

Tahoe Regional Planning Agency

2016 Winter Travel Mode Share Survey *Final Report*



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1. Introduction

This report documents the execution and summarizes the results of the 2016 Winter Travel Mode Share (TMS) Survey for the Tahoe Basin. NuStats conducted the survey in February 2016 for the Tahoe Regional Planning Agency (TRPA).

Survey Purpose

The purpose of the survey was to capture accurate and reliable travel mode data of permanent residents, seasonal residents, and visitors to commercial and recreational sites within the Tahoe Basin. This survey will provide data necessary to support TRPA's current efforts to update its long-range regional plan.

Survey Design

Because the sample was a "choice" sample and not a probability sample, the resulting data set was neither weighted nor expanded to reflect population parameters.

Survey Summary Outcomes

A total of 1,181 interviews were conducted. Of these, 572 were with full-time residents, 89 were with seasonal residents, and 520 were with visitors. See Table 1 for further details.

Table 1: Survey Outcomes by Length of Visit and Interviewing Site

Site of Interviewing Location	Full-Time Residents	Seasonal Residents	Visitors	Total
South Shore	339	48	312	699
North Shore	233	41	208	482
<i>Total</i>	572	89	520	1,181

The split of the resident type (full-time, seasonal and visitors) for the winter 2008, 2012 and 2016 studies were very similar. In the 2008 study 45 percent were with full-time residents with 2012 and 2016 both capturing 48 percent of data from full-time residents. Seasonal residents ranged from 6 to 9 percent respectively. Visitors participating in the study whereas follow: 2008 - 45 percent, 2012 - 43 percent, and 2016 - 44 percent.

2. Methodology

Surveyor Selection and Training

The surveyor staff was secured through Blue Ribbon Employment, a temporary employment agency located in South Lake Tahoe. Individuals selected to conduct data collection activities were required to have lived in the Tahoe Basin area a minimum of two years, be familiar with recreational and commercial areas surrounding the Tahoe Basin area, have an outgoing personality, be a minimum of 18 years of age, have excellent speaking skills, and have reliable personal transportation.

A total of 10 surveyors were selected for the study. Four of the survey staff resided in the North Lake Tahoe area and six resided in the South Lake Tahoe Area. This gave us coverage of both shores and allowed us to simultaneously collect data from each shore with limited travel time.

Surveyors were required to attend a two-hour training session, which was held on Thursday, February 18th, 2016, at the TRPA office from 1:00 p.m. to 3:00 p.m. During the training session, surveyors were advised about the purpose of the study, work schedule (survey times and location), dress code, and data collection methodology, which stressed reading each question completely as worded, survey device (pc tablet) functionality, and full collection of all data elements. The training session included a focused review of the questionnaire to familiarize the staff with each question and appropriate responses to be collected. Following the classroom-style training session, surveyors participated in mock interviews with each other prior to beginning actual data collection.

Documented training materials were provided to each surveyor to keep as reference. A copy of the Training Manual is included in Appendix D.

Survey Sites

TRPA staff and NuStats jointly pre-selected 38 data collection sites based on the following criteria:

- Balance between North Lake Tahoe and South Lake Tahoe split (40 percent of sites and collected data secured from North Lake Tahoe sites and 60 percent of sites and collected data secured from South Lake Tahoe sites);
- Balance between commercial and recreational activity sites (19 commercial sites and 24 recreational sites); and
- Anticipated activity level.

Tables 2 through 4 identify the final list of the 38 pre-selected survey sites, sample types, locations, and collection goals.

Table 2: Site Selection and Collection Goal

Not all pre-selected sites were surveyed for reasons such as the area being closed for the season or little to no activity levels at specific sites. The sites that were not surveyed are listed below:

- Bijou Cross Country Ski Area was attempted but had minimal activity on the survey date,
- Kings Beach Commercial was attempted but had minimal activity on the survey date,
- Stateline Community Plan was attempted but had minimal activity on the survey date,
- Zephyr Cove was attempted but had minimal activity on the survey date.

Sites were oversampled to account for the sites that had low participants. The following sites were oversampled:

- North Stateline Non-Casinos,
- South Stateline, and
- Tahoma.

Table 3: Commercial Site Selection and Collection Goal

SITE	Completes	Sample Type	Shore	Goal
Bijou/al Tahoe	20	Commercial	South	20
Cove East/Tahoe Keys Marina	17	Commercial	North	20
Dollar Hill	21	Commercial	North	20
Harrahs/Harveys	36	Commercial	South	50
Homewood Commercial	12	Commercial	North	6
Incline Village Recreational Commercial	38	Commercial	North	35
Kings Beach Commercial	4	Commercial	North	34
Kingsbury Community Plan	19	Commercial	South	20
Meyers	31	Commercial	South	22
North Stateline Non-Casinos	24	Commercial	North	5
Roundhill	57	Commercial	South	50
Shops @ Carnelian Bay	60	Commercial	North	50
Sierra Tract	23	Commercial	South	20
Ski Run	46	Commercial	South	50
South Stateline	92	Commercial	South	67
South Y	17	Commercial	South	25
Stateline Community Plan	19	Commercial	South	67
Sunnyside	3	Commercial	North	5
Tahoe City	23	Commercial	North	25
Tahoma	36	Commercial	North	9
Grand Total				600

Table 4: Recreational Site Selection and Collection Goal

SITE	Completes	Sample Type	Shore	Goal
Alpine Meadows	32	Recreational	North	30
Bijou Cross Country Ski Area	4	Recreational	South	30
Camp Richardson Resort	34	Recreational	South	30
Cove East/Tahoe Keys	5	Recreational	South	24
Diamond Peak Ski Resort	107	Recreational	North	110
El Dorado Beach/Boat Ramp	25	Recreational	South	25
Heavenly Ski Resort	122	Recreational	South	135
Homewood Ski Resort	60	Recreational	North	60
Incline Village Recreational Center	36	Recreational	North	35
Kahle Community Center and Park	22	Recreational	South	26
Ms Dixie	25	Recreational	South	24
North Tahoe Conference Center	9	Recreational	North	20
South Lake Tahoe Ice Arena	3	Recreational	South	25
South Lake Tahoe Rec Ctr	9	Recreational	South	26
South Lake Tahoe Senior Ctr	21	Recreational	South	25
Spooner Junction Snow Play Area	3	Recreational	South	25
Spooner Lake Cross Country Ski Resort	17	Recreational	North	25
Zephyr Cove	49	Recreational	South	75
Grand Total				750

Data Collection Methodology

All data collection activities were conducted by trained staff using intercept interview methodology. Interviews averaged four to five minutes in length and were conducted with one member of a traveling party (visitor, seasonal resident, or full-time resident) age 18 or older.

Surveyors were provided with sampling instructions prior to the start of data collection efforts at each survey site. The sampling instructions defined whether to conduct a census sample of every travel party encountered (at low activity sites), or sample every Nth travel party at higher activity sites. Tables 5 and 6 identify the sampling methodology conducted at each site by commercial and recreational survey location, respectively.

Table 5: Data Collection Methodology by Sample Type: Commercial

SITE	Sample Type	Sampling
Bijou/al Tahoe	Commercial	Census
Cove East/Tahoe Keys Marina	Commercial	Census
Dollar Hill	Commercial	Census
Harrahs/Harveys	Commercial	Every 2 nd travel party
Homewood Commercial	Commercial	Census
Incline Village Recreational Commercial	Commercial	Every 2 nd travel party
Kings Beach Commercial	Commercial	Every 2 nd travel party
Kingsbury Community Plan	Commercial	Census
Meyers	Commercial	Census
North Stateline Non-Casinos	Commercial	Census
Roundhill	Commercial	Every 2 nd travel party
Shops @ Carnelian Bay	Commercial	Census
Sierra Tract	Commercial	Every 2 nd travel party
Ski Run	Commercial	Every 2 nd travel party
South Stateline	Commercial	Every 2 nd travel party
South Y	Commercial	Every 2 nd travel party
Stateline Community Plan	Commercial	Every 2 nd travel party
Sunnyside	Commercial	Census
Tahoe City	Commercial	Every 2 nd travel party
Tahoma	Commercial	Census

Table 6: Data Collection Methodology by Sample Type: Recreation

SITE	Sample Type	Sampling
Alpine Meadows	Recreational	Census
Bijou Cross Country Ski Area	Recreational	Census
Camp Richardson Resort	Recreational	Census
Cove East/Tahoe Keys	Recreational	Census
Diamond Peak Ski Resort	Recreational	Every 3 rd travel party
El Dorado Beach/Boat Ramp	Recreational	Census
Heavenly Ski Resort	Recreational	Every 3 rd travel party
Homewood Ski Resort	Recreational	Every 3 rd travel party
Incline Village Recreational Center	Recreational	Census
Kahle Community Center and Park	Recreational	Census
Ms Dixie	Recreational	Every 3 rd travel party
North Tahoe Conference Center	Recreational	Census
South Lake Tahoe Ice Arena	Recreational	Census
South Lake Tahoe Rec Ctr	Recreational	Census
South Lake Tahoe Senior Ctr	Recreational	Census
Spooner Junction Snow Play Area	Recreational	Census
Spooner Lake Cross Country Ski Resort	Recreational	Census
Zephyr Cove	Recreational	Every 3 rd travel party

Publicity

Coulter and Associates was responsible for the development and placement of a comprehensive media notice detailing the sponsor, purpose, and dates of the upcoming study. The media notice was released to local print and electronic media sources approximately four days prior to data collection. See Appendix C for the Press Release. In addition, a follow-up acknowledgement was sent to the survey sites to express our gratitude for allowing us on their property to conduct the study.

Logistics

Following survey site selection, TRPA, NuStats, and Coulter and Associates conducted a joint effort to contact appropriate individuals at each site to advise about the study purpose, secure permission to conduct survey activities at the site, and define the survey timeframe. Contact was made by a variety of modes including e-mail, telephone, and U.S. mail services.

Upon securing permission to survey at the sites, TRPA and PTV NuStats conducted an extensive site review at each of the 38 survey locations prior to the start of data collection in order to identify surveyor staging locations that would minimize bias for encountering respondents traveling by one specific travel mode. For example, surveyors were not staged in parking lots where they would encounter nearly 100

percent of travel by private automobile. Nor were surveyors staged near bus stop locations where the majority of respondents would be traveling by public transportation.

A deliberate effort was made to stage surveyors at locations at each site that allowed for the highest degree of intercepting potential respondents who may travel to the site by a variety of travel modes. These included main entrances (at parks for example), sidewalks (in front of commercial centers), or main activity points (such as beaches and trailheads). Table 7 identifies the number of surveyors and their staging location at each survey site.

Table 7: Surveyor Staging Locations

Location	Staging Location
Bijou/al Tahoe	1 from Safeway to Big Daddy's on Hwy. 50, 1 in Rite Aid strip center, 1 along Harrison Ave., 1 between Longs Drugs and Heidi's Restaurant, 1 from west of Safeway on both sides of street to Harrison
Dollar Hill	2 covering East and West side of Hwy 28 from 7-11 (Fabian Road) to Old Mill Road.
Homewood Commercial	2 covering both sides of Hwy 89 from Homewood Ski Resort to Post Office
Incline Village Commercial	1 at Raley's center and strip center on the north side of Hwy 28 and Village Blvd., 1 on south side of Hwy 28 from 7-11 center to stores in block with Starbucks, 1 at stores at corners of Southwood Blvd. and Village Center.
Kings Beach Commercial	1 from Beach Street to Beaver Street along both sides of Hwy 28.
Kingsbury Community Plan	1 on both sides of Kingsbury Grade from Hwy 50 to approximately Meadow Dr, 1 at Lakeside liquor store, 1 at Burger King area on Hwy 50.
Meyers	1 along Hwy 50 at gas station near Pioneer Trail and Apache Ave to Hwy 89, south on Hwy 89 to Shakori Dr then back to Hwy 50, continuing on the north side of Hwy 50 to Santa Fe Rd.
North Casinos	1 at Crystal Bay, Biltmore and Cal-Neva casino entrances (Goals revised by client)
North Stateline Non Casino	1 at stores on both sides of Hwy 28 from Biltmore parking lot to approximately Manor Ave. (Goals revised by client)
Round Hill Community Plan	2 along sidewalk in front of all stores on both sides of Hwy 50.
Sierra Tract	1 from Blue Lake to Lodi on both sides of Hwy 50.
Ski Run	6 near Chevron and stores along shore, 2 on each side of Ski Run from Hwy 50 to David Ln and Pioneer Trl.
South Stateline	1 at Raley's shopping center mall, including restaurants at front, 1 from Wildwood to Stateline along Hwy 50 and all side roads near Cedar Ave and Pine Blvd, 1 from Heavenly Village to Embassy Suites, 2 inside Heavenly Village.
South Y Commercial	1 person at Y Outlet shops and south on 50, 1 person on Millers Outlet side to north boundary on Hwy 50, 1 person at K-Mart center and south on Hwy. 50
Stateline Community Plan	2 from Stateline to Lake Parkway/Mont Bleu side, 2 from Stateline to Lake Parkway/Horizon side, 1 at casino back entrances on Mont Bleu side, 1 at casino back entrances on Horizon side
Sunnyside	1 covering both sides of Hwy 89 from General Store to Pineland Drive
Tahoe City	2 on North side of Hwy 28 from Lighthouse Center (East) to Albertson's at Hwy 28 and Hwy 89 intersection. 2 on South side of Hwy 28 from Lighthouse Center (East) to Chevron Station/raft rental (West) including Fanny Bridge and Comstock Village.
Tahoma Commercial	1 person covering from laundry mart mini-mart to PDQ food mart on both sides of Hwy 89
The Shops at Carnelian Bay	2 at 7-11 and post office
Alpine Meadows (Backside)	1 at ski lift line.
Camp Richardson Resort	1 at ski rental store, 1 at general market, 1 at beach and restaurant area.
Commons Beach	1 in parking lot, beach front, playground, and stairway down from Hwy 28 to beach.
Diamond Peak Ski Resort	2 at ski lift lines.

Location	Staging Location
El Dorado Beach/Boat Ramp	1 on bike path at Lakeview Ave along beachfront.
Granlibakken Ski Resort	2 covering lift lines
Heavenly Ski Resort	3 at Gondola line, 4 at Cal Base lift lines, and 3 covering both Stagecoach and Boulder lift lines
Homewood Ski Resort	2 covering lift lines
Incline Village Recreational Center	1 outside entrance to recreational center.
Kahle Community Center and Park	1 outside entrance to recreational area and in playground area
MS Dixie Entrance (at Zephyr Cove)	2 at ticket window, boarding line, walkway to boats
South Casino Area	1 in front of Harvey's casino/hotel 1 in the back of Harrah's casino/hotel
North Tahoe Conference Center	2 outside entrance to recreational center
North Tahoe Regional Park	1 at sled hill, snowmobile rental, bathrooms, parking lot.
South Tahoe Ice Arena	1 at entrance to Ice Arena.
South Tahoe Recreation Center	1 at entrance to recreational center.
South Tahoe Senior Center	1 at entrance to senior center and parking lot
Spooner Junction Snow Play Area	1 at parking area and bottom of sled hill.
Spooner Lake Cross Country Ski Resort	3 in parking lot and trail heads.
Tahoe Cross Country Ski Area	1 at trail head and picnic table area
Zephyr Cove Marina/Resort	1 at snowmobile rental and gift shop, 1 along parking lot sidewalk/restrooms/snack shop, 1 around lodge/restaurant.

Survey Dates

Data collection was conducted over 9 days, from February 19 to February 28, 2016 not including February 25th and February 26th which was a snow day and surveyors could not travel. Sites to be surveyed each day were scheduled based on their proximity to each other and anticipated activity level on the day of the week they were scheduled to be surveyed. Table 8 identifies the date and timeframe of survey activities.

