALUE	BRANCH
Same work place every day	SAME LOCATION EVERY DAY	1	YOUR_EMPLOYER
Work from home	HOME	2	YOUR_EMPLOYER
No fixed work place	NO FIXED WORK PLACE	3	YOUR_EMPLOYER
I prefer not to answer	REFUSED	-7	YOUR_EMPLOYER
I don’t know	DON’T KNOW	-8	YOUR_EMPLOYER

YOUR_EMPLOYER

YOUR_EMPLOYER
TYPE: Computed

CASE WHEN JOBS=0 AND WKSTAT=2 THEN 0

WHEN JOBS>1 THEN 1

ELSE 2 END

WEB	AVALUE
the place where [$YOU_VOLUNTEER] the most	0
[$YOUR] primary employer	1
[$YOUR] employer	2

Branch

CONDITION	BRANCH
WPLACE=1	WORKGEOCODE
WKSTAT=2	WORKGEOCODE
ELSE	WMODE

WORKGEOCODE

WADDR

TYPE: GeoCodePage
ProgrammerNote: Work write-out to TBW.
QTEXT:

WEB	CATI
What is the name and address of [$YOUR_EMPLOYER]? If you don't know the address, please provide the name, city and state.	What is the name and address of [$YOUR_EMPLOYER]?

Branch

CONDITION	BRANCH
WKSTAT=2	STUDE
ELSE	WMODE

WMODE

WMODE

TYPE: SelectSingle
QTEXT:

WEB	CATI
How [$DO_YOU] usually travel to work?	How [$DO_YOU] usually travel to work?

ATEXT:

WEB	CATI	AVALUE	BRANCH
Walk	WALK	1	TCOFF
Bicycle	BICYCLE	2	TCOFF
Motorcycle/moped	MOTORCYCLE/MOPED	3	TCOFF
Auto/ van/truck (as the driver)	AUTO/ VAN/TRUCK (AS THE DRIVER)	4	CARPTOWK
Auto/van/truck (as the passenger)	AUTO/VAN/TRUCK (AS THE PASSENGER)	5	CARPTOWK
Carpool/vanpool	CARPOOL/VANPOOL	6	CARPTOWK
School bus	SCHOOL BUS	7	TCOFF
Public transit – local bus	PUBLIC TRANSIT – LOCAL BUS	8	TCOFF
Dial-a-ride/paratransit	DIAL-A-RIDE/PARATRANSIT	9	TCOFF
Private bus or shuttle	PRIVATE BUS OR SHUTTLE	10	TCOFF
Taxi/limo	TAXI/LIMO	11	TCOFF
Airplane	AIRPLANE	12	TCOFF

WEB	CATI	AVALUE	BRANCH
[$I_DO] not travel to work	SUBJECT DOES NOT TRAVEL TO WORK	13	TCOFF
Something Else	SOMETHING ELSE	97	CARPTOWK
I prefer not to answer	REFUSED	-7	CARPTOWK
I don't know	DON'T KNOW	-8	CARPTOWK

WMODE_O
TYPE: SelectSingle
ProgrammerNote: Asked if respondent responds Other, Specify to WMODE (WMODE=97)
QTEXT:

If you said something else, please provide details.

HAVE_YOU
TYPE: Computed

CASE WHEN [$R]=1 THEN 1 ELSE 2 END

WEB	AVALUE
have you	1
has [$FNAME]	2

CARPTOWK

CARPTOWK
TYPE: SelectSingle
QTEXT:

WEB	CATI
How many times [$HAVE_YOU] carpooled to work in the past week? This includes traveling with a member of your household or with someone from a different household.	How many times [$HAVE_YOU] carpooled to work in the past week? This includes traveling with a member of your household or with someone from a different household.

ATEXT:

WEB	CATI	AVALUE
Zero Times (never)	ZERO TIMES (NEVER)	1
Once or Twice	ONCE OR TWICE	2
Three or four times	THREE OR FOUR TIMES	3
Five or more times	FIVE OR MORE TIMES	4
I prefer not to answer	REFUSED	-7
I don't know	DON'T KNOW	-8

TCOFF

WRKHRS
TYPE: NumberEntry (1-100)
QTEXT:

WEB	CATI
How many hours [$DO_YOU] work in a typical week at [$YOUR][$PRIMARY] workplace?	How many hours [$DO_YOU] work in a typical week at [$YOUR][$PRIMARY] workplace?

ATEXT:

WEB	CATI	AVALUE
Number Entry	Number Entry	1-100
I prefer not to answer	REFUSED	-7
I don't know	DON'T KNOW	-8

TCOFF

TYPE: SelectSingle

QTEXT:

WEB	CATI
Regardless of whether [$YOU_TELECOMMUTE], is telecommuting offered at [$YOUR] [$PRIMARY] workplace?	Regardless of whether [$YOU_TELECOMMUTE], is telecommuting offered at [$YOUR] [$PRIMARY] workplace?

ATEXT:

WEB	CATI	AVALUE	BRANCH
Yes	YES	1	TCDAYS
No	NO	2	COMPR
I prefer not to answer	REFUSED	-7	COMPR
I don't know	DON'T KNOW	-8	COMPR

YOU_WORK

TYPE: Computed

CASE WHEN $R = 1 THEN 1 WHEN $R>1 AND GENDER = 1 THEN 2 WHEN $R>1 AND GENDER = 2 THEN 3 ELSE 4 END

TEXT	AVALUE
you work	1
he works	2
she works	3
[$FNAME] works	4

TCDAYS

TCDAYS

TYPE: NumberEntry(0-7)

QTEXT:

WEB	CATI
How many days [$DO_YOU] telecommute per week (meaning [$YOU_WORK] from home instead of traveling to [$YOUR] workplace)?	How many days [$DO_YOU] telecommute per week (meaning [$YOU_WORK] from home instead of traveling to [$YOUR] workplace)?

COMPR

COMPR

TYPE: SelectSingle

QTEXT:

WEB	CATI
[$DO_YOU] work a compressed work week, such as 40 hours in 4 days or 80 hours in 9 days?	[$DO_YOU] work a compressed work week, such as 40 hours in 4 days or 80 hours in 9 days?

ATEXT:

WEB	CATI	AVALUE
4/40	4/40	1
9/80	9/80	2
No	NO	3
Other, SPECIFY	Other, SPECIFY	97
I prefer not to answer	REFUSED	-7
I don't know	DON'T KNOW	-8

COMPR_O
TYPE: TextEntry
ProgrammerNote: COMPR=97
QTEXT:

If you said 'Other' Please describe…

WKFLEX
TYPE: SelectSingle
ProgrammerNote: Asked if subject is 16 or older and has a job
QTEXT:

WEB	CATI
[$DO_YOU] have the ability to set or change [$YOUR] own start or end work times?	[$DO_YOU] have the ability to set or change [$YOUR] own start or end work times?

ATEXT:

WEB	CATI	AVALUE
Yes	YES	1
No	NO	2
I prefer not to answer	REFUSED	-7
I don't know	DON'T KNOW	-8

WTRAV
TYPE: SelectSingle
QASKEDIF: Skip if WPLACE = 2 OR WKSTAT=2
QTEXT:

WEB	CATI
On average, how many days per week [$DO_YOU] travel to [$YOUR] work location?	On average, how many days per week [$DO_YOU] travel to [$YOUR] work location?

ATEXT:

WEB	CATI	AVALUE
1 day a week	1 DAY A WEEK	1
2 days a week	2 DAYS A WEEK	2
3 days a week	3 DAYS A WEEK	3

WEB	CATI	AVALUE
4 days a week	4 DAYS A WEEK	4
5 days a week	5 DAYS A WEEK	5
6 days a week	6 DAYS A WEEK	6
7 days a week	7 DAYS A WEEK	7
Never	NEVER	0
I prefer not to answer	REFUSED	-7
I don't know	DON'T KNOW	-8

INDUS

INDUS

TYPE: SelectSingle

ProgrammerNote: Asked if subject is 16 or older and has a job (JOBS>=1 or JOBS IN (-7 or -8))

QTEXT:

WEB	CATI
What is [$YOUR_EMPLOYER]'s industry?	What is [$YOUR_EMPLOYER]'s industry?

ATEXT:

WEB	CATI	AVALUE
Farming, Mining or Agricultural	Farming, Mining or Agricultural	1
Manufacturing, Industrial and Distribution	Manufacturing, Industrial and Distribution	2
Construction	Construction	3
Public Administration, Government	Public Administration, Government	4
Retail Trade or Sales	Retail Trade or Sales	5
Wholesale, Distribution and Warehousing, Utilities	Wholesale, Distribution and Warehousing, Utilities	6
Maintenance Services	Maintenance Services	7
Education Services	Education Services	8
Health Care Services	Health Care Services	9
Leisure, Arts, Entertainment, and Recreation Services	Leisure, Arts, Entertainment, and Recreation Services	10
Other Services (e.g., Banking, Real Estate, Consulting, etc.)	Other Services (e.g., Banking, Real Estate, Consulting, etc.)	11
Other Industry	Other Industry	97
I prefer not to answer	REFUSED	-7
I don't know	DON'T KNOW	-8

INDUS_O

TYPE:

ProgrammerNote: Asked if respondent responds Other,Specify to INDUS (INDUS=97)

QTEXT:

If you said something else, please describe.

STUDE

DAYCARE

TYPE: Computed

CASE WHEN ([AGE]<5 AND [AGE] >=0) OR ([AGE] <=0 AND [AAGE:C] IN [1,2]) THEN 1 ELSE 2 END

TEXT	CODE
daycare,	1
	2

STUDE

TYPE: SelectSingle

ProgrammerNote: Asked Always

QTEXT:

WEB	CATI
[$ARE_YOU_CAP] currently enrolled in any type of school, including[$DAYCARE] technical school, or university?	[$ARE_YOU_CAP] currently enrolled in any type of school, including[$DAYCARE] technical school, or university? [IF YES: Is that full-time or part-time?]

ATEXT:

WEB	CATI	AVALUE	BRANCH
Yes - Full Time	YES - FULL TIME	1	SCHOL
Yes - Part Time	YES - PART TIME	2	SCHOL
No	NO	3	EDUC
I prefer not to answer	REFUSED	-7	EDUC
I don’t know	DON’T KNOW	-8	EDUC

SCHOL

SCHOL

TYPE: SelectSingle

ProgrammerNote: Asked if subject is enrolled in school (STUDE IN (1, 2))

QTEXT:

WEB	CATI
What school grade or level [$DO_YOU] attend?	What school grade or level [$DO_YOU] attend?

ATEXT:

WEB	CATI	AVALUE	BRANCH
Daycare	DAYCARE	1	SLOC
Nursery/Pre-school	NURSERY/PRE-SCHOOL	2	SLOC
Kindergarten to 8th grade	KINDERGARTEN TO 8TH GRADE	3	SLOC
9th – 12th grade	9TH – 12TH GRADE	4	SLOC
Vocational/Technical school	VOCATIONAL/TECHNICAL SCHOOL	5	SWEB
2-year college (community college)	2-YEAR COLLEGE (COMMUNITY COLLEGE)	6	SWEB
4-year college or university	4-YEAR COLLEGE OR UNIVERSITY	7	SWEB
Graduate/Professional school	GRADUATE/PROFESSIONAL SCHOOL	8	SWEB

WEB	CATI	AVALUE	BRANCH
Something else	OTHER, SPECIFY	97	SLOC
I prefer not to answer	REFUSED	-7	SLOC
I don't know	DON'T KNOW	-8	SLOC

SCHOL_O
TYPE: TextEntry
ProgrammerNote: Asked if respondent responds Other, Specify to SCHOL (SCHOL=97)
QTEXT:
If you said something else, please provide details.

SLOC

SLOC
TYPE: SelectSingle
QASKEDIF: SCHOL in (1,2,3,4,97,-7,-8)
QTEXT:

WEB	CATI
[$ARE_YOU_CAP] home schooled?	[$ARE_YOU_CAP] home schooled?

ATEXT:

WEB	CATI	AVALUE	BRANCH
Yes	YES	1	EDUC
No	NO	2	+1
I prefer not to answer	REFUSED	-7	+1
I don't know	DON'T KNOW	-8	+1

SWEB

SWEB
TYPE: SelectSingle
QASKEDIF: (SCHOL IN (5, 6, 7, 8, 97, - 7, -8))
QTEXT:

WEB	CATI
Is [$YOUR] school an online-only curriculum?	Is [$YOUR] school an online-only curriculum?

ATEXT:

WEB	CATI	AVALUE	BRANCH
Yes	YES	1	EDUC
No	NO	2	IF SLCOC =1 THEN EDUC ELSE SGEOCODE
I prefer not to answer	REFUSED	-7	SGEOCODE
I don't know	DON'T KNOW	-8	SGEOCODE

SGEOCODE

SADDR

TYPE: GeoCodeAddress
ProgrammerNote: School write-out to TBW.
QTEXT:

WEB	CATI
What is the name and address of [$YOUR] school? If you don't know the address, please provide the city and state. [If you attend school at your home, please type the word "home" in the address line. If you don't know the address of the place you go to school, type "DK" in the address line.]	What is the name and address of [$YOUR] school?

SMODE

SMODE

TYPE: TextEntry
QTEXT:

WEB	CATI
How [$DO_YOU] usually get to school?	How [$DO_YOU] usually get to school?

ATEXT:

WEB	CATI	AVALUE	BRANCH
Walk	Walk	1	+1
Bicycle	Bicycle	2	+1
Motorcycle/moped	Motorcycle/moped	3	+1
Auto/van/truck (as the driver)	Auto/van/truck (as the driver)	4	+1
Auto/van/truck (as the passenger)	Auto/van/truck (as the passenger)	5	+1
Carpool/vanpool	Carpool/vanpool	6	+1
School bus	School bus	7	+1
Public transit – local bus	Public transit – local bus	8	+1
Dial-a-ride/paratransit	Dial-a-ride/paratransit	9	+1
Private bus or shuttle	Private bus or shuttle	10	+1
Taxi/limo	Taxi/limo	11	+1
Airplane	Airplane	12	+1
[$I_DO] not travel to school	Subject does not travel to school	13	+1
Something Else	Something Else	97	+1
I prefer not to answer	REFUSED	-7	+1
I don't know	DON'T KNOW	-8	+1

SMODE_O

TYPE: TextEntry

ProgrammerNote: Asked if respondent responds Other, Specify to SMODE (SMODE=97)
QTEXT:
If you said something else, please provide details.

EDUC

EDUC
TYPE: SelectSingle
ProgrammerNote: Asked if subject is over the age of 4 and doesn't report being in HS or below ((AGE>=5 or AAGE NOT IN (1)) AND (SCHOL NOT IN (1,2,3,4)). IF subject is under the age of 5 or is in HS or below code "Not a high School Grad" (EDUC=1)
QTEXT:

WEB	CATI
What is the highest grade or degree that [$YOU_HAVE] earned?	What is the highest grade or degree that [$YOU_HAVE] earned?

ATEXT:

WEB	CATI	AVALUE
Not a high school graduate, grade 12 or less (this includes very young children)	Not a high school graduate, grade 12 or less (this includes very young children)	1
High school graduate (high school diploma or GED)	High school graduate (high school diploma or GED)	2
Some college credit but no degree	Some college credit but no degree	3
Associate or technical school degree	Associate or technical school degree	4
Bachelor's or undergraduate degree	Bachelor's or undergraduate degree	5
Graduate degree (includes professional degree like PHD, MD, DD, JD)	Graduate degree (includes professional degree like PHD, MD, DD, JD)	6
Some other degree	Some other degree	97
I prefer not to answer	REFUSED	-7
I don't know	DON'T KNOW	-8

EDUC_O
TYPE: SelectSingle
ProgrammerNote: Asked if respondent responds Other,Specify to EDUC (EDUC=97)
QTEXT:
If you said some other degree, please provide the degree.

PWMORE

PWMORE
TYPE: Computed
CASE WHEN $R<MAXPERNO:C THEN 1 ELSE 2

TEXT	AVALUE	BRANCH
More to report	1	WORKINTRO+
Done reporting persons	2	DOWNLOAD

End Person Work Roster

Sample Scheduling Module

DOWNLOAD

DOWNLOAD
TYPE: Computed
ProgrammerNote:
QTEXT:

CASE WHEN 1=1 THEN 1 ELSE 2 END

ATEXT:

WEB	CATI	AVALUE
Print	PRINT	1
Receive in the mail	RECEIVE IN THE MAIL	2

TRIPDATE

DOWNLOADMSG
TYPE: Computed

CASE WHEN SMRTPHN_TEST=1 THEN 1

ELSE 2 END

WEB	CATI	AVALUE
Note that we will use [$PERSONEMAIL:1] to send email messages with instructions about your participation in the survey, including directions about how to download the app for your phone.	Note that we will use [$PERSONEMAIL:1] to send email messages with instructions about your participation in the survey, including directions about how to download the app for your phone.	1
Note that we will send email messages with instructions about your participation in the survey including links for you to download and print your travel logs.	Note that we will send email messages with instructions about your participation in the survey including links for you to download and print your travel logs.	2

TRIPDATE
TYPE: Computed
NOTE: Travel dates should be assigned 10 days or more in the future (based on DOW (DAYFLAG) preflagged in sample file). This can be the next available date IF the response to DOWNLOAD is 1.

wgs_get_travel_day([DAYFLAG], DOWNLOAD])

TRIPDATEFORMAT
TYPE: Computed
Convert to user-friendly date format (m/d/yyyy)

TDASSIGN

TDASSIGN
TYPE: SelectSingle
ProgrammerNote: Asked Always
QTEXT:

WEB	CATI
The travel date that has been selected for your household is [$TRIPDATEFORMAT]. Note: The only reason to change your travel date is if everyone in your household will be outside of the Billings Yellowstone	The travel date that has been selected for your household is [$TRIPDATEFORMAT]. [$DOWNLOADMSG] NOTE: THE ONLY REASON TO CHANGE A TRAVEL DATE IS IF EVERYONE IN THE HOUSEHOLD WILL BE OUTSIDE OF THE

WEB	CATI
County area during the whole day on your assigned travel day.[$DOWNLOADMSG] 	BILLINGS YELLOWSTONE COUNTY AREA DURING THE WHOLE DAY ON THE ASSIGNED TRAVEL DAY.

ATEXT:

WEB	CATI	AVALUE	BRANCH
Continue	CONTINUE	1	MAILNAME
I cannot record my travel on this day because everyone in my household will be out of the area	RESPONDENT CANNOT RECORD THEIR TRAVEL ON THIS DAY	2	NEWTRIPDATE

NEWTRIPDATE

NEWTRIPDATE

TYPE: Calendar Dropdown

ProgrammerNote: Asked if travel date is no good (TDASSIGN=2)

QTEXT:

WEB	CATI
Choose a new travel date offered from the calendar below. The new travel date must be on the same day of the week as the one previously assigned to you. Remember, the only reason you should select a new travel date is if your ENTIRE household will be outside of the area on the assigned day. (Click in the text box below and select one of the highlighted days.) Reasons to choose a new travel date: Your entire household will be traveling OUTSIDE of the Billings Yellowstone County area for the entire travel day. Reasons to keep your assigned travel date: - One member of your household will be out of the area, but others will still be in the area. - You are not planning to go to any places that day. - You are not planning to go to any typical places that day. 	Ok, the next available date is [OFFER THE NEXT AVAILABLE TRAVEL DATE TO THE PARTICIPANT] REMEMBER, THE ONLY REASON YOU SHOULD ASSIGN A NEW TRAVEL DATE IS IF THE *ENTIRE* HOUSEHOLD WILL BE OUTSIDE OF THE AREA ON THE ASSIGNED DAY. THE FOLLOWING ARE *NOT* VALID REASONS TO CHANGE THE ASSIGNED TRAVEL DATE: - ONE MEMBER OF THE HOUSEHOLD WILL BE OUT OF THE AREA, BUT OTHERS WILL STILL BE IN THE AREA. - YOU ARE NOT PLANNING TO GO TO ANY PLACES THAT DAY. - YOU ARE NOT PLANNING TO GO TO ANY TYPICAL PLACES THAT DAY.

ATEXT:

WEB	CATI	AVALUE	BRANCH
DateSelect	DateSelect		HOUSEHOLD_WRITEOUT
None of these dates work for me	NONE OF THE OFFERED DATES WORK	1	NOGOODTRIPDATE

NOGOODTRIPDATE

NOGOODTRIPDATE

TYPE: TextEntry – Phone Number

ProgrammerNote: Asked if there is no good travel date available (NEWTRIPDATE=3)
AREQUIREDIF: NOGOODTRIPDATE is null
FORMAT: ###-###-####
QTEXT:

WEB	CATI
I'm sorry that date does not work for you. We will have a supervisor contact you – what is the best way to reach you (please provide either an email or phone number) – Starting with the area code, please enter phone number below:	

NOGOODTRIPDATEEMAIL
TYPE: TextEntry - email
ProgrammerNote: Asked if there is no good travel date available (NEWTRIPDATE=3)
AREQUIREDIF: NOGOODTRIPDATE is null
FORMAT: NN@NN
QTEXT:

Or enter an email address below:

INT_NOGOODEXIT_SET
TYPE: Computed
QASKEDIF: NEWTRIPDATE=3

=901

Branch

TEXT	CODE
ELSE	NOGOODDATE2

HOUSEHOLD_WRITEOUT

HOUSEHOLD_WRITEOUT
TYPE: Computed
ProgrammerNote: Household write-out to household.

