A Study of the Demographics and Economic Impacts of OHV/OSV Users in the State of California

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Prepared by
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TABLE OF CONTENTS

LIST OF TABLES 7

EXECUTIVE SUMMARY 1

INTRODUCTION 8

Survey Design Considerations and Variables for the Study 10

Survey Participant Recruitment, Distribution, Sampling, and Data Collection 11

Managing Recall/Non-response Bias and Error in Measuring Travel and Trip Characteristics 14

Tourist, Tourism, and User Classifications for the Purposes of Estimating Economic Impact 14

Economic Impact Analysis Procedures 15

Introduction to the GIS 17

SECTION I. PARTICIPANT DEMOGRAPHIC CHARACTERISTICS 19

OHV/OSV Participation Rates by Jurisdiction in California 20

OHV/OSV Participant Demographic Characteristics – Age 25

OHV/OSV Participant Demographic Characteristics – Gender 26

OHV/OSV Participant Demographic Characteristics – Race/Ethnicity 27

OHV/OSV Participant Demographic Characteristics – Language Spoken at Home 27

OHV/OSV Participant Demographic Characteristics – Education Level 28

OHV/OSV Participant Demographic Characteristics – 2023 Annual Household Income 29

OHV/OSV Participant Demographic Characteristics – County and State of Residence 30

SECTION II. SURVEY PARTICIPANT OHV/OSV TRIP CHARACTERISTICS 31

OHV/OSV Recreation Trip Characteristics – First Time/Repeat Visitors & Primary Purpose of Visit 32

OHV/OSV Recreation Trip Characteristics – Visitation Frequency 33

OHV/OSV Recreation Trip Characteristics – Recreational Activities at Destination/Site 42

OHV/OSV Recreation Trip Characteristics – Travel Party Size 42

OHV/OSV Recreation Trip Characteristics – Day/Overnight Trip Classification 43

OHV/OSV Recreation Trip Characteristics – Type of Lodging Used 44

OHV/OSV Recreation Trip Characteristics – Fees Paid for Destination/Site Access **45**

OHV/OSV Recreation Trip Characteristics – Expenditures Per Spending Party Size (Non-Capital Expenditures) **45**

OHV/OSV Recreation Trip Characteristics – Expenditures Per Spending Party Size (Capital Expenditures) **48**

OHV/OSV Recreation Trip Characteristics – Spending per Park Management Agency Type **49**

OHV/OSV Recreation Trip Characteristics – Revenue Per Available Visitor (RPAV) **52**

OHV/OSV Recreation Trip Characteristics – Estimated Direct Spending **54**

The Economic Impact of OHV/OSV Recreation in California **55**

SECTION III. SPECIAL EVENT PARTICIPANT CHARACTERISTICS AND SPENDING PATTERNS **70**

Special Event Comparison Statistics – First Time/Repeat Visitors 71

Special Event Comparison Statistics – Overnight Trips **71**

Special Event Comparison Statistics – Visitation Frequency **72**

Special Event Comparison Statistics – Participants' Age **73**

Special Event Comparison Statistics – Participants' Gender **73**

Special Event Comparison Statistics – Language Spoken at Home **73**

Special Event Comparison Statistics – Educational Level **74**

Special Event Comparison Statistics – Annual Household Income **74**

Special Event Comparison Statistics – Purpose of Visit to Destination/Site **75**

Special Event Comparison Statistics – Type of Lodging Used **75**

Special Event Comparison Statistics – Travel Party Size **76**

Special Event Comparison Statistics – Type of Park Management Area Visited **76**

Special Event Comparison Statistics – Spending per Travel Party (Non-Capital Expenditures) **76**

SECTION IV. OFF-HIGHWAY VEHICLE & OVER SNOW VEHICLE USER COMPARISONS **79**

Off-Highway Recreation Vehicle Usage Comparisons – First Time/Repeat Visitors **80**

Off-Highway Recreation Vehicle Usage Comparisons – Overnight Trips **80**

Off-Highway Recreation Vehicle Usage Comparisons – Visitation Frequency **80**

Off-Highway Recreation Vehicle Usage Comparisons – Participants' Age **81**

Off-Highway Recreation Vehicle Usage Comparisons – Participants' Gender **81**

Off-Highway Recreation Vehicle Usage Comparisons – Language Spoken at Home 81

Off-Highway Recreation Vehicle Usage Comparisons – Educational Level 82

Off-Highway Recreation Vehicle Usage Comparisons – Annual Household Income 82

Off-Highway Recreation Vehicle Usage Comparisons – Purpose of Visit to Destination/Site 83

Off-Highway Recreation Vehicle Usage Comparisons – Type of Lodging Used 83

Off-Highway Recreation Vehicle Usage Comparisons – Travel Party Size 83

Off-Highway Recreation Vehicle Usage Comparisons – Fees Paid for Destination/Site Access 84

Off-Highway Recreation Vehicle Usage Comparisons – Spending per Travel Party (Non-Capital Expenditures) 84

Off-Highway Recreation Vehicle Usage Comparisons – Spending per Travel Party (Capital Expenditures) 86

SECTION V. VEHICLE OWNERSHIP AND REGISTRATION INFORMATION 87

OHV/OSV Ownership and Registration Information – State of California 88

OHV/OSV Ownership and Registration Information – Estimated Tax Revenue 93

OHV/OSV Ownership and Registration Information – Projected OHV/OSV Ownership Trends 95

OHV/OSV Ownership and Registration Information – Survey Respondents' Ownership Statistics (Vehicle Type) 97