Table 8: Data Collection Day and Time Period

Location	Shore	Type	Survey Date	Times
Bijou/al Tahoe	South	Commercial	2/19/2016	3:30pm – 5:30pm
Camp Richardson Resort	South	Recreational	2/19/2016	3:30pm – 5:30pm
Kingsbury Community Plan	South	Commercial	2/19/2016	12:00pm – 2:15pm
Lakeside Casino	South	Recreational	2/19/2016	2:30pm – 3:30pm
MS Dixie Entrance (at Zephyr Cove)	South	Recreational	2/19/2016	12:00pm – 2:00pm 1:00pm – 3:30pm
Round Hill Community Plan	South	Commercial	2/19/2016	3:00pm – 6:30pm
Sierra Tract	South	Commercial	2/19/2016	3:00pm – 5:30pm
South Stateline	South	Commercial	2/19/2016	3:00pm – 6:30pm
Zephyr Cove Marina/Resort	South	Recreational	2/19/2016	12:00pm – 4:30pm 12:00pm – 2:00pm 2:00pm – 3:00pm 1:00pm – 2:00pm
Alpine Meadows (Backside)	North	Recreational	2/20/2016	12:30pm – 5:30pm
Commons Beach	North	Recreational	2/20/2016	11:00am – 4:30pm
Diamond Peak Ski Resort	North	Recreational	2/20/2016	10:30am – 4:30pm
Kings Beach Commercial	North	Commercial	2/20/2016	12:00pm – 5:30pm
North Casinos	North	Commercial	2/20/2016	12:00pm – 5:00pm
Ski Run	South	Commercial	2/20/2016	11:00am – 4:00pm
South Casino Area	South	Commercial	2/20/2016	1:00pm – 6:30pm
South Tahoe Ice Arena	South	Recreational	2/20/2016	11:00am – 4:30pm
South Tahoe Recreation Center	South	Recreational	2/20/2016	10:30am – 4:30pm
South Tahoe Senior Center	South	Recreational	2/20/2016	10:00am – 2:00pm
Dollar Hill	North	Commercial	2/21/2016	11:30am – 4:00pm
Granlibakken Ski Resort	North	Recreational	2/21/2016	11:30am – 4:00pm
Homewood Ski Resort	North	Recreational	2/21/2016	11:00am – 4:30pm
Incline Village Commercial	North	Commercial	2/21/2016	1:00pm - 5:00pm
South Y Commercial	South	Commercial	2/21/2016	12:30pm – 5:30pm
Spooner Junction Snow Play Area	South	Recreational	2/21/2016	9:00am – 3:00pm
Spooner Lake Cross Country Ski Resort	South	Recreational	2/21/2016	9:30am – 3:30pm
Heavenly Ski Resort	South	Recreational	2/22/2016	12:00pm - 5:00pm
Meyers	South	Commercial	2/22/2016	11:00am – 4:00pm
North Stateline Non Casino	North	Commercial	2/22/2016	12:00pm – 5:30pm
North Tahoe Conference Center	North	Recreational	2/22/2016	11:00am – 4:00pm
North Tahoe Regional Park	North	Recreational	2/22/2016	2:00pm – 6:00pm
Stateline Community Plan	South	Commercial	2/22/2016	1:00pm – 5:30pm
Sunnyside	North	Commercial	2/22/2016	11:00am – 12:30pm

Location	Shore	Type	Survey Date	Times
Tahoe City	North	Commercial	2/22/2016	10:45am – 3:15pm
Tahoe Cross Country Ski Area	North	Recreational	2/23/2016	10:30am – 4:15pm
Tahoma Commercial	North	Commercial	2/23/2016	1:30pm – 5:30pm
The Shops at Carnelian Bay	North	Commercial	2/23/2016	1:00pm – 5:00pm
Homewood Commercial	North	Commercial	2/24/2016	1:45pm – 5:45pm
Incline Village Recreational Center	North	Recreational	2/27/2016	10:45am – 3:45pm
Kahle Community Center and Park	South	Recreational	2/27/2016	10:00am – 11:00am 12:30pm – 4:30pm

Survey Instrument

The survey instrument was designed as an intercept instrument with respondent-provided data recorded verbatim by interviewers. The survey instrument was uploaded into a project website which was then uploaded into pc tablets for surveying. The questionnaire consisted of 22 primarily self-coded questions. The questionnaire was designed to obtain information in three major categories: residential status, travel patterns, and respondent demographics. A copy of the questionnaire program is in Appendix A. Unweighted data frequencies for non-locational data elements are presented in Appendix B. As noted in Table 9, some of the required data elements were captured by means other than as a question on the questionnaire. This approach had multiple benefits: (1) the questionnaire was shorter to enhance response and (2) data quality was improved by circumventing respondent-provided information.

Table 9: Data Elements and Capture Methodology

Data Element	Capture Method
Survey Date	Control file
Survey Day	Control file
Data Collection Time	Control file
Survey Location	Control file
Full-Time Resident	Respondent reported
Seasonal Resident	Respondent reported
Visitor	Respondent reported
Visitor Purpose	Respondent reported
Length of Stay	Respondent reported
Number of Visits	Respondent reported
Housing Type	Respondent reported
Address	Respondent reported
Origin	Respondent reported
Origin Place	Respondent reported
Travel Mode	Respondent reported
Trip Purpose	Respondent reported
Duration	Respondent reported
Travel Party Size	Respondent reported
Visitor Party Size	Respondent reported
Employment Status	Respondent reported
Age	Respondent reported
Income	Respondent reported
Visitor Spending	Respondent reported
Gender	Visual determination

In-Field Questionnaire Editing

As surveys were completed on the pc tablets, basic skip patterns and quality control software performed checks for completeness and accuracy. Following data collection, completed questionnaires underwent a cursory field review for editing and correction. In addition to questionnaire review, the NuStats Field Manager documented each day's activity, including preliminary estimation of completed questionnaires, survey date, time, staging locations and data collection methodology in an Excel spreadsheet control file.

Data Processing

Data entry was conducted in real time by the use of the pc tablets. Upon completion of each individual survey, the data was automatically uploaded to a project website. Open ended responses were reviewed for the purpose of correcting misspellings and verifying that the surveyor correctly read numeric data. The results of the data processing were linked to the field management system so that an accurate accounting of survey progress and status was maintained. The survey device used is listed in Figure 1.

Figure 1: Device Used to Capture Data Elements



Figure 2a and Figure 2b are the maps indicating location of complete by Commercial sites and Recreational sites respectively.

Figure 2a: Recreational Completes

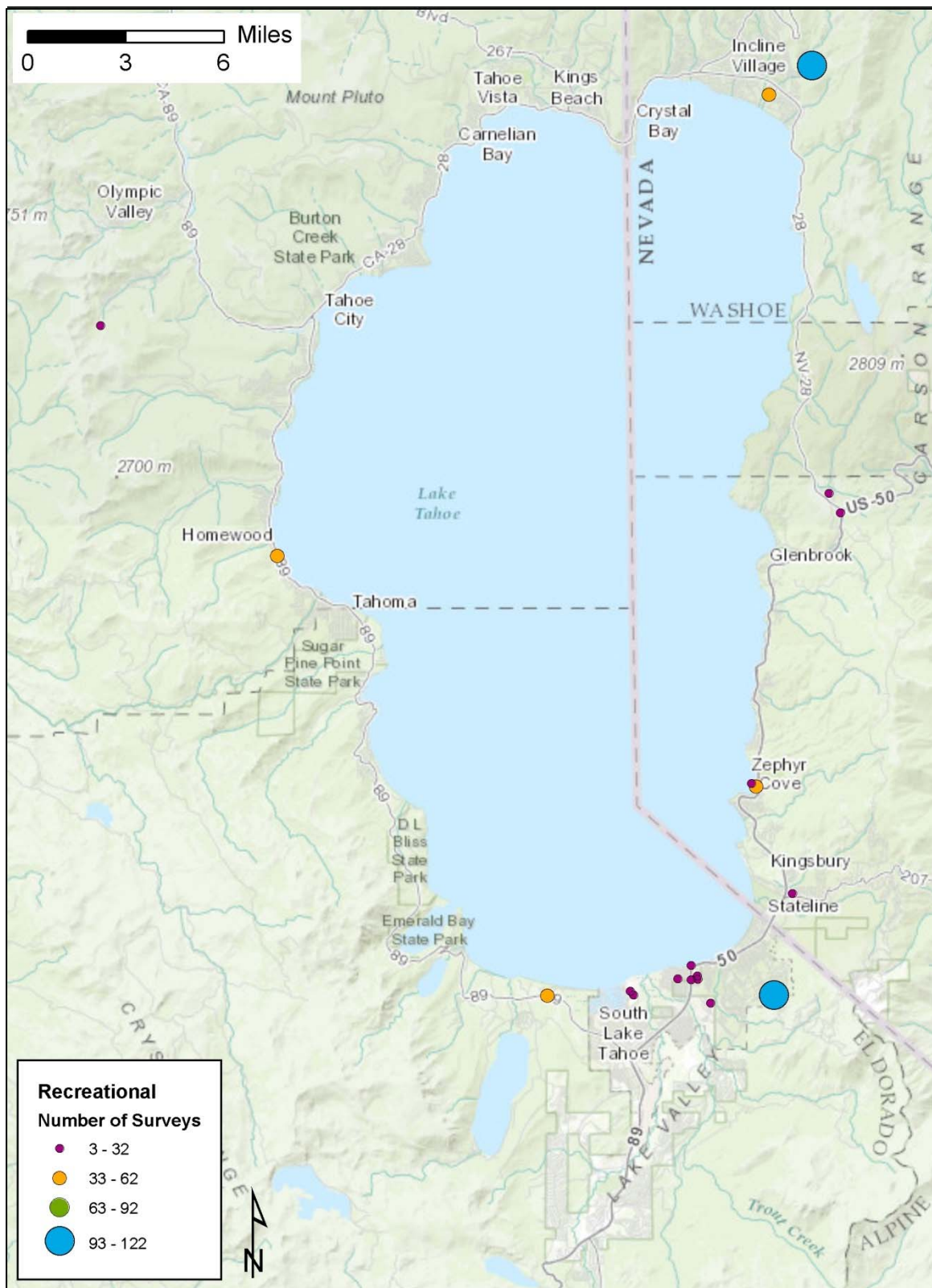
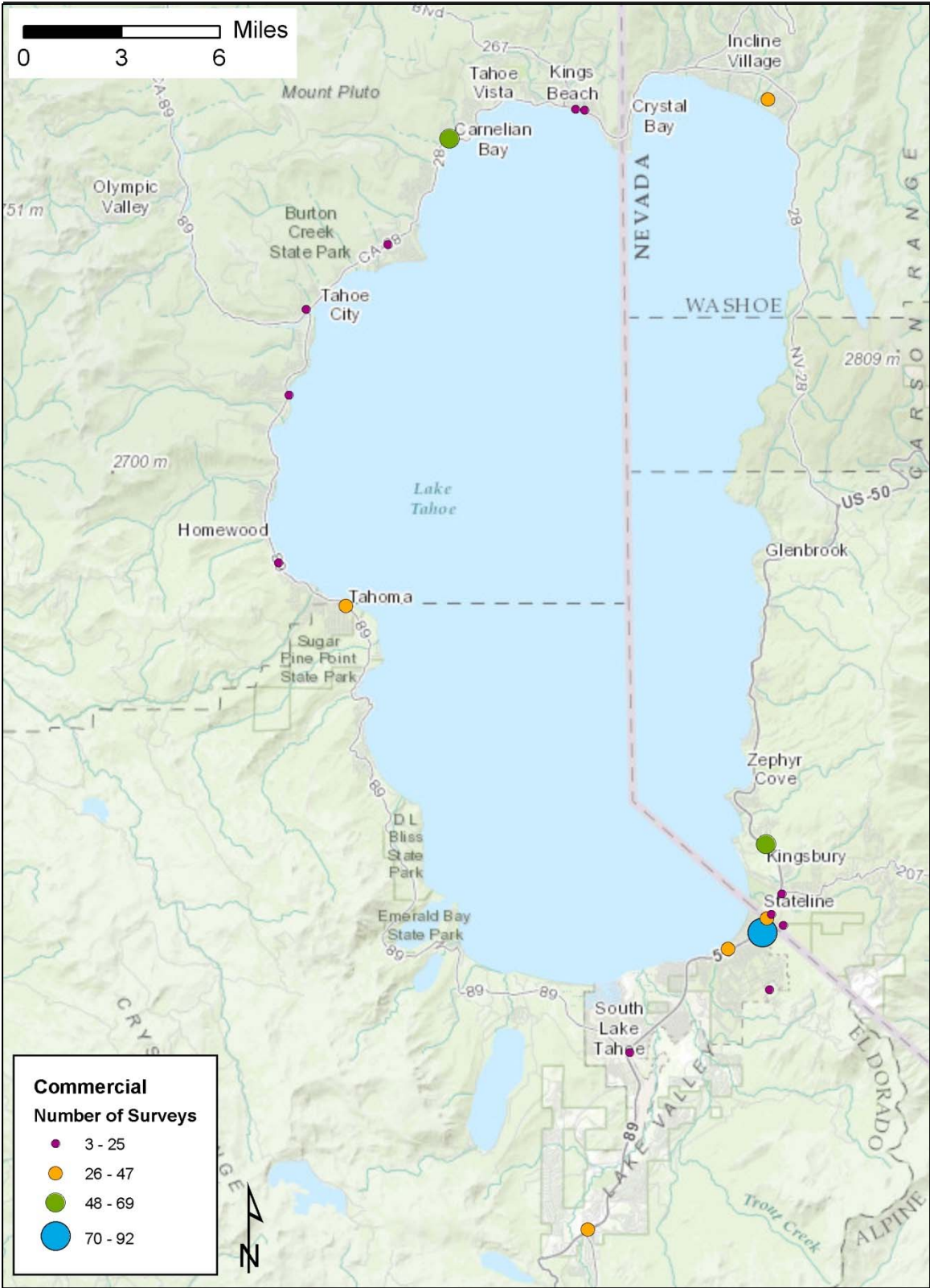


Figure 2b: Commercial Completes



3. Data Results

This section provides survey results as compared to the data collected in previous winter survey efforts (2008, 2012 & 2016). Because these interviews were conducted using a choice sample, the results presented represent only those participants who completed an interview. The final data set contains 1,181 complete, usable records.

Where appropriate, the findings show the data in the aggregate as well as by sample type: commercial or recreational. Tables and graphics in this report display the percentages of each coded response unless otherwise noted.

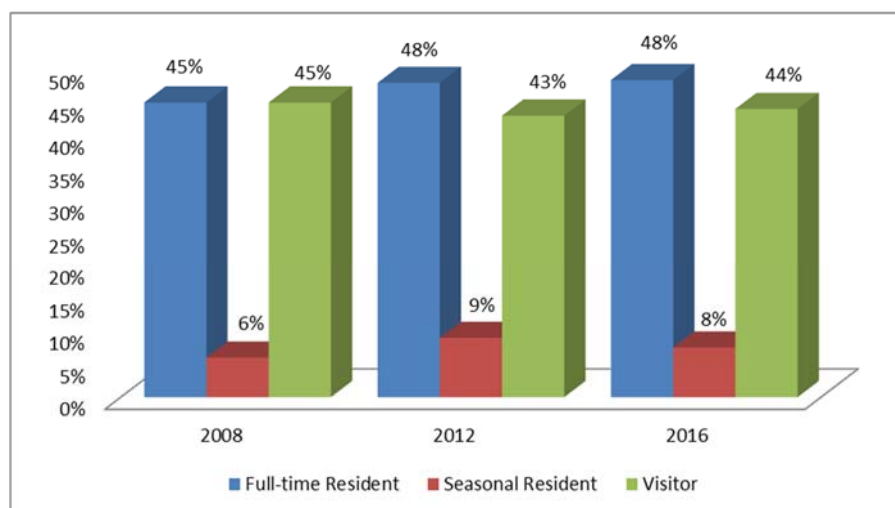
Respondent Characteristics

Results presented here under respondent characteristics include both resident and visitor data and demographics. Resident and visitor data figures in the section are in response to questions 1 – 6, 9, and 19 on the survey. Demographic figures are in response to questions 16-18 and 20 on the survey. Cross-tabulation of survey results are presented for specific variables.

RESIDENT AND VISITOR DATA

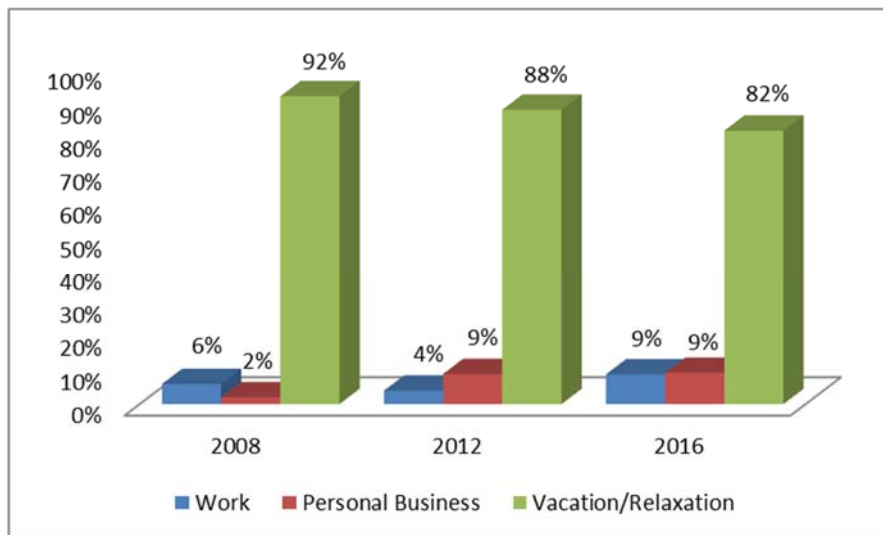
In the 2016 winter survey, 44 percent of respondents classified themselves as visitors to the Tahoe Basin at the time of the survey and eight percent reported as a seasonal resident. Figure 3 shows that nearly half of the respondents are full-time residents of the Tahoe Basin, and resident status is consistent with the previous winter survey efforts.