YOUR_LOG
TYPE: Computed

CASE WHEN [$HHSIZ]=1 THEN 1 ELSE 2 END (3 and 4 are not used)

TEXT	CODE
your travel log	1
the travel logs	2
the package	3
the materials	4

MAILNAME

MAILFNAM
TYPE: TextEntry

ProgrammerNote: Asked if household wants their travel logs mailed (DOWNLOAD=2)
QTEXT:

WEB	CATI
We will mail [$YOUR_LOG] in time to arrive before the scheduled travel date. To whom should we address the envelope? First name:	We will mail [$YOUR_LOG] in time to arrive before the scheduled travel date. To whom should we address the envelope? FIRST NAME:

ATEXT:

WEB	CATI	AVALUE
I prefer not to answer	REFUSED	-7
I don't know	DON'T KNOW	-8

MAILLNAM
TYPE: TextEntry
ProgrammerNote: Asked if household wants their travel logs mailed (DOWNLOAD=2)
QTEXT:

WEB	CATI
Last name:	LAST NAME:

ATEXT:

WEB	CATI	AVALUE
I prefer not to answer	REFUSED	-7
I don't know	DON'T KNOW	-8

MAILING_ADDRESS
TYPE: TextEntry
ProgrammerNote: Asked if household wants their travel logs mailed (DOWNLOAD=2)
QTEXT:

WEB	CATI
What address should we use to mail the travel logs to you…	What address should we use to mail the travel logs to you…

ATEXT:

WEB	CATI	AVALUE	BRANCH
[$FULLADDRESS]	[$FULLADDRESS]	1	PHONE1
Or a different address?	Or a different address?	2	MADDRESS_GEO

MADDRESS_GEO

MADDRESS_STREET
TYPE: TextEntry
QTEXT:
ProgrammerNote: Asked if respondent wants travel logs mailed to a different addressed then the sampled one
What is that preferred address?
STREET NUMBER AND NAME:

MADDRESS_CITY
TYPE: TextEntry

QASKEDIF: MAILING_ADDRESS=2
ProgrammerNote: Asked if respondent wants travel logs mailed to a different addressed then the sampled one

City:

MADDRESS_STATE
TYPE: TextEntry
QASKEDIF: MAILING_ADDRESS=2
ProgrammerNote: Asked if respondent wants travel logs mailed to a different addressed then the sampled one

State:

MADDRESS_ZIP
TYPE: TextEntry
QASKEDIF: MAILING_ADDRESS=2
ProgrammerNote: Asked if respondent wants travel logs mailed to a different addressed then the sampled one

ZIP:

PHONE1

PHONE1
TYPE: SelectSingle
ProgrammerNote: Asked if there is a phone match with the sampled address (PHONE IS NOT NULL)
QTEXT:

WEB	CATI
The number we have in our system for you is [$MAINPHONE]. Is that the best number to use if we need to reach you?	The number we have in our system for you is [$MAINPHONE]. Is that the best number to use if we need to reach you?

ATEXT:

WEB	CATI	AVALUE	BRANCH
Yes	YES	1	PHONE3
No	NO	2	PHONE2
I prefer not to answer	REFUSED	-7	PHONE2

PHONE2

BPHONE1
TYPE: TextEntry
ProgrammerNote: Asked if there is no sampled phone number or respondent prefers to use a number other than the sampled phone number ('[$PHONE]' = 'null' OR '[$PHONE]' = '' OR '[$PHONE]' = ' ' OR [$PHONE1:C]=2)
FORMAT: ###-###-####
QTEXT:

WEB	CATI
Because we may need to talk with you, please give us the best telephone number to reach you on starting with the area code first.	Because we may need to talk with you, please give us the best telephone number to reach you on starting with the area code first.

PHONE3

PHTYPE
TYPE: SelectSingle
ProgrammerNote: Asked if there is a phone number (PHONE1=1 or BPHONE <> NULL)
QTEXT:

WEB	CATI
This number is a…	Is this number a…

ATEXT:

WEB	CATI	AVALUE
Work	Work,	1
Home	Home, or	2
Cell	Cell number?	3
I prefer not to answer	REFUSED	-7
I don't know	DON'T KNOW	-8

REMINDERSINFO

REMEMAIL1

TYPE: TextEntry
ProgrammerNote: Asked Always
FORMAT: NN@NN
AREQUIREDIF: Never
QTEXT:

WEB	CATI
We will contact you on [$DATEBEFORETRAVELFORMAT] to remind you about your travel day and to see if you have any questions. We will also contact you after your travel day to remind you to report your travel or to clarify information you have reported. Please give us the best email address to contact you…	We will contact you on [$DATEBEFORETRAVELFORMAT] to remind you about your travel day and to see if you have any questions. We will also contact you after your travel day to remind you to report your travel or to clarify information you have reported. Please give us the best email address to contact you…

ATEXT:

WEB	AVALUE
EMAIL	OPEN – format: NN@NN

REMEMAIL2

TYPE: TextEntry
ProgrammerNote: Asked Always. Confirm that the two emails match.
FORMAT: NN@NN
AREQUIREDIF: Never
QTEXT:

WEB	CATI
Re-enter your email address for confirmation	Re-enter the email address for confirmation

ATEXT:

WEB	AVALUE
EMAIL	OPEN – format: NN@NN

EMAILCONFIRMATION

EMAILCONFIRMATION

TYPE: TextEntry
ProgrammerNote: Asked if the two reminder emails don't match (REMEMAIL<>REMEMAIL2).

FORMAT: NN@NN
AREQUIREDIF: Never
QTEXT:

WEB	CATI
The two email addresses you just supplied do not match. Please confirm which email address is correct…	The two email addresses you just supplied do not match. Please confirm which email address is correct…

ATEXT:

WEB	CATI	AVALUE	BRANCH
[$REMEMAIL]	[$REMEMAIL]	1	REMINDERS2
[$REMEMAIL2]	[$REMEMAIL2]	2	REMINDERS2
Neither	Neither	3	REMINDERSINFO

RMEMAIL
TYPE: Computed
CASE WHEN coalesce([$EMAILCONFORMATION:C],1)=1 THEN 1 ELSE 2 END

WEB	CATI	AVALUE
[$REMEMAIL]	[$REMEMAIL]	1
[$REMEMAIL2]	[$REMEMAIL2]	2

REMINDERS2

RMTXTNUM
TYPE: TextEntry
ProgrammerNote: Asked Always
FORMAT: ###-###-####
AREQUIREDIF: Never
QTEXT:

WEB	CATI
If you would also like to receive reminders by text message please enter your cell phone starting with the area code first.	If you would also like to receive reminders by text message please give me your cell phone number starting with the area code first.

ATEXT:

WEB	CATI	AVALUE
PHONE	PHONE	OPEN – format: ###-###-####

REMINDERS3

RMIVR
TYPE: SelectSingle
ProgrammerNote: Asked Always
AREQUIREDIF: Always
QTEXT:

WEB	CATI
Would you like to receive an automated telephone reminder the day before you travel? If you select 'yes', you will receive a recorded message that reminds you to start logging your trips the night before you are scheduled to travel.	Would you like to receive an automated telephone reminder the day before you travel?

WEB	CATI
	[IF NEEDED] You will receive a recorded message that reminds you to start logging your trips the night before you are scheduled to travel.

ATEXT:

WEB	CATI	AVALUE
Yes	YES	1
No	NO	2

RETPREF1

YOU3

TYPE: Computed

CASE WHEN HHSIZ=1 THEN 1 ELSE 2 END

TEXT	CODE
you	1
you and the other members of your household	2

RETPREFVAR

TYPE: Computed

CASE WHEN initiationmode=WEB THEN 1 ELSE 2 END

TEXT	AVALUE
After your first travel day, you will be able to log in to confirm the information [$YOU3] collect via the app alongside travel from other people in your household.	1
After your first travel day, you will be able to log in to confirm the information [$YOU3] collect via the app alongside travel from other people in your household.	2

RETPREF

RETPREF

TYPE: SelectSingle

ProgrammerNote: Asked Always. Default value = 1

QTEXT:

[$RETPREFVAR]

WEB	CATI	ASHOWNIF	AVALUE	BRANCH
Okay	OK	ALWAYS	1	LINK

BEST_TIME_RANGE

BEGCDATE

TYPE: Computed

'[$TRIPDATE]'::date + interval '1 day'

ENDCDATE
TYPE: computed
ENDCDATE=TRIPDATE+7

BEST_TIME

HHCALLTIME
TYPE: DateTime
ProgrammerNote: Asked if household doesn't report that online is their RETPREF AND INITIATIONMODE='CATI'
QTEXT:

WEB	CATI
	NOTE: SEE DATE RANGE ABOVE. HOURS AVAILABLE M-F -> 10AM TO 7PM We will call you back after your travel date to collect your travel details. What would be the best date and time to call you back? IF NEEDED: Our telephone staff is not available at that time how about… [OFFER CLOSEST AVAILABLE TIME FOR THAT DATE]

LINK

LINK
TYPE: Computed

CASE WHEN [$DOWNLOAD]=1 AND INITATIONMODE=WEB

WHEN [$DOWNLOAD]=1 AND INITATIONMODE=CATI THEN 2

ELSE 3 END

TEXT	AVALUE
Please click here "https://travelcatawbavalleywww.BigSkyDailyTravel.com/Content/site/files/Travel_Log.pdf" to print log(s) for anyone who will not be using a smartphone. Also, click here "https://travelcatawbavalley.com/Content/site/files/Example_Travel_Log.pdf" to print a travel log example. You only need one copy of the example.	1
Please go to https://www.BigSkyDailyTravel.com under the "About the Survey" tab to print your log(s) and examples for each member of your household who will not be using a smartphone. You only need one copy of the example.	2
	3

THANK1

THANK1
TYPE: Display
QTEXT:

WEB	CATI
Thank you for agreeing to take part in this important travel survey sponsored by the Billings-Yellowstone County Metropolitan Planning Organization and The Montana Department of Transportation. This concludes the first	Thank you for agreeing to take part in this important travel survey sponsored by Westat with support City of Billings, Yellowstone County, and The Montana Department of Transportation. [$LINK] We will be in touch during

WEB	CATI
stage of the survey. Please look for additional information from us during the next steps of your participation. [$LINK]	the remaining step of your survey. Do you have any questions before we end the call? [NOTE: ALLOW FOR QUESTIONS AND END THE CALL IF THE RESPONDENT IS SATISFIED]

Branch

Condition	Branch
ELSE	END

THANK02

INT_THANK02_SET
Type: SelectSingle
QTEXT:

=603

INT_THANK02

INT_THANK02
Type: SelectSingle
QTEXT:

WEB	CATI
Invitations to participate in the survey are based on addresses. We must confirm that you live at the address we just asked about to continue with the survey. Do you live at… [$BASESTRT][$BASEAPT] [$BASECITY], [$BASESTAT] [$BASEZIP]	Invitations to participate in the survey are based on addresses. We must confirm that you live at the address we just asked about to continue with the survey. Do you live at… [$BASESTRT][$BASEAPT] [$BASECITY], [$BASESTAT] [$BASEZIP]

ATEXT:

WEB	CATI	AVALUE	BRANCH
I live at the above address	RESPONDENT LIVES AT THE ABOVE ADDRESS	102	ADD_CHECK3
I do not live at the above address	RESPONDENT DOES NOT LIVE AT THE ABOVE ADDRESS	603	ADD_CHECK3

THANK03

THANK03
Type:
QTEXT:

WEB	CATI
Invitations to participate in the survey are based on addresses. Because you do not live at the address we just asked about, you are not eligible to take part in the survey. Thank you for visiting our website.	Invitations to participate in the survey are based on addresses. Because you do not live at the address we just asked about, you are not eligible to take part in the survey.

Branch

Condition	Branch
ELSE	END

THANK04

THANK04
Type:
QTEXT:

WEB	CATI
Thank you for your participation; those are all the questions we have at this time.	Thank you for your participation; those are all the questions we have at this time.

Branch

Condition	Branch
ELSE	END

READMSG

READMSG
TYPE: label
**(PLEASE READ THE FOLLOWING MESSAGE INTO THE ANSWERING MACHINE.)

**

This is [INTERVIEWER_NAME] calling on behalf of the City of Billings, Yellowstone County, and The Montana Department of Transportation about the Billings Yellowstone County Household Travel Survey being conducted in your area. We will try to reach you again in the next few days or you may reach our study team at [$HOTLINE_NUMBER].

Branch

Condition	Branch
ELSE	END

NOGOODDATE2

INT_NOGOODEXIT
TYPE: TextEntry
QTEXT:

WEB	CATI
Thank you – we will have someone contact you soon to try and arrange for a travel date that works for you.	Thank you – we will have someone contact you soon to try and arrange for a travel date that works for you.

ATEXT:

WEB	CATI	AVALUE	BRANCH
CONTINUE	CONTINUE	901	END

ADULT_SET

INT_ADULT_SET
TYPE: Calculated
ProgrammerNote: If there is a HHMEM at least 18 but they are not available (INT_A3=302) set disposition to "Callback to reach Adult" (302).

=302

ADULT

INT_ADULT
TYPE: SelectSingle
QTEXT:

WEB	CATI
The survey must be completed by an adult household member. Please ask an adult in the household to come back and complete the survey.	The survey must be completed by an adult. Please ask an adult in your household to call us back at [$HOTLINE_NUMBER] or they can complete the survey online at www.BigSkyDailyTravel.com with your PIN: [$PIN].

ATEXT:

WEB	CATI	AVALUE	BRANCH
Continue to exit survey	CALL BACK TO REACH ADULT	302	END

NOADULT_SET

INT_NOADULT_SET
TYPE: Computed

=606

NOADULT

INT_NOADULT
TYPE: SelectSingle
QTEXT:

WEB	CATI
Thank you but we can only conduct the survey with households where there is at least one person 18 or older living in the household.	Thank you but we can only conduct the survey with households where there is at least one person 18 or older living in the household.

ATEXT:

WEB	CATI	AVALUE	BRANCH
Select to exit survey	EXIT	606	END

RESULT

INT_RESULT
TYPE: SelectSingle
QASKEDIF: '[$INITIATIONMODE]'='CATI'
Programmer Note: treat RECCALLBACK as OpenEnd on values 300 or 301

ATEXT	AVALUE
Default	100

ATEXT	AVALUE
Partial	101
Partial Manual	102
Call-back General	300
Call-back Specific	301
Call-back to reach Adult	302
Will Continue Online	200
Non-Working Number	600
Non-Residential	602
Ring no Answer	400
Busy Signal	402
Voicemail- no message left	401
Voicemail- Message Left	403
Language Barrier	700
Initial Refusal	500
Final Refusal	501
Invalid Address	603
Invalid GPS Address	604
Invalid Release Group	608
Complete	800
Problem	900
New Travel date needed	901
HH Size DQ	605
HH Age DQ	606

RECCALLBACK
TYPE: DateTimeEntry
QASKEDIF: '[$INITIATIONMODE]'='CATI'
REQUIREDIF: INT_RESULT IN (300,301)

WEB	CATI
	Call back on:

RESULT_O
TYPE: TextEntry
QASKEDIF: '[$INITIATIONMODE]'='CATI'

WEB	CATI
	INTERVIEWER NOTES

RESULT_PHONE
TYPE: TextEntry Format
QASKEDIF: '[$INITIATIONMODE]'='CATI'
FORMAT: ###-###-####

WEB	CATI
	The numbers we have on file for you are: [$PHONE], [$RMTXTNUM], [$BPHONE1]. Is that correct?

END

NOTE: Branch to SMS if CATI, Public Site if WEB

Appendix C. Final Retrieval Script

General Documentation Notes:

- Orange heading indicate a new screen
- Blue heading indicate a new variable
- "Type" indicates the type of variable that will be collected
    - SelectSingle – Select one option from list provided
    - SelectMultiple – Select multiple option from list provided
    - NumberEntry – Number field within the range provided
    - TextEntry – Open text field
    - DropDown – Select one option from a drop down list
    - CalendarDropDown – Select a date from a calendar provided
    - Computed- Computed variable used in recalls
    - GeoCodeAddress – Address search tool using Google Maps API
- ProgrammerNote provides the logic for when the question will be presented or any special instructions not already covered in the other specifications
- Because the survey is voluntary and respondents should not feel compelled to provide a response, options for "Don't Know" and "Prefer not to answer (Refused)" will be available. To minimize non-response, these choices will not initially appear as answer choices on any screen presented to the respondent.
    - If a participant clicks "Next" on a page without answering a question they will receive a prompt noting that no answer was provided and presenting three options:
        - I meant to answer it (selecting this will direct the participant back to the unanswered question).
        - I don't know
        - I prefer not to answer
- In CATI question text, the text in ALL CAPS is for instruction to the interviewer and should not be read out loud
- Text that is wrapped with square brackets and preceded by a dollar sign '$' denotes situations where the text varies based on roster row number and other context, e.g., [$ARE_YOU] will be replaced with either "are you" or "is John Jr."
- Respondents who quit the survey prior to completion of all questions and return to finish at a later time will be presented a screen that welcomes them back to the survey and informs them that they will be returned to the place where they left the survey.
    - WEB text
        - Welcome back. We see that [$FNAME] has already started the survey, click "Next" to continue where they left off.
    - CATI text
        - I see that [$FNAME] has already started the survey; I'm going to pull up the survey where they left off.

Phone Reminder / Travel Date Change

1. REMINDERBRANCH

REMINDERBRANCH
TYPE: Computed

CASE WHEN travel day <= TODAY THEN 1 ELSE 2 END

AVALUE	BRANCH
1	INTRO2
2	INOUT

2. INTRO2

RMINTRO2
TYPE: SelectSingle
ProgrammerNote: Asked if a travel day reminder phone call (TODAY<=NTRIPDATE)
QTEXT

WEB	CATI
	Hello this is [INTERVIEWER NAME] calling on behalf of the 'Billings Yellowstone County Household Travel Survey' to remind you that your scheduled travel day is [$TRIPDATELONGFORMAT]. Do you have any questions about the materials we sent you?

ATEXT

WEB	CATI	AVALUE	BRANCH
	NO QUESTIONS	1	RETPREF
	TRAVEL DATE IS BAD FOR RESPONDENT	2	NEW_TD
	NO ANSWER	3	READMSG

3. NEW_TD

NEW_TD
TYPE: Calendar Dropdown Menu
ProgrammerNote: Asked if no good travel date is available (NEWTRIPDATE=3)
QTEXT

WEB	CATI
	Okay, we can offer you an alternative travel date; however, we have to maintain the same day of the week. Which of the following dates would you prefer? [READ ONLY THE DATES THAT ARE HIGHLIGHTED]

4. TDTEXT

REREMIN
TYPE: Calculated
ProgrammerNote: Asked if a travel day reminder phone call (TODAY<=NTRIPDATE)

CASE WHEN coalesce([$RMINTRO2:C], 0)=2 THEN 1 WHEN coalesce([$RETPREF:C], 0) <> 1 THEN 2 ELSE 3 END"

ATEXT	AVALUE
"We'll call you back on [$DAYBEFORENEWTRIPDATE] to remind you of your new travel date."	1
"We'll call you back on [$HHCALLTIMEFORMAT] to collect your travel information."	2
	3

RETPREF

TYPE: SelectSingle

ProgrammerNote: Asked if a travel day reminder phone call (TODAY<=TRIPDATE)

QTEXT

WEB	CATI
	You previously reported that your preference to complete the travel reporting step was by "[$PREVRETPREF]"? Is that still your preference?

ATEXT

WEB	CATI	AVALUE	BRANCH
	ONLINE	1	ENDREMIN
	PHONE	2	HHCALLTIME
	NO PREFERENCE	3	HHCALLTIME

5. BEST_TIME

HHCALLTIME

TYPE: SelectSingle

ProgrammerNote: Asked if a travel day reminder phone call for a household who's retrieval preference is not ONLINE (TODAY<=TRIPDATE AND RETPREF IN (2,3)). **Make sure the new callback is created**

WEB	CATI
	We will call you back after your travel date to collect your travel details. What would be the best date and time to call you back? NOTE: [READ ONLY THE DATES THAT ARE HIGHLIGHTED]

6. ENDREMIN

ENDREMIN

TYPE: SelectSingle

ProgrammerNote: Asked if a travel day reminder phone call reminder (TODAY<=TRIPDATE)

QTEXT

WEB	CATI
	Great! [$REREMIN] Remember as a thank you we will send your household a $15 check for completing the survey.

ATEXT

WEB	CATI	AVALUE	BRANCH
	END REMINDER	1	END

7. READMSGREMIND

READMSGREMIND
TYPE: SelectSingle
ProgrammerNote: (RM_INTRO2=3)
QTEXT

WEB	CATI
	[PLEASE READ THE FOLLOWING MESSAGE INTO THE ANSWERING MACHINE] Hello, this is [INTERVIEWER NAME] calling to remind you about the Billings Yellowstone County Household Travel Survey. Your travel date is tomorrow, [$TRIPDATELONGFORMAT]. Please make sure each person in your household installs and uses the Daily Travel smartphone app, or uses a travel log to help keep track of the all the places you go. Beginning on [$DAYAFTERNEWTRIPDATE], you can complete the study online at www.BigSkyDailyTravel.com using your PIN: [$PIN] or by calling us at 1-. As a thank you, we will send your household a $15 participation check when you successfully complete the survey. Thank you for participating in this important survey and have a good day.

8. INT_READMSG2_SET

INT_READMSG2_SET
TYPE: Calculated
ProgrammerNote: If interview reaches an answering machine (TBBUT=403) set disposition to "Voicemail – Message Left" (403).

=403

RECCALLBACK
TYPE: DatePicker
ProgrammerNote: ('[$INITIATIONMODE]'='CATI')
QTEXT

WEB	CATI
	NOTE: SEE DATE RANGE ABOVE. HOURS AVAILABLE M-F -> 10 AM TO 7 PM / SAT -> 12 PM TO 4PM Call back on: IF NEEDED: Our telephone staff is not available at that time how about… [OFFER CLOSEST AVAILABLE TIME FOR THAT DATE]

RESULT_O
TYPE: TextEntry
ProgrammerNote: ('[$INITIATIONMODE]'='CATI')

RESULT_PHONE
TYPE: open
FORMAT: ###-###-####
ProgrammerNote: ('[$INITIATIONMODE]'='CATI')

WEB	CATI
	The numbers we have on file for you are: [$PHONE1], [$RMPHONE], [$BPHONE1]. Is that correct?