SECTION VI. SUMMARY OF STUDY FINDINGS AND OBSERVATIONS 104

REFERENCES 118

APPENDIX A – LITERATURE REVIEW OF PREVIOUS ECONOMIC IMPACT STUDIES 123

APPENDIX B - PREVIOUS OHV/OSV ECONOMIC IMPACT STUDIES, SAMPLE SIZE AND RESPONSE RATES FOR DATA COLLECTION 147

APPENDIX C - ECONOMIC IMPACTS OF SPECIAL EVENT OHV/OSV RECREATION 148

APPENDIX D. OHV/OSV ATTENDANCE RATES, 2017-2023 153

APPENDIX E – MAIL OUT SURVEY 157

APPENDIX F – PROTOCOL FOR INTERCEPT SURVEY 162

APPENDIX G – INTERCEPT SURVEY 163

APPENDIX H – POSTCARD SURVEY 166

APPENDIX I – ONLINE SURVEY.....167

APPENDIX J – CALIFORNIA DEPARTMENT OF MOTOR VEHICLES (DMV) REGISTERED VEHICLES (BY COUNTY), 2016-2023 190

APPENDIX K – OHV/OSV TRENDS, CALIFORNIA (COUNTY), 2016-2027 210

APPENDIX L - VEHICLE TRENDS/PREDICTIONS, CALIFORNIA (COUNTY) 2016-2027.....238

APPENDIX M-UNREGISTERED OHV/OSV BY COUNTY 267

LIST OF TABLES

Table 1. Project/Study Objectives Keyed to Survey Questions (Appendices C, E-G) 10
Table 2. Survey Response Rates 14
Table 3. United States Forest Service (USFS), National Forests in California 2023 20
Table 4. Bureau of Land Management (BLM) District Office 2023 21
Table 5. California State Vehicular Recreation Areas (SVRA) 2023 22
Table 6. Selected Respondent Demographic Characteristics (Park Management Agency) 24
Table 7. OHV/OSV Users and Tourist Classifications* 24
Table 8. Age of Respondents 25
Table 9 Mean and Median Age by Gender of Respondents 26
Table 10. Gender of Respondents 26
Table 11. Gender of Respondents and First Time & Repeat Visitors (Percent) 26
Table 12. Race/Ethnicity of Respondents by Percent 27
Table 13. Race/Ethnicity of First/Repeat Visitors (Percentage) 27
Table 14. Language Spoken at Home 27
Table 15. Language Spoken at Home by First Time and Repeat Visitors (Percent) 28
Table 16. Education Level of Respondents 28
Table 17. Level of Education by First Time Visitors/Repeat Visitors (Percent) 28
Table 18. Annual Household Income of Respondents 29
Table 19. Annual Household Income by First Time/Repeat Visitors (Percent) 29
Table 20. Respondents County in California and State of Residence (Percent) 30
Table 21. First Time/Repeat Visit to Destination/Site 32
Table 22. Primary Purpose of Visit for Respondents 32
Table 23. Primary Purpose of Visit for First Time/Repeat Visitors (Percent) 33
Table 24. Purpose of Visit, Day Trip/Overnight Trips (Percent) 33
Table 25. Visitation Frequency for OHV/OSV Respondents 33
Table 26. Number of Months Per Year Participating in OHV/OSV Recreation in California 34
Table 27. Respondents' County of Residence Compared to Destination/Site County Visited (Percent) 34
Table 28. Respondents' County of Residence Compared to County of Destination/Site Visited (Percent) 37
Table 29. Frequency of Visitation to SVRAs and SRAs (Percent) 40
Table 30. California SVRA Visitation Data 1997-2023. 41

Table 31. Respondents' Recreational Activity Participation at Site 42
Table 32. Number of People in Travel Party 42
Table 33. Overnight/Day Trip Frequencies 43
Table 34. Day/Overnight Trips, First Time, and Repeat Visitors (Percent) 43
Table 35. Type of Lodging Used by Respondents 44
Table 36. Type of Lodging Used by First Time and Repeat Visitors (Percent) 44
Table 37. Fees Paid for Destination/Site Access 45
Table 38. Fees Paid for Destination/Site Access, First Time and Repeat Visitors (Percent) 45
Table 39. Expenditures Per Spending Party Size Traveling to/at the Destination/Site (Dollars)* 46
Table 40. Spending Patterns for First Time and Repeat Visitors (Dollars)* 46
Table 41. Capital Expense Per Spending Party Size Traveling to/at Destination/Site (Dollars) 48
Table 42. Capital Expenditures for First Time and Repeat Visitors (Dollars) 48
Table 43. Spending Comparison Traveling to Destination/Site, by Park Management Agency Type (Dollars) 49
Table 44. Capital Expenditures Spending Comparison Traveling to Destination/Site, by Park Management Agency Type (Dollars) 50
Table 45. Spending Comparison at the Destination/Site, by Park Management Agency Type (Dollars) 50
Table 46. Capital Expenditures Spending Comparison at the Destination/Site, by Park Management Agency Type (Dollars) 51
Table 47. Travel Party Spending, by Park Management Agency Type Visited 52
Table 48. Revenue Per Available Visitor (RPAV) Travel Related Trip Expenditures (Dollars) 53
Table 49. Revenue Per Available Visitor (RPAV) Capital Related Expenses (Dollars) 54
Table 50. 2023 Economic Contributions of Visitor Spending for Off-Highway Vehicular and Over-Snow Vehicular Recreation in California 54
Table 51. Overall Impacts of OHV/OSV Recreation in 2023 Dollars 55
Table 52. Impact Multipliers 55
Table 53. Impacts of OHV/OSV Recreation Spending on Sales/Output (Top 10 Industries) 56
Table 54. Top 10 Industries by Estimated Growth (Percent) 56
Table 55. Value Added Impacts of OHV/OSV Recreation Spending (Top 10 Industries) 57
Table 56. Impacts of OHV/OSV Recreation Spending on Employment (Top 10 Industries) 58
Table 57. Fiscal (Tax Revenue) Impact of OHV/OSV Recreation Spending 59
Table 58. Overall impacts of OHV/OSV recreation in Carnegie SVRA (to include San Joaquin and contiguous counties) 59

Table 59. Impact Multipliers 59
Table 60. Overall impacts of OHV/OSV recreation in Carnegie SVRA (to include San Joaquin County only). 60
Table 61. Impact Multipliers 60
Table 62. Overall impacts of OHV/OSV recreation in Clay Pit SVRA (to include Butte and contiguous counties) 60
Table 63. Impact Multipliers 60
Table 64. Overall impacts of OHV/OSV recreation in Clay Pit SVRA (to include Butte County only) 60
Table 65. Impact multipliers 61
Table 66. Overall impacts of OHV/OSV recreation in Heber Dunes SVRA (to include Imperial and contiguous counties) 61
Table 67. Impact Multipliers 61
Table 68. Overall impacts of OHV/OSV recreation in Heber Dunes SVRA (to include Imperial County only) 61
Table 69. Impact multipliers 62
Table 70. Overall impacts of OHV/OSV recreation in Hollister Hills SVRA (to include San Benito and contiguous counties) 62
Table 71. Impact Multipliers 62
Table 72. Overall impacts of OHV/OSV recreation in Hollister Hills SVRA (to include San Benito County only) 62
Table 73. Impact Multipliers 62
Table 74. Overall impacts of OHV/OSV recreation in Hungry Valley SVRA (to include Los Angeles and contiguous counties) 63
Table 75. Impact Multipliers 63
Table 76. Overall impacts of OHV/OSV recreation in Hungry Valley SVRA (to include Los Angeles County only) 63
Table 77. Impact Multipliers 63
Table 78. Overall impacts of OHV/OSV recreation in Oceano Dunes SVRA (to include San Luis Obispo and contiguous counties) 64
Table 79. Impact Multipliers 64
Table 80. Overall impacts of OHV/OSV recreation in Oceano Dunes SVRA (to include San Luis Obispo County only) 64
Table 81. Impact Multipliers 64

Table 82. Overall impacts of OHV/OSV recreation in Ocotillo Wells SVRA (to include San Diego and contiguous counties) 65
Table 83. Impact Multipliers..... 65
Table 84. Overall impacts of OHV/OSV recreation in Ocotillo Wells SVRA (to include San Diego County only) 65
Table 85. Impact Multipliers..... 65
Table 86. Overall impacts of OHV/OSV recreation in Prairie City SVRA (to include Sacramento and contiguous counties) 65
Table 87. Impact Multipliers..... 66
Table 88. Overall impacts of OHV/OSV recreation in Prairie City SVRA (to include Sacramento County only) 66
Table 89. Impact Multipliers..... 66
Table 90. Overall impacts of OHV/OSV recreation in Mammoth Bar - Auburn State Recreation Area (to include Placer and contiguous counties). 67
Table 91. Impact multipliers. 67
Table 92. Overall impacts of OHV/OSV recreation in Mammoth Bar - Auburn State Recreation Area (to include Placer County only) 67
Table 93. Impact multipliers. 67
Table 94. Overall impacts of OHV/OSV recreation in Red Rock Canyon State Park (to include Kern and contiguous counties) 67
Table 95. Impact multipliers. 68
Table 96. Overall impacts of OHV/OSV recreation in Red Rock Canyon State Park (to include Kern County only) 68
Table 97. Impact multipliers. 68
Table 98. Overall impacts of OHV/OSV recreation in Jasper Sears OHV - San Luis Reservoir State Recreation Area (to include Merced and contiguous counties) 68
Table 99. Impact multipliers. 69
Table 100. Overall impacts of OHV/OSV recreation in Jasper Sears OHV - San Luis Reservoir State Recreation Area (to include Merced County only). 69
Table 101. Impact multipliers. 69
Table 102. Special Event Attendance by Park Type and Travel Party Size 71
Table 103. First Time and Repeat Visitor Special Event Respondents (Percent) 71

