

2017 ARIZONA STATE PARKS: OFF-HIGHWAY VEHICLE RECREATION REPORT

Economic Impact of Off-Highway Recreation in the State of Arizona

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EXECUTIVE SUMMARY

The state of Arizona has abundant natural resources appropriate for off-highway motorized vehicle recreation. Off-highway vehicles (OHV) include a two-wheel, three-wheel or four-wheel vehicles, motorcycle, dune buggies, amphibious vehicle, ground effects or aircushion vehicle and any other type of land transportation that derives its motor power from any source but muscle or wind. Examples include ATVs, UTVs, Side by Sides, ROVs, motorcycles, mopeds and snowmobiles. An off-Highway Vehicle trail is a multiple use path open to off-highway vehicles used for recreational purpose. OHV trails are managed by federal, state, local and/or tribal agencies as well as private organizations. The purpose of this study is to measure the approximate monetary transactions that influence the incomes of local business and employment figures. Through surveys, this study examines specific expenditure allocations and economic impact of the most frequented OHV trail systems in Arizona during the year 2017. In summary, two objectives guide this study: 1) To determine travel and spending behavior of OHV recreationists in Arizona in 2017 and; 2) To determine the economic impact of OHV recreation in Arizona, for the year 2017, in terms of direct, indirect and induced effects.

Key Findings of the Study:

- Total direct spending of OHV recreation is \$1.86 billion out of which the annual ancillary sector contribution is \$793.41 million and annual OHV operating expenses are \$1.07 billion.
- The out-of-state contribution in the ancillary sectors is \$65.51 million. Out-of-state visitors spend a total of \$177.61 million on vehicle operating expenses. Local retained visitor contributions are \$727.90 million on ancillary sectors and \$888.68 million on vehicle-related expenses.
- Total economic contribution of OHV recreation in the state of Arizona in 2017 is \$2.64 billion in output, \$1.60 billion in value added (gross domestic product), \$.94 billion in labor income, 21,077 jobs, \$221.76 million in state/local taxes and \$148.23 million in federal taxes. Out of this contribution, direct visitor spending on ancillary sectors contributes to 9,896 jobs, \$.94 billion in output, \$.55 billion in value added, and \$.33 billion in labor income.
- In 2017, OHV operating expenses generated 11,180 jobs, \$170 billion in output, \$1.04 billion in value added, and \$.61 billion in labor income.

A further breakdown of key results is presented below:

- Approximately 90% of the OHV visitors are from Arizona. Out of the local visitors, 70% are retained and 30% are displaced. Almost 55% of the local users are from Maricopa County, 15% are from Mohave County and 9% from Pima County. Approximately 27% of the out-of-state visitors are from California and 8% are from Oregon with 6% from Utah.
- Average total spending (per person per day), on ancillary sectors at the most recently visited trail, by retained local visitors (including both day trippers and overnight visitors) is \$399.46. Highest expenditure item is repairs/maintenance, followed by clothing (including helmets, boots, gloves etc.), and gasoline/oil for OHV and tow vehicles. Average annual spending of retained visitors on ancillary sectors (per person per day) is \$2,339.87. Highest annual spending is incurred on repair/maintenance followed by gasoline/oil for OHV and tow vehicles, food and beverage purchases at grocery and/or convenience stores.
- Average total spending (per person per day), on ancillary sectors at the most recently visited trail, by out-of-state visitors (including both day trippers and overnight visitors) is \$356.74 per person per day. The highest spending item is in the other category followed by repairs and maintenance and restaurant/lounge purchases. Average annual total spending by out-of-town visitors on ancillary sectors is \$1,421.33 per person per day with the highest spending on gasoline/oil for OHV and tow vehicles followed by repairs/maintenance and restaurant/lounge purchases.
- Annual total (average) vehicle related expenses for retained local visitors add to \$9,476 per person. Highest average spending is incurred on purchase of OHVs (\$5,262.68) followed by motorized recreational accessories (\$1,831.24), fuel, oil and lubricants (\$1,216.68). With regard to out-of-state OHV visitors, overall average spending on vehicle-related expenses is \$10,047.22 per person. The highest average expenditure for the out-of-state visitors on vehicle operating expenses is on purchasing OHVs (\$6,236) followed by motorized accessories (\$1,745.84), and fuel, oil and lubricants (\$958.84).
- The average number of times an OHV trail is visited by all OHV visitors is 12 and the median value is 11. Average distance traveled to an OHV recreation trail, by all OHV users, is 105 miles (one way), with the median value being 35 miles. Approximately 66% of the OHV visitors are day trippers; 34% stay overnight. Median number of hours spent at the trail (for day trippers) is six while the median number of nights spent at the trail (by overnights) is three. Median party size is four (for both day trippers and those staying overnight). Approximately 79% of the visitors are repeat visitors and 21% are on their first-time visits. Approximately 36.4% travel with friends and family, 22.6% travel with family only and 22% travel with friends only.

- The most popular OHV trail is Boulders followed by Havasu and Table Mesa. Approximately, 27.8% of most frequented trails are located in Maricopa County. Almost 19.9% and 14.9% of the patronized OHV trails are located in Yavapai and La Paz counties respectively. The most popular vehicle across all OHV visitors is UTV/Side by Side (43%) followed by SUV/Jeep (18%), ATV (15.3%), and dirt bike (13.4%).
- The primary reason for the OHV trip in 2017 is trail riding using a Side by Side/UTV followed by trail riding/ATVs, and driving back roads. The most common source of information for OHV users is word of mouth followed by online/website, maps/GPS programs, and state/federal agency.
- Most visitors reside in the State of Arizona and the majority of them are from Maricopa County. Average age across all visitors is 55 years with a median value of 56 years. Approximately 87% are males, approximately 41.4% have attended at least some college/technical school and 56% are college graduates. Only 7.4% of the OHV users earn less than \$40,000 in annual household income and 48.6% of the respondents earn more than \$100,000 in annual household income. Approximately 91% of the respondents are Caucasians.

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INTRODUCTION

Off-highway vehicle-based recreation is one of the most popular and growing recreation activities in Arizona and takes place in public, state, and private lands. Several studies report that OHV recreation produces substantial economic benefits to the communities and to the state in which the recreation activity takes place (Cordell, Betz, Green & Owens 2005; Legg, Price & Williams 2006; Otto 2008; Silberman & Andereck 2006). OHV users spend money on food, lodging, and other travel related expenditures. The recreational equipment they use stimulates economic activity and employment. They significantly contribute to the quality of life for many residents of Arizona. The spending associated with the use of OHV trails and recreation is also important to the local economy as it generates jobs and income.

The purpose of this study is to document the economic impact of tourists and retained local spending (primary purpose non-local visitors and locals who would have visited the OHV trail outside the study area if a local option was not available). The study's method is based on analysis of online surveys collected in 2017. The data was collected to gather information from visitors to understand travel and recreation motivations, travel and visit behavior, activity preferences, spending and satisfaction levels so that Arizona State Parks can improve future service. The economic impact analysis uses spending and travel behavior data from that study to measure how spending by OHV visitor circulates through local gateway economies, generating business sales and supporting local jobs and resident income.

For the purpose of this study, a visitor is defined as a non-local or a local who would have traveled outside the local region if the existing park had not been available. Visitor expenditure data is taken from an online survey posted at the OHV website. Most studies have used IMPLAN input-output model to capture the direct, indirect and induced impacts of OHV recreation to state economies (Kaliszewski 2011; Pardue & Shand 2014; Taylor, Ngler, Bastian & Foulke 2013). IMPLAN modeling software helps determine economic impacts of recreation and tourism in the United States. It uses an input/output modeling technique to understand how a local economy functions and the economic benefits of tourism and recreation activities/facilities. The currently available IMPLAN Version 3 modeling system uses 536 distinct sectors and can offer a summary of economic impact in the county in terms of changes in jobs, household income, tax impacts, and gross regional product as new expenditures are injected into the economy. It is used to measure the impact of visitor expenditures on local economies in terms of output, value added, labor income, and federal and state/local taxes.

This study is unique because it also includes retained spending by locals residing in the study area. It is argued that spending by residents, who would have gone to a substitute OHV trail outside the study area if the AZ trail had been absent, is retained spending. This spending is retained by the park and without the park, would have been spent their money outside the study area. Also, it

makes an effort to calculate the leverage ratio- or the number of dollars generated for local residents for every dollar invested by Arizona State Parks in the form of annual operating expenses (Greenwood & Vick 2008). Leverage ratio is calculated by dividing labor income with operating expenses.

Overview of Economic Effects Analyses

To determine economic benefits of OHV recreation, a more comprehensive economic impact study is required which makes use of an input/output modeling technique focused on social accounting matrices, multipliers, and trade flows (Stynes 2010). More information is offered below:

SAMs: Social Accounting Matrices (SAMs) take into account real dollars of all business transactions happening annually in the economy as reported by businesses and governmental agencies. SAMs also factor in 'non-market' transactions such as taxes and unemployment benefits. This type of analysis provides an in depth look at the economic impact of visitor expenditures on the local economy and can identify different types of industries and households that benefit the most from the economic impact analysis (IMPLAN 2000; 2014).

Multipliers help to show direct, indirect and induced impacts as a result of the visitor spending based on 536 different industries. Multipliers improve the accuracy of economic impact studies by calculating how the initial expenditures injected in the region can spur additional/indirect purchases of goods and services to meet demand for tourism products (Crompton 2010; Greenwood & Vick 2008; Gunthar, Parr, Graziano & Carstensen 2011; Fletcher 1989).

Direct effects are determined by the initial visitor expenditures injected into the economy. The indirect effects relate to additional spending incurred by tourism businesses in the region to produce/supply the tourism products. Examples include expenditures incurred by restaurants on groceries, services, other supplies and labor. Finally the induced effect measures the money that is re-spent in the study area as a result of employee spending (drawn from income earned as a result of direct and indirect effects).

Trade Flows method helps to capture regional purchase coefficients and can perform a multi-regional analysis to show an organization's product is capable of generating additional effects in the surrounding areas (IMPLAN 2014).

This economic impact study examines the direct, indirect and induced economic effects of the OHV visitor expenditures in the gateway region of each selected trail and for the whole state. Visitors/tourists in this study are broadly categorized as: retained (locals), in-state non-locals or domestic (from outside the gateway region but residing in Arizona) and out-of-state. Spending (retained) is considered for those local residents who would have gone elsewhere if the OHV trail they were using had been absent. IMPLAN software is used, which to date is the most commonly used software to determine economic impacts of recreation and tourism in the United States.

Information is also elicited on the following: day tripper versus overnight visitors, length of stay, place of stay, place of residence (zip code), and retained (spending of local residents who would have gone outside the gateway region or state if the selected OHV did not exist) or displaced (substitute spending that might have been incurred on items other than those associated with the OHV recreation) expenditures.

Types of Economic Effects Measured

The economic effects of visitor spending to local economies are estimated by multiplying visitor spending by regional economic multipliers. Five types of economic impacts are calculated:

- **Output:** can be described as the total value of production.
- **Employment:** refers to annual average jobs. This includes self-employed and wage and salary employees, and all full-time, part-time and seasonal jobs, based on a count of full-time/part-time average over twelve months.
- **Value Added:** is the combination of labor income, other property type income, and indirect business taxes. Other property type income includes corporate profits, interest income and rental payments. Value added accounts for all non-commodity payments associated to an industry's production.
- **Labor Income:** is composed of two components. These are employee compensation and proprietor income. Employee compensation is total income to the labor factor of production. From the point of view of a business, employee compensation is the total cost of labor including wages and salaries, other labor related income like health and retirement benefits, and both employee and employer contributions to social insurance. Proprietor income is the total income to a sole proprietor or self-employed 'employee.'
- **Indirect business taxes:** are taxes collected by businesses on behalf of the government. These include sales tax, excise tax, property tax, fees, fines, and licenses.
- **Tax Impacts:** These are categorized as federal and state/local. The tax impact report provides information on tax collection by state/local and federal governments. The software does not break state taxes from county taxes in a region but if the impact region is local, then state/local tax implies local tax contributions and jobs.

DATA SOURCES AND METHODS

A comprehensive online survey was designed to accomplish the study objectives. During the development process, existing studies were examined to determine different spending items associated with OHV recreation. The survey link was hosted at the Arizona State Parks website. Additionally, visitors at geographically dispersed trails were randomly surveyed at selected popular trail sites. The visitor data was used to segment visitors by type of trip. OHV visitors were split into the following three distinct visitor segments in order to help explain differences in spending across different user groups.

- Local visitors
- Local retained visitors (day trippers and overnight visitors)
- Out-of-state Non-local visitors (day trippers and overnight visitors): outside of Arizona

Sampling design: Total OHV recreationists (out-of-state and retained locals) for financial year 2017 was weighted based on a report prepared by Budruk et al. (2014). Approximately 12.6% of the local population of Arizona participates in OHV recreation.

Efforts are made to obtain the following estimates: total expenditures for day and overnight trips; annual expenditures to purchase and maintain vehicle; other expenditures supporting the recreational use of vehicles; economic contributions to the State of Arizona; total expenditures made by OHV recreationists; and number of day trips and overnight trips by residents and non-residents by OHV type (such as ATV, dirt or dual purpose bikes, snowmobiles, 4-WD, Side by Side, Sand Buggy/Rail). Expenditure categories include both trip and annual expenditures. Trip related expenditure items include: gasoline/oil for motorized recreational vehicles and tow vehicles, restaurants/lounge purchases, food and beverages purchased at grocery and/or convenience stores, user fees and donations, guides and tour packages, lodging (overnight trips only), repairs, souvenirs, gifts and entertainment, and other trip-related expenditures. Itemized vehicle expenditures include: maintenance, repairs, storage, and miscellaneous items in Arizona by resident and non-resident households that participate in motorized recreation included repairs and parts, vehicle storage, motorized recreational accessories (covers, saddle or tank bags, ski skins, studs, carbides, mirrors etc.), clothing (suits, pants, gloves etc.), safety equipment (helmets, tools, first aid, etc.), annual insurance payment, registration or permit fees, club memberships, magazine subscriptions, and vehicle purchase.

The visitor data is used to segment visitors to type of trip. OHV users are split into the following three distinct visitor segments in order to help explain differences in spending across user groups.

- Local visitors
- Local (retained) visitors & non-local visitors (outside the gateway region) from Arizona
- Non-local visitors from outside of Arizona

Robusticity of Web-based surveys

Web-based surveys have been noted as one of the most significant advances in survey methodology despite some limitations associated with computer anxiety, interface issues and different screen formats. Advantages include:

- Low cost, fast response time, and flexibility: Online surveys can be conducted very quickly and efficiently. The respondents can conveniently complete the survey at their own pace.
- Interactivity without interviewer bias: The interactivity nature of the Internet reduces possible bias due to the absence of the interviewers.
- Target sample selection: It is easier to accurately select respondents, e.g., with a pop-up invitation window when certain responses are recorded by the system. Also, respondents can be conveniently directed to questions of relevance.
- Quick and easy access: One key advantage is the ability to effectively reach respondents across different geographic locations.
- Desensitize sensitive subjects: Being able to complete an online survey with privacy and convenience can minimize embarrassment and sensitivity towards certain controversial issues or personal topics. Online surveys can also be used to collect information related to unpopular beliefs or attitudes. In addition, online surveys provide stronger anonymity when compared to other survey techniques.
- Less processing errors: Responses are recorded online simultaneously. With careful design, typical data input and processing errors can be avoided.

IMPLAN

IMPLAN software was used which, to date, is the most commonly used software to determine economic impact of recreation and tourism in the United States. The IMPLAN software system uses the input/output modeling technique to understand how a local economy functions and the economic benefits of Maricopa County's parks and recreational facilities. Additionally, it makes use of an input/output modeling technique focused on social accounting matrices, multipliers, and trade flows (Greenwood & Vick 2008; IMPLAN 2007; 2014):

STUDY LIMITATIONS

Like all studies, this study is also subject to logistical and methodological limitations. The self-reported responses, of online surveys, are voluntary and run the risk of excluding certain populations who do not have access to Internet and might be in the low-income category. Although representativeness of an online sample has been a cause of concern, this study made a dedicated effort to minimize the limitation as data was collected throughout the year (2017). In addition to making the survey available at the Arizona State Parks and Trails website, the link was forwarded to OHV event attendees, different mailing lists, associated partners/organizations, OHV clubs and organized groups.

The vehicle purchase item in the spending questionnaire generated some outliers that could not be eliminated even after treating the data. Winsorized averages (by trimming both end of the data by 4.5%) are used but some outliers with low and high values could not be deleted. A future study may add a question for further clarification if a visitor reports low expenditure for the vehicle purchase item. Furthermore, it was not possible to capture the vehicle-related spending of out-of-state visitors since it was assumed that most expenditures would occur in the place of residence. It is likely that some portion of vehicle related expenses are incurred in the visited region. A future study can include a question that can help capture that portion of vehicle-related expenditures. Because of this limitation, it is likely that the economic impact of vehicle-related spending is underestimated.

Last, this study is only able to present descriptive results from the onsite survey data. Although most of the spending figures from onsite surveys were comparable to those reported by the web-based surveys, the sample size was small and could not be included in the economic impact analysis. Nevertheless, this study is unique because it also includes retained spending of locals residing in the study area for each trail site. It is argued that spending by residents, who would have gone to a substitute OHV recreation trail outside the state if the OHV trails had not been available, is retained spending. This spending is retained by the State and its absence would have made the local resident incur spending outside the study area.

FINDINGS

A total of 3,550 online surveys were collected in the year 2017 with 1,654 completed surveys. Total number of onsite surveys are 142. Based on weighted percent of OHV users, reported from a study conducted in 2015 (Budruk et al. 2014), 12.6% of the local residents of Arizona are reported to be OHV users. According to the online survey results, 90% of the OHV visitors are from Arizona and 10% are from out of state. The total population of Arizona, according to the 2017 census data, is 7,016,270. Based on this population, a total of 792,109 local OHV users was calculated. Next, a total of 890,336.8 OHV users are ascertained by adding 10% of out-of-state OHV visitors. Retained OHV visitors total to 554,413 of which 372,566 are day trippers and 181,848 are overnight visitors. A total of 98,228 out-of-state visitors were calculated of which 39,488 are day trippers and 58,740 are overnight visitors. Retained spending data is based on 900 surveys and out-of-state spending data is analyzed based on 142 surveys. Approximately 80% of the onsite respondents are from Arizona and 20% are from out of state.

The findings chapter is divided into five broad sections: 1) direct visitor expenditures for OHV visitors who responded to the online survey; 2) direct visitor expenditures at the top three most visited trails in Arizona, based on the online survey; 3) direct onsite visitor expenditures of OHV visitors who were surveyed at the selected trails; 4) marketing profile, travel behavior and visitor profile of OHV visitors who responded to the online survey; and 5) marketing profile, travel behavior, and visitor profile of OHV visitors who were surveyed at the selected trailhead (onsite). Each section is further divided into two subsections to offer a more detailed breakdown of visitor expenses (in terms of retained/out-of-state and day trippers/overnight visitors) incurred annually and at the most recent trail. Additionally, direct annual vehicle-related expenditures (reported online and onsite) are presented.

Section 1: Economic Impact and Direct Expenditures by OHV Visitors based on the Online Survey

Table 1 presents total economic impact of OHV recreation. As the results show, OHV recreation generates \$2.64 billion in output and \$1.60 billion in gross domestic product (value added). Federal tax contributions were \$148.23 million and state/local tax contributions were \$221.76 million

Table 1: Total economic impact of OHV recreation (\$)

| Category | Jobs | Labor Income | Value Added | Output |
|--------------|---------------|--------------------|----------------------|----------------------|
| Operating | 11,159 | 601,656,568 | 1,037,973,487 | 1,688,519,567 |
| Ancillary | 9,896.30 | 333,989,541 | 553,525,912 | 937,366,712 |
| Total | 21,077 | 940,319,938 | 1,599,415,134 | 2,637,044,177 |

Table 2 presents total direct expenditures incurred by OHV visitors in 2017. As the table illustrates, OHV visitors in the State of Arizona generate a total annual direct spending of

approximately \$1.86 billion in 2017. Contributions from annual ancillary items are approximately \$793.41 million. Annual vehicle expenses across all OHV vehicles are \$1.07 billion.

Table 2: Aggregate Annual Expenditures for all OHV Users (\$)

| Item | Ancillary | OHV Operating Expenses | Total Expenditures |
|--------------|-----------------------|-------------------------------|---------------------------|
| Retained | 727,897,419.02 | 888,684,893.68 | 1,616,582,312.70 |
| Out of State | 65,512,121.01 | 177,606,602.80 | 243,118,723.81 |
| Total | 793,409,540.03 | 1,066,291,496.48 | 1,859,701,036.51 |

For the purpose of economic impact modelling, out of state OHV operating expenses are excluded. It is highly likely that most of the out-of-state OHV operating expenses are incurred in other states. Excluding out of state OHV expenditures, total direct spending by OHV visitors in the State of Arizona is \$1,682,094,433.71. In other words, it is approximately \$1.68 billion.

Tables 3-27 present a breakdown of OHV visitor spending (both ancillary and vehicle operating expenses) by retained and out-of-state visitors based on the online survey. Retained users are further divided into day trippers and overnight visitors. Similarly, out-of-state users are divided into out-of-state day trippers and out-of-state overnight visitors.

Ancillary Spending Impact of OHV Visitors

Tables 3 and 4 present economic impact contributions of total ancillary spending by OHV visitors in terms of jobs, labor income, value added, output and state/local and federal tax contributions.

Table 3: Economic Impact Breakdown (\$)

| | Jobs | Labor Income | Value Added | Output |
|--------------|-----------------|---------------------|--------------------|--------------------|
| Direct | 6,901.70 | 197,543,169 | 306,591,804 | 502,580,471 |
| Indirect | 1,183.60 | 56,091,950 | 102,954,734 | 182,510,630 |
| Induced | 1,811.00 | 80,354,422 | 143,979,375 | 252,275,611 |
| TOTAL | 9,896.30 | 333,989,541 | 553,525,912 | 937,366,712 |

Table 4: State/Local and Federal Taxes 2017 (\$)

| Tax Category | Employee Compensation | Proprietor Income | Tax on Production | Households | Corporations | Total |
|-------------------------|------------------------------|--------------------------|--------------------------|-------------------|---------------------|--------------------|
| Total State & Local Tax | 0.00 | \$0.00 | 66,199,520 | 6,065,089 | 1,014,070 | 73,278,679 |
| Total Federal Tax | 37,575,928 | 1,203,013 | 8,388,784 | 22,548,532 | 9,568,805 | 79,285,062 |
| Total | 37,575,928 | 1,203,013 | 74,588,304 | 28,613,621 | 10,582,875 | 152,563,741 |

Table 5 presents a breakdown of direct, indirect and induced impacts in terms of output, full time jobs, labor income and value added (gross regional product) for top ten industries impacted by economic impact.

Table 5: Economic Impact Contributions of Top Ten Industries (\$)

| Description | Employment | Labor Income | Value Added | Output |
|--|------------|--------------|-------------|-------------|
| Automotive repair and maintenance, except car washes | 1,487.00 | 82,210,191 | 103,119,392 | 150,519,960 |
| Limited-service restaurants | 1,201.20 | 23,935,014 | 57,912,778 | 101,528,739 |
| Real estate | 302.2 | 5,881,943 | 38,095,297 | 55,727,115 |
| Hotels and motels, including casino hotels | 506.1 | 16,276,916 | 32,961,253 | 54,729,406 |
| Other accommodations | 1,762.60 | 20,004,150 | 28,479,880 | 61,792,479 |
| Retail - Food and beverage stores | 380.5 | 12,613,285 | 18,849,925 | 27,670,168 |
| Owner-occupied dwellings | 0 | \$0 | 18,829,817 | 29,021,692 |
| Retail - Clothing and clothing accessories stores | 352.7 | 10,153,413 | 18,588,578 | 30,174,406 |
| Other amusement and recreation industries | 393.8 | 9,855,375 | 16,743,358 | 27,174,972 |
| Retail - Gasoline stores | 342.6 | 10,836,279 | 14,469,646 | 23,405,046 |

Table 6 presents a breakdown of visitor spending based on retained and out-of-state visitors. The table shows, highest annual ancillary spending is incurred in the gasoline/oil sector followed by the restaurant/lounge purchases and food and beverage sectors. **Table 7** presents a breakdown of ancillary spending by day trippers and overnight visitors. Highest spending sector among the day trippers is noted to be on restaurant/lounge purchases followed by the food and beverage and the clothing sectors. Overnight visitors spend the most in the food and beverage sector followed by the ‘other’ and repairs/maintenance sectors. Average annual spending per person per day for both day trippers and overnight visitors is presented in **Tables 8 and 9**.

Table 6: Total Direct Annual Spending reported on Ancillary Items (\$)

| Item | Retained | Out of State | Total Spending | Percent |
|--|-----------------------|----------------------|-----------------------|----------------|
| Gasoline/oil for OHV & tow vehicles | 139,023,516.62 | 13,207,026.00 | 152,230,542.62 | 19.19 |
| Restaurant/lounge purchases | 84,113,804.68 | 9,203,961.47 | 93,317,766.15 | 11.76 |
| Food and beverage purchased at grocery and/or convenience stores | 78,057,052.56 | 8,044,494.60 | 86,101,547.16 | 10.85 |
| Guides and tour packages | 6,525,629.66 | 278,828.20 | 6,804,457.86 | 0.86 |
| Repairs/maintenance | 138,662,005.60 | 9,285,612.44 | 147,947,618.04 | 18.65 |
| OHV Rentals | 2,347,699.04 | 547,775.60 | 2,895,474.64 | 0.36 |
| Sporting goods | 46,237,276.24 | 2,005,621.34 | 48,242,897.58 | 6.08 |
| Souvenirs and gifts | 13,593,385.12 | 1,803,077.89 | 15,396,463.01 | 1.94 |
| Amusement/Entertainment | 22,816,035.22 | 3,585,767.22 | 26,401,802.44 | 3.33 |
| Clothing - clothing, helmets, boots, gloves etc. | 57,125,290.38 | 3,806,467.00 | 60,931,757.38 | 7.68 |
| Other | 31,382,603.16 | 4,883,013.48 | 36,265,616.64 | 4.57 |
| Lodging - Camping/RV | 57,317,522.00 | 4,922,584.00 | 62,240,106.00 | 7.84 |
| Lodging -Hotel/motel | 50,695,598.74 | 3,937,891.77 | 54,633,490.51 | 6.89 |
| Total | 727,897,419.02 | 65,512,121.01 | 793,409,540.03 | 100.00 |

To eliminate omission bias, an ‘other’ category was offered in regards to spending. Day tripper and overnight respondents spent money on additional OHV-related items such as vehicle repairs, new tires, trailers, permits and decals, camping gear, entry-related fees, food and beverages, maps and GPS equipment, and other miscellaneous items.

Table 7 shows that the highest annual spending is incurred on gasoline/oil for OHV and tow vehicles followed by the repairs/maintenance and restaurant/lounge purchases sectors. Day trippers spend the most on restaurant/lounge purchases followed by food and beverage and the clothing sectors whereas the overnight visitors incurred the highest spending in the food and beverage sector followed by the repairs/maintenance and gasoline/oil sectors.

Table 7: Annual Total Spending of Retained Local OHV Visitors on Ancillary Items

| Item | Day Trippers | Overnight Visitors | Total Spending (\$) | Percent |
|--|----------------------|---------------------------|----------------------------|----------------|
| Gasoline/oil for OHV & tow vehicles | 3,844,664.06 | 15,178,852.56 | 139,023,516.62 | 19.10 |
| Restaurant/lounge purchases | 70,958,920.36 | 13,154,884.32 | 84,113,804.68 | 11.56 |
| Food and beverage purchased at grocery and/or convenience stores | 54,409,538.64 | 23,647,513.92 | 78,057,052.56 | 10.72 |
| Guides and tour packages | 4,698,057.26 | 1,827,572.40 | 6,525,629.66 | 0.90 |
| Repairs/maintenance | 16,985,724.00 | 21,676,281.60 | 138,662,005.60 | 19.05 |
| OHV Rentals | 1,758,511.52 | 589,187.52 | 2,347,699.04 | 0.32 |
| Sporting goods | 36,153,804.64 | 10,083,471.60 | 46,237,276.24 | 6.35 |
| Souvenirs and gifts | 1,162,077.36 | 2,431,307.76 | 13,593,385.12 | 1.87 |
| Amusement/Entertainment | 0,070,130.42 | 2,745,904.80 | 22,816,035.22 | 3.13 |
| Clothing - clothing, helmets, boots, gloves etc. | 50,240,525.10 | 6,884,765.28 | 57,125,290.38 | 7.85 |
| Other | 8,829,814.20 | 22,552,788.96 | 31,382,603.16 | 4.31 |
| Lodging - Camping/RV | 47,315,882.00 | 10,001,640.00 | 57,317,522.00 | 7.87 |
| Lodging -Hotel/motel | 44,301,823.06 | 6,393,775.68 | 50,695,598.74 | 6.96 |
| Total | 90,729,472.62 | 137,167,946.40 | 727,897,419.02 | 100.00 |

Average annual spending across the day trippers and overnight visitors is found to be \$2339.87. Day trippers spend \$1,585 annually on ancillary sectors associated with OHV recreation whereas overnight visitors spend \$754.3 annually in the ancillary sectors. A detailed breakdown is presented in Table 8. Median party size for day trippers is 4 and median party size for overnight visitors is 5. Median value for number of nights for overnight retained visitors is 3.

Table 8: Average Annual Spending of Retained OHV Visitors (\$)

| Item | Day trippers | Overnight Visitors | Total | Percent |
|--|-----------------|--------------------|-----------------|---------------|
| Gasoline/oil for OHV & tow vehicles | 332.41 | 83.47 | 415.88 | 17.77 |
| Restaurant/lounge purchases | 190.46 | 72.34 | 262.8 | 11.23 |
| Food and beverage purchased at grocery and/or convenience stores | 146.04 | 130.04 | 276.08 | 11.80 |
| Guides and tour packages | 12.61 | 10.05 | 22.66 | 0.97 |
| Repairs/maintenance | 314 | 119.2 | 433.20 | 18.51 |
| OHV Rentals | 4.72 | 3.24 | 7.96 | 0.34 |
| Sporting goods | 97.04 | 55.45 | 152.49 | 6.52 |
| Souvenirs and gifts | 29.96 | 13.37 | 43.33 | 1.85 |
| Amusement/Entertainment | 53.87 | 15.1 | 68.97 | 2.95 |
| Clothing -helmets, boots, gloves etc. | 134.85 | 37.86 | 172.71 | 7.38 |
| Other OHV trip-related expenses | 23.7 | 124.02 | 147.72 | 6.31 |
| Lodging - Camping/RV | 127 | 55 | 182 | 7.78 |
| Lodging -Hotel/motel | 118.91 | 35.16 | 154.07 | 6.58 |
| Total | 1,585.57 | 754.3 | 2,339.87 | 100.00 |

For the recently visited trail, **Table 9** shows total direct spending on ancillary sectors is \$145.30 million. Highest spending is incurred on repairs/maintenance followed by the sporting goods sector. The day trippers spend the most on repairs/maintenance followed by the clothing sector whereas the overnight visitors incurred the highest spending on sporting goods followed by the repairs/maintenance sector.

Table 9: Total Spending on Ancillary Items at the Recent Trail (\$)

| Item | Day Trippers | Overnight Visitors | Total Spending \$ | Percent |
|--|----------------------|----------------------|-----------------------|---------------|
| Gasoline/oil for OHV & tow vehicles | 8,874,522.12 | 2,749,642.33 | 11,624,164.45 | 8.00 |
| Restaurant/lounge purchases | 6,594,418.20 | 2,050,067 | 8,644,485.20 | 5.95 |
| Food and beverage purchased at grocery and/or convenience stores | 5,722,613.76 | 2,312,427.92 | 8,035,041.68 | 5.53 |
| Guides and tour packages | 491,787.12 | 452,255.2 | 944,042.32 | 0.65 |
| Repairs/maintenance | 27,219,671.96 | 5,367,008.74 | 32,586,680.70 | 22.43 |
| OHV Rentals | 1,046,910.46 | 707,817.10 | 1,754,727.56 | 1.21 |
| Sporting goods | 7,261,311.34 | 22,077,336.92 | 29,338,648.26 | 20.19 |
| Souvenirs and gifts | 1,788,316.80 | 898,329.34 | 2,686,646.14 | 1.85 |
| Amusement/Entertainment | 11,162,077.36 | 1,192,872.89 | 12,354,950.25 | 8.50 |
| Clothing - helmets, boots, gloves etc. | 12,283,501.02 | 2,176,238.07 | 14,459,739.09 | 9.95 |
| Other OHV trip-related expenses | 0.00 | 5,686,694 | 5,686,694.00 | 3.91 |
| Lodging - Camping/RV | 5,674,180.18 | 2,752,225.19 | 8,426,405.37 | 5.80 |
| Lodging - Hotel/motel | 6,713,639.32 | 2,040,747.31 | 8,754,386.63 | 6.03 |
| Total | 94,832,949.64 | 50,463,662.01 | 145,296,611.65 | 100.00 |

Average direct spending figures are presented in **Table 10**. As the table shows, total average spending at the most recent trail is \$399.46

Table 10: Average Spending of Retained Local OHV Visitors at the Recent Trail (\$)

| Item | Day Trippers | Overnight Visitors | Total | Percent |
|--|---------------|--------------------|---------------|---------------|
| Gasoline/oil for OHV & tow vehicles | 23.82 | 15.12 | 38.94 | 9.75 |
| Restaurant/lounge purchases | 17.7 | 11.27 | 28.97 | 7.25 |
| Food and beverage purchased at grocery and/or convenience stores | 15.36 | 12.72 | 28.08 | 7.03 |
| Guides and tour packages | 1.32 | 2.49 | 3.81 | 0.95 |
| Repairs/maintenance | 73.06 | 29.51 | 102.57 | 25.68 |
| OHV Rentals | 2.81 | 3.89 | 6.7 | 1.68 |
| Sporting goods | 19.49 | 11.42 | 30.91 | 7.74 |
| Souvenirs and gifts | 4.8 | 4.94 | 9.74 | 2.44 |
| Amusement/Entertainment | 7.37 | 6.56 | 13.93 | 3.49 |
| Clothing - clothing, helmets, boots, gloves etc. | 32.97 | 11.97 | 44.94 | 11.25 |
| Other OHV trip-related expenses | 0 | 31.27 | 31.27 | 7.83 |
| Lodging - Camping/RV | 15.23 | 15.13 | 30.36 | 7.60 |
| Lodging -Hotel/motel | 18.02 | 11.22 | 29.24 | 7.32 |
| Total | 231.95 | 167.51 | 399.46 | 100.00 |

*Median Party Size of Day Trippers: 4; Median Party Size for Overnight Visitors: 5; and Median Nights for Overnight Visitors: 3

Out-of-State OHV Visitors

With regard to out of state visitors, total direct spending is \$65.51 million. **Table 11** shows that the highest annual spending is incurred in the gasoline/oil for OHV and tow vehicles sector followed by the lodging (camping/RV) and restaurant/lounge purchases sectors. Highest annual direct spending by day trippers is in the gasoline/oil for OHV and tow vehicles sector followed by restaurant/lounge purchases and food and beverage sectors. Overnight visitors spend the most on gasoline/oil for OHV and tow vehicles followed by the food and beverage and lodging (camping/RV) sectors. Total average annual spending per person per day across the day trippers and overnight visitors is \$1,421.33. See **Table 12** for detailed breakdown. Day tripper and overnight respondents spent money on additional OHV-related items such as other vehicle repairs, new tires, permits, entry-related fees, food and beverages, and other miscellaneous items.