Figure 3: Residence Status



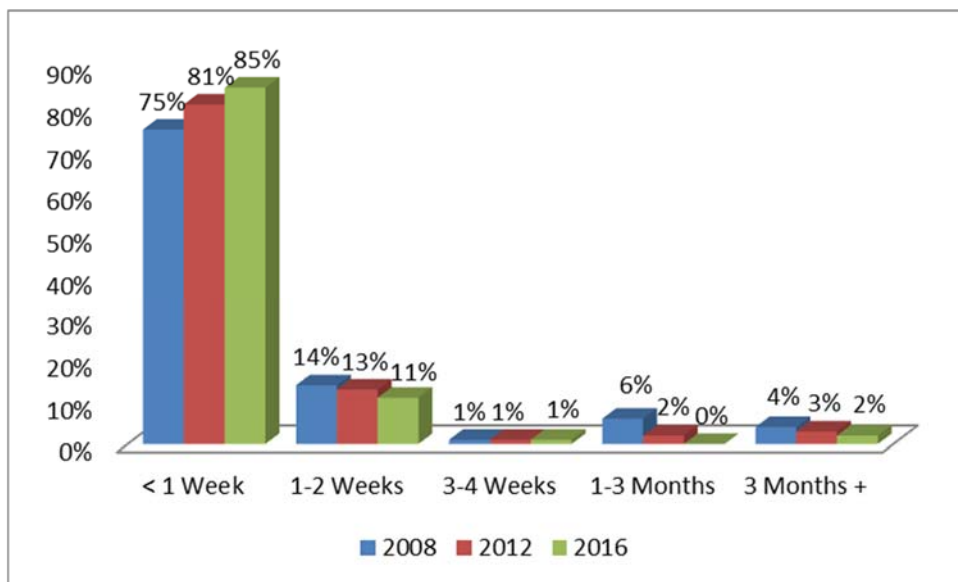
In 2016, Visitors' indicated primary purpose for visiting Tahoe was overwhelmingly vacation / relaxation similar to previous findings, and continued the trend of declining by 10 percent since 2008. In addition, work saw a five percent increase from 2012. See Figure 4 for further detail.

Figure 4: Primary Purpose for Visit to Tahoe



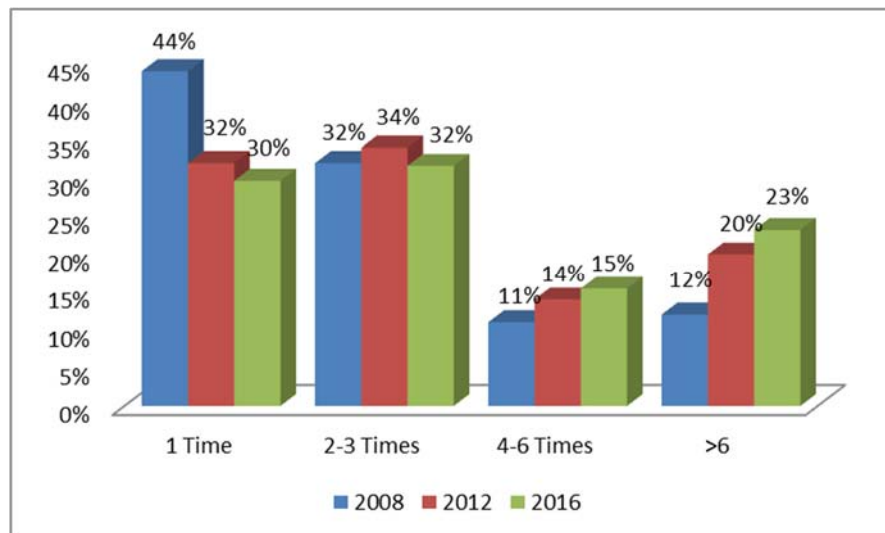
Eighty-five percent of visitors and seasonal residents interviewed were staying in the Tahoe area less than a week. While the length of visit for those who reported 1 month or more decreased as in years past. Remaining constant over the last three survey cycles were the one to two weeks category. See Figure 5 for further detail.

Figure 5: Length of Visit



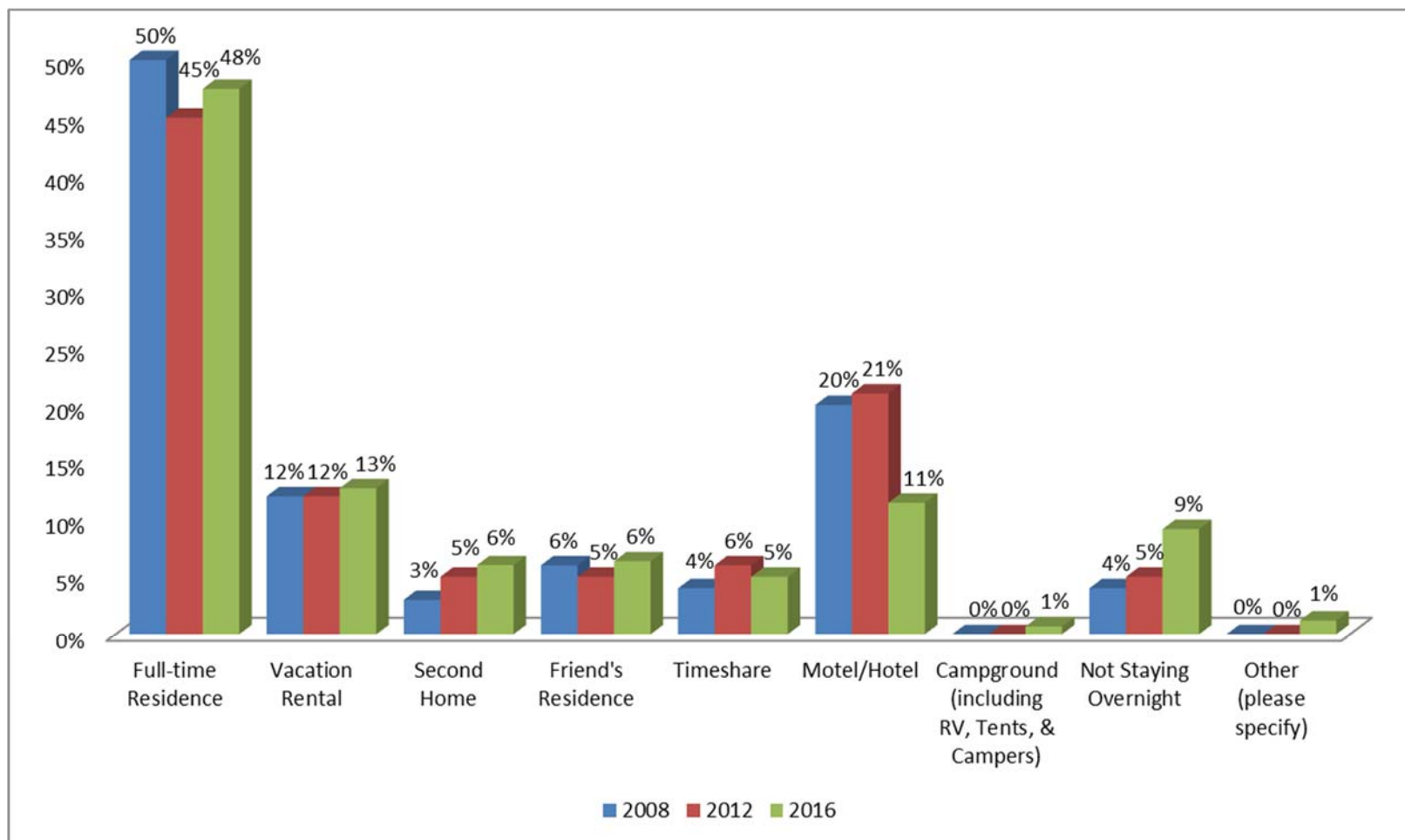
Of the seasonal and visitors surveyed, nearly one-third indicated that they would make two or three trips to the region this year. Those who reported visiting the Tahoe basin once declined two percentage points (30 percent) from 2012. Conversely, there has been a modest increase in those who reported visiting the basin 4 or more times. Figure 6 show that 23 percent said they will visit Lake Tahoe six or more times this year.

Figure 6: Number Visits to Lake Tahoe



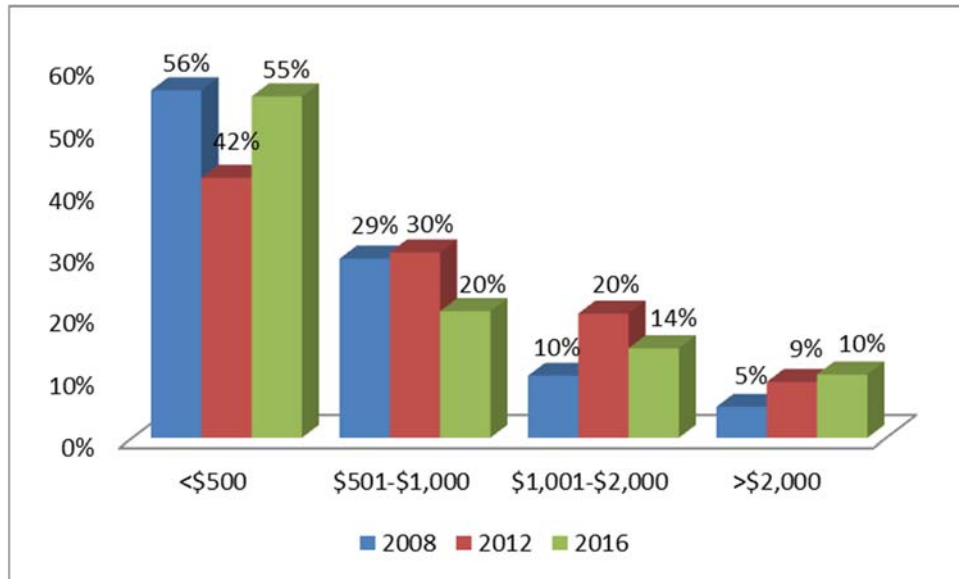
In 2016, 48 percent of all respondents were staying in (or live in) a full-time residence; 11 percent reported they were staying in a motel/hotel which was a sharp decline from the previous survey iteration. In addition, nine percent of those surveyed reported they were not staying overnight which was a four percent increase from 2012. See Figure 7 for further detail.

Figure 7: Type of Lodging/Dwelling



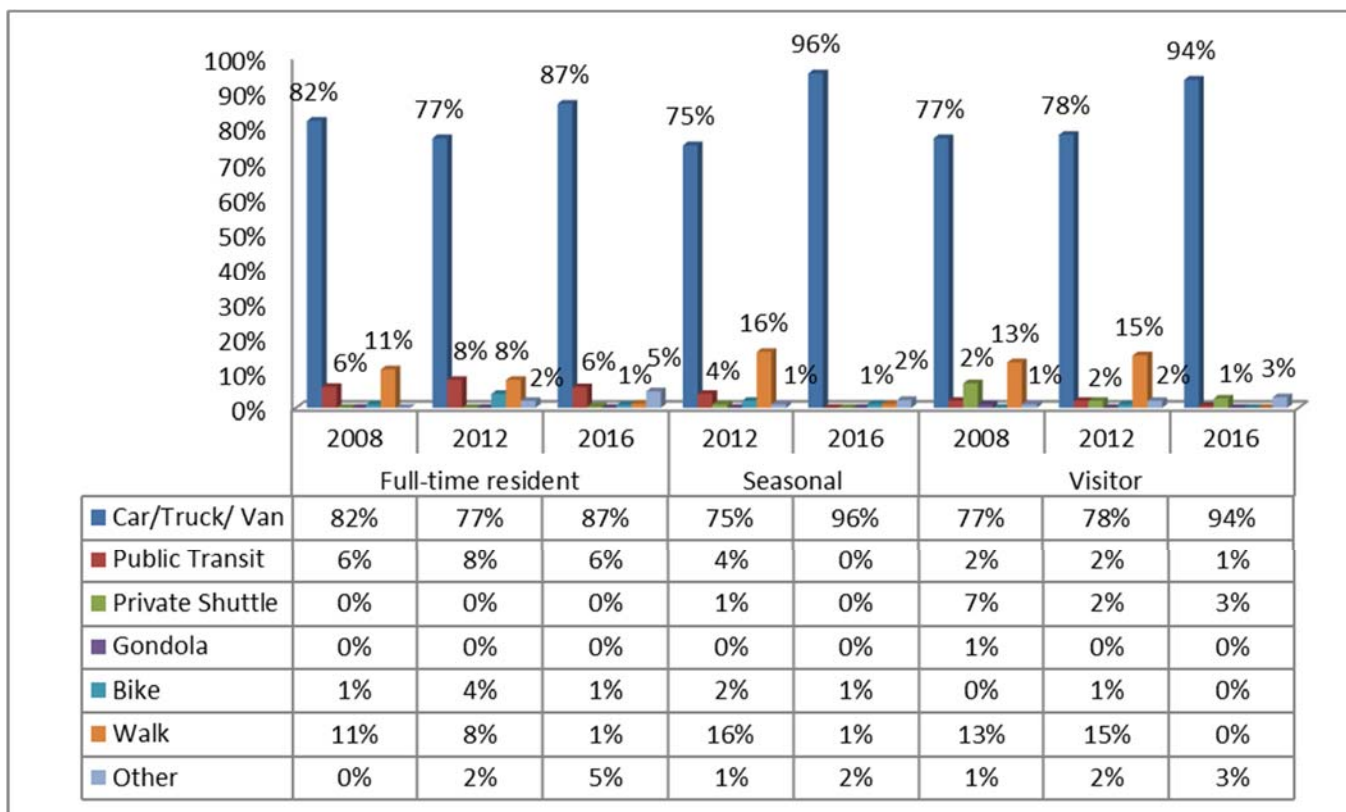
Over half (55 percent) of visitors interviewed reported they would spend below \$500 on this trip to the Tahoe Basin. Twenty percent reported they would spend between \$501 and \$1,000 which depicted a ten percent drop since the 2012 survey. Roughly one-quarter said they planned to spend more than \$1,000 on this trip.

Figure 8: Amount Plan to Spend On This Trip (Visitors Only)



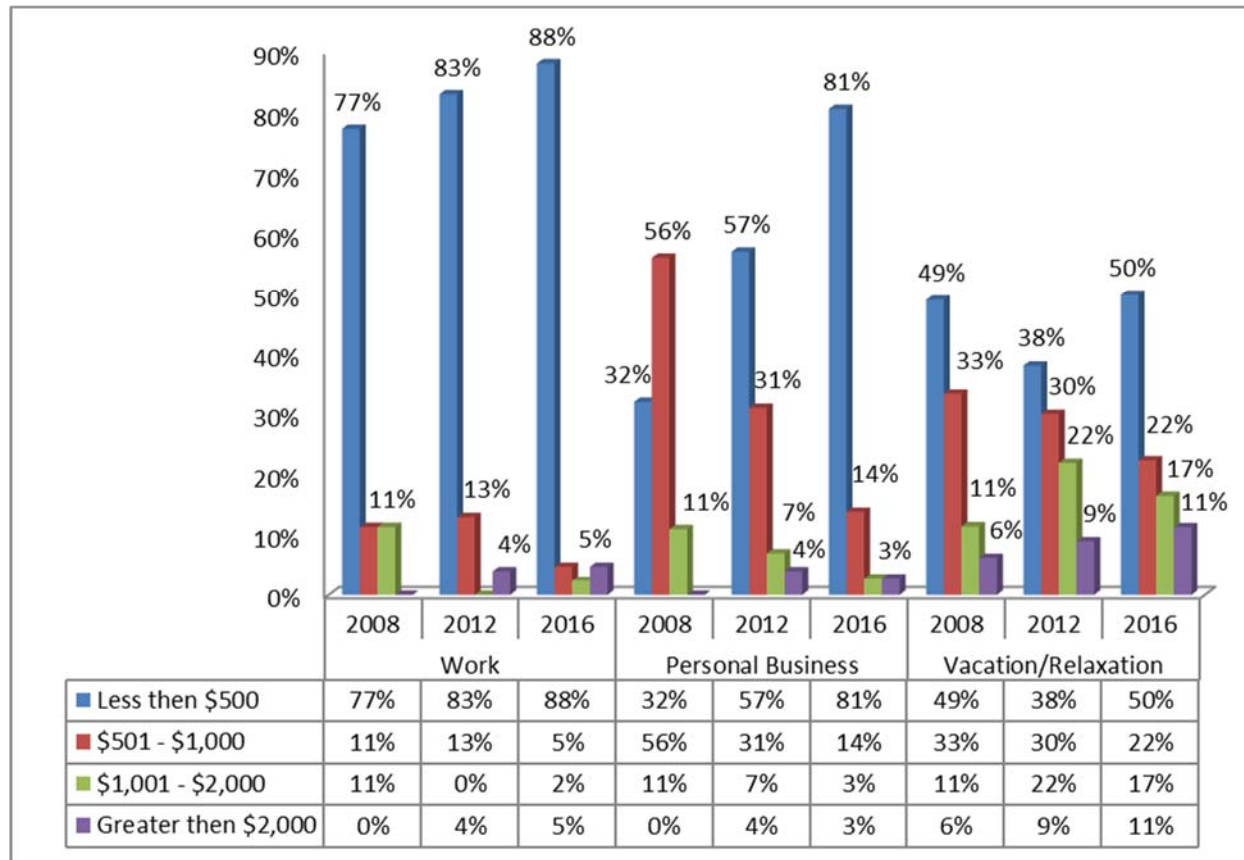
Similar to the previous winter survey results, regardless of residential status, car/truck/van was the primary mode used to get to the location where the respondents were surveyed. This number was somewhat higher for seasonal residents and visitors due to the numerous snow events as evidenced in the percentage of those who accessed the basin via walking. See Figure 9 for further details.