Table 104. Overnight Trip or Day Trip, Special Event Visitors, in Percent 71
Table 105. Overnight Trip Mean/Median Number of Nights Stayed, OHV/OSV Visitors 72
Table 106. Visitation Time Frames at Destination/Site 72
Table 107. Number of Months/Year Participating in OHV/OSV Recreation in California 72
Table 108. Age of Special Event Respondents (Years) 73
Table 109. Gender Comparison of OSV and OHV Users (Percent) 73
Table 110. Language Spoken at Home (Percent) 73
Table 111. Highest Education Level (Percent) 74
Table 112. Annual Household Income (Percent) 74
Table 113. Purpose of Visit (Percent) 75
Table 114. Lodging Type Used (Percent) 75
Table 115. Number of Individuals in Travel Group (Including Respondent) 76
Table 116. Type of Park Visited by Management Agency (Percent) 76
Table 117. Comparison of Spending Traveling to the Destination/Site by Purpose of Visit (Dollars) 76
Table 118. Comparison of Spending in the Region of the Destination/Site by Purpose of Visit (Dollars) 77
Table 119. Capital Expenditures by Purpose of Visit (Dollars) 78
Table 120. First Time and Repeat Visitors (Percent) 80
Table 121. Overnight Trip Mean/Median Number of Nights Stayed 80
Table 122. Visitation Timeframes at Destination/Site 80
Table 123. Number of Months/Year Participating in Off-Highway Recreation 81
Table 124. Age of Respondents (Years) 81
Table 125. Gender Comparison of Users (Percent) 81
Table 126. Language Spoken at Home (Percent) 81
Table 127. Highest Education Level (Percent) 82
Table 128. Annual Household Income (Percent) 82
Table 129. Purpose of Visit (Percent) 83
Table 130. Lodging Type Used (Percent) 83
Table 131. Mean Number of Individuals in Travel Group (Including Respondent) 83
Table 132. Destination/Site Fee Paid for Off-Highway Recreation Usage (Percent) 84
Table 133. Spending for Users Traveling to/at Destination/Site (Dollars) 84
Table 134. Capital Expenditures Spending for Users Traveling to/at Destination/Site (Dollars) 86
Table 135. Vehicle Type Registered with DMV, California 88

Table 136. Registered Ownership by County 88
Table 137. County Population, by Percent of Population and Total Number of OHV/OSV Registered 89
Table 138. Total Number of OHV/OSVs Registered by County and Percent of County 90
Table 139. Registered Vehicle Type by County 91
Table 140. Registered Vehicle Type by County 92
Table 141. Estimated Taxes Statewide for OHV/OSV Vehicle Sales 93
Table 142. Taxes Collected by County for OHV/OSV Registrations 93
Table 143. Estimated Growth in Ownership and Type of OHV/OSV by County (Percent), 2016-2027 95
Table 144. Estimated Growth in Ownership and Type of OHV/OSV by County (Percent), 2016-2027 96
Table 145. Vehicle Type Owned* (Percent) 97
Table 146. OHV/OSVs Owned by Type, Respondent Reported* (Percent) 97
Table 147. First Time or Repeat Visitors, by Vehicle Type Owned (Percent) 98
Table 148. Vehicle Type Owned and Site Visited by Survey Respondents (Percent) 98
Table 149. Vehicle Type Owned by Gender (Percent) 98
Table 150. Vehicle Type Used on Last Trip at Destination/Site* 99
Table 151. Vehicle Type Used on Last Trip by First Time and Repeat Visitors (Percent) 99
Table 152. Vehicle Type Used on Last Trip by Day/Overnight Trips (Percent) 100
Table 153. Vehicle Type Used on Last Trip by Purpose of Visit (Percent) 100
Table 154. Vehicle Type Used on Last Trip by Gender (Percent) 101
Table 155. Vehicle Type Used by Race/Ethnicity (Percent) 102
Table 156. Vehicle Type Last Used by Language Spoken at Home (Percent) 102
Table 157. Vehicle Type Last Used by Education Level (Percent) 103
Table 158. Summary of the Economic Output Associated with State Vehicular Recreation Areas (SVRA) and State Recreation Areas (SRA) in 2023 Dollars 113
Table 159. Estimated Number of Distinct OHV/OSV Users in California 115
Table 160. Overall Impacts of OHV/OSV Special Event Recreation 148
Table 161. Economic Impact Multipliers 148
Table 162. Impacts of OHV/OSV Special Event Recreation Spending on Sales/Output (Top 10 Industries) 148
Table 163. Top 10 Industries by Estimated Growth (Percent) 150
Table 164. Value Added Impacts of OHV/OSV Special Event Recreation Spending (Top 10 Industries) 151
Table 165. Impacts of OHV/OSV Special Event Recreation Spending on Employment (Top 10 Industries) 151
Table 166. Fiscal (Tax revenues) Impact of OHV/OSV Special Event Recreation Spending 152

EXECUTIVE SUMMARY

Off-highway recreation is an endeavor enjoyed by outdoor enthusiasts across California. Residents and visitors take part in this activity on their own or with friends and family, and enjoy the environmental, social and personal benefits each time they travel to their destination or site. The State of California also benefits financially, with millions of dollars generated from taxes and registration fees. Within California, cities and towns of all sizes also financially reap the benefits of year-round off-highway and over-snow recreation.

This study represents a multi-year study conducted by the Sustainable Parks and Recreation Community Initiative (SPARCI), in association with the Department of Recreation Administration at California State University, Fresno, and California State Parks OHV Division. Included in the summary are specific items highlighting California tax revenues, OHV/OSV capital expenditures, OHV/OSV ownership, and select OHV/OSV respondent characteristics. Highlights from these descriptions drawn from the data collected during the 2022-2024 seasons include the following:

Surveys

- A total of 2,695 usable surveys were collected for analysis (160 mail-out, 2,243 English and 13 Spanish online surveys to total 2,256, and another 279 intercept surveys). The mail out version of the survey resulted in a 60.3% (n=160) response rate. The online survey netted 2,256 surveys, and the intercept survey used at parks and sites netted another 279 surveys.

Demographics

- The total number of OHV/OSV user counts per year in California is estimated to be 9,035,951. Given these calculations, it is reasonable to assume that there are at least 1.4 million to 2.2 million OHV/OSV distinct users in California, perhaps more, as presented within these calculations. For discussion purposes and analysis, we can assume that the calculation using the total visitor count (9,035,951) and median travel party size (4) results in 2,258,987 distinct OHV/OSV users in California, which is 5.79% of the California population. Coincidentally, this number is similar to the result using registered vehicles and median travel party size resulting in 2,526,667 distinct users.

	Registered Vehicles Times Travel Party Size	Total Visitor Count Divided by Times Visited Per Year	Total Visitor Count Divided by Travel Party Size	Comparison to Arizona and Oregon Percent of Population
Mean	3,916,347	492,154	1,457,411	
Median	2,526,667	602,396	2,258,987	
Based on 12.6% of the Population (Arizona)				4,909,614
Based on 15.9 % of the Population (Oregon)				6,195,465

- The estimated total OHV/OSV user counts per year in California on USFS lands is 1,040,948 (2.6 average spending party size), on BLM lands is 6,304,914 (2.7 average spending party size), and SVRA lands is 1,690,089 (3.05 average spending party size) per year.