Table 11: Total Annual Spending by Out of State Visitors on Ancillary Sectors (\$)

| Item | Day Trippers | Overnight Visitors | Total Spending | Percent |
|--|----------------------|----------------------|----------------------|--------------|
| Gasoline/oil for OHV & tow vehicles | 8,725,268.48 | 4,481,862.00 | 13,207,026.00 | 20.16 |
| Restaurant/lounge purchases | 5,873,050.24 | 3,331,145.40 | 9,203,961.47 | 14.05 |
| Food and beverage purchased at grocery and/or convenience stores | 4,343,285.12 | 3,701,207.40 | 8,044,494.60 | 12.28 |
| Guides and tour packages | 211,260.80 | 67,551.00 | 278,828.20 | 0.43 |
| Lodging - Camping/RV | 5,741,160.32 | 3,544,371.60 | 9,285,612.44 | 14.17 |
| Lodging Hotel/motel | 419,757.44 | 128,053.20 | 547,775.60 | 0.84 |
| Repairs/maintenance | 1,115,141.12 | 890,498.40 | 2,005,621.34 | 3.06 |
| OHV Rentals | 958,768.64 | 844,093.80 | 1,803,077.89 | 2.75 |
| Sporting goods | 1,357,202.56 | 1,705,809.60 | 3,585,767.22 | 5.47 |
| Souvenirs and gifts | 2,290,698.88 | 1,515,492.00 | 3,806,467.00 | 5.81 |
| Amusement/Entertainment | 3,080,853.76 | 1,802,143.20 | 4,883,013.48 | 7.45 |
| Clothing - clothing, helmets, boots, gloves etc. | 2,292,673.28 | 2,629,789.80 | 4,922,584.00 | 7.51 |
| Other OHV trip-related expenses | 1,535,688.32 | 2,402,466.00 | 3,937,891.77 | 6.01 |
| Total | 37,944,808.96 | 27,044,483.40 | 65,512,121.01 | 100 |

Table 12: Average Annual Spending of Out-of-State OHV Visitors (\$)

| Item | Day trippers | Overnight Visitors | Total Spending | Percent |
|--|---------------|--------------------|----------------|---------------|
| Gasoline/oil for OHV & tow vehicles | 220.96 | 76.3 | 297.26 | 20.91 |
| Restaurant/lounge purchases | 148.73 | 56.71 | 205.44 | 14.45 |
| Food and beverage purchased at grocery and/or convenience stores | 109.99 | 63.01 | 173.00 | 12.17 |
| Guides and tour packages | 5.35 | 1.15 | 6.50 | 0.46 |
| Repairs/maintenance | 145.39 | 60.34 | 205.73 | 14.47 |
| OHV Rentals | 10.63 | 2.18 | 12.81 | 0.90 |
| Sporting goods | 28.24 | 15.16 | 43.4 | 3.05 |
| Souvenirs and gifts | 24.28 | 14.37 | 38.65 | 2.72 |
| Amusement/Entertainment | 34.37 | 29.04 | 63.41 | 4.46 |
| Clothing - clothing, helmets, boots, gloves etc. | 58.01 | 25.8 | 83.81 | 5.90 |
| Other OHV trip-related expenses | 78.02 | 30.68 | 108.7 | 7.65 |
| Lodging - Camping/RV | 58.06 | 44.77 | 102.83 | 7.23 |
| Lodging -Hotel/motel | 38.89 | 40.9 | 79.79 | 5.61 |
| Total | 960.92 | 460.41 | 1421.33 | 100.00 |

Median party size for day trippers is 5.5 and median party size for overnight visitors is 4. Median number of nights is 4.

Table 13 shows direct spending by out of state OHV visitors is \$16.39 million. Highest spending is in the repairs/maintenance sector followed by the ‘other’ category (examples of other category spending are presented on page 19). The day trippers spend the most in the ‘other’ category followed by the repairs/maintenance sector whereas the overnight visitors incurred the highest spending on lodging (hotel/motel) followed by restaurant/lounge purchases. **Table 14** shows that the total average ancillary spending across the day trippers and the overnight visitors is \$356.74.

Table 13: Total Spending of Out-of-State OHV Visitors at a Recent Trail (\$)

| Item | Day Trippers | Overnights | Total Spending | Percent |
|--|---------------------|---------------------|----------------------|---------------|
| Gasoline/oil for OHV & tow vehicles | 734,476.80 | 1,015,700.80 | 1,750,177.60 | 10.7 |
| Restaurant/lounge purchases | 889,269.76 | 1,100,558.29 | 1,989,828.05 | 12.2 |
| Food and beverage purchased at grocery and/or convenience stores | 426,470.40 | 841,600.50 | 1,268,070.90 | 7.8 |
| Guides and tour packages | 34,749.44 | 66,283.08 | 101,032.52 | 0.6 |
| Repairs/maintenance | 1,497,779.84 | 785,558.80 | 2,283,338.64 | 14.0 |
| OHV Rentals | 358,945.92 | 0.00 | 358,945.92 | 2.2 |
| Sporting goods | 190,727.04 | 159,448.70 | 350,175.74 | 2.0 |
| Souvenirs and gifts | 197,045.12 | 365,436.23 | 562,481.35 | 3.4 |
| Amusement/Entertainment | 553,226.88 | 432,012.20 | 985,239.08 | 6.0 |
| Clothing - clothing, helmets, boots, gloves etc. | 640,100.48 | 475,593.80 | 1,115,694.28 | 6.8 |
| Other OHV trip-related expenses | 2,290,698.88 | 463,967.84 | 2,754,666.72 | 16.9 |
| Lodging - Camping/RV | 210,865.92 | 822,118.54 | 1,032,984.46 | 6.2 |
| Lodging - Hotel/motel | 555,596.16 | 1,279,941.34 | 1,835,537.50 | 11.1 |
| Total | 8,579,952.64 | 7,808,220.12 | 16,388,172.76 | 100.00 |

Table 14: Average Annual Spending of Out-of-State OHV Visitors at the most recent trail (\$)

| Item | Day Trippers | Overnight Visitors | Total Spending | Percent |
|--|---------------------|---------------------------|-----------------------|----------------|
| Gasoline/oil for OHV & tow vehicles | 18.6 | 17.29 | 35.89 | 10.1 |
| Restaurant/lounge purchases | 22.52 | 18.74 | 41.26 | 11.6 |
| Food and beverage purchased at grocery and/or convenience stores | 10.8 | 14.33 | 25.13 | 7.0 |
| Guides and tour packages | 0.88 | 1.13 | 2.01 | 0.6 |
| Repairs/maintenance | 37.93 | 13.37 | 51.3 | 14.4 |
| OHV Rentals | 9.09 | 6.53 | 15.62 | 4.4 |
| Sporting goods | 4.83 | 2.71 | 7.54 | 2.1 |
| Souvenirs and gifts | 4.99 | 6.22 | 11.21 | 3.1 |
| Amusement/Entertainment | 14.01 | 7.35 | 21.36 | 6.0 |
| Clothing - helmets, boots, gloves etc. | 16.21 | 8.1 | 24.31 | 6.8 |
| Other OHV trip-related expenses | 58.01 | 7.9 | 65.91 | 18.5 |
| Lodging - Camping/RV | 5.34 | 14 | 19.34 | 5.4 |
| Lodging -Hotel/motel | 14.07 | 21.79 | 35.86 | 10.1 |
| Total | 217.28 | 139.46 | 356.74 | 100.0 |

OHV Operating Expenses

This section presents a breakdown of expenses associated with the operation of OHV vehicles. For the purpose of economic impact, breakdown of visitors based on each OHV type is computed from the number of visitors who offered vehicle spending data.

OHV Vehicle Spending by Retained Visitors

Table 15 presents economic impact contributions of OHV expenditures. As Table 15 shows, OHV spending generated \$1.70 billion in output, \$1.04 billion in value added and 11,180 jobs. **Table 16** presents a breakdown of state/local and federal tax contributions. **Table 17** presents top ten industries that benefited the most by the OHV expenditures. Total State and Local tax contributions are \$148.48 million and total federal tax contributions are \$68.94 million.

Table 15: Economic Impact of OHV Expenditures (\$)

| Impact Type | Employment | Labor Income | Value Added | Output |
|---------------------|------------------|--------------------|----------------------|----------------------|
| Direct Effect | 5,572.74 | 341,420,128 | 587,895,749 | 888,684,878 |
| Indirect Effect | 2,342.84 | 119,147,907 | 196,786,965 | 353,697,933 |
| Induced Effect | 3,265.25 | 145,762,361 | 261,206,508 | 457,294,654 |
| Total Effect | 11,180.84 | 606,330,397 | 1,045,889,222 | 1,699,677,465 |

Table 16: State/Local and Federal Tax Contributions (\$)

| Tax Category | Employee Compensation | Proprietor Income | Tax on Production | Households | Corporations | Total |
|-------------------------|-----------------------|-------------------|--------------------|-------------------|------------------|--------------------|
| Total State & Local Tax | 0 | 0 | 135,435,460 | 11,040,627 | 2,007,606 | 148,483,693 |
| Total Federal Tax | 65,924,594 | 3,017,185 | \$17,162,341 | \$41,046,375 | \$18,943,849 | 68,941,779 |
| Total Tax | 65,924,594 | 3,017,185 | 135,435,460 | 11,040,627 | 2,007,606 | 217,425,472 |

Table 17: Economic Impact Contributions of Top Ten Industries (\$)

| Items | Employment | Labor Income | Value Added | Output |
|--|------------|---------------|---------------|---------------|
| Wholesale trade | 2,473.6 | 202,944,563.9 | 381,095,831.0 | 580,544,277.3 |
| Retail - Motor vehicle and parts dealers | 1,362.2 | 84,767,915.2 | 137,083,841.1 | 176,473,729.8 |
| Real estate | 450.0 | 8,813,284.6 | 57,080,580.1 | 83,675,319.3 |
| Retail - Gasoline stores | 1,248.8 | 39,743,321.1 | 53,069,119.3 | 85,552,487.8 |
| Insurance agencies, brokerages, and related activities | 529.1 | 29,948,218.5 | 42,773,095.8 | 92,325,962.6 |
| Owner-occupied dwellings | 0.0 | 0.0 | 34,226,655.8 | 52,764,190.9 |
| Retail - General merchandise stores | 329.8 | 9,582,722.7 | 16,043,751.1 | 24,322,754.8 |
| Management of companies and enterprises | 120.8 | 10,607,465.5 | 13,367,835.4 | 24,939,675.6 |
| Employment services | 211.8 | 8,748,405.6 | 12,799,628.4 | 16,932,932.2 |
| Hospitals | 146.9 | 11,022,970.1 | 12,752,035.9 | 22,533,179.5 |

Approximately 20% use ATV followed by UTV, SUV, Dirt Bikes, 4WD, desert buggies and snowmobiles. As **Table 18** illustrates, annual total OHV operating expense by retained visitors is \$888.68 million. Because it was possible to obtain the actual Sticker fund revenue from Arizona State Parks, the amount (\$2.3 million) based on online data is substituted with the actual expense incurred by the state of Arizona. The highest annual spending is associated with vehicle purchase followed by accessories. To eliminate omission bias, the ‘other’ category was included. Day tripper and overnight respondents spent money on additional OHV-related items such as vehicle repairs, new tires, trailers, permits and decals, camping gear, entry-related fees, food and beverages, maps and GPS equipment, and other miscellaneous items.

Table 18: Annual Total OHV Vehicle Spending by Retained AZ Users (\$)

| Item | Total Spending | Percent |
|---|-----------------------|---------------|
| Motorized recreational accessories (trailers, covers, add ons etc.) | 170,694,308.13 | 19.21 |
| Annual Insurance payment | 51,658,232.06 | 5.81 |
| Licenses, registration/ permit | 17,396,118.66 | 1.96 |
| Sticker fund* | 5,076,200.32 | 0.57 |
| Club memberships | 2,318,170.33 | 0.26 |
| Purchase of OHVs | 540,999,088.51 | 60.88 |
| Fuel, oil, & lubricants (OHV) | 83,638,294.60 | 9.41 |
| Other expenses | 16,904,481.07 | 1.90 |
| Total | 888,684,893.68 | 100.00 |

Table 19 offers an itemized breakdown of total spending per vehicle. As the results show, highest vehicle related spending is incurred by those who own a Side by Side followed by SUV/Jeep and dirt bike. Average per person spending by items and vehicles is presented in **Tables 20-22**.

Table 19: Vehicle related Expenses of Retained Local Visitors (\$)

| Item | ATV | Dirt Bike | Dual Sport Bike | 4 WD | Side by Side | SUV/Jeep | Snow-mobiles | Dune Buggy |
|---|----------------------|-----------------------|------------------------|----------------------|-----------------------|-----------------------|---------------------|---------------------|
| Motorized recreational accessories (trailers, covers, add ons etc.) | 19,374,969.24 | 21,343,302.92 | 5,976,755.17 | 23,059,155.24 | 62,966,317.24 | 37,165,246.17 | 0.00 | 808,562.15 |
| Annual Insurance payment | 7,507,543.41 | 3,245,183.68 | 2,145,370.11 | 9,835,391.79 | 12,141,140.63 | 16,507,737.52 | 111,837.27 | 164,027.64 |
| Licenses, registration/ permit | 2,609,679.17 | 1,358,837.50 | 851,405.69 | 3,554,918.12 | 3,926,103.18 | 5,046,924.17 | 10,438.15 | 37,812.69 |
| Sticker fund | 260,613.62 | 576,762.07 | 220,104.52 | 97,596.43 | 612,643.09 | 282,845.09 | 0.00 | 5,395.65 |
| Club memberships | 295,289.15 | 740,687.16 | 255,883.03 | 100,056.84 | 410,786.63 | 511,151.00 | 0.00 | 4,316.52 |
| Purchase of OHVs | 40,930,739.93 | 64,341,879.02 | 20,635,978.46 | 42,024,087.02 | 303,650,321.38 | 68,092,059.39 | 0.00- | 1,324,023.31 |
| Fuel, oil, & lubricants (OHV) | 10,237,270.29 | 9,974,928.82 | 4,506,760.45 | 13,804,461.17 | 23,143,013.21 | 21,071,081.68 | 186,395.45 | 714,383.52 |
| Other expenses | 195,019.59 | 4,081,865.95 | 917,235.09 | 2,839,728.00 | 6,631,373.51 | 2,196,093.76 | 0.00 | 43,165.17 |
| Total | 81,411,124.40 | 105,663,447.12 | 35,509,492.52 | 95,315,394.62 | 413,481,698.86 | 150,873,138.80 | 308,670.87 | 3,101,686.63 |

Table 20: Average Spending on OHV Vehicle Operating Expenses (\$)

| Vehicle | Average spending | Percent |
|-------------------------|------------------|---------------|
| Dune Buggy | 784.70 | 8.28 |
| SUV/Jeep | 1,408.05 | 14.86 |
| UTV/Side by Side | 995.33 | 10.50 |
| Snowmobile | 1,509.33 | 15.93 |
| 4WD | 2,785.42 | 29.39 |
| Dual Purpose Sport Bike | 1,273.08 | 13.43 |
| Dirt Bike | 376.36 | 3.97 |
| ATV | 343.81 | 3.63 |
| Total | 9,476.10 | 100.00 |

*Median party size for all OHVs excluding snowmobiles and dune buggy is 4. Median party size for snowmobiles and dune buggies is 9.5 and 5.5 respectively.

Table 21: Average Spending per Item across all OHV Vehicles (\$)

| Item | Average spending | Percent |
|---|------------------|---------------|
| Motorized recreational accessories (trailers, covers, add ons etc.) | 1,831.24 | 19.32 |
| Annual Insurance payment | 707.12 | 7.46 |
| Licenses, registration/ permit | 209.37 | 2.21 |
| Sticker fund | 25.02 | 0.26 |
| Club memberships | 29.03 | 0.31 |
| Purchase of OHVs | 5,262.68 | 55.54 |
| Fuel, oil, & lubricants (OHV) | 1,216.68 | 12.84 |
| Other expenses | 194.94 | 2.06 |
| Total | 9,476.10 | 100.00 |

Table 22: Average Expenditures based on Type of OHV Vehicle (\$)

| Item | ATV | Dirt | Dual | 4WD | UTV | SUV | Snow | Buggy | Total |
|-----------------|---------------|-----------------|---------------|-----------------|-----------------|-----------------|---------------|---------------|-----------------|
| Accessories | 186.75 | 284.42 | 167.53 | 365.15 | 424.17 | 313.60 | 0 | 89.63 | 1,831.24 |
| Insurance | 72.36 | 43.24 | 60.13 | 155.74 | 81.79 | 139.29 | 136.36 | 18.18 | 707.12 |
| Registration | 25.15 | 18.11 | 23.86 | 56.29 | 26.45 | 42.59 | 12.73 | 4.19 | 209.37 |
| Sticker Funds | 2.51 | 7.69 | 6.17 | 1.55 | 4.13 | 2.39 | 0 | 0.60 | 25.02 |
| Club | 2.85 | 9.87 | 7.17 | 1.58 | 2.77 | 4.31 | 0 | 0.48 | 29.03 |
| Buy | 394.52 | 857.40 | 578.43 | 665.46 | 2045.54 | 574.57 | 0 | 146.76 | 5,262.68 |
| Fuel | 98.67 | 132.92 | 126.32 | 218.60 | 155.90 | 177.80 | 227.27 | 79.19 | 1,216.68 |
| Other | 1.88 | 54.39 | 25.71 | 44.97 | 44.67 | 18.53 | 0 | 4.78 | 194.94 |
| Total \$ | 784.70 | 1,408.05 | 995.33 | 1,509.33 | 2,785.42 | 1,273.08 | 376.36 | 343.81 | 9,476.10 |

OHV Operating Expenses by Out of State Visitors

Tables 23-27 present results on annual OHV expenses. Approximately \$177.61 million is incurred by out of state OHV visitors on vehicle expenses. As illustrated by **Table 23**, the highest spending is incurred on the purchase of OHVs followed by motorized recreational accessories and fuel, oil and lubricants. **Table 24** presents expense breakdown per OHV vehicle type and **Tables 25-27** present itemized average spending information for each person. Median party size for SUV/Jeep and UTV/Side by Side is 5, median party size for ATV and dual purpose bikes is 4. Median party size for dirt bikes and 4 WD is 5 and 2.5 respectively. Median party size for dune buggy is 6.5. To eliminate omission bias, visitors were offered an ‘other’ category to capture spending on items not listed in survey. Additional OHV-related items noted are other vehicle repairs, new tires, permits, entry-related fees, food and beverage, and other miscellaneous items.

Table 23: Annual Vehicle-related Expenses of Out-of-State OHV Visitors (\$)

| Item | All Vehicle Total | Percent |
|---|----------------------|--------------|
| Motorized recreational accessories (trailers, covers, add ons etc.) | 29,448,953.9 | 16.6 |
| Annual Insurance payment | 7,454,786.8 | 4.2 |
| Licenses, registration/ permit | 3,099,375.5 | 1.7 |
| Sticker fund | 287,823.5 | 0.2 |
| Club memberships | 468,141.6 | 0.3 |
| Purchase of OHVs | 122,723,431.8 | 69.1 |
| Fuel, oil, & lubricants (OHV) | 12,609,539.8 | 7.1 |
| Other expenses | 1,514,549.8 | 0.9 |
| Total | 177,606,602.8 | 100.0 |

Table 24: Total operating Expenses per OHV Vehicle for Out-of-State Visitors (\$)

| Item | Dune Buggy | SUV | UTV | 4WD | Dual | Dirt bikes | ATV | Total |
|--------------|--------------------|---------------------|----------------------|---------------------|--------------------|---------------------|---------------------|----------------------|
| Accessories | 109,246.2 | 2,138,313.5 | 16,471,122.0 | 2,972,812.4 | 532,542.9 | 4,007,463.2 | 3,217,453.9 | 29,448,953.9 |
| Insurance | 86,486.5 | 1,622,815.2 | 2,000,562.8 | 2,369,729.2 | 149,407.9 | 351,105.0 | 874,680.3 | 7,454,786.8 |
| Registration | 13,132.3 | 348,515.9 | 795,809.5 | 1,229,362.1 | 100,591.4 | 293,902.5 | 318,061.8 | 3,099,375.5 |
| Sticker Fund | 4,551.9 | 32,546.3 | 106,513.6 | 13,017.9 | 22,928.9 | 52,271.3 | 55,993.7 | 287,823.5 |
| Club | 11,379.8 | 44,381.3 | 108,817.9 | 84,024.6 | 7,396.4 | 153,855.0 | 58,286.7 | 468,141.6 |
| Buy | 227,596.2 | 8,977,692.9 | 78,331,693.9 | 9,914,660.9 | 473,371.4 | 13,610,250.0 | 11,188,166.5 | 122,723,431.8 |
| Fuel | 238,976.0 | 2,053,964.3 | 4,049,885.2 | 3,809,507.7 | 310,650.0 | 791,465.6 | 1,355,091.1 | 12,609,539.8 |
| Other | 455,192.3 | 266,287.5 | 469,090.8 | - | - | - | 323,979.2 | 1,514,549.8 |
| Total | 1,146,561.1 | 15,484,516.7 | 102,333,495.7 | 20,393,114.7 | 1,596,888.9 | 19,260,312.5 | 17,391,713.1 | 177,606,602.8 |

Table 25: Average Spending on OHV Vehicle Operating Expenses (\$)

| Vehicle | Average spending | Percent |
|-------------------------|------------------|--------------|
| Dune Buggy | 484.39 | 4.8 |
| SUV/Jeep | 1,090.31 | 10.9 |
| UTV/Side by Side | 2,620.24 | 26.1 |
| Snowmobile | 0.00 | 0.0 |
| 4WD | 1,914.67 | 19.1 |
| Dual Purpose Sport Bike | 385.54 | 3.8 |
| Dirt Bike | 2,712.34 | 27 |
| ATV | 839.73 | 8.4 |
| Total | 10,047.22 | 100.1 |

*Median party size for all vehicles is found to be 4

Table 26: Average Spending per Item across all OHV Vehicles (\$)

| Item | Average spending | Percent |
|---|------------------|---------------|
| Motorized recreational accessories (trailers, covers, add ons etc.) | 1745.84 | 17.4 |
| Annual Insurance payment | 552.27 | 5.5 |
| Licenses, registration/ permit | 246.92 | 2.5 |
| Sticker fund | 23.76 | 0.2 |
| Club memberships | 44.87 | 0.4 |
| Purchase of OHVs | 6236 | 62.1 |
| Fuel, oil, & lubricants (OHV) | 958.84 | 9.5 |
| Other expenses | 238.71 | 2.4 |
| Total | 10,047.22 | 100.00 |

Table 27: Average Expenditures based on Type of OHV Vehicle (\$)

| Item | Dune Buggy | SUV | UTV | 4WD | Dual | Dirt | ATV | Total \$ |
|--------------|---------------|-----------------|-----------------|-----------------|---------------|-----------------|---------------|------------------|
| Accessories | 46.15 | 150.56 | 421.74 | 279.11 | 128.57 | 564.35 | 155.35 | 1,745.84 |
| Insurance | 36.54 | 114.27 | 51.22 | 222.49 | 36.07 | 49.44 | 42.23 | 552.27 |
| Registration | 5.55 | 24.54 | 20.38 | 115.42 | 24.29 | 41.39 | 15.36 | 246.92 |
| Sticker Fund | 1.92 | 2.29 | 2.73 | 1.22 | 5.54 | 7.36 | 2.70 | 23.76 |
| Club | 4.81 | 3.13 | 2.79 | 7.89 | 1.79 | 21.67 | 2.81 | 44.87 |
| Buy | 96.15 | 632.14 | 2,005.68 | 930.87 | 114.29 | 1,916.67 | 540.20 | 6,236.00 |
| Fuel | 100.96 | 144.63 | 103.70 | 357.67 | 75.00 | 111.46 | 65.43 | 958.84 |
| Other | 192.31 | 18.75 | 12.01 | 0.00 | 0.00 | 0.00 | 15.64 | 238.71 |
| Total | 484.39 | 1,090.31 | 2,620.24 | 1,914.67 | 385.54 | 2,712.34 | 839.73 | 10,047.21 |

*Snowmobile: \$0

Section 2: Direct Spending of OHV Visitors at three most popular trails: Boulders, Lake Havasu, and Table Mesa

Approximately 140,278 (14.1%) of all OHV visitors frequent three popular trails. Online survey results show that 5.6% of the respondents frequent the Boulders OHV area. Percent of visitors using Lake Havasu and Table Mesa are 4.7% (46,759 users) and 3.8% (37,805) respectively. **Table 28** presents total economic impact of all three trails and **Table 29** presents further break down of the results. Visitors to these trails incur \$14.74 million in direct spending in ancillary sectors. **Table 30** presents tax related impacts. **Table 31** presents an overview of direct spending of OHV visitors to Boulders, Lake Havasu and Table Mesa.

Table 28: Total Economic Impact of OHV Recreation (Ancillary Spending) (\$)

| Event | Jobs | Labor Income | Value Added | Output |
|--------------|--------------|---------------------|----------------------|----------------------|
| Boulders | 47.9 | 1,984,156 | 3,185,793 | 5,146,124 |
| Lake Havasu | 78 | 2,014,618 | 3,332,048 | 5,885,995 |
| Table Mesa | 102.6 | 4,475,955 | 6,891,704 | 11,002,211 |
| TOTAL | 228.5 | 8,474,729.00 | 13,409,545.00 | 22,034,330.00 |

Table 29: Economic Impact Breakdown in terms of Direct, Indirect and Induced Benefits (\$)

| Impact Type | Employment | Labor Income | Value Added | Output |
|---------------------|--------------|-------------------|-------------------|-------------------|
| Direct Effect | 251.1 | 9,178,894 | 13,380,153 | 20,778,721 |
| Indirect Effect | 42 | 2,120,461 | 4,009,699 | \$6,759,641 |
| Induced Effect | 82.7 | 3,893,785 | 6,868,926 | 11,731,171 |
| Total Effect | 375.7 | 15,193,140 | 24,258,778 | 39,269,534 |

Table 30: State/Local and Federal Taxes Contributions (\$)

| Tax Category | Employee | Proprietor | Tax on | Households | Corporations | Total |
|------------------------------------|------------------|---------------|------------------|------------------|----------------|------------------|
| Total State & Local Tax | 0.00 | 0.00 | 2,724,975 | 282,963 | 41,449 | 3,049,387 |
| Total Federal Tax | 1,598,701 | 84,340 | 360,558 | 1,059,829 | 394,779 | 3,498,207 |
| Total | 1,598,701 | 84,340 | 3,085,533 | 1,342,792 | 436,228 | 6,547,594 |

Table 31: Aggregate Ancillary Expenditures for Top Three Trails (\$)

| Item | Boulders | Havasu | Table mesa | Total Expenditures \$ |
|---------------------|---------------------|---------------------|---------------------|-----------------------|
| Retained | 4,131,636.82 | 5,856,805.96 | 4,020,518.44 | 14,008,961.22 |
| Out of State | 0.00 | 733,605.76 | 0.00 | 733,605.76 |
| Total | 4,131,636.82 | 6,590,411.72 | 4,020,518.44 | 14,742,566.98 |

Next, a detailed breakdown of impact and direct spending is offered on each of the three trails.

Boulders

Approximately 72.6% of the OHV visitors to the Boulder trails are retained (n=95). The data reported only one out of AZ visitor. Hence **Tables 32-36** present direct spending of retained visitors out of which 85.5% are day trippers (n=59)

Table 32: Economic Impact of Ancillary Spending at Boulders (\$)

| Impact Type | Employment | Labor Income | Value Added | Output |
|------------------------|-------------|--------------------|--------------------|--------------------|
| Direct Effect | 31.6 | \$1,196,042 | \$1,759,443 | \$2,722,826 |
| Indirect Effect | 5.5 | \$279,159 | \$528,701 | \$890,779 |
| Induced Effect | 10.8 | \$508,955 | \$897,648 | \$1,532,518 |
| Total Effect | 47.9 | \$1,984,156 | \$3,185,793 | \$5,146,124 |

Table 33: State/Local and Federal Tax Contributions (\$)

| Tax Category | Employee | Proprietor | Tax on | Households | Corporations | Total |
|---------------------------|-----------------|-------------------|----------------|-------------------|---------------------|----------------|
| Total State and Local Tax | 0.00 | 0.00 | 359,328 | 37,040 | 5,509 | 401,877 |
| Total Federal Tax | 204,825 | 12,446 | 47,603 | 138,700 | 52,463 | 456,037 |
| Total | 204,825 | 12,446 | 406,931 | 175,740 | 57,972 | 857,914 |

Table 34: Economic Impact Contributions of Top Ten Industries (\$)

| Description | Employment | Labor Income | Value Added | Output |
|--|-------------------|---------------------|--------------------|---------------|
| Automotive repair and maintenance, except car washes | 11.9 | 691,513 | 860,090 | 1,238,343 |
| Limited-service restaurants | 5.0 | 101,656 | 245,944 | 426,311 |
| Real estate | 1.6 | 33,806 | 226,207 | 320,094 |
| Retail - Clothing and clothing accessories stores | 4.0 | 123,344 | 221,138 | 351,901 |
| Hotels and motels, including casino hotels | 2.1 | 75,414 | 149,775 | 239,249 |
| Owner-occupied dwellings | 0.0 | 0.00 | 112,055 | 172,706 |
| Wholesale trade | 0.5 | 44,515 | 82,302 | 122,740 |
| Retail - Food and beverage stores | 1.5 | 52,239 | 77,573 | 113,104 |
| Retail - Sporting goods, hobby, musical instrument and book stores | 2.0 | 45,737 | 67,465 | 107,201 |
| Retail - Gasoline stores | 1.4 | 51,301 | 66,383 | 103,269 |

Table 35: Total Direct Spending by Retained OHV Users on Ancillary Items (\$)

| Item | Day Trippers | Over Night Visitors | Total Spending | Percent |
|--|---------------------|---------------------|---------------------|----------------|
| Gasoline/oil for OHV & tow vehicles | 581,685.00 | 80,606.15 | 662,291.15 | 16.00% |
| Restaurant/lounge purchases | 337,786.83 | 40,303.08 | 378,089.91 | 9.20% |
| Food and beverage purchased at grocery and/or convenience stores | 245,566.63 | 80,430.71 | 325,997.34 | 7.90% |
| Guides and tour packages | 15,167.80 | 0.00 | 15,167.80 | 0.40% |
| Lodging -Camping/RV | 95,102.08 | 35,666.22 | 130,768.30 | 3.20% |
| Lodging- Hotel/motel | 232,825.68 | 6,015.38 | 238,841.06 | 5.80% |
| Repairs/maintenance | 1,108,765.93 | 118,102.05 | 1,226,867.98 | 29.70% |
| OHV Rentals | 45,503.39 | 0.00 | 45,503.39 | 1.10% |
| Sporting goods | 230,853.86 | 15,489.62 | 246,343.48 | 6.00% |
| Souvenirs and gifts | 72,350.39 | 20,051.28 | 92,401.67 | 2.20% |
| Amusement/Entertainment | 25,785.25 | 7,017.95 | 32,803.20 | 0.80% |
| Clothing - helmets, boots, gloves etc. | 696,960.25 | 39,601.28 | 736,561.53 | 17.80% |
| Total | 3,688,353.10 | 443,283.72 | 4,131,636.82 | 100.00% |

Table 36: Average Spending by Retained OHV AZ Users, at Boulders, on Ancillary Items (\$)

| Item | Day Trippers | Over Night Visitors | Total Average Spending | Percent |
|--|---------------|---------------------|------------------------|---------------|
| Gasoline/oil for OHV & tow vehicles | 16.25 | 13.74 | 29.99 | 16.8% |
| Restaurant/lounge purchases | 9.44 | 6.87 | 16.31 | 9.1% |
| Food and beverage purchased at grocery and/or convenience stores | 6.86 | 13.71 | 20.57 | 11.5% |
| Guides and tour packages | 0.42 | 0.00 | 0.42 | 0.2% |
| Lodging - Camping/RV | 2.66 | 6.08 | 8.74 | 4.9% |
| Lodging Hotel/motel | 6.50 | 1.03 | 7.53 | 4.2% |
| Repairs/maintenance | 30.97 | 20.14 | 51.11 | 28.6% |
| OHV Rentals | 1.27 | 0.00 | 1.27 | 0.7% |
| Sporting goods | 6.45 | 2.64 | 9.09 | 5.1% |
| Souvenirs and gifts | 2.02 | 3.42 | 5.44 | 3.0% |
| Amusement/Entertainment | 0.72 | 1.20 | 1.92 | 1.1% |
| Clothing - clothing, helmets, boots, gloves etc. | 19.47 | 6.75 | 26.22 | 14.7% |
| Total | 103.04 | 75.58 | 178.62 | 100.0% |

*Median party size for Day tripper=4; Median party size for overnight visitors=5; median nights=2.34

Lake Havasu

Approximately 81.7% of Lake Havasu visitors are local, of which 82.8% are retained (n=58). The remaining are from out-of-state (n=10). Out of the retained visitors, 75.6% are day trippers (n=48) and 60% of the out-of-state (18.3%) are day trippers. Total direct ancillary spending by retained OHV visitors to Lake Havasu is \$7.17 million. **Tables 37- 39** present economic impact contributions of visitor spending at Lake Havasu. **Tables 40-43** present a detailed breakdown of spending by retained and out of state visitors on ancillary spending items

Table 37: Economic Impact of Ancillary Spending at Boulders (\$)

| Impact Type | Employment | Labor Income | Value Added | Output |
|---------------------|------------|------------------|------------------|------------------|
| Direct Effect | 69.8 | 1,750,218 | 2,764,305 | 4,740,368 |
| Indirect Effect | 4 | 124,976 | 234,452 | 519,665 |
| Induced Effect | 4.2 | 139,424 | 333,291 | 625,962 |
| Total Effect | 78 | 2,014,618 | 3,332,048 | 5,885,995 |

Table 38: State/Local and Federal Tax Contributions (\$)

| Tax Category | Employee | Proprietor | Tax on | Households | Corporations | Total |
|---------------------------|----------------|--------------|----------------|----------------|---------------|------------------|
| Total State and Local Tax | 0.00 | 0.00 | 600,606 | 27,975 | 4,512 | 633,093 |
| Total Federal Tax | 263,688 | 8,035 | 52,219 | 112,657 | 43,874 | 480,473 |
| Total | 263,688 | 8,035 | 652,825 | 140,632 | 48,386 | 1,113,566 |

Table 39: Economic Impact Contributions of Top Ten Industries (\$)

| Item | Employment | Labor Income | Value Added | Output |
|--|------------|--------------|-------------|-------------|
| Automotive repair and maintenance, except car washes | 18.8 | \$756,006 | \$1,016,062 | \$1,614,943 |
| Limited-service restaurants | 10.3 | \$370,609 | \$645,852 | \$1,021,125 |
| Hotels and motels, including casino hotels | 4.9 | \$90,542 | \$214,549 | \$424,948 |
| Retail - Food and beverage stores | 4.4 | \$133,211 | \$202,733 | \$305,363 |
| Other accommodations | 10.5 | \$123,596 | \$174,526 | \$373,355 |
| Retail - Gasoline stores | 5 | \$116,550 | \$169,660 | \$301,462 |
| Other amusement and recreation industries | 3.8 | \$91,124 | \$156,126 | \$255,709 |
| Retail - Clothing and clothing accessories stores | 4.8 | \$65,930 | \$154,637 | \$313,785 |
| Owner-occupied dwellings | 0 | \$0 | \$105,951 | \$163,298 |
| Real estate | 1.2 | \$27,657 | \$91,160 | \$161,705 |

Retained

Table 40: Total Spending by Retained OHV AZ Users, at Lake Havasu, on Ancillary Items

| Item | Day Trippers | Over Night Visitors | Total Spending | Percent |
|--|---------------------|---------------------|---------------------|---------------|
| Gasoline/oil for OHV & tow vehicles | 1,849,498.13 | 75,145.56 | 1,924,643.69 | 26.8% |
| Restaurant/lounge purchases | 836,024.38 | 67,416.30 | 903,440.68 | 12.6% |
| Food and beverage purchased at grocery and/or convenience stores | 900,784.25 | 65,197.72 | 965,981.97 | 13.5% |
| Guides and tour packages | 10,976.25 | 2,862.69 | 13,838.94 | 0.2% |
| Lodging - Camping/RV | 220,073.81 | 33,550.70 | 253,624.51 | 3.5% |
| Lodging Hotel/motel | 320,140.63 | 42,940.32 | 363,080.95 | 5.1% |
| Repairs/maintenance | 1,418,680.31 | 78,180.01 | 1,496,860.32 | 20.9% |
| OHV Rentals | 0.00 | 0.00 | 0.00 | 0.0% |
| Sporting goods | 175,345.59 | 1,746.24 | 177,091.83 | 2.5% |
| Souvenirs and gifts | 237,818.75 | 11,450.75 | 249,269.50 | 3.5% |
| Amusement/Entertainment | 137,386.06 | 29,092.07 | 166,478.13 | 2.3% |
| Clothing - clothing, helmets, boots, gloves etc. | 573,417.59 | 74,143.62 | 647,561.21 | 9.0% |
| Other OHV trip-related expenses | - | 6,906.23 | 6,906.23 | 0.1% |
| Total | 6,680,145.75 | 488,632.19 | 7,168,777.94 | 100.0% |

Table 41: Average Spending by Retained OHV Visitors on Ancillary Items (\$)

| Item | Day Trippers | Over Night Visitors | Total Average Spending | Percent |
|--|---------------------|----------------------------|-------------------------------|----------------|
| Gasoline/oil for OHV & tow vehicles | 63.19 | 7.95 | 71.14 | 25.4% |
| Restaurant/lounge purchases | 28.56 | 7.14 | 35.7 | 12.8% |
| Food and beverage purchased at grocery and/or convenience stores | 30.78 | 6.90 | 37.68 | 13.5% |
| Guides and tour packages | 0.38 | 0.30 | 0.68 | 0.2% |
| Lodging - Camping/RV | 7.52 | 3.55 | 11.07 | 4.0% |
| Lodging Hotel/motel | 10.94 | 4.55 | 15.49 | 5.5% |
| Repairs/maintenance | 48.47 | 8.28 | 56.75 | 20.3% |
| OHV Rentals | 0.00 | 0.00 | 0 | 0.0% |
| Sporting goods | 5.99 | 0.18 | 6.17 | 2.2% |
| Souvenirs and gifts | 8.13 | 1.21 | 9.34 | 3.3% |
| Amusement/Entertainment | 4.69 | 3.08 | 7.77 | 2.8% |
| Clothing - clothing, helmets, boots, gloves etc. | 19.59 | 7.85 | 27.44 | 9.8% |
| Other OHV trip-related expenses | 0.00 | 0.73 | 0.73 | 0.3% |
| Total | 228.23 | 51.72 | 279.95 | 100.0% |

*Median party size for day tripper =4; Median party size for overnight visitors =11; median nights=6

Out-of-State

Out of state OHV visitors generate direct annual spending of \$.73 million. **Table 42** presents a breakdown by different sectors and **Table 43** presents a breakdown of average per person spending figures. As **Table 43** shows, no spending is reported on some ancillary items.