Figure 9: Trip Mode by Residence Status



As one might expect, visitors to the Tahoe Basin who were traveling for vacation / relaxation reported that they planned to spend more money than those traveling for personal business or work. See Figure 10 for details.

Figure 10: Amount Spent By Purpose of Visit



Demographics Characteristics

Sixty percent of Tahoe residents surveyed reported that they are employed full-time; while 19 percent are retired, not working and 14 percent are employed part-time. Very few respondents are unemployed. Of those employed either full or part time, nearly one-quarter of respondents work in the gaming industry. Additionally, the construction industry also saw an increase from six percent to 19 percent. Twenty-three percent of respondents who answered other registered as self-employed. See Figures 11 and 12 for further detail.

Figure 11: Employment Status

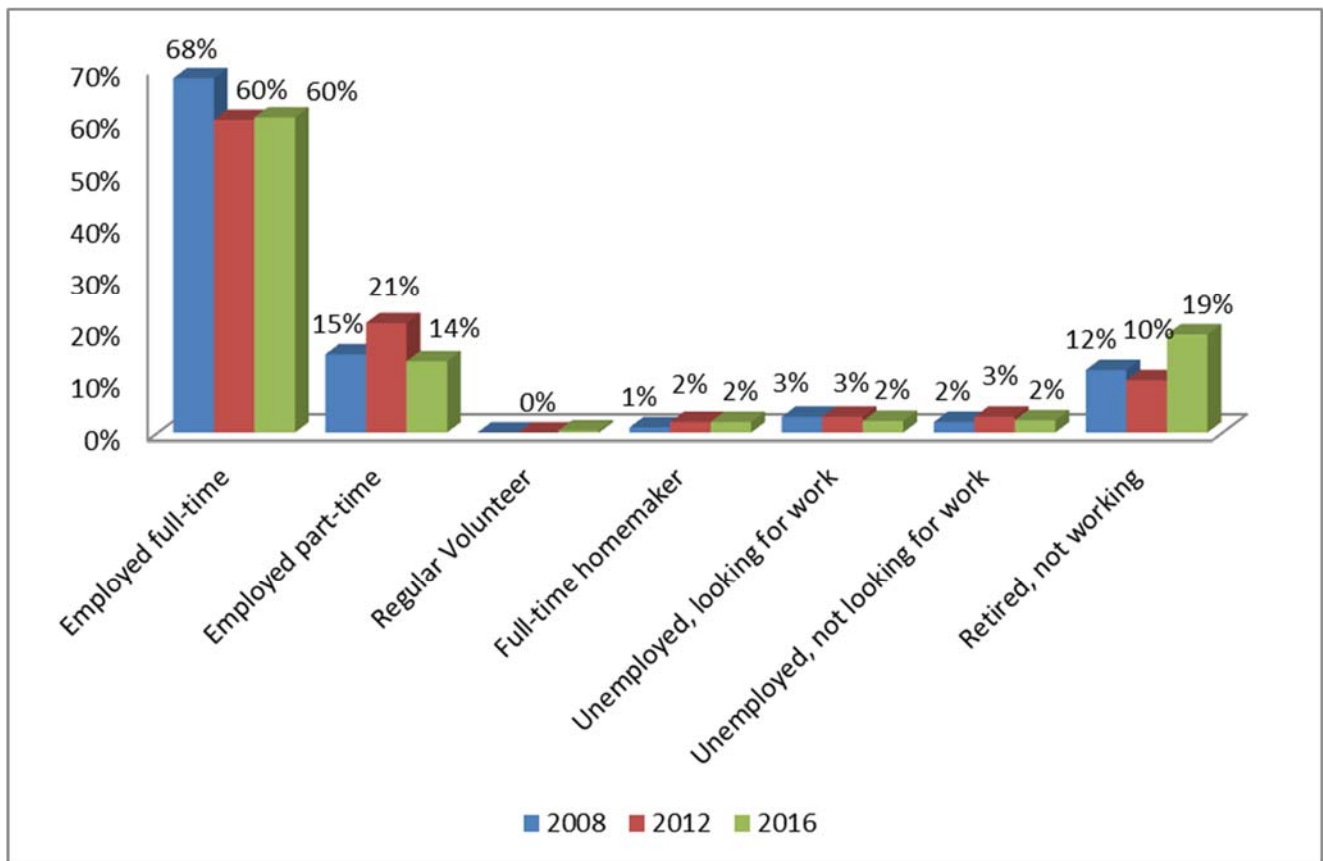
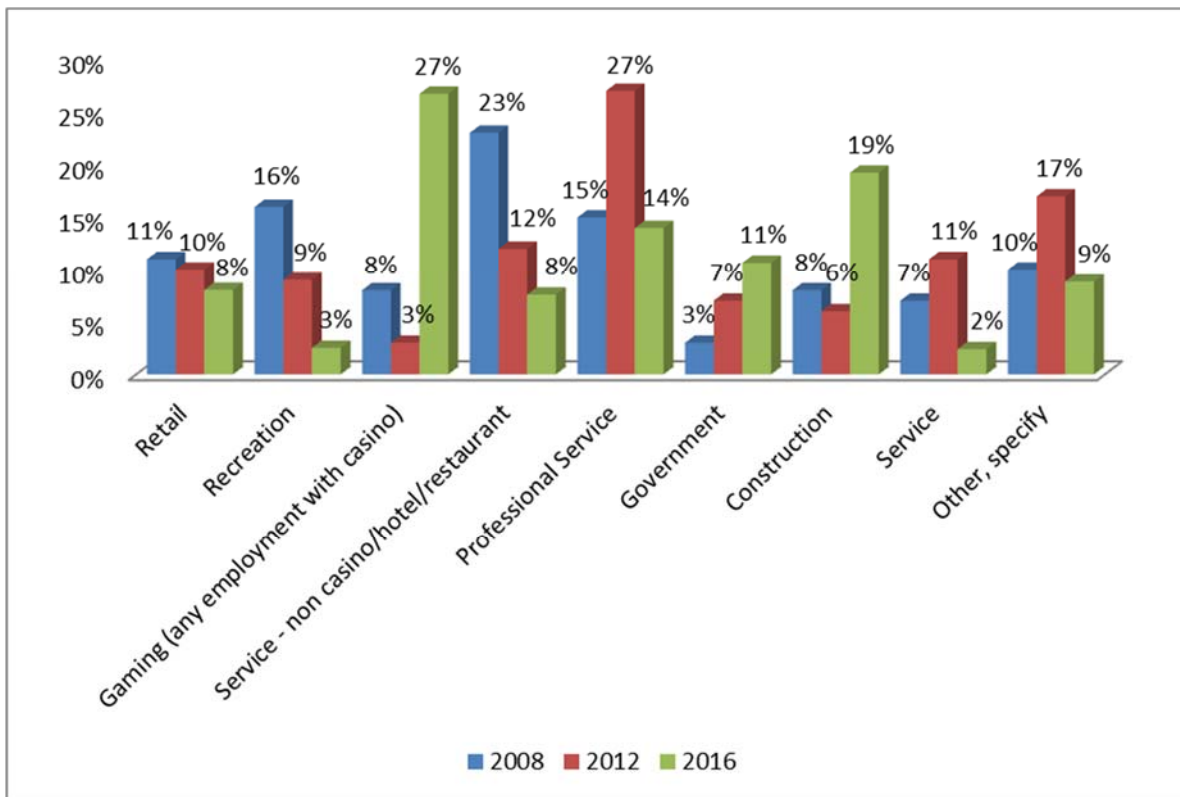


Figure 12: Employment Type



In 2016, 41 percent of respondents are between the ages of 25-44. Of those respondents who answered a specific income category, 15 percent reported a 2015 household income of \$50,000 - \$74,999. The second highest category reported was \$100,000 - \$149,999.

Figure 13: Age

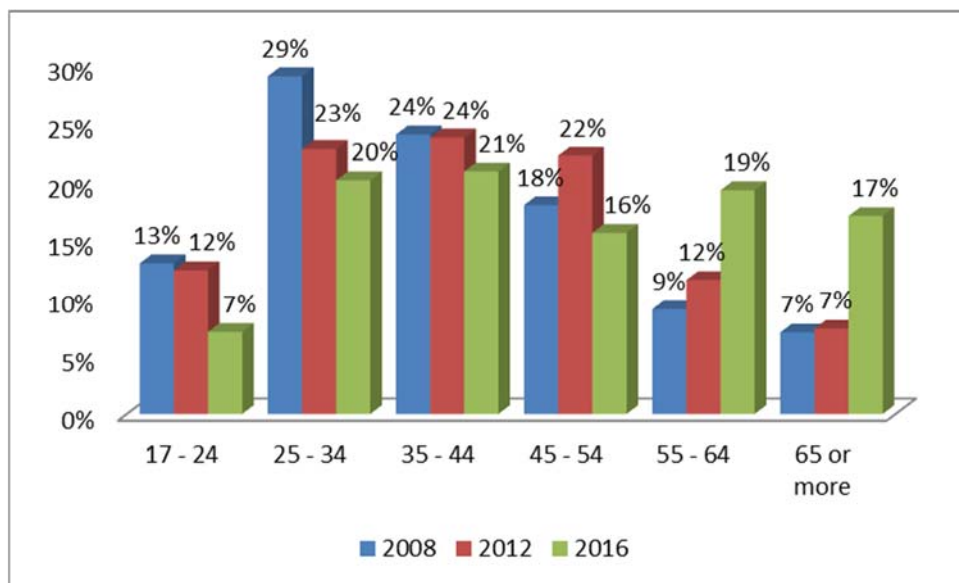
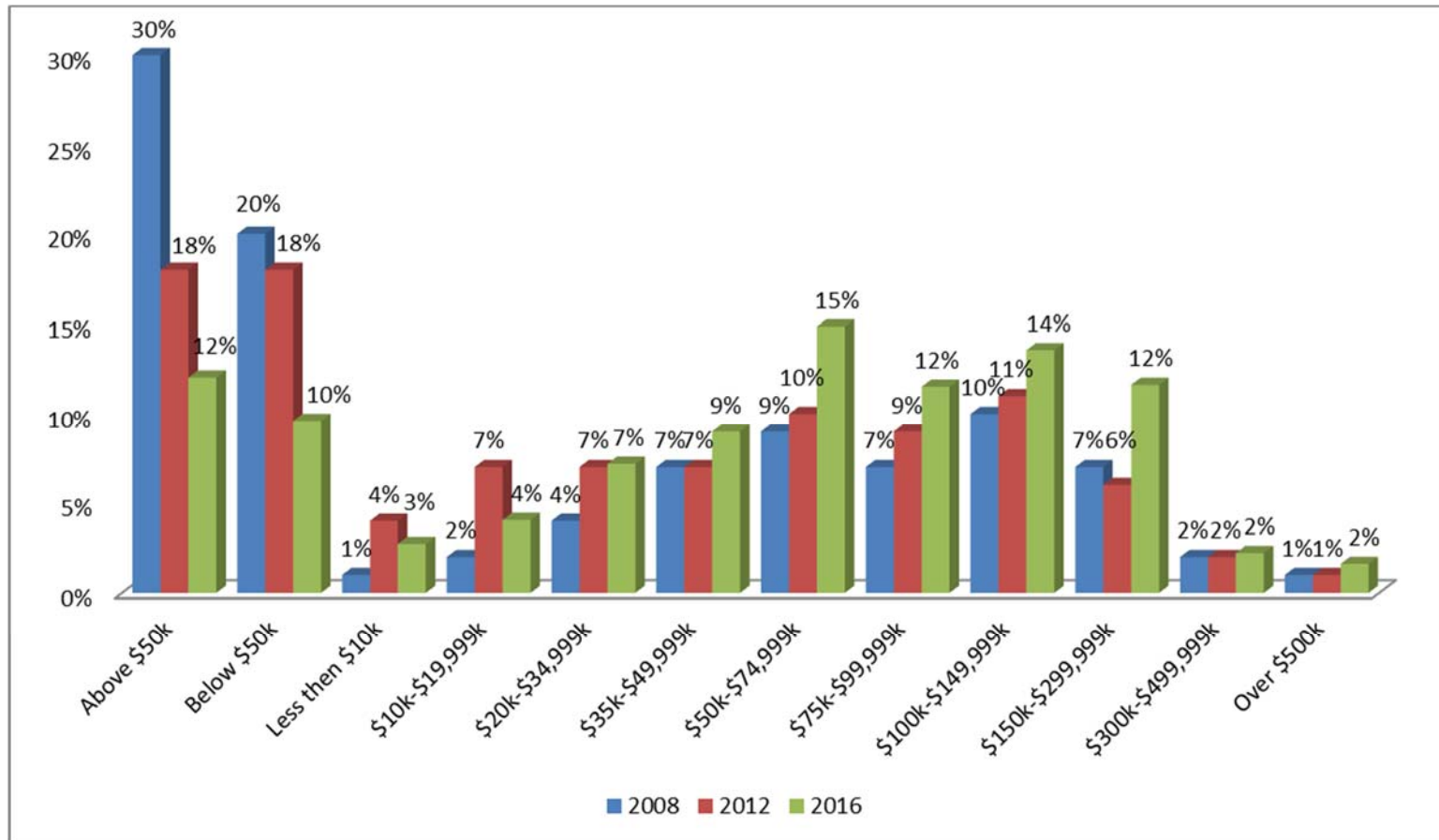
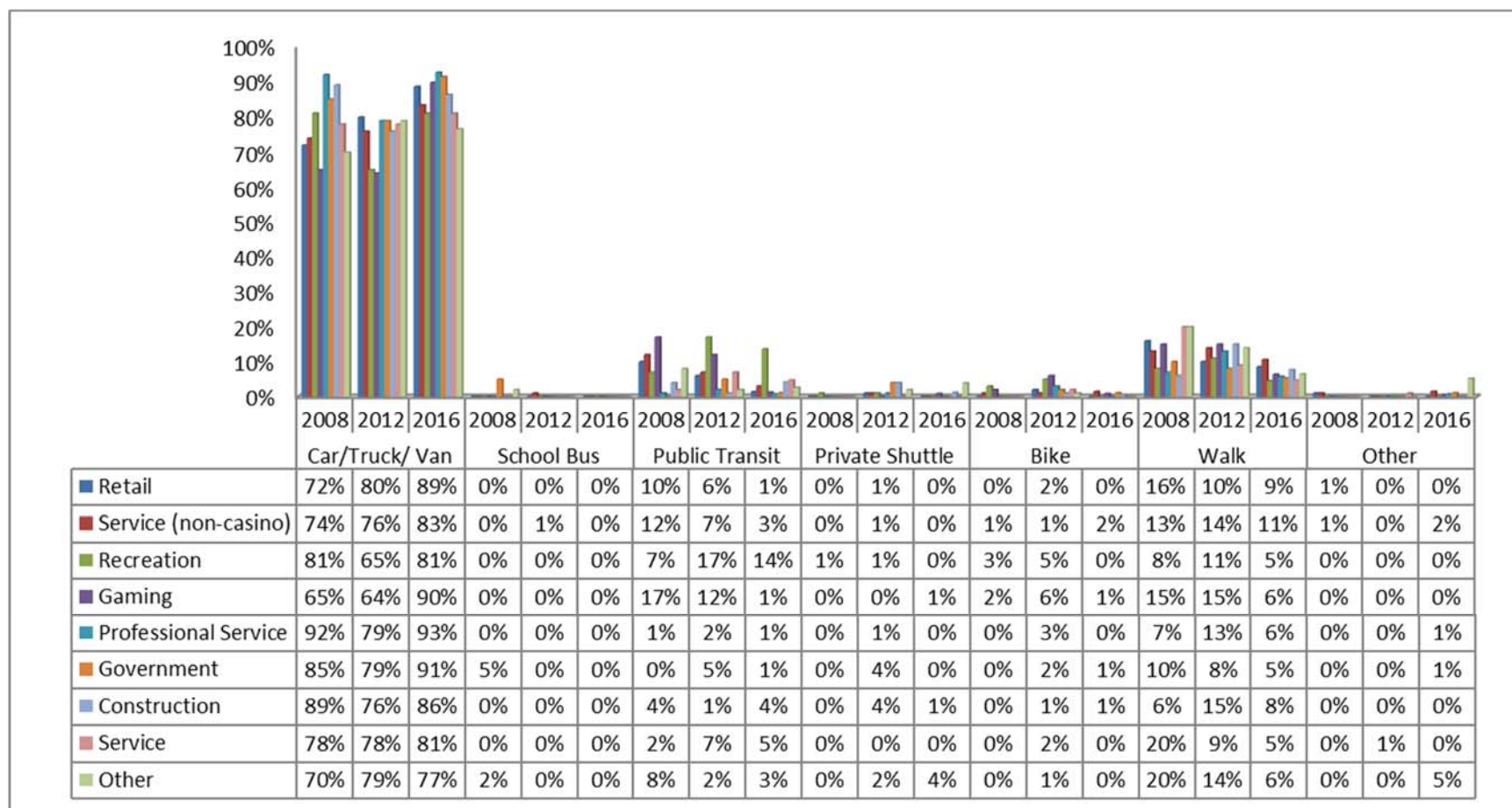