- To establish the total number of visitor days, we can multiply the total number of vehicles registered with DMV (631,669), and times it by the median number of year visits (15), which results in 9,475,035 OHV/OSV user days. This figure supports and confirms the visitor counts as it approximates the reported visitor counts provided by the USFS, BLM, and State Parks.
- The average age of study respondents was just over 51 years, with respondents ranging in age from 12-85 years.
- The majority of survey respondents in this study were male (57.5%), with 10.9% of respondents identifying as female. Respondents who chose to indicate one's gender as "self-defined" comprised 4.1% of the group, and those respondents who preferred not to answer equaled 2.6% of the respondents.
- Most respondents indicated their race/ethnicity was White or Caucasian (73.1%). Ten percent (10%) of respondents identified as Hispanic/Latino, with another 1.2% indicating African American, and 4.2% identify as Native American and 2.4% as Asian. Over eight percent (8.9%) preferred not to answer, and 0.2% identified as "Other."
- Over 65% of the respondents reported that English was the language always spoken at home (65.8%). Another 7.1% of the respondents indicating a mix of English and Spanish was spoken at home.
- Most respondents graduated from college or technical school (40.9%) and 10.6% of respondents held postgraduate degrees. Just over one-fifth of the respondents (21.3%) graduated from high school.
- Most respondents (17.9%) reported income as $100,000-149,999 per year. Respondents making $100,000 and above make up 43.2% of the sample.

Travel and Trip Characteristics

- The majority of respondents (88.1%) reported that they had visited the same park/site in the past. Nearly 12% of respondents reported that it was their first time visiting that park/site.
- Respondents averaged 20 years visiting the same destination/site, five months a year visiting the same site, and 3.7 days a month visiting the same site.
- The estimated mean trips per year would be 3.7 days in a month x 5 months in a year = 18.5.
- Fifty percent (51%) of the OHV/OSV sample were day users, representing an estimated 4,608,335 off-road visits. Another 35.5% were overnight users, representing 3,252,942 off-road visits.
- The majority (59.7%, 5,421,571 OHV/OSV riders) of users however were considered non-local – tourists in other words. Forty percent of the users lived less than 50 miles from their home zip code, as reported in the survey.
- The vast majority (77.8%, equaling 7,048,042 OHV/OSV users) of survey respondents reported their primary purpose of visiting was for participating in OHV/OSV activities at that park/site.
- For repeat visitors, visiting the destination/site was the primary purpose for visitation with the greatest percentage of respondents (89%). For first time visitors, 26% of the respondents indicated that they stopped at the site on their way to another location.
- The average travel party size for OHV/OSV recreation enthusiasts was 6.2 people, inclusive of adults and children.
- A total of 29.6% of the respondents reported camping overnight of some type. Specifically, the majority (20.8%) of visitors who stayed overnight used the campgrounds at the site they were visiting. Another 3.5% stayed at other campgrounds, while 5.3% stayed in their RV/vehicle in undesignated sites. A smaller percent stayed in hotels, Bed & Breakfast lodging, and rentals like Airbnb and VRBO.

Special Events

- There are an estimated 128,447 special event attendees at California SVRAs, another 46,843 who attend special events on USFS lands, and 214,367 visitors who attend special events on BLM lands. There is a total of 9,035,951 OHV/OSV user counts, of which 389,657 (15.5% of the total) attend special events.
- For special events, the median travel party size is five, and the number of individual travel parties (18+ years of age) is 77,931.
- The median spending party size is two persons per party, the number of spending travel parties is 194,828.
- An overwhelming majority of special event participants were repeat visitors. 88% of the special event users were repeat visitors. There were more first-time visitors (20.8%) who were on a side-trip.
- Special Event users averaged nearly three (3) nights per trip when attending an event, while users who were visiting that site/park as their primary purpose averaged 3.4 nights. Fifty percent of the special event users spent an overnight, while the majority of those visiting for the purpose of going to that park/site and a side trip were day users. The number of nights per trip includes the nights spent at the destination, as well as the nights spent travelling to the destination.
- Most participants, when sorted by purpose of visit utilized the SVRAs. It appears that those attending special events primarily utilized the California State Vehicle Recreation Areas (41.6%), then the Other (21.9%, private/municipal), then the USFS (22.5%) and BLM (14%).
- The majority of special event users stayed in a campground at the site (31.3%), followed by staying in their RV in undesignated areas (10.3%). A similar pattern is found within the group visiting that park. Those on a side trip had a higher percent staying with relatives (6.9%), at campgrounds elsewhere (8.8%) and in hotels/motels (5.1%).

OHV/OSV Comparisons

- There is also a uniqueness in both OHV and OSV recreation. The genres vary in activities, lodging, spending patterns, and length of stay. On average, OSV recreation appears to require a greater amount of spending for lodging, equipment purchases and repairs, and other ancillary trip items (i.e., food, recreation services) in comparison to OHV recreation.
- Overall, there are an estimated 1,084,314 OSV user counts and 7,951,637 OHV user counts in California per year. Additionally, many survey respondents indicated owning both OHVs and OSVs.
- There are an estimated 235,720 individuals using OSV's in California.
- OSV users averaged nearly five (5) nights per trip when recreating, and OHV users averaged over three (3) nights per trip. The number of nights per trip includes the nights spent at the destination, as well as the nights spent travelling to the destination.
- The average travel party size of OSV users is 4.6.

OHV/OSV Vehicles

- The California Department of Motor Vehicles (DMV) currently has 631,669 registered off-road vehicles. The DMV lists 1.6 million off road vehicles that were previously registered.
- The types of OHV/OSV vehicles used by survey respondents for their current or last trip consisted of recreational motorcycles/motorbikes used most frequently, followed by street licensed vehicles.
- The recreational motorcycle/motorbike was used by 33% of the survey respondents, with another 24% using street licensed off road vehicles (jeeps, pickups etc.), followed by recreational off-highway vehicles (13.6%) and ATVs (12.1%).
- The projected growth from 2016-2027 in ownership of OHV/OSVs within California is between

8.4-50.4%, depending on the County of residence.

- Humboldt, Santa Clara, Sierra, Orange, and Trinity Counties have the lower rates of projected vehicular registrations.
- Counties with the highest projected rates of vehicular registrations in the future include Amador, Calaveras, Imperial, Lake, Merced, Monterey, Nevada, San Benito, Sutter, Tehama, and Yuba.
- The highest percentage of vehicles used at SVRAs are motorcycles, ATV's, sand-specialized and street licensed OHVs. For the USFS, snow-specialized, rock-specialized, amphibious are more prevalent. BLM users mostly consist of sand, recreational off-highway, and back country only vehicles.

Economics

- The total tax revenue collected in California for OHV/OSV vehicles sold (631,669 vehicles) was $246,807,483.
- The revenue per available visitor (RPAV) is approximately *$2,898.* These dollar figures offer insights into the overall revenue generated and the average revenue per visitor across all surveyed categories. The RPAV for travel related trip expenditures is approximately $292.90. The RPAV for capital related spending is approximately $2,606. OHV/OSV park managers and communities adjacent to the OHV/OSV recreation destinations/sites can apply and estimate the potential revenues based on tickets sold, vehicular counts and attendance figures.
- Study respondents who did purchase, rent or repair equipment indicated they would spend between $400-$14,000 on OHV/OSV, which are identified in the study as capital expenditures – traveling to and at their destination/site for their trip.
- Total **direct** spending was calculated for travel expenses for SVRAs, USFS and BLM sites. Median spending for all travel for the SVRAs is $70,128,920, for the USFS is $3,524,092, and for BLM users $105,764,932. Capital expenditures for SVRAs are $121,052,624, for the USFS are $8,356,719, and for BLM users are $456,002,905.