9. INOUT

INOUT
Type: Computed
QASKEDIF: '[$INITIATIONMODE]'='CATI'
ProgrammerNote: Calculate based on system variable from SMS

ATEXT	AVALUE
INBOUND CALL	1
OUTBOUND CALL	2

10. TBBUT

TBBUTVAR
TYPE: Computed

CASE WHEN initiationmode='CATI' AND in_out =1 THEN 1

WHEN initiationmode='CATI' AND in_out=2 THEN 2

ELSE initiationmode='WEB' THEN 3

END

ATEXT	AVALUE
Okay, I now have the survey up… Next, I will	1
Hello, this is [INTERVIEWER NAME] calling on behalf of the Billings Yellowstone County Household Travel Survey. Your household was asked to take part in our survey about daily travel. I'm calling to collect the details about your travel. Next, I will '	2
Welcome back to the Billings Yellowstone County Household Travel Survey. Next, we will	3

TBBUT
TYPE: SelectSingle
ProgrammerNote: Always Asked
QASKEDIF:
QTEXT

WEB	CATI
[$TBBUTVAR] ask you to provide or confirm details about trips and activities recorded on your travel day ([$NTRIPDATE]) for each person in your household. If possible, please have each adult report their own travel.	[$TBBUTVAR] ask you to provide or confirm details about trips and activities recorded on your travel day ([$NTRIPDATE]) for each person in your household. If possible, we will ask each adult to tell me about their own travel.

ATEXT

WEB	CATI	AVALUE	ASHOWNIF	BRANCH
Click 'Next' to continue.	CLICK NEXT TO CONTINUE	100	WEB or CATI	SELECTPERSON
	REACHED ANSWERING MACHINE	403	CATI	READMSG2_SET
	GO TO RESULTS	101	CATI	INT_RESULT

11. SelectPerson

SELECTPERSON1

TYPE: DropDown
ProgrammerNote: Always Asked, drop down should include AGE >=13, or AAGE not in (1,2)
QTEXT

WEB	CATI
Okay, now we are going to ask you some general questions about your household's travel experiences. We need to know if people are reporting their own travel or someone else's travel. Please select **YOUR** name from the drop down list below: The person providing this information needs to be an adult household member.	Before we begin I need to know with whom I'm speaking. IF NEEDED: [The person providing this information needs to be an adult household member.] SELECT PARTICIPANT NAME FROM LIST BELOW

ATEXT

WEB	CATI	AVALUE
LIST OF PEOPLE 13 OR OLDER	LIST OF PEOPLE 13 OR OLDER	

SELECTPERSON2

TYPE: DropDown
ProgrammerNote:If SELECTPERSON1=PERNO AGE is >=13 and <=17 or AAGE in (3.4), only show/allow selection of that PERNO, otherwise, show all HH members
QTEXT

WEB	CATI
Whose travel are you about to report? Choose the person below for whom you want to report travel:	IF YOU ARE SPEAKING WITH SOMEONE WHO IS REPORTING BY PROXY FOR ANOTHER HOUSEHOLD MEMBER, SELECT THE NAME OF THE PERSON WHOSE TRAVEL IS BEING REPORTED BELOW. I'm now going to bring up the travel reporting screen. One moment, please... CLICK 'START' OR 'CONTINUE' TO REPORT TRAVEL INFORMATION.

ATEXT

WEB	CATI	AVALUE
LIST OF ALL HH MEMBERS	LIST OF ALL HH MEMBERS	

ASSENT

TYPE: SelectSingle
ProgrammerNote: Shown if, AGE is >=13 and <=17, or AAGE in (3,4)
QTEXT

WEB	CATI
I understand the research being conducted. By clicking next, I agree to be in this study.	IF YOU ARE SPEKAING TO A CHILD BTWEEN THE AGES OF 13-17, STATE THE FOLLOWING: To move forward with the survey, I need to make sure you understand the research being conducted and agree to continue.

12. TBW – Place Wizard

YOU
TYPE: computed
CASE WHEN [$R]=1 THEN 1 ELSE 2 END

ATEXT	AVALUE
you	1
[$FNAME]	2

WERE_YOU
TYPE: computed
CASE WHEN [$R]=1 THEN 1 ELSE 2 END

ATEXT	AVALUE
were you	1
was [$FNAME]	2

I_FNAME
TYPE: computed
CASE WHEN [$R]=1 THEN 1 ELSE 2 END

ATEXT	AVALUE
I	1
[$FNAME]	2

PlaceNameText
TYPE: Computed
CASE WHEN gpsplace=true THEN 4 WHEN [$R]=1 THEN 1 WHEN [$R]=2 THEN 2 ELSE 3 END

ATEXT	AVALUE
Starting at 3:00 AM [$WERE_YOU] at home or someplace else?	1
Where did [$YOU1] go first?	2
Where did [$YOU1] go next?	3
Confirm the place recorded on [$YOUR] phone is correct:	4

INTROLABEL
TYPE: TextEntry
ProgrammerNote: Always Asked
QTEXT:

WEB	CATI	PR
Tell us about all the <u>places</u> you went on the assigned travel day, [$TRAVDATE], from morning to night (starting at 3 am through 2:59 am). For each place: (1) Use the drop down menu to select where you went; (2) Enter the time you arrived and left; (3) Click the 'Save' button; (4) Use the 'Add New Place' button if	Tell us about all the <u>places</u> you went on the assigned travel day, [$TRAVDATE], from morning to night (starting at 3 am through 2:59 am). For each place: (1) Use the drop down menu to select where you went; (2) Enter the time you arrived and left; (3) Click the 'Save' button; (4) Use the 'Add New Place' button	Confirm the list of all the places recorded by [$YOUR] phone on the assigned travel day, [$TRAVDATE]. If a place you visited is missing, select 'Insert Place' after the last place you visited before going to the missing place. Adjust

WEB	CATI	PR
you made another trip or check the box to show that the '[$I_FNAME] did not leave this place'. The map on the right will display the route(s) to help visualize the travel day.	if you made another trip or check the box to show that the '[$I_FNAME] did not leave this place'. The map on the right will display the route(s) to help visualize the travel day.	the arrival and departure times on other places as needed.

LOCNAME

TYPE: TextEntry
ProgrammerNote: Always Asked
QTEXT:

WEB	CATI	PR
[$PLACENAMETEXT] 	[$PLACENAMETEXT] 	[$PLACENAMETEXT]

ARRTIME

TYPE: NumberEntry
FORMAT: H:MM AMPM
ProgrammerNote: [$R]>1
QASKEDIF:

WEB	CATI	PR
What time did [$YOU] arrive here?	What time did [$YOU] arrive here?	Confirm the time [$YOU] arrived here.

DEPTIME

TYPE: SelectSingle
FORMAT: H:MM AMPM
ProgrammerNote: Always Asked

WEB	CATI	PR
What time did [$YOU] leave here?	What time did [$YOU] leave here?	Confirm the time [$YOU] left here.

LASTPLACE

TYPE: CheckBox

WEB	CATI	PR
[$I_FNAME] did not leave this place.	(THIS IS WHERE THEY ENDED THEIR TRAVEL DAY.)	[$I_FNAME] did not leave this place.

13. TripsBasic

MODE

TYPE: SelectSingle
ProgrammerNote: Asked if respondent reports going to at least 1 place. The second display will be used if the subject used public transportation during the trip and the only MODE options will be 7-10)
QASKEDIF: PLACENO>1
QTEXT

WEB	CATI	PR
[DISPLAY CURRENT PLACE NUMBER AND NAME FOOTER] How did [$YOU] get to this place?	[DISPLAY CURRENT PLACE NUMBER AND NAME FOOTER] How did [$YOU] get to this place?	[DISPLAY CURRENT PLACE NUMBER AND NAME FOOTER] Confirm or provide how [$YOU] got to this place.

ATEXT

WEB	CATI	AVALUE
Walk	WALK	1
Bicycle	BICYCLE	2
Motorcycle/moped	MOTORCYCLE/MOPED	3
Auto / van / truck (as the driver)	AUTO / VAN / TRUCK (AS THE DRIVER)	4
Auto / van / truck (as the passenger)	AUTO / VAN / TRUCK (AS THE PASSENGER)	5
Carpool/vanpool	CARPOOL/VANPOOL	6
School bus	SCHOOL BUS	7
MET Public transit – local bus	MET PUBLIC TRANSIT – LOCAL BUS	8
Crow Nation Transit	CROW NATION TRANSIT	9
Dial-a-ride/paratransit	DIAL-A-RIDE/PARATRANSIT	10
Private bus or shuttle	PRIVATE BUS OR SHUTTLE	11
Taxi/limo	TAXI/LIMO	12
Uber/ride share	UBER/RIDE SHARE	13
Airplane	AIRPLANE	14
Something Else	SOMETHING ELSE	97
I don't know	DON'T KNOW	-8
I prefer not to answer	REFUSED	-7

MODE_O

TYPE: TextEntry
ProgrammerNote: Asked if respondent responds Other, Specify to MODE
QASKEDIF: MODE=97
AREQUIREDIF: MODE=97
QTEXT

WEB	CATI	PR
Please describe how [$YOU] got to this place.	Please describe how [$YOU] got to this place.	Please describe how [$YOU] got to this place.

ATEXT

WEB	CATI	AVALUE
ENTER TEXT	ENTER TEXT	

14. SPEEDCHECK – SKIP IF NO SPEED CHECK TRIGGERS

TOOFAST

QASKEDIF: Asked if travel time is shorter than mode would dictate
Programmer Note: If any answer provided in the 3 steps fixes the problem a "Problem solved!" screen will pop-up. Hit "Continue" to return to the survey.
QTEXT

According to what you told us, we calculate that it took [$YOU1] [$TRAVEL TIME] minutes to travel about [$DISTANCE] miles by the mode [$MODE], or more than [$MAX ALLOWABLE SPEED FOR MODE].

First, please review the times below and correct any errors.

WEB	CATI	AVALUE
[$YOU] left [PREVIOUS PLACE] at:	[$YOU] left [PREVIOUS PLACE] at:	EDIT TIME
[$YOU] arrived at [NEXT PLACE] at:	[$YOU] arrived at [NEXT PLACE] at:	EDIT TIME
[$YOU] left [NEXT PLACE] at:	[$YOU] left [NEXT PLACE] at:	EDIT TIME
If the information is correct, click Next.	If the information is correct, click Next.	NEXT>>

Second, is the mode of travel correct?

WEB	CATI	AVALUE
[$YOU] traveled there by [$MODE]:	[$YOU] traveled there by [$MODE]:	EDIT MODE
		<<BACK
If the information is correct, click Next.	If the information is correct, click Next.	NEXT>>

Lastly, are the locations where you went correct on this map?

WEB	CATI	AVALUE
PLACE#: [PLACE NAME]	PLACE#: [PLACE NAME]	CORRECT THIS ADDRESS
		CHOOSE SOMEWHERE ELSE
PLACE#: [PLACE NAME]	PLACE#: [PLACE NAME]	CORRECT THIS ADDRESS
		CHOOSE SOMEWHERE ELSE
		<<BACK
If the information is correct, click Next.	If the information is correct, click Next.	NEXT>>

If the speed error is corrected during any of the three previous steps a screen will direct users back into trip details.

WEB	CATI	AVALUE
Problem solved! Thank you for reviewing and fixing this information. Click Continue to return to the survey.	Click Continue to return to the survey.	Continue

TOOSLOW

ProgrammerNote: Asked if travel time is longer than mode would dictate

According to what you told us, we see that it took [$YOU1] [$TRAVEL TIME] minutes to travel about [$DISTANCE] miles in a [$MODE], or less than [MIN ALLOWABLE SPEED FOR MODE].

First, please review the times below and correct any errors.

WEB	CATI	AVALUE
[$YOU] left [PREVIOUS PLACE] at:	[$YOU] left [PREVIOUS PLACE] at:	EDIT TIME
[$YOU] arrived at [NEXT PLACE] at:	[$YOU] arrived at [NEXT PLACE] at:	EDIT TIME
[$YOU] left [NEXT PLACE] at:	[$YOU] left [NEXT PLACE] at:	EDIT TIME
If the information is correct, click Next.	If the information is correct, click Next.	NEXT>>

Second, is the mode of travel correct?

WEB	CATI	AVALUE
[$YOU] traveled there by:	[$YOU] traveled there by:	EDIT MODE

WEB	CATI	AVALUE
		<<BACK
If the information is correct, click Next.	If the information is correct, click Next.	NEXT>>

Lastly, are the locations where you went correct on this map?

WEB	CATI	AVALUE
PLACE#: [PLACE NAME]	PLACE#: [PLACE NAME]	CORRECT THIS ADDRESS
		CHOOSE SOMEWHERE ELSE
PLACE#: [PLACE NAME]	PLACE#: [PLACE NAME]	CORRECT THIS ADDRESS
		CHOOSE SOMEWHERE ELSE
		<<BACK
If the information is correct, click Next.	If the information is correct, click Next.	NEXT>>

If the speed error is corrected during any of the three previous steps a screen will direct users back into trip details.

WEB	CATI	AVALUE
Problem solved! Thank you for reviewing and fixing this information.		
Click Continue to return to the survey.		Continue

LNGTRP_R

QTEXT

WEB	CATI
Thanks for trying to fix the problem. Help us understand what was going on when you traveled to [$LOCNAME]	Thanks for trying to fix the problem. Help us understand what was going on when you traveled to [$LOCNAME]

ATEXT

WEB	CATI	AVALUE
Weather (e.g., rain or snow)	WEATHER (E.G., RAIN OR SNOW)	1
Construction	CONSTRUCTION	2
An accident	AN ACCIDENT	3
Traffic congestion	TRAFFIC CONGESTION	4
Something else	SOMETHING ELSE	97

LNGTRP_R_O

TYPE: TextEntry
ProgrammerNote: Asked if respondent reports some other reason for slow travel
QASKEDIF: LNGTRP_R=97
QTEXT

WEB	CATI
Please describe why it took as long as it did to get to [$LOCNAME].	Please describe why it took as long as it did to get to [$LOCNAME].

15. TripsBasicContinued

TOTTR

TYPE: NumberEntry
RANGE: 1-15
ProgrammerNote: Asked if respondent reports going to at least 1 place
QASKEDIF: PLACENO>1
QTEXT

WEB	CATI	PR
[DISPLAY CURRENT PLACE NUMBER AND NAME] How many people went to this place with [$YOU]?	[DISPLAY CURRENT PLACE NUMBER AND NAME] How many people went to this place with [$YOU]?	[DISPLAY CURRENT PLACE NUMBER AND NAME] Confirm how many people went to this place with [$YOU]?

ATEXT

WEB	CATI	AVALUE
ENTER NUMBER	ENTER NUMBER	

HHMEM

TYPE: SelectMultiple
ProgrammerNote: Asked if household size is greater than one and respondent reports traveling with at least one person. If HHSIZ=1 autocode HHMEM=0
QASKEDIF: HHSIZ>1 AND TOTTR>=1
QTEXT

WEB	CATI	PR
[DISPLAY CURRENT PLACE NUMBER AND NAME] Of these, please select any household members.	[DISPLAY CURRENT PLACE NUMBER AND NAME] Of these, please select any household members.	[DISPLAY CURRENT PLACE NUMBER AND NAME] Please confirm the listed household members.

ATEXT

WEB	CATI	AVALUE
LIST OF HH MEMBERS		

16. PlaceDetails

YOUR2

TYPE: computed

CASE WHEN SELECTPERSON1=SELECTPERSON2 THEN 1 ELSE 2 END

TEXT	CODE
your	1
[$FNAME]'s	2

TPURP

TYPE: SelectSingle
ProgrammerNote: Always asked. Place choices in two columns.
QASKEDIF:
QTEXT

WEB	CATI	PR
[DISPLAY CURRENT PLACE NUMBER, PLACE NAME, MODE, ARRIVAL AND DEPARTURE	[DISPLAY CURRENT PLACE NUMBER, PLACE NAME, MODE, ARRIVAL AND	[DISPLAY CURRENT PLACE NUMBER, PLACE NAME, MODE, ARRIVAL AND

WEB	CATI	PR
TIME] What was [$YOUR2] main activity here?	DEPARTURE TIME] What was [$YOUR2] main activity at [$LOCNAME]?	DEPARTURE TIME] Confirm or select from below, [$YOUR2] main activity at [$LOCNAME]?

ATEXT

WEB	CATI	AVALUE
01. Typical home activities	01. TYPICAL HOME ACTIVITIES	1
02. Worked at home (paid)	02. WORKED AT HOME (PAID)	2
03. Worked at fixed work location	03. WORKED AT FIXED WORK LOCATION	3
04. Worked at non-fixed work location	04. WORKED AT NON-FIXED WORK LOCATION	4
05. Work related (off-site meeting)	05. WORK RELATED (OFF-SITE MEETING)	5
06. Attended school or daycare / studied	06. ATTENDED SCHOOL OR DAYCARE / STUDIED	6
07. Volunteered	07. VOLUNTEERED	7
08. Shopped (non-routine like for appliances, cars, home furnishings)	08. SHOPPED (NON-ROUTINE LIKE FOR APPLIANCES, CARS, HOME FURNISHINGS)	8
09. Shopped (routine like grocery, clothing)	09. SHOPPED (ROUTINE LIKE GROCERY, CLOTHING)	9
10. Drive-thru errands (ATM, dry cleaning, pharmacy, etc.)	10. DRIVE-THRU ERRANDS (ATM, DRY CLEANING, PHARMACY, ETC.)	10
11. Serviced a vehicle (purchased gas, regular maintenance)	11. SERVICED A VEHICLE (PURCHASED GAS, REGULAR MAINTENANCE)	11
12. Health care visit	12. HEALTH CARE VISIT	12
13. Non-shopping errands (banking, post office, government, etc.)	13. NON-SHOPPING ERRANDS (BANKING, POST OFFICE, GOVERNMENT, ETC.)	13
14. Drive thru / take-out dining	14. DRIVE THRU / TAKE-OUT DINING	14
15. Ate / dined out	15. ATE / DINED OUT	15
16. Socialized with friends / relatives	16. SOCIALIZED WITH FRIENDS / RELATIVES	16
17. Attended a religious or community event	17. ATTENDED A RELIGIOUS OR COMMUNITY EVENT	17
18. Exercised or other recreation	18. EXERCISED OR OTHER RECREATION	18
19. Attended a major special event	19. ATTENDED A MAJOR SPECIAL EVENT	
20. Dropped off / Picked up a passenger(s)	20. DROPPED OFF / PICKED UP A PASSENGER(S)	
21. Changed travel mode / transferred	21. CHANGED TRAVEL MODE / TRANSFERRED	19
Something else	SOMETHING ELSE	97
I don't know	DON'T KNOW	-8
I prefer not to answer	REFUSED	-7

TPURP_O

TYPE: TextEntry
ProgrammerNote: Asked if subject responds "Something else" to trip purpose
QASKEDIF: TPURP=97
AREQUIREDIF: TPURP=97
WEB QTEXT = CATI QTEXT

WEB	CATI
[DISPLAY CURRENT PLACE NUMBER, PLACE NAME, MODE, ARRIVAL AND DEPARTURE TIME] What was [$YOUR2] main activity here?	[DISPLAY CURRENT PLACE NUMBER, PLACE NAME, MODE, ARRIVAL AND DEPARTURE TIME] What was [$YOUR2] main activity at [$LOCNAME]?

ATEXT

WEB	CATI	AVALUE
ENTER TEXT	ENTER TEXT	

17. TPURP2

TPURP2

TYPE: SelectSingle
ProgrammerNote: Always asked. Place choices in two columns.
QASKEDIF:
QTEXT

WEB	CATI
[DISPLAY CURRENT PLACE NUMBER, PLACE NAME, MODE, ARRIVAL AND DEPARTURE TIME] What else [$DID_YOU] do here?	[DISPLAY CURRENT PLACE NUMBER, PLACE NAME, MODE, ARRIVAL AND DEPARTURE TIME] What else [$DID_YOU] do at [$LOCNAME]?

ATEXT

WEB	CATI	AVALUE
00. Nothing else	00. NOTHING ELSE	0
01. Typical home activities	01. TYPICAL HOME ACTIVITIES	1
02. Worked at home (paid)	02. WORKED AT HOME (PAID)	2
03. Worked at fixed work location	03. WORKED AT FIXED WORK LOCATION	3
04. Worked at non-fixed work location	04. WORKED AT NON-FIXED WORK LOCATION	4
05. Work related (off-site meeting)	05. WORK RELATED (OFF-SITE MEETING)	5
06. Attended school or daycare / studied	06. ATTENDED SCHOOL OR DAYCARE / STUDIED	6
07. Volunteered	07. VOLUNTEERED	7
08. Shopped (non-routine like for appliances, cars, home furnishings)	08. SHOPPED (NON-ROUTINE LIKE FOR APPLIANCES, CARS, HOME FURNISHINGS)	8
09. Shopped (routine like grocery, clothing)	09. SHOPPED (ROUTINE LIKE GROCERY, CLOTHING)	9
10. Drive-thru errands (ATM, dry cleaning, pharmacy, etc.)	10. DRIVE-THRU ERRANDS (ATM, DRY CLEANING, PHARMACY, ETC.)	10
11. Serviced a vehicle (purchased gas, regular maintenance)	11. SERVICED A VEHICLE (PURCHASED GAS, REGULAR MAINTENANCE)	11
12. Health care visit	12. HEALTH CARE VISIT	12
13. Non-shopping errands (banking, post office, government, etc.)	13. NON-SHOPPING ERRANDS (BANKING, POST OFFICE, GOVERNMENT, ETC.)	13

WEB	CATI	AVALUE
14. Drive thru / take-out dining	14. DRIVE THRU / TAKE-OUT DINING	14
15. Ate / dined out	15. ATE / DINED OUT	15
16. Socialized with friends / relatives	16. SOCIALIZED WITH FRIENDS / RELATIVES	16
17. Attended a religious or community event	17. ATTENDED A RELIGIOUS OR COMMUNITY EVENT	17
18. Exercised or other recreation	18. EXERCISED OR OTHER RECREATION	18
19. Attended a major special event	19. ATTENDED A MAJOR SPECIAL EVENT	
20. Dropped off / Picked up a passenger(s)	20. DROPPED OFF / PICKED UP A PASSENGER(S)	
21. Changed travel mode / transferred	21. CHANGED TRAVEL MODE / TRANSFERRED	19
Something else	SOMETHING ELSE	97
I don't know	DON'T KNOW	-8
I prefer not to answer	REFUSED	-7

DID_YOU
TYPE: computed
CASE WHEN SELECTPERSON2=SELECTPERSON3 THEN 1 ELSE 2 END

TEXT	CODE
did you	1
did [$FNAME]	2

TPURP2_O
TYPE: TextEntry
ProgrammerNote: Asked if subject responds "Something else" to trip purpose
QASKEDIF: TPURP=97
AREQUIREDIF: TPURP=97
WEB QTEXT = CATI QTEXT

WEB	CATI
What else [$DID_YOU] do here?	What else [$DID_YOU] do here?