Table 42: Total Annual Spending by Out-of-State OHV Visitors on Ancillary Sectors (\$)

| Item | Day Trippers | Over Night Visitors | Total Spending | Percent |
|--|-------------------|---------------------|-------------------|---------------|
| Gasoline/oil for OHV & tow vehicles | 76,442.47 | 3,818.19 | 80,260.66 | 10.9% |
| Restaurant/lounge purchases | 71,142.46 | 4,405.60 | 75,548.06 | 10.3% |
| Food and beverage purchased at grocery and/or convenience stores | 67,880.91 | 3,561.20 | 71,442.11 | 9.7% |
| Guides and tour packages | 0.00 | 0.00 | 0.00 | 0.0% |
| Lodging - Camping/RV | 122,307.95 | 0.00 | 122,307.95 | 16.7% |
| Lodging Hotel/motel | 61,153.98 | 0.00 | 61,153.98 | 8.3% |
| Repairs/maintenance | 116,192.55 | 0.00 | 116,192.55 | 15.8% |
| OHV Rentals | 0 | 0 | 0.00 | 0.0% |
| Sporting goods | 36,692.39 | 0.00 | 36,692.39 | 5.0% |
| Souvenirs and gifts | 42,807.78 | 0.00 | 42,807.78 | 5.8% |
| Amusement/Entertainment | 85,615.57 | 0.00 | 85,615.57 | 11.7% |
| Clothing - clothing, helmets, boots, gloves etc. | 27,519.29 | 0.00 | 27,519.29 | 3.8% |
| Other OHV trip-related expenses | 14,065.414 52 | 0.00 | 14,065.41 | 1.9% |
| Total | 721,820.77 | 11,784.99 | 733,605.76 | 100.0% |

Table 43: Average Spending by Out of State Spending on Ancillary Items (\$)

| Item | Day Trippers | Over Night Visitors | Total Average Spending (\$) | Percent |
|--|---------------------|----------------------------|------------------------------------|----------------|
| Gasoline/oil for OHV & tow vehicles | 14.88 | 1.11 | 16.00 | 11.10% |
| Restaurant/lounge purchases | 13.85 | 1.29 | 15.14 | 10.50% |
| Food and beverage purchased at grocery and/or convenience stores | 13.21 | 1.04 | 14.25 | 9.90% |
| Guides and tour packages | 0.00 | 0.00 | 0.00 | 0.00% |
| Lodging - Camping/RV | 23.81 | 0.00 | 23.81 | 16.50% |
| Lodging Hotel/motel | 11.9 | 0.00 | 11.9 | 8.30% |
| Repairs/maintenance | 22.62 | 0.00 | 22.62 | 15.70% |
| OHV Rentals | 0.00 | 0.00 | 0.00 | 0.00% |
| Sporting goods | 7.14 | 0.00 | 7.14 | 5.00% |
| Souvenirs and gifts | 8.33 | 0.00 | 8.33 | 5.80% |
| Amusement/Entertainment | 16.67 | 0.00 | 16.67 | 11.60% |
| Clothing - helmets, boots, gloves etc. | 5.36 | 0.00 | 5.36 | 3.70% |
| Other OHV trip-related expenses | 2.74 | 0.00 | 2.74 | 1.90% |
| Total | 140.52 | 3.44 | 143.96 | 100.00% |

*Median party size for day tripper =7; Median party size for overnight visitors =5.5; median nights=26.5

Table Mesa

Tables 44-46 present economic impact contributions of OHV visitors to Table Mesa in terms of jobs, value added and output. **Tables 47 and 48** present spending information of OHV visitors to the Table Mesa trail. Approximately 98% of the visitors are found to be local. Furthermore, 73.8% of locals are retained and 75% of retained visitors are day trippers. Only two respondents are from out-of-state, hence their spending is not reported. As **Table 47** shows, total direct spending generated at this trail by day trippers and overnight visitors is \$4.02 million. Table 29 presents a breakdown of average spending on ancillary items by day trippers and overnight retained visitors. Median party size for day trippers is 4. Median party size for overnight visitors is found to be 12 and median number of nights is 2.

Table 44: Economic Impact of Ancillary Spending at Table Mesa (\$)

| Impact Type | Employment | Labor Income | Value Added | Output |
|-----------------|------------|--------------|-------------|--------------|
| Direct Effect | 67.5 | \$2,791,718 | \$3,831,935 | \$5,824,809 |
| Indirect Effect | 10.7 | \$535,834 | \$1,034,359 | \$1,719,420 |
| Induced Effect | 24.4 | \$1,148,402 | \$2,025,409 | \$3,457,982 |
| Total Effect | 102.6 | \$4,475,955 | \$6,891,704 | \$11,002,211 |

Table 45: State/Local and Federal Tax Contributions (\$)

| Tax Category | Employee | Proprietor | Tax on | Households | Corporations | Total |
|---------------------------|----------|------------|---------|------------|--------------|-----------|
| Total State and Local Tax | 0.00 | 0.00 | 800,177 | 83,518 | 10,464 | 894,159 |
| Total Federal Tax | 64,999 | 26,987 | 106,005 | 312,741 | 99,655 | 1,010,387 |
| Total | 64,999 | 26,987 | 906,182 | 396,259 | 110,119 | 1,904,546 |

Table 46: Economic Impact Contributions of Top Ten Industries (\$)

| Description | Employment | Labor Income | Value Added | Output |
|--|------------|--------------|-------------|-------------|
| Automotive repair and maintenance, except car washes | 35.4 | \$2,064,325 | \$2,567,567 | \$3,696,740 |
| Real estate | 3.4 | \$71,870 | \$480,899 | \$680,496 |
| Limited-service restaurants | 6.6 | \$135,888 | \$328,764 | \$569,867 |
| Owner-occupied dwellings | 0 | \$0 | \$252,741 | \$389,540 |
| Other accommodations | 11.5 | \$144,984 | \$200,661 | \$417,566 |
| Retail - Food and beverage stores | 3.7 | \$124,471 | \$184,835 | \$269,494 |
| Wholesale trade | 1.1 | \$98,337 | \$181,810 | \$271,141 |
| Retail - Clothing and clothing accessories stores | 2.8 | \$85,979 | \$154,147 | \$245,297 |
| Hotels and motels, including casino hotels | 1.8 | \$65,612 | \$130,307 | \$208,152 |
| Retail - General merchandise stores | 2.3 | \$66,844 | \$111,515 | \$169,873 |

Table 47: Total Spending by Retained OHV Visitors on Ancillary Items (\$)

| Item | Day Trippers | Over Night Visitors | Total Spending | Percent |
|--|---------------------|---------------------|---------------------|---------------|
| Gasoline/oil for OHV & tow vehicles | 458,295.02 | 26,881.00 | 485,176.01 | 12.1% |
| Restaurant/lounge purchases | 203,047.99 | 27,210.54 | 230,258.53 | 5.7% |
| Food and beverage purchased at grocery and/or convenience stores | 363,528.93 | 29,470.23 | 392,999.16 | 9.8% |
| Guides and tour packages | 0.00 | 0.00 | 0.00 | 0.0% |
| Lodging - Camping/RV | 195,280.28 | 15,017.58 | 210,297.86 | 5.2% |
| Lodging Hotel/motel | 71,462.95 | 31,070.85 | 102,533.81 | 2.6% |
| Repairs/maintenance | 1,623,451.83 | 216,201.36 | 1,839,653.20 | 45.8% |
| OHV Rentals | 77677.12121 | 0.00 | 77,677.12 | 1.9% |
| Sporting goods | 173,219.98 | 14,240.81 | 187,460.79 | 4.7% |
| Souvenirs and gifts | 19,419.28 | 3,813.24 | 23,232.52 | 0.6% |
| Amusement/Entertainment | 37,285.02 | 5,178.48 | 42,463.49 | 1.1% |
| Clothing - helmets, boots, gloves etc. | 218,390.40 | 11,651.57 | 230,041.97 | 5.7% |
| Other OHV trip-related expenses | 198076.6591 | 647.31 | 198,723.97 | 4.9% |
| Total | 3,639,135.47 | 381,382.97 | 4,020,518.44 | 100.0% |

Table 48: Average Spending by Retained OHV Visitors on Ancillary Items (\$)

| Item | Day Trippers | Over Night Visitors | Total Average Spending | Percent |
|--|---------------------|----------------------------|-------------------------------|----------------|
| Gasoline/oil for OHV & tow vehicles | 22.35 | 3.93 | 26.28 | 11.3% |
| Restaurant/lounge purchases | 9.90 | 3.98 | 13.88 | 6.0% |
| Food and beverage purchased at grocery and/or convenience stores | 17.73 | 4.31 | 22.04 | 9.4% |
| Guides and tour packages | 0.00 | 0.00 | 0.00 | 0.0% |
| Lodging - Camping/RV | 9.52 | 2.20 | 11.72 | 5.0% |
| Lodging Hotel/motel | 3.48 | 4.55 | 8.03 | 3.4% |
| Repairs/maintenance | 79.17 | 31.63 | 110.80 | 47.5% |
| OHV Rentals | 3.79 | 0.00 | 3.79 | 1.6% |
| Sporting goods | 8.45 | 2.08 | 10.53 | 4.5% |
| Souvenirs and gifts | 0.95 | 0.56 | 1.50 | 0.6% |
| Amusement/Entertainment | 1.82 | 0.76 | 2.58 | 1.1% |
| Clothing - helmets, boots, gloves etc. | 10.65 | 1.70 | 12.35 | 5.3% |
| Other OHV trip-related expenses | 9.66 | 0.09 | 9.75 | 4.2% |
| Total | 177.46 | 55.79 | 233.25 | 100.0% |

Section 3: Direct Expenditures by Onsite Respondents

Table 49 presents total itemized average annual spending for retained and out of state OHV visitors. Total annual average spending for both retained and out-of-state visitors is \$5,381.94. **Tables 50 and 51** give average breakdown by retained and out-of-state visitors. **Table 50** gives a detailed breakdown of annual average per person per day expenditures. Median party size for day trippers and overnight visitors is 2 and median number of nights is 3. **Table 51** offers average spending per item, at the visited trail, where the survey is conducted. Median party size for day trippers and overnight visitors, at the trail, is 2 and median number of nights is 3. **Tables 52 and 53** present a similar breakdown for out-of-state visitors. Annual median party size for day trippers and overnight visitors is 2 and median nights is 3. For the visited trail, where the visitors are surveyed, median party size for day trippers and overnight visitors is again 2 but median number of nights is found to be 9.5

Table 49: Total Average Annual Ancillary Spending of OHV Visitors (\$)

| Item | Retained | Out of AZ | Total Spending \$ | Percent |
|--|-----------------|-----------------|-------------------|---------------|
| Gasoline/oil for OHV & tow vehicles | 522.36 | 545.31 | 1,067.67 | 19.8% |
| Restaurant/lounge purchases | 410.11 | 454.41 | 864.52 | 16.1% |
| Food and beverage purchased at grocery and/or convenience stores | 464.18 | 688.04 | 1,152.22 | 21.4% |
| Guides and tour packages | 18.29 | 1.17 | 19.46 | 0.4% |
| Lodging - Camping/RV | 157.71 | 177.78 | 335.49 | 6.2% |
| Lodging -Hotel/motel | 438.58 | 582.81 | 1,021.39 | 19.0% |
| Repairs/maintenance | 3.45 | 10.00 | 13.45 | 0.2% |
| OHV Rentals | 66.19 | 126.75 | 192.94 | 3.6% |
| Sporting goods | 47.27 | 138.97 | 186.24 | 3.5% |
| Souvenirs and gifts | 22.64 | 94.36 | 117.00 | 2.2% |
| Amusement/Entertainment | 177.08 | 158.13 | 335.21 | 6.2% |
| Clothing - clothing, helmets, boots, gloves etc. | 59.66 | 16.70 | 76.36 | 1.4% |
| Total | 2,387.51 | 2,994.43 | 5,381.94 | 100.0% |

Retained OHV Visitors

Table 50: Average Annual Ancillary Spending of Retained OHV Visitors (\$)

| Item | Day Trippers | Over Night Visitors | Total Spending | Percent |
|--|-----------------|---------------------|-----------------|----------------|
| Gasoline/oil for OHV & tow vehicles | 402.47 | 119.89 | 522.36 | 21.90% |
| Restaurant/lounge purchases | 291.54 | 118.57 | 410.11 | 17.20% |
| Food and beverage purchased at grocery and/or convenience stores | 332.26 | 131.93 | 464.18 | 19.40% |
| Guides and tour packages | 18.29 | 0.00 | 18.29 | 0.80% |
| Lodging -Camping/RV | 136.28 | 21.42 | 157.71 | 6.60% |
| Lodging- Hotel/motel | 336.34 | 102.24 | 438.58 | 18.40% |
| Repairs/maintenance | 0.00 | 3.45 | 3.45 | 0.10% |
| OHV Rentals | 0.00 | 0.00 | 0.00 | 0.00 |
| Sporting goods | 65.04 | 1.15 | 66.19 | 2.80% |
| Souvenirs and gifts | 34.45 | 12.82 | 47.27 | 2.00% |
| Amusement/Entertainment | 20.54 | 2.1 | 22.64 | 0.90% |
| Clothing - helmets, boots, gloves etc. | 160.43 | 16.65 | 177.08 | 7.40% |
| Other OHV trip-related expenses | 57.36 | 2.3 | 59.66 | 2.50% |
| Total | 1,854.99 | 532.52 | 2,387.51 | 100.00% |

Table 51: Average Ancillary Spending of Out-of-State OHV Visitors at the Trail (\$)

| Item | Day Trippers | Overnight Visitors | Total Spending \$ | Percent |
|--|---------------|--------------------|-------------------|---------------|
| Gasoline/oil for OHV & tow vehicles | 24.21 | 22.61 | 46.82 | 19.0% |
| Restaurant/lounge purchases | 29.72 | 16.25 | 45.96 | 18.7% |
| Food and beverage purchased at grocery and/or convenience stores | 28.50 | 12.20 | 40.70 | 16.5% |
| Guides and tour packages | 2.20 | 0.00 | 2.20 | 0.9% |
| Lodging - Camping/RV | 14.60 | 16.66 | 31.26 | 12.7% |
| Lodging -Hotel/motel | 25.19 | 1.67 | 26.87 | 10.9% |
| Repairs/maintenance | 0.00 | 1.72 | 1.72 | 0.7% |
| OHV Rentals | 7.07 | 1.15 | 8.22 | 3.3% |
| Sporting goods | 4.18 | 2.56 | 6.75 | 2.7% |
| Souvenirs and gifts | 3.05 | 0.00 | 3.05 | 1.2% |
| Amusement/Entertainment | 16.04 | 1.52 | 17.56 | 7.1% |
| Clothing - helmets, boots, gloves etc. | 14.88 | 0.00 | 14.88 | 6.0% |
| Total | 169.64 | 76.35 | 245.99 | 100.0% |

Out of State OHV Visitors

Table 52: Average Annual Ancillary Spending by OHV Visitors (\$)

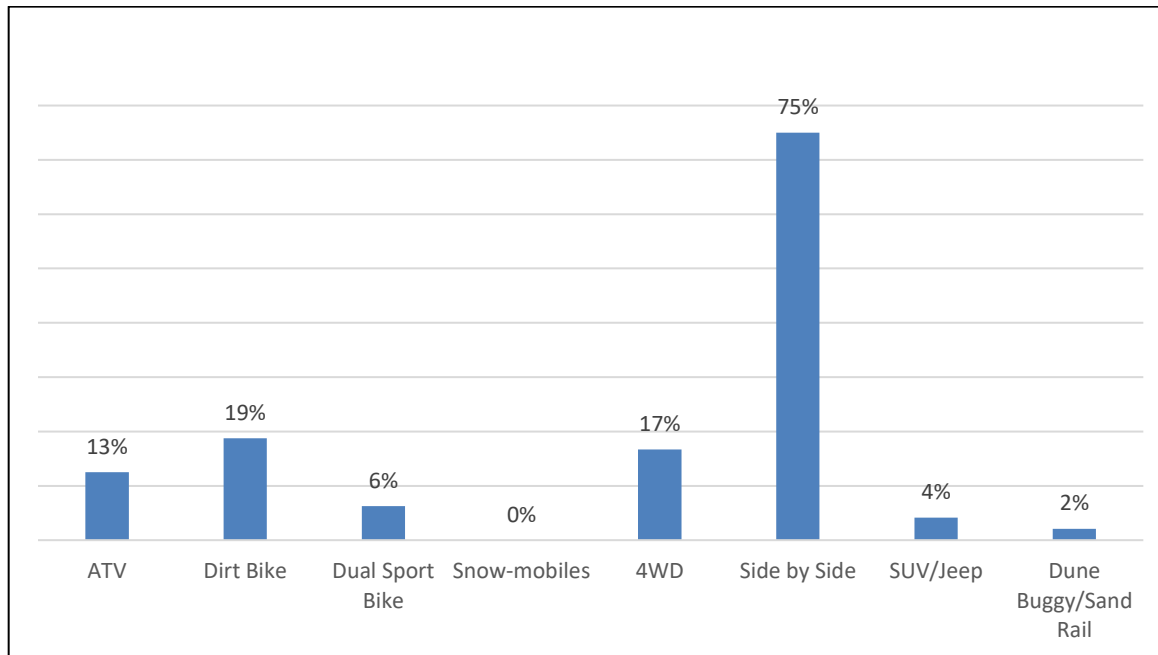
| Item | Day Trippers | Overnight Visitors | Total Spending \$ | Percent |
|--|-----------------|--------------------|-------------------|---------------|
| Gasoline/oil for OHV & tow vehicles | 421.00 | 124.31 | 545.31 | 18.2% |
| Restaurant/lounge purchases | 402.00 | 52.41 | 454.41 | 15.2% |
| Food and beverage purchased at grocery and/or convenience stores | 600.00 | 88.04 | 688.04 | 23.0% |
| Guides and tour packages | 0.00 | 1.17 | 1.17 | 0.0% |
| Lodging - Camping/RV | 165.50 | 12.28 | 177.78 | 5.9% |
| Lodging -Hotel/motel | 548.75 | 34.06 | 582.81 | 19.5% |
| Repairs/maintenance | 10.00 | - | 10.00 | 0.3% |
| OHV Rentals | 125.00 | 1.75 | 126.75 | 4.2% |
| Sporting goods | 114.55 | 24.42 | 138.97 | 4.6% |
| Souvenirs and gifts | 85.00 | 9.36 | 94.36 | 3.2% |
| Amusement/Entertainment | 145.00 | 13.13 | 158.13 | 5.3% |
| Clothing - clothing, helmets, boots, gloves | 5.00 | 11.70 | 16.70 | 0.6% |
| Total | 2,621.80 | 372.63 | 2,994.43 | 100.0% |

Table 53: Average Ancillary Spending of OHV Visitors at the Trail (\$)

| Item | Day Trippers | Overnight Visitors | Total Spending \$ | Percent |
|--|---------------|--------------------|-------------------|---------------|
| Gasoline/oil for OHV & tow vehicles | 16.90 | 25.31 | 42.21 | 10.6% |
| Restaurant/lounge purchases | 69.75 | 16.15 | 85.90 | 21.5% |
| Food and beverage purchased at grocery and/or convenience stores | 64.45 | 25.63 | 90.08 | 22.6% |
| Guides and tour packages | 0.00 | 0.00 | 0.00 | 0.0% |
| Lodging - Camping/RV | 27.50 | 4.39 | 31.89 | 8.0% |
| Lodging -Hotel/motel | 50.00 | 1.68 | 51.68 | 12.9% |
| Repairs/maintenance | 0.00 | 0.00 | 0.00 | 0.0% |
| OHV Rentals | 25.00 | 0.00 | 25.00 | 6.3% |
| Sporting goods | 27.50 | 12.65 | 40.15 | 10.1% |
| Souvenirs and gifts | 17.50 | 2.84 | 20.34 | 5.1% |
| Amusement/Entertainment | 5.00 | 3.98 | 8.98 | 2.2% |
| Clothing - clothing, helmets, boots, gloves | 0.00 | 2.92 | 2.92 | 0.7% |
| Total | 303.60 | 95.55 | 399.15 | 100.0% |

Figures 1 and 2 present type of OHV used by visitors surveyed at the trail site. Tables 54 -55 present spending breakdown based on the most popular vehicle.

Figure 1: Type of OHV Used by Retained Visitors



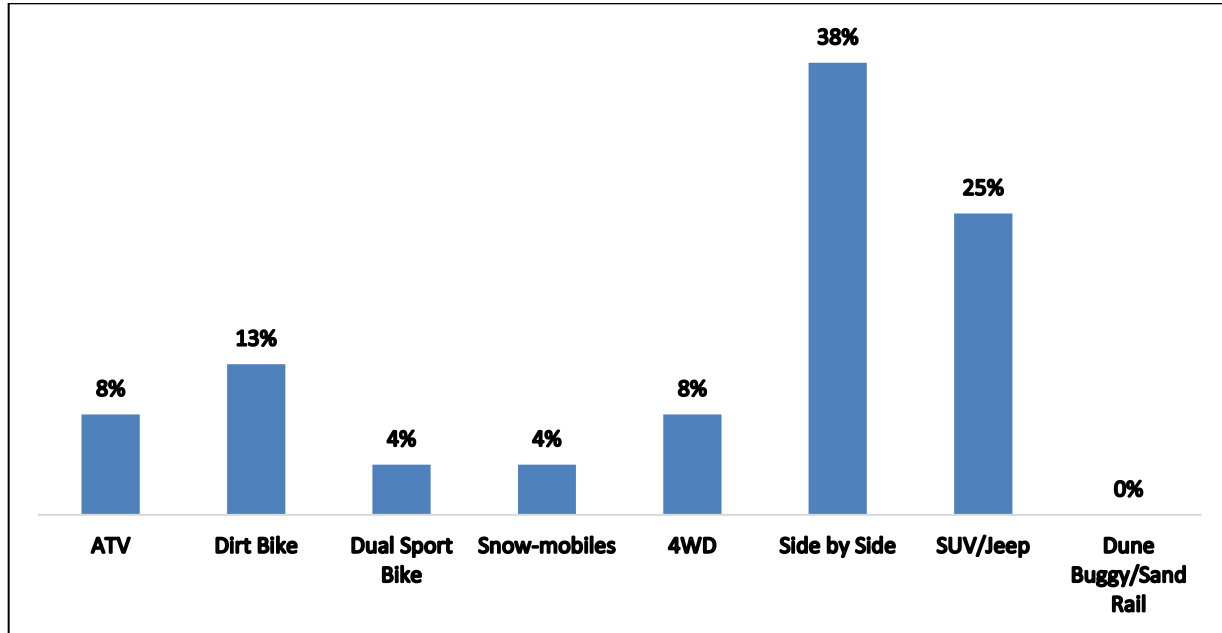
*n=24

Table 54: OHV Operating Expenses by Retained Visitors (\$)

| | Side By Side Average | Side by Side Percent | SUV/Jeep Average | SUV/Jeep Percent |
|---|----------------------|----------------------|------------------|------------------|
| Motorized recreational accessories (trailers, covers, add ons etc.) | 644.44 | 15.0% | 1,041.67 | 29.2% |
| Annual Insurance payment | 139.00 | 3.2% | 256.25 | 7.2% |
| Licenses, registration/ permit | 24.89 | 0.6% | 123.33 | 3.5% |
| Sticker fund | 6.11 | 0.1% | 0.75 | 0.0% |
| Club memberships | 10.56 | 0.2% | 8.75 | 0.2% |
| Purchase of OHVs | 3,055.56 | 71.3% | 1,500.00 | 42.1% |
| Fuel, oil, & lubricants (OHV) | 406.11 | 9.5% | 633.33 | 17.8% |
| Other expenses | - | 0.0% | - | 0.0% |
| Total | 4,286.67 | 100% | 3,564.08 | 100.0% |

*n=10 for Side by Side; n=7 for SUV/Jeep

Figure 2: Type of OHV Used by Out-of-State Visitors



*n=25

Table 55: OHV Operating Expenses by Out-of-State Visitors (\$)

| Item | SUV/Jeep Average | SUV/Jeep Percent |
|---|------------------|------------------|
| Motorized recreational accessories (trailers, covers, add ons etc.) | 798.15 | 17.2% |
| Annual Insurance payment | 173.74 | 3.7% |
| Licenses, registration/ permit | 26.73 | 0.6% |
| Sticker fund | 15.00 | 0.3% |
| Club memberships | 4.51 | 0.1% |
| Purchase of OHVs | 3157.41 | 67.9% |
| Fuel, oil, & lubricants (OHV) | 472.22 | 10.2% |
| Other expenses | 4647.75 | 100.0% |
| Total | 798.15 | 17.2% |

*n=36

Tables 56- 59 offer a more detailed comparison of visitor spending at the trail and at the annual level for retained and out-of-state OHV visitors

Table 56: Average Spending of Retained Day Trippers- at the Trail and Annual (\$)

| Item | Recent Trail | Recent Trail Percent | Annual | Annual Percent |
|--|---------------|----------------------|-----------------|----------------|
| Gasoline/oil for OHV & tow vehicles | 24.21 | 14.3% | 402.47 | 21.7% |
| Restaurant/lounge purchases | 29.72 | 17.5% | 291.54 | 15.7% |
| Food and beverage purchased at grocery and/or convenience stores | 28.50 | 16.8% | 332.26 | 17.9% |
| Guides and tour packages | 2.20 | 1.3% | 18.29 | 1.0% |
| Lodging - Camping/RV | 14.60 | 8.6% | 136.28 | 7.3% |
| Lodging -Hotel/motel | 25.19 | 14.9% | 336.34 | 18.1% |
| Repairs/maintenance | 0.00 | 0.0% | 0.00 | 0.0% |
| OHV Rentals | 7.07 | 4.2% | 65.04 | 3.5% |
| Sporting goods | 4.18 | 2.5% | 34.45 | 1.9% |
| Souvenirs and gifts | 3.05 | 1.8% | 20.54 | 1.1% |
| Amusement/Entertainment | 16.04 | 9.5% | 160.43 | 8.6% |
| Clothing- helmets, boots, gloves etc. | 14.88 | 8.8% | 57.36 | 3.1% |
| Total | 169.64 | 100.0% | 1,854.99 | 100.0% |

* n=41; Median Party Size: 2

Table 57: Average Spending of Out-of-State Overnight Visitors– at the Trail and Annual (\$)

| Item | Recent Trail | Recent Trail Percent | Annual | Annual Percent |
|--|--------------|----------------------|---------------|----------------|
| Gasoline/oil for OHV & tow vehicles | 22.61 | 29.6% | 119.89 | 22.5% |
| Restaurant/lounge purchases | 16.25 | 21.3% | 118.57 | 22.3% |
| Food and beverage purchased at grocery and/or convenience stores | 12.20 | 16.0% | 131.93 | 24.8% |
| Guides and tour packages | 0.0 | 0.0% | 0.00 | 0.0% |
| Lodging - Camping/RV | 16.66 | 21.8% | 21.42 | 4.0% |
| Lodging -Hotel/motel | 1.67 | 2.2% | 102.24 | 19.2% |
| Repairs/maintenance | 1.72 | 2.3% | 3.45 | 0.6% |
| OHV Rentals | 1.15 | 1.5% | 1.15 | 0.2% |
| Sporting goods | 2.56 | 3.4% | 12.82 | 2.4% |
| Souvenirs and gifts | 0.00 | 0.0% | 2.10 | 0.4% |
| Amusement/Entertainment | 1.52 | 2.0% | 16.65 | 3.1% |
| Clothing- helmets, boots, gloves etc. | 0.00 | 0.0% | 2.30 | 0.4% |
| Total | 76.35 | 100.0% | 532.52 | 100.0% |

*n=29; Median party size: 2; Median nights: 9.5

Table 58: Average Spending of Out-of-State Day Trippers – at the Trail and Annual (\$)

| Item | Recent Trail | Recent Trail Percent | Annual | Annual Percent |
|--|--------------|----------------------|---------------|----------------|
| Gasoline/oil for OHV & tow vehicles | 16.9 | 5.6% | 421 | 16.1% |
| Restaurant/lounge purchases | 69.75 | 23.0% | 402 | 15.3% |
| Food and beverage purchased at grocery and/or convenience stores | 64.45 | 21.2% | 600 | 22.9% |
| Guides and tour packages | 0 | 0.0% | 0 | 0.0% |
| Lodging - Camping/RV | 27.5 | 9.1% | 165.5 | 6.3% |
| Lodging -Hotel/motel | 50 | 16.5% | 548.75 | 20.9% |
| Repairs/maintenance | 0 | 0.0% | 10 | 0.4% |
| OHV Rentals | 25 | 8.2% | 125 | 4.8% |
| Sporting goods | 27.5 | 9.1% | 114.55 | 4.4% |
| Souvenirs and gifts | 17.5 | 5.8% | 85 | 3.2% |
| Amusement/Entertainment | 5 | 1.6% | 145 | 5.5% |
| Clothing- helmets, boots, gloves etc. | 0 | 0.0% | 5 | 0.2% |
| Total | 303.6 | 100.0% | 2621.8 | 100.0% |

*n=11; Median party size: 2

Table 59: Average Spending of Out of State Overnight Visitors – at the Trail and Annual (\$)

| Item | Recent Trail | Recent Trail Percent | Annual | Annual Percent |
|--|--------------|----------------------|---------------|----------------|
| Gasoline/oil for OHV & tow vehicles | 25.31 | 26.5% | 124.31 | 33.4% |
| Restaurant/lounge purchases | 16.15 | 16.9% | 52.41 | 14.1% |
| Food and beverage purchased at grocery and/or convenience stores | 25.63 | 26.8% | 88.04 | 23.6% |
| Guides and tour packages | 0.00 | 0.0% | 1.17 | 0.3% |
| Lodging - Camping/RV | 4.39 | 4.6% | 12.28 | 3.3% |
| Lodging -Hotel/motel | 1.68 | 1.8% | 34.06 | 9.1% |
| Repairs/maintenance | 0.00 | 0.0% | 0.00 | 0.0% |
| OHV Rentals | 0.00 | 0.0% | 1.75 | 0.5% |
| Sporting goods | 12.65 | 13.2% | 24.42 | 6.6% |
| Souvenirs and gifts | 2.84 | 3.0% | 9.36 | 2.5% |
| Amusement/Entertainment | 3.98 | 4.2% | 13.13 | 3.5% |
| Clothing- helmets, boots, gloves etc. | 2.92 | 3.1% | 11.70 | 3.1% |
| Total | 95.55 | 100.0% | 372.63 | 100.0% |

*n=19; Median party size: 2; Median nights: 3

Section 4: Marketing Profile & Travel Behavior of Online Respondents

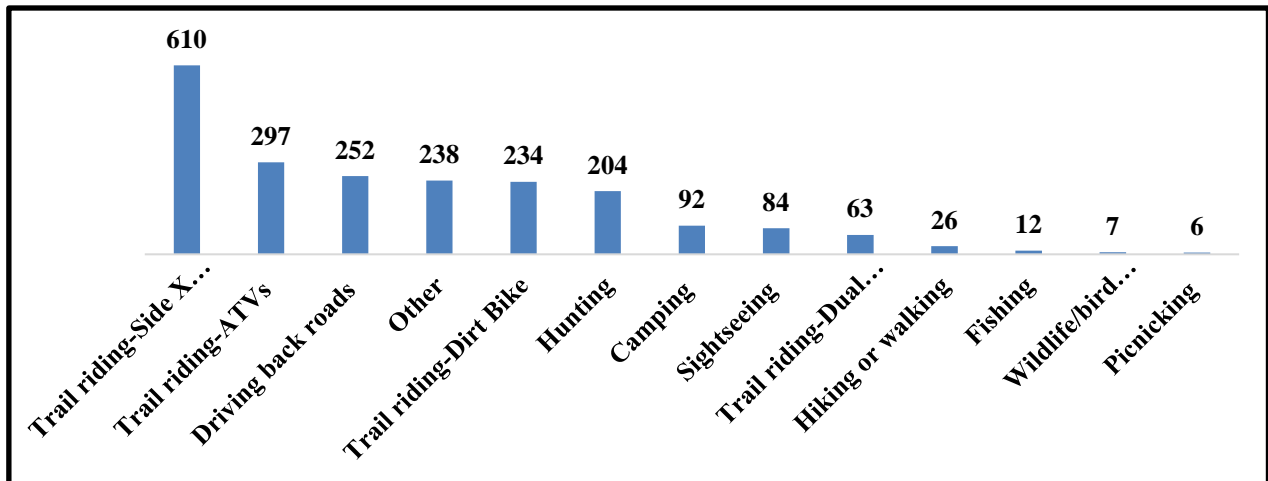
These findings are divided into three main sections: visitor profile, marketing profile, and travel behavior.

Marketing Profile

Survey respondents were asked to select primary reason(s) for taking the most recent OHV trip in 2017. Respondents still planning their trip were requested to state their primary reason for ‘planning’ their OHV trip; 13 possible reasons were listed in the survey, which were identified from documented literature. To eliminate omission bias, an ‘other’ category was offered (for details, please see Appendix- **Table 54**). Several respondents selected multiple reasons. The most popular reasons were trail riding with Side by Sides (610), trail riding with ATVs (297), and driving backroads with 4-wheelers (252), as presented in **Figure 3**.

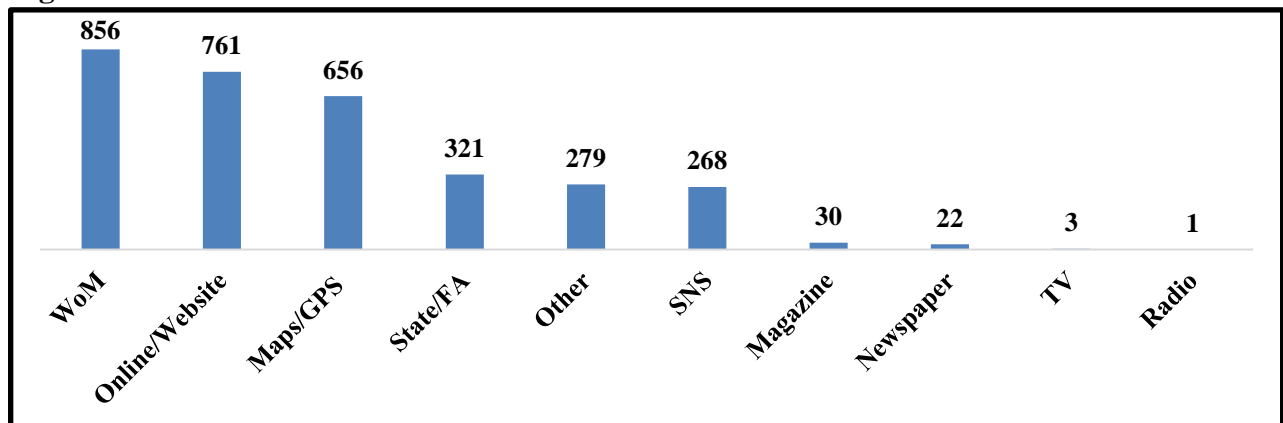
Figure 3: Primary Reason for the most recent OHV trip (n=2,125)

OHV respondents obtained information on OHV trails mostly by word of mouth (856),



online/website (761), and maps/GPS (656). For information on the ‘other’ category, please see Appendix (**Table 55**). A detailed breakdown presented in **Figure 4**.