IMPLAN Output Models of Economic Impact of OHV/OSV

In order to estimate economic impacts of OHV/OSV recreation in California, outputs from each sector were examined as inputs to other sectors of the economy. The model estimates economic impacts of OHV/OSV recreation in the state of California on the total value of economic transactions, value added, and employment. The model relied on median spending data as reported by OHV/OSV visitors, to avoid the risk of inflating the numbers when using average expenditure figures. All estimates are in 2023 dollars. Based on visitor spending data, OHV/OSV recreational users in California:

- Generated over $10 billion in economic output in the state,
- Supported over 58,000 jobs, and
- Generated nearly $1.8 billion in tax revenues ($508 million in state tax revenues, $340 million in county taxes, and $952 million in federal taxes) are realized.

Based on visitor spending data, OHV/OSV recreational users' economic impacts on the counties where the SVRA's and SRA's are located, and the adjacent counties is reported as follows.

Carnegie SVRA

Based on visitor spending data, OHV/OSV recreational users in Carnegie SVRA:

- Generated near $39 million in economic output in the state,
- Supported 260 jobs, and
- Generated nearly $7 million in tax revenues ($3,501,038 million in state and county tax revenues).

Clay Pit SVRA

Based on visitor spending data, OHV/OSV recreational users in Clay Pit SVRA:

- Generated near $30 million in economic output in the state,
- Supported over 200 jobs, and
- Generated over $5 million in tax revenues ($2,642,225 in state and county tax revenues).

Heber Dunes SVRA

Based on visitor spending data, OHV/OSV recreational users in Heber Dunes SVRA:

- Generated over $18 million in economic output in the state,
- Supported 130 jobs, and
- Generated over $3 million in tax revenues ($1,729,430 million in state and county tax revenues).

Hollister Hills SVRA

Based on visitor spending data, OHV/OSV recreational users in Hollister Hills SVRA:

- Generated near $49 million in economic output in the state,
- Supported over 360 jobs, and
- Generated over $8 million in tax revenues ($4,817,371 million in state and county tax revenues).

Hungry Valley SVRA

Based on visitor spending data, OHV/OSV recreational users in Hungry Valley SVRA:

- Generated near $117 million in economic output in the state,
- Supported 676 jobs, and
- Generated over $20 million in tax revenues ($9,642,075 million in state and county tax revenues).

Oceano Dunes SVRA

Based on visitor spending data, OHV/OSV recreational users in Oceano Dunes SVRA:

- Generated over $379 million in economic output in the state,

- Supported over 2,600 jobs, and
- Generated over $63 million in tax revenues ($32,856,861 million in state and county tax revenues.

Ocotillo Wells SVRA

Based on visitor spending data, OHV/OSV recreational users in Ocotillo Wells SVRA:

- Generated over $800 million in economic output in the state,
- Supported over 5,000 jobs, and
- Generated near $140 million in tax revenues ($69,073,783 million in state and county tax revenues)

Prairie City SVRA

Based on visitor spending data, OHV/OSV recreational users in Prairie City SVRA:

- Generated over $59 million in economic output in the state,
- Supported 385 jobs, and
- Generated over $9 million in tax revenues ($4,994,379 million in state and county tax revenues).

Mammoth Bar – Auburn State Recreation Area

Based on visitor spending data, OHV/OSV recreational users in Mammoth Bar SRA:

- Generated nearly $7.2 million in economic output in the state,
- Supported 48 jobs, and
- Generated over $1.2 million in tax revenues ($611,962 thousand in state and county tax revenues).

Red Rock Canyon State Park

Based on visitor spending data, OHV/OSV recreational users in Red Rock Canyon SRA:

- Generated nearly $11 million in economic output in the state,
- Supported 73 jobs, and
- Generated over $1.9 million in tax revenues ($968,050 thousand in state and county tax revenues).

Jasper Sears OHV – San Luis Reservoir SRA

Based on visitor spending data, OHV/OSV recreational users in Jasper Sears:

- Generated nearly $2.8 million in economic output in the state,
- Supported 20 jobs, and
- Generated over $476 thousand in tax revenues ($259,640 thousand in state and county tax revenues).

Summary of the Economic Output Associated with State Vehicular Recreation Areas (SVRA) and State Recreation Areas (SRA) in 2023 Dollars.

Park	County & Contiguous Counties $ of Output	County of Park $ of Output	State & County Tax Revenues in Dollars	Jobs
Carnegie	38,984,376	34,122,624	3,501,038	260
Clay Pit	29,647,771	29,031,219	2,642,225	200
Heber Dunes	18,231,757	16,806,423	1,729,430	130
Hollister Hills	48,942,411	41,696,352	4,817,371	360
Hungry Valley	116,875,923	111,272,787	9,642,075	676
Oceano Dunes	379,135,462	348,828,961	32,856,861	2,600
Ocotillo Wells	805,923,817	780,250,872	69,073,783	5,000
Prairie City	59,459,732	55,317,278	4,994,379	385
Mammoth Bar SRA	7,179,316	6,810,495	611,962	48
Red Rock Canyon SRA	10,926,897	9,562,136	968,050	73
Jasper Sears SRA	2,778,751	2,530,480	259,640	20
Statewide	10,092,155,725	N/A	847,638,570	58,000

Note: Statewide includes OHV/OSV recreation on federal lands.

INTRODUCTION

This study was prepared for the State of California Department of Parks and Recreation, Off-Highway Motor Vehicle Recreation (OHMVR) Division. The mission of the OHMVR is to provide leadership statewide in Off-Highway Vehicle (OHV) and Over-Snow Vehicle (OSV) recreation opportunities. The OHMVR Division acquires, develops, and operates state-owned vehicular areas, and provides funding to other public agencies. The OHMVR Division's purpose is to ensure off-highway and over snow recreational opportunities remain available for future generations of Californians by providing education, conservation, and enforcement efforts (retrieved 2/19/2024 https://ohv.parks.ca.gov/?page_id=1246).

OHVs and OSVs are popular forms of recreational pursuits for many Californians. While OHV/OSV recreationists are aware of their own off-highway activities and expenditures, very little information is known of the overall demographic characteristics of these users, and the economic impact of the entire off-highway vehicle recreation industry in California. This study reports data collected from users of the State Vehicular Recreation Areas (SVRA) managed by the California Department of Parks and Recreation, OHMVR Division, federal lands (United States Forest Service Pacific Southwest Region 5), and the Bureau of Land Management (BLM), as well as municipal and private OHV areas.

This study, commissioned by the California Department of Parks and Recreation, OHMVR Division, provides an estimate of expenditures, activities, trends of ownership and operation, and economic impacts. The Department of Recreation Administration (RA) at California State University (CSU) – Fresno provided technical assistance to include survey development, data collection, analysis and reporting assistance in this effort. The report is organized as follows:

- **Introduction**: includes the scope of work, purpose of study, and study objectives. This section includes survey descriptions, methods employed, survey response rates, and information on the economic impact analysis.
- **Findings of the study and research effort:** includes socio-economic and demographics of respondents, trip characteristics such as expenditures, length of stay, first time and repeat visits, travel party and spending party size. Information on OHV/OSV vehicle type reported by survey respondents, and as reported by DMV.
- **Appendices**: includes links to research and tabular statistical data to provide more detailed information.