Figure 14: Household Income



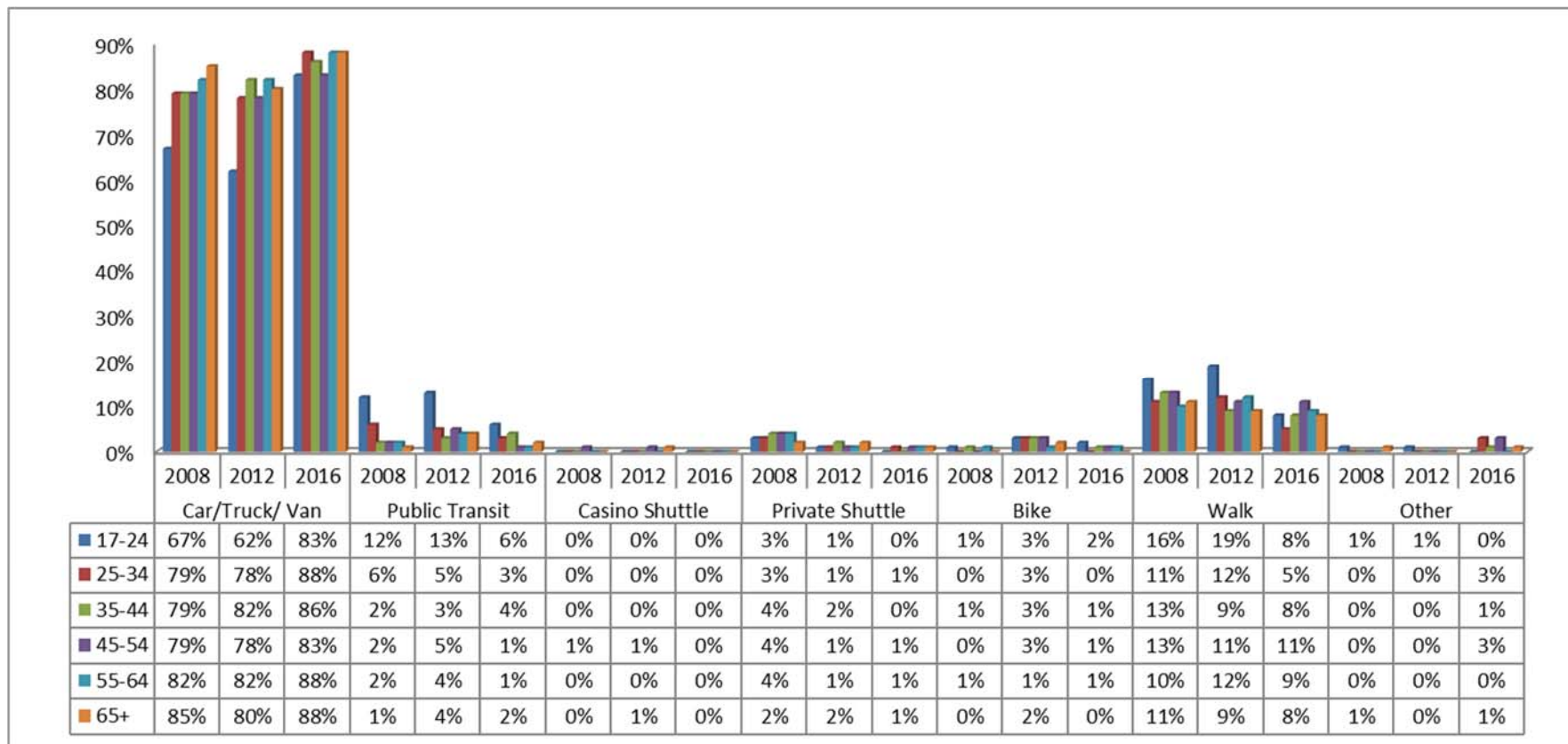
Regardless of occupation, car/truck/van was the primary mode used to get to the location where the respondents were surveyed. This number was highest among those working in professional services and lowest among those employed in gaming. See Figure 15 for further details.

Figure 15: Trip Mode by Occupation



Comparing trip mode with age, car/truck/van was again the dominant mode of travel to the location where the respondents were surveyed. The higher the age, the more likely a respondent was to have reported car/truck/van as the mode of travel. Public transit use was highest among the 17-24 age categories, but saw a decline in usage over the last two survey efforts. Walking was highest amongst the 45-54 age demographic in 2016, while all other age categories experienced a decline for this mode. Figure 16 for further detail.

Figure 16: Trip Mode by Age



Respondents were provided the option of either reporting the total income of all members of their household in 2015 as above or below \$50,000 or by more specific income categories. Condensing the results into the above or below \$50,000 income categories reveals that walking and public transit use is far greater among household reporting less than \$50,000/year. The fact that the walk response saw a steep decline can be attributed to the heavy snow fall in the basin. Car/truck/van use is noticeably higher for households above \$50,000/year. Households reported below \$50,000 /year are more likely to walk than households above \$50,000/year. See Figure 17 for detailed results.

Figure 17: Trip Mode by Income

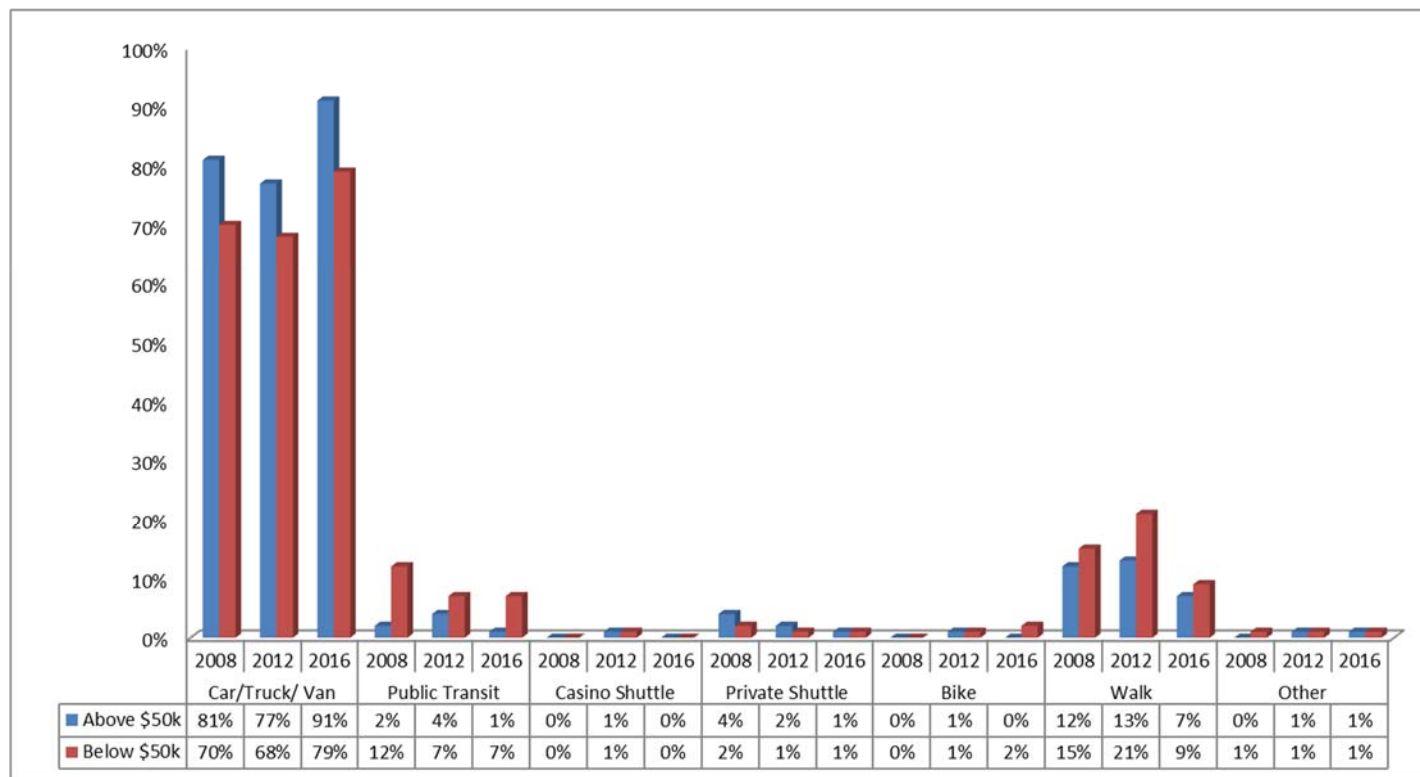


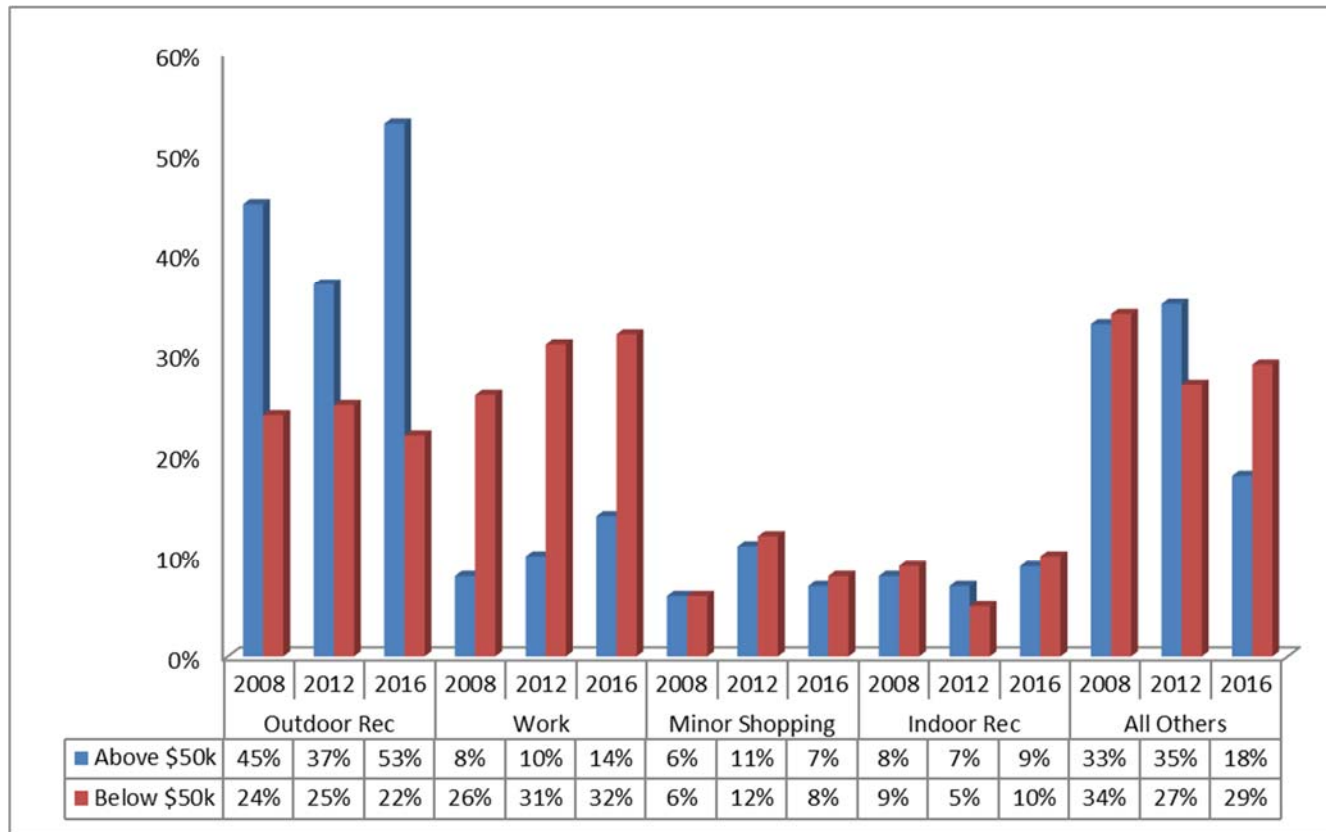
Table 10 provides a breakdown of the results by specific income categories. Personal vehicles amongst the above \$50k category experienced the largest increase (15 percent) from the 2012 survey. As noted in Figure 17 (Trip Mode by Income), the walk category saw the biggest decline for both the above \$50k (five percent) and below \$50k (14 percent) due to the weather experienced in the Tahoe basin.

Table 10: Trip Mode by Income

	Car/Truck/Van			Public Transit			Casino Shuttle			Private Shuttle			Bicycle			Walk			Other, specify		
	2008	2012	2016	2008	2012	2016	2008	2012	2016	2008	2012	2016	2008	2012	2016	2008	2012	2016	2008	2012	2016
Above \$50k	81%	77%	92%	2%	4%	1%	0%	1%	0%	4%	2%	0%	0%	1%	0%	12%	13%	8%	0%	0%	0%
Below \$50k	70%	68%	77%	12%	7%	13%	0%	1%	0%	2%	1%	0%	0%	1%	2%	15%	21%	7%	1%	1%	1%
Less then \$10k	81%	54%	56%	6%	14%	4%	0%	0%	0%	6%	0%	4%	0%	8%	7%	6%	22%	30%	0%	0%	0%
\$10k-\$19,999k	61%	62%	68%	11%	25%	15%	0%	0%	0%	0%	0%	3%	4%	3%	0%	21%	9%	10%	4%	0%	3%
\$20k-\$34,999k	78%	77%	86%	10%	12%	3%	0%	0%	0%	0%	0%	0%	2%	3%	1%	10%	8%	6%	0%	0%	1%
\$35k-\$49,999k	88%	76%	87%	4%	1%	1%	0%	1%	1%	1%	0%	1%	0%	9%	1%	7%	12%	8%	0%	0%	0%
\$50k-\$74,999k	80%	88%	89%	2%	1%	1%	0%	0%	0%	2%	0%	1%	3%	3%	0%	13%	8%	7%	1%	0%	2%
\$75k-\$99,999k	86%	82%	93%	3%	5%	0%	0%	0%	0%	3%	2%	0%	0%	2%	0%	7%	8%	5%	0%	0%	2%
\$100k-\$149,999k	79%	83%	87%	1%	0%	0%	0%	0%	0%	7%	3%	2%	0%	3%	0%	13%	12%	8%	1%	0%	1%
\$150k-\$299,999k	78%	82%	92%	0%	0%	0%	1%	0%	0%	9%	0%	0%	0%	3%	0%	12%	15%	6%	0%	0%	1%
\$300k-\$499,999k	86%	81%	96%	0%	4%	0%	0%	0%	0%	5%	0%	0%	0%	4%	0%	9%	8%	5%	0%	0%	0%
Over \$500k	85%	64%	88%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	15%	29%	6%	0%	0%	6%

An analysis of trip purpose versus income reveals that approximately half of those earning above \$50,000/year were engaging in outdoor recreation activities, compared with only 22 percent of those earning less than \$50,000/year. Conversely, nearly one-third of those earning less than \$50,000/year were traveling to work, compared to 14 percent of those earning above \$50,000/year. Figure 18 provides a comparison of both income classifications and Table 11 displays a more detailed breakdown of income categories.

Figure 18: Trip Purpose by Income



Trip purpose by income demonstrates the direct correlation with income categories and the types of trip purposes respondents reported during the survey. Continuing the upward trend from the 2008 and 2012 survey efforts saw a 10 percent increase for those who make below \$50k and their trip purpose was work (41 percent). Another spike in the trending occurred for those making above \$50k and their trip purpose was indoor recreation which could be attributed to the high levels of snow received in the Tahoe basin.