Figure 4:



Travel Behavior

Travel behavior of survey respondents was determined by: first time OHV users versus repeat visitations, distance traveled to specified OHV site, day trippers versus overnight visitors, time spent in terms of hours (for day trippers) and nights (in terms of overnight visitors), type of OHV vehicle used, and party size. Furthermore, respondents were requested to provide names of Arizona-specific trails they used or planned to use in 2017. To identify retained local OHV visitors, local survey respondents are asked if they would travel to another state in the absence of OHV recreation in Arizona. **Figures 5-8 and Tables 60-63** show survey responses specific to travel behavior.

Figure 5: First Time vs. Repeat Visitors (n=2,810)

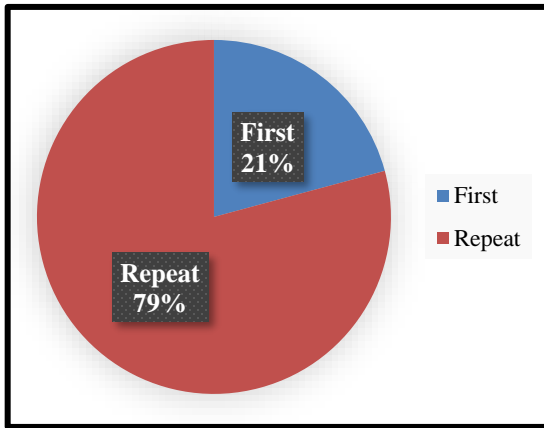


Figure 5 is a breakdown of first time and repeat OHV visitors. Almost 80% are repeat visitors.

Table 60: Day trippers vs Overnights:

Winsorized Average/median Hours and Nights

*Daytripper (n=1,283, after minus 2.5% (32) from each head and tail, total used n=1,219)

*Overnighter (n=690, after minus 2.5% (17) from each head and tail, total used n=656)

| | Day(hour) | Night(night) |
|---------------|-----------|--------------|
| n | 1219 | 656 |
| Mean | 6.77 | 5.97 |
| Median | 6 | 3 |

Information on number of hours and nights spent at the OHV site is shown in **Table 60**. As seen above, median hours spent by day trippers is six and median number of nights spent by overnight

Table 61: Distance Traveled (n=2,003)

| | | |
|---------------------------|--|--------------|
| Mean | | 105.22 miles |
| Median | | 35 miles |
| Standard Deviation | | 297.14 miles |

Average distance traveled (one way) by all OHV survey respondents was 105.2 miles

Figure 6: Day Trippers vs. Overnights (n=2,046)

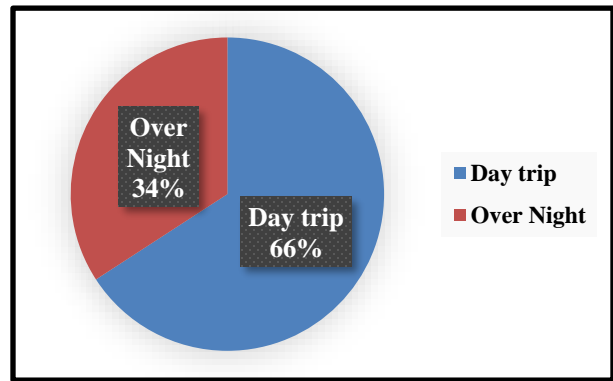


Figure 6 presents a breakdown of day trippers versus overnight visitors. Majority of survey respondents are day trippers.

Table 62: Party Size (n=1,996)

| Party size | Women | Men | Children | Total |
|---------------|-------|------|----------|-------------|
| Mean | 2.50 | 3.17 | 2.69 | 5.77 |
| Median | 2 | 2 | 2 | 4 |

Table 62 presents a breakdown of type of party and party size. Median party size is four and the average number of people per party is about 10 across all OHV users.

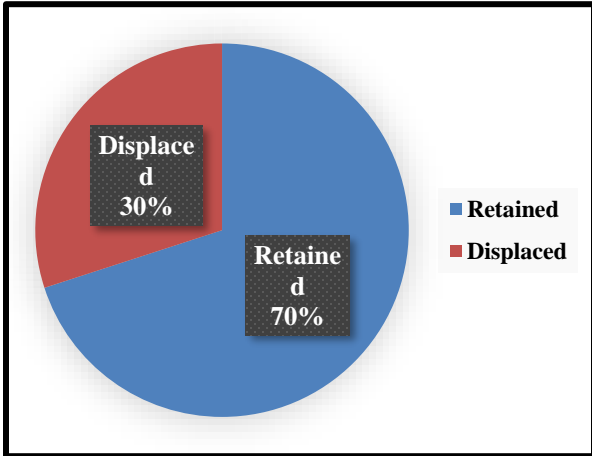


Figure 7: Retained vs. Displaced Local Visitors (n=1,857)

In regards to local OHV survey respondents who would have traveled outside the State of Arizona if OHV recreation trails were not available, **Figure 7** shows that approximately 70% of the local visitors fall into the retained visitor category and 30% are displaced. In other words, 27% of the local visitors would have spent money on other commodities in Arizona in the absence of OHV recreation.

Respondents are also asked to offer information on the type of OHV vehicle used for recreation. **Figure 8** presents a breakdown of visitors based on type of vehicle used. As presented above, most popular OHV vehicles include side by sides (42.9%), SUV/Jeep (18.1%), and ATVs (15.3%). Information in the ‘other’ category is presented in the Appendix C (**Table 54**).

Figure 8: Type of OHV Used (n=2,042)

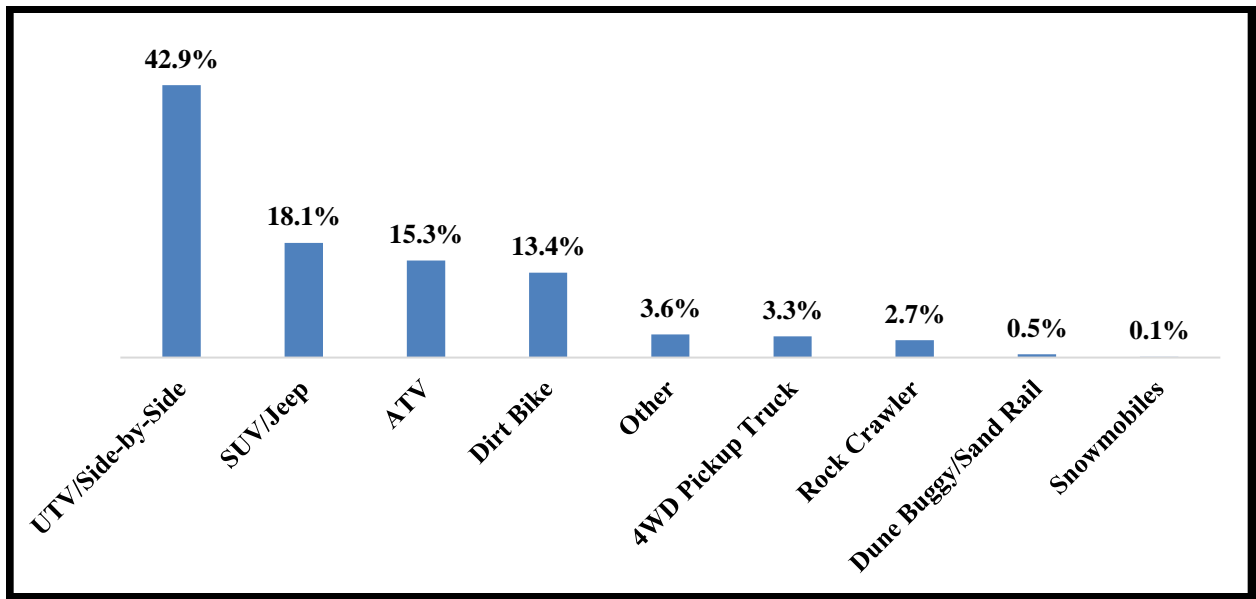


Table 63: Recently Visited Trails (n=2,240: a total of 1,657 respondents answered)

| Rank | Trail | County | N | % |
|------|--------------------------|--------------------------------|-----|------|
| 1 | Boulders/mile markers | Maricopa | 126 | 5.6% |
| 2 | Havasu | La Paz | 106 | 4.7% |
| 3 | Table Mesa | Maricopa | 85 | 3.8% |
| 4 | Peace | La Paz | 79 | 3.5% |
| 5 | Crown King | Yavapai | 63 | 2.8% |
| 6 | Four Peaks | Maricopa | 52 | 2.3% |
| 7 | Quartzsite | La Paz | 49 | 2.2% |
| 8 | Sycamore | Maricopa | 49 | 2.2% |
| 8 | Tonto National Forest | Gila, Maricopa, Yavapai, Pinal | 49 | 2.2% |
| 9 | Bulldog | Maricopa | 46 | 2.1% |
| 9 | Coconino National Forest | Coconino, Gila, Yavapai | 46 | 2.1% |
| 10 | Florence | Pinal | 43 | 1.9% |
| 11 | Sedona | Yavapai | 42 | 1.9% |
| 12 | Box Canyon | Pinal | 39 | 1.7% |
| 12 | Rolls OHV | Maricopa | 39 | 1.7% |
| 13 | Cinder Hills | Coconino | 35 | 1.6% |
| 13 | Reddington | Pima | 35 | 1.6% |
| 14 | Wild Cat | Navajo | 29 | 1.3% |
| 15 | Lake Pleasant | Maricopa | 28 | 1.3% |
| 16 | Mohave County | Mohave | 27 | 1.2% |
| 16 | Prescott National Forest | Yavapai | 27 | 1.2% |
| 17 | Flagstaff | Coconino | 26 | 1.2% |
| 17 | Rim | Coconino, Gila, Yavapai | 26 | 1.2% |
| 17 | Williams | Coconino | 26 | 1.2% |
| 18 | Standard Wash | Mohave | 24 | 1.1% |
| 19 | Parker | La Paz | 23 | 1.0% |
| 20 | Alamo | La Paz | 20 | 0.9% |

*Please see Appendix C: Tables 13-22 breakdown of remaining (44.7%) recently visited trails.

Table 63 presents a detailed breakdown of visitations per trail. Almost six percent of OHV survey respondents used the “Boulders” trail in Maricopa County. About five percent of respondents listed “Lake Havasu or Havasu,” followed by “Table Mesa” at nearly four percent. Arizona Peace Trail, Crown King, Four Peaks, Quartzsite, Sycamore Creek/Trail, and Tonto National Forest were also frequently mentioned by 49 respondents or more. The top 20 trails (shown in **Table 63**) were most

popular among 55.3% of the OHV survey respondents. Breakdown of visitors to other visited trails is presented in Appendix section (Tables 29-52).

Visitor Profile

Approximately 44.2% of all survey respondents shared their place of residence (zip code). Almost 90% of OHV visitors reside in the State of Arizona.

Figure 9: Place of Residence of OHV Visitors

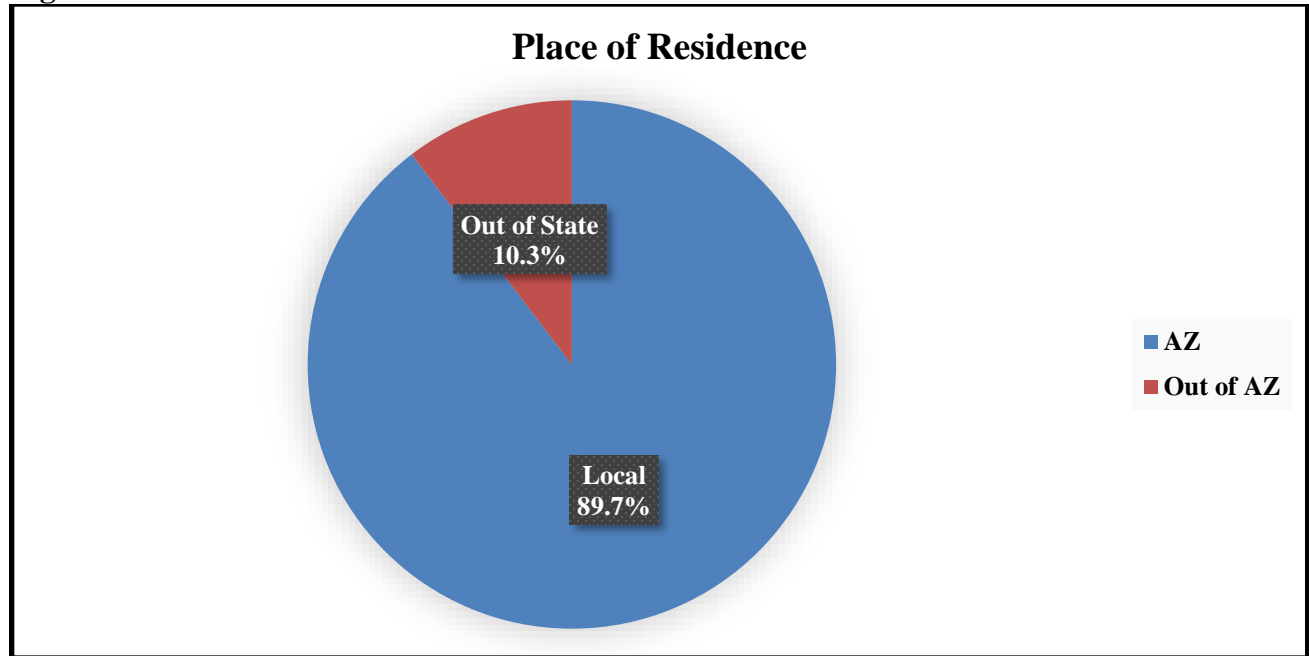


Table 64: Place of Residence of Local OHV Visitors (n=1,401)

| County | N | % |
|----------|-----|-------|
| Maricopa | 766 | 54.7% |
| Mohave | 209 | 14.9% |
| Pima | 126 | 9.0% |
| Yavapai | 113 | 8.1% |
| Coconino | 51 | 3.6% |
| Other | 136 | 9.7% |

*Please see Appendix C -**Table 24** for information on the remaining 9.7%.

Table 64 presents a detailed breakdown of local OHV visitors, based on their place of residence. Approximately 55% of the respondents reside in Maricopa County.

Table 65 State of Residence

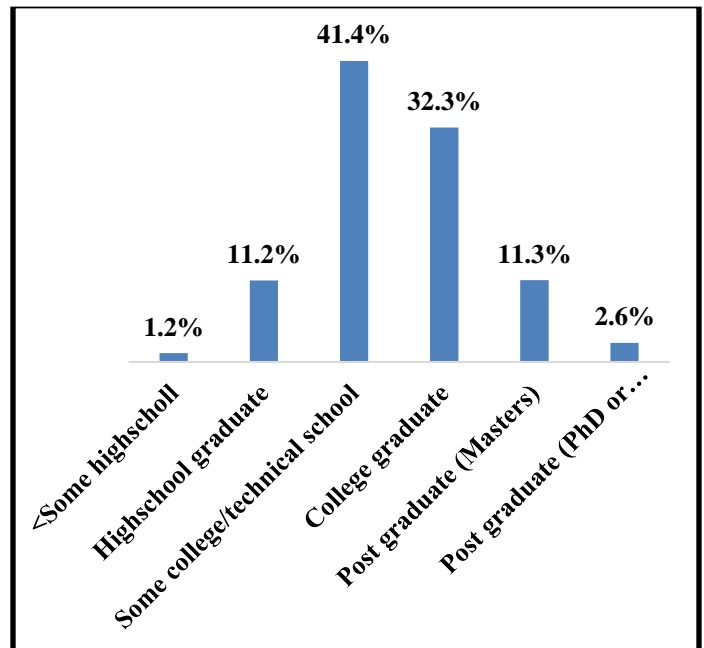
Out-of-State Visitors (n=161)

| State | N | % |
|--------------|----|-------|
| California | 44 | 27.3% |
| Oregon | 13 | 8.1% |
| Washington | 10 | 6.2% |
| Colorado | 9 | 5.6% |
| Nevada | 7 | 4.3% |
| Utah | 7 | 4.3% |
| Illinois | 6 | 3.7% |
| South Dakota | 6 | 3.7% |
| Idaho | 5 | 3.1% |
| New Mexico | 4 | 2.5% |
| Canada | 4 | 2.5% |
| Montana | 4 | 2.5% |
| Other | 42 | 26.1% |

*Please see Appendix -Table 25 for remaining 26.1%.

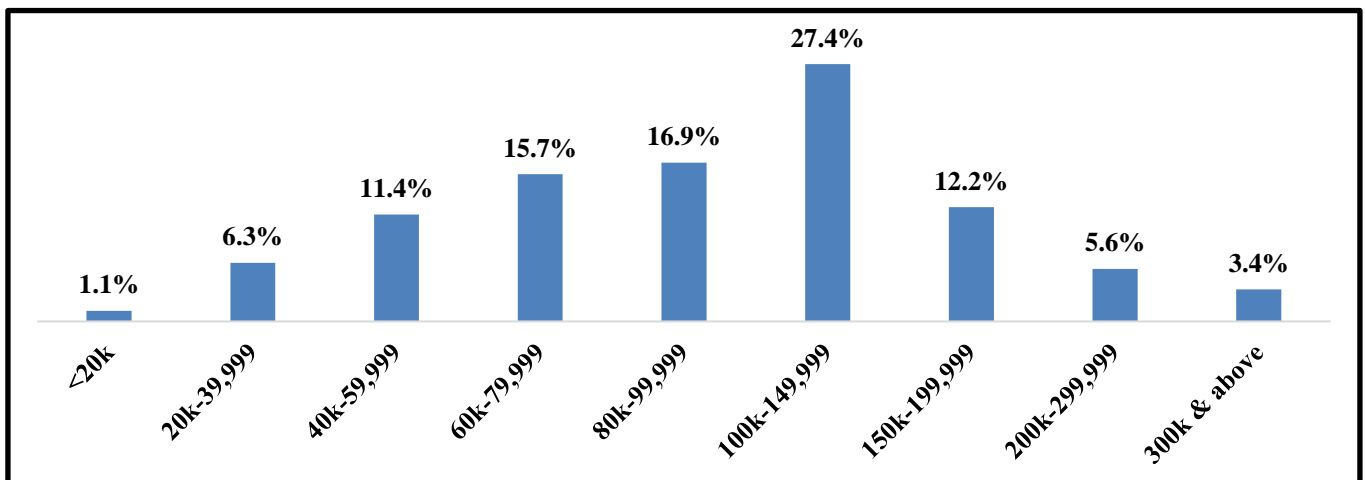
With regard to out-of-state visitors, **Table 65** shows a total of 41.6% respondents are from California, Oregon, and Washington.

Figure 10: Education of OHV Visitors (n=1,589)



It is noted that the majority of the OHV visitors are males (85%). The ethnicity of OHV respondents was mostly Caucasian (91%). Most survey respondents (87.6%), as seen in **Figure 10**, are college graduates or have attended some college/technical school.

Figure 11: Annual Household Income (n=1,518)



Nearly 49% of respondents' household income is more than \$100,000, annually (**Figure 11**). Furthermore, only 7.4% of the OHV visitors have an annual household income of \$40,000 or less.

Out-of-State

Marketing Profile

Survey respondents are asked to select primary reason(s) for taking the most recent OHV trip in 2017. Respondents still planning their trip are requested to state their primary reason for ‘planning’ their OHV trip; 13 possible reasons are listed in the survey, which are identified from documented literature. To eliminate omission bias, an ‘other’ category is offered. Several respondents selected multiple reasons. The most popular reasons are trail riding with side x sides (day trippers, 31.7%, overnight visitors, 47.3%) and trail riding with ATVs (day trippers, 16.1%, overnight visitors, 30%), as presented in **Figure 12**.

Figure 12: Primary reason of Out-of-State – Day Trippers (n= 60) and Overnight Visitors (n= 93)

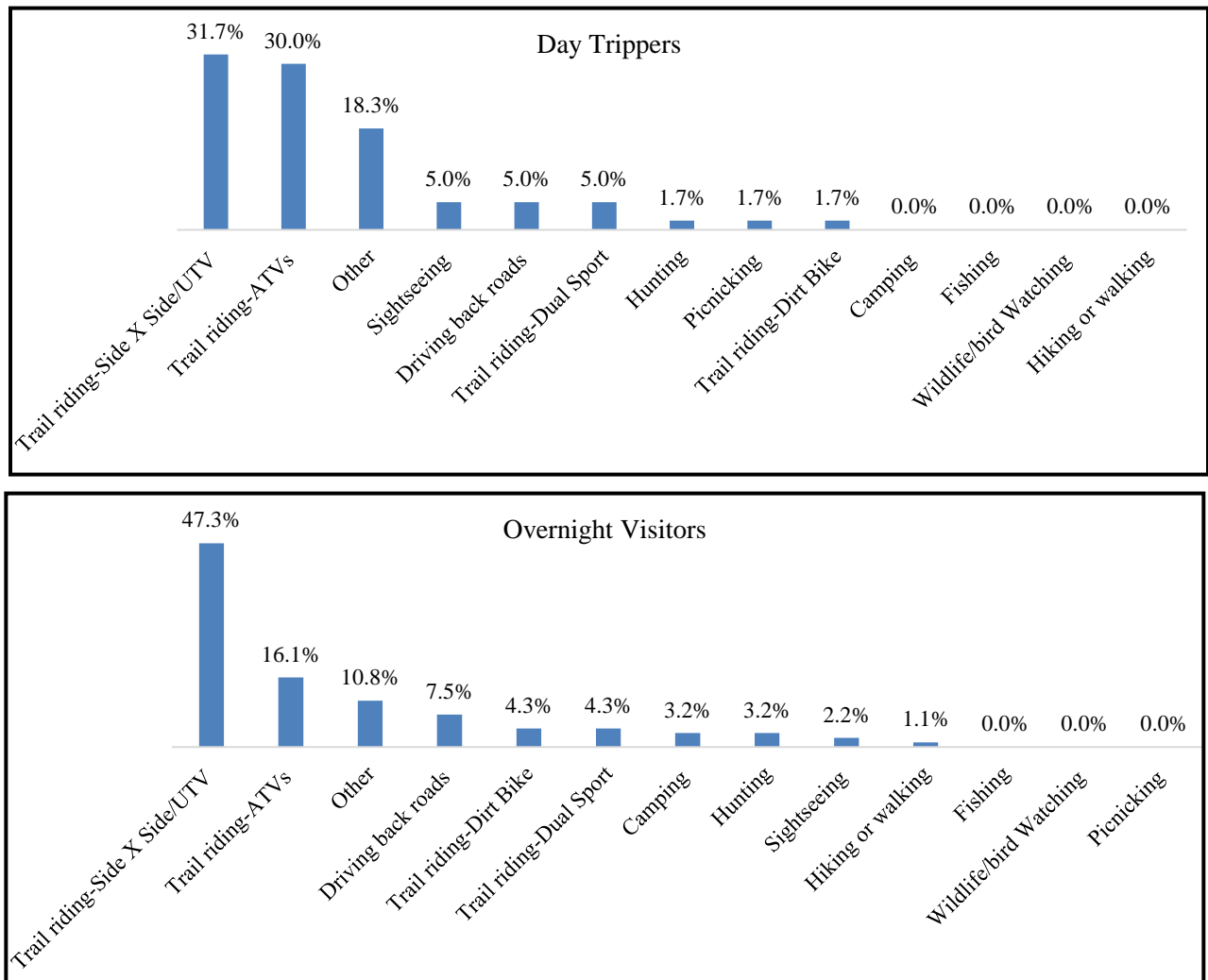
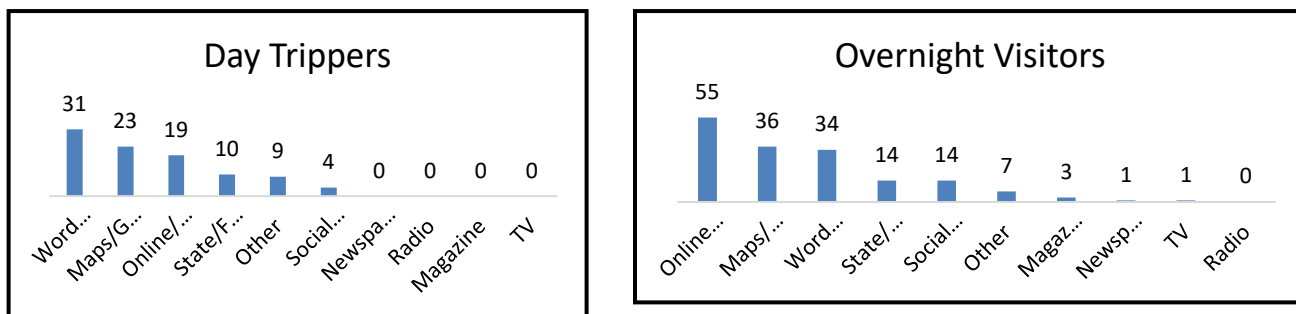


Figure 13: Information source of Out-of-State – Day trippers (n= 96) and Overnight Visitors (n= 165)



OHV respondents obtained information on OHV trails mostly by word of mouth (31 day trippers and 34 overnight visitors), maps/GPS (23 day trippers and 36 overnight visitors), and online websites (19 day trippers and 55 overnight visitors). Detailed breakdown presented in **Figure 13**.

Travel behavior of survey out-of-state respondents is determined by: first time OHV users versus repeat visitations, distance traveled to specified OHV site, day trippers versus overnight visitors, time spent in terms of hours (for day trippers) and nights (in terms of overnight visitors), type of OHV vehicle used, and party size. Furthermore, respondents are asked to provide names of Arizona-specific trails they used or planned to use in 2017. **Figures 14 & 15 and Tables 66 & 67** show survey responses specific to travel behavior.

Figure 14: First Time vs. Repeat Visitors Out-of-State–Day Trippers (n= 57) & Overnight Visitors (n=91)

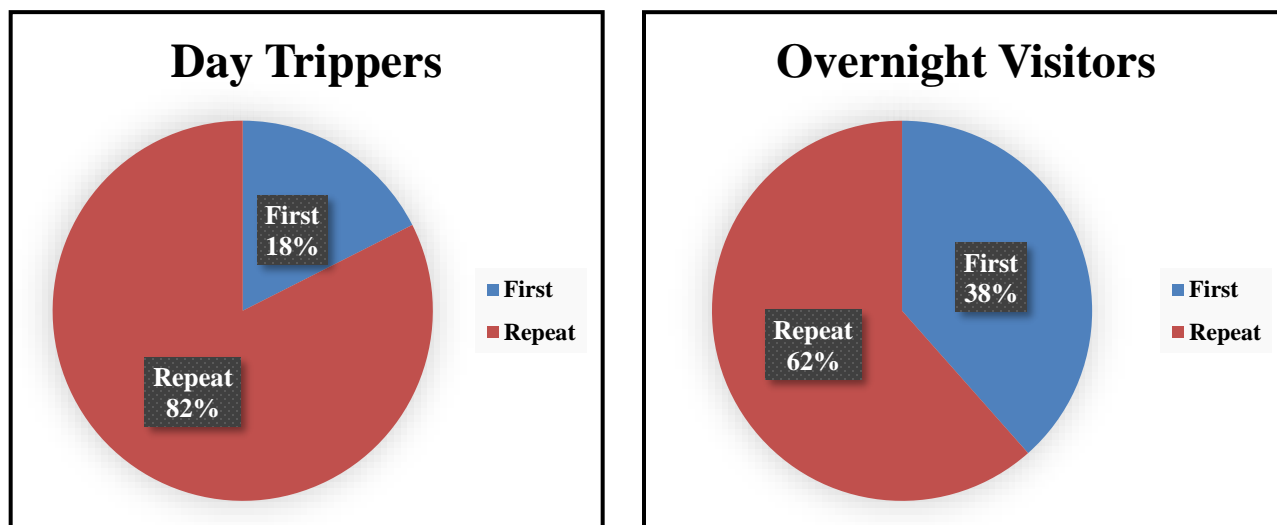


Figure 14 is a breakdown of first time and repeat OHV visitors, of which 82% day trippers are repeat visitors.

Table 66: Party Size by Out-of-State – Day trippers (n=60) & Overnight Visitors (n=93)

| Day | Women | Men | Children | Total Party size | Night | Women | Men | Children | Total Party size |
|--------|-------|------|----------|------------------|--------|-------|------|----------|------------------|
| Mean | 3.75 | 5.07 | 0.17 | 8.98 | Mean | 2.98 | 4.20 | 0.80 | 7.98 |
| Median | 2 | 2 | 0 | 5 | Median | 1 | 2 | 0 | 4 |

Table 66 presents a breakdown of type of party and party size. Median party size is five for ‘day trippers, and four for overnight visitors. The average number of people is about the same for both categories, (8.98 day trippers and 7.98 overnight visitors).

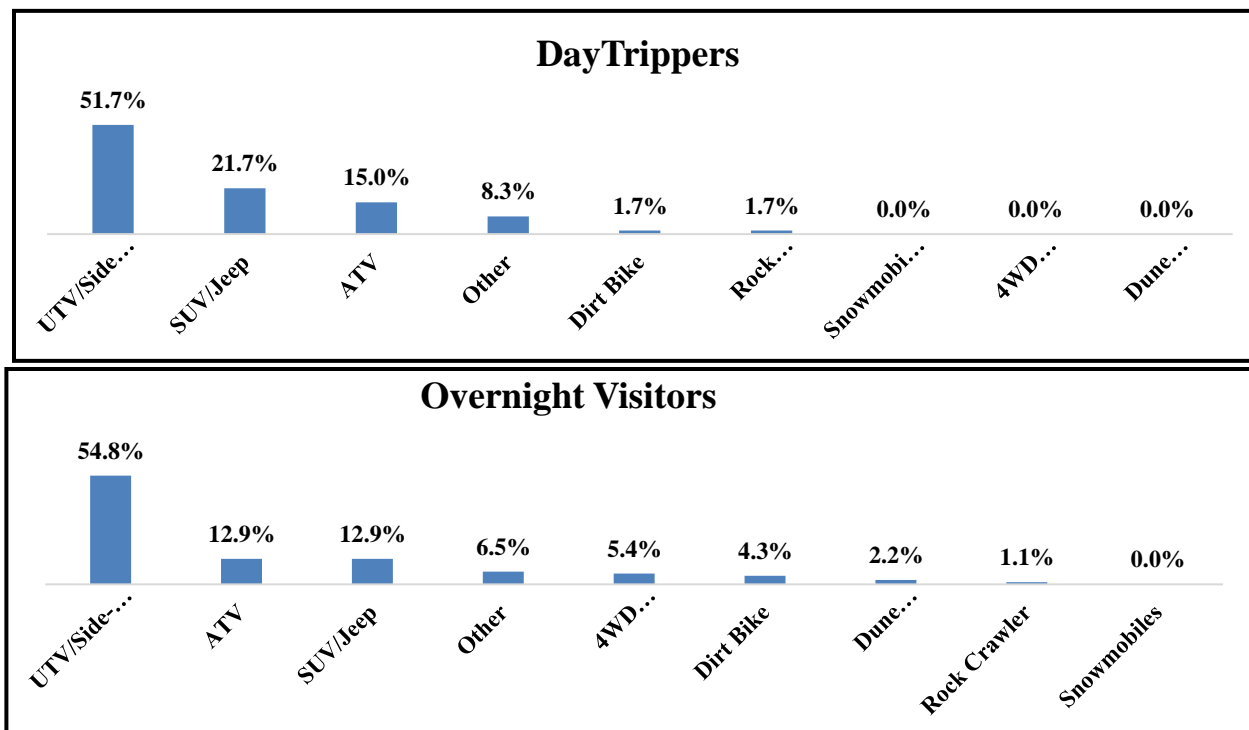
Table 67: Distance Traveled (Day trippers (n=60) & Overnight Visitors (n=94)

| Day Trippers (n=60) | Distance Traveled | Overnight (n=94) | Distance Traveled |
|---------------------|-------------------|--------------------|-------------------|
| Mean | 235.77 | Mean | 531.66 |
| Median | 20 | Median | 300 |
| Standard Deviation | 627.99 | Standard Deviation | 574.68 |

Average distance traveled by out-of-state OHV survey respondents is about 236 miles (day trippers) and approximately 532 miles (overnight visitors), as seen in Table 67.

As presented in Figure 15, most popular OHV vehicles include UTV/Side by Side (among 51.7% day trippers and 54.8% overnight visitors), SUVs (21.7% day trippers and 12.9% overnight visitors), and ATV’s (15% day trippers and 12.9% overnight visitors).

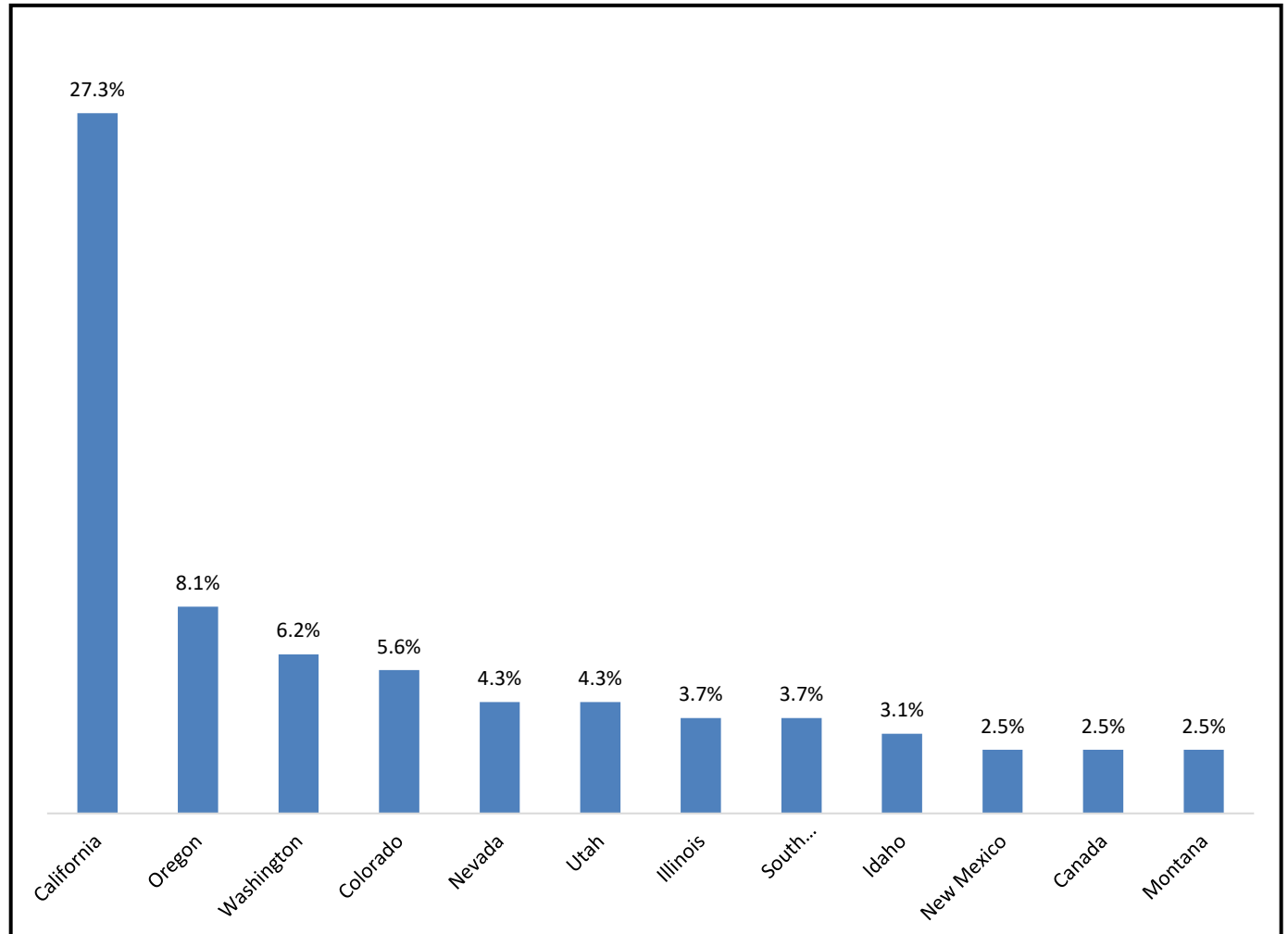
Figure 15: Type of OHV by Out-of-State – Day trippers (n=60) and Overnight Visitors (n=93)



Visitor Profile

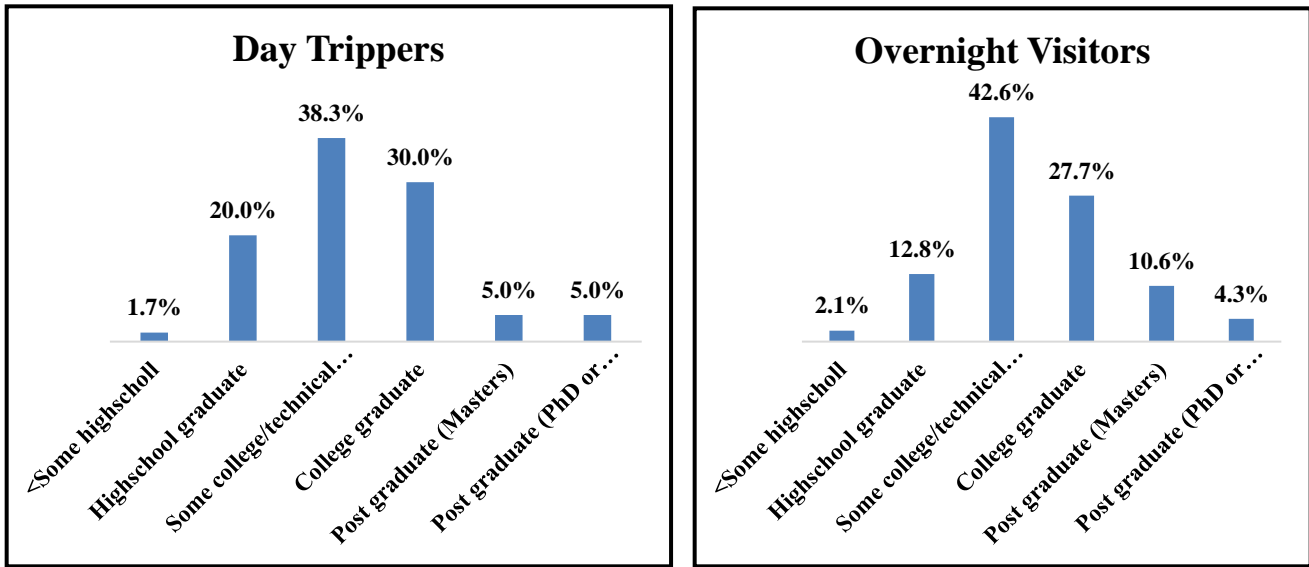
Approximately 44.2% of all survey respondents share their place of residence (zip code). Almost 27.3% of the OHV visitors reside in California.