ATEXT

WEB	CATI	AVALUE
Enter text	ENTER TEXT	

Note: The place details roster will return to TPURP until all places are complete.

18. NOGO

NOGOWHY
TYPE: SelectSingle
ProgrammerNote: Asked if respondent reported 0 trips
QASKEDIF: MAX PLACENO=1
QTEXT

WEB	CATI
What was the main reason that [$YOU1] did not go anywhere on [$YOUR_THEIR] travel day?	What was the main reason that [$YOU1] did not go anywhere on [$YOUR_THEIR] travel day?

ATEXT

WEB	CATI	AVALUE
Personally sick	PERSONALLY SICK	1
Vacation or personal day	VACATION OR PERSONAL DAY	2
Caretaking	CARETAKING	3
Home-bound elderly or disabled	HOME-BOUND ELDERLY OR DISABLED	4
Worked at home (for pay)	WORKED AT HOME (FOR PAY)	5
Not scheduled to work	NOT SCHEDULED TO WORK	6
Worked around home (not for pay)	WORKED AROUND HOME (NOT FOR PAY)	7
Out of area	OUT OF AREA	8
No transportation available	NO TRANSPORTATION AVAILABLE	9
No longer a household resident	NO LONGER A HOUSEHOLD RESIDENT	10
Something else	SOMETHING ELSE	97
I don't know	DON'T KNOW	-8
I prefer not to answer	REFUSED	-7

NOGOWHY_O
TYPE: TextEntry
ProgrammerNote: Asked if subject responds "Something else" to NOGOWHY
QASKEDIF: MAX PLACENO=1
AREQUIREDIF: NOGOWHY=97
QTEXT

WEB	CATI
What was the main reason that [$YOU1] did not go anywhere on [$YOUR_THEIR] travel day?	What was the main reason that [$YOU1] did not go anywhere on [$YOUR_THEIR] travel day?

ATEXT

WEB	CATI	AVALUE
Enter	ENTER TEXT	

19. APP_USE

YOUR_THEIR
TYPE: computed

CASE WHEN SELECTPERSON1=SELECTPERSON2 THEN 1 ELSE 2 END

TEXT	CODE
your	1
their	2

YOU1
TYPE: Computed

CASE WHEN SELECTPERSON2=SELECTPERSON3 THEN 1 ELSE 2 END

TEXT	CODE
you	1

[$FNAME]	2

USEDAPP

TYPE: SelectMultiple

ProgrammerNote: Asked if trip reporting for the person is complete, the person answered YES to SMRTPHN and either YES to AGE12TO18 or their age is >= 18 and they recorded 0 GPS places.

QASKEDIF: [$SELPLACENO:C]=[$TOTPL:C]

QTEXT

WEB	CATI
Earlier, [$YOU] told us you owned a smartphone but did not record any travel on [$TRAVDATE] using it. Which of the following describes why [$YOU] did not use the app? Note: Select all that apply.	Earlier, [$YOU] told us you owned a smartphone but did not record any travel on [$TRAVDATE] using it. Which of the following describes why [$YOU] did not use the app? SELECT ALL THAT APPLY

ATEXT

WEB	CATI	AVALUE	BRANCH
[$FNAME] did use the app!	[$FNAME] did use the app!	1	APP_USE2
Could not download the app	Could not download the app	2	APP_USE2
Phone is too old	Phone is too old	3	APP_USE2
Operating system is too old	Operating system is too old	4	APP_USE2
No memory or storage left on the phone	No memory or storage left on the phone	5	APP_USE2
Did not trust the app	Did not trust the app	6	APP_USE2
Could not log in to the app	Could not log in to the app	7	APP_USE2
Left the phone at home	Left the phone at home	8	APP_USE2
Never received directions for the app	Never received directions for the app	9	APP_USE2
Some other reason	Something else	97	APP_USE2
I don’t know	DON’T KNOW	-8	APP_USE2
I prefer not to answer	REFUSED	-7	APP_USE2

USEDAPP_O

TYPE: TextEntry

ProgrammerNote: Asked if subject responds “Something else” to USEDAPP

QASKEDIF:

AREQUIREDIF: USEDAPP=97

QTEXT

WEB	CATI
What was the other reason you didn’t use the app?	Please describe your other reason

ATEXT

WEB	CATI	AVALUE
Enter	ENTER TEXT	

20. APP_USE2

YOUR2
TYPE: computed
ProgrammerNote: : Asked if trip reporting for the person is complete, the person answered YES to SMRTPHN and either YES to AGE12TO18 or their age is >= 18 and they recorded 0 GPS places.

CASE WHEN SELECTPERSON1=SELECTPERSON2 THEN 1 ELSE 2 END

TEXT	CODE
your	1
[$FNAME]'s	2

SURVEY_COMPARE
Type: SelectSingle

Tell us about [$YOUR2] overall survey experience in this second round (as compared to the survey from last spring).

VARIABLE NAME	WEB ATEXT = CATI ATEXT	Much Harder	Harder	Neither	Easier	Much Easier	Not Applicable
SURVEY_EASE	Compared to the first time, this round of the survey was…	1	2	3	4	5	6
TRAVEL_EASE	Compared to the first time I did this survey, keeping track of my travel this time was…	1	2	3	4	5	6
DAYS_EASE	For each additional day, I found reporting my travel to be…	1	2	3	4	5	6

21. APP_USE3

APP_SCALE
Type: SelectSingle
ProgrammerNote: Asked if trip reporting for the person is complete, the person answered YES to SMRTPHN and either YES to AGE12TO18 or their age is >= 18 and they recorded 0 GPS places.

Rate [$YOUR2] level of agreement with each statement below about [$YOUR2] experience using the smartphone app.

VARIABLE NAME	WEB ATEXT = CATI ATEXT	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Not Applicable

APP_USE1	It was easy to find help when needed.	1	2	3	4	5	6
APP_USE2	It was easy to use the app.	1	2	3	4	5	6
APP_USE3	The mapping feature of the app was easy to work with.	1	2	3	4	5	6
APP_USE4	Using the app did not impact my phone's battery life.	1	2	3	4	5	6
APP_USE5	If I did this survey again, I would prefer to use the app.	1	2	3	4	5	6
APP_USE6	I was confident that my data was secure.	1	2	3	4	5	6
APP_USE7	The app made it easy to report for other people traveling with me.	1	2	3	4	5	6
APP_USE8	I preferred reporting trip details as they happened throughout the day over recording trips on a paper log.	1	2	3	4	5	6
APP_USE9	I would prefer recording my trips on paper travel logs.	1	2	3	4	5	6

22. HAVELOG

HVLOG
TYPE: SelectSingle
ProgrammerNote: Asked if respondent completed their travel log
QASKEDIF: 1=0
QTEXT

WEB	CATI
Did you have [$YOUR2] completed travel log to refer to as you reported [$YOUR_THEIR] travel?	Did you have [$YOUR2] completed travel log to refer to as you reported [$YOUR_THEIR] travel?

ATEXT

WEB	CATI	AVALUE	BRANCH
Yes	YES	1	TBW
No	NO	2	TBW
I don't know	DON'T KNOW	-8	TBW
I prefer not to answer	REFUSED	-7	TBW

END PLACE DETAILS

23. ALTSELECTPERSON

ALTSELECTPERSON
TYPE: DropDown
ProgrammerNote: Should only be asked of 1 adult after all persons have reported trip details.
QTEXT:

Thanks for telling us about your travel day. We are almost done. Before we finish, we would like to find out about your experience with using different transportation options.

We need to know which person is answering the following questions.

Please select your name from the list below.

ATEXT:

WEB	CATI	AVALUE
List of people 18 or older	LIST OF PEOPLE 18 OR OLDER	

24. BIKES

BIKETRIPS

TYPE: SelectSingle
ProgrammerNote: Asked of whichever person is responding. Only asked once.
QTEXT:

How many days did [$DO_YOU_CAP] ride a bicycle in the last 30 days?

ATEXT:

WEB	CATI	AVALUE
Number Entry	Number Entry	1
I prefer not to answer	REFUSED	-7
I don’t know	DON’T KNOW	-8

BIKEREASON

TYPE: SelectSingle
ProgrammerNote: Asked of whichever person is responding. Only asked once.
QTEXT:

What was the primary reason for you to ride a bicycle over the last 30 days?

ATEXT:

WEB	CATI	AVALUE
Commuting to work or school	COMMUTING TO WORK OR SCHOOL	1
Recreation	RECREATION	2
Exercise/for my health	EXERCISE/FOR MY HEALTH	3
Personal errands (to the store, post office, and so on)	PERSONAL ERRANDS (TO THE STORE, POST OFFICE, AND SO ON)	4
Required for my job	REQUIRED FOR MY JOB	5
Didn't bicycle	DIDN'T BICYCLE	6
Some other purpose — Specify	SOME OTHER PURPOSE — SPECIFY	97
I prefer not to answer	DON’T KNOW	-7
I don't know	REFUSED	-8

25. BIKES2

BIKETERRAIN

TYPE: SelectSingle
ProgrammerNote: Asked of whichever person is responding. Only asked once.
QTEXT:

When you ride a bicycle, is it mostly on…

ATEXT:

WEB	CATI	AVALUE
Bike lanes on paved roads	BIKE LANES ON PAVED ROADS	1
Shoulders of paved roads	SHOULDERS OF PAVED ROADS	2
Paved roads, not on shoulders or lined bike lanes (riding in the same lane as cars or other vehicles)	PAVED ROADS, NOT ON SHOULDERS OR LINED BIKE LANES (RIDING IN THE SAME LANE AS CARS OR OTHER VEHICLES)	3
Bike paths, walking paths, or trails (defined as paths where cars are not allowed to drive)	BIKE PATHS, WALKING PATHS, OR TRAILS (DEFINED AS PATHS WHERE CARS ARE NOT ALLOWED TO DRIVE)	4
Unpaved roads (for example dirt, gravel, sand)	UNPAVED ROADS (FOR EXAMPLE DIRT, GRAVEL, SAND)	5
Sidewalks	SIDEWALKS	6
Didn't bicycle	DIDN'T BICYCLE	7
Other	OTHER	97
I prefer not to answer	DON'T KNOW	-7
I don't know	REFUSED	-8

NOBIKEWHY

TYPE: MultiSelect
ProgrammerNote: Asked of whichever person is responding. Only asked once.
QTEXT:

What keeps you, if anything, from riding a bicycle more often?

ATEXT:

WEB	CATI	AVALUE
Personal health or disability	Personal health or disability	1
Lack of safe / comfortable bicycle facilities	Lack of safe / comfortable bicycle facilities	2
Weather	Weather	3
Safety while biking next to / with cars	Safety while biking next to / with cars	4
Safety while biking through intersections	Safety while biking through intersections	5
Work schedule, family obligations	Work schedule, family obligations	6
Distance to destination is too far	Distance to destination is too far	7
Needing to carry bulky items	Needing to carry bulky items	8
Not interested in bicycling	Not interested in bicycling	9
Nothing keeps me from riding more often	Nothing keeps me from riding more often	10

WEB	CATI	AVALUE
No bicycle available	No bicycle available	11
Other — Specify:	Other — Specify:	97
I prefer not to answer	DON'T KNOW	-7
I don't know	REFUSED	-8

26. PUBTRANS

TRANSTRIPS

TYPE: SelectSingle
ProgrammerNote: Asked of whichever person is responding. Only asked once.
QTEXT:

How many of the last 30 days did you use public transit?

ATEXT:

WEB	CATI	AVALUE
Number Entry	Number Entry	1
I prefer not to answer	REFUSED	-7
I don't know	DON'T KNOW	-8

NOPUBTRANSWHY

TYPE: MultiSingle
ProgrammerNote: Asked of whichever person is responding. Only asked once.
QTEXT:

What keeps you, if anything, from using public transit more often?

ATEXT:

WEB	CATI	AVALUE
Bus doesn't go where I need it to go	Bus doesn't go where I need it to go	1
Bus doesn't run when I need it to	Bus doesn't run when I need it to	2
Work schedule, family obligations	Work schedule, family obligations	3
Personal health or disability	Personal health or disability	4
Weather	Weather	5
Safety	Safety	6
Distance to bus stop is too far	Distance to bus stop is too far	7
Needing to carry bulky items	Needing to carry bulky items	8
Nothing keeps me from using public transit more often	Nothing keeps me from using public transit more often	9
Other, specify:	Other, specify:	10
I prefer not to answer	DON'T KNOW	-7
I don't know	REFUSED	-8

27. ROUNDABOUT

INTERSECTION

TYPE: SelectSingle
ProgrammerNote: Asked of whichever person is responding. Only asked once.
QTEXT:

Which type of intersection in the Billings area do you generally think is easier to get through, whether you are driving, walking, or biking?

ATEXT:

WEB	CATI	AVALUE
Intersection with a roundabout	INTERSECTION WITH A ROUNDABOUT	1
Intersection with stop signs (4-way stop or 2-way stop)	INTERSECTION WITH STOP SIGNS (4-WAY STOP OR 2-WAY STOP)	2
Intersection with a traffic light (stop light)	INTERSECTION WITH A TRAFFIC LIGHT (STOP LIGHT)	3
Uncontrolled intersections (no stop signs, traffic lights, or roundabouts)	UNCONTROLLED INTERSECTIONS (NO STOP SIGNS, TRAFFIC LIGHTS, OR ROUNDABOUTS)	4
I prefer not to answer	REFUSED	-7
I don’t know	DON’T KNOW	-8

RNDABOUTFEEL

TYPE: SelectSingle
ProgrammerNote: Asked of whichever person is responding. Only asked once.
QTEXT:

How comfortable are you, if at all, travelling through roundabouts in the Billings area, whether you are driving, walking, or biking?

ATEXT:

WEB	CATI	AVALUE
Very comfortable	Very comfortable	1
Somewhat comfortable	Somewhat comfortable	2
Neither comfortable nor uncomfortable	Neither comfortable nor uncomfortable	3
Somewhat uncomfortable	Somewhat uncomfortable	4
Very uncomfortable	Very uncomfortable	5
I prefer not to answer	REFUSED	-7
I don’t know	DON’T KNOW	-8

28. HHINC2

HHINC2

TYPE: SelectSingle
ProgrammerNote: Asked if HHINC in (-7, -8)
QASKEDIF:

WEB	CATI
There is just one more question before we collect information about your entry to win a gift card. Because income is	There is just one more question before we collect information about your entry to win a gift card.< Because income is

related to how, when, and why people go from place to place, and because we want to be sure to include all types of households in our survey, please select which of the three categories best represents your total household income for last year.	related to how, when, and why people go from place to place, and because we want to be sure to include all types of households in our survey, please tell me which of the three categories best represents your total household income for last year. Was it…

ATEXT

WEB	CATI	AVALUE
Less than $30,000	Less than $30,000	1
$30,000 to $59,999	$30,000 to $59,999	2
$60,000 or more	$60,000 or more	3
I don't know	DON'T KNOW	-8
I prefer not to answer	REFUSED	-7

29. INCENMAILING

INCENMAILFNAM

TYPE: TextEntry
ProgrammerNote: Always asked. Prepopulate field with MAILFNAM.
QASKEDIF:
MaxLength: 50
QTEXT

WEB	CATI
We will send you a check for $15 and your household will be entered into a drawing for a $500 gift card to thank you for your participation in the survey. Please confirm or provide a name for us to include.	We will send you a check for $15 and your household will be entered into a drawing for a $500 gift card to thank you for your participation in the survey. Please confirm or provide a name for us to include.

ATEXT

WEB	CATI	AVALUE
First name:	FIRST NAME	

INCENMAILLNAM

TYPE: TextEntry
ProgrammerNote: Always asked. Prepopulate field with MAILLNAM.
QASKEDIF:
MaxLength: 50
QTEXT

WEB	CATI

ATEXT

WEB	CATI	AVALUE
Last name:	LAST NAME	

FUTURESURVEY

TYPE: SelectSingle
ProgrammerNote: Always asked. Prepopulate field with MAILLNAM.
QASKEDIF:
QTEXT

WEB	CATI

Would you be interested in doing a future survey? If Yes, we may contact you about a similar topic and invite you to participate.	Would you be interested in doing a future survey? If Yes, we may contact you about a similar topic and invite you to participate.

ATEXT

WEB	CATI	AVALUE
Yes	YES	1
No	NO	2
I don't know	DON'T KNOW	-7
I prefer not to answer	REFUSED	-8

30. THANK

THANK

TYPE: Display
ProgrammerNote: Always asked
QASKEDIF:
QTEXT

WEB	CATI
Thank you for taking time to help the Billings Yellowstone Metropolitan Planning Organization better understand the transportation needs of Billings and Yellowstone County. . If you have any questions about the survey or your participation, please call 1-855-910-7484.	Thank you for taking time to help the Billings Yellowstone Metropolitan Planning Organization better understand the transportation needs of the Billings and Yellowstone County. If you have any questions about the survey or your participation, please call 1-855-910-7484.

BRANCH

WEB	CATI	BRANCH
ELSE	ELSE	END

31. INT_RESULT

INT_RESULT

TYPE: SelectSingle
ProgrammerNote: Asked if retrieval mode is CATI ('[$INITIATIONMODE]'='CATI')
QASKEDIF:
ATEXT

CATI	AVALUE
Default	100
Partial	101
Partial (Manual)	102
Equipment Reminded	103
Equipment Shipped Back	104
Prompted Recall Released	105
Will Continue Online	200
Mailed Travel Logs Back	201
Logs Received	202
Logs Received – Follow-up Needed	203
Call-back General	300

CATI	AVALUE
Call-back Specific	301
Call-back to Reach Adult	302
Ring no Answer	400
Voicemail	401
Busy Signal	402
Voicemail Message Left	403
Initial Refusal	500
Final Refusal	501
Non-Working Number	600
Non-Residential	602
Invalid Address	603
HH Size DQ	605
HH Age DQ	606
HHVEH REFUSAL	607
Invalid Release Group	608
Language Barrier	700
Complete	800
Problem	900
New Travel Date Needed	901

32. INT_READMSG2_SET

INT_READMSG2_SET
TYPE: Calculated
ProgrammerNote: If interview reaches an answering machine (TBBUT=403) set disposition to "Voicemail – Message Left" (403).
QASKEDIF:

=403

33. READMSG2

INT_READMSG2
TYPE: SelectSingle
ProgrammerNote: (TBBUT=403)

QASKEDIF: [PLEASE READ THE FOLLOWING MESSAGE INTO THE ANSWERING MACHINE]

Hello, this is [INTERVIEWER NAME] calling on behalf of the Billings Yellowstone County Household Travel Survey. I am calling to complete the interview about your travel on [$NTRIPDATE]. You can reach our survey team by calling 1-855-910-7484 or you can complete the survey online at www.BigSkyDailyTravel.com with your PIN [$PIN].

As a thank you, we will send your household a $20 check when you successfully complete the survey. Thank you and have a good day.

ATEXT	AVALUE	BRANCH
EXIT SURVEY	403	END

34. END

TYPE: LabelOnly
QASKEDIF:0
NOTE: Branch to SMS if CATI, Public Site if WEB

Appendix D. Print Materials and Public Site

Advanced Letter

Sponsored by:

The Billings-Yellowstone County Household Travel Survey

«SAMPNO»
«CITY» Resident
«ADDRESS»
«CITY», «STATE» «ZIP»

«DATENOW»

Dear Resident:

Elected officials and planners at the City of Billings and Yellowstone County are working together to understand how the roads and services in our county serve us. We are asking you to participate in the **Billings-Yellowstone County Household Travel Survey**; a survey about how people get around in Yellowstone County and use the roads and bridges to get things done for work, study, and life in general.

Participation is voluntary and your personal information will be kept confidential as required by law.

This survey will be used to:

- Help make decisions about how and where to spend transportation dollars.
- Help identify road improvements for better access to jobs, schools, healthcare, parks, recreation and other important daily activities.
- Help improve roads, reduce traffic, and make travel easier and safer in your neighborhood.

The information that you provide will help us make sure transportation projects reflect the needs of your community.

Westat, a nationally recognized survey research firm, has been hired to conduct the survey.

Thank you in advance for helping to keep Yellowstone County moving!

How you can help:

Sign-up and complete a brief survey at: www.BigSkyDailyTravel.com

Your **PIN# is «PINNO»** (Or call Westat at 1-855-910-7484).

Use a travel log we provide to keep track of where you go for one day.

Complete the final step of the survey by telling us about where you went during that day.

Your household will receive **$15 after** completing all parts of the survey.

Completing households will also be eligible to win a **$500 gift card**.

Sincerely,

Thomas W. Hanel
Mayor, City of Billings

John Ostlund
Chair, Yellowstone County Commission

This survey is sponsored by The Billings-Yellowstone County Metropolitan Planning Organization and the Montana Department of Transportation with support and oversight from the Yellowstone County Board of Planning, Billings City Council, the Yellowstone County Commissioners and the Montana Department of Transportation

First Post Card Reminder

Your participation in the **Billings-Yellowstone County Household Travel Survey** will help us better understand transportation needs as your community continues to grow and change. No matter how you travel from place-to-place: by car or by bus, on foot or on a bike – we want to hear from you!

If you have already responded to our online survey**, thank you!** If not, there's still time.

To begin the survey, please visit the study website at **www.BigSkyDailyTravel.com**and enter your PIN.