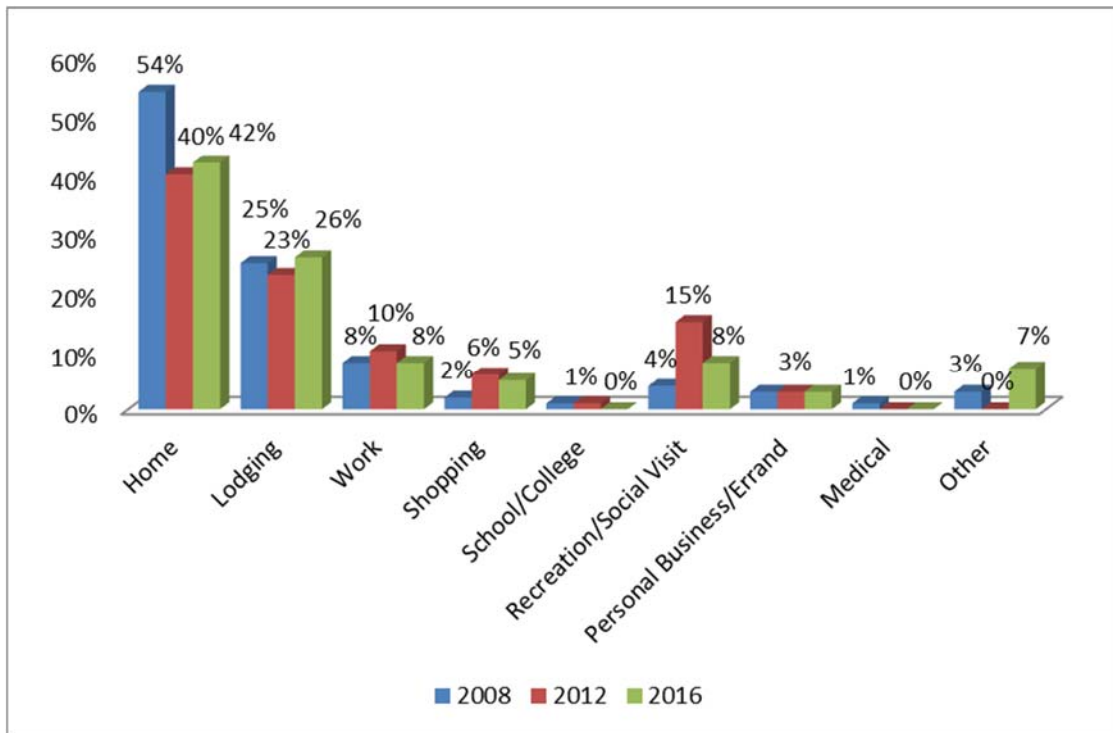
Table 11: Trip Purpose by Income

	Outdoor Rec			Work			Minor Shopping			Indoor Rec			All Others		
	2008	2012	2016	2008	2012	2016	2008	2012	2016	2008	2012	2016	2008	2012	2016
Above \$50K	45%	37%	55%	8%	10%	23%	6%	11%	6%	8%	7%	3%	33%	35%	13%
Below \$50K	24%	25%	23%	26%	31%	41%	6%	12%	7%	9%	5%	8%	8%	27%	22%
Less then \$10k	20%	15%	21%	27%	29%	54%	13%	27%	0%	7%	2%	0%	33%	27%	25%
\$10k-\$19,999	11%	13%	11%	29%	34%	34%	21%	19%	8%	7%	4%	16%	32%	31%	32%
\$20k-\$34,999	21%	18%	25%	21%	39%	28%	7%	14%	10%	2%	6%	10%	50%	23%	27%
\$35k-\$49,999	33%	26%	23%	12%	19%	18%	16%	18%	10%	3%	5%	12%	36%	31%	37%
\$50k-\$74,999	41%	33%	45%	9%	17%	17%	10%	16%	8%	8%	5%	9%	32%	29%	21%
\$75k-\$99,999	57%	34%	56%	4%	12%	10%	5%	20%	6%	5%	7%	12%	28%	27%	17%
\$100k-\$149,999	58%	38%	52%	8%	8%	13%	10%	13%	7%	6%	7%	9%	19%	35%	20%
\$150k-\$299,999	59%	48%	52%	3%	1%	13%	10%	16%	7%	2%	11%	9%	26%	23%	20%
\$300k-\$499,999	55%	30%	60%	0%	3%	0%	14%	23%	5%	0%	23%	35%	32%	20%	0%
Over \$500,000	31%	57%	63%	0%	0%	0%	23%	7%	0%	15%	7%	13%	31%	29%	25%

Trip Characteristics

Trip characteristics presented here are in response to questions 8, 11, 14, and 15 on the survey. With regards to trip origin, 42 percent of trips originated from a residence while 26 percent of respondents were traveling from their lodging.

Figure 19: Trip Origin



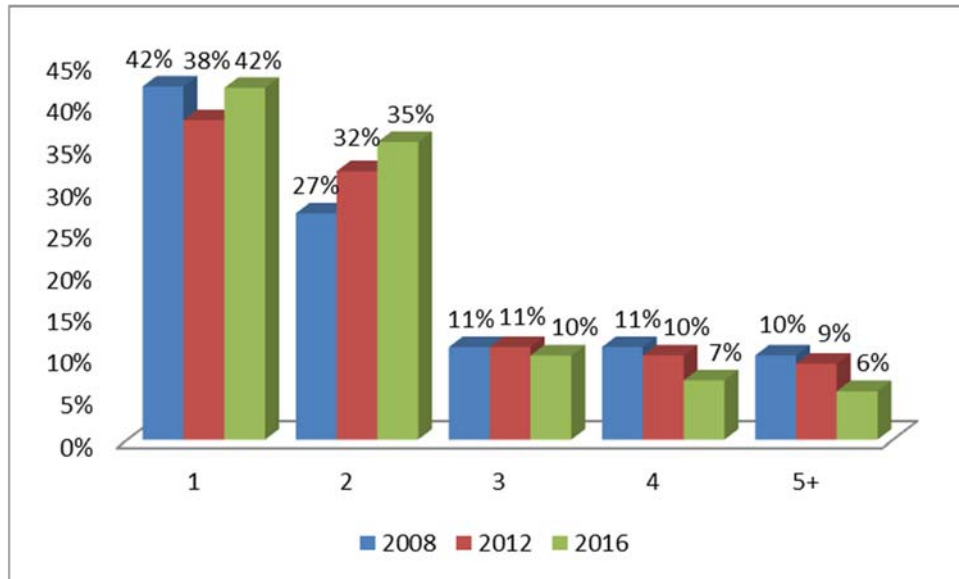
As shown in the Table 12, trip purpose varied based on residential status. For full-time residents, work was the leading trip purpose for the last three survey iterations, followed closely by outdoor recreation. Seasonal residents reported outdoor recreation as their primary trip purpose which experienced a 22 percent increase from the previous survey. For visitors, outdoor recreation was by far the dominant trip purpose at 64 percent.

Table 12: Residential Status by Trip Purpose

	Full-time resident			Seasonal resident			Visitor		
	2008	2012	2016	2008	2012	2016	2008	2012	2016
At home activities	0%	0%	1%	0%	1%	0%	1%	1%	0%
Work	22%	23%	24%	17%	8%	17%	2%	2%	11%
Work related	6%	5%	2%	2%	1%	0%	3%	1%	0%
Eating/drinking at a restaurant/bar	8%	8%	8%	9%	12%	5%	6%	14%	9%
Minor shopping	9%	17%	13%	11%	20%	5%	7%	13%	6%
Major shopping	0%	0%	1%	0%	0%	0%	0%	0%	0%
Quick stops	7%	6%	11%	7%	9%	9%	2%	5%	5%
Medical	1%	1%	0%	1%	1%	0%	0%	0%	0%
Personal business	6%	6%	7%	11%	4%	0%	0%	1%	2%
Outdoor recreation	21%	17%	16%	27%	32%	54%	64%	45%	64%
Indoor recreation	11%	9%	14%	6%	4%	8%	1%	4%	1%
Entertainment	1%	1%	0%	0%	1%	0%	1%	3%	0%
Casino gaming	1%	2%	1%	2%	4%	0%	5%	5%	1%
Visiting friends or relatives	1%	1%	1%	2%	0%	0%	1%	1%	1%
Religious	0%	0%	0%	0%	0%	0%	0%	0%	0%
Picking up someone	1%	1%	0%	0%	1%	1%	0%	1%	0%
Loop Trip	2%	2%	0%	4%	0%	1%	3%	1%	0%
Others	4%	3%	0%	0%	2%	1%	5%	2%	0%

Nearly four-in-ten respondents reported trips to survey locations by themselves. Thirty-five percent of those surveyed said they traveled with someone else. Travel party of three individuals remained constant at 10 percent with four or more travel party sizes were reported by 13 percent of those surveyed.

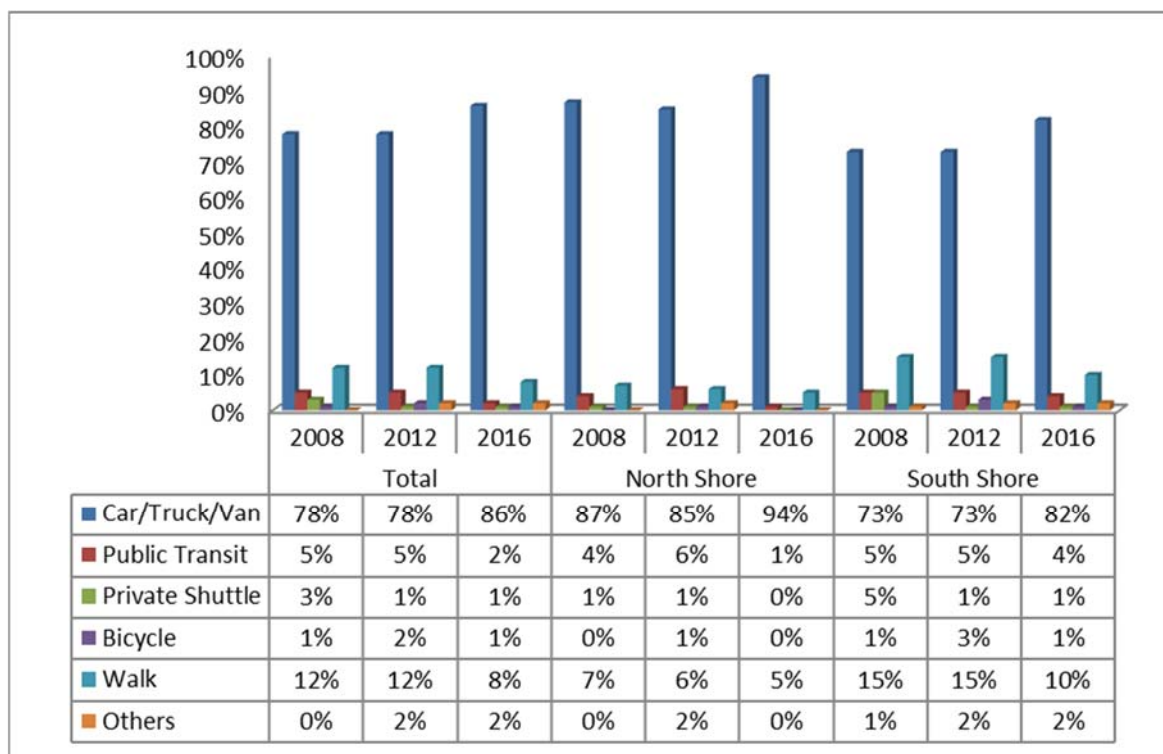
Figure 22: Traveling Party Size – Trips within Tahoe Basin



Mode Share Results

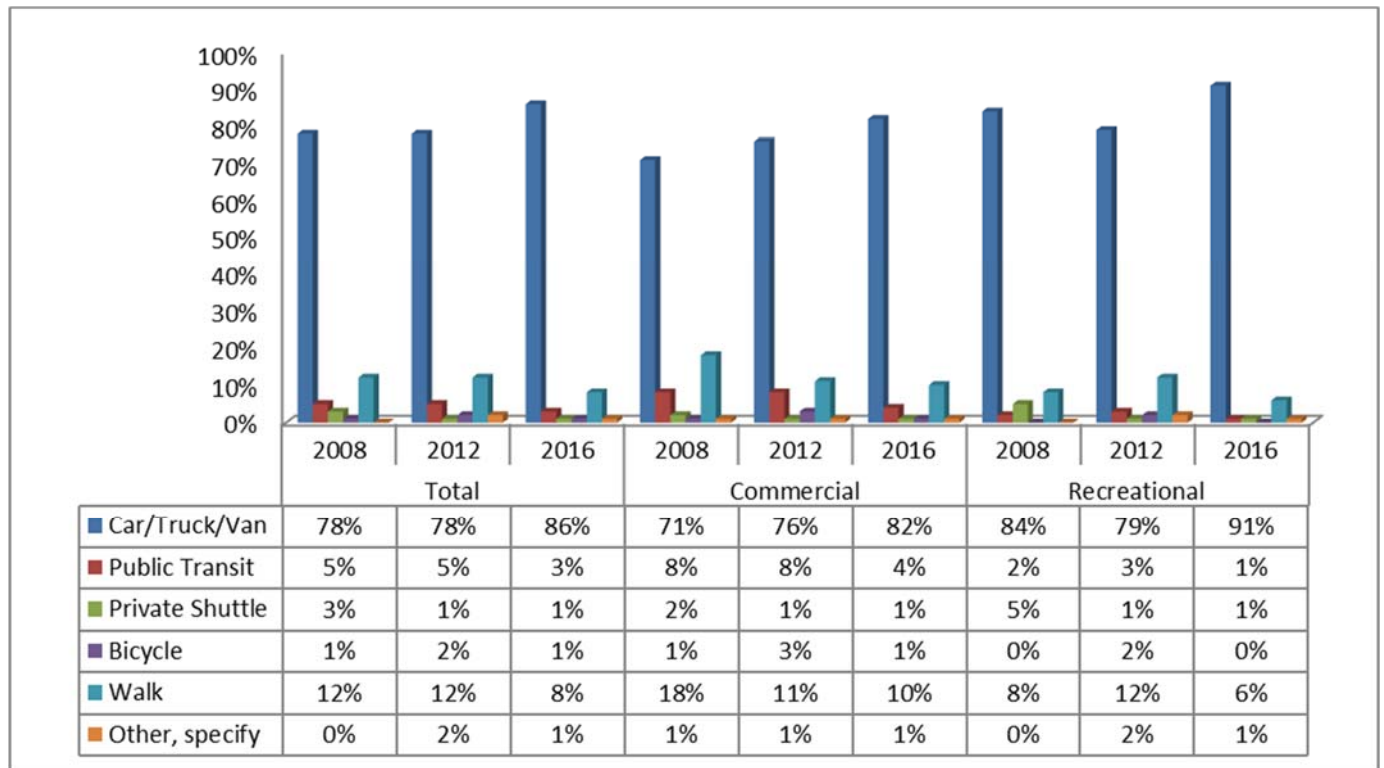
The mode share results presented here are in response to question 13 on the survey. Overall, car/truck/van was the dominant mode used to get to the survey site. Auto use was higher on the north shore than on the south shore with both shores seeing an increase of nine percent from 2012. Another noticeable difference between shores was walking. Ten percent of south shore respondents walked to get to the survey site, compared with only 5% of north shore respondents. Transit use dropped five percent from 2012 with only 1 percent of those surveyed who used public transit. See Figure 23 for further details.