Figure 16: Out-of-State Visitors (n=161)



* Please see Appendix C: **Table 25** for breakdown of remaining 26.1% of the out of state visitors.

Figure 17: Education of Out of State – Day trippers (n=60) and Overnight Visitors (n=94)

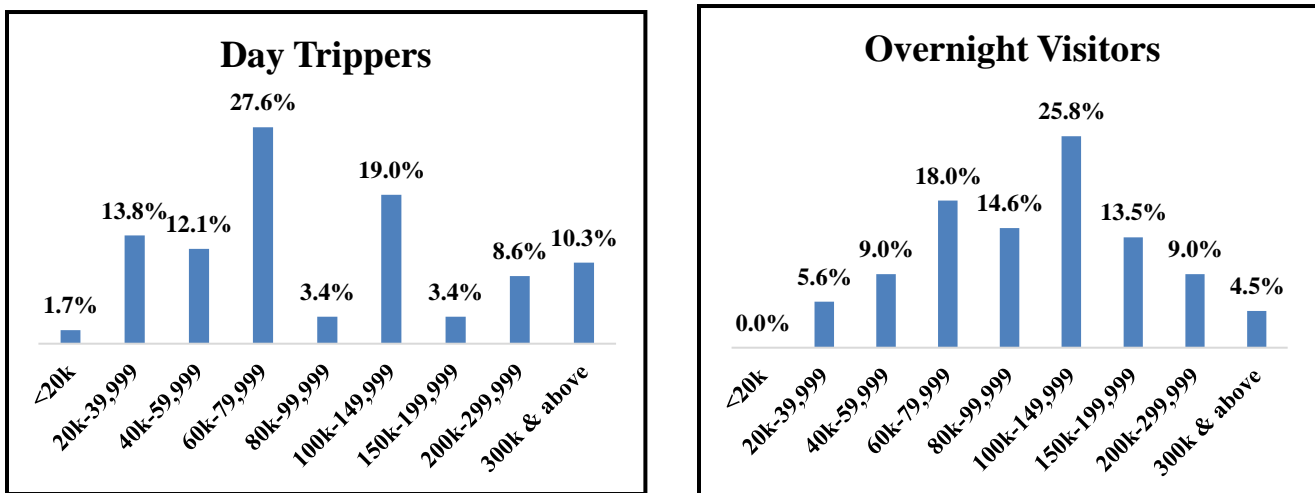


The ethnicity of OHV respondents is mostly Caucasian (92.7% day trippers and 88% overnight visitors).

Most survey respondents (78.3% day trippers and 85.2% overnight visitors), as seen in **Figure 17** are college graduates or have attended some college or technical school; while 20% of day trippers only held high school diplomas.

Approximately 41.3% of day trippers' annual household income is more than \$100,000; while 53% of overnight visitors make more than \$100,000 in annual household income (**Figure 18**). Furthermore, about 5.6% of the overnight OHV visitors earn annual household income of \$40,000 or less.

Figure 18: Income of Out of AZ – Day trippers (n= 58) and Overnight Visitors (n= 89)



Retained

Marketing Profile

Survey respondents are asked to select primary reason(s) for taking the most recent OHV trip in 2017. Respondents still planning their trip are requested to state their primary reason for ‘planning’ their OHV trip; 13 possible reasons were listed in the survey, which were identified from documented literature. To eliminate omission bias, the ‘other’ category is offered. Several respondents select multiple reasons. The most popular reasons are trail riding with side x sides (29% day trippers and 31% overnight visitors), trail riding with dirt bikes (20% day trippers), and trail riding with ATVs (13% overnight visitors), as presented in **Figure 19**.

Figure 19: Primary reason of Retained – Day trippers (n= 629) & Overnight Visitors (n= 306)

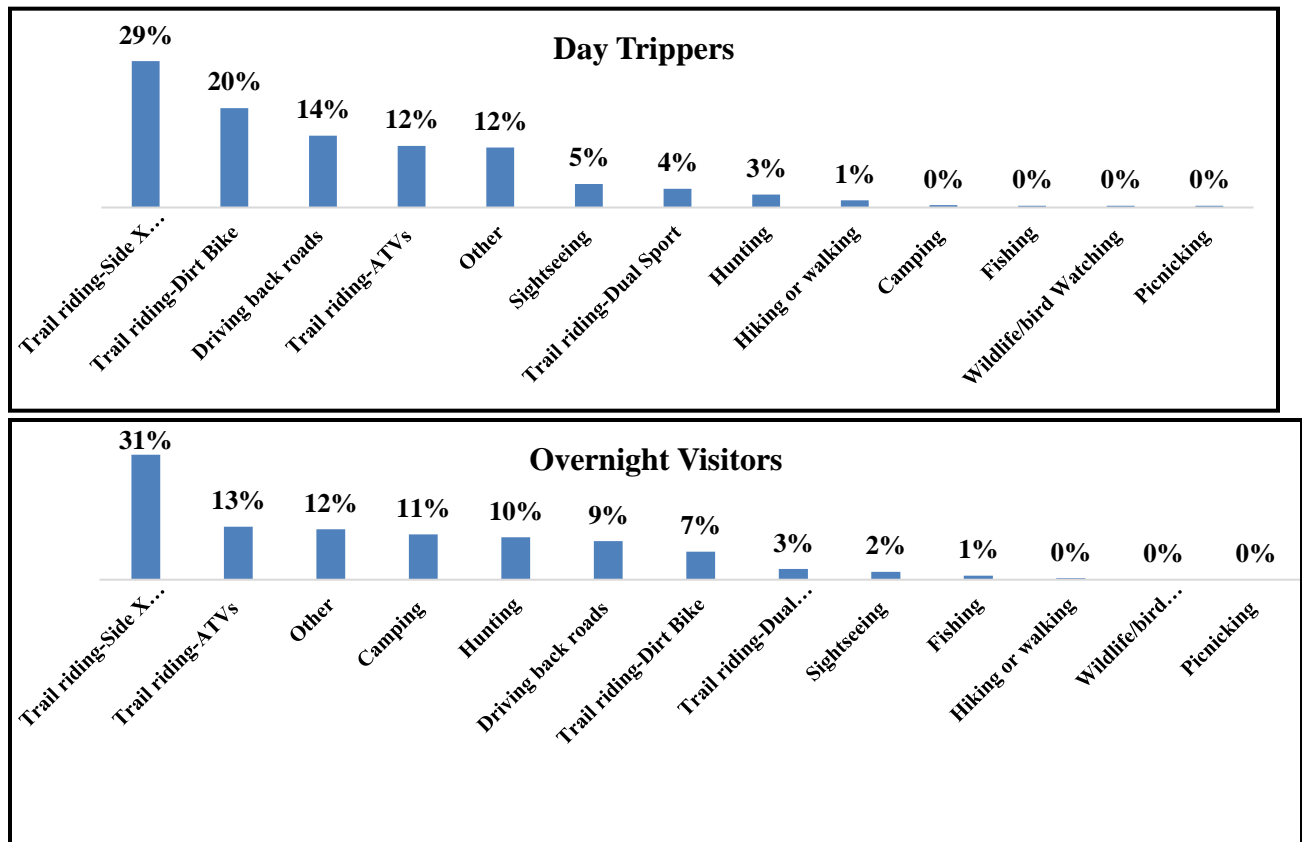
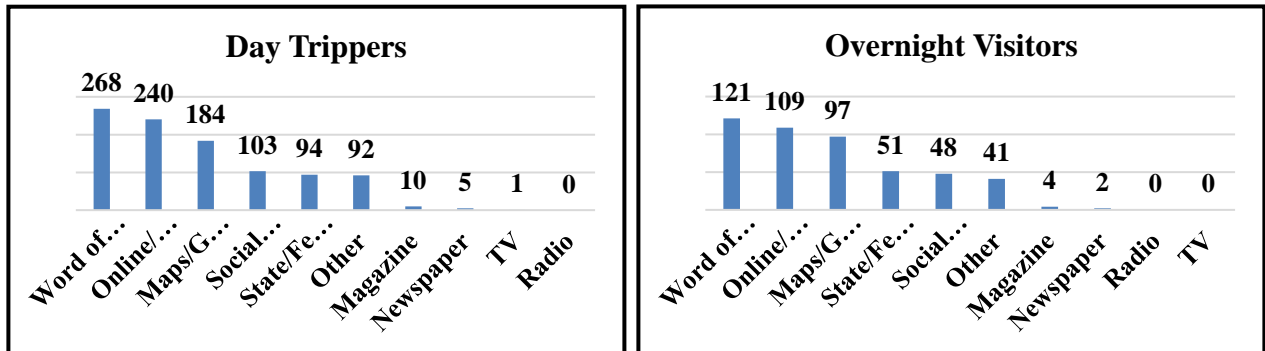


Figure 20: Information Source of Out-of-State – Day trippers (n= 997) and Overnight visitors (n= 473)



OHV respondents obtained information on OHV trails mostly by word of mouth (268 day trippers and 121 overnight visitors), online websites (240 day trippers and 109 overnight visitors), and maps/GPS (184 day trippers and 97 overnight visitors). Detailed breakdown

Travel Behavior

Travel behavior of retained survey respondents is determined by: first time OHV users versus repeat visitations, distance traveled to specified OHV site, day trippers versus overnight visitors, time spent in terms of hours (for day trippers) and nights (in terms of overnight visitors), type of OHV vehicle used, and party size. Furthermore, respondents are requested to provide names of Arizona-specific trails they used or planned to use in 2017. **Figures 21 & 22 and Tables 68 & 69** show survey responses specific to travel behavior.

Figure 21: First Time vs. Repeat Visitors Out of State – Day trippers (n= 623) and Overnight Visitors (n= 305)

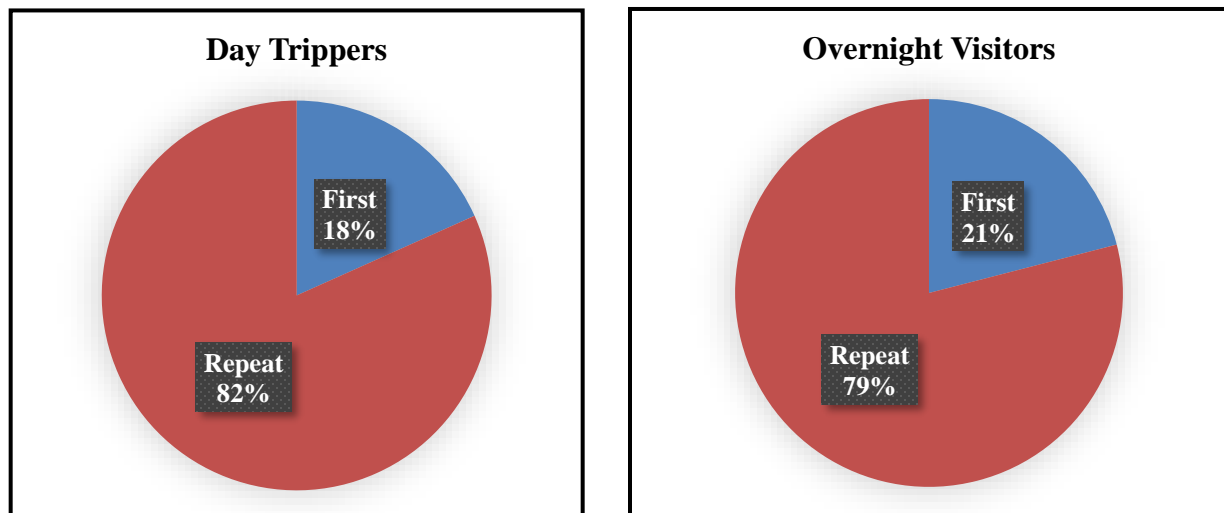


Figure 21 is a breakdown of first time and repeat OHV visitors out of which 82% ‘day trippers’ are repeat visitors.

Table 68: Party Size of Out-of-State for day trippers (n=631) & Overnight Visitors (n=307)

| Day Trippers | Women | Men | Children | Total Party size | Overnight Visitors | Women | Men | Children | Total Party size |
|--------------|-------|------|----------|------------------|--------------------|-------|------|----------|------------------|
| Mean | 1.85 | 3.44 | 0.68 | 5.96 | Mean | 2.61 | 4.92 | 1.64 | 9.16 |
| Median | 1 | 2 | 0 | 4 | Median | 1 | 2 | 0 | 5 |

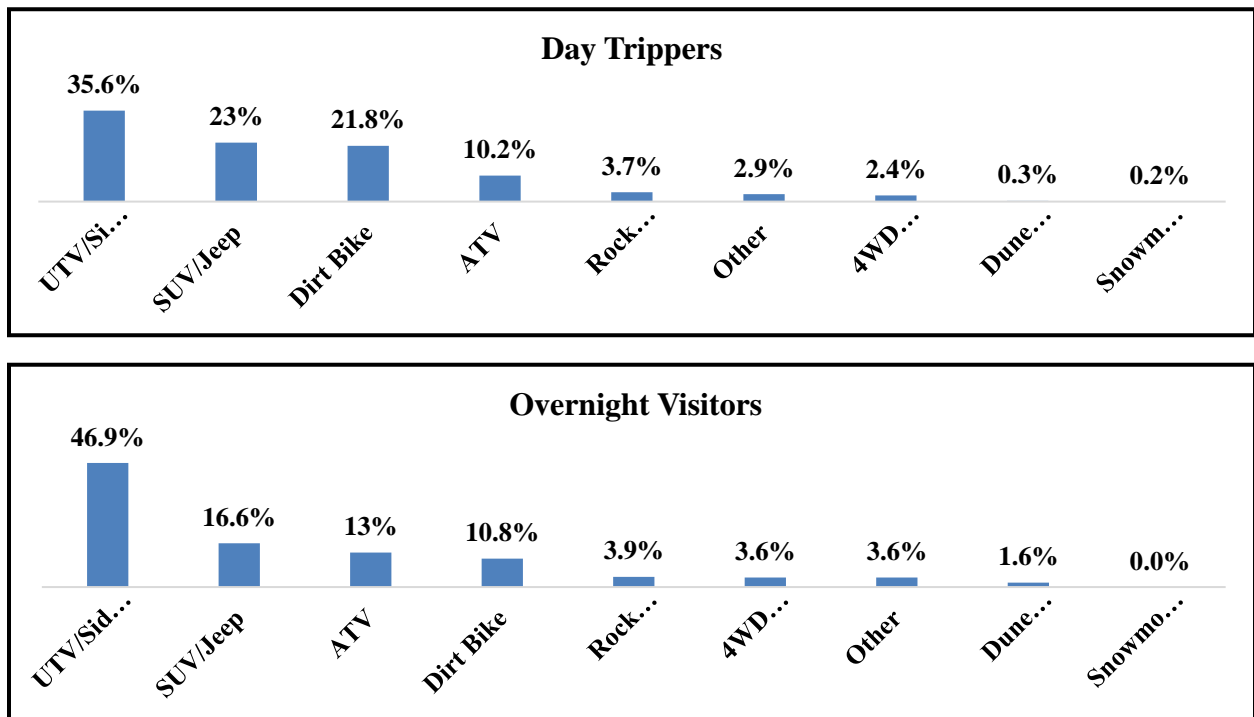
Table 68 presents a breakdown of type of party and party size. Median party size is four for ‘day trippers, and five for overnight visitors. The average party size is considerably larger for 9.16 overnight visitors than 5.96 day trippers.

Table 69: Distance Traveled

| Day Trippers (n=631) | DT | Overnight (n=307) | DT |
|----------------------|--------|--------------------|--------|
| Mean | 46.50 | Mean | 107.52 |
| Median | 25 | Median | 100 |
| Standard Deviation | 241.40 | Standard Deviation | 83.07 |

Average distance traveled by retained OHV survey respondents is about 47 miles (day trippers) and approximately 108 miles (overnight visitors), as seen in **Table 69**.

Figure 22: Type of OHV used of Out of State – Day trippers (n=60) & Overnight Visitors (n=93)



Visitor Profile

Approximately 55.5% of all retained survey respondents live in Maricopa County, followed by Mohave County (16.7%), and Yavapai (8.4%), as seen in **Table 70**.

Table 70: County of Residence of Retained Visitors

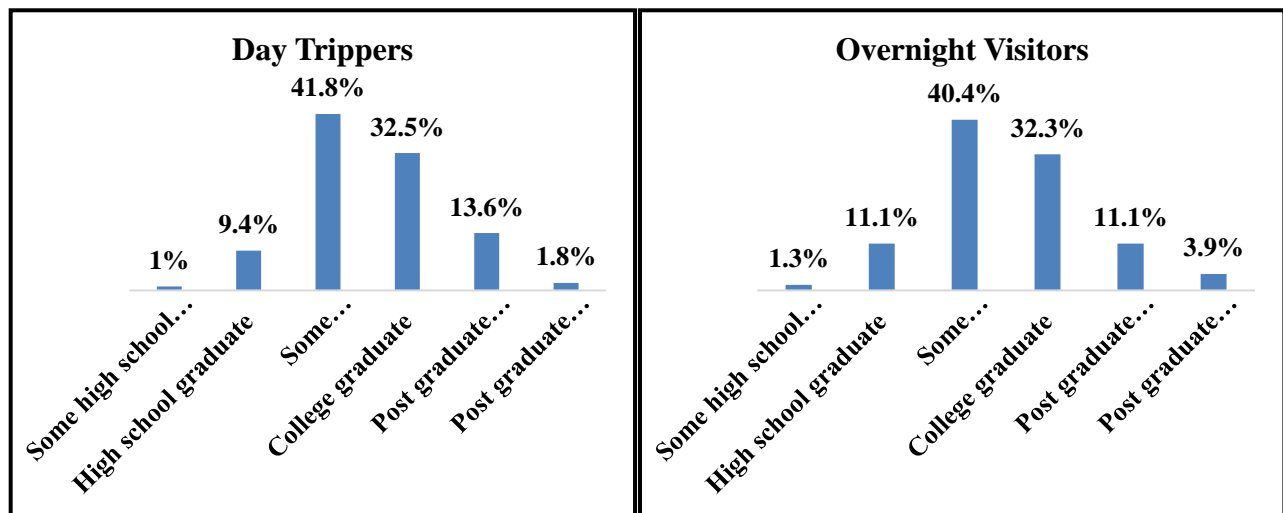
| County | N | Percent |
|------------|-----|---------|
| Maricopa | 533 | 55.5 |
| Mohave | 160 | 16.7 |
| Yavapai | 81 | 8.4 |
| Pinal | 74 | 7.7 |
| Coconino | 35 | 3.7 |
| La Paz | 27 | 2.8 |
| Yuma | 14 | 1.5 |
| Navajo | 13 | 1.4 |
| Cochise | 11 | 1.2 |
| Gila | 5 | 0.5 |
| Graham | 4 | 0.4 |
| Greenlee | 2 | 0.2 |
| Santa Cruz | 1 | 0.1 |

Respondents are asked to offer information on the type of OHV vehicle used for recreation.

Figure 22 presents a breakdown of visitors based on type of vehicle used.

As presented, most popular OHV vehicles include UTV's/Side x Sides (35.6% day trippers and 46.9% overnight visitors), SUVs (23% day trippers and 16.6% overnight visitors), and Dirt Bikes (21.8% day trippers and 10.8% overnight visitors).

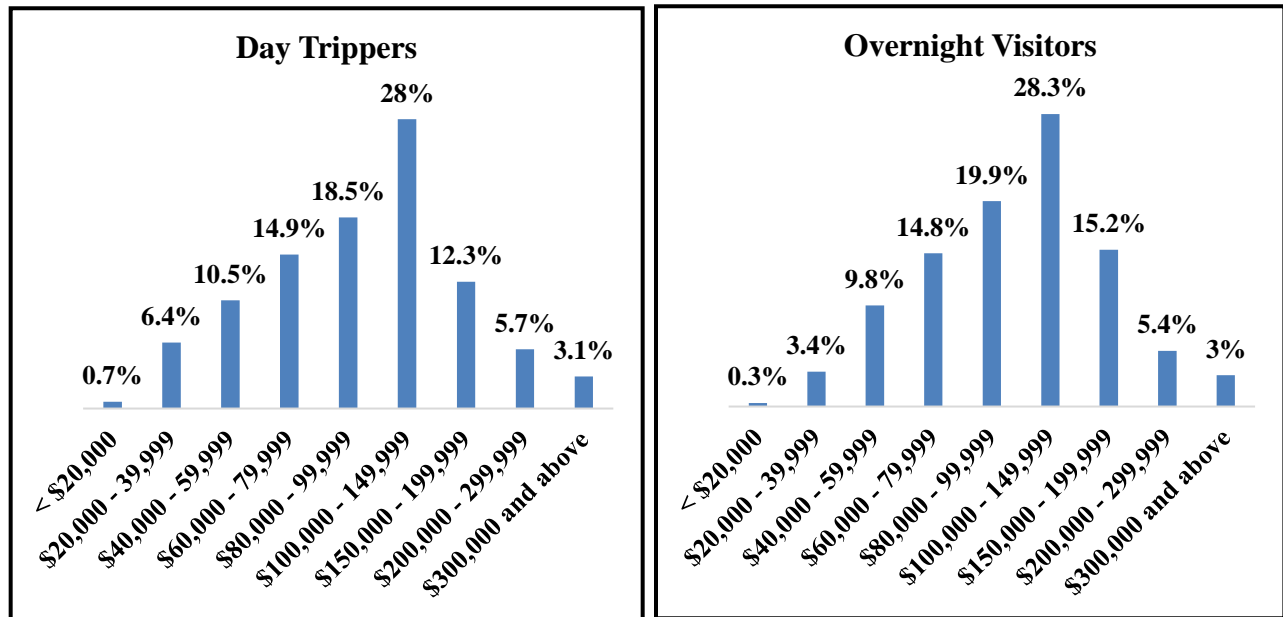
Figure 23: Education of Retained – Day trippers (n= 627) & Overnight Visitors (n= 307)



The ethnicity of OHV respondents is mostly Caucasian (i.e. day trippers, 91.5%).

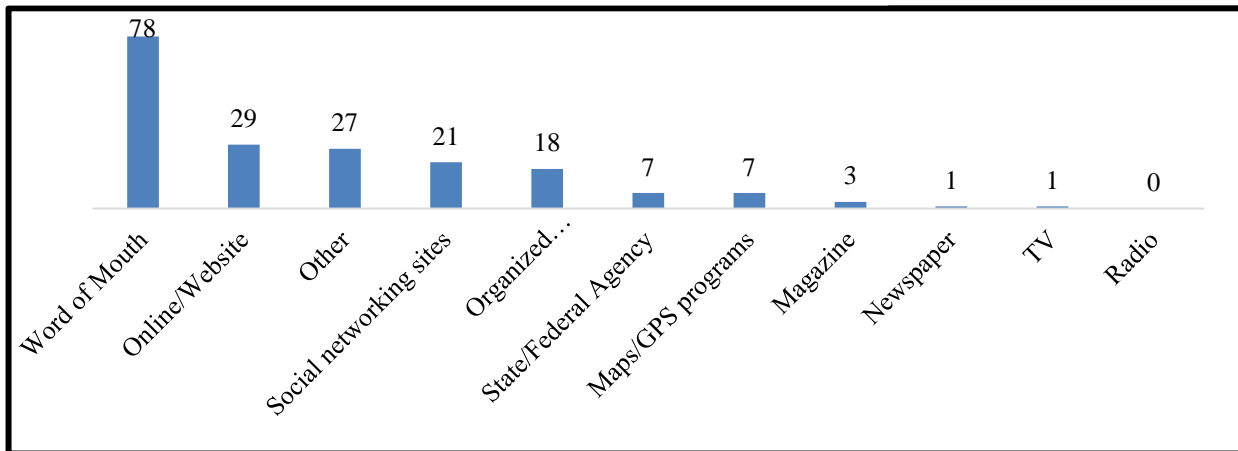
Most retained survey respondents (89.7% day trippers and 87.7% overnight visitors), as seen in **Figure 23** are college graduates or have attended some college or technical school; while 9.4% of day trippers only held high school diplomas.

Figure 24: Income of Retained – Day trippers (n= 611) & Overnight Visitors (n= 297)



Approximately 49.1% of day trippers’ annual household income is more than \$100,000; while overnight visitors’ is nearly 52%. (**Figure 24**). Furthermore, about 3.7% of the overnight OHV visitors have an annual household income of \$40,000 or less.

Figure 25: Source of Information



*n=192 (total number of respondents= 14)

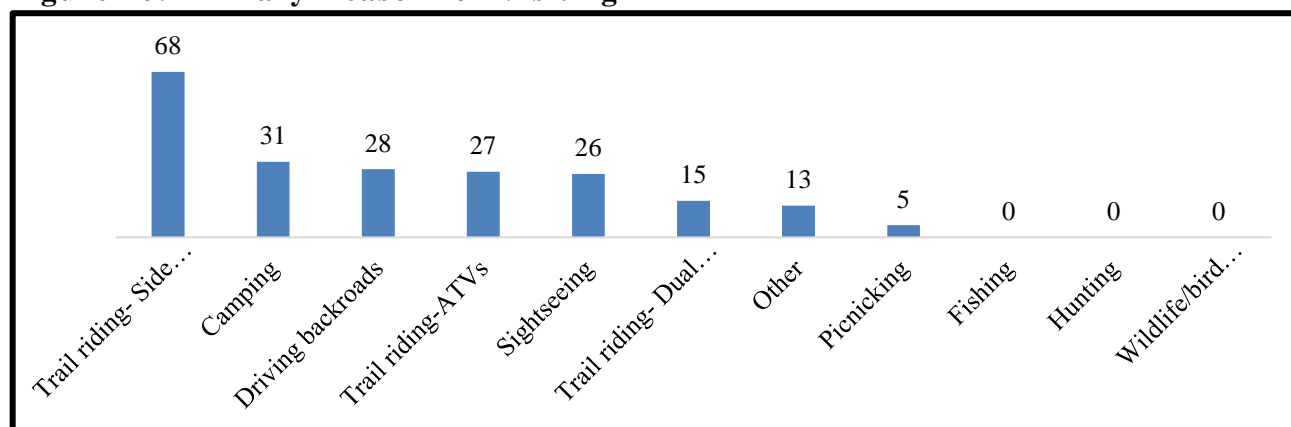
OHV respondents obtained information on OHV trails mostly by word of mouth (78), online website (29), and social networking sites (27). Detailed breakdown presented in **Figure 25**.

Section 5: Marketing Profile & Travel Behavior of OHV Visitors at Trail Site

Marketing Profile

Survey respondents are asked to select primary reason(s) for taking the most recent OHV trip in 2017. Respondents still planning their trip were asked to state their primary reason for ‘planning’ their OHV trip; 13 possible reasons were listed in the survey, which were identified from documented literature. To eliminate omission bias, an ‘other’ category is offered. Several respondents selected multiple reasons. The most popular reasons are trail riding with side x sides (68), camping (31), and driving backroads with 4-wheelers (28), as presented in **Figure 26**.

Figure 26: Primary Reason for Visiting



*n=213, total number of respondents=142

Travel Behavior

Travel behavior of survey respondents is determined by: first time OHV users versus repeat visitations, distance traveled to specified OHV site, day trippers versus overnight visitors, time spent in terms of hours (for day trippers) and nights (in terms of overnight visitors), type of OHV vehicle used, and party size. Furthermore, respondents were requested to provide names of Arizona-specific trails they used or planned to use in 2017. To identify retained local OHV visitors, local survey respondents are asked if they would have traveled to another state in the absence of OHV recreation in Arizona. **Figures 27-32 and Tables 71-73** show survey responses to travel behavior-related questions.

Figure 27: First Time vs. Repeat Visitors (n=142)

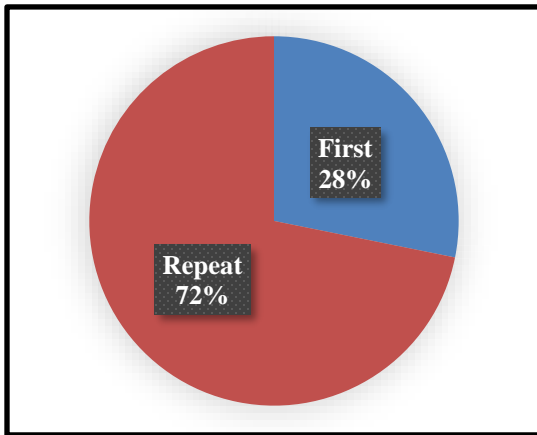


Figure 27 is a breakdown of first time and repeat OHV visitors, of which nearly 72% are repeat visitors.

Table 71: Day Trippers vs Overnight Visitors– Hours and nights

| | Day(hour) | Night(night) |
|---------------|-----------|--------------|
| n | 79 | 63 |
| Mean | 5.23 | 6.81 |
| Median | 5 | 3.5 |

Information on number of hours and nights spent at the OHV site is shown in Table 71. As seen above, median hours spent by day trippers is 5 and median number of nights spent by overnight visitors is 3.5.

Table 72: Distance traveled (n=142)

| | |
|---------------------------|----------|
| Mean | 246.7887 |
| Median | 90 |
| Standard Deviation | 456.1201 |

Average distance traveled (one way) by all OHV survey respondents is 247 miles (Table 72).

Figure 28: Day Trippers vs. Overnight Visitors

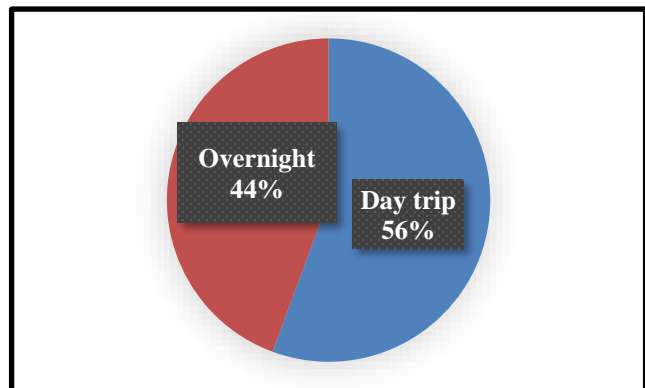


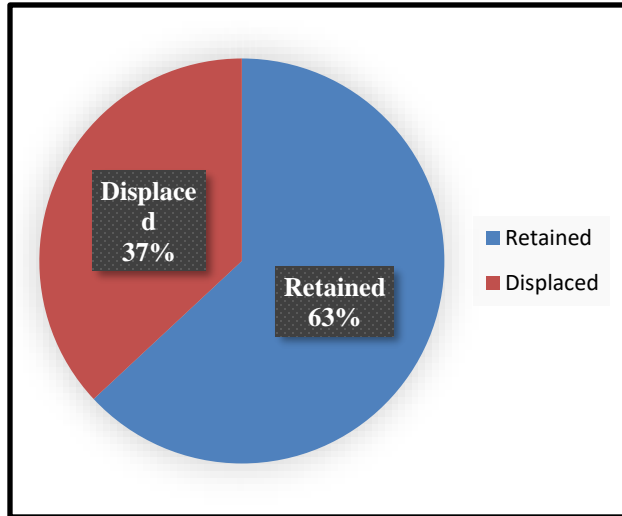
Figure 28 presents a breakdown of day trippers versus overnight visitors. About 56% of survey respondents are day trippers.

Table 73: Party size (n=142)

| Party size | Women | Men | Children | Total |
|---------------|-------|------|----------|-------------|
| Mean | 0.68 | 1.12 | 0.24 | 2.04 |
| Median | 1 | 1 | 0 | 2 |

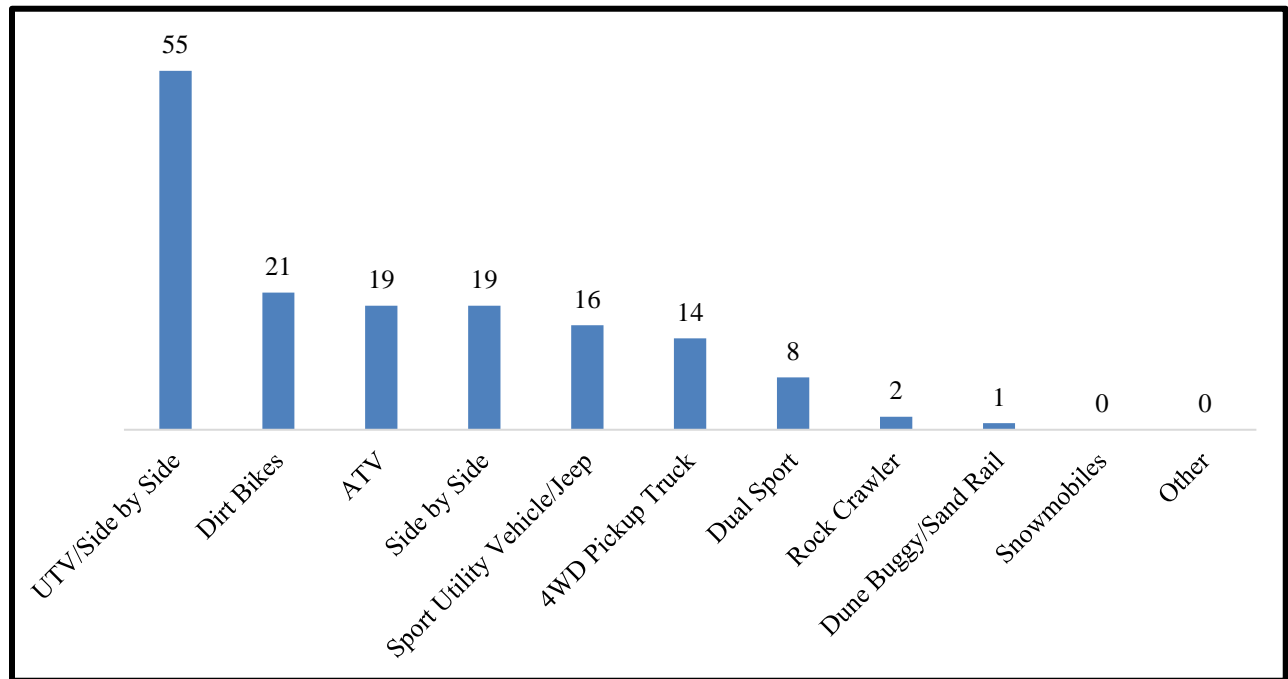
Table 73 presents a breakdown of type of party and party size. Median party size is 2 and the average number of people per party is about 2 across all OHV users.

Figure 29: Retained vs. Displaced Local Visitors (n=1,857)



In regards to local OHV survey respondents who would have traveled outside the State of Arizona if OHV recreation trails were not available, **Figure 29** shows that approximately 63% of the local visitors fall into the retained visitor category and 37% are displaced. In other words, 37% of the local visitors would have spent money on other commodities in Arizona in the absence of OHV recreation.

Figure 30: Type of OHV Used



*n=155, total respondents: 142

Respondents are asked to offer information on the type of OHV vehicle used for recreation. **Figure 30** presents a breakdown of visitors based on type of vehicle used. As presented above, most popular OHV vehicles include UTV/Side by Side (55), Dirt Bikes (21), and ATVs (19).