Your PIN is located under your address on the other side of this card.

You will **receive $15** as a thank you for completing the survey. One household will also win a $500 gift card.

Questions? Please email **BigSkyDailyTravel @westat.com** or call **1-855-910-7484.**

Thank you for helping to move Billings and Yellowstone County forward!

This survey is sponsored by The City of Billings, Yellowstone County, and the Montana Department of Transportation with support and oversight from the Billings City Council and the Yellowstone County Commissioners

Second Post Card Reminder

Travel Log

Billings - Yellowstone County Household Travel Survey

Questions? Go to: www.BigSkyDailyTravel.com Or Call: 1-855-910-7484

A Where did you go? List each place you went during your travel day, including short trips like stopping for gas, going to the ATM, or picking kids up from school?	B What time did you arrive at this place?	C How did you get to this place? (for example, walk, car, bus, etc.)	D How many people went to this place with you? Who were they?	E What did you do at this place?	F What time did you leave this place?
BEGIN HERE: Place 1: Your travel day starts at 3 A.M. on the morning of your assigned day. Where were you at this time? ☐ Home ☐ Other Place (Provide place name and address): ☐ Work ☐ School					☐☐:☐☐ ☐ AM ☐ PM ☐ Did not leave
Place 2: Where did you go next? ☐ Home ☐ Other Place (Provide place name and address): ☐ Work ☐ School	☐☐:☐☐ ☐ AM ☐ PM		# with you: Names:		☐☐:☐☐ ☐ AM ☐ PM ☐ Did not leave
Place 3: Where did you go next? ☐ Home ☐ Other Place (Provide place name and address): ☐ Work ☐ School	☐☐:☐☐ ☐ AM ☐ PM		# with you: Names:		☐☐:☐☐ ☐ AM ☐ PM ☐ Did not leave
Place 4: Where did you go next? ☐ Home ☐ Other Place (Provide place name and address): ☐ Work ☐ School	☐☐:☐☐ ☐ AM ☐ PM		# with you: Names:		☐☐:☐☐ ☐ AM ☐ PM ☐ Did not leave
Place 5: Where did you go next? ☐ Home ☐ Other Place (Provide place name and address): ☐ Work ☐ School	☐☐:☐☐ ☐ AM ☐ PM		# with you: Names:		☐☐:☐☐ ☐ AM ☐ PM ☐ Did not leave
Place 6: Where did you go next? ☐ Home ☐ Other Place (Provide place name and address): ☐ Work ☐ School	☐☐:☐☐ ☐ AM ☐ PM		# with you: Names:		☐☐:☐☐ ☐ AM ☐ PM ☐ Did not leave
Place 7: Where did you go next? ☐ Home ☐ Other Place (Provide place name and address): ☐ Work ☐ School	☐☐:☐☐ ☐ AM ☐ PM		# with you: Names:		☐☐:☐☐ ☐ AM ☐ PM ☐ Did not leave

Example Travel Log

Travel Log Example

This example shows tips for recording your travel day.
Since you already provided home, work, and school addresses, simply mark an X for these places.

Billings-Yellowstone County Household Travel Survey

A. Where did you go? List each place you went during your travel day, including short trips like stopping for gas, going to the ATM, or picking kids up from school?	B. What time did you arrive at this place?	C. How did you get to this place? (for example, walk, car, bus, etc.)	D. How many people went to this place with you? Who were they?	E. What did you do at this place?	F. What time did you leave this place?
BEGIN HERE: Place 1: Your travel day starts at 3 A.M. on the morning of your assigned day. Where were you at this time? X Home Other Place (Provide place name and address): Work School "Most people are HOME at 3 a.m. but some work overnight."					☐ 7 : ☒ 3 ☐ 7 ☒ AM ☐ PM ☐ Did not leave
Place 2: Where did you go next? Home Other Place (Provide place name and address): ☒ Work School	☐ 8 : 0 4 ☒ AM ☐ PM	Car	# with you: 0 Names:	Work	☐ 1 2 : 0 9 ☐ AM ☒ PM ☐ Did not leave
Place 3: Where did you go next? Home ☒ Other Place (Provide place name and address): Work School Texas Roadhouse 1824 King Ave W, Billings, MT, 59102	☐ 1 2 : 1 7 ☐ AM ☒ PM	Walk	# with you: 3 Names:	Ate Lunch	☐ 1 : 3 4 ☐ AM ☒ PM ☐ Did not leave
Place 4: Where did you go next? Home Other Place (Provide place name and address): ☒ Work School	☐ 1 : 4 2 ☐ AM ☒ PM	Walk	# with you: 3 Names:	Work	☐ 5 : 0 7 ☐ AM ☒ PM ☐ Did not leave
Place 5: Where did you go next? Home Other Place (Provide place name and address): Work ☒ School Beth's School	☐ 5 : 1 4 ☐ AM ☒ PM	Car	# with you: 0 Names:	Pick-Up Beth	☐ 5 : 1 5 ☐ AM ☒ PM ☐ Did not leave
Place 6: Where did you go next? Home ☒ Other Place (Provide place name and address): Work School Albertson's, Central Ave,	☐ 5 : 2 2 ☐ AM ☒ PM	Car	# with you: 1 Names: Beth	Grocery Shopping	☐ 6 : 0 2 ☐ AM ☒ PM ☐ Did not leave
Place 7: Where did you go next? ☒ Home Other Place (Provide place name and address): Work School	☐ 6 : 1 7 ☐ AM ☒ PM	Car	# with you: 1 Names: Beth		☐ : ☐ ☐ AM ☐ PM ☒ Did not leave

Use exact times when recording departure and arrival times.

Only count additional members in your party. Do not include yourself.

Write a few words as a reminder of what you did at each place.

List the names of household members who traveled with you.

Check this box instead of entering a time if you stayed at a place for the rest of the night through the next morning. This is usually HOME.

Use your notes on the travel log to help you recall your travel as you report at www.BigSkyDailyTravel.com.

Public Site Main Page

Take the Survey

Did you know that YOUR travel habits help shape Billings and Yellowstone County's transportation system?

It's true. Your daily commutes to work from home and back, errands around town, bike rides and walks and everything in between. Where you go, how you get there and what you do when you get there all shape the understanding of how the roads in Yellowstone County are used and how they can be improved – now and in the future.

To plan for road improvements, we need to understand how you travel today. Your participation in this survey is critical in helping improve the future of transportation for all of us.

If you received an invitation letter, enter your PIN at the right to begin the survey.

Invited to take the survey?

Enter your PIN below to get started. The first step is a short household questionnaire. It should take about 15 minutes.

Completed your assigned travel day?

Enter your PIN below to report your travel online. (Be aware, you cannot report your travel until the day *after* your assigned travel day.)

Your PIN: Enter PIN here Submit

8 character code (e.g., A2B5C7D3)

Lost your PIN? Click to request that it be emailed to you. If you prefer to take the survey by telephone interview, please call the toll-free hotline at 1-855-910-7484.

Read the Privacy Statement.

Record where you go!

Before your assigned travel date, go to Google Play or the App Store to download and install the DailyTravel app on your mobile phone. Use your PIN to log into the app.

DailyTravel App

The fastest, easiest way to gather accurate travel information ...in the palm of your hand!

Available on the App Store | ANDROID APP ON Google play

On your assigned travel date, the app will ask you for information about each place you go.

If you are not using a smartphone, record all the places you go in your paper travel log. View and print a travel log and example travel log from Downloads.

Downloads

- Travel Log One per person
- Example Travel Log

A few common questions

- What if out-of-the-ordinary events happen on the day I'm supposed to keep track of the places I go?
- What if I don't drive a car?
- What if I travel out of the area or region on my assigned travel days?

Learn more at Frequently Asked Questions. If you have other questions, please contact us.

About the Survey

The Critical Role this Survey Plays in Transportation Planning in Billings and Yellowstone County

The Billings and Yellowstone County Household Travel Survey is designed to improve the transportation system for the City of Billings and Yellowstone County now and over the next 20 years.

How does that happen? Basically, Billings, Yellowstone County, and MDT are required to update our long range transportation plans. Travel demand models are the tools used to estimate where future travel in the area will occur. The information provided by Billings Yellowstone County Household Travel Survey participants like you is the data on which these models are built.

The estimates gathered from these models are then used as the basis for transportation planning and prioritization of future transportation investments. That means the information submitted by participants directly impacts the selection and prioritization of improvements that the region enjoys as a whole. It will also be used to plan and budget for these improvements across the region over the next 20 years.

What does this really mean?

- Easier, safer local and region-wide travel.
- Improved distribution of limited funding resources.
- Less future traffic congestion.

Why Your Participation Matters

We need your input to help us spend our transportation dollars wisely.

Accurate information about how and when people get from place to place in our region will help ensure that transportation funds are spent where they are needed most.

You can make a difference.

Your travel information will help build a complete picture of local and region-wide transportation needs, so decision-makers can effectively recommend where to make improvements.

You are important.

Your household was randomly selected to represent many other households like yours across the region.

Survey News

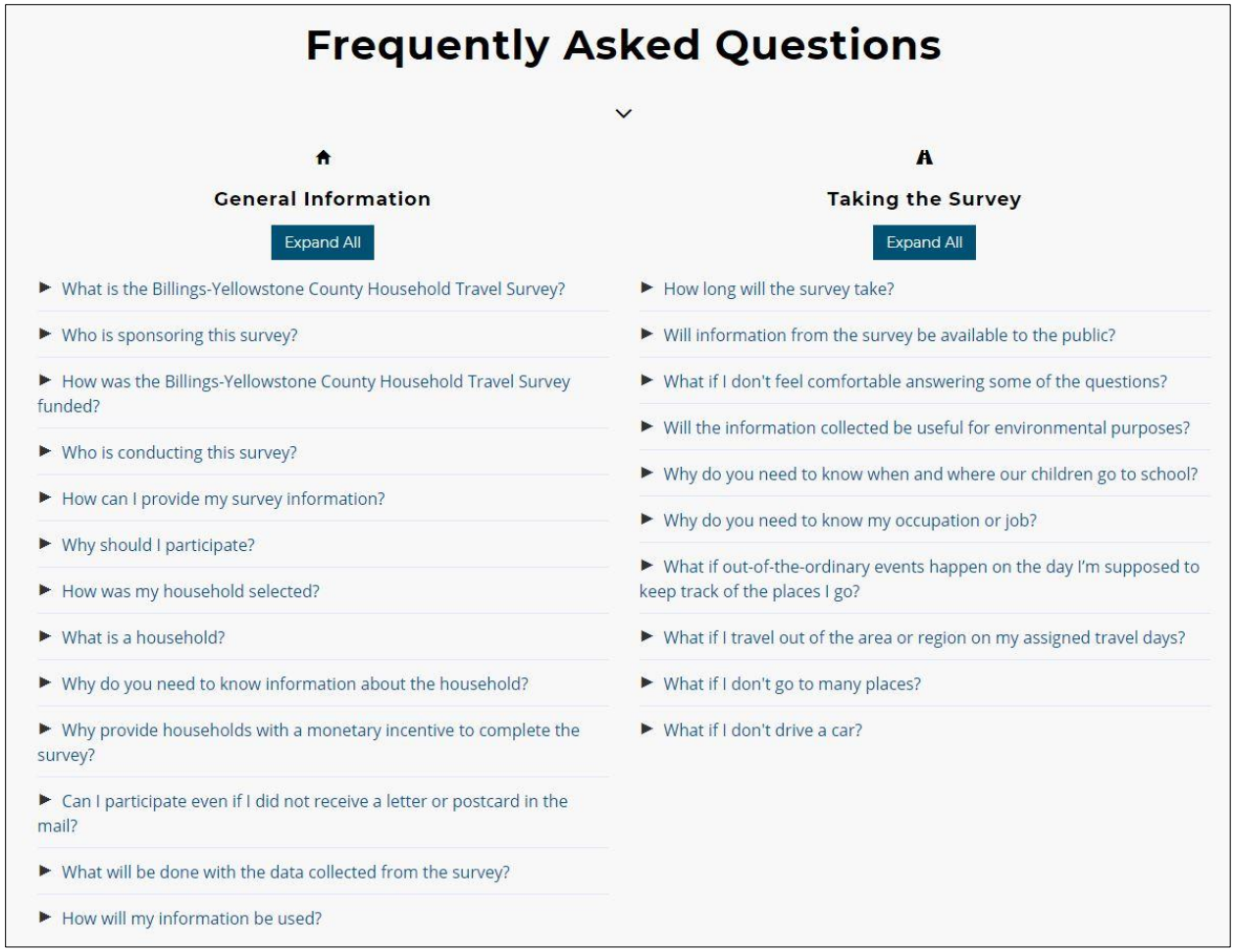
- The first invitations to participate will be mailed in mid-April.

More About the Survey

This survey will be conducted with approximately 1,100 households across the region. Randomly selected households will be initially contacted by mail, asked to respond to a brief survey about their household, and then asked to use a smartphone application for each person who owns one in order to keep track of the places they go for seven days. Detailed information about these places will be confirmed separately in the second part of the survey.

When the survey is completed, the data will be used to estimate how much travel is generated by all households in the region.

For more information, visit Frequently Asked Questions. If you have other questions, please contact us.



Frequently Asked Questions

General Information

Expand All

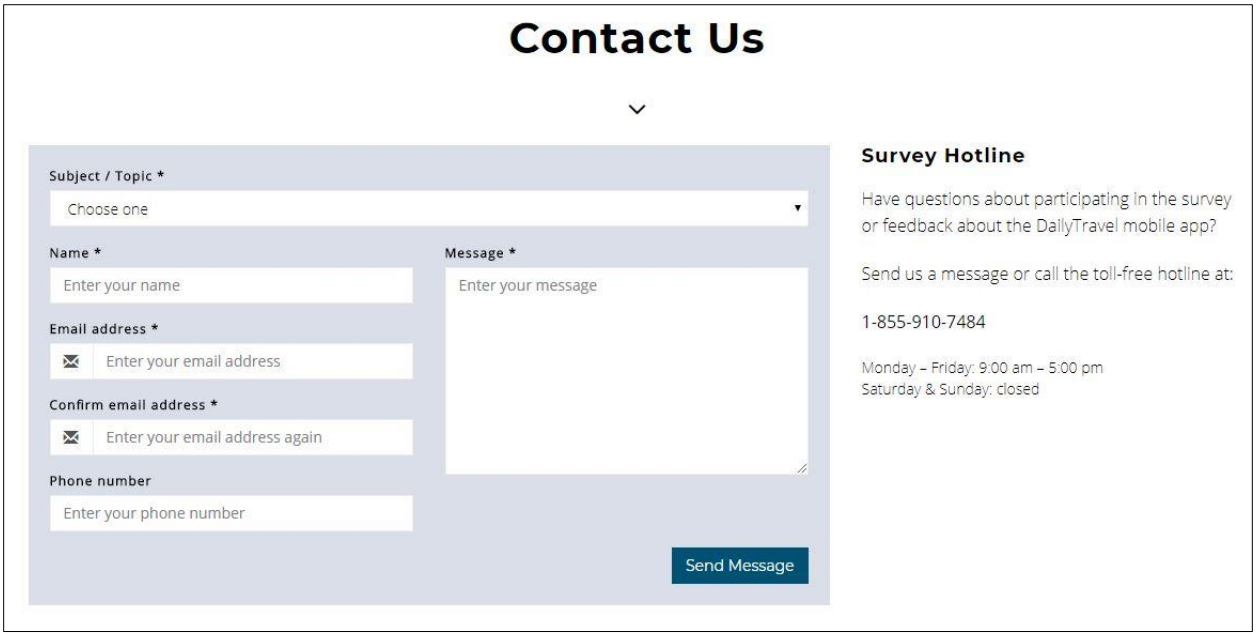
- What is the Billings-Yellowstone County Household Travel Survey?
- Who is sponsoring this survey?
- How was the Billings-Yellowstone County Household Travel Survey funded?
- Who is conducting this survey?
- How can I provide my survey information?
- Why should I participate?
- How was my household selected?
- What is a household?
- Why do you need to know information about the household?
- Why provide households with a monetary incentive to complete the survey?
- Can I participate even if I did not receive a letter or postcard in the mail?
- What will be done with the data collected from the survey?
- How will my information be used?

Taking the Survey

Expand All

- How long will the survey take?
- Will information from the survey be available to the public?
- What if I don't feel comfortable answering some of the questions?
- Will the information collected be useful for environmental purposes?
- Why do you need to know when and where our children go to school?
- Why do you need to know my occupation or job?
- What if out-of-the-ordinary events happen on the day I'm supposed to keep track of the places I go?
- What if I travel out of the area or region on my assigned travel days?
- What if I don't go to many places?
- What if I don't drive a car?

Contact Us


Contact Us
Subject / Topic *
Choose one
Name *
Enter your name
Email address *
Enter your email address
Confirm email address *
Enter your email address again
Phone number
Enter your phone number
Message *
Enter your message
Send Message
Survey Hotline
Have questions about participating in the survey or feedback about the DailyTravel mobile app?
Send us a message or call the toll-free hotline at:
1-855-910-7484
Monday – Friday: 9:00 am – 5:00 pm
Saturday & Sunday: closed

Appendix E. Codebooks
Household Frequencies

SAMPNO Sample household identifier

Codes	Responses	Frequency	Percentage
{range}	NA	1,066	100
		1,066	**100**

TRAVDATE Travel Date

Codes	Responses	Frequency	Percentage
2017-05-02	NA	100	9.4
2017-05-03	NA	116	10.9
2017-05-04	NA	103	9.7
2017-05-09	NA	58	5.4
2017-05-10	NA	38	3.6
2017-05-11	NA	30	2.8
2017-05-16	NA	57	5.3
2017-05-17	NA	70	6.6
2017-05-18	NA	69	6.5
2017-05-23	NA	89	8.3
2017-05-24	NA	93	8.7
2017-05-25	NA	101	9.5
2017-05-30	NA	47	4.4
2017-05-31	NA	37	3.5
2017-06-01	NA	23	2.2
2017-06-06	NA	11	1.0
2017-06-07	NA	12	1.1
2017-06-08	NA	12	1.1
		1,066	**100.0**

TRAVDAY Travel day - day of week

Codes	Responses	Frequency	Percentage
3	Tuesday	362	34.0
4	Wednesday	366	34.3
5	Thursday	338	31.7
		1,066	**100.0**

HHPROXY Household person identifier responding to household level transportation questions

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	28	2.6
1	NA	906	85.0
2	NA	130	12.2
3	NA	2	0.2
		1,066	**100.0**

HHSIZE Count of household members

Codes	Responses	Frequency	Percentage
1	NA	312	29.3
2	NA	474	44.5
3	NA	117	11.0
4	NA	100	9.4
5	NA	38	3.6
6	NA	25	2.3
		1,066	**100.0**

HHVEH Count of household vehicles

Codes	Responses	Frequency	Percentage
0	NA	13	1.2
1	NA	303	28.4
2	NA	372	34.9
3	NA	223	20.9
4	NA	93	8.7
5	NA	36	3.4
6	NA	14	1.3
7	NA	5	0.5
8	NA	4	0.4
9	NA	1	0.1
10	NA	1	0.1
11	NA	1	0.1
		1,066	**100.0**

RESTY Housing Type

Codes	Responses	Frequency	Percentage
1	Single-family detached house,	787	73.8
2	Single-family attached house (duplex/townhouse/rowhouse),	81	7.6
3	An apartment or condo,	134	12.6
4	Manufactured Home or Trailer,	64	6.0
		1,066	**100.0**

RESTY_O Housing Type (Other)

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,066	100
		1,066	**100**

HOMEOWN Home Ownership

Codes	Responses	Frequency	Percentage
-8	I don’t know	1	0.1
-7	I prefer not to answer	2	0.2
1	Own without mortgage	340	31.9
2	Own with mortgage	484	45.4
3	Rent	228	21.4
4	Occupied without payment of rent	8	0.8
97	Some other arrangement	3	0.3
		1,066	**100.0**

HOMEOWN_O Home Ownership (Other)

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,063	99.7
MOBILE TRAILER	NA	2	0.2
RELOCATING	NA	1	0.1
		1,066	**100.0**

HHINC Household income

Codes	Responses	Frequency	Percentage
-7	I prefer not to answer	17	1.6
1	Less than $10,000	28	2.6
2	$10,000 to $14,999	36	3.4
3	$15,000 to $19,999	36	3.4
4	$20,000 to $24,999	49	4.6
5	$25,000 to $29,999	61	5.7
6	$30,000 to $34,999	69	6.5
7	$35,000 to $39,999	53	5.0
8	$40,000 to $44,999	61	5.7
9	$45,000 to $49,999	63	5.9
10	$50,000 to $59,999	97	9.1
11	$60,000 to $74,999	141	13.2
12	$75,000 to $99,999	156	14.6
13	$100,000 to $124,999	112	10.5
14	$125,000 to $149,999	34	3.2
15	$150,000 to $199,999	30	2.8
16	$200,000 or more	23	2.2
		1,066	**100.0**

HHINC2 Household Income (Follow-up)

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,051	98.6
-7	I prefer not to answer	7	0.7
2	$30,000 to $59,999	3	0.3
3	$60,000 or more	5	0.5
		1,066	**100.0**

CONGCHOICE Minutes of Congestion Encountered before Choosing Alternate Route

Codes	Responses	Frequency	Percentage
1	Less than 3 minutes	35	3.3
2	5 minutes	210	19.7
3	10 minutes	395	37.1
4	15 minutes	255	23.9
5	20 minutes	89	8.3
6	More than 20 minutes	65	6.1
97	Other:_____	17	1.6
		1,066	**100.0**

CONGCHOICE_O Minutes of Congestion Encountered before Choosing Alternate Route (Other)

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,049	98.4
HOMEMAKER	NA	1	0.1
NOT APPLICABLE	NA	1	0.1
Not Ascertained	NA	1	0.1
RETIRED	NA	13	1.2
UNEMPLOYED	NA	1	0.1
		1,066	**100.0**