Study Purpose

- **Scope of Work**: Develop and administer a study, analyze data, and prepare a report that examines the demographics of OHV/OSV recreationists and the economic contributions of off-highway motor vehicle recreation throughout California.
- **Purpose of Study**: Document the demographics of OHV/OSV recreationists and the economic contributions of OHV/OSV recreation throughout California.

Study Objectives

- **Demographic and Recreation Use Information:** Develop, administer, and analyze data from an OHV/OSV demographic survey, using data collected from registered OHV/OSV owners;
- **Economic Contributions and Assess the Economic Value of OHV/OSV:** Calculate local spending patterns when registered owners visit an OHV/OSV area. Estimate the contributions of this spending to the California economy by applying total trip and vehicle related expenditures. Estimate regional economic significance by identifying economic sectors influenced by this spending for defined regions. Estimate regional economic spending by non-local OHV/OSV area visitors;
- **Economic Impact of various OHV Special Event Attendees:** Assess the economic impact of OHV/OSV users who indicated they participated in special events;

- **Estimate the Current Number of Visitors:** Estimate the number of visitors to particular OHV/OSV areas; and
- **Forecast OHV/OSV Ownership Projections and Trends:** Forecast the number of OHV/OSV recreationists within California by vehicle types to 2027.

Survey Description and Methodology

To calculate demographics and economic impacts for sites, the following were used:

- Data from all the USFS jurisdictions in California using the National Visitor Use Monitoring system which has counts for visitors and their activities, as well as demographics.
- Visitor data counts from all BLM Field Offices/Regions for OHV/OSV users.
- SVRA data counts to estimate visitors and activities as well as demographics.
- Survey data was collected to estimate visitor demographics and spending based on the sites visited.
- Mean/median spending and spending party size were determined to estimate economic impacts of OHV/OSV users at USFS and BLM parks/sites.

Surveys were collected online, in person (intercepts) and via paper copies mailed to homes. Survey contacts and distributions were created by posting survey links (English and Spanish) on the State Parks OHV website. Invitations to complete the survey were distributed via emails, personal visits to parks, OHV/OSV retail establishments, clubs, and associations. Additionally, a list of California Department of Motor Vehicles (DMV) registered OHV/OSV owners was obtained and invitations to use the online survey or mail back the included paper surveys were mailed to randomly selected households on this list. Postcards with QR codes were distributed at entry points to parks/sites that were staffed. At unstaffed sites students provided postcards with QR codes on selected days/times. Posters, in English and Spanish were distributed to State of California OHV/OSV sites and federal lands.

Survey Design Considerations and Variables for the Study

Table 1. Project/Study Objectives Keyed to Survey Questions (Appendices C, E-G)

Variables	Online Survey Question Numbers	Mailed Survey Question Numbers	Special Event (Intercept) Survey Question Numbers
Demographics	1, 3, 5-7, 13-19	1, 3, 5-7, 13-19	1-2, 4-5, 9–15
Recreation Usage	4, 6-7, 10-12, 20	4, 6-7, 10-12, 20	3-6, 16
Economic (Spending) Contributions	1-2, 5-6, 8-10	1-2, 5-6, 8-10	1-2, 5, 7-8

User Demographics: City of origin (zip code), visitation patterns (first time and repeat recreationist, frequency of visits, purpose of travel), day trip, overnight and lodging type, length of visit, travel party size, age, gender, number of children if any, income, language spoken at home, and education.

Recreation Opportunities within OHV/OSV Areas: Recreational pursuits while visiting the parks, such as camping, mountain biking, hiking, swimming, snow play, skiing, as well as motorized recreation. In addition, identification of areas visited, number of days riding in the past month, types of vehicles used, and year/model of vehicles. Specifically, the study objectives of this survey were to determine what recreation opportunities are of interest to visitors, identify gaps in recreational opportunities, identify the need for multiple forms of recreation within OHV/OSV areas, and the need for connectivity between public lands that offer several kinds of recreation opportunities.

Economic Contributions and Economic Value of OHV/OSV Recreation: Identify the economic impact of OHV/OSV recreation to communities in regions of California, to the OHV/OSV industry, and to the overall California economy. The combined economic and demographic data will be used to estimate OHV/OSV ownership trends (vehicle types) and numbers of OHV/OSV riders based on data from 2022-2024. Therefore, the following datapoints were required: (a) local spending and spending while traveling to the OHV/OSV sites; (b) spending party size; (c) place of origin (zip codes used to identify non-local recreationists); and (d) expenditures for motorized OHV/OSV equipment, rentals, and repairs in route to the site/at the site visited.

Identify Special Events Attendee Characteristics and Spending at Events: Surveys and postcards (with QR codes and http address links for the online surveys) were distributed at events. Purpose-of-visit questions were used to segment special event attendees as the primary purpose of visit.

OHV/OSV Area Visitor Study Specific Sites. Completed online surveys of users who indicate visitations to these areas were used to estimate visitation and visitor characteristics. Data from the USFS, BLM and State Parks OHMVR Division were used to estimate visitations and visitor characteristics. Respondents for the online survey were asked to pick from a GIS interactive map the site that they were visiting or had last visited. That response was used to identify specific sites for OHV/OSV use.

Forecast OHV/OSV Ownership Projections and Trends. Forecasting the number of OHV/OSV recreationists within California by vehicle types using the DMV list of registered OHV/OSV vehicle owners.

Survey Participant Recruitment, Distribution, Sampling, and Data Collection

Copies of the surveys, postcards, and other materials for gathering data are included in Appendices D-H. The following section describes in detail the types of methods employed to gather data for this study.

Participant recruitment that utilized postcards and posters (written in English and Spanish) with QR codes were distributed at multiple parks/sites with entry points or distributed at sites where student research assistants were present. The QR code provided online access to the survey. The entire study period spanned from 2021-2024 and included the time when COVID-19 was impacting California, which in turn created an impact on the number of people visiting parks. Specifically, the SVRAs, USFS, and BLM Districts and Field Offices were sent over 200 hundred posters (80 in Spanish and 120 in English, 12” x 18” weather resistant posters). These agencies also received 3000 English postcards and 2,500 Spanish postcards for distribution at entrances to parks/sites. Additionally, postcards were distributed to over 20 off-road (OHV/OSV) vehicle retail establishments and 30 clubs or OHV/OSV interest groups. Finally, researchers attended various meetings with off-road groups meeting with the USFS to discuss the project.

Research assistants employed to gather data included two Spanish speaking individuals, two Hmong assistants (speaking Thai, Vietnamese, and Lao), and two participant-observer assistants. One participant-observer assistant was an off-road motorcycle rider and snowmobiler aged 32, and the other was a 68-year-old Sport UTV rider. Participant-observers talked with and distributed postcards to OHV/OSV users. Finally, two trips were made during the winter months ranging from Placer County to Tulare County to visit Sno-parks and other areas where snowmobiles were located by the research team from California State University, Fresno.

A mail-out survey with postage paid return envelopes was mailed to randomly selected California DMV list of registered OHV/OSV owners. Stratified sampling was employed using mailing addresses in various State regions to ensure adequate randomization occurred in association with the sample population. Multiple postcard

mailings were used to promote the completion of the survey – either online or in the mail. The online survey link was also sent to DMV registered owners of OHV/OSV users in letter format and postcards inviting participation.