Table 74: Recently Visited Trails

| Rank | Trail | County | N | % |
|------|-----------------|-------------------------------|----|------|
| 1 | Table Mesa | Maricopa | 16 | 5.9% |
| 2 | Crown King | Yavapai | 10 | 3.7% |
| 2 | Lake Havasu | La Paz | 10 | 3.7% |
| 2 | Lake Pleasant | Maricopa | 10 | 3.7% |
| 3 | Boulders | Maricopa | 9 | 3.3% |
| 4 | Wickenburg | Maricopa | 8 | 2.9% |
| 5 | Flagstaff | Coconino | 7 | 2.6% |
| 6 | Payson | Gila | 6 | 2.2% |
| 6 | Prescott | Yavapai | 6 | 2.2% |
| 6 | Sycamore | Maricopa | 6 | 2.2% |
| 7 | Cinder Hills | Yavapai | 5 | 1.8% |
| 7 | Four Peaks | Maricopa | 5 | 1.8% |
| 7 | Sedona | Yavapai | 5 | 1.8% |
| 8 | Florence | Pinal | 4 | 1.5% |
| 8 | White Mountains | Apache | 4 | 1.5% |
| 8 | Wildcat | Coconino | 4 | 1.5% |
| 8 | Kingman | Mohave | 4 | 1.5% |
| 9 | Box Canyon | Pinal | 3 | 1.1% |
| 9 | Bulldog Canyon | Maricopa | 3 | 1.1% |
| 9 | Hualapai | Mohave | 3 | 1.1% |
| 9 | Mogollon Rim | Coconino, Gila, Yavapai | 3 | 1.1% |
| 9 | Quartzsite | La Paz | 3 | 1.1% |
| 9 | Mormon lake | Coconino | 3 | 1.1% |
| 9 | Alamo Lake | La Paz | 3 | 1.1% |
| 9 | Salome | La Paz | 3 | 1.1% |
| 9 | Bouse | La Paz | 3 | 1.1% |
| 9 | Arizona Strip | Mohave | 3 | 1.1% |

*n=272/ total 142 respondents answered

Please see Appendix Tables 26-28 for information on remaining 28.7%.

Table 55 presents a detailed breakdown of visitations per trail. Almost six percent of OHV survey respondents used the “Table Mesa” trail in Maricopa County. About four percent of respondents listed “Lake Havasu or Havasu,” followed by “Lake Pleasant” and “Crown King” at nearly four

percent. “Boulders,” “Wickenburg,” “Flagstaff,” “Payson,” and “Prescott” were also frequently mentioned by 36 respondents. The nine trails (shown in **Table 55**) are most popular among 70.3% of the OHV survey respondents.

Visitor Profile

All survey respondents shared their place of residence (zip code). Almost 80% of OHV visitors reside in the State of Arizona.

Figure 31: Place of Residence of OHV Visitors

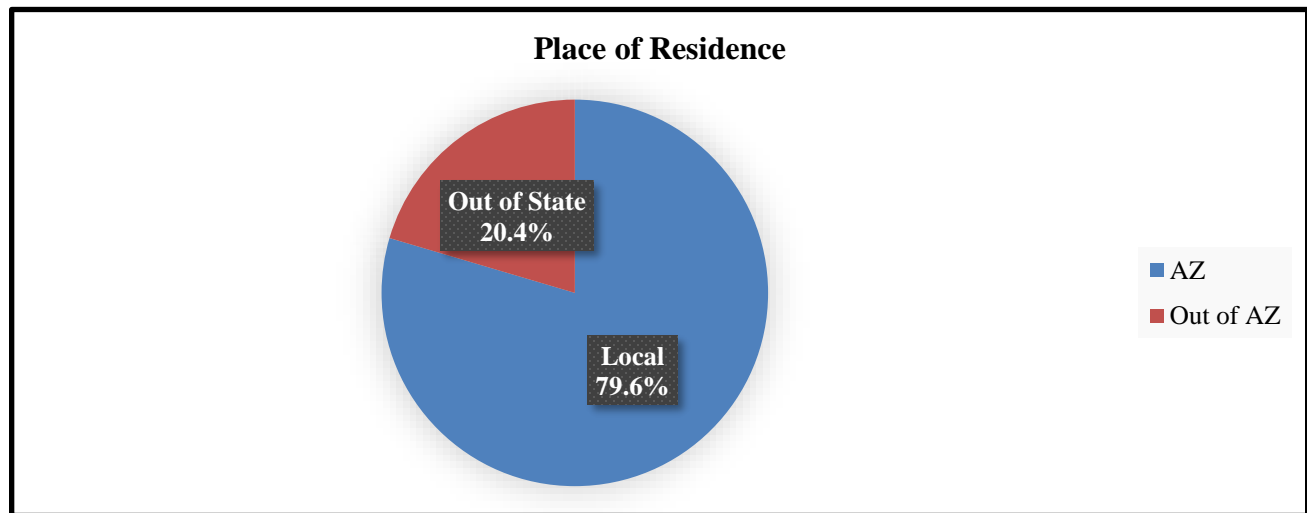


Figure 32: Place of Residence by County (n=1,401)

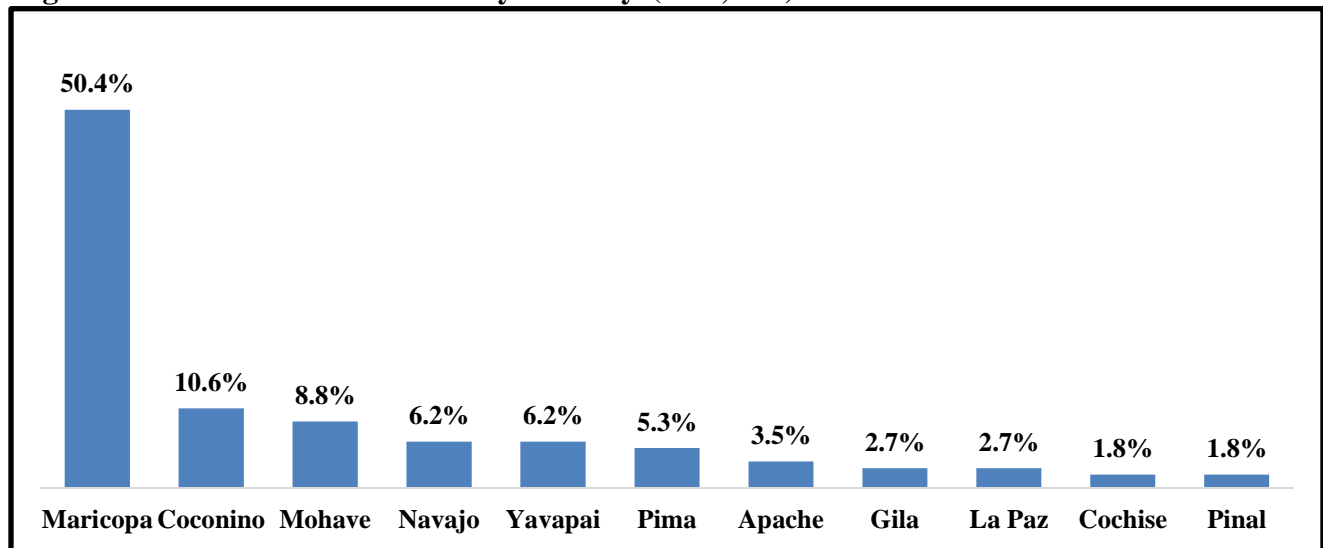


Figure 32 presents a detailed breakdown of local OHV visitors, based on their place of residence. Approximately 50% of the respondents reside in Maricopa County. For information on out of state visitors, please see Appendix C (**Table 26**). Next, **Table 75** presents twenty most visited trails by onsite respondents.

Table 75: Other Visited Trails (Top Twenty)

| | Trail | County | N | % |
|----|---------------|--------------------------------|----------|----------|
| 1 | Boulders | Maricopa | 104 | 3.5% |
| 2 | Table mesa | Maricopa | 102 | 3.4% |
| 3 | Crown king | Yavapai | 92 | 3.1% |
| 4 | Four Peaks | Maricopa | 89 | 3.0% |
| 5 | Sycamore | Maricopa | 88 | 3.0% |
| 6 | Box Canyon | Pinal | 76 | 2.5% |
| 7 | Parker | La Paz | 72 | 2.4% |
| 8 | Cinder hills | Coconino | 70 | 2.3% |
| 9 | Florence | Pinal | 69 | 2.3% |
| 10 | Lake Havasu | La Paz | 68 | 2.3% |
| 11 | Sedona | Yavapai | 65 | 2.2% |
| 12 | Flagstaff | Coconino | 60 | 2.0% |
| 13 | Bulldog | Maricopa | 59 | 2.0% |
| 14 | Wickenburg | Maricopa | 48 | 1.6% |
| 15 | Wild Cat | Navajo | 43 | 1.4% |
| 16 | Tonto NF | Gila, Maricopa, Yavapai, Pinal | 42 | 1.4% |
| 17 | Quartzsite | La Paz | 37 | 1.2% |
| 18 | Lake Pleasant | Maricopa | 36 | 1.2% |
| 19 | Williams | Coconino | 36 | 1.2% |
| 20 | Prescott Area | Yavapai | 35 | 1.2% |

REFERENCES

- Budruk, M., Andereck, K., Prateek, G. & Steffey, E. (2014). 2013-2014 Arizona State Parks Trails Study: Technical Report. Arizona State University (Report Prepared for Arizona State Parks).
- Cordell, H., Betz, C., Green, G. & Owens, M. (2005). *Off-Highway Vehicle Recreation in the United States, Regions and States: A National Report for the National Survey on Recreation and the Environment (NSRE)*. Retrieved from http://www.fs.us/recreation/programs/ohv/OHV_final_report.pdf
- Crompton, J. (2010). *Measuring the Economic Impact of Park and Recreation Services*. National Park and Recreation Association.
- Dolincar, S., Laesser, C. & Matus, K. (2009). Online Versus Paper: Format Effects in Tourism Surveys. *Journal of Tourism Research*, 47(1): 295-316.
- Fletcher, J. (1989). Input-Output Analysis and Tourism Impact Studies. *Annals of Tourism Research*, 16, 514-529.
- Greenwood, J. & Vick, C. (2008). *Economic Contribution of Visitors to North Carolina State Parks*. North Carolina State University: Raleigh (NC).
- Gunthar, P., Parr, K., Graziano, M. & Carstensen, F. (2011). *The Economic Impact of State Parks, Forests and Natural Resources under the Management of Department of Environmental Protection*. Connecticut Center for Economic Analysis: University of Connecticut, CT.
- Hung, K. & Law, R. (2011). An Overview of Internet-based Surveys in Hospitality and Tourism Journals. *Tourism Management*, 32: 717-724.
- Kaliszewski, N. (2011). *Jackson Hole Trails Project Economic Impact Study*. University of Wyoming.
- IMPLAN Professional (2000). *IMPLAN PRO: User's Guide*. MIG, Inc.: Stillwater, MN
- IMPLAN (2014). *Principles of Impact Analysis and IMPLAN Application*. IMPLAN GROUP, LLC: Huntersville, NC.
- Legg, M., Price, J. & Williams, P. (2006). An Economic Impact Analysis of the Effects to Gilmer, Texas and Local Surrounding Communities of Barnwell Mountain Off-Highway Vehicle Recreation Area, 2005-2006. Impact DataSource: Austin, TX.
- Li, X., Cheng, C., Kim, H. & Petrick, J. (2008). A Systematic Comparison of First-time and Repeat Visitors via a Two-Phase Online Survey. *Tourism Management*, 29: 2778-293.

Munn, I., Hussain, A., Spurlock, S. & Henderson, J. (2010). Economic Impact of Fishing, Hunting, and Wildlife- Associated Recreation Expenditures on the Southeast U.S. Regional Economy: An Input-Output Analysis. *Human Dimension of Wildlife*, 15: 433-449.

National Resource Report (2012). *2012 National Park Visitor Spending Effects*. US Department of the Interior: For Collins, Colorado.

Otto, D. (2008). *The Economic Impact of Off-Highway Vehicles in Iowa*. Strategies Economic Group. Des Moines, IA.

Pardue, E. and Stand, J. (2014). *The Economic Impact and Fiscal Impact of the Hatfield-McCoy Trail System in West Virginia*. Center for Business and Economic Research, Huntington, WV.

Silberman, J. & Andereck, K. (2006). The Economic Value of Off-Highway Vehicle Recreation. *Journal of Leisure Research*, 38(2): 208-223.

Stynes, D. (2010). *Economic Benefits to Local Communities from National Park Visitation and Payroll, 2010*. Michigan State University: East Lansing (MI).

Taylor, D., Nagler, A., Bastian, C. & Foulke, T. (2013). *The Economic Impact of Non-motorized Trail Usage on National Forests in Wyoming*. University of Wyoming, WY.

The Trust for Public Land (2010). *The Economic Benefits of Denver's Park and Recreation Systems*. The Trust for Public Land's Center for City Park Excellence: Colorado

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APPENDIX

Description of Terms

- Small 'n' denotes respondents who responded to all or at least one spending item.
- Retained locals mean those locals who listed an alternative park outside their study area they would have been interested in visiting if the OHV recreation was not offered in Arizona. This implies that the OHV trails retain outside spending and should be factored into the economic impact.
- Outliers mean unusual values that can skew the data and consequentially the overall average spending values. These have to be substituted or removed for accuracy and to eliminate bias. Outliers are noted for some spending figures and substituted/treated with average values wherever necessary.

Appendix A

Table 1 Definition of Tax Types for State and Local Governments

| Transaction Type | Description |
|--|---|
| Dividends | State and local government dividends refers to investment-based dividends paid by corporations to government. |
| Social Insurance Taxes: Employee Contribution | The social insurance contribution is paid by state employees towards State sponsored pensions instead of social security. |
| Social Insurance Taxes: Employer Contribution | The social insurance contribution is paid by the State towards State sponsored pensions instead of social security. |
| Indirect Business Tax: Sales Tax | Sales taxes payment to State and Local government. |
| Indirect Business Tax: Property Tax | Levied on Real Estate, property taxes are paid by corporations to State and Local governments. Due to the special situation associated with Sector 361, this category involves payments of property taxes based on homes. |
| Indirect Business Tax: Motor Vehicle | Taxes levied by State and Local governments on motor vehicle license. |
| Indirect Business Tax: Severance | Taxes imposed by a State on extracting natural resources. |
| Indirect Business Tax: Other taxes | Other taxes collected by State and Local governments, such as business licenses, documentary and stamp taxes. |
| Indirect Business Tax: S/L Non-taxes | This category consists of fines (such as parking and speeding tickets), fees (State and County park passes or day fees) and donated funds. |
| Corporate Profits Tax | Corporate profits taxes paid to State and Local governments. |
| Personal Tax: Income Tax | Individuals' income taxes payments to State and Local Government through withholding, declarations and final settlement, less refunds. |
| Personal Tax: Non-tax (fines and fees) | Household personal non-tax paid to State and Local Governments, including fines, donations, passport and immigration fees, and migratory bird-hunting stamps. |
| Personal Tax: Motor Vehicle Licenses | Household personal motor vehicle fee paid to State and Local governments. |
| Personal Tax: Property Taxes | Household personal property tax paid to State and Local governments. Dividend, interest, and rental income of persons with capital consumption adjustment sometimes fall under the category of property income. |
| Personal Tax: Other Taxes (fishing/hunting) | Other miscellaneous fees and licenses paid to State and Local governments, such as hunting and fishing licenses, marriage licenses, registration of pleasure boats, and licenses for pets. |

Source: IMPLAN (2014)

Table 2 Definition of Tax Types for Federal Government

| Transaction Type | Description |
|--|---|
| Social Insurance Taxes: Employee Contribution | The employee paid portion for Federal social insurance, including payments by employees, the self-employed, and other individuals who take part in the government programs of hospital insurance, supplementary medical insurance; old-age, survivors, and disability insurance (social security, FICA); unemployment insurance, railroad retirement; veteran's life insurance, and temporary disability insurance. |
| Social Insurance Taxes: Employer Contribution | The employer paid portion for Federal social insurance, including social security, unemployment insurance, medical and retirement plans |
| Indirect Business Tax: Excise Taxes | Excise taxes collected by Federal government on alcohol, tobacco, telephones, coal, fuels, air transportation, vehicles, and so on. |
| Indirect Business Tax: Custom Duty | This category refers to gross collections net refunds. |
| Indirect Business Tax: Non-Taxes | This category includes petroleum royalties, fines, regulatory fees, forfeitures and donated funds. |
| Corporate Profits Tax: | Corporate profits tax payment to Federal governments. |
| Personal Tax: Income Tax | Individuals' income taxes payment to the Federal Government through withholding, declarations and final settlement, less refunds. |

Source: IMPLAN (2014)

Appendix B– OHV Operating Expense Distribution

Table 3: ATV

| | ATVAcc | ATVIns | ATVRegist | ATVStick | ATVClub | ATVBuy | ATVFuel | ATVOth |
|---------------|---------|--------|-----------|----------|---------|---------|---------|--------|
| Mean | 842.52 | 289.45 | 100.62 | 10.05 | 11.38 | 1578.09 | 394.70 | 30.87 |
| Median | 150 | 100 | 35 | 0 | 0 | 0 | 120 | 0 |
| Stdev | 2271.42 | 454.61 | 164.66 | 25.78 | 32.20 | 6147.07 | 756.77 | 231.83 |
| Max | 25000 | 2200 | 1000 | 150 | 250 | 50000 | 5000 | 3000 |
| Min | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Table 4: Dirt Bike

| | DirtAcc | DirtIns | DirtRegist | DirtStick | DirtClub | DirtBuy | DirtFuel | DirtOth |
|---------------|---------|---------|------------|-----------|----------|---------|----------|---------|
| Mean | 1385.44 | 172.98 | 72.43 | 30.74 | 39.48 | 3429.62 | 531.69 | 217.58 |
| Median | 500 | 100 | 50 | 20 | 20 | 80 | 300 | 0 |
| Stdev | 2473.31 | 232.23 | 75.60 | 52.69 | 89.80 | 4970.47 | 763.59 | 683.65 |
| Max | 22500 | 1500 | 500 | 500 | 750 | 30000 | 5000 | 5000 |
| Min | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Table 5: Dual Purpose Sport Bike

| | DualAcc | DualIns | DualRegist | DualStick | DualClub | DualBuy | DualFuel | DualOth |
|---------------|---------|---------|------------|-----------|----------|---------|----------|---------|
| Mean | 670.11 | 240.54 | 95.46 | 24.68 | 28.69 | 2582.87 | 505.30 | 147.13 |
| Median | 500 | 180 | 50 | 25 | 0 | 0 | 250 | 0 |
| Stdev | 705.10 | 236.38 | 124.76 | 39.83 | 69.45 | 4078.00 | 637.25 | 270.05 |
| Max | 3000 | 1200 | 750 | 225 | 500 | 26000 | 2500 | 1500 |
| Min | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Table 6: 4WD

| | 4WDAcc | 4WDIns | 4WDRegist | 4WDStick | 4WDClub | 4WDBuy | 4WDFuel | 4WDOth |
|---------------|---------|--------|-----------|----------|---------|----------|---------|--------|
| Mean | 2050.51 | 622.98 | 225.17 | 6.18 | 6.34 | 9712.47 | 874.38 | 179.87 |
| Median | 500 | 600 | 150 | 0 | 0 | 0 | 500 | 0 |
| Stdev | 4931.17 | 493.43 | 223.55 | 23.21 | 19.32 | 81281.41 | 1129.34 | 902.24 |
| Max | 40000 | 3600 | 1000 | 200 | 100 | 1000000 | 7000 | 7500 |
| Min | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Key: Motorized recreational accessories – ACC; Annual insurance payment – Ins; Licenses registration or permit – Regist; Sticker fund – Stick; Club membership – Club; Purchase of OHVs – Buy; Fuel, oil, & lubricants – Fuel; Other expenses, please specify – Oth.

Table 7: UTV/Side by Side

| | UTVAcc | UTVIns | UTVRegist | UTVStick | UTVClub | UTVBuy | UTVFuel | UTVOth |
|---------------|---------|--------|-----------|----------|---------|----------|---------|----------|
| Mean | 1696.69 | 327.16 | 105.79 | 16.51 | 11.07 | 11521.82 | 623.61 | 274.6155 |
| Median | 952.29 | 290 | 50 | 0 | 0 | 0 | 400 | 0 |
| Stdev | 2527.53 | 267.32 | 159.61 | 28.20 | 29.69 | 59370.82 | 813.52 | 1950.042 |
| Max | 19200 | 1800 | 1250 | 300 | 250 | 1114000 | 5000 | 35000 |
| Min | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Table 8: SUV/Jeep

| | SUVAcc | SUVIns | SUVRegist | SUVStick | SUVClub | SUVBuy | SUVFuel | SUVOth |
|---------------|---------|--------|-----------|----------|---------|---------|---------|--------|
| Mean | 1254.45 | 557.18 | 170.35 | 9.55 | 17.25 | 2298.27 | 805.97 | 74.12 |
| Median | 400 | 500 | 100 | 0 | 0 | 0 | 400 | 0 |
| Stdev | 2281.12 | 532.49 | 218.87 | 27.79 | 36.49 | 8137.04 | 1547.08 | 331.20 |
| Max | 20000 | 3000 | 2000 | 250 | 250 | 50000 | 17000 | 3000 |
| Min | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Table 9: Snowmobiles

| | SnowAcc | SnowIns | SnowRegist | SnowStick | SnowClub | SnowBuy | SnowFuel | SnowOth |
|---------------|---------|---------|------------|-----------|----------|---------|----------|---------|
| Mean | 0 | 750 | 70 | 0 | 0 | 0.00 | 1250 | 0.00 |
| Median | 0 | 750 | 70 | 0 | 0 | 0 | 1250 | 0 |
| Stdev | 0.00 | 494.97 | 42.43 | 0.00 | 0.00 | 0.00 | 1060.66 | 0.00 |
| Max | 0 | 1100 | 100 | 0 | 0 | 0 | 2000 | 0 |
| Min | 0 | 400 | 40 | 0 | 0 | 0 | 500 | 0 |

Table 10: Dune Buggies

| | BuggyAcc | BuggyIns | BuggyRegist | BuggyStick | BuggyClub | BuggyBuy | BuggyFuel | BuggyOth |
|---------------|----------|----------|-------------|------------|-----------|----------|-----------|----------|
| Mean | 1031.82 | 172.73 | 39.82 | 5.68 | 4.55 | 3290.15 | 752.27 | 45.45 |
| Median | 100 | 150 | 22.5 | 0 | 0 | 0 | 175 | 0 |
| Stdev | 1369.18 | 188.81 | 58.42 | 15.30 | 21.32 | 10038.01 | 984.70 | 213.20 |
| Max | 5000 | 600 | 200 | 50 | 100 | 45000 | 3000 | 1000 |
| Min | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Key: Motorized recreational accessories – ACC; Annual insurance payment – Ins; Licenses registration or permit – Regist; Sticker fund – Stick; Club membership – Club; Purchase of OHVs – Buy; Fuel, oil, & lubricants – Fuel; Other expenses, please specify – Oth.

Table 11: Distribution of Out-of-State Vehicle Operating expenses

| Dune buggy | Acc | Ins | Regist | Stick | Club | Buy | Fuel | Oth |
|-------------------|------------|------------|---------------|--------------|-------------|------------|-------------|------------|
| Mean | 300 | 237.5 | 62.25 | 12.5 | 31.25 | 625 | 1125 | 1250 |
| Median | 0 | 150 | 41 | 0 | 0 | 0 | 750 | 0 |
| Stdev | 600 | 309.23 | 27.55 | 25 | 62.5 | 1250 | 514.12 | 2500 |
| Max | 1200 | 650 | 62.25 | 50 | 125 | 2500 | 1125 | 5000 |
| Min | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | |
| SUV | Acc | Ins | Regist | Stick | Club | Buy | Fuel | Oth |
| Mean | 942.71 | 571.33 | 141.79 | 11.46 | 15.63 | 5357.14 | 723.13 | 93.75 |
| Median | 500 | 556 | 120.90 | 0 | 0 | 0 | 600 | 0 |
| Stdev | 934.37 | 429.00 | 93.89 | 32.15 | 23.56 | 7760.51 | 582.15 | 283.73 |
| Max | 3000 | 1600 | 300 | 150 | 60 | 35000 | 2000 | 1000 |
| Min | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | |
| UTV | Acc | Ins | Regist | Stick | Club | Buy | Fuel | Oth |
| Mean | 4190.92 | 256.12 | 115.29 | 13.64 | 164.47 | 10774.23 | 518.48 | 106.82 |
| Median | 1100 | 250 | 60 | 0 | 0 | 6950 | 500 | 0 |
| Stdev | 12851.41 | 183.60 | 146.16 | 26.33 | 1242.00 | 12691.89 | 406.90 | 316.34 |
| Max | 99999 | 900 | 1000 | 100 | 10100 | 60000 | 2100 | 1800 |
| Min | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | |
| 4WD | Acc | Ins | Regist | Stick | Club | Buy | Fuel | Oth |
| Mean | 1128.00 | 770.56 | 288.56 | 3.06 | 19.72 | 5888.89 | 1899.72 | 0 |
| Median | 500 | 600 | 287.5 | 0 | 0 | 0 | 400 | 0 |
| Stdev | 1565.19 | 782.39 | 239.58 | 8.93 | 49.72 | 17509.29 | 4627.05 | 0 |
| Max | 5000 | 3000 | 1000 | 30 | 200 | 70000 | 20000 | 0 |
| Min | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Key: Motorized recreational accessories – ACC; Annual insurance payment – Ins; Licenses registration or permit – Regist; Sticker fund – Stick; Club membership – Club; Purchase of OHVs – Buy; Fuel, oil, & lubricants – Fuel; Other expenses, please specify – Oth.

Table 12: Distribution of Out-of-State Vehicle Operating expenses (Continued)

| Dual | Acc | Ins | Regist | Stick | Club | Buy | Fuel | Oth |
|---------------|------------|------------|---------------|--------------|-------------|------------|-------------|------------|
| Mean | 700 | 144.29 | 97.14 | 22.14 | 7.14 | 457.14 | 300 | 0 |
| Median | 500 | 125 | 95 | 0 | 0 | 0 | 200 | 0 |
| Stdev | 629.15 | 75.41 | 76.26 | 36.95 | 10.75 | 814.16 | 180.28 | 0 |
| Max | 2000 | 250 | 200 | 100 | 25 | 2000 | 600 | 0 |
| Min | 200 | 50 | 0 | 0 | 0 | 0 | 150 | 0 |
| | | | | | | | | |
| Dirt | Acc | Ins | Regist | Stick | Club | Buy | Fuel | Oth |
| Mean | 2716.67 | 148.33 | 124.17 | 22.08 | 65 | 5750 | 462.5 | 0 |
| Median | 1000 | 100 | 110 | 10 | 27.5 | 5000 | 375 | 0 |
| Stdev | 4209.21 | 148.74 | 135.27 | 31.00 | 87.41 | 5941.00 | 526.62 | 0 |
| Max | 15000 | 400 | 400 | 100 | 250 | 15000 | 2000 | 0 |
| Min | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | |
| ATV | Acc | Ins | Regist | Stick | Club | Buy | Fuel | Oth |
| Mean | 805.52 | 238.45 | 63.24 | 29.12 | 30.31 | 7078.62 | 339.26 | 547.5 |
| Median | 500 | 175 | 47.5 | 25 | 25 | 4500 | 200 | 75 |
| Stdev | 1112.89 | 259.48 | 58.25 | 24.95 | 29.32 | 7211.75 | 356.16 | 997.51 |
| Max | 5145 | 1200 | 275 | 75 | 100 | 19000 | 1500 | 2040 |
| Min | 2 | 0 | 0 | 0 | 0 | 0 | 20 | 0 |

Key: Motorized recreational accessories – ACC; Annual insurance payment – Ins;
 Licenses registration or permit – Regist; Sticker fund – Stick; Club membership – Club;
 Purchase of OHVs – Buy; Fuel, oil, & lubricants – Fuel; Other expenses, please specify – Oth.

Appendix C - Marketing Profile & Travel Behavior

Table 13: Recently-visited Trail

| Trail | County | n | Percent |
|---------------------|-----------------|----|---------|
| Munds | Coconino | 18 | 0.8% |
| Kaibab | Coconino | 17 | 0.8% |
| Butcher Jones | Maricopa | 17 | 0.8% |
| Bullhead City | Mohave | 16 | 0.7% |
| Santa Rita | Santa Cruz | 16 | 0.7% |
| Wickenburg | Maricopa | 15 | 0.7% |
| Alto | Yavapai | 15 | 0.7% |
| Mormon Lake | Coconino | 14 | 0.6% |
| Payson | Gila | 14 | 0.6% |
| Bradshaw | Yavapai | 14 | 0.6% |
| Broken Arrow | Yavapai | 14 | 0.6% |
| Bumble Bee | Yavapai | 14 | 0.6% |
| White Mtn. | Apache | 13 | 0.6% |
| Happy Jack | Coconino | 13 | 0.6% |
| Kelly Canyon/Trail | Coconino | 13 | 0.6% |
| Desert Wells | Pinal | 13 | 0.6% |
| Hayfield Draw | Yavapai | 12 | 0.5% |
| Prescott Area | Yavapai | 12 | 0.5% |
| Bouse | La Paz | 11 | 0.5% |
| Mesquite | Maricopa | 11 | 0.5% |
| Charleu Gap | Pinal | 11 | 0.5% |
| Castle Hot Springs | Maricopa | 9 | 0.4% |
| Vulture Mine | Maricopa | 9 | 0.4% |
| Kingman | Mohave | 9 | 0.4% |
| Maverick Trail | Navajo | 9 | 0.4% |
| Montana Mtn. | Pinal | 9 | 0.4% |
| White Tanks | Maricopa | 8 | 0.4% |
| Superior | Pinal | 8 | 0.4% |
| Soldier Pass | Yavapai | 8 | 0.4% |
| KOFA | Yuma | 8 | 0.4% |
| Yuma | Yuma | 8 | 0.4% |
| Arizona Strip | Mohave/Coconino | 7 | 0.3% |
| Apache Trail | Pinal | 7 | 0.3% |
| Queens Valley | Pinal | 7 | 0.3% |
| Patagonia | Santa Cruz | 7 | 0.3% |
| Imperial Sand Dunes | Yuma | 7 | 0.3% |
| Tonto Basin | Gila | 6 | 0.3% |

Table 14: Recently-visited trail (Continued)

| Trail | County | n | Percent |
|---------------------|--------------------------------|---|---------|
| Apache Sit-Greaves | Greenlee, Apache, Navajo, Coco | 6 | 0.3% |
| Harquahala | La Paz | 6 | 0.3% |
| Salome | La Paz | 6 | 0.3% |
| Hieroglyphic Mts. | Maricopa | 6 | 0.3% |
| Chiva Fall | Pima | 6 | 0.3% |
| Rosemont Jnt. | Pima | 6 | 0.3% |
| Ghost Town | Pinal | 6 | 0.3% |
| Gardner Canyon | Santa Cruz | 6 | 0.3% |
| Mingus Mtn. | Yavapai | 6 | 0.3% |
| Verde (camp/valley) | Yavapai | 6 | 0.3% |
| Alpine | Apache | 5 | 0.2% |
| Hewitt Canyon | Gila | 5 | 0.2% |
| La Paz | La Paz | 5 | 0.2% |
| Planet (ranch) | La Paz | 5 | 0.2% |
| Swansea | La Paz | 5 | 0.2% |
| Bartlett Lake | Maricopa | 5 | 0.2% |
| Morristown | Maricopa | 5 | 0.2% |
| Moss Wash | Mohave | 5 | 0.2% |
| Oatman | Mohave | 5 | 0.2% |
| Tucson | Pima | 5 | 0.2% |
| Superstition | Pinal, Maricopa, Gila | 5 | 0.2% |
| Bloody Basin | Yavapai | 5 | 0.2% |
| Senator Hwy | Yavapai | 5 | 0.2% |
| Sheridan | Yavapai | 5 | 0.2% |
| Glamis | Yuma | 5 | 0.2% |
| Saffel Canyon | Apache | 4 | 0.2% |
| Sunrise to Big Lake | Apache | 4 | 0.2% |
| Fort Valley | Coconino | 4 | 0.2% |
| Stoneman Lake | Coconino | 4 | 0.2% |
| Cherry Creek | Gila | 4 | 0.2% |
| Barry Goldwater | Maricopa | 4 | 0.2% |
| Cave Creek | Maricopa | 4 | 0.2% |
| Phoenix | Maricopa | 4 | 0.2% |
| Saguaro | Maricopa | 4 | 0.2% |
| Cattail Cove | Mohave | 4 | 0.2% |

Table 15: Recently-visited trail (Continued)

| Trail | County | n | Percent |
|---------------------|---------------|----------|----------------|
| Secret Pass | Mohave | 4 | 0.2% |
| Black Mtn. | Mohave | 4 | 0.2% |
| Utah | Utah | 4 | 0.2% |
| 7 Mile Gulch | Yavapai | 4 | 0.2% |
| Cottonwood AZ | Yavapai | 4 | 0.2% |
| Schnebly Hill | Yavapai | 4 | 0.2% |
| Smiley Rock | Yavapai | 4 | 0.2% |
| Coconino County | Coconino | 3 | 0.1% |
| Forest Lakes | Coconino | 3 | 0.1% |
| Jackass Flats | Coconino | 3 | 0.1% |
| Drippin' springs | Gila | 3 | 0.1% |
| Pine | Gila | 3 | 0.1% |
| Roosevelt Lake | Gila | 3 | 0.1% |
| Hot Well Dunes | Graham | 3 | 0.1% |
| Bison Blvd | La Paz | 3 | 0.1% |
| Black Mesa | La Paz | 3 | 0.1% |
| Cibola | La Paz | 3 | 0.1% |
| Ehrenberg Sand Bowl | La Paz | 3 | 0.1% |
| Carefree | Maricopa | 3 | 0.1% |
| Hassayampa | Maricopa | 3 | 0.1% |
| Log Corral | Maricopa | 3 | 0.1% |
| Rio Verde | Maricopa | 3 | 0.1% |
| Sunflower | Maricopa | 3 | 0.1% |
| Hualapai | Mohave | 3 | 0.1% |
| Meadview | Mohave | 3 | 0.1% |
| White Hills | Mohave | 3 | 0.1% |
| Yucca | Mohave | 3 | 0.1% |
| Shea Rd. | Parker | 3 | 0.1% |
| Mt. Lemon | Pima | 3 | 0.1% |
| Rail X | Pima | 3 | 0.1% |
| San Domingo | Pima | 3 | 0.1% |
| Mammoth AZ | Pinal | 3 | 0.1% |
| Picacho | Pinal | 3 | 0.1% |
| Rogers Trough | Pinal | 3 | 0.1% |
| San Manuel | Pinal | 3 | 0.1% |
| Empire Mts./Ranch | Santa Cruz | 3 | 0.1% |

Table 16: Recently-visited Trail (Continued)

| Trail | County | n | Percent |
|------------------------|----------------------------------|----------|----------------|
| Camp Verde | Texas | 3 | 0.1% |
| Black Canyon | Yavapai | 3 | 0.1% |
| Camp Wood | Yavapai | 3 | 0.1% |
| Cleater | Yavapai | 3 | 0.1% |
| copper canyon | Yavapai | 3 | 0.1% |
| Granite | Yavapai | 3 | 0.1% |
| Sheep's Bridge | Yavapai | 3 | 0.1% |
| Brenda | Yuma | 3 | 0.1% |
| Sonoran | Yuma, Maricopa, Pima, Santa Cruz | 3 | 0.1% |
| San Francisco River | Apache | 2 | 0.1% |
| Springerville | Apache | 2 | 0.1% |
| California | California | 2 | 0.1% |
| Buckhorn | Cochise | 2 | 0.1% |
| Cochise | Cochise | 2 | 0.1% |
| Dragoon Springs | Cochise | 2 | 0.1% |
| Mescal | Cochise | 2 | 0.1% |
| Grand Canyon | Coconino | 2 | 0.1% |
| Kendrick Mtn. | Coconino | 2 | 0.1% |
| Lake Mary | Coconino | 2 | 0.1% |
| Christopher Creek area | Gila | 2 | 0.1% |
| Greenback Mts. | Gila | 2 | 0.1% |
| Middle Gila Canyon | Gila | 2 | 0.1% |
| Pyatte | Gila | 2 | 0.1% |
| Rye | Gila | 2 | 0.1% |
| Strawberry AZ | Gila | 2 | 0.1% |
| Willow | Gila | 2 | 0.1% |
| Fry Mesa | Graham | 2 | 0.1% |
| Galiuro | Graham | 2 | 0.1% |
| Plamosa | La Paz | 2 | 0.1% |
| Camp Creek | Maricopa | 2 | 0.1% |
| Gila River | Maricopa | 2 | 0.1% |
| Peoria | Maricopa | 2 | 0.1% |
| Seven Springs | Maricopa | 2 | 0.1% |
| Sugarloaf | Maricopa | 2 | 0.1% |
| Boriana mine | Mohave | 2 | 0.1% |
| Golden Shore | Mohave | 2 | 0.1% |