Figure 23: Mode to Location by Total and Shore Surveyed



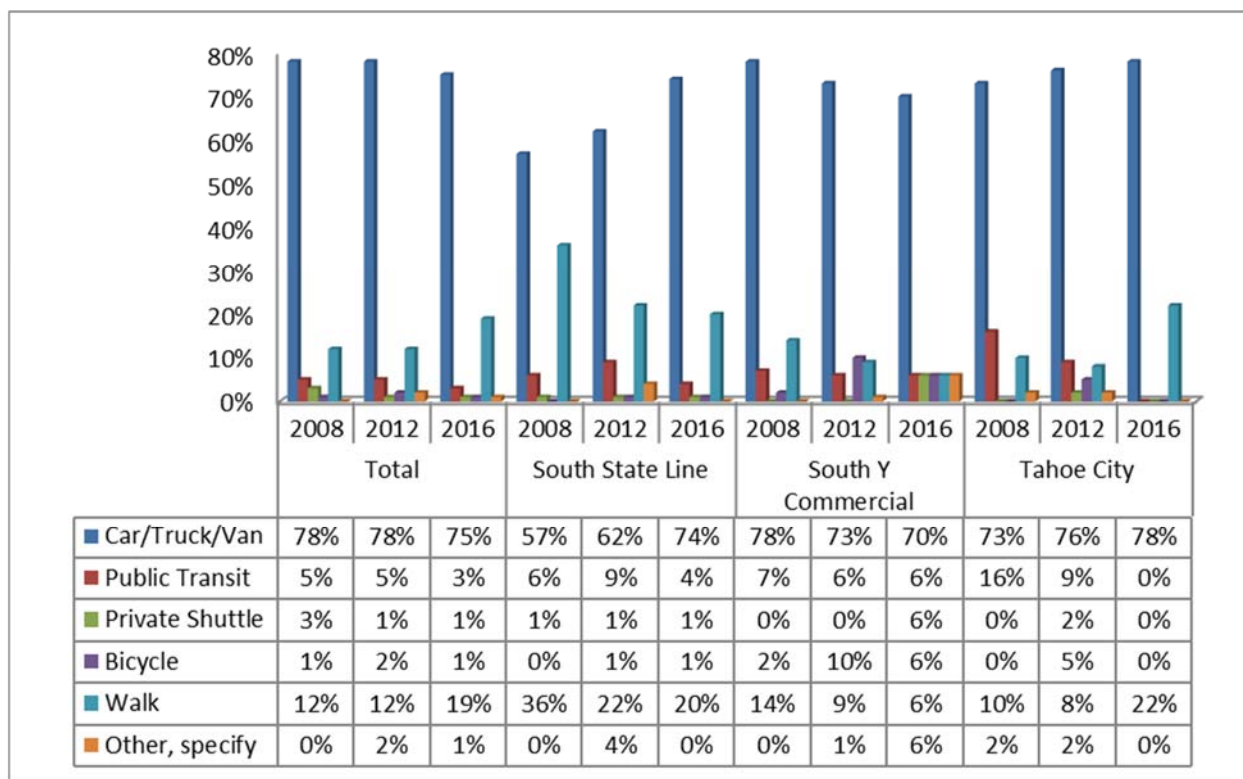
Viewing the mode share results by that the sample type reveals car/truck/van mode is significantly higher for those surveyed at recreational sites than commercial sites. As a result, the mode of walk is higher among those surveyed at commercial sites. See Figure 24 for further details.

Figure 24: Mode to Location by Total and Sample Type



Looking at the mode share results for a select few of the commercial sites shows a drastic difference in the mode share breakdown. While car/truck/van is the primary mode for all sites, the dominance of this mode varies. At Tahoe City on the north shore, in 2008 16 percent of respondents used public transit and nobody reported using public transit in 2016. Walking and other modes rounded out the results. See Figure 25 for further details.

Figure 25: Mode to Location by Total and Specific Sites



On the south shore at South Stateline, car/truck/van travel mode saw the largest increase (12 percent) from the last survey effort in 2012, while walking accounted for 20 percent of responses. South Y on the south shore and Tahoe City on the north shore reported similar results for car/truck/van. The difference between those two sites was walk use reported in Tahoe.

4. Mode Split Comparison

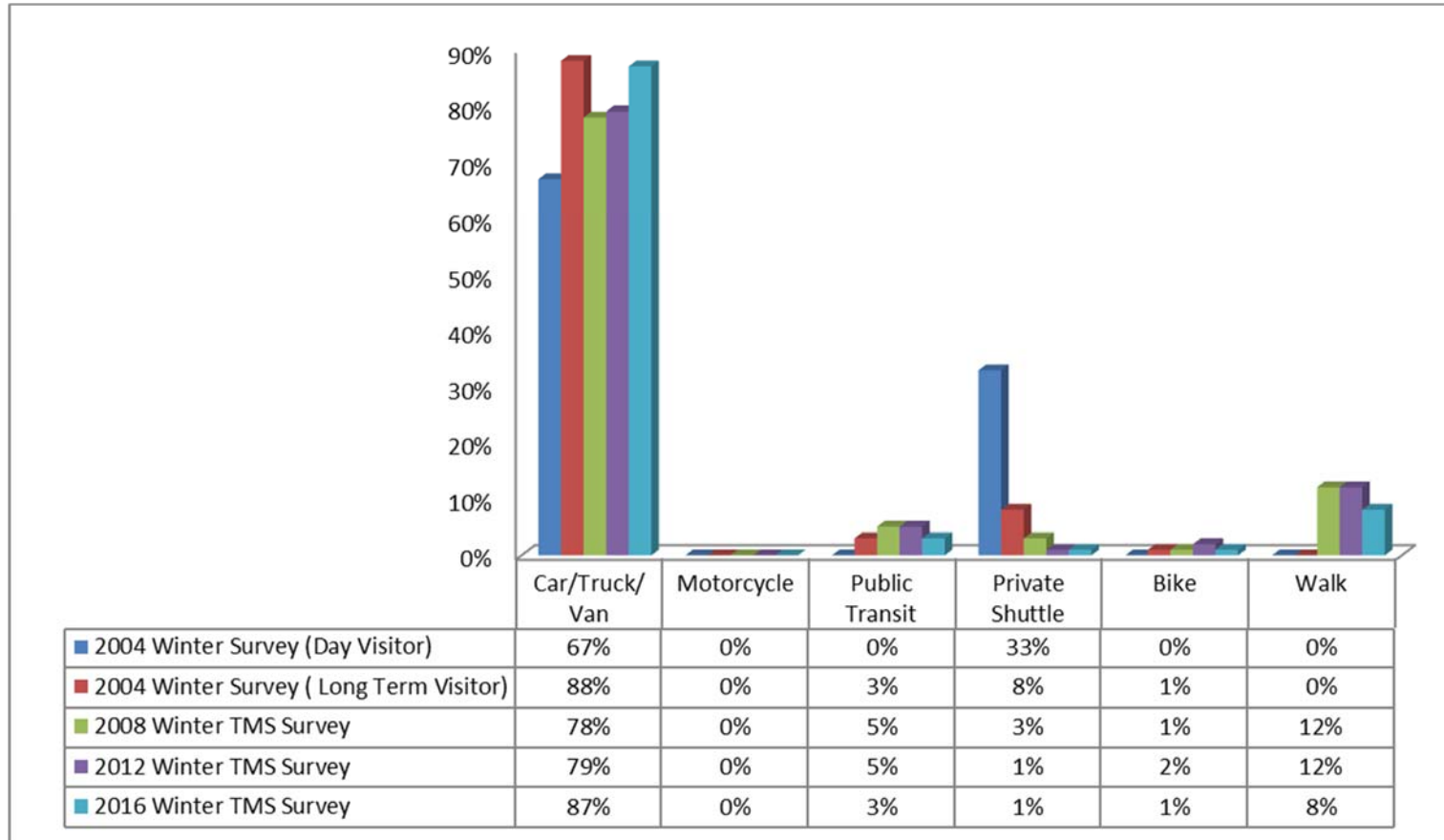
One key goal of the TMS Survey is to identify mode splits among different resident types within the Tahoe Basin. Conducting this research effort over multiple years will provide a mechanism to track changes in mode split over time and to assess TRPA efforts at reducing the use of personal vehicles and/or travel where single occupancy vehicles are the mode of travel.

In 2004, NuStats conducted TRPA's first travel mode share (TMS) survey. In this winter survey, respondents were asked to report their travel mode for the trip to the location at which they were intercepted. Additionally, in 2006 NuStats conducted the Summer Visitor Surveys in which mode split data of visitors to the Tahoe Basin were collected. The recently completed 2016 winter TMS survey followed the same format of the 2008 and 2012 winter surveys with only minor modifications – which allows for a side by side comparison of the results. To a lesser extent, the results of the 2004 through 2016 are comparable. A comparison of all surveys is provided here.

As shown in Figure 26, car/truck/van was the dominant mode for all surveys. However, the car/truck/van mode proved to be higher than the last two winter survey efforts by an increase in roughly eight percent. Private shuttle share has steadily decreased from the 2004 winter survey to the 2016 winter survey with minimal gains made in both the walk and public transit modes.

Follow up winter travel mode share surveys will remove any impact seasonal variations have on the results and will provide for a more robust comparison of the impact of planning practices aimed at reducing automobile use throughout the Tahoe Basin.

Figure 26: Mode Split Comparison – Visitor Surveys and Travel Mode Share Survey



Appendix A: Survey Instrument

1.

2. Hello. My name is _____ and I'm conducting a study on behalf of the Tahoe Regional Planning Agency. I'm interviewing residents and visitors in the region about their daily travel activities. This study will take no longer than 5-minutes and will benefit the community by providing information about local travel patterns for better transportation planning. The study is purely a research effort, your participation is voluntary and your answers will be completely confidential.

May I please conduct the survey with you?

Please circle the selected answer (only one answer allowed)

1. Yes
2. No
3. DK/RF

Jump Rules:

<u>C diti :</u>	<u>B h i :</u>	<u>Q ti :</u>
Answer (CurrQues) == 2	ejqrChapter	2
Answer (CurrQues) == 3	ejqrChapter	2

3. Are you a full time resident of the Tahoe Basin?

E t C diti :

Equals(2, 1)

Please circle the selected answer (only one answer allowed)

1. Yes
2. No

Jump Rules:

<u>C diti :</u>	<u>B h i :</u>	<u>Q ti :</u>
Answer (CurrQues) == 1	ejqrIndex	11

4. Are you a seasonal resident?

Please circle the selected answer (only one answer allowed)

1. Yes
2. No

Jump Rules:		
C diti :	B h i :	O ti :
Answer (CurrQues) == 1	ejqrIndex	7

5. Or are you visiting the Tahoe Basin on vacation or business?

Please circle the selected answer (only one answer allowed)

1. Yes
2. No

Jump Rules:		
C diti :	B h i :	O ti :
Answer (CurrQues) == 2	ejqrIndex	3

6. IF VISITOR:

What is your primary purpose for visiting the Tahoe Basin?

Please circle the selected answer (only one answer allowed)

1. Work
2. Personal Business
3. Vacation/Relaxation (please specify): _____

7. IF VISITOR/SEASONAL RESIDENT:

How many nights will you be staying in the Tahoe Basin?

The number should be in the range of 0 and 999

8. IF VISITOR/SEASONAL RESIDENT:

How many times in 2012 will you or have you come to Lake Tahoe?

The number should be in the range of 0 and 100

9. IF VISITOR/SEASONAL RESIDENT:

What was your primary means of travel to enter the Tahoe Basin?

Please circle the selected answer (only one answer allowed)

1. Car/Truck/Van (rented, owned or leased)
2. Motorcycle/Moped
3. School Bus
4. Public Transit
5. Para Transit
6. Casino Shuttle
7. Private Shuttle
8. Taxi/Limo
9. Gondola
10. Ferry or Boat
11. Bike
12. Walk _____
13. Other (please specify): _____
14. DK/RF

10. IF VISITOR/SEASONAL RESIDENT:

If you arrived by private vehicle (Car/Truck/Van/Motorcycle), how many people, including yourself, traveled in the vehicle?

The number should be in the range of 0 and 100

11. What best describes where you are staying/living in the Tahoe Basin?

Please circle the selected answer (only one answer allowed)

1. Full-time residence
2. Vacation rental
3. Second home
4. Friend's residence
5. Timeshare
6. Motel/Hotel
7. Campground (including RV, tents and campers)
8. Not staying overnight
9. Other (please specify): _____

12. RESIDENTS AND VISITORS:

What is the City and/or ZIP code of your overnight lodging location?

Please use lines to fill up a free-text answer

13. INTERVIEW NAME LOCATION

Please circle the selected answer (only one answer allowed)

1. Alpine Meadows (back side)
 2. Bijou Cross Country Ski Area
 3. Bijou/Al Tahoe Community Plan Area
 4. Camp Richardson Resort
 5. Commons Beach
 6. Cove East/Tahoe Keys marina
 7. Diamond Peak Ski Resort
 8. Dollar Hill
 9. El Dorado Beach/Boat Ramp
 10. Granlibakken Ski Resort
 11. Harrahs/Harveys
 12. Heavenly Ski Resort
 13. Homewood
 14. Homewood Ski Resort
 15. Incline Village
 16. Incline Village Recreational Center
 17. Kahle Community Center and Park
 18. Kings Beach
 19. Kingsbury Community Plan Area
 20. Meyer's (Meek's Hardware)
 21. MS Dixie Entrance (at Zephyr Cove)
 22. North Shore Totals
 23. North Stateline Casinos
 24. North Stateline Non-Casino
 25. North Tahoe Conference Center
 26. North Tahoe Regional Park
 27. Paige Meadows
 28. Shops at Carnelian Bay
 29. Sierra Tract
 30. Ski Run
 31. South Casino Area
 32. South State Line
 33. South Tahoe Ice Arena
 34. South Tahoe Recreation Center
 35. South Tahoe Senior Center
-

36. South Y Comercial
 37. Spooner Junction, Snow Play Area
 38. Spooner Lake Cross Country Ski Resort
 39. Statleline community plan
 40. Sunnyside
 41. Tahoe City
 42. Tahoe Cross-Country Ski Area
 43. Tahoe Vista
 44. Tahoma
 45. The shops at Carnelian bay
 46. Zephyr Cove Marina-Resort
 47. Other (Please Specify): _____
-

14. Now I am going to ask you some questions about your trip to this location. By "trip to this location" I mean your most recent trip today, from the last physical location you were at, until you reached this location, with no stops in between.

Where are you coming from?

Please circle the selected answer (only one answer allowed)

1. Home
2. Lodging
3. Work
4. Shopping
5. School/college
6. Recreation/social visit
7. Personal business/errand
8. Medical
9. Other

Jump Rules:		
C diti :	B h i :	O ti :
Answer (CurrQues) == 1	ejqrIndex	16

15. DO NOT ASK IF Q11=HOME
What is the name of that place?

E t C diti :
 !Equals(14, 1)

Please use lines to fill up a free-text answer

16. What was your primary means of transportation to get to this location?
Did you use any other modes as part of this trip to this location?

MULTIPLE RESPONSE - IF RESPONDENT REFUSES, TERMINATE.

Please circle the selected answers (minimum: 1, maximum: 3)

1. Car/Truck/Van (rented, owned or leased)
2. Motorcycle/Moped
3. School bus
4. Public transit
5. Para transit
6. Casino shuttle
7. Private shuttle
8. Taxi/Limo
9. Gondola
10. Ferry or boat
11. Bike
12. Walk
13. Other (please specify): _____
14. DK/RF -> THANK & TERMINATE

Jump Rules:		
C diti :	B h i :	O ti :
Contains(16, 14)	ejqrChapter	2

17. What is the primary purpose of this specific trip to this location?

Please circle the selected answers (minimum: 1, maximum: 24)

1. At home activities (sleeping, watching TV, eating, personal care, etc.)
2. At home - work related
3. Work
4. Work related
5. Eating/drinking at restaurant/bar
6. Minor shopping (grocery shopping, souvenir shopping, frequent, weekly basis, maintenance)
7. Major shopping (appliance, car, etc.)
8. Quick stop (coffee, gas, etc.)
9. Medical
10. Personal business (bank, pay bill, etc)
11. Outdoor recreation (skiing, hiking, snowmobiling, etc.)
12. Indoor recreation (bowling, ice skating, yoga, etc.)
13. Entertainment (movie, sports event, show)
14. Casino gaming
15. Visiting friend/relative
16. Religious
17. Community/political meeting
18. School
19. Picking up someone
20. Dropping off someone
21. Loop trip (walking dog around block)
22. Riding along with someone on their trip
23. Other (please specify): _____
24. DK/RF

18. How many people, including yourself, are in your immediate party and are traveling with you on this specific trip?

The number should be in the range of 0 and 100

19. RESIDENTS ONLY:
Which of the following currently describes your situation?

MULTIPLE RESPONSE

E t C diti :
 Answer(3) == 1 || Answer(4) == 1

Please circle the selected answers (minimum: 1, maximum: 8)

- 1. Employed full time
- 2. Employed part time
- 3. Regular volunteer
- 4. Retired
- 5. Full time homemaker
- 6. Unemployed, looking for work
- 7. Unemployed, not looking for work
- 8. DK/RF

Jump Rules:		
C diti :	B h i :	O ti :
Contains (19, 1)	ejqrIndex	20
Contains (19, 2)	ejqrIndex	20
Contains (19, 3)	ejqrIndex	21
Contains (19, 4)	ejqrIndex	21
Contains (19, 5)	ejqrIndex	21
Contains (19, 6)	ejqrIndex	21
Contains (19, 7)	ejqrIndex	21
Contains (19, 8)	ejqrIndex	21

**20. IF EMPLOYED FULL OR PART TIME:
Please describe your type of employment.**

Field ID :
Contains(19, 1 & 19, 2)

Please circle the selected answer (only one answer allowed)

1. Retail
2. Service – (non-casino hotel/motel/restaurant)
3. Recreation
4. Gaming (any employment with casino)
5. Professional Services
6. Government
7. Construction
8. Service
9. Other _____

21. What is your age?

The number should be in the range of 0 and 100

22. What was the total income by all members of your household in 2011?

Please circle the selected answer (only one answer allowed)

1. Above \$50k
 2. Below \$50k
 3. Less than \$10k
 4. \$10k-\$19,999k
 5. \$20k-\$34,999k
 6. \$35k-\$49,999k
 7. \$50k-\$74,999k
 8. \$75k-\$99,999k
 9. \$100k-\$149,999k
 10. \$150k-\$299,999k
 11. \$300k-\$499,999k
 12. Over \$500k
 13. DK/RF
-

23. VISITOR ONLY:

How much money do you anticipate that you will spend on yourself only on this trip to Tahoe? (A guess is okay if you're not sure.)