The intercept survey was available in both English and Spanish. Research assistants visited each SVRA, some SRAs and federal lands to distribute one-page questionnaires (front and back) and postcards with the QR code for the online survey. Respondents were also given a postage paid envelope if they chose to mail the questionnaire back to the CSU-Fresno campus. Research assistants visited sites for 2.5 years in each season (fall, winter, spring, summer), and the visits included weekdays/weekends/holidays. Attempts were made to visit sites with special events during the study period. Special event participants were asked to fill out a one-page survey or use the QR code to access the online survey. The work around COVID-19 restrictions during the first year and a half limited some access to special events as they were canceled.

An online survey was available in both English and Spanish. The online survey was also sent by the California State Park and Recreation staff using their internal email lists. In addition, clubs, OHV/OSV associations, Chamber of Commerce organizations, and retail businesses (i.e., motorcycle, ATV) were either sent links and/or postcards and full posters for distribution. The researchers also attended meetings with the USFS when they met with clubs and organizations for cleanup and trail maintenance.

Understanding the intricacies of OHV/OSV recreation requires capturing the perspectives of those who engage in this popular activity. To delve deeper into the world of OHV/OSV enthusiasts, researchers employed Qualtrics, a robust online survey platform. This platform offered several advantages, including convenient online accessibility for respondents, built-in features to ensure data quality and consistency, robust security measures for protecting participant information, and integrated tools for facilitating data analysis. The survey itself was meticulously structured and divided into clear blocks that addressed critical aspects of the OHV/OSV experience.

Starting with park identification, the survey delved into the specific location of the most recent OHV/OSV visit, followed by probing questions about visitation patterns. Whether it was a person's first encounter with the park or a seasoned veteran's regular escape, the survey captured frequency of visits and duration of outings. Understanding the size and composition of OHV/OSV groups was also crucial, with the survey inquiring about the number of adults and children accompanying the respondent.

The survey prompted participants to reveal their primary purpose for the visit, such as attending special events, whether that park/site was serving as a final destination or visiting the park/site while traveling through the area. Exploring financial aspects, the survey queried about fee payment methods, whether through individual tickets, annual passes, or alternative means.

For those spending the night on trips, the survey shed light on their overnight arrangements, inquiring about the types of accommodations frequented by OHV/OSV enthusiasts. To comprehend the economic impact of OHV/OSV recreation, the survey included questions about group spending, encompassing travel, lodging, food, and any recreational activities enjoyed during the trip.

The survey also helped to identify the vehicles used on the day of the trip (or most recent trip) and the types of vehicles owned. Detailing the types of OHVs/OSVs utilized, from motorcycles and ATVs to UTVs, the survey further explored ownership patterns, differentiating between owned, rented, and borrowed vehicles. Recognizing the growing trend of electric vehicles, the survey inquired about electric OHV/OSV usage and recent purchases within the last three years. Finally, to gain a broader understanding of personal OHV

ownership, the survey cataloged the types of vehicles respondents possessed, along with the number owned and any electric vehicle holdings.

In summary, the data collection process specifically targeted visits to a designated site or park. The survey commenced with a verification block ensuring respondents visited the correct OHV/OSV site and provided clear definitions of OHV/OSV recreation. Subsequent blocks featured a variety of question types including multiple choice, dropdown menus, and open-ended responses. These blocks focused on various aspects of OHV/OSV visits, including frequency, duration, group size, primary purpose, fees, and overnight trip details. The survey also explored group expenses and vehicle-related inquiries, such as types used during visits, ownership status, electric and tracked vehicle usage, and personal vehicle ownership details. Skip logic was employed to streamline the survey experience by displaying questions pertinent to respondents based on their previous answers. This comprehensive approach aimed to gather insights into OHV/OSV recreation patterns, motivations, spending habits, and vehicle preferences, contributing to a deeper understanding of this recreational activity's impact on individuals and the environment.

The online survey comprised various types of questions aimed at gathering detailed information about respondents' off-highway recreation experiences. The following types of survey questions were used:

- Multiple Choice Questions (MCQs): These questions presented respondents with a set of predefined answer choices. For instance, questions like Q3 (First Visit) and Q8 (Primary Purpose) offered respondents a list of options to choose from;
- Open-ended Questions: While most questions in the survey were structured, there were instances where respondents were encouraged to provide free-text responses, such as Q2 (Zip Code) and the spend-related questions like Q13 and Q14 (Group Spend);
- Rating Scale Questions: Though not explicitly present in the provided excerpt, rating scale questions usually asked respondents to rate their agreement or satisfaction on a scale, such as from 1 to 5 or from "Strongly Disagree" to "Strongly Agree.";
- Matrix Questions: Matrix questions allowed respondents to provide multiple answers in a grid format, where rows represented different attributes or statements, and columns represented the rating scale or response options. While the questions in the provided excerpt weren't laid out exactly in this format, the section where respondents specify the types of vehicles used (Q15) somewhat resembled a matrix-style layout;
- Dropdown Questions: These questions offered a list of options that respondents could select from a drop-down menu; and
- Skip Logic: The survey incorporated skip logic, directing respondents to relevant sections based on their previous responses. For instance, the survey skipped questions that were not applicable based on the respondent's earlier answers, enhancing the survey's efficiency and relevance. By utilizing a combination of these question types, the survey aimed to collect comprehensive data regarding respondents' off-highway recreation experiences, including visit frequency, spending patterns, accommodation preferences, vehicle types used, and ownership details. Additionally, the use of skip logic helped streamline the survey experience by tailoring questions to each respondent's situation, thereby improving data accuracy and reducing respondent burden.

The online survey represented a concerted effort to comprehensively understand the dynamics of OHV/OSV recreation. By engaging respondents in a variety of question formats, the survey effectively captured the multifaceted nature of OHV/OSV experiences. Through skip logic, respondents were directed seamlessly through relevant sections, enhancing both the efficiency and relevance of data collection. By exploring visitation patterns, motivations, spending habits, and vehicle preferences, the survey not only illuminated

individual behaviors but also offered insights into the broader impact of OHV/OSV recreation on both individuals and the environment. This methodological approach underscored the commitment to unraveling the complexities of OHV/OSV recreation in California.

Managing Recall/Non-response Bias and Error in Measuring Travel and Trip Characteristics

Recall bias is a systematic error that occurs when participants do not remember previous events or experiences accurately or omit details. The accuracy and volume of memories may be influenced by subsequent events and experiences. Non-response bias is ignoring the survey and prompts or not finishing the survey or skipping questions because of the seemingly lack of relevance to the stated purpose of the study. Determining the quantity and direction of recall error is surprisingly difficult. The problem is that one rarely knows the true number of trips taken by any individual, so there is no benchmark against which to compare memory-reported trips.

This study design incorporated intercept surveys taken onsite to determine trip characteristics. In addition, the online survey and mail-out survey framed the questions using "the most recent trip" to address potential recall bias resulting in self-reporting the last OHV/OSV trip taken (Howard, Lankford & Havitz, 1991; Howard, Havitz, Lankford, & Dimanche, 1992). Given the process of collecting data (random mailed survey invitations, on-site intercepts, and the online survey), the length of time collecting data (two years), and the collection of data from state and federal OHV/OSV areas, it is likely that the sample is representative (+/- 5%) to any given OHV/OSV attendance in California.

Table 2. Survey Response Rates

Survey Type	Sent	Undelivered	Refused	Net	Returned	Response Rate
Mail out Survey	450	161	24	265	160	60.3%
Online Survey	4,000	1,286	N/A	2,714	2,256	N/A
Intercept Survey	N/A	N/A	N/A	N/A	279	N/A
Total*	N/A	N/A	N/A	N/A	2,686	N/A

*Response rates in percentage are not relevant for intercept and convenience samples.