Table 17: Recently-visited trail (Continued)

| Trail | County | n | Percent |
|--------------------|---------------|----------|----------------|
| Golden Valley | Mohave | 2 | 0.1% |
| Heber-Overgaard | Navajo | 2 | 0.1% |
| Show low | Navajo | 2 | 0.1% |
| Nevada | Nevada | 2 | 0.1% |
| Oregon | Oregon | 2 | 0.1% |
| Ajo | Pima | 2 | 0.1% |
| Tortolita mtn area | Pima | 2 | 0.1% |
| Ajax Mine | Pinal | 2 | 0.1% |
| Butter Field | Pinal | 2 | 0.1% |
| Coke Ovens | Pinal | 2 | 0.1% |
| Martinez Canyon | Pinal | 2 | 0.1% |
| Pinal County | Pinal | 2 | 0.1% |
| Rug Road | Pinal | 2 | 0.1% |
| Mansfield Canyon | Santa Cruz | 2 | 0.1% |
| Piute Trail | UTAH | 2 | 0.1% |
| Agua Fria | Yavapai | 2 | 0.1% |
| Bagdad/Camp | Yavapai | 2 | 0.1% |
| Blue Wall | Yavapai | 2 | 0.1% |
| Bull Pen | Yavapai | 2 | 0.1% |
| Cornville | Yavapai | 2 | 0.1% |
| Devils Bridge/Hwy | Yavapai | 2 | 0.1% |
| Green Gulch | Yavapai | 2 | 0.1% |
| Hog Back | Yavapai | 2 | 0.1% |
| Outlaw Trail | Yavapai | 2 | 0.1% |
| Thumb Butte | Yavapai | 2 | 0.1% |
| Fortuna Hills | Yuma | 2 | 0.1% |
| Lake Martinez | Yuma | 2 | 0.1% |
| Canyon de Chelly | Apache | 1 | 0.0% |
| Eager | Apache | 1 | 0.0% |
| Greer | Apache | 1 | 0.0% |
| Silver Creek | Apache | 1 | 0.0% |
| Johnson Valley | CALIFORNIA | 1 | 0.0% |
| Lucerne Valley | CALIFORNIA | 1 | 0.0% |
| Ocotillo Wells | CALIFORNIA | 1 | 0.0% |
| Bakerville rd | Cochise | 1 | 0.0% |
| Bowie OHV | Cochise | 1 | 0.0% |

Table 18: Recently-visited Trail (Continued)

| Trail | County | n | Percent |
|----------------------|--|----------|----------------|
| Carr Canyon | Cochise | 1 | 0.0% |
| Chiricahua Mtn. | Cochise | 1 | 0.0% |
| Hereford | Cochise | 1 | 0.0% |
| Tombstone Hills | Cochise | 1 | 0.0% |
| Wetstone Mtn. | Cochise | 1 | 0.0% |
| Coronado Forest | Cochise, Pima, Pinal, Graham, Santa Cruz | 1 | 0.0% |
| Cender Lake | Coconino | 1 | 0.0% |
| Clint's Well | Coconino | 1 | 0.0% |
| Coleman Lake | Coconino | 1 | 0.0% |
| Glen Canyon | Coconino | 1 | 0.0% |
| Great Western Trail | Coconino | 1 | 0.0% |
| lone rock | Coconino | 1 | 0.0% |
| O'Leary trail | Coconino | 1 | 0.0% |
| Page | Coconino | 1 | 0.0% |
| Paria Plateau | Coconino | 1 | 0.0% |
| Sunset Crater | Coconino | 1 | 0.0% |
| Tusayan ranger di | Coconino | 1 | 0.0% |
| vermillion cliffs | Coconino | 1 | 0.0% |
| Walnut Canyon | Coconino | 1 | 0.0% |
| Wupatki | Coconino | 1 | 0.0% |
| Crackerjack Mine | Gila | 1 | 0.0% |
| Desert to Tall Pines | Gila | 1 | 0.0% |
| Ellison Creek | Gila | 1 | 0.0% |
| Gila County | Gila | 1 | 0.0% |
| Milk Ranch | Gila | 1 | 0.0% |
| Picture Mtn. | Gila | 1 | 0.0% |
| Pinal Mtn. | Gila | 1 | 0.0% |
| Rim rd. | Gila | 1 | 0.0% |
| Turkey Creek | Gila | 1 | 0.0% |
| Young | Gila | 1 | 0.0% |
| Hackberry Creek | Gila | 1 | 0.0% |
| Graham County | Graham | 1 | 0.0% |

Table 19: Recently-visited Trail (Continued)

| Trail | County | n | Percent |
|---------------------|------------------|----------|----------------|
| Safford | Graham | 1 | 0.0% |
| Whitlock Cienaga | Graham | 1 | 0.0% |
| Gila Box | Graham, Greenlee | 1 | 0.0% |
| Clifton | Greenlee | 1 | 0.0% |
| Duncan | Greenlee | 1 | 0.0% |
| Eagle Creek | Greenlee | 1 | 0.0% |
| Greenlee | Greenlee | 1 | 0.0% |
| Hannigan Meadow | Greenlee | 1 | 0.0% |
| Snake Pit | Greenlee | 1 | 0.0% |
| Peloncillo | Greenlee | 1 | 0.0% |
| Desert Bar | La Paz | 1 | 0.0% |
| Hope | La Paz | 1 | 0.0% |
| Hovatter | La Paz | 1 | 0.0% |
| Red Cloud Mine | La Paz | 1 | 0.0% |
| Belmont | Maricopa | 1 | 0.0% |
| Big Horn | Maricopa | 1 | 0.0% |
| Cooks Mesa | Maricopa | 1 | 0.0% |
| Desert Vista | Maricopa | 1 | 0.0% |
| Dos Mohave | Maricopa | 1 | 0.0% |
| Dugas road | Maricopa | 1 | 0.0% |
| Goldwater West | Maricopa | 1 | 0.0% |
| Microwave Towers | Maricopa | 1 | 0.0% |
| Pleasant Valley | Maricopa | 1 | 0.0% |
| Probocito | Maricopa | 1 | 0.0% |
| Road Runner | Maricopa | 1 | 0.0% |
| Robbins Butte | Maricopa | 1 | 0.0% |
| San Domingo Wash | Maricopa | 1 | 0.0% |
| Wild pass | Maricopa | 1 | 0.0% |
| Olgovie road | Minnesota | 1 | 0.0% |
| Burrow Creek Canyon | Mohave | 1 | 0.0% |
| Cupcake Trail | Mohave | 1 | 0.0% |
| Falls Wash | Mohave | 1 | 0.0% |
| Franconia Gulch | Mohave | 1 | 0.0% |
| Gold Basin | Mohave | 1 | 0.0% |
| Mohave Rd. | Mohave | 1 | 0.0% |
| Mohave Wash | Mohave | 1 | 0.0% |

Table 20: Recently-visited Trail (Continued)

| Trail | County | n | Percent |
|----------------------------|--------|---|---------|
| Prashant National Monument | Mohave | 1 | 0.0% |
| Powerline Rd. | Mohave | 1 | 0.0% |
| Serendipity | Mohave | 1 | 0.0% |
| Sleeping Princess | Mohave | 1 | 0.0% |
| Topock | Mohave | 1 | 0.0% |
| Cedar Canyon | Navajo | 1 | 0.0% |
| linden | Navajo | 1 | 0.0% |
| Low Mountain | Navajo | 1 | 0.0% |
| Taylor Arizona | Navajo | 1 | 0.0% |
| Grant Mountain | Nevada | 1 | 0.0% |
| springboard trail | Oregon | 1 | 0.0% |
| Tillamook | Oregon | 1 | 0.0% |
| slate creek | Payson | 1 | 0.0% |
| Baboquivari Mountains | Pima | 1 | 0.0% |
| Bog Springs | Pima | 1 | 0.0% |
| Buenos Aires | Pima | 1 | 0.0% |
| Catalina Mtn. | Pima | 1 | 0.0% |
| Dog Town Road | Pima | 1 | 0.0% |
| Fish Canyon | Pima | 1 | 0.0% |
| High Creek | Pima | 1 | 0.0% |
| Ironwood National | Pima | 1 | 0.0% |
| Kentucky camp | Pima | 1 | 0.0% |
| Madera canyon | Pima | 1 | 0.0% |
| Marana | Pima | 1 | 0.0% |
| Organ pipe nat. | Pima | 1 | 0.0% |
| Pima county | Pima | 1 | 0.0% |
| Redfield canyon | Pima | 1 | 0.0% |
| Rincon Mtn. | Pima | 1 | 0.0% |
| Sahuarita | Pima | 1 | 0.0% |
| Three Feathers | Pima | 1 | 0.0% |
| Three Points | Pima | 1 | 0.0% |
| 96 ranch | Pinal | 1 | 0.0% |
| Big Wash | Pinal | 1 | 0.0% |
| Coolidge | Pinal | 1 | 0.0% |

Table 21: Recently-visited Trail (Continued)

| Trail | County | n | Percent |
|------------------------|---------------|----------|----------------|
| Elvis Trail | Pinal | 1 | 0.0% |
| Highway to hell | Pinal | 1 | 0.0% |
| Kelvin highway | Pinal | 1 | 0.0% |
| Lost Dutchman | Pinal | 1 | 0.0% |
| Oak Flat Camp | Pinal | 1 | 0.0% |
| Oracle Trail | Pinal | 1 | 0.0% |
| Peppersauce Canyon | Pinal | 1 | 0.0% |
| Pickett Post | Pinal | 1 | 0.0% |
| Riverside | Pinal | 1 | 0.0% |
| Scandon (Scanlon) Wash | Pinal | 1 | 0.0% |
| Woodpecker | Pinal | 1 | 0.0% |
| California Gulch | Santa Cruz | 1 | 0.0% |
| Santa Cruz County | Santa Cruz | 1 | 0.0% |
| Temporal Rd. | Santa Cruz | 1 | 0.0% |
| Tubac | Santa Cruz | 1 | 0.0% |
| Tummacacori | Santa Cruz | 1 | 0.0% |
| Washington Camp | Santa Cruz | 1 | 0.0% |
| red rock | Sedona | 1 | 0.0% |
| Los Coyotes | Texas | 1 | 0.0% |
| Arapeen Trail | UTAH | 1 | 0.0% |
| Moab | Utah | 1 | 0.0% |
| Hatfield McCoy | West Virginia | 1 | 0.0% |
| Amulet | Yavapai | 1 | 0.0% |
| Blue Hills | Yavapai | 1 | 0.0% |
| Bob cat canyon | Yavapai | 1 | 0.0% |
| Bryant | Yavapai | 1 | 0.0% |
| Chimney Rock | Yavapai | 1 | 0.0% |
| Congress | Yavapai | 1 | 0.0% |
| Corded Jct Area | Yavapai | 1 | 0.0% |
| Devils Staircase | Yavapai | 1 | 0.0% |
| Horse Thief Basin | Yavapai | 1 | 0.0% |
| Iron King Mine | Yavapai | 1 | 0.0% |
| Jerome | Yavapai | 1 | 0.0% |

Table 22: Recently-visited Trail (Continued)

| Trail | County | n | Percent |
|-------------------|-------------------|----------|----------------|
| Kirkland | Yavapai | 1 | 0.0% |
| Lynx Lake | Yavapai | 1 | 0.0% |
| Maggie Mine trail | Yavapai | 1 | 0.0% |
| Perkinsville | Yavapai | 1 | 0.0% |
| Seligman | Yavapai | 1 | 0.0% |
| Smasher Canyon | Yavapai | 1 | 0.0% |
| Smith Mesa OHV | Yavapai | 1 | 0.0% |
| Tule Creek | Yavapai | 1 | 0.0% |
| Walker | Yavapai | 1 | 0.0% |
| Wolf Creek | Yavapai | 1 | 0.0% |
| Yankee Doodle | Yavapai | 1 | 0.0% |
| New River Canyon | Yavapai, Maricopa | 1 | 0.0% |
| McMullen | Yuma | 1 | 0.0% |

Table 23: Place of Residence for Local OHV Visitors

| Place of Residence | n | Percent |
|---------------------------|----------|----------------|
| La Paz | 43 | 3.1% |
| Navajo | 25 | 1.8% |
| Yuma | 22 | 1.6% |
| Cochise | 16 | 1.1% |
| Gila | 14 | 1.0% |
| Graham | 8 | 0.6% |
| Greenlee | 4 | 0.3% |
| Santa Cruz | 3 | 0.2% |
| Pinal | 1 | 0.1% |

Table 24: Place of Residence for Out-of-State Visitors (based on online surveys)

| Place of Residence | n | Percent |
|---------------------------|----------|----------------|
| Alaska | 3 | 1.9% |
| Michigan | 3 | 1.9% |
| Minnesota | 3 | 1.9% |
| Ohio | 3 | 1.9% |
| Texas | 3 | 1.9% |
| Wisconsin | 3 | 1.9% |
| Wyoming | 3 | 1.9% |
| Iowa | 2 | 1.2% |
| Florida | 2 | 1.2% |
| Kansas | 2 | 1.2% |
| Missouri | 2 | 1.2% |
| Nebraska | 2 | 1.2% |
| New York | 2 | 1.2% |
| North Dakota | 2 | 1.2% |
| Oklahoma | 2 | 1.2% |
| Arkansas | 1 | 0.6% |
| Germany | 1 | 0.6% |
| Indiana | 1 | 0.6% |
| Sweden | 1 | 0.6% |
| Tennessee | 1 | 0.6% |

Table 25: Place of Residence for Out-of-State Visitors (Based on surveys conducted at the trail site)

| County | N | Percent |
|---------------|-----------|----------------|
| Idaho | 8 | 27.6% |
| Montana | 3 | 10.3% |
| Washington | 3 | 10.3% |
| California | 2 | 6.9% |
| Michigan | 2 | 6.9% |
| New Mexico | 2 | 6.9% |
| Utah | 2 | 6.9% |
| Canada | 1 | 3.4% |
| Louisiana | 1 | 3.4% |
| Nevada | 1 | 3.4% |
| Ohio | 1 | 3.4% |
| Oregon | 1 | 3.4% |
| Pennsylvania | 1 | 3.4% |
| Texas | 1 | 3.4% |
| Total | 29 | 100.0% |

Table 26: Recently Visited Trails (Onsite Respondents)

| Trail | County | n | Percent |
|---------------------|---------------|----------|----------------|
| Arizona Peace trail | La Paz | 2 | 0.9% |
| Jerome | Yavapai | 2 | 0.9% |
| Middle Gila Canyons | Gila | 2 | 0.9% |
| Parker Shea Rd. | La Paz | 2 | 0.9% |
| Reddington Pass | Pima | 2 | 0.9% |
| Standard Wash | Mohave | 2 | 0.9% |
| Williams | Coconino | 2 | 0.9% |
| Stoneman Lake | Coconino | 2 | 0.9% |
| Bumblebee | Yavapai | 2 | 0.9% |
| Happy Jack | Yavapai | 2 | 0.9% |
| Yuma | Yuma | 2 | 0.9% |
| Heber | Navajo | 2 | 0.9% |
| Congress | Yavapai | 2 | 0.9% |
| 11 Mile Wash | Coconino | 1 | 0.4% |
| Ajo | Navajo | 1 | 0.4% |
| Apache Junction | Maricopa | 1 | 0.4% |
| Apache Trail | Pinal | 1 | 0.4% |

Table 27: Recently Visited Trails (Onsite Respondents)

| Trail | County | n | Percent |
|------------------------|-----------------------|----------|----------------|
| Camp Verde | Yavapai | 1 | 0.4% |
| Carefree | Maricopa | 1 | 0.4% |
| Desert bar | La Paz | 1 | 0.4% |
| Eager | Apache | 1 | 0.4% |
| Hot Well Dunes | Graham | 1 | 0.4% |
| Kaibab NF | Coconino | 1 | 0.4% |
| Kelly Canyon | Coconino | 1 | 0.4% |
| Munds park | Coconino | 1 | 0.4% |
| Oro Valley | Pima | 1 | 0.4% |
| Patagonia | Santa Cruz | 1 | 0.4% |
| Pine Top | Navajo | 1 | 0.4% |
| Rio Verde | Maricopa | 1 | 0.4% |
| Rolls | Maricopa | 1 | 0.4% |
| Ruby Wash | Yavapai | 1 | 0.4% |
| Safford | Graham | 1 | 0.4% |
| San Manuel | Pinal | 1 | 0.4% |
| Sonoran Desert | Yuma | 1 | 0.4% |
| St. John's | Apache | 1 | 0.4% |
| Superstition Mountains | Pinal, Maricopa, Gila | 1 | 0.4% |
| Tucson | Pima | 1 | 0.4% |
| Perkinsville | Yavapai | 1 | 0.4% |
| Prescott Lakes | Yavapai | 1 | 0.4% |
| Lake Mary | Coconino | 1 | 0.4% |
| White Tanks | Maricopa | 1 | 0.4% |
| Alto Pit | Yavapai | 1 | 0.4% |
| Tonto Basin | Gila | 1 | 0.4% |
| Bloody Basin | Yavapai | 1 | 0.4% |
| Motoland | Maricopa | 1 | 0.4% |
| Fort Valley | Coconino | 1 | 0.4% |
| Walapai | Mohave | 1 | 0.4% |
| Santa Rita | Santa Cruz | 1 | 0.4% |

Table 28: Recently Visited Trails (Onsite Respondents)

| Trail | County | n | Percent |
|-------------------|---------------|----------|----------------|
| Roosevelt Lake | Gila | 1 | 0.4% |
| Morristown | Mohave | 1 | 0.4% |
| Oro Valley | Pima | 1 | 0.4% |
| Oracle | Pinal | 1 | 0.4% |
| Phoenix | Maricopa | 1 | 0.4% |
| Globe | Gila | 1 | 0.4% |
| Wittman | Maricopa | 1 | 0.4% |
| Casa Grande | Pinal | 1 | 0.4% |
| Aguila | Maricopa | 1 | 0.4% |
| Cave Creek | Maricopa | 1 | 0.4% |
| Bagdad | Yavapai | 1 | 0.4% |
| Bartlett Lake | Maricopa | 1 | 0.4% |
| Mingus Mountain | Yavapai | 1 | 0.4% |
| Bush Highway Area | Maricopa | 1 | 0.4% |
| Coke Ovens | Yavapai | 1 | 0.4% |
| Camp Creek | Maricopa | 1 | 0.4% |
| Vulture | Maricopa | 1 | 0.4% |
| Rosemont Junction | Pima | 1 | 0.4% |

Table 29: Other Visited Trails (Online respondents)

| Trail | County | N | % |
|---------------------|--------------------------------|----------|----------|
| Boulders | Maricopa | 104 | 3.5% |
| Table mesa | Maricopa | 102 | 3.4% |
| Crown king | Yavapai | 92 | 3.1% |
| Four Peaks | Maricopa | 89 | 3.0% |
| Sycamore | Maricopa | 88 | 3.0% |
| Box Canyon | Pinal | 76 | 2.5% |
| Parker | La Paz | 72 | 2.4% |
| Cinder hills | Coconino | 70 | 2.3% |
| Florence | Pinal | 69 | 2.3% |
| Lake Havasu | La Paz | 68 | 2.3% |
| Sedona | Yavapai | 65 | 2.2% |
| Flagstaff | Coconino | 60 | 2.0% |
| Bulldog | Maricopa | 59 | 2.0% |
| Wickenburg | Maricopa | 48 | 1.6% |
| Wild Cat | Navajo | 43 | 1.4% |
| Tonto NF | Gila, Maricopa, Yavapai, Pinal | 42 | 1.4% |
| Quartzsite | La Paz | 37 | 1.2% |
| Lake Pleasant | Maricopa | 36 | 1.2% |
| Williams | Coconino | 36 | 1.2% |
| Prescott Area | Yavapai | 35 | 1.2% |
| Arizona Peace Trail | La Paz | 34 | 1.1% |
| Rolls OHV | Maricopa | 33 | 1.1% |
| Rim | Coconino, Gila, Yavapai | 32 | 1.1% |
| Kelly Canyon | Coconino | 29 | 1.0% |
| Butcher Jones | Maricopa | 27 | 0.9% |
| Alamo Lake | La Paz | 26 | 0.9% |
| Hualapai | Mohave | 26 | 0.9% |
| Coconino NF | Coconino, Gila, Yavapai | 25 | 0.8% |
| Bouse | La Paz | 24 | 0.8% |
| Broken Arrow | Yavapai | 24 | 0.8% |
| Kingman | Mohave | 23 | 0.8% |
| Payson | Gila | 23 | 0.8% |
| Montana Mountains | Pinal | 22 | 0.7% |

Table 30: Other Visited Trails (Online respondents)

| | | | |
|--------------------|------------|----|------|
| White Mountain | Navajo | 22 | 0.7% |
| Bradshaw | Yavapai | 21 | 0.7% |
| Bullhead | Mohave | 21 | 0.7% |
| Coconino County | Coconino | 21 | 0.7% |
| Patagonia | Santa Cruz | 20 | 0.7% |
| Prescott NF | Yavapai | 20 | 0.7% |
| Apache Trail | Pinal | 19 | 0.6% |
| Hayfield Draw | Yavapai | 19 | 0.6% |
| Mormon Lake | Coconino | 19 | 0.6% |
| Munds | Coconino | 19 | 0.6% |
| Bumble bee | Yavapai | 18 | 0.6% |
| Camp Wood | Yavapai | 18 | 0.6% |
| Payette Draw | Gila | 17 | 0.6% |
| Reddington pass | Pima | 17 | 0.6% |
| Mohave County | Mohave | 15 | 0.5% |
| Tucson | Pima | 15 | 0.5% |
| Alto | Yavapai | 14 | 0.5% |
| Bloody Basin | Yavapai | 14 | 0.5% |
| Chiva Fall | Pima | 14 | 0.5% |
| Yuma | Yuma | 14 | 0.5% |
| Castle hot springs | Maricopa | 13 | 0.4% |
| Kaibab | Coconino | 13 | 0.4% |
| Charleau Gap | Pinal | 12 | 0.4% |
| Cottonwood | Yavapai | 12 | 0.4% |
| Fort Valley | Coconino | 12 | 0.4% |
| happy jack | Coconino | 12 | 0.4% |
| Heber | Navajo | 12 | 0.4% |
| Pine | Gila | 12 | 0.4% |
| Standard wash | Mohave | 12 | 0.4% |
| Tombstone | Cochise | 12 | 0.4% |
| Verde Valley | Yavapai | 12 | 0.4% |
| Queens valley | Pinal | 11 | 0.4% |
| Schnebly | Yavapai | 11 | 0.4% |
| Sheeps Bridge | Yavapai | 11 | 0.4% |

Table 31: Other Visited Trails (Online respondents)

| | | | |
|---------------------|--------------------------------|----|------|
| Coke Ovens | Pinal | 10 | 0.3% |
| Forest lakes | Coconino | 10 | 0.3% |
| Hassayampa | Maricopa | 9 | 0.3% |
| La Paz | La Paz | 9 | 0.3% |
| Mesquite | Maricopa | 9 | 0.3% |
| Salome | La Paz | 9 | 0.3% |
| Sitgreaves | Greenlee, Apache, Navajo, Coco | 9 | 0.3% |
| Turkey Creek | Gila | 9 | 0.3% |
| Vulture Mine | Maricopa | 9 | 0.3% |
| Arizona Strip | Mohave/Coconino | 8 | 0.3% |
| Cornville | Yavapai | 8 | 0.3% |
| Gardner Canyon | Santa Cruz | 8 | 0.3% |
| Great Western Trail | Coconino | 8 | 0.3% |
| Maverick | Pima | 8 | 0.3% |
| Morristown | Maricopa | 8 | 0.3% |
| Mt. Lemon | Pima | 8 | 0.3% |
| New River | Maricopa | 8 | 0.3% |
| Santa Rita | Santa Cruz | 8 | 0.3% |
| Shea rd | La Paz | 8 | 0.3% |
| Sunrise to Big Lake | Apache | 8 | 0.3% |
| Superior | Pinal | 8 | 0.3% |
| Alpine | Apache | 7 | 0.2% |
| Bartlett Lake | Maricopa | 7 | 0.2% |
| Harquahala | La Paz | 7 | 0.2% |
| Hot wells | Graham | 7 | 0.2% |
| Kofa | Yuma | 7 | 0.2% |
| Log Corral | Maricopa | 7 | 0.2% |
| Mingus Mountains | Yavapai | 7 | 0.2% |
| Senator highway | Yavapai | 7 | 0.2% |
| Sheridan | Yavapai | 7 | 0.2% |
| Show Low | Navajo | 7 | 0.2% |
| Sunflower | Maricopa | 7 | 0.2% |
| Topock | Mohave | 7 | 0.2% |

Table 32: Other Visited Trails (Online respondents)

| | | | |
|------------------|--|---|------|
| White tanks | Maricopa | 7 | 0.2% |
| Young | Gila | 7 | 0.2% |
| Black Mesa | La Paz | 6 | 0.2% |
| Desert bar | La Paz | 6 | 0.2% |
| Empire Ranch | Santa Cruz | 6 | 0.2% |
| Stoneman Lake | Coconino | 6 | 0.2% |
| Willow | Gila | 6 | 0.2% |
| 7 Mile Gulch | Yavapai | 5 | 0.2% |
| Cave Creek | Maricopa | 5 | 0.2% |
| Chimney Rock | Yavapai | 5 | 0.2% |
| Coronado NF | Cochise, Pima, Pinal, Graham, Santa Cruz | 5 | 0.2% |
| Elvis trail | Pinal | 5 | 0.2% |
| Jackass Flats | Coconino | 5 | 0.2% |
| Martinez | Yuma | 5 | 0.2% |
| Mohave | Mohave | 5 | 0.2% |
| Mud springs | Cochise | 5 | 0.2% |
| Oatman | Mohave | 5 | 0.2% |
| Preachers Pass | La Paz | 5 | 0.2% |
| Roosevelt Lake | Gila | 5 | 0.2% |
| Rovies Needle | La Paz | 5 | 0.2% |
| Saffel Canyon | Apache | 5 | 0.2% |
| Superstition | Pinal, Maricopa, Gila | 5 | 0.2% |
| 96 ranch | Pinal | 4 | 0.1% |
| Agua Fria | Yavapai | 4 | 0.1% |
| Barry Goldwater | Maricopa | 4 | 0.1% |
| Catalina | Pima | 4 | 0.1% |
| Cattail Cove | Mohave | 4 | 0.1% |
| Congress | Yavapai | 4 | 0.1% |
| Desert wells | Pinal | 4 | 0.1% |
| Dripping Springs | Gila | 4 | 0.1% |
| Ehrenberg | La Paz | 4 | 0.1% |
| Gila Box | Graham, Greenlee | 4 | 0.1% |
| Glamis | Yuma | 4 | 0.1% |

Table 33: Other Visited Trails (Online respondents)

| | | | |
|---------------------|------------|---|------|
| Globe | Gila | 4 | 0.1% |
| Graham | Graham | 4 | 0.1% |
| Granite | Yavapai | 4 | 0.1% |
| Mesa | Maricopa | 4 | 0.1% |
| Moss Wash | Mohave | 4 | 0.1% |
| Mt. Ord | Maricopa | 4 | 0.1% |
| Rosemont Junction | Pima | 4 | 0.1% |
| Rug Road | Pinal | 4 | 0.1% |
| Saguaro Lake | Maricopa | 4 | 0.1% |
| secret pass | Mohave | 4 | 0.1% |
| Smiley rock | Yavapai | 4 | 0.1% |
| Springerville | Apache | 4 | 0.1% |
| Wikieup | Mohave | 4 | 0.1% |
| Yucca | Mohave | 4 | 0.1% |
| Black Canyon | Yavapai | 3 | 0.1% |
| Brenda | La Paz | 3 | 0.1% |
| camp creek | Maricopa | 3 | 0.1% |
| Cherry creek | Gila | 3 | 0.1% |
| Chloride | Mohave | 3 | 0.1% |
| Cibola | La Paz | 3 | 0.1% |
| Clints well | Coconino | 3 | 0.1% |
| Devils Highway | Pinal | 3 | 0.1% |
| Ghost town | Pinal | 3 | 0.1% |
| Grand Canyon | Coconino | 3 | 0.1% |
| Greens Peak | Navajo | 3 | 0.1% |
| Gunsight Pass | Santa Cruz | 3 | 0.1% |
| Imperial Sand Dunes | Yuma | 3 | 0.1% |
| Ironwood Forest | Pima | 3 | 0.1% |
| Mammoth | Pinal | 3 | 0.1% |
| Phoenix | Maricopa | 3 | 0.1% |
| Pima | Pima | 3 | 0.1% |
| Rattler Pass | Maricopa | 3 | 0.1% |
| Rogers Trough | Pinal | 3 | 0.1% |

Table 34: Other Visited Trails (Online respondents)

| | | | |
|---------------------|------------|---|------|
| Seven Springs | Maricopa | 3 | 0.1% |
| Smasher Canyon | Yavapai | 3 | 0.1% |
| Sonoita | Santa Cruz | 3 | 0.1% |
| Sugarloaf | Maricopa | 3 | 0.1% |
| Toroweap | Mohave | 3 | 0.1% |
| Tortolita mountains | Pima | 3 | 0.1% |
| White Hills | Mohave | 3 | 0.1% |
| Yavapai | Yavapai | 3 | 0.1% |
| Ajax Mine | Pinal | 2 | 0.1% |
| Anderson | Coconino | 2 | 0.1% |
| Aravaipa | Pinal | 2 | 0.1% |
| Arivaca | Pima | 2 | 0.1% |
| Ash Creek | Graham | 2 | 0.1% |
| Bear Canyon | Coconino | 2 | 0.1% |
| Bisbee | Cochise | 2 | 0.1% |
| Black Mountains | Mohave | 2 | 0.1% |
| Buckeye | Maricopa | 2 | 0.1% |
| Casner | Yavapai | 2 | 0.1% |
| Copper Canyon | Yavapai | 2 | 0.1% |
| Copper Creek | Yavapai | 2 | 0.1% |
| Fossil Creek | Gila | 2 | 0.1% |
| Galuiro | Graham | 2 | 0.1% |
| Gold Canyon | Pinal | 2 | 0.1% |
| Golden Shore | Mohave | 2 | 0.1% |
| Green Valley | Pima | 2 | 0.1% |
| Greer | Apache | 2 | 0.1% |
| Groom Creek | Yavapai | 2 | 0.1% |
| Highway to Hell | Pinal | 2 | 0.1% |
| Hope | La Paz | 2 | 0.1% |
| Humphreys | Coconino | 2 | 0.1% |
| Jerome | Yavapai | 2 | 0.1% |
| Kendrick Park | Coconino | 2 | 0.1% |
| Las Cienegas | Pima | 2 | 0.1% |

Table 35: Other Visited Trails (Online respondents)

| | | | |
|---------------------|----------------------------------|---|------|
| Long Draw | Pima | 2 | 0.1% |
| Mayer | Yavapai | 2 | 0.1% |
| Mt. Graham | Graham | 2 | 0.1% |
| Oak Flats | Pinal | 2 | 0.1% |
| Orme Rd | Yavapai | 2 | 0.1% |
| Peach Springs | Mohave | 2 | 0.1% |
| picket post | Pinal | 2 | 0.1% |
| Pinal | Pinal | 2 | 0.1% |
| Planet Ranch | Mohave | 2 | 0.1% |
| Rail X Ranch | Pima | 2 | 0.1% |
| Red Cloud Mine | La Paz | 2 | 0.1% |
| Red Creek | Yavapai | 2 | 0.1% |
| Rio Verde | Maricopa | 2 | 0.1% |
| Saligman | Yavapai | 2 | 0.1% |
| San Francisco Peaks | Coconino | 2 | 0.1% |
| San Manuel | Pinal | 2 | 0.1% |
| Silver Creek | Apache | 2 | 0.1% |
| Sonoran | Yuma, Maricopa, Pima, Santa Cruz | 2 | 0.1% |
| Swansea | La Paz | 2 | 0.1% |
| Tank Pass | La Paz | 2 | 0.1% |
| Tonto Basin | Gila | 2 | 0.1% |
| West peak | Maricopa | 2 | 0.1% |
| Woodpecker | Pinal | 2 | 0.1% |
| Yankee doodle | Yavapai | 2 | 0.1% |
| Yarnell | Yavapai | 2 | 0.1% |
| Aguila | Maricopa | 1 | 0.0% |
| Annaconda | Maricopa | 1 | 0.0% |
| Aqua Caliente | Pima | 1 | 0.0% |
| Aquarius Mountains | Mohave | 1 | 0.0% |
| Avra Valley | Pima | 1 | 0.0% |
| Bassett peak | Pima | 1 | 0.0% |
| Belmont Mountains | Maricopa | 1 | 0.0% |
| Ben Avery | Maricopa | 1 | 0.0% |

Table 36: Other Visited Trails (Online respondents)

| | | | |
|-------------------------|------------|---|------|
| Benson | Cochise | 1 | 0.0% |
| Big Eye Mine | Yuma | 1 | 0.0% |
| Bison Blvd | La Paz | 1 | 0.0% |
| Blue River | Greenlee | 1 | 0.0% |
| Blue Wash | Coconino | 1 | 0.0% |
| Bonita | Graham | 1 | 0.0% |
| Boriana Mine | Mohave | 1 | 0.0% |
| Bull Springs | Pima | 1 | 0.0% |
| Burro Creek | Mohave | 1 | 0.0% |
| Bush Highway | Coconino | 1 | 0.0% |
| Cactus Monument | Pima | 1 | 0.0% |
| Canyon Diablo | Navajo | 1 | 0.0% |
| Cedar lake | Navajo | 1 | 0.0% |
| Cerbat Mountains | Mohave | 1 | 0.0% |
| Challenger Way | Havasu | 1 | 0.0% |
| Chamberlin Trail | Gila | 1 | 0.0% |
| Chevelon Canyon area | Coconino | 1 | 0.0% |
| China Dam | Maricopa | 1 | 0.0% |
| Chino Valley | Yavapai | 1 | 0.0% |
| Chiricahua | Cochise | 1 | 0.0% |
| Cienega Creek | Santa Cruz | 1 | 0.0% |
| Cinder Lakes | Coconino | 1 | 0.0% |
| Clarkdale | Yavapai | 1 | 0.0% |
| Clay Pits | Maricopa | 1 | 0.0% |
| Cleater | Yavapai | 1 | 0.0% |
| Cotton Wood Canyon Road | Pinal | 1 | 0.0% |
| Craggy Wash | La Paz | 1 | 0.0% |
| Day Mine Road | Maricopa | 1 | 0.0% |
| Desert Trails | Maricopa | 1 | 0.0% |
| Desoto Mine | Yavapai | 1 | 0.0% |
| Diamondback | Yavapai | 1 | 0.0% |
| Dragoon | Cochise | 1 | 0.0% |
| Dreamy draw | Maricopa | 1 | 0.0% |

Table 37: Other Visited Trails (Online respondents)

| | | | |
|--------------------------|------------|---|------|
| Dry Creek | Yavapai | 1 | 0.0% |
| East fork black river | Coconino | 1 | 0.0% |
| Eloy | Pinal | 1 | 0.0% |
| Empire Cienega | Santa Cruz | 1 | 0.0% |
| Feather Trail | Coconino | 1 | 0.0% |
| Flag Mine | Mohave | 1 | 0.0% |
| Freeman Road | Pinal | 1 | 0.0% |
| Gaudalote Flats | Maricopa | 1 | 0.0% |
| General Cooks | Yavapai | 1 | 0.0% |
| Gila rim | Gila | 1 | 0.0% |
| Gila River | Maricopa | 1 | 0.0% |
| Goat Hill | Maricopa | 1 | 0.0% |
| Golden Valley | Mohave | 1 | 0.0% |
| Grant Creek | Pima | 1 | 0.0% |
| Greasy Spoon | Yavapai | 1 | 0.0% |
| Greaterville | Pima | 1 | 0.0% |
| Greenback | Gila | 1 | 0.0% |
| Grey Eagle | La Paz | 1 | 0.0% |
| Guthrie Peak | Pima | 1 | 0.0% |
| Hackberry | Mohave | 1 | 0.0% |
| Haigler Creek Campground | Gila | 1 | 0.0% |
| Hells Canyon | Maricopa | 1 | 0.0% |
| Hells gate | Gila | 1 | 0.0% |
| Hewitt canyon | Gila | 1 | 0.0% |
| Hieroglyphic | Maricopa | 1 | 0.0% |
| Horeshoe | Coconino | 1 | 0.0% |
| Horse Thief trail | Yavapai | 1 | 0.0% |
| Horseshow Lake | Coconino | 1 | 0.0% |
| Huachuca | Cochise | 1 | 0.0% |
| Hutch | Maricopa | 1 | 0.0% |
| Jackson Cabin | Graham | 1 | 0.0% |
| Juniper mesa | Yavapai | 1 | 0.0% |