BIKETRIPS Number of Days They Rode a Bicycle

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	30	2.8
-8	I don't know	8	0.8
-7	I prefer not to answer	6	0.6
0	NA	825	77.4
1	NA	46	4.3
2	NA	30	2.8
3	NA	17	1.6
4	NA	13	1.2
5	NA	32	3.0
6	NA	6	0.6
7	NA	3	0.3
8	NA	4	0.4
9	NA	2	0.2
10	NA	15	1.4
12	NA	4	0.4
13	NA	1	0.1
15	NA	6	0.6
18	NA	1	0.1
20	NA	10	0.9
25	NA	4	0.4
28	NA	2	0.2
30	NA	1	0.1
		1,066	**100.0**

BIKEREASON Primary Reason for Riding Bicycle

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	30	2.8
-8	I don’t know	7	0.7
-7	I prefer not to answer	6	0.6
1	Commuting to work or school	27	2.5
2	Recreation	80	7.5
3	Exercise/for my health	77	7.2
4	Personal errands (to the store, post office, and so on)	20	1.9
5	Required for my job	2	0.2
6	Didn’t bicycle	817	76.6
		1,066	**100.0**

BIKEREASON_O Primary Reason for Riding Bicycle (Other)

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,066	100
		1,066	**100**

BIKETERRAIN Most Common Type of Surface when Riding a Bike

Codes	Responses
-9	NOT ASCERTAINED
-8	I don’t know
-7	I prefer not to answer
1	Bike lanes on paved roads
2	Shoulders of paved roads
3	Paved roads, not on shoulders or lined bike lanes (riding in the same lane as cars or other vehicles)
4	Bike paths, walking paths, or trails (defined as paths where cars are not allowed to drive)
5	Unpaved roads (for example dirt, gravel, sand)
6	Sidewalks
7	Didn’t bicycle

BIKETERRAIN_O Most Common Type of Surface when Riding a Bike (Other)

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,066	100
		1,066	**100**

TRANSTRIPS Number of Days They Used Public Transit in the past 30 Days

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	31	2.9
-8	I don't know	5	0.5
-7	I prefer not to answer	5	0.5
0	NA	995	93.3
1	NA	5	0.5
2	NA	7	0.7
3	NA	1	0.1
4	NA	1	0.1
5	NA	3	0.3
6	NA	3	0.3
8	NA	1	0.1
9	NA	1	0.1
12	NA	2	0.2
15	NA	4	0.4
18	NA	1	0.1
26	NA	1	0.1
		1,066	**100.0**

RNDABOUTFEEL Opinion on Roundabouts

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	31	2.9
-8	I don't know	1	0.1
-7	I prefer not to answer	3	0.3
1	Very comfortable	515	48.3
2	Somewhat comfortable	268	25.1
3	Neither comfortable nor uncomfortable	68	6.4
4	Somewhat uncomfortable	91	8.5
5	Very uncomfortable	89	8.3
		1,066	**100.0**

INTERSECTION Intersection Type Preference

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	31	2.9
-8	I don't know	1	0.1
-7	I prefer not to answer	3	0.3
1	Intersection with a roundabout	369	34.6
2	Intersection with stop signs (4-way stop or 2-way stop)	87	8.2
3	Intersection with a traffic light (stop light)	542	50.8
4	Uncontrolled intersections (no stop signs, traffic lights, or roundabouts)	33	3.1
		1,066	**100.0**

FUTURESURVEY Interest in Participating in Future Surveys

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	31	2.9
-7	I prefer not to answer	2	0.2
1	Yes	798	74.9
2	No	235	22.0
		1,066	**100.0**

TAXES_1 Billings-Yellowstone County area transportation improvement preference: Maintain our existing transportation corridors, including streets, roads, sidewalks, bike lanes, and crosswalks

Codes	Responses
-1	NA
1	Maintain our existing transportation corridors, including streets, roads, sidewalks, bike lanes, and crosswalks

TAXES_2 Billings-Yellowstone County area transportation improvement preference: Build new transportation corridors

Codes	Responses	Frequency	Percentage
-1	NA	682	64
2	Build new transportation corridors	384	36
		1,066	**100**

TAXES_3 Billings-Yellowstone County area transportation improvement preference: Widen existing transportation corridors

Codes	Responses	Frequency	Percentage
-1	NA	561	52.6
3	Widen existing transportation corridors	505	47.4
		1,066	**100.0**

TAXES_4 Billings-Yellowstone County area transportation improvement preference: Improve public transit (bus)

Codes	Responses	Frequency	Percentage
-1	NA	811	76.1
4	Improve public transit (bus)	255	23.9
		1,066	**100.0**

TAXES_5 Billings-Yellowstone County area transportation improvement preference: Improve bicycle facilities, such as trails/paths and lanes

Codes	Responses	Frequency	Percentage
-1	NA	832	78
5	Improve bicycle facilities, such as trails/paths and lanes	234	22
		1,066	**100**

TAXES_6 Billings-Yellowstone County area transportation improvement preference: Improve pedestrian facilities, such as sidewalks and crosswalks

Codes	Responses	Frequency	Percentage
-1	NA	808	75.8
6	Improve pedestrian facilities, such as sidewalks and crosswalks	258	24.2
		1,066	**100.0**

TAXES_7 Billings-Yellowstone County area transportation improvement preference: Improve safety and reduce crashes

Codes	Responses	Frequency	Percentage
-1	NA	581	54.5
7	Improve safety and reduce crashes	485	45.5
		1,066	**100.0**

TAXES_RF Billings-Yellowstone County area transportation improvement preference: Prefers not to answer

Codes	Responses	Frequency	Percentage
-1	NA	1,066	100
		1,066	**100**

TAXES_DK Billings-Yellowstone County area transportation improvement preference: Does not know

Codes	Responses	Frequency	Percentage
-1	NA	1,066	100
		1,066	**100**

NOBIKEWHY_1 Reasons for Not Biking More Often: Personal health or disability

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	939	88.1
1	Personal health or disability	127	11.9
		1,066	**100.0**

NOBIKEWHY_2 Reasons for Not Biking More Often: Lack of safe / comfortable bicycle facilities

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	917	86
2	Lack of safe / comfortable bicycle facilities	149	14
		1,066	**100**

NOBIKEWHY_3 Reasons for Not Biking More Often: Weather

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	851	79.8
3	Weather	215	20.2
		1,066	**100.0**

NOBIKEWHY_4 Reasons for Not Biking More Often: Safety while biking next to / with cars

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	839	78.7
4	Safety while biking next to / with cars	227	21.3
		1,066	**100.0**

NOBIKEWHY_5 Reasons for Not Biking More Often: Safety while biking through intersections

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	927	87
5	Safety while biking through intersections	139	13
		1,066	**100**

NOBIKEWHY_6 Reasons for Not Biking More Often: Work schedule, family obligations

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	885	83
6	Work schedule, family obligations	181	17
		1,066	**100**

NOBIKEWHY_7 Reasons for Not Biking More Often: Distance to destination is too far

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	877	82.3
7	Distance to destination is too far	189	17.7
		1,066	**100.0**

NOBIKEWHY_8 Reasons for Not Biking More Often: Needing to carry bulky items

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	921	86.4
8	Needing to carry bulky items	145	13.6
		1,066	**100.0**

NOBIKEWHY_9 Reasons for Not Biking More Often: Not interested in bicycling

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	850	79.7
9	Not interested in bicycling	216	20.3
		1,066	**100.0**

NOBIKEWHY_10 Reasons for Not Biking More Often: Nothing keeps me from riding more often

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,018	95.5
10	Nothing keeps me from riding more often	48	4.5
		1,066	**100.0**

NOBIKEWHY_11 Reasons for Not Biking More Often: No bicycle available

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	797	74.8
11	No bicycle available	269	25.2
		1,066	**100.0**

NOBIKEWHY_SE Reasons for Not Biking More Often: Other (Specify)

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,036	97.2
-7	I prefer not to answer	1	0.1
2	Lack of safe / comfortable bicycle facilities	2	0.2
3	Weather	1	0.1
4	Safety while biking next to / with cars	1	0.1
6	Work schedule, family obligations	7	0.7
7	Distance to destination is too far	2	0.2

Codes	Responses	Frequency	Percentage
9	Not interested in bicycling	2	0.2
97	Other - Specify:	14	1.3
		1,066	**100.0**

NOBIKEWHY_RF Reasons for Not Biking More Often: Prefers not to answer

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,061	99.5
-7	I prefer not to answer	5	0.5
		1,066	**100.0**

NOBIKEWHY_DK Reasons for Not Biking More Often: Does not know

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,064	99.8
-8	I don’t know	2	0.2
		1,066	**100.0**

NOBIKEWHY_O Reasons for Not Biking More Often (Other)

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,052	98.7
.	NA	1	0.1
AGE	NA	6	0.6
BICYCLE IN NEED OF MAINTENANCE	NA	2	0.2
DO NOT KNOW HOW TO RIDE A BIKE	NA	1	0.1
DOES NOT HAVE A BIKE	NA	1	0.1
NO NEED, REASON, OR DESIRE TO RIDE A BIKE	NA	1	0.1
TIME CONSTRAINTS	NA	1	0.1
WEATHER	NA	1	0.1
		1,066	**100.0**

NOPUBTRANSWHY_1 Reasons for Not Using Public Transportation More Often: Bus doesn’t go where I need it to go

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	802	75.2
1	Bus doesn't go where I need it to go	264	24.8
		1,066	**100.0**

NOPUBTRANSWHY_2 Reasons for Not Using Public Transportation More Often: Bus doesn't run when I need it to

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	852	79.9
2	Bus doesn't run when I need it to	214	20.1
		1,066	**100.0**

NOPUBTRANSWHY_3 Reasons for Not Using Public Transportation More Often: Work schedule, family obligations

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	853	80
3	Work schedule, family obligations	213	20
		1,066	**100**

NOPUBTRANSWHY_4 Reasons for Not Using Public Transportation More Often: Personal health or disability

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,032	96.8
4	Personal health or disability	34	3.2
		1,066	**100.0**

NOPUBTRANSWHY_5 Reasons for Not Using Public Transportation More Often: Weather

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,049	98.4
5	Weather	17	1.6
		1,066	**100.0**

NOPUBTRANSWHY_6 Reasons for Not Using Public Transportation More Often: Safety

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,046	98.1
6	Safety	20	1.9
		1,066	**100.0**

NOPUBTRANSWHY_7 Reasons for Not Using Public Transportation More Often: Distance to bus stop is too far

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	928	87.1
7	Distance to bus stop is too far	138	12.9
		1,066	**100.0**

NOPUBTRANSWHY_8 Reasons for Not Using Public Transportation More Often: Needing to carry bulky items

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	985	92.4
8	Needing to carry bulky items	81	7.6
		1,066	**100.0**

NOPUBTRANSWHY_9 Reasons for Not Using Public Transportation More Often: Nothing keeps me from using public transit more often

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	749	70.3
9	Nothing keeps me from using public transit more often	317	29.7
		1,066	**100.0**

NOPUBTRANSWHY_SE Reasons for Not Using Public Transportation More Often: Other (Specify)

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	876	82.2

Codes	Responses	Frequency	Percentage
1	Bus doesn't go where I need it to go	5	0.5
2	Bus doesn't run when I need it to	1	0.1
3	Work schedule, family obligations	3	0.3
7	Distance to bus stop is too far	3	0.3
9	Nothing keeps me from using public transit more often	2	0.2
97	Other, specify:	176	16.5
		1,066	**100.0**

NOPUBTRANSWHY_RF Reasons for Not Using Public Transportation More Often: Prefers not to answer

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,062	99.6
-7	I prefer not to answer	4	0.4
		1,066	**100.0**

NOPUBTRANSWHY_DK Reasons for Not Using Public Transportation More Often: Does not know

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,060	99.4
-8	I don't know	6	0.6
		1,066	**100.0**

NOPUBTRANSWHY_O Reasons for Not Using Public Transportation More Often (Other)

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	890	83.5
.	NA	1	0.1
FARE	NA	2	0.2
GENERAL DISPLEASURE WITH SERVICE	NA	7	0.7
LACK OF KNOWLEDGE/DIFFICULTY USING SERVICE	NA	3	0.3
NO NEED, REASON, OR DESIRE TO TAKE PUBLIC TRANSIT	NA	55	5.2
PREFER OTHER MODE OF TRANSPORTATION	NA	69	6.5
SERVICE NOT AVAILABLE	NA	35	3.3

Codes	Responses	Frequency	Percentage
TIME CONSTRAINTS	NA	4	0.4
		1,066	**100.0**

TRIP_CODE Household Has at Least One Person with a Trip Quality Code that Identifies Trip-Related Reporting that is Not Realistic

Codes	Responses	Frequency	Percentage
1	Yes	102	9.6
2	No	964	90.4
		1,066	**100.0**

HHTRIPS Count of household trips on travel day

Codes	Responses	Frequency	Percentage
0	NA	66	6.2
1	NA	7	0.7
2	NA	103	9.7
3	NA	57	5.3
4	NA	109	10.2
5	NA	79	7.4
6	NA	111	10.4
7	NA	76	7.1
8	NA	77	7.2
9	NA	47	4.4
10	NA	65	6.1
11	NA	42	3.9
12	NA	46	4.3
13	NA	27	2.5
14	NA	32	3.0
15	NA	23	2.2
16	NA	8	0.8
17	NA	18	1.7
18	NA	7	0.7
19	NA	8	0.8
20	NA	6	0.6
21	NA	5	0.5
22	NA	12	1.1
23	NA	5	0.5
24	NA	7	0.7

Codes	Responses	Frequency	Percentage
25	NA	3	0.3
26	NA	2	0.2
27	NA	2	0.2
28	NA	1	0.1
29	NA	4	0.4
30	NA	1	0.1
31	NA	1	0.1
32	NA	2	0.2
33	NA	1	0.1
35	NA	3	0.3
37	NA	2	0.2
39	NA	1	0.1
		1,066	**100.0**

BLYSRKWT0 Household weight. The jacknife derived replicate weights, BLYSRKWT * (1-100), reside in the separate 'household_replicate_weights' table.

Codes	Responses	Frequency	Percentage
{range}	NA	1,066	100
		1,066	**100**

SAMPNO Sample household identifier

Codes	Responses	Frequency	Percentage
{range}	NA	2,351	100
		2,351	**100**

PERNO Household person identifier

Codes	Responses	Frequency	Percentage
1	NA	1,066	45.3
2	NA	754	32.1
3	NA	280	11.9
4	NA	163	6.9
5	NA	63	2.7
6	NA	25	1.1
		2,351	**100.0**

AGE Age

Codes	Responses	Frequency	Percentage
-7	I prefer not to answer	12	0.5
0	NA	33	1.4
1	NA	23	1.0
2	NA	34	1.4
3	NA	42	1.8
4	NA	33	1.4
5	NA	25	1.1
6	NA	32	1.4
7	NA	30	1.3
8	NA	25	1.1
9	NA	34	1.4
10	NA	18	0.8
11	NA	29	1.2
12	NA	19	0.8
13	NA	27	1.1
14	NA	16	0.7
15	NA	28	1.2
16	NA	22	0.9

Codes	Responses	Frequency	Percentage
17	NA	20	0.9
18	NA	17	0.7
19	NA	21	0.9
20	NA	15	0.6
21	NA	13	0.6
22	NA	7	0.3
23	NA	22	0.9
24	NA	15	0.6
25	NA	29	1.2
26	NA	37	1.6
27	NA	25	1.1
28	NA	34	1.4
29	NA	26	1.1
30	NA	46	2.0
31	NA	21	0.9
32	NA	47	2.0
33	NA	44	1.9
34	NA	37	1.6
35	NA	43	1.8
36	NA	36	1.5
37	NA	28	1.2
38	NA	21	0.9
39	NA	29	1.2
40	NA	21	0.9
41	NA	22	0.9
42	NA	21	0.9
43	NA	25	1.1
44	NA	20	0.9
45	NA	24	1.0
46	NA	32	1.4
47	NA	27	1.1
48	NA	23	1.0
49	NA	24	1.0
50	NA	26	1.1
51	NA	14	0.6
52	NA	25	1.1
53	NA	17	0.7
54	NA	28	1.2
55	NA	36	1.5
56	NA	38	1.6
57	NA	39	1.7

Codes	Responses	Frequency	Percentage
58	NA	29	1.2
59	NA	45	1.9
60	NA	42	1.8
61	NA	32	1.4
62	NA	43	1.8
63	NA	41	1.7
64	NA	31	1.3
65	NA	49	2.1
66	NA	46	2.0
67	NA	40	1.7
68	NA	25	1.1
69	NA	47	2.0
70	NA	60	2.6
71	NA	19	0.8
72	NA	23	1.0
73	NA	26	1.1
74	NA	21	0.9
75	NA	18	0.8
76	NA	17	0.7
77	NA	12	0.5
78	NA	10	0.4
79	NA	11	0.5
80	NA	13	0.6
81	NA	14	0.6
82	NA	10	0.4
83	NA	11	0.5
84	NA	5	0.2
85	NA	5	0.2
86	NA	3	0.1
87	NA	3	0.1
88	NA	9	0.4
89	NA	2	0.1
90	NA	5	0.2
91	NA	2	0.1
92	NA	2	0.1
93	NA	1	0.0
94	NA	2	0.1
		2,351	**100.0**

AGE2 Age Range (followup)

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	2,339	99.5
-7	I prefer not to answer	6	0.3
6	45-64 years old	1	0.0
7	65 years old or older	5	0.2
		2,351	**100.0**

AGERANGE Age Range, derived by combining AGE and AGE2

Codes	Responses	Frequency	Percentage
-7	I prefer not to answer	6	0.3
1	0-4 years old	165	7.0
2	5-12 years old	212	9.0
3	13-15 years old	71	3.0
4	16-17 years old	42	1.8
5	18-44 years old	722	30.7
6	45-64 years old	617	26.2
7	65 years old or older	516	21.9
		2,351	**100.0**

RELATE Relationship

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,066	45.3
-7	I prefer not to answer	5	0.2
2	Spouse/Unmarried partner	646	27.5
3	Son/Daughter	540	23.0
4	Father/Mother	32	1.4
5	Brother/Sister	9	0.4
6	Grandparent	2	0.1
7	Grandchild	17	0.7
8	Live-In Help	1	0.0
9	Roommate/Other Non-Related	24	1.0
97	Other Related	9	0.4
		2,351	**100.0**

RELATE_O Relationship (Other)

Codes	Responses	Frequency	Percentage

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	2,341	99.6
RELATIVE	NA	9	0.4
stepson	NA	1	0.0
		2,351	**100.0**

SEX Sex

Codes	Responses	Frequency	Percentage
-77	I prefer not to answer	33	1.4
-7	I prefer not to answer	5	0.2
1	Male	1,062	45.2
2	Female	1,251	53.2
		2,351	**100.0**

LIC Valid Drivers License

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	454	19.3
1	Yes	1,815	77.2
2	No	82	3.5
		2,351	**100.0**

DISAB Travel-limiting Disability Status

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	454	19.3
1	Yes	73	3.1
2	No	1,824	77.6
		2,351	**100.0**

DTYPE_1 Travel-limiting Disability Type: Visually Impaired or Blind

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	2,342	99.6
1	Visually Impaired or Blind	9	0.4
		2,351	**100.0**

DTYPE_2 Travel-limiting Disability Type: Hearing Impaired or Deaf

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	2,344	99.7
2	Hearing Impaired or Deaf	7	0.3
		2,351	**100.0**

DTYPE_3 Travel-limiting Disability Type: Cane or Walker

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	2,330	99.1
3	Cane or Walker	21	0.9
		2,351	**100.0**

DTYPE_4 Travel-limiting Disability Type: Wheelchair Non-Transferable

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	2,349	99.9
4	Wheelchair Non-Transferable	2	0.1
		2,351	**100.0**

DTYPE_5 Travel-limiting Disability Type: Wheelchair Transferable

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	2,346	99.8
5	Wheelchair Transferable	5	0.2
		2,351	**100.0**

DTYPE_6 Travel-limiting Disability Type: Mentally or Emotionally Disabled

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	2,339	99.5
6	Mentally or Emotionally Disabled	12	0.5
		2,351	**100.0**

DTYPE_SE Travel-limiting Disability Type: Other (Specify)

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	2,317	98.6
-7	I prefer not to answer	2	0.1
1	Visually Impaired or Blind	1	0.0
3	Cane or Walker	1	0.0
6	Mentally or Emotionally Disabled	6	0.3
97	Other (Specify)	24	1.0
		2,351	**100.0**

HISP Hispanic or Latino Origin

Codes	Responses	Frequency	Percentage
-7	I prefer not to answer	15	0.6
1	Yes	105	4.5
2	No	2,231	94.9
		2,351	**100.0**

HISP_O Hispanic or Latino Origin (Other)

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	2,328	99.0
European	NA	2	0.1
Native American	NA	1	0.0
USA	NA	2	0.1
asian	NA	3	0.1
caucasion	NA	2	0.1
cosmopolitan	NA	1	0.0
mult racial	NA	1	0.0
she is white	NA	1	0.0
south asian	NA	1	0.0
southeast asian	NA	1	0.0
what does this have to do with travel	NA	3	0.1
white	NA	4	0.2
who wants to know	NA	1	0.0
		2,351	**100.0**

RACE Race

Codes	Responses	Frequency	Percentage
-7	I prefer not to answer	25	1.1
1	White	2,152	91.5
2	African American, Black	14	0.6
3	Asian	19	0.8
4	American Indian, Alaskan Native	42	1.8
5	Native Hawaiian or Pacific Islander	7	0.3
6	Multiracial	69	2.9
97	Some other race	23	1.0
		2,351	**100.0**

RACE_O Race (Other)

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	2,319	98.6
AMERICAN	NA	2	0.1
COSTA RICAN	NA	2	0.1
EUROPEAN	NA	1	0.0
HEBREW	NA	1	0.0
HISPANIC	NA	11	0.5
Human	NA	2	0.1
LATINO	NA	2	0.1
NYB	NA	1	0.0
PUERTO RICAN	NA	3	0.1
SPANISH	NA	1	0.0
planet rider	NA	2	0.1
what does this have to do with travel	NA	4	0.2
		2,351	**100.0**