Editing :

Equals(5, 1)

Please circle the selected answer (only one answer allowed)

1. Less than \$500
 2. \$501-\$1,000
 3. \$1,001 - \$2,000
 4. Greater than \$2,000
-

24. DO NOT ASK:

Gender

Please circle the selected answer (only one answer allowed)

1. Male
 2. Female
-

25. Thank you!

CLICK NEXT TO SUBMIT

<u>Jump Rules:</u>		
<u>C_diti :</u>	<u>B h i :</u>	<u>O ti :</u>
CurrQues	ejqrSubmit	-1

26. Thanks for your time. I hope you have a pleasant day.

<u>E t C_diti :</u>
Contains(16, 14 & 1, 2 & 1, 3)

Appendix B: Data Frequencies 2016

Are you a full time resident of the Tahoe Basin?

		Frequency	Percent	Valid Percent
Valid	Yes	572	48.4%	48.4%
	No	609	51.6%	51.6%
	Total	1,181	100.0%	100.0%

Are you a seasonal resident?

		Frequency	Percent	Valid Percent
Valid	Yes	89	7.5%	14.6%
	No	521	44.1%	85.4%
	Total	610	51.7%	100.0%
Missing	System	571	48.3%	
Total		1,181	100.0%	

Or, are you visiting the Tahoe Basin on vacation or business?

		Frequency	Percent	Valid Percent
Valid	Yes	520	44.0%	44.0%
Missing	System	661	56.0%	100.0%
Total		1,181	100.0%	

What is your primary purpose for visiting the Tahoe Basin?

		Frequency	Percent	Valid Percent
Valid	Work	54	4.6%	4.6%
	Personal Business	57	4.8%	4.8%
	Vacation/Relaxation	498	42.2%	42.2%
	Total	609	51.6%	100.0%
Missing	System	572	48.4%	
Total		1,181	100.0%	

How many nights will you be staying in the Tahoe Basin?

		Frequency	Percent	Valid Percent
Valid	Less than 1 week	421	84.7%	84.7%
	1 to 2 weeks	63	12.7%	12.7%
	3 to 4 weeks (1 month)	3	0.1%	0.1%
	1 month to 3 months (Season)	2	0.0%	0.0%
	More than 3 months	8	0.2%	0.2%
	Total	497	42.1%	100.0%
Missing	System	683	57.8%	
Total		1,181	100.0%	

How many times in 2016 will you or have you come back to Lake Tahoe?

		Frequency	Percent	Valid Percent
Valid	1 time	152	29.7%	29.7%
	2 - 3 times	162	31.6%	31.6%
	4 - 6 times	79	15.4%	15.4%
	Greater than 6 times	119	23.2%	23.2%
	Total	512	43.4%	100.0%
Missing	System	669	56.6%	
Total		1,181	100.0%	

What was your primary means of travel to enter the Tahoe Basin?

		Frequency	Percent	Valid Percent
Valid	Car/Truck/Van (rented, owned or leased)	488	41.3%	93.1%
	Motorcycle/Moped	1	0.1%	0.2%
	Public Transit	3	0.3%	0.6%
	Para Transit	0	0.0%	0.0%
	Casino Shuttle	2	0.2%	0.4%
	Private Shuttle	12	1.0%	2.3%
	Taxi/Limo	4	0.3%	0.8%
	Walk	0	0.0%	0.0%
	Total	524	44.4%	100.0%
Missing	System	657	55.6%	
Total		1,181	100.0%	

If you arrived by private vehicle, how many people, including yourself, traveled in the vehicle?

		Frequency	Percent	Valid Percent
Valid	1	424	35.9%	39.6%
	2	395	33.4%	33.4%
	3	111	9.4%	9.4%
	4	79	6.7%	6.7%
	5 or more	60	5.1%	5.1%
	RF	1	0.1%	0.1%
	Total	1,070	90.6%	100.0%
Missing	System	111	9.4%	
Total		1,181	100.0%	

What best describes where you are staying/living in the Tahoe Basin?

		Frequency	Percent	Valid Percent
Valid	Full time residence	561	55.7%	55.7%
	Vacation Rental	150	14.9%	14.9%
	Second Home	71	7.1%	7.1%
	Friend's Residence	25	2.5%	2.5%
	Timeshare	59	5.9%	5.9%
	Motel/Hotel	25	2.5%	2.5%
	Campground (including RV, tents and campers)	8	0.8%	0.8%
	Not staying overnight	108	10.7%	10.7%
Total		1,007	100.0%	100.0%

Interview Site Shore

		Frequency	Percent	Valid Percent
Valid	North Shore	482	40.8%	40.8%
	South Shore	699	59.2%	59.2%
	Total	1,181	100.0%	100.0%

Type of Site

		Frequency	Percent	Valid Percent
Valid	Commercial	590	50.0%	50.0%
	Recreational	591	50.0%	50.0%
	Total	1,181	100.0%	100.0%

Where are you coming from?

		Frequency	Percent	Valid Percent
Valid	Home	499	42.4%	42.4%
	Lodging	309	26.2%	26.2%
	Work	99	8.4%	8.4%
	Shopping	60	5.1%	5.1%
	School/college	4	0.3%	0.3%
	Recreation/social visit	122	10.4%	10.4%
	Personal business/errand	45	3.8%	3.8%
	Medical	5	0.4%	0.4%
	Other	35	3.0%	3.0%
	Total	1,178	100.0%	100.0%

What was your primary means of transportation to get to this place?

		Frequency	Percent	Valid Percent
Valid	Car/Truck/Van	1,023	86.6%	86.6%
	Motorcycle/Moped	0	0.0%	0.0%
	School bus	0	0.0%	0.0%
	Public Transit	29	2.5%	2.5%
	Para Transit	0	0.0%	0.0%
	Casino Shuttle	1	0.1%	0.1%
	Private Shuttle (e.g., ski lodge, snowmobile tour)	9	0.8%	0.8%
	Taxi/Limousine	7	0.6%	0.6%
	Bicycle	11	0.9%	0.9%
	Walk	95	8.0%	8.0%
	Other, specify	6	0.5%	0.5%
	Total	1,181	100.0%	100.0%

Please describe your type of employment.

		Frequency	Percent	Valid Percent
Valid	Retail	71	6.0%	8.1%
	Service - non casino hotel/motel/restaurant	68	5.8%	7.8%
	Recreation	22	1.9%	2.5%
	Gaming (any employment with casino)	233	19.8%	26.7%
	Professional Service	122	10.4%	14.0%
	Government	95	8.1%	10.9%
	Construction	168	14.3%	19.3%
	Service	21	1.8%	2.4%
	Other, specify	72	6.1%	8.3%
	Total	872	74.0%	100.0%
Missing	System	306	26.0%	
Total		1,178	100.0%	

What is your age?

		Frequency	Percent	Valid Percent
Valid	17 - 24	83	7.0%	7.0%
	25 - 34	237	20.1%	20.1%
	35 - 44	246	20.8%	20.8%
	45 - 54	184	15.6%	15.6%
	55 - 64	227	19.2%	19.2%
	65 or more	201	17.0%	17.0%
	RF	3	0.3%	0.3%
	Total	1,181	100.0%	100.0%

What was the total income by all members of your household in 2015?

		Frequency	Percent	Valid Percent
Valid	Above \$50k	119	10.1%	12.0%
	Below \$50k	95	8.0%	9.6%
	Less then \$10k	27	2.3%	2.7%
	\$10k-\$19,999k	40	3.4%	4.0%
	\$20k-\$34,999k	71	6.0%	7.2%
	\$35k-\$49,999k	89	7.5%	9.0%
	\$50k-\$74,999k	147	12.4%	14.9%
	\$75k-\$99,999k	114	9.7%	11.5%
	\$100k-\$149,999k	134	11.3%	13.5%
	\$150k-\$299,999k	115	9.7%	11.6%
	\$300k-\$499,999k	22	1.9%	2.2%
	Over \$500k	16	1.4%	1.6%
	Total	989	83.7%	100.0%
Missing	DK/RF	192	16.3%	
Total		1,181	100.0%	

**How much money do you anticipate that you will spend on yourself
only on this trip to Tahoe?**

		Frequency	Percent	Valid Percent
Valid	Less then \$500	286	24.2%	55.0%
	\$501 - \$1,000	106	9.0%	20.4%
	\$1,001 - \$2,000	75	6.4%	14.4%
	Greater then \$2,000	53	4.5%	10.2%
	Total	520	44.0%	100.0%
Missing	System	661	56.0%	
Total		1,181	100.0%	

Gender

- Was not asked for the 2016 survey

Residenttype

		Frequency	Percent	Valid Percent
Valid	Full-time resident	572	48.4%	48.4%
	Seasonal resident	89	7.5%	7.5%
	Visitor	520	44.0%	44.0%
	Total	1,181	100.0%	100.0%

Employment Status

		Responses		Percent of Cases
		N	Percent	
emply(a)	Employed full-time	713	60.3%	60.4%
	Employed part-time	162	13.7%	13.7%
	Regular Volunteer	6	0.5%	0.5%
	Full-time homemaker	223	18.9%	18.9%
	Unemployed, looking for work	25	2.1%	2.1%
	Unemployed, not looking for work	26	2.2%	2.2%
	Retired, not working	28	2.4%	2.4%
Total		1,183	100.0%	100.2%

Trip Purpose

		Responses		Percent of Cases
		N	Percent	
Purp(a)	At home activities (sleeping, watching TV, eating, personal care, housework, etc.)	4	0.3%	0.3%
	Working at home (job related-for pay)	8	0.7%	0.7%
	Work (including regular volunteer work)	198	17.0%	17.0%
	Work-related (meeting, errand, etc.)	13	1.1%	1.1%
	Eating or drinking at restaurant/bar	97	8.3%	8.3%
	Minor Shopping (frequent, grocery, clothes)	108	9.2%	9.2%
	Major Shopping (occasional, COSTCO, appliance, car, etc.)	4	0.3%	0.3%
	Quick stop (gas, ATM, coffee, newspaper)	98	8.4%	8.4%
	Medical	2	0.2%	0.2%
	Personal business (bank, pay bill, dry cleaning, errands, etc.)	46	3.9%	3.9%
	Outdoor recreation participation (skiing, snowmobiling, fishing, hiking, etc.)	469	40.2%	40.2%
	Indoor recreation participation (bowling, ice skating, etc.)	94	8.0%	8.0%
	Entertainment (movie, sports event, show)	4	0.3%	0.3%
	Casino gaming	9	0.8%	0.8%
	Visiting friends or relatives	6	0.5%	0.5%
	Religious	1	0.1%	0.1%
	Community/political meeting	0	0.0%	0.0%
	School	0	0.0%	0.0%
	Picking up someone	4	0.3%	0.3%
	Dropping off someone	0	0.0%	0.0%
	Loop trip (walking dog around block)	3	0.3%	0.3%
	Riding along with someone on their trip	0	0.0%	0.0%
Total		1,778	100.0%	100.0%

Appendix C: Press Release

NEWS RELEASE

DATA COLLECTION FOR LAKE TAHOE TRAVEL MODE SURVEY BEGINS THIS MONTH

STATELINE, NV – February 2, 2016 – The Tahoe Regional Planning Agency will conduct travel surveys with visitors and residents at several recreational and commercial locations throughout the Basin beginning Thursday, February 18th, 2016.

The interviewing, to be carried out by a professional survey research company, is scheduled to take place for approximately two weeks. Surveyors will wear badges while patrolling survey sites. Results from the Travel Mode Survey will be used to track the success of and help plan multi-modal travel options around Lake Tahoe. The short survey conducted on smart tablets is intended primarily to gather data on travel patterns to commercial and recreation areas, but also will be used to collect visitor-specific data and demographic information. The data will be used solely for the transportation planning process.

According to TRPA Long Range Planning and Transportation Manager, Nick Haven, "Because this study is an integral part of the planning agency's ongoing transportation monitoring program, we sincerely appreciate the participation and cooperation of local employers and businesses." Haven added, "We also are thankful for the time and information provided by each survey participant as his or her input will assist in shaping transportation solutions throughout the Lake Tahoe area."

The Travel Mode Survey is being conducted by NuStats, an independent, accredited survey research company, and the same firm who implemented previous transportation-related studies around Lake Tahoe as well as Reno, Sacramento, and San Francisco. Data collected via this survey provides transportation planners with annual comparisons on seasonal residency, age, gender, income, vacation stay locations, types of transportation in regards to how visitors arrived to the Lake Tahoe area, and auto occupancy. Results of the study will be made available to the public. For more information about the study, please contact Keith Norberg, Transportation Planner, Tahoe Regional Planning Agency, at 775.589.5289 or knorberg@trpa.org.

The Tahoe Regional Planning Agency leads the cooperative effort to preserve, restore, and enhance the unique natural and human environment of the Lake Tahoe Region, while improving local communities, and people's interactions with our irreplaceable environment.

Appendix D: Interviewer Training Manual

INTRODUCTION:

Welcome to the Travel Mode Survey team. You have been selected to work on an important survey conducted with visitors and residents of the Tahoe Basin Area. This study, sponsored by the Tahoe Regional Planning Agency, will be an essential factor for future planning efforts to improve non-auto travel in and around the North and South Shores of Lake Tahoe.

WORK SCHEDULE:

Full study: February 24th – March 4th, 2012 (weekdays and weekends)

Normally, surveying will be conducted from 10am to 6pm with a break for lunch. On certain days however, the schedule may be altered by one or two hours. Surveyors will be working every day throughout the surveying period. Your flexibility is appreciated so a full crew is working Monday through Sunday.

DRESS CODE/WORK EXPECTATIONS:

You will be provided with a TRPA badge to wear each day you are surveying. Please wear your badge to project legitimacy and a professional appearance for your work.

The supervisor will advise you of lunch time and break periods. Please return promptly to work when break periods are over.

Please plan to be at the meeting location 5 minutes prior schedule.

In the event of an emergency, please contact the supervisor at 512 740-7740 Brad or

530-412-3521 Lucia

STUDY DESIGN

We will be surveying popular commercial and recreation sites located in the North and South Shore area of the Tahoe Basin. Typically, we will be surveying multiple sites in one day – but these sites will be close together so we don't lose much travel time.

Each site has a specific goal of interviews that needs to be conducted and all data completely and accurately collected. Your supervisor will advise you of the goal for each site. We will work as a team to make goal.

WORK TASKS:

It is important that you are completely familiar with the survey instrument. If you are unsure about what data a question is capturing, ask the supervisor for clarification.

As a surveyor, you will be approaching visitors and residents (over the age of 18) and asking them to participate in a brief five-minute survey. All information collected in the survey is confidential and not identified with any single individual. Participation is voluntary.

At each survey site, your supervisor will designate the location where you will be stationed to approach a respondent. Only one respondent in a traveling party may participate in the study. At certain sites, you may be asked to approach every *n*th travel party – in order to insure randomness of participation and not bias study results due to mode of travel or demographic self-selection. (Your supervisor will advise you daily about the approach pattern.)

Politely invite a member of the travel party to participate in the study by saying:

"Hello. My name is _____ and I'm conducting a study on behalf of the Tahoe Regional Planning Agency. I'm interviewing residents and visitors in the region about their daily travel activities. This study will take no longer than 5-minutes and will benefit the community by providing information about local travel patterns for better transportation planning. The study is purely a research effort, your participation is voluntary and your answers will be completely confidential." If a member of the travel party agrees to participate, confirm that he or she is 18 years old or older. If the participant is under age 18, attempt to interview another member of the travel part who meets the age requirements.

If no member of the travel party wishes to participate in the study, politely stress the importance of participating. If no one still wishes to participate, thank them for their time and tally the group as a single refusal.

Conduct the survey by reading each question on the questionnaire exactly as it is stated. All questions must be answered in order for the questionnaire to count toward the interview site goal. Please completely fill in bubble responses and print text responses neatly.

After you complete five interviews at a site, return your tablet to the supervisor so a count may be made to determine if goal has been reached. All data will be reviewed and surveyors will receive constructive feedback.

Finally, have fun, be friendly. Hopefully, you will enjoy working on this project.