Table 38: Other Visited Trails (Online respondents)

| | | | |
|-----------------------|----------|---|------|
| Kearny Trail | Pinal | 1 | 0.0% |
| Kelvin Highway | Pinal | 1 | 0.0% |
| Kentucky Camp | Pima | 1 | 0.0% |
| Klondyke | Graham | 1 | 0.0% |
| La Gurta | Yuma | 1 | 0.0% |
| La Posa | La Paz | 1 | 0.0% |
| Lake Mary | Coconino | 1 | 0.0% |
| Long Lake | Coconino | 1 | 0.0% |
| Lynx Lake | Yavapai | 1 | 0.0% |
| mansfield | Maricopa | 1 | 0.0% |
| Maricopa | Maricopa | 1 | 0.0% |
| Marsh Station | Cochise | 1 | 0.0% |
| Martinez canyon | Pinal | 1 | 0.0% |
| Matazal | Maricopa | 1 | 0.0% |
| McEniry Tunnel | Graham | 1 | 0.0% |
| McPhearson pass | Yuma | 1 | 0.0% |
| Meadview | Mohave | 1 | 0.0% |
| Mescal | Cochise | 1 | 0.0% |
| Middle gila canyon | Gila | 1 | 0.0% |
| Mineral Mountain Road | Pinal | 1 | 0.0% |
| Mineral wash | La Paz | 1 | 0.0% |
| Mohave Wash | Mohave | 1 | 0.0% |
| Morgan City Wash | Maricopa | 1 | 0.0% |
| Negro Canyon | Graham | 1 | 0.0% |
| North Mineral Mine | Pinal | 1 | 0.0% |
| Oracle | Pinal | 1 | 0.0% |
| Organ Pipe | Pima | 1 | 0.0% |
| Oro valley | Pima | 1 | 0.0% |
| Osborne Wash | La Paz | 1 | 0.0% |
| Page | Coconino | 1 | 0.0% |
| Palm Canyon | Yuma | 1 | 0.0% |
| Peppersauce canyon | La Paz | 1 | 0.0% |
| Picacho Peak | Pinal | 1 | 0.0% |

Table 39: Other Visited Trails (Online respondents)

| | | | |
|-------------------------|------------|---|------|
| Pinal Air Park | Pinal | 1 | 0.0% |
| Pinetop | Navajo | 1 | 0.0% |
| Pinto Creek | Pinal | 1 | 0.0% |
| Plomosa Mountains | La Paz | 1 | 0.0% |
| Portor Mountain | Navajo | 1 | 0.0% |
| Powell | Coconino | 1 | 0.0% |
| Powerline Road | Yavapai | 1 | 0.0% |
| Red Knolls | Graham | 1 | 0.0% |
| Reymert | Pinal | 1 | 0.0% |
| Rice Peak | Pinal | 1 | 0.0% |
| Rio Rico Area | Santa Cruz | 1 | 0.0% |
| River Island State Park | La Paz | 1 | 0.0% |
| Rock Creek | Gila | 1 | 0.0% |
| Rocker panel Pass | Coconino | 1 | 0.0% |
| Ruby Wash | Maricopa | 1 | 0.0% |
| Rye | Gila | 1 | 0.0% |
| Salida Gulch | Yavapai | 1 | 0.0% |
| Salt Mine | Maricopa | 1 | 0.0% |
| Salt River area | Maricopa | 1 | 0.0% |
| San Domingo Wash | Maricopa | 1 | 0.0% |
| San Rafael | Santa Cruz | 1 | 0.0% |
| Saw Tooth Mountain | Pinal | 1 | 0.0% |
| serendipity | Mohave | 1 | 0.0% |
| Sierra ancha | Gila | 1 | 0.0% |
| Sierrita Mountain | Pima | 1 | 0.0% |
| Silver Bell | Pima | 1 | 0.0% |
| Silver King Mine | Pinal | 1 | 0.0% |
| Sleeping princess | Mohave | 1 | 0.0% |
| Soldier Pass | Yavapai | 1 | 0.0% |
| spruce mountain | Yavapai | 1 | 0.0% |
| Summit Road | Maricopa | 1 | 0.0% |
| Sunshine mine | Maricopa | 1 | 0.0% |

Table 40: Other Visited Trails (Online respondents)

| | | | |
|------------------|------------|---|------|
| Switchbacks | Yavapai | 1 | 0.0% |
| The Cabin | Pinal | 1 | 0.0% |
| The Murals | La Paz | 1 | 0.0% |
| three feathers | Pima | 1 | 0.0% |
| Tiger Wash | La Paz | 1 | 0.0% |
| Tip Top Mine | Yavapai | 1 | 0.0% |
| Tumacacori | Santa Cruz | 1 | 0.0% |
| Tusayan | Coconino | 1 | 0.0% |
| Vail | Pima | 1 | 0.0% |
| Walnut Creek | Coconino | 1 | 0.0% |
| Warner Valley | Maricopa | 1 | 0.0% |
| Warsaw Canyon | Santa Cruz | 1 | 0.0% |
| Whitlow | Pinal | 1 | 0.0% |
| Wild Burro | Pima | 1 | 0.0% |
| Wild Cow Springs | Mohave | 1 | 0.0% |
| Wing Mountain | Coconino | 1 | 0.0% |
| Wolverine Pass | Pinal | 1 | 0.0% |
| Yellowstone | Maricopa | 1 | 0.0% |

Table 41: Other Visited Out-of-State Trails (Online respondents)

| Trail | State | N | % |
|------------------------------|------------|-----|-------|
| Moab | Utah | 182 | 11.8% |
| Imperial Sand Dunes (Glamis) | California | 156 | 10.1% |
| Utah | Utah | 84 | 5.4% |
| Colorado | Colorado | 81 | 5.2% |
| Paiute trail | Utah | 52 | 3.4% |
| California | California | 30 | 1.9% |
| Idaho | Idaho | 27 | 1.7% |
| Johnson valley | California | 26 | 1.7% |
| Nevada | Nevada | 22 | 1.4% |
| Ocotillo | California | 19 | 1.2% |
| Sand Hallow | Nevada | 19 | 1.2% |
| Rubicon | California | 18 | 1.2% |
| Baja | California | 15 | 1.0% |
| Taylor Lake | Colorado | 15 | 1.0% |
| Crown King | Arizona | 14 | 0.9% |
| Hurricane St. George | Florida | 14 | 0.9% |
| Montana | Montana | 14 | 0.9% |
| Oregon | Oregon | 14 | 0.9% |
| Big Bear | California | 13 | 0.8% |
| Ouray | Colorado | 11 | 0.7% |
| Boulders | Arizona | 10 | 0.6% |
| Silverton | Colorado | 10 | 0.6% |
| Washington | Washington | 10 | 0.6% |
| Buttercup | California | 9 | 0.6% |
| New Mexico | New Mexico | 9 | 0.6% |
| Death Valley | California | 8 | 0.5% |
| Havasu | Arizona | 8 | 0.5% |
| Marysvale | Utah | 8 | 0.5% |
| Sycamore | Arizona | 8 | 0.5% |
| Arapeen | Utah | 7 | 0.5% |
| Box canyon | Arizona | 7 | 0.5% |
| Coral Pink Dunes | Utah | 7 | 0.5% |
| Crested Butte | Colorado | 7 | 0.5% |
| Florence | Arizona | 7 | 0.5% |
| Logandale | Nevada | 7 | 0.5% |
| Pink Coral | Utah | 7 | 0.5% |

Table 42: Other Visited Out-of-State Trails (Online respondents)

| | | | |
|---------------------------|---------------|---|------|
| Bulldog | Arizona | 6 | 0.4% |
| Mexico | Mexico | 6 | 0.4% |
| Mohave Trail | Nevada | 6 | 0.4% |
| Parker | Arizona | 6 | 0.4% |
| San Juan | Colorado | 6 | 0.4% |
| Black bear | Colorado | 5 | 0.3% |
| Black Hills | South Dakota | 5 | 0.3% |
| Coconino National Forest | Arizona | 5 | 0.3% |
| Duck Creek Village | Utah | 5 | 0.3% |
| Dumont Dunes | California | 5 | 0.3% |
| Farmington | New Mexico | 5 | 0.3% |
| Grand Staircase Escalante | New Mexico | 5 | 0.3% |
| Oregon Dunes | Oregon | 5 | 0.3% |
| Payette Draw | Arizona | 5 | 0.3% |
| Silver City | New Mexico | 5 | 0.3% |
| Wyoming | South Dakoto | 5 | 0.3% |
| Alamo Lake | Arizona | 4 | 0.3% |
| Alpine Loop | Colorado | 4 | 0.3% |
| Bryce Canyon | Utah | 4 | 0.3% |
| Flagstaff | Arizona | 4 | 0.3% |
| Gila | New Mexico | 4 | 0.3% |
| Hatfield McCoy | West Virginia | 4 | 0.3% |
| Havasu landing | California | 4 | 0.3% |
| Kennedy Meadows | California | 4 | 0.3% |
| Laughlin | Nevada | 4 | 0.3% |
| Needles area | California | 4 | 0.3% |
| payson area | Arizona | 4 | 0.3% |
| Rocky point | Mexico | 4 | 0.3% |
| San Rafael Swell | Utah | 4 | 0.3% |
| Bartlett lake | Arizona | 3 | 0.2% |
| Bend | Oregon | 3 | 0.2% |
| Browns camp | Oregon | 3 | 0.2% |

Table 43: Other Visited Out-of-State Trails (Online respondents)

| | | | |
|--------------------------|--------------|---|------|
| Bullhead | Arizona | 3 | 0.2% |
| Canyonlands | Utah | 3 | 0.2% |
| Cinders | Arizona | 3 | 0.2% |
| CloudCroft | New Mexico | 3 | 0.2% |
| Coke ovens | Arizona | 3 | 0.2% |
| Cottonwood Pass | Colorado | 3 | 0.2% |
| Gordon's Well | California | 3 | 0.2% |
| Gunnison | Colorado | 3 | 0.2% |
| Hungry Valley | California | 3 | 0.2% |
| Kaibab national forest | Arizona | 3 | 0.2% |
| Kansas | Kansas | 3 | 0.2% |
| Kingman area | Arizona | 3 | 0.2% |
| Mesquite | Arizona | 3 | 0.2% |
| Michigan | Michigan | 3 | 0.2% |
| Missouri | Missouri | 3 | 0.2% |
| Mohave County | Arizona | 3 | 0.2% |
| mohave road | Arizona | 3 | 0.2% |
| mormon lake | Arizona | 3 | 0.2% |
| Mt. Lemmon | Arizona | 3 | 0.2% |
| Munds Park | Arizona | 3 | 0.2% |
| Picacho | Arizona | 3 | 0.2% |
| Pipestone | Montana | 3 | 0.2% |
| Pismo Beach | California | 3 | 0.2% |
| Prescott | Arizona | 3 | 0.2% |
| Prescott National Forest | Arizona | 3 | 0.2% |
| Quartzsite | Arizona | 3 | 0.2% |
| Rico | Colorado | 3 | 0.2% |
| Ridgecrest | California | 3 | 0.2% |
| Rolls | Arizona | 3 | 0.2% |
| South Dakota | South Dakota | 3 | 0.2% |
| Tonto NF | Arizona | 3 | 0.2% |
| Vulture | Arizona | 3 | 0.2% |
| Wildcat | Arizona | 3 | 0.2% |
| Williams | Arizona | 3 | 0.2% |
| Alto Pit | Arizona | 2 | 0.1% |

Table 44: Other Visited Out-of-State Trails (Online respondents)

| | | | |
|----------------------|------------|---|------|
| American Fork Canyon | Utah | 2 | 0.1% |
| arizona peace trail | Arizona | 2 | 0.1% |
| Barstow | California | 2 | 0.1% |
| Beaver | Utah | 2 | 0.1% |
| Black river falls | Wisconsin | 2 | 0.1% |
| Bloody Basin | Arizona | 2 | 0.1% |
| Borrego state park | California | 2 | 0.1% |
| Broken arrow | Arizona | 2 | 0.1% |
| Camp Wood | Arizona | 2 | 0.1% |
| Cedar Mountain | Utah | 2 | 0.1% |
| Cleghorn | California | 2 | 0.1% |
| Copper Basin | California | 2 | 0.1% |
| Cornville | Arizona | 2 | 0.1% |
| Corral Canyon | California | 2 | 0.1% |
| Durango | Colorado | 2 | 0.1% |
| El Mirage | Arizona | 2 | 0.1% |
| Flat top | Colorado | 2 | 0.1% |
| Fort valley | Arizona | 2 | 0.1% |
| Four Peaks | Arizona | 2 | 0.1% |
| Fremont trail | Utah | 2 | 0.1% |
| Great Western | Utah | 2 | 0.1% |
| Heber | Arizona | 2 | 0.1% |
| Hollister Hills | California | 2 | 0.1% |
| Imogene Pass | Colorado | 2 | 0.1% |
| Iowa | Iowa | 2 | 0.1% |
| Kelly Canyon | Arizona | 2 | 0.1% |
| Knab | Utah | 2 | 0.1% |
| Lake Pleasant OHV | Arizona | 2 | 0.1% |
| Lake Powell | Utah | 2 | 0.1% |
| Las Cruces | New Mexico | 2 | 0.1% |
| Log Corral | Arizona | 2 | 0.1% |
| Lone Pine | California | 2 | 0.1% |
| Mammoth | California | 2 | 0.1% |
| Mingus Mountain | Arizona | 2 | 0.1% |
| monticello | Utah | 2 | 0.1% |
| Monument Valley | Arizona | 2 | 0.1% |

Table 45: Other Visited Out-of-State Trails (Online respondents)

| | | | |
|------------------------|------------|---|------|
| Naches National Forest | Washington | 2 | 0.1% |
| New River | Arizona | 2 | 0.1% |
| Pahrump | Nevada | 2 | 0.1% |
| Rim | Arizona | 2 | 0.1% |
| Rogers trough | Arizona | 2 | 0.1% |
| Salome | Arizona | 2 | 0.1% |
| Sandy Hallow | Utah | 2 | 0.1% |
| Sedona | Arizona | 2 | 0.1% |
| Seven Mile Wash | Arizona | 2 | 0.1% |
| Sheeps Bridge | Arizona | 2 | 0.1% |
| Shogun | Oregon | 2 | 0.1% |
| Spangler Hills | California | 2 | 0.1% |
| Standard wash | Arizona | 2 | 0.1% |
| Superstition Mountains | Arizona | 2 | 0.1% |
| Table Mesa | Arizona | 2 | 0.1% |
| Telluride | Colorado | 2 | 0.1% |
| The Rolls | Arizona | 2 | 0.1% |
| Tin Cup Pass | Colorado | 2 | 0.1% |
| Verde River | Arizona | 2 | 0.1% |
| Washington | Washington | 2 | 0.1% |
| Wisconsin | Wisconsin | 2 | 0.1% |
| Apex | Nevada | 1 | 0.1% |
| Four Peaks | Arizona | 1 | 0.1% |
| Marysvale | Utah | 1 | 0.1% |
| Moonrocks | Nevada | 1 | 0.1% |
| Whitehall | Montana | 1 | 0.1% |
| 7 mile gulch | Arizona | 1 | 0.1% |
| Ajax Mine | Arizona | 1 | 0.1% |
| Alaska | Alaska | 1 | 0.1% |
| Alberta Mountains | Canada | 1 | 0.1% |
| Alomo Lake | Arizona | 1 | 0.1% |
| Anthony Dunes | Idaho | 1 | 0.1% |
| Anthony Sand Dunes | Idaho | 1 | 0.1% |
| Anza Borrega | California | 1 | 0.1% |
| Apache sitgraves | Arizona | 1 | 0.1% |
| Aravaca | Arizona | 1 | 0.1% |

Table 46: Other Visited Out-of-State Trails (Online respondents)

| | | | |
|-----------------------|------------|---|------|
| Arizona | Arizona | 1 | 0.1% |
| Arizona Strip | Arizona | 1 | 0.1% |
| Arkansas | Arkansas | 1 | 0.1% |
| Aspen Loop | Colorado | 1 | 0.1% |
| Auburn | New York | 1 | 0.1% |
| Bagdad | Arizona | 1 | 0.1% |
| Bass Lake | California | 1 | 0.1% |
| Bears Ears | Utah | 1 | 0.1% |
| Big Maggie May Creek | Arizona | 1 | 0.1% |
| Bighorns | Wyoming | 1 | 0.1% |
| Bishop | California | 1 | 0.1% |
| Bitterroot Mountains | Montana | 1 | 0.1% |
| Black Mountain | Kentucky | 1 | 0.1% |
| Blind Indian | Arizona | 1 | 0.1% |
| BLM | Arizona | 1 | 0.1% |
| Bloomfield | New Mexico | 1 | 0.1% |
| Blue Men's | Oregon | 1 | 0.1% |
| Boise NF | Idaho | 1 | 0.1% |
| Bradshaw | Arizona | 1 | 0.1% |
| Bridgeport | California | 1 | 0.1% |
| Buckskin | Arizona | 1 | 0.1% |
| Burro Mountains | New Mexico | 1 | 0.1% |
| Butcher Jones | Arizona | 1 | 0.1% |
| Cal City | California | 1 | 0.1% |
| Calico | Nevada | 1 | 0.1% |
| California Pass | California | 1 | 0.1% |
| California Sand dunes | California | 1 | 0.1% |
| Camp Creek | Arizona | 1 | 0.1% |
| Capitol Reef | Utah | 1 | 0.1% |
| Carnage Canyon | Colorado | 1 | 0.1% |
| Carson City | Nevada | 1 | 0.1% |
| Casner | Arizona | 1 | 0.1% |
| Castle Hot Springs | Arizona | 1 | 0.1% |
| Chaco Canyon | New Mexico | 1 | 0.1% |

Table 47: Other Visited Out-of-State Trails (Online respondents)

| | | | |
|---------------------------------|------------|---|------|
| Chappie-Shasta | California | 1 | 0.1% |
| Charleau | Arizona | 1 | 0.1% |
| Chicken Corners | Utah | 1 | 0.1% |
| Chile Challenge | New Mexico | 1 | 0.1% |
| Chinaman Gulch | Colorado | 1 | 0.1% |
| Christmas Tree road | Nevada | 1 | 0.1% |
| Cimmaron | Kansas | 1 | 0.1% |
| Clark Canyon | Montana | 1 | 0.1% |
| Clearwater | Idaho | 1 | 0.1% |
| Colorado Mountains | Colorado | 1 | 0.1% |
| Colorado Natl Forest | Colorado | 1 | 0.1% |
| Congress | Arizona | 1 | 0.1% |
| Coronado | Arizona | 1 | 0.1% |
| Crater Lake | California | 1 | 0.1% |
| Daniel Boone forest | Kentucky | 1 | 0.1% |
| Desert Wells | Arizona | 1 | 0.1% |
| Dolores | Colorado | 1 | 0.1% |
| dome valley | Arizona | 1 | 0.1% |
| Dove springs California | California | 1 | 0.1% |
| Eagar | Arizona | 1 | 0.1% |
| East Pocket | Arizona | 1 | 0.1% |
| El Camino Del Diablo | Arizona | 1 | 0.1% |
| Engineer Pass | Colorado | 1 | 0.1% |
| Ersheim trail | California | 1 | 0.1% |
| Fairview | Utah | 1 | 0.1% |
| Fossil Creek | Arizona | 1 | 0.1% |
| Ft Huacuhca | Arizona | 1 | 0.1% |
| Galiuro Mountains | Arizona | 1 | 0.1% |
| Gardner Canyon | Arizona | 1 | 0.1% |
| Gardner Canyon Trail | Arizona | 1 | 0.1% |
| Ghost town loop | Arizona | 1 | 0.1% |
| Gifford Pinchot National Forest | Mt Baker | 1 | 0.1% |
| Gold Butte | Nevada | 1 | 0.1% |
| Gold Gulch Draw | New Mexico | 1 | 0.1% |
| Gooseberry | Utah | 1 | 0.1% |

Table 48: Other Visited Out-of-State Trails (Online respondents)

| | | | |
|------------------------|------------|---|------|
| Gorman | California | 1 | 0.1% |
| Graham County | Arizona | 1 | 0.1% |
| Grand Mesa Forest | Colorado | 1 | 0.1% |
| Granite Hills OHV | Arizona | 1 | 0.1% |
| Grant Creek | Arizona | 1 | 0.1% |
| Grants | New Mexico | 1 | 0.1% |
| Green gulch | Arizona | 1 | 0.1% |
| Green Mountains | Colorado | 1 | 0.1% |
| Happy Jack | Arizona | 1 | 0.1% |
| Harlaquahala | Arizona | 1 | 0.1% |
| Harrison Hills | Wisconsin | 1 | 0.1% |
| Hassayampa | Arizona | 1 | 0.1% |
| havasupai mountain | Arizona | 1 | 0.1% |
| Hayfield draw OHV | Arizona | 1 | 0.1% |
| Hayward | Wisconsin | 1 | 0.1% |
| Hermosa Creek | Colorado | 1 | 0.1% |
| Hieroglyphic Mountains | Arizona | 1 | 0.1% |
| High Country | Arizona | 1 | 0.1% |
| Homestake Pass | Montana | 1 | 0.1% |
| Hook and Ladder | Utah | 1 | 0.1% |
| Hoxeyville | Michigan | 1 | 0.1% |
| Hualapai | Arizona | 1 | 0.1% |
| Illinois | Illinois | 1 | 0.1% |
| Island Park | Idaho | 1 | 0.1% |
| Jawbone Canyon | California | 1 | 0.1% |
| Jericho | Utah | 1 | 0.1% |
| John Bull | California | 1 | 0.1% |
| Jones Creek | Washington | 1 | 0.1% |
| Juniper Mesa | Arizona | 1 | 0.1% |
| Kendrick Park | Arizona | 1 | 0.1% |
| KOH | California | 1 | 0.1% |
| Lake Alamo | Arizona | 1 | 0.1% |
| Lake City | Colorado | 1 | 0.1% |
| Lake Tahoe | California | 1 | 0.1% |
| Land between the lakes | Kentucky | 1 | 0.1% |

Table 49: Other Visited Out-of-State Trails (Online respondents)

| | | | |
|--------------------------|------------|---|------|
| Largo Canyon | New Mexico | 1 | 0.1% |
| Lone Rock | Utah | 1 | 0.1% |
| Los Padres NF | California | 1 | 0.1% |
| Lucerne Valley | California | 1 | 0.1% |
| Mancos | Colorado | 1 | 0.1% |
| Manti | Utah | 1 | 0.1% |
| Marana | Arizona | 1 | 0.1% |
| Medicine lake | California | 1 | 0.1% |
| Mesa | Arizona | 1 | 0.1% |
| Minnesota | Iowa | 1 | 0.1% |
| Mint 400 | California | 1 | 0.1% |
| Moccasin gap | Virginia | 1 | 0.1% |
| Monroe | Wisconsin | 1 | 0.1% |
| Montana Mountain | Arizona | 1 | 0.1% |
| Moss Wash | Arizona | 1 | 0.1% |
| Mount Hood | Oregon | 1 | 0.1% |
| Mt delmoe lake | Montana | 1 | 0.1% |
| Mule Creek | New Mexico | 1 | 0.1% |
| Navajo Lake | Utah | 1 | 0.1% |
| New York | New York | 1 | 0.1% |
| Nezperce National Forest | Idaho | 1 | 0.1% |
| Nickoli Mount | Oregon | 1 | 0.1% |
| NM BDR section 4 | New Mexico | 1 | 0.1% |
| Oak Flat | Arizona | 1 | 0.1% |
| Oceano Dunes Park | California | 1 | 0.1% |
| Oklahoma | Oklahoma | 1 | 0.1% |
| Old Bodie Mine | California | 1 | 0.1% |
| Oliver Springs | Tennessee | 1 | 0.1% |
| Olympic Peninsula | Washington | 1 | 0.1% |
| Ophir Pass | Colorado | 1 | 0.1% |
| Ozark | Arkansas | 1 | 0.1% |
| Pagosa Springs | Colorado | 1 | 0.1% |
| Palmer | Alaska | 1 | 0.1% |
| Panamint Valley | California | 1 | 0.1% |

Table 50: Other Visited Out-of-State Trails (Online respondents)

| | | | |
|----------------------|------------|---|------|
| Pearl Pass | Utah | 1 | 0.1% |
| Pike National Forest | Colorado | 1 | 0.1% |
| Pinal County | Arizona | 1 | 0.1% |
| Pinal mountains | Arizona | 1 | 0.1% |
| Pirates cove | California | 1 | 0.1% |
| Planet Ranch | Arizona | 1 | 0.1% |
| Plaster City | California | 1 | 0.1% |
| Pozo | California | 1 | 0.1% |
| Priest Gulch | Colorado | 1 | 0.1% |
| Quray | Colorado | 1 | 0.1% |
| Rail X Ranch | Arizona | 1 | 0.1% |
| Red River | New Mexico | 1 | 0.1% |
| Red Rock Canyon | California | 1 | 0.1% |
| Reddington | Arizona | 1 | 0.1% |
| Reserve | New Mexico | 1 | 0.1% |
| Rhyolite | Nevada | 1 | 0.1% |
| Richfield | Utah | 1 | 0.1% |
| Ride royal blue | Tennessee | 1 | 0.1% |
| Rio Grande Forest | Colorado | 1 | 0.1% |
| Roosevelt Lake | Arizona | 1 | 0.1% |
| Rug road | Arizona | 1 | 0.1% |
| Safford | Arizona | 1 | 0.1% |
| Salton Sea | California | 1 | 0.1% |
| Sand Lakes | Michigan | 1 | 0.1% |
| Sand Wash Basin | Colorado | 1 | 0.1% |
| Schnebly Hill | Arizona | 1 | 0.1% |
| Schultz Pass | Arizona | 1 | 0.1% |
| Searchlight | Nevada | 1 | 0.1% |
| Seven Springs | Arizona | 1 | 0.1% |
| Shasta Chappie | California | 1 | 0.1% |
| Shoshone County | Idaho | 1 | 0.1% |
| Sierra Forest | Georgia | 1 | 0.1% |
| Sierra Nevada | California | 1 | 0.1% |
| Slick Rock | Utah | 1 | 0.1% |
| Slot Canyon | Arizona | 1 | 0.1% |

Table 51: Other Visited Out-of-State Trails (Online respondents)

| | | | |
|--|---------------|---|------|
| Smoke Mountains | Utah | 1 | 0.1% |
| Spring Mountains | Nevada | 1 | 0.1% |
| Springerville | New Mexico | 1 | 0.1% |
| Standard Wash, Hualapi Mt, Mormon Lake | Arizona | 1 | 0.1% |
| Stanley | Canada | 1 | 0.1% |
| Stoneman Lake | Arizona | 1 | 0.1% |
| Stonyford | California | 1 | 0.1% |
| Sunflower Mine | Arizona | 1 | 0.1% |
| Sunrise area | Arizona | 1 | 0.1% |
| Superior NF | Minnesota | 1 | 0.1% |
| Sweetwater State Park | Georgia | 1 | 0.1% |
| Swingarm | Utah | 1 | 0.1% |
| Talladega Nat'l Forest | Alabama | 1 | 0.1% |
| Texas | Texas | 1 | 0.1% |
| Texas Canyon | California | 1 | 0.1% |
| The rim | Arizona | 1 | 0.1% |
| TinCup Pass | Colorado | 1 | 0.1% |
| Tobacco Root Mountains | Colorado | 1 | 0.1% |
| Tombstone area | Arizona | 1 | 0.1% |
| Tusayon | Arizona | 1 | 0.1% |
| Twenty Nine Palms | California | 1 | 0.1% |
| Two Leafs | Nevada | 1 | 0.1% |
| Utting crossing | Arizona | 1 | 0.1% |
| Valley of Fire | Nevada | 1 | 0.1% |
| West Virginia | West Virginia | 1 | 0.1% |
| Western Slope | Colorado | 1 | 0.1% |
| Weston Pass | Colorado | 1 | 0.1% |
| Whipple Creek | California | 1 | 0.1% |
| White Mountains | Arizona | 1 | 0.1% |
| White Rim Trail | Utah | 1 | 0.1% |
| White Sands | New Mexico | 1 | 0.1% |
| White Tank Mtns | Arizona | 1 | 0.1% |
| White tanks | Arizona | 1 | 0.1% |
| White wash | Utah | 1 | 0.1% |

Table 52: Other Visited Out-of-State Trails (Online respondents)

| | | | |
|-----------------|------------|---|------|
| Wickenburg | Arizona | 1 | 0.1% |
| Wickieup | Arizona | 1 | 0.1% |
| Wind Rock | Tennessee | 1 | 0.1% |
| Wisconsin | Wisconsin | 1 | 0.1% |
| Woodpecker Mine | Arizona | 1 | 0.1% |
| Yankee Doodle | Arizona | 1 | 0.1% |
| Yavapai CO | Arizona | 1 | 0.1% |
| Young | Arizona | 1 | 0.1% |
| Young road area | Arizona | 1 | 0.1% |
| Yucca | California | 1 | 0.1% |
| Yuma | Arizona | 1 | 0.1% |
| Yuma area | Arizona | 1 | 0.1% |
| Zion | Utah | 1 | 0.1% |

Table 53: Primary Reason for Visiting (Other Category)

| Codes | Totals | Percent |
|--------------|---------------|----------------|
| Rock Crawler | 25 | 10.7% |
| ATV | 10 | 4.3% |
| Jeep | 97 | 41.5% |
| 4-Wheel | 19 | 8.1% |
| SUV | 1 | 0.4% |
| Pickup | 3 | 1.3% |
| All | 10 | 4.3% |
| Hunting | 8 | 3.4% |
| Camping | 10 | 4.3% |
| UTV | 7 | 3.0% |
| Dune Buggy | 3 | 1.3% |
| Side-by-Side | 4 | 1.7% |
| Sight See | 9 | 3.8% |
| Working | 9 | 3.8% |
| Dirt Biking | 4 | 1.7% |
| Photography | 4 | 1.7% |
| Home | 1 | 0.4% |
| TRAIL RIDE | 3 | 1.3% |
| Total | 234 | 100.0% |

Table 54: Vehicle (other category)

| Codes | Totals | Percent |
|------------------|---------------|----------------|
| Pickup | 1 | 1.5% |
| All | 4 | 6.2% |
| Dirt Bike | 13 | 20.0% |
| Side-by- Side | 4 | 6.2% |
| ATV | 7 | 10.8% |
| UTV | 2 | 3.1% |
| Jeep | 14 | 21.5% |
| Dual Sport | 10 | 15.4% |
| Sand Rail | 1 | 1.5% |
| Golf | 1 | 1.5% |
| Walking | 3 | 4.6% |
| 4-Wheel | 4 | 6.2% |
| Rock Crawler | 1 | 1.5% |
| Total | 65 | 100.0% |

Table 55: Source of Information (Other category)

| Code | Totals | Percent |
|---------------------|---------------|----------------|
| CLUB | 90 | 34.5% |
| PRIOR EXPERIENCE | 56 | 21.5% |
| BOOK | 38 | 14.6% |
| ONLINE | 17 | 6.5% |
| LIVE NEARBY | 37 | 14.2% |
| HUNTING | 12 | 4.6% |
| ALL | 1 | 0.4% |
| FAMILY/FRIEND | 10 | 3.8% |
| Total | 261 | 100.0% |

Appendix D (Survey Sample) – Economic Impact of OHV Recreation in Arizona

Weekday Weekend

Thank you for agreeing to participate in this survey. Knowing about your travel and spending behavior will help us determine marketing profile and economic impact of OHV recreation in the State of Arizona. This questionnaire should not take more than eight minutes of your time to complete. Your response is very important to the success of this study.

We understand that privacy is of utmost importance to you. Your participation is voluntary. You can choose not to participate or to withdraw from the study at any time. Your responses will be kept confidential and only used in an aggregate form. If you have any questions concerning the research study, please contact Deepak Chhabra, School of Community Resources and Development, Arizona State University at 602-496-0172; deepak.chhabra@asu.edu.

Sincerely

Deepak Chhabra
Associate Professor, ASU

Carl Yoshioka
Professor, ASU



Section I: Reason for OHV trip

1) What is the primary reason for taking this OHV trip? (Please check one or more of the following)

- Camping Fishing Sightseeing Hunting Driving backroads
 Trail riding-ATVs Wildlife/bird Watching Picnicking
 Hiking or walking Trail riding-Dirtbike
 Trail riding- Side by Side/UTV Trail riding- Dual Sport
 Other, please describe:

2) What sources did you use to obtain information on the OHV trail?

- Newspaper Radio Online/Website Word of Mouth
 State/Federal Agency Magazine TV Social networking sites
 Maps/GPS programs Organized Group/Association
 Other, please specify:

3) Is this your first visit to the OHV trail? Yes No

If no, number of times visited in 2016:

4) Is OHV recreation the main reason for visiting this trail? Yes No

5) Distance traveled to the trail from your residence: _____ (miles- one way)

6) How much time are you planning to spend on this trail? Day trip Overnight

If day tripper, number of hours: _____ If overnight, number of nights _____

7) Are you member of an organized group? Yes No

If yes, please provide name of the group/organization:

Section II: OHV Travel Behavior

8) What OHV vehicle are you using? (Please check one)

- ATV UTV/Side by Side Dirt Bikes Rock Crawler
 Snowmobiles 4 WD Pickup Truck Side by Side
 Sport Utility Vehicle/Jeep Dune Buggy/Sand Rail Dual Sport
 Other, please describe:

9) How many people are in your party?

Number of women: _____ Number of men: _____ Number of children (under age 18): _____

10) Who is traveling with you? (Please check one of the following)

- Friends only Family only Friends and Family
 Organized group Traveling alone Other, please specify:

11) Name other OHV areas/trails you have used in Arizona in 2016:

12) Name other OHV areas/trails you have used outside of Arizona in 2016:

13) If you are a resident of Arizona, please answer this question:

If the OHV trails were not available, would you have traveled outside of Arizona for OHV recreation?

- Yes No

Section III: OHV Travel & Related Expenditures

14) During your OHV trip, what is the approximate total amount you or your immediate group will spend (please include a total of dollars already spent and dollars planning to spend) in each of the following categories? (Please do your best to provide an estimate).

| Item | In the surrounding area (within 50 miles of the trail) (\$) | Annual Expense (\$) |
|---|---|---------------------|
| Gasoline/oil for OHV & tow vehicles | | |
| Restaurant/lounge purchases | | |
| Food and beverage purchased at grocery and/or convenience stores as part of OHV recreation trip | | |
| Guides and tour packages | | |
| Lodging (overnight trips only) as per part of OHV activities Camping/RV Hotel/motel | | |
| Repairs/maintenance | | |
| OHV Rentals | | |
| Sporting goods | | |
| Souvenirs and gifts | | |
| Amusement/Entertainment | | |
| Clothing - clothing, helmets, boots, gloves etc. | | |
| Other OHV trip-related expenses | | |

15) Please provide a breakdown of your annual OHV expenditures in 2016 (Your responses are very important for us to determine economic impact of OHV recreation).

| Item | ATV | Dirt Bike | Dual Sport Bike | Snow-mobiles | 4 WD | Side by Side | SUV/Jeep | Dune Buggy/Sand Rail | City/town of Spending |
|--|-----|-----------|-----------------|--------------|------|--------------|----------|----------------------|-----------------------|
| Motorized recreational accessories (trailers, covers, add ons, ski skins etc.) | | | | | | | | | |
| Annual Insurance payment | | | | | | | | | |
| Licenses, registration or permit fees | | | | | | | | | |
| Sticker fund | | | | | | | | | |
| Club memberships | | | | | | | | | |
| Purchase of OHVs | | | | | | | | | |
| Fuel, oil, & lubricants (OHV) | | | | | | | | | |
| Other expenses, please specify: | | | | | | | | | |

Section IV: User Profile

16) What is your gender? Male Female

17) Your year of birth is:

18) Which of the following best describes the highest level of education you have completed?

Some high school or less High school graduate Some college/technical school

College graduate Post graduate school (Masters)

Post graduate school (Ph.D. or equivalent)

19) What is your zip code? _____

20) What is your approximate household income before taxes?

< \$20,000 \$20,000 – 39,999 \$40,000 – 59,999

\$60,000 – 79,999 \$80,000 – 99,999 \$100,000 – 149,999

\$150,000 – 199,999 \$200,000 – 299,999 \$300,000 and Above

21) Which racial or ethnic groups do you identify with?

Hispanic/Latino Asian

White/Caucasian Black/African American

Native Hawaiian or Other Pacific Islander American Indian, Alaska Native

Other, Please describe:

Thank You