SMRTPHN Own a Smartphone

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	389	16.5
-7	I prefer not to answer	1	0.0
1	Yes	1,200	51.0
2	No	761	32.4

Codes	Responses	Frequency	Percentage
		2,351	**100.0**

SMRTPHN_TEST Willingness to Download App

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,619	68.9
1	Yes	522	22.2
2	No	210	8.9
		2,351	**100.0**

EMPLY Employment Status

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	454	19.3
1	Yes	1,225	52.1
2	No	672	28.6
		2,351	**100.0**

JOBS Current Number of Jobs

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,124	47.8
-7	I prefer not to answer	1	0.0
0	NA	2	0.1
1	NA	1,077	45.8
2	NA	127	5.4
3	NA	18	0.8
4	NA	2	0.1
		2,351	**100.0**

WKSTAT Employment Status

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	454	19.3
0	Worker, including self employed	1,226	52.1
1	Retired	430	18.3

Codes	Responses	Frequency	Percentage
2	Volunteer	26	1.1
3	Homemaker	71	3.0
4	Unemployed but looking for work	31	1.3
5	Unemployed, not seeking employment	9	0.4
6	Student (part-time or full-time)	51	2.2
7	Disabled non-worker	51	2.2
97	Something else	2	0.1
		2,351	**100.0**

WKSTAT_O Employment Status (Other)

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	2,341	99.6
CARETAKER	NA	2	0.1
Injured, no comp income, fighting, can't work	NA	1	0.0
Remodeling Contractor works many different job	NA	1	0.0
Stock trader	NA	1	0.0
Vetran	NA	1	0.0
he works periodically	NA	1	0.0
retired but hobby cattle ranching	NA	1	0.0
retired, but hobby cattle rancher	NA	1	0.0
under treatment for Cancer	NA	1	0.0
		2,351	**100.0**

WPLACE Does Work Location Vary or Is It Fixed

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,126	47.9
1	Same work place every day	999	42.5
2	Work from home	93	4.0
3	No fixed work place	133	5.7
		2,351	**100.0**

WMODE Mode to Work

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,128	48.0
1	Walk	31	1.3

Codes	Responses	Frequency	Percentage
2	Bicycle	18	0.8
3	Motorcycle/moped	3	0.1
4	Auto/van/truck (as the driver)	1,066	45.3
5	Auto/van/truck (as the passenger)	24	1.0
6	Carpool/vanpool	14	0.6
8	Public transit local bus	5	0.2
12	Airplane	2	0.1
13	[$I_DO] not travel to work	60	2.6
		2,351	**100.0**

WMODE_O Mode to Work (Other)

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	2,346	99.8
Drive a car	NA	1	0.0
Four Wheeler	NA	1	0.0
My own car	NA	1	0.0
Personal car	NA	1	0.0
my car	NA	1	0.0
		2,351	**100.0**

CARPTOWK Carpool Frequency during the Last Week

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,245	53.0
1	Zero Times (never)	993	42.2
2	Once or Twice	53	2.3
3	Three or four times	25	1.1
4	Five or more times	35	1.5
		2,351	**100.0**

WRKHRS Average Number of Hours Worked in a Typical Work Week

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,129	48.0
1	NA	5	0.2
2	NA	6	0.3
3	NA	4	0.2

Codes	Responses	Frequency	Percentage
4	NA	6	0.3
5	NA	9	0.4
6	NA	6	0.3
7	NA	2	0.1
8	NA	22	0.9
9	NA	4	0.2
10	NA	24	1.0
11	NA	2	0.1
12	NA	12	0.5
14	NA	2	0.1
15	NA	16	0.7
16	NA	12	0.5
17	NA	1	0.0
18	NA	2	0.1
20	NA	47	2.0
22	NA	2	0.1
23	NA	1	0.0
24	NA	20	0.9
25	NA	31	1.3
26	NA	3	0.1
27	NA	1	0.0
28	NA	7	0.3
29	NA	1	0.0
30	NA	42	1.8
32	NA	17	0.7
33	NA	2	0.1
34	NA	5	0.2
35	NA	26	1.1
36	NA	30	1.3
37	NA	6	0.3
38	NA	6	0.3
39	NA	1	0.0
40	NA	562	23.9
41	NA	2	0.1
42	NA	14	0.6
43	NA	3	0.1
44	NA	5	0.2
45	NA	87	3.7
47	NA	2	0.1
48	NA	7	0.3
49	NA	3	0.1

Codes	Responses	Frequency	Percentage
50	NA	83	3.5
52	NA	1	0.0
55	NA	16	0.7
56	NA	2	0.1
60	NA	29	1.2
65	NA	4	0.2
66	NA	1	0.0
70	NA	8	0.3
80	NA	8	0.3
84	NA	2	0.1
		2,351	**100.0**

TCOFF Number of Hours Worked in a Typical Week

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,129	48
1	Yes	165	7
2	No	1,057	45
		2,351	**100**

WKFLEX Ability to Set or Change Work Start or End Times

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,129	48.0
1	Yes	486	20.7
2	No	736	31.3
		2,351	**100.0**

WTRAV Average Number of Days Traveled to Work Location per Week

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,221	51.9
0	Never	8	0.3
1	1 day a week	22	0.9
2	2 days a week	47	2.0
3	3 days a week	77	3.3
4	4 days a week	140	6.0
5	5 days a week	749	31.9

Codes	Responses	Frequency	Percentage
6	6 days a week	68	2.9
7	7 days a week	19	0.8
		2,351	**100.0**

COMPR Compressed Work Week

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,129	48.0
1	4/40	86	3.7
2	9/80	17	0.7
3	No	1,085	46.2
97	Other, SPECIFY	34	1.4
		2,351	**100.0**

COMPR_O Compressed Work Week (Other)

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	2,267	96.4
Business owner, so work as needed at home and work	NA	1	0.0
Business owner, so work from home and restaraunt	NA	1	0.0
He is a farmer and works basically all the time	NA	1	0.0
He works for himself as many hours as required	NA	1	0.0
I have the option to work 40 hours in 4 days	NA	1	0.0
I work every Monday and Tuesday.	NA	1	0.0
M-TH 9 hrs ea; F 4 hrs	NA	1	0.0
No set schedule	NA	2	0.1
Part Time	NA	1	0.0
Shifts depend on job duties.	NA	1	0.0
Truck driver	NA	1	0.0
When he feels up to workiing	NA	1	0.0
Work 25 hours 3 days per week	NA	1	0.0
Work when I need to	NA	1	0.0
consulting-hours/locations varies	NA	1	0.0
occassional part time work	NA	1	0.0
self-employed	NA	1	0.0
self-employed. as work load demands	NA	1	0.0
two weeks on two weeks off in north dakota 12 hr/d	NA	1	0.0
usually40hrs per week 4-5 days per week	NA	1	0.0
work as many hours as required to get the job done	NA	1	0.0

Codes	Responses	Frequency	Percentage
1/40	NA	1	0.0
2 - 12 hr shifts	NA	1	0.0
2/13	NA	1	0.0
2/24	NA	3	0.1
3/12	NA	2	0.1
3/13	NA	1	0.0
3/14	NA	1	0.0
3/36	NA	8	0.3
3/40	NA	4	0.2
4 1/2 for days 1 day 4 hours	NA	1	0.0
4 days 9 hours 1 day 4 hours	NA	1	0.0
4/30	NA	1	0.0
4/32	NA	1	0.0
4/32 plus on call 1 evening/week + 1 w/e per mo	NA	1	0.0
4/36	NA	2	0.1
4/40	NA	1	0.0
4/50	NA	2	0.1
5 days/8 hrs	NA	1	0.0
5 days a week 8 plus hours a day	NA	1	0.0
5/40	NA	5	0.2
5/50	NA	4	0.2
5/60	NA	2	0.1
6 hours 5 days a week	NA	1	0.0
6 to 7	NA	1	0.0
8/40	NA	1	0.0
9 days per pay period, 9 hour days	NA	1	0.0
12 hour shifts	NA	1	0.0
12 houtlr days	NA	1	0.0
12/day	NA	1	0.0
24/2	NA	1	0.0
25 hours in 3 days	NA	1	0.0
34-37 hours per week, usually 5 days	NA	1	0.0
40/5	NA	1	0.0
50/6	NA	1	0.0
80 hours in 5 days	NA	1	0.0
80/6	NA	1	0.0
84 IN 7 DAYS	NA	1	0.0
84 hours in 14 days	NA	1	0.0
120 hours in a row	NA	1	0.0
		2,351	**100.0**

INDUS Employer's Industry

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,130	48.1
-8	I don't know	1	0.0
1	Farming, Mining or Agricultural	47	2.0
2	Manufacturing, Industrial and Distribution	42	1.8
3	Construction	66	2.8
4	Public Administration, Government	95	4.0
5	Retail Trade or Sales	168	7.1
6	Wholesale, Distribution and Warehousing, Utilities	39	1.7
7	Maintenance Services	35	1.5
8	Education Services	121	5.1
9	Health Care Services	227	9.7
10	Leisure, Arts, Entertainment, and Recreation Services	41	1.7
11	Other Services (e.g., Banking, Real Estate, Consulting, etc.)	289	12.3
97	Other Industry	50	2.1
		2,351	**100.0**

INDUS_O Employer's Industry (Other)

Codes	Responses	Frequency	Percentage
{range}	NOT ASCERTAINED	2,351	100
		2,351	**100**

STUDE Student Status

Codes	Responses	Frequency	Percentage
1	Yes - Full Time	355	15.1
2	Yes - Part Time	81	3.4
3	No	1,915	81.5
		2,351	**100.0**

SCHOL School Grade or Level

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,886	80.2

Codes	Responses	Frequency	Percentage
-7	I prefer not to answer	2	0.1
1	Daycare	41	1.7
2	Nursery/Pre-school	45	1.9
3	Kindergarten to 8th grade	201	8.5
4	9th 12th grade	79	3.4
5	Vocational/Technical school	8	0.3
6	2-year college (community college)	14	0.6
7	4-year college or university	54	2.3
8	Graduate/Professional school	21	0.9
		2,351	**100.0**

SCHOL_O School Grade or Level (Other)

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	2,344	99.7
Biblical instruction	NA	1	0.0
Certificate ed	NA	1	0.0
College Graduate	NA	1	0.0
Community Education Certificate Program	NA	1	0.0
I have a BA	NA	1	0.0
n/a	NA	1	0.0
none	NA	1	0.0
		2,351	**100.0**

SLOC Home Schooled

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,981	84.3
1	Yes	19	0.8
2	No	351	14.9
		2,351	**100.0**

SMODE Mode Used to get to School

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,955	83.2
-7	I prefer not to answer	2	0.1
1	Walk	31	1.3

Codes	Responses	Frequency	Percentage
2	Bicycle	2	0.1
3	Motorcycle/moped	2	0.1
4	Auto/van/truck (as the driver)	85	3.6
5	Auto/van/truck (as the passenger)	208	8.8
6	Carpool/vanpool	9	0.4
7	School bus	51	2.2
8	Public transit local bus	2	0.1
13	[$I_DO] not travel to school	4	0.2
		2,351	**100.0**

SMODE_O Mode Used to get to School (Other)

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	2,350	100
Parent drives her	NA	1	0
		2,351	**100**

EDUC Educational Attainment

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	459	19.5
1	Not a high school graduate, grade 12 or less (this includes very young children)	87	3.7
2	High school graduate (high school diploma or GED)	381	16.2
3	Some college credit but no degree	348	14.8
4	Associate or technical school degree	215	9.1
5	Bachelor's or undergraduate degree	592	25.2
6	Graduate degree (includes professional degree like PHD, MD, DD, JD)	269	11.4
		2,351	**100.0**

EDUC_O Educational Attainment (Other)

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	2,341	99.6
Business College for Secretary	NA	1	0.0
Certified Flight Instructor, Royal Air Force	NA	1	0.0
Certified operating room technician	NA	1	0.0
Cosmetology	NA	1	0.0

Codes	Responses	Frequency	Percentage
Master Barber licence	NA	1	0.0
Registered Nurse - non BS	NA	1	0.0
Special ed	NA	1	0.0
Vocational training	NA	1	0.0
accounting certificate	NA	1	0.0
certified medical transcriptionist	NA	1	0.0
		2,351	**100.0**

USED_PHONE Phone App Use

Codes	Responses	Frequency	Percentage
1	Yes	637	27.1
2	No	1,714	72.9
		2,351	**100.0**

PHONE_MAKE Manufacturer of phone of travel application user

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,714	72.9
Apple	NA	357	15.2
Google	NA	7	0.3
HTC	NA	4	0.2
HUAWEI	NA	1	0.0
Huawei	NA	3	0.1
LENOVO	NA	1	0.0
LGE	NA	21	0.9
TCL	NA	1	0.0
motorola	NA	24	1.0
samsung	NA	218	9.3
		2,351	**100.0**

NOGOWHY Reason for No Trips

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	1,994	84.8
-8	I don’t know	1	0.0
-7	I prefer not to answer	9	0.4
1	Personally sick	47	2.0

Codes	Responses	Frequency	Percentage
2	Vacation or personal day	26	1.1
3	Caretaking	11	0.5
4	Home-bound elderly or disabled	19	0.8
5	Worked at home (for pay)	22	0.9
6	Not scheduled to work	46	2.0
7	Worked around home (not for pay)	74	3.1
8	Out of area	30	1.3
9	No transportation available	9	0.4
10	No longer a household resident	3	0.1
97	Something else	60	2.6
		2,351	**100.0**

NOGOWHY_O Reason for No Trips (Other)

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	2,297	97.7
.	NA	1	0.0
AGE	NA	1	0.0
HOSTING GUEST	NA	2	0.1
MILITARY	NA	1	0.0
NO NEED, REASON, DESIRE, OR PLACE TO TRAVEL TO	NA	37	1.6
RESPONSE INDICATES TRAVEL	NA	1	0.0
RETIRED	NA	6	0.3
STUDENT	NA	2	0.1
UNEMPLOYED	NA	2	0.1
WAITING ON GOOD OR SERVICE	NA	1	0.0
		2,351	**100.0**

QC_LOC Poor Trip Reporting Data Code: Person Has Low-Precision Location Data

Codes	Responses	Frequency	Percentage
1	Yes	8	0.3
2	No	2,343	99.7
		2,351	**100.0**

QC_JOINT Poor Trip Reporting Data Code: Person Has Contradictory Intra-Household Joint/Shared Travel

Codes	Responses	Frequency	Percentage
1	Yes	116	4.9
2	No	2,235	95.1
		2,351	**100.0**

QC_TIME Poor Trip Reporting Data Code: Person Has Travel with Unrealistic Durations

Codes	Responses	Frequency	Percentage
1	Yes	58	2.5
2	No	2,293	97.5
		2,351	**100.0**

QC_LOOP Poor Trip Reporting Data Code: Person Has Unrealistic Back-to-Back/Loop Travel

Codes	Responses	Frequency	Percentage
1	Yes	15	0.6
2	No	2,336	99.4
		2,351	**100.0**

QC_DAY Poor Trip Reporting Data Code: Person Abandoned Trip Reporting without Completing Entire Day's Travel

Codes	Responses	Frequency	Percentage
1	Yes	11	0.5
2	No	2,340	99.5
		2,351	**100.0**

PERTRIPS Count of person trips on travel day

Codes	Responses	Frequency	Percentage
0	NA	528	22.5
1	NA	18	0.8
2	NA	500	21.3
3	NA	229	9.7
4	NA	297	12.6

Codes	Responses	Frequency	Percentage
5	NA	219	9.3
6	NA	171	7.3
7	NA	141	6.0
8	NA	84	3.6
9	NA	48	2.0
10	NA	46	2.0
11	NA	25	1.1
12	NA	21	0.9
13	NA	7	0.3
14	NA	6	0.3
15	NA	4	0.2
16	NA	2	0.1
17	NA	4	0.2
18	NA	1	0.0
		2,351	**100.0**

BLYSPRKWT0 Person weight. The jacknife derived replicate weights, BLYSPRKWT0 * (1-100), reside in the separate 'person_replicate_weights' table.

Codes	Responses	Frequency	Percentage
{range}	NA	2,351	100
		2,351	**100**

SAMPNO Sample household identifier

Codes	Responses	Frequency	Percentage
{range}	NA	10,629	100
		10,629	**100**

PERNO Household person identifier

Codes	Responses	Frequency	Percentage
1	NA	6,097	57.4
2	NA	3,122	29.4
3	NA	802	7.5
4	NA	421	4.0
5	NA	142	1.3
6	NA	45	0.4
		10,629	**100.0**

PLACENO Household person place identifier

Codes	Responses	Frequency	Percentage
1	NA	2,184	20.5
2	NA	1,823	17.2
3	NA	1,805	17.0
4	NA	1,305	12.3
5	NA	1,076	10.1
6	NA	779	7.3
7	NA	560	5.3
8	NA	389	3.7
9	NA	248	2.3
10	NA	164	1.5
11	NA	116	1.1
12	NA	70	0.7
13	NA	45	0.4
14	NA	24	0.2
15	NA	17	0.2
16	NA	11	0.1
17	NA	7	0.1
18	NA	5	0.0

Codes	Responses	Frequency	Percentage
19	NA	1	0.0
		10,629	**100.0**

LOCNO Household location identifier

Codes	Responses	Frequency	Percentage
100	NA	4,791	45.1
102	NA	705	6.6
103	NA	2	0.0
202	NA	361	3.4
203	NA	60	0.6
302	NA	41	0.4
303	NA	231	2.2
402	NA	2	0.0
403	NA	114	1.1
502	NA	2	0.0
503	NA	37	0.3
603	NA	18	0.2
1000000	NA	595	5.6
1000001	NA	461	4.3
1000002	NA	345	3.2
1000003	NA	244	2.3
1000004	NA	165	1.6
1000005	NA	95	0.9
1000006	NA	56	0.5
1000007	NA	31	0.3
1000008	NA	23	0.2
1000009	NA	16	0.2
1000010	NA	12	0.1
1000011	NA	6	0.1
1000012	NA	5	0.0
1000013	NA	4	0.0
1000014	NA	1	0.0
1000015	NA	2	0.0
2000001	NA	174	1.6
2000002	NA	171	1.6
2000003	NA	177	1.7
2000004	NA	194	1.8
2000005	NA	154	1.4
2000006	NA	131	1.2

Codes	Responses	Frequency	Percentage
2000007	NA	120	1.1
2000008	NA	106	1.0
2000009	NA	89	0.8
2000010	NA	81	0.8
2000011	NA	80	0.8
2000012	NA	66	0.6
2000013	NA	77	0.7
2000014	NA	63	0.6
2000015	NA	49	0.5
2000016	NA	48	0.5
2000017	NA	45	0.4
2000018	NA	34	0.3
2000019	NA	29	0.3
2000020	NA	29	0.3
2000021	NA	22	0.2
2000022	NA	26	0.2
2000023	NA	28	0.3
2000024	NA	13	0.1
2000025	NA	21	0.2
2000026	NA	11	0.1
2000027	NA	11	0.1
2000028	NA	21	0.2
2000029	NA	9	0.1
2000030	NA	10	0.1
2000031	NA	9	0.1
2000032	NA	7	0.1
2000033	NA	6	0.1
2000034	NA	10	0.1
2000035	NA	9	0.1
2000036	NA	10	0.1
2000037	NA	4	0.0
2000038	NA	2	0.0
2000039	NA	3	0.0
2000040	NA	1	0.0
2000041	NA	5	0.0
2000042	NA	4	0.0
2000043	NA	6	0.1
2000044	NA	6	0.1
2000045	NA	3	0.0
2000046	NA	5	0.0
2000047	NA	8	0.1

Codes	Responses	Frequency	Percentage
2000049	NA	4	0.0
2000053	NA	1	0.0
2000054	NA	2	0.0
2000056	NA	1	0.0
2000060	NA	1	0.0
2000061	NA	2	0.0
2000079	NA	1	0.0
2000080	NA	1	0.0
2000085	NA	1	0.0
2000100	NA	1	0.0
2000101	NA	1	0.0
2000118	NA	1	0.0
		10,629	**100.0**

DEPTIME Departure Time

Codes	Responses	Frequency	Percentage
{range}	NA	10,629	100
		10,629	**100**

ARRTIME Arrival Time

Codes	Responses	Frequency	Percentage
{range}	NA	10,629	100
		10,629	**100**

TRAVTIME Travel duration in minutes

Codes	Responses	Frequency	Percentage
{range}	NA	10,629	100
		10,629	**100**

DISTANCE Trip distance in miles, derived from route geometry returned by Google Maps API (network distance)

Codes	Responses	Frequency	Percentage

Codes	Responses	Frequency	Percentage
{range}	NA	10,629	100
		10,629	**100**

MODE Travel Mode

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	2,205	20.7
-8	I don't know	1	0.0
-7	I prefer not to answer	2	0.0
1	Walk	390	3.7
2	Bicycle	106	1.0
3	Motorcycle / moped	20	0.2
4	Auto / van / truck (as the driver)	6,270	59.0
5	Auto / van / truck (as the passenger)	1,454	13.7
6	Carpool / vanpool	38	0.4
7	School bus	83	0.8
8	MET Public transit local bus	38	0.4
11	Private bus or shuttle	4	0.0
14	Airplane	2	0.0
97	Something Else	16	0.2
		10,629	**100.0**

MODE_O Mode (Other)

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	10,613	99.8
ATV	NA	2	0.0
PERSAONAL CAR	NA	1	0.0
PERSONAL CAR	NA	3	0.0
SEMI TRUCK	NA	5	0.0
TRUCK	NA	5	0.0
		10,629	**100.0**

VEHNO Household vehicle identifier

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	3,585	33.7
1	NA	4,234	39.8

Codes	Responses	Frequency	Percentage
2	NA	1,981	18.6
3	NA	529	5.0
4	NA	128	1.2
5	NA	14	0.1
7	NA	3	0.0
97	NA	155	1.5
		10,629	**100.0**