A total of 2,695 usable surveys were collected for analysis (160 mail-out, 2,234 English and 13 Spanish online surveys to total 2,256, and 279 intercept surveys). The mail out version of the survey resulted in a 60.3% (n=160) response rate. The online survey netted 2,247 surveys, and the intercept survey used at parks and sites netted another 279 surveys. See Appendix B for previous sample sizes and response rates of previous economic impact studies.

Tourist, Tourism, and User Classifications for the Purposes of Estimating Economic Impact

Several definitions of a "tourist" to an off-road area may be useful for determining visitor characteristics and economic impacts. These definitions are useful as the readers interpret the data contained within this report. The following are generally accepted definitions of a person(s) traveling to determine if they are a tourist or local and if their spending can be used in determining economic impact:

- A tourist (non-local OHV/OSV visitor) means a person who travels from a place of residence to a different town, city, county, state or country for purposes of business, pleasure, recreation, education, arts, heritage or culture.
- A tourist (non-local OHV/OSV visitor), according to the World Tourism Organization, is a person traveling to and staying in places outside of their usual environment.
- A tourist (non-local OHV/OSV visitor) is someone who travels 50+ miles from home one-way and/or stays overnight.
- A tourist (non-local OHV/OSV visitor) is someone who has traveled outside of their county of residence; and
- A tourist (non-local OHV/OSV visitor) for this study is someone whose primary purpose is to engage in off-road and over snow recreation, away from their home for a day or night.

Economic Impact Analysis Procedures

OHV/OSV user spending data collected through this study design was analyzed using the Impact Analysis and Planning (IMPLAN) modeling system. The IMPLAN model is a basic input-output economic model that was developed by the USFS in the 1970s as a resource management planning tool (https://implan.com/history/). In 1987, the USFS contracted with the University of Minnesota to expand and update the Forest Service IMPLAN database. The IMPLAN system was then run on a mainframe computer and used exclusively by the USFS. In 1991, the University of Minnesota IMPLAN Group began its first commercial order. In 1993, The University of Minnesota IMPLAN Group transformed into a private company, Minnesota IMPLAN Group (MIG), Inc., owned by Scott Lindall and Doug Olson. MIG, Inc. released its first national-level data set and began the process of annual IMPLAN database updates. During 2009, MIG, Inc. released Version 3.0 of the IMPLAN software, adding Multi-Regional Input-Output (MRIO) capabilities. MIG, Inc. was sold in 2013 and officially changed its name to IMPLAN – the Headquarters was subsequently relocated to Huntersville, NC. During 2018, IMPLAN released the IMPLAN web version which was the most advanced economic modeling tool created at that time. In 2020, IMPLAN integrated occupational data into the application. Economic, occupational (Bureau of Labor Statistics), and U.S. Census data is now integrated with the software. The economic data can be provided at the county level, as well as in aggregates of multiple counties, to help determine local and regional economic impacts of industry sectors. The analysis in this study was based on the aggregate of counties included in the economic impact region, as well as state level impacts.

The industry on which this study focused was the OHV/OSV recreation and tourism industry in the State of California. Because this industry attracts spending from both residents and visitors, the industry can be seen both as a basic industry and a service industry. The distinction between OHV/OSV recreation and tourism as a basic industry versus a service industry is important when estimating the relative impact of spending by local OHV/OSV trail users versus non-local visitors to the trails when analyzing data. The researchers were interested in determining only the amount of money spent by visitors to the region as well as the induced effects of this spending in the State of California.

Another benefit of the IMPLAN model is the use of multipliers to track interactions between sectors within a local economy (i.e., recreation, lodging, food services) and to determine the value of goods and services that are exchanged between sectors. This aspect of the model helps to estimate the total effects of spending on OHV/OSV recreation and tourism across the economy. Multipliers were used to determine the total output, the total labor income, and the total number of jobs generated by the OHV/OSV recreation and tourism industry in California.

Understanding and interpreting direct, indirect, induced, and multiplier effects associated with IMPLAN requires a basic knowledge of terminology. The bullet points below outline the various effects, inclusive of multipliers.

- *Direct Effects* are injections in the economy that are multiplied further, based on linkages of different economic sectors in the area. Direct effects are the economic impacts in different economic sectors that are derived directly from the injection of these inputs.
- *Indirect Effects* measure the total value of supplies and services supplied to related businesses.
- *Induced effects* accrue when related businesses and businesses in the indirect industries spend their earnings (i.e., wages, salaries, profits, rent and dividends) in goods and services in the area.
- *Total Effects* are the sum of direct, indirect, and induced effects and are the total of transactions attributable directly to expenditures related to visiting an OHV/OSV site; and
- The *Multiplier Effect* demonstrates the process through which initial spending in a region generates further rounds of re-spending within the region. The rippling process of subsequent re-spending is the multiplier effect. The term refers to the number of times a dollar "changes hands" within the community before it leaks out of the community. For example, the OHV/OSV user pays the local merchant, the local merchant spends money at the grocery store, the grocery business owner pays its cashier, and so on. For ease of interpretation, the number of times a dollar "changes hands" within the community is quantified as one number by which all expenditures are multiplied. It should be remembered however that a multiplier represents an estimate and should be interpreted respectively and conservatively. The multiplier effect is found by dividing the Total Effect by the Direct Effect.

Many studies rely on estimates of visitor expenditures and visitor data, collected for the purpose of the study. Therefore, it is usually recommended that economic impact studies are customized for a specific area, and not reliant on estimated expenditure averages. Otherwise, the likelihood of overemphasizing the impacts generated by sectors, and creating a misleading statement of the impacts, increases. This study was designed to collect the primary data from actual OHV/OSV users and owners of the equipment.

In summary, there are three elements that contribute to the total impact of visitor spending: (a) direct effect, which is the first-round effect of visitor spending; (b) indirect effect, which is the ripple impact of additional rounds of recirculating the initial visitors' dollars; and (c) induced effect, which is further ripple effects caused by employees of impacted business spending some of their salaries and wages in other business in the host community (Howard & Crompton, 1995). These three effects, when examined in totality, create a multiplier effect.

The following bullet points provide additional explanation of economic impact terminology (inclusive of detailing which data points are linked to direct, indirect, induced and multiplier effects) to assist the reader when reviewing the data tables.

- The “Direct Effect,” line is the first line in every vehicle section. It is the starting point. It includes the local economic effects directly tied to the event or activity being investigated – in this case, the “Expenditure” made by California off-highway vehicle operators.
- “Expenditure” is the number that starts the model for each section. It is the total expenditure estimated based on per vehicle expenditure estimates derived from the survey and DMV records.

- "Output" is the total value of California product sold as a result of the "Expenditure." In the case of off-highway vehicle operation, "Output" is substantially lower than "Expenditure." Most expenditures made to start this process are made in the retail system. The service or "Output" retailers provide is access to products made by others. The cost of goods sold for these goods passes through the retailer and is not calculated as part of the retailers "Output." Retailer "Output" is the margin the retailer keeps after paying for the goods sold. This is also true of franchise fees in the hotel and restaurant industries.
- "Value Added" is the portion of output value that is created by economic activity in the State's economy. It excludes the value of purchased inputs that come from outside of the State. The sum of Value Added from all industries in the State should be equivalent to Gross State Product (GSP). Value Added generally includes labor income, proprietor's income, and property-based income.
- "Labor Income" is part of "Value Added." It includes wages and salaries for paid employees and proprietor's income which accrues to the non-corporate owners.
- "Jobs" is a simple count of the number of jobs. Jobs may be part-time, full-time, or require overtime. A