TPURP Trip Purpose

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	24	0.2
-8	I don't know	1	0.0
-7	I prefer not to answer	3	0.0
1	01. Typical home activities	4,490	42.2
2	02. Worked at home (paid)	119	1.1
3	03. Worked at fixed work location	1,162	10.9
4	04. Worked at non-fixed work location	171	1.6
5	05. Work related (off-site meeting)	132	1.2
6	06. Attended school or daycare / studied	307	2.9
7	07. Volunteered	100	0.9
8	08. Shopped (non-routine like for appliances, cars, home furnishings)	353	3.3
9	09. Shopped (routine like grocery, clothing)	804	7.6
10	10. Drive-thru errands (ATM, dry cleaning, pharmacy, etc.)	107	1.0
11	11. Serviced a vehicle (purchased gas, regular maintenance)	147	1.4
12	12. Health care visit	228	2.1
13	13. Non-shopping errands (banking, post office, government, etc.)	411	3.9
14	14. Drive thru / take-out dining	180	1.7
15	15. Ate / dined out	443	4.2
16	16. Socialized with friends / relatives	331	3.1
17	17. Attended a religious or community event	97	0.9
18	18. Exercised or other recreation	406	3.8
19	19. Attended a major special event	41	0.4
20	20. Dropped off / Picked up a passenger(s)	497	4.7
21	21. Changed travel mode / transferred	43	0.4
97	Something else	32	0.3
		10,629	**100.0**

TPURP_O Trip Purpose (Other)

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	10,598	99.7
ACCOMPANY COMPANION	NA	11	0.1
Emergency trip to Texas	NA	1	0.0
Residential treatment center	NA	1	0.0
SLEEP	NA	1	0.0
TRAFFIC SIGNAL	NA	3	0.0
UNEXPECTED DISRUPTION	NA	7	0.1
Video Games	NA	1	0.0
Was out of state on vacation at this time.	NA	1	0.0
We branded our cattle that day	NA	1	0.0
We branded that day at home	NA	1	0.0
he is a truck driver and not home very often	NA	1	0.0
home rehabing torn acl	NA	1	0.0
recuperate from shoulder surgery	NA	1	0.0
		10,629	**100.0**

TPURP2 Secondary Trip Purpose

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	25	0.2
-8	I don’t know	3	0.0
-7	I prefer not to answer	4	0.0
0	00. Nothing else	8,905	83.8
1	01. Typical home activities	526	4.9
2	02. Worked at home (paid)	54	0.5
3	03. Worked at fixed work location	155	1.5
4	04. Worked at non-fixed work location	37	0.3
5	05. Work related (off-site meeting)	26	0.2
6	06. Attended school or daycare / studied	37	0.3
7	07. Volunteered	24	0.2
8	08. Shopped (non-routine like for appliances, cars, home furnishings)	24	0.2
9	09. Shopped (routine like grocery, clothing)	65	0.6
10	10. Drive-thru errands (ATM, dry cleaning, pharmacy, etc.)	7	0.1
11	11. Serviced a vehicle (purchased gas, regular maintenance)	22	0.2
12	12. Health care visit	28	0.3
13	13. Non-shopping errands (banking, post office, government, etc.)	32	0.3
14	14. Drive thru / take-out dining	12	0.1
15	15. Ate / dined out	206	1.9
16	16. Socialized with friends / relatives	245	2.3
17	17. Attended a religious or community event	7	0.1

Codes	Responses	Frequency	Percentage
18	18. Exercised or other recreation	99	0.9
19	19. Attended a major special event	9	0.1
20	20. Dropped off / Picked up a passenger(s)	57	0.5
21	21. Changed travel mode / transferred	16	0.2
97	Something else	4	0.0
		10,629	**100.0**

TPURP2_O Secondary Trip Purpose (Other)

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	10,626	100
ACCOMPANY COMPANION	NA	2	0
UNEXPECTED DISRUPTION	NA	1	0
		10,629	**100**

COMPANIONS Number of people on trip not including respondent

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	2,174	20.5
0	NA	4,910	46.2
1	NA	2,332	21.9
2	NA	746	7.0
3	NA	251	2.4
4	NA	117	1.1
5	NA	54	0.5
6	NA	5	0.0
7	NA	5	0.0
8	NA	2	0.0
9	NA	2	0.0
10	NA	11	0.1
11	NA	1	0.0
15	NA	5	0.0
20	NA	4	0.0
25	NA	1	0.0
30	NA	3	0.0
31	NA	4	0.0
40	NA	2	0.0
		10,629	**100.0**

HHCOUNT Number of household persons on trip not including respondent

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	4,207	39.6
0	NA	3,563	33.5
1	NA	2,039	19.2
2	NA	515	4.8
3	NA	184	1.7
4	NA	93	0.9
5	NA	28	0.3
		10,629	**100.0**

NONHHCOUNT Number of non-household persons on trip not including respondent

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	4,208	39.6
-1	NA	1	0.0
0	NA	5,642	53.1
1	NA	649	6.1
2	NA	69	0.6
3	NA	18	0.2
4	NA	6	0.1
5	NA	1	0.0
6	NA	3	0.0
7	NA	3	0.0
8	NA	2	0.0
9	NA	3	0.0
10	NA	4	0.0
11	NA	1	0.0
15	NA	5	0.0
20	NA	4	0.0
25	NA	1	0.0
30	NA	7	0.1
40	NA	2	0.0
		10,629	**100.0**

HHPARTY Number of household persons on trip including respondent

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	4,207	39.6
1	NA	3,563	33.5
2	NA	2,039	19.2
3	NA	515	4.8
4	NA	184	1.7
5	NA	93	0.9
6	NA	28	0.3
		10,629	**100.0**

PARTY Number of people on trip including respondent

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	2,174	20.5
1	NA	4,910	46.2
2	NA	2,332	21.9
3	NA	746	7.0
4	NA	251	2.4
5	NA	117	1.1
6	NA	54	0.5
7	NA	5	0.0
8	NA	5	0.0
9	NA	2	0.0
10	NA	2	0.0
11	NA	11	0.1
12	NA	1	0.0
16	NA	5	0.0
21	NA	4	0.0
26	NA	1	0.0
31	NA	3	0.0
32	NA	4	0.0
41	NA	2	0.0
		10,629	**100.0**

ACTDUR Activity duration or dwell time in minutes

Codes	Responses	Frequency	Percentage
{range}	NA	10,629	100
		10,629	**100**

PERNO1 Household Person Identifier on Trip: 1

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	9,406	88.5
1	NA	1,223	11.5
		10,629	**100.0**

PERNO2 Household Person Identifier on Trip: 2

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	9,550	89.8
2	NA	1,079	10.2
		10,629	**100.0**

PERNO3 Household Person Identifier on Trip: 3

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	9,881	93
3	NA	748	7
		10,629	**100**

PERNO4 Household Person Identifier on Trip: 4

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	9,996	94
4	NA	633	6
		10,629	**100**

PERNO5 Household Person Identifier on Trip: 5

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	10,353	97.4
5	NA	276	2.6
		10,629	**100.0**

PERNO6 Household Person Identifier on Trip: 6

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	10,455	98.4
6	NA	174	1.6
		10,629	**100.0**

PERNO7 Household Person Identifier on Trip: 7

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	10,629	100
		10,629	**100**

PERNO8 Household Person Identifier on Trip: 8

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	10,629	100
		10,629	**100**

PERNO9 Household Person Identifier on Trip: 9

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	10,629	100
		10,629	**100**

PERNO10 Household Person Identifier on Trip: 10

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	10,629	100
		10,629	**100**

PERNO11 Household Person Identifier on Trip: 11

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	10,629	100

Codes	Responses	Frequency	Percentage
		10,629	**100**

PERNO12 Household Person Identifier on Trip: 12

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	10,629	100
		10,629	**100**

PLACEID Unique place identifier

Codes	Responses	Frequency	Percentage
{range}	NA	10,629	100
		10,629	**100**

SAMPNO Sample household identifier

Codes	Responses	Frequency	Percentage
{range}	NA	10,304	100
		10,304	**100**

LOCNO Household location identifier

Codes	Responses	Frequency	Percentage
{range}	NA	10,304	100
		10,304	**100**

PERNO Household person identifier

Codes	Responses	Frequency	Percentage
NA	APPROPRIATE SKIP	8,884	-
1	NA	633	44.6
2	NA	426	30.0
3	NA	207	14.6
4	NA	112	7.9
5	NA	31	2.2
6	NA	11	0.8
		10,304	**100.0**

LOCTYPE Type of location

Codes	Responses	Frequency	Percentage
1	Home Location	1,066	10.3
2	Work Location	1,025	9.9
3	School Location	395	3.8
4	Other Location	7,818	75.9
		10,304	**100.0**

LONGITUDE Longitude (WGS 84 / EPSG: 4326)

Codes	Responses	Frequency	Percentage

Codes	Responses	Frequency	Percentage
{range}	NA	10,304	100
		10,304	**100**

LATITUDE Latitude (WGS 84 / EPSG: 4326)

Codes	Responses	Frequency	Percentage
{range}	NA	10,304	100
		10,304	**100**

LOCNAME Name of Location (Entered/Selected by Respondent)

Codes	Responses	Frequency	Percentage
{range}	NA	10,304	100
		10,304	**100**

STREETADDR Street Address

Codes	Responses	Frequency	Percentage
{range}	NA	10,304	100
		10,304	**100**

CITY City

Codes	Responses	Frequency	Percentage
{range}	NA	10,304	100
		10,304	**100**

STATE State

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	9	0.1
AL	NA	22	0.2
AZ	NA	1	0.0
CO	NA	20	0.2
FL	NA	23	0.2

Codes	Responses	Frequency	Percentage
IA	NA	2	0.0
ID	NA	5	0.0
ME	NA	1	0.0
MN	NA	11	0.1
MT	NA	10,073	97.8
NC	NA	1	0.0
ND	NA	39	0.4
NV	NA	1	0.0
PA	NA	1	0.0
TX	NA	8	0.1
UT	NA	2	0.0
VA	NA	1	0.0
WA	NA	1	0.0
WV	NA	1	0.0
WY	NA	82	0.8
		10,304	**100.0**

ZIP Postal Zip Code

Codes	Responses	Frequency	Percentage
{range}	NA	10,304	100
		10,304	**100**

COUNTRY Country

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	416	4
USA	NA	9,888	96
		10,304	**100**

FULLADDR Complete Address with Formatting

Codes	Responses	Frequency	Percentage
{range}	NA	10,304	100
		10,304	**100**

FULLFIPS Census Block FIPS Code (Comprehensive)

Codes	Responses	Frequency	Percentage
{range}	NA	10,304	100
		10,304	**100**

STATEFIPS Census State FIPS Code

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	9	0.1
1	NA	22	0.2
4	NA	1	0.0
8	NA	20	0.2
12	NA	23	0.2
16	NA	5	0.0
19	NA	2	0.0
23	NA	1	0.0
27	NA	11	0.1
30	NA	10,073	97.8
32	NA	1	0.0
37	NA	1	0.0
38	NA	39	0.4
42	NA	1	0.0
48	NA	8	0.1
49	NA	2	0.0
51	NA	1	0.0
53	NA	1	0.0
54	NA	1	0.0
56	NA	82	0.8
		10,304	**100.0**

COUNTYFIPS Census County FIPS Code

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	9	0.1
1	NA	7	0.1
3	NA	53	0.5
5	NA	22	0.2

Codes	Responses	Frequency	Percentage
7	NA	4	0.0
9	NA	53	0.5
11	NA	1	0.0
13	NA	16	0.2
15	NA	7	0.1
17	NA	10	0.1
19	NA	1	0.0
21	NA	5	0.0
23	NA	1	0.0
25	NA	20	0.2
27	NA	14	0.1
29	NA	25	0.2
31	NA	105	1.0
33	NA	31	0.3
35	NA	2	0.0
37	NA	11	0.1
39	NA	5	0.0
43	NA	4	0.0
45	NA	5	0.0
49	NA	20	0.2
53	NA	9	0.1
55	NA	8	0.1
57	NA	6	0.1
59	NA	11	0.1
61	NA	1	0.0
63	NA	5	0.0
65	NA	11	0.1
67	NA	28	0.3
69	NA	3	0.0
71	NA	8	0.1
75	NA	1	0.0
83	NA	1	0.0
85	NA	7	0.1
87	NA	9	0.1
89	NA	13	0.1
93	NA	9	0.1
95	NA	56	0.5
97	NA	19	0.2
101	NA	3	0.0
103	NA	5	0.0
105	NA	11	0.1

Codes	Responses	Frequency	Percentage
107	NA	1	0.0
111	NA	9,634	93.5
113	NA	2	0.0
123	NA	2	0.0
133	NA	1	0.0
155	NA	1	0.0
169	NA	1	0.0
201	NA	2	0.0
399	NA	1	0.0
439	NA	2	0.0
453	NA	2	0.0
		10,304	**100.0**

TRACTFIPS Census Tract FIPS Code

Codes	Responses	Frequency	Percentage
{range}	NA	10,304	100
		10,304	**100**

BLOCKFIPS Census Block Fips Code

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	9	0.1
1	NA	3,356	32.6
2	NA	2,454	23.8
3	NA	3,434	33.3
4	NA	758	7.4
5	NA	161	1.6
6	NA	131	1.3
7	NA	1	0.0
		10,304	**100.0**

CBSA OMB Core Based Statistical Area

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	298	2.9
11180	NA	1	0.0
12420	NA	2	0.0

Codes	Responses	Frequency	Percentage
13420	NA	1	0.0
13740	NA	9,690	94.0
13900	NA	11	0.1
14500	NA	4	0.0
14580	NA	97	0.9
15580	NA	9	0.1
16220	NA	17	0.2
16620	NA	1	0.0
16940	NA	1	0.0
17660	NA	4	0.0
19100	NA	3	0.0
19300	NA	11	0.1
19740	NA	12	0.1
19860	NA	3	0.0
22020	NA	1	0.0
22660	NA	2	0.0
23940	NA	21	0.2
24500	NA	11	0.1
24540	NA	2	0.0
25740	NA	24	0.2
26420	NA	2	0.0
26620	NA	10	0.1
27220	NA	1	0.0
27340	NA	1	0.0
29460	NA	1	0.0
29660	NA	1	0.0
29820	NA	1	0.0
33460	NA	1	0.0
33540	NA	5	0.0
36540	NA	1	0.0
37860	NA	22	0.2
37980	NA	1	0.0
38060	NA	1	0.0
38860	NA	1	0.0
39420	NA	1	0.0
39940	NA	1	0.0
40540	NA	5	0.0
41620	NA	2	0.0
43260	NA	9	0.1
47900	NA	1	0.0
48780	NA	10	0.1

Codes	Responses	Frequency	Percentage
		10,304	**100.0**

CSA OMB Combined Statistical Area

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	10,243	99.4
170	NA	1	0.0
206	NA	3	0.0
216	NA	18	0.2
218	NA	1	0.0
244	NA	1	0.0
288	NA	2	0.0
290	NA	10	0.1
292	NA	1	0.0
332	NA	1	0.0
378	NA	1	0.0
380	NA	11	0.1
420	NA	1	0.0
428	NA	1	0.0
438	NA	1	0.0
446	NA	1	0.0
482	NA	2	0.0
518	NA	4	0.0
548	NA	1	0.0
		10,304	**100.0**

SAMPNO Sample household identifier

Codes	Responses	Frequency	Percentage
{range}	NA	2,449	100
		2,449	**100**

VEHNO Household vehicle identifier

Codes	Responses	Frequency	Percentage
1	NA	1,053	43.0
2	NA	750	30.6
3	NA	378	15.4
4	NA	155	6.3
5	NA	62	2.5
6	NA	26	1.1
7	NA	12	0.5
8	NA	7	0.3
9	NA	3	0.1
10	NA	2	0.1
11	NA	1	0.0
		2,449	**100.0**

VEHYEAR Vehicle Year

Codes	Responses	Frequency	Percentage
-8	I don’t know	11	0.4
-7	I prefer not to answer	10	0.4
1900	NA	1	0.0
1938	NA	1	0.0
1946	NA	1	0.0
1947	NA	2	0.1
1948	NA	2	0.1
1950	NA	2	0.1
1952	NA	1	0.0
1953	NA	1	0.0
1954	NA	4	0.2
1956	NA	5	0.2
1959	NA	2	0.1

Codes	Responses	Frequency	Percentage
1960	NA	1	0.0
1961	NA	2	0.1
1962	NA	1	0.0
1964	NA	2	0.1
1965	NA	2	0.1
1966	NA	8	0.3
1967	NA	3	0.1
1968	NA	7	0.3
1969	NA	3	0.1
1970	NA	3	0.1
1971	NA	1	0.0
1972	NA	6	0.2
1973	NA	2	0.1
1974	NA	6	0.2
1975	NA	2	0.1
1976	NA	7	0.3
1977	NA	6	0.2
1978	NA	7	0.3
1979	NA	9	0.4
1980	NA	6	0.2
1981	NA	6	0.2
1982	NA	3	0.1
1983	NA	8	0.3
1984	NA	16	0.7
1985	NA	14	0.6
1986	NA	13	0.5
1987	NA	9	0.4
1988	NA	16	0.7
1989	NA	28	1.1
1990	NA	18	0.7
1991	NA	19	0.8
1992	NA	26	1.1
1993	NA	21	0.9
1994	NA	29	1.2
1995	NA	32	1.3
1996	NA	53	2.2
1997	NA	35	1.4
1998	NA	56	2.3
1999	NA	55	2.2
2000	NA	82	3.3
2001	NA	80	3.3

Codes	Responses	Frequency	Percentage
2002	NA	101	4.1
2003	NA	83	3.4
2004	NA	104	4.2
2005	NA	119	4.9
2006	NA	126	5.1
2007	NA	141	5.8
2008	NA	138	5.6
2009	NA	83	3.4
2010	NA	110	4.5
2011	NA	123	5.0
2012	NA	114	4.7
2013	NA	104	4.2
2014	NA	118	4.8
2015	NA	106	4.3
2016	NA	103	4.2
2017	NA	30	1.2
		2,449	**100.0**

MAKE Vehicle Make

Codes	Responses	Frequency	Percentage
-8	I don't know	15	0.6
-7	I prefer not to answer	17	0.7
1	American Motors	5	0.2
2	Jeep (Includes Willys/Kaiser-Jeep)	83	3.4
3	AM General	2	0.1
6	Chrysler/Daimler Chrysler	47	1.9
7	Dodge	157	6.4
9	Plymouth	6	0.2
12	Ford	501	20.5
13	Lincoln	14	0.6
14	Mercury	13	0.5
18	Buick	55	2.2
19	Cadillac	25	1.0
20	Chevrolet	367	15.0
21	Oldsmobile	13	0.5
22	Pontiac	34	1.4
23	GMC	98	4.0
24	Saturn	5	0.2
30	Volkswagen	24	1.0

Codes	Responses	Frequency	Percentage
32	Audi	10	0.4
33	Austin/Austin Healey	5	0.2
34	BMW	15	0.6
35	Nissan/Datsun	74	3.0
37	Honda	209	8.5
38	Isuzu	2	0.1
41	Mazda	24	1.0
42	Mercedes Benz	9	0.4
43	MG	1	0.0
45	Porsche	3	0.1
47	Saab	14	0.6
48	Subaru	120	4.9
49	Toyota	239	9.8
50	Triumph	3	0.1
51	Volvo	11	0.4
52	Mitsubishi	9	0.4
53	Suzuki	16	0.7
54	Acura	8	0.3
55	Hyundai	42	1.7
58	Infiniti	5	0.2
59	Lexus	8	0.3
62	Land Rover	1	0.0
63	KIA	25	1.0
67	Scion	3	0.1
69	Other Import	1	0.0
72	Harley-Davidson	27	1.1
73	Kawasaki	11	0.4
76	Yamaha	17	0.7
82	Freightliner	2	0.1
84	International Harvester/Navistar	2	0.1
85	Kenworth	1	0.0
89	White/Autocar-White/GMC	2	0.1
98	Other	41	1.7
99	Unknown	8	0.3
		2,449	**100.0**

MAKE_O Vehicle Make (Other)

Codes	Responses	Frequency	Percentage
{range}	NOT ASCERTAINED	2,449	100

Codes	Responses	Frequency	Percentage
		2,449	**100**

MODEL Vehicle Model

Codes	Responses	Frequency	Percentage
{range}	F-Series pickup	2,449	100
		2,449	**100**

MODEL_O Vehicle Model (Other)

Codes	Responses	Frequency	Percentage
{range}	NOT ASCERTAINED	2,449	100
		2,449	**100**

FUEL Fuel Type

Codes	Responses	Frequency	Percentage
-8	I don’t know	4	0.2
-7	I prefer not to answer	2	0.1
1	Gas	2,282	93.2
2	Diesel	113	4.6
3	Hybrid, electric, or alternative fuel	40	1.6
97	Some other fuel	8	0.3
		2,449	**100.0**

FUEL_O Fuel Type (Other)

Codes	Responses	Frequency	Percentage
{range}	NOT ASCERTAINED	2,449	100
		2,449	**100**

VEHTYPE Vehicle Type

Codes	Responses	Frequency	Percentage
-8	I don’t know	1	0.0

Codes	Responses	Frequency	Percentage
-7	I prefer not to answer	3	0.1
1	Automobile/Car/Station Wagon	899	36.7
2	Van (Mini/Cargo/Passenger)	113	4.6
3	SUV (Santa Fe, Tahoe, Jeep, etc.)	600	24.5
4	Pickup Truck	637	26.0
5	Other Truck	13	0.5
6	RV (Recreational Vehicle)	51	2.1
7	Motorcycle/Motorbike	112	4.6
97	Something Else	20	0.8
		2,449	**100.0**

VEHTYPE_O Vehicle Type (Other)

Codes	Responses	Frequency	Percentage
-9	NOT ASCERTAINED	2,429	99.2
ATV	NA	16	0.7
Military Ambulance	NA	1	0.0
SEMI TRUCK	NA	2	0.1
UTV	NA	1	0.0
		2,449	**100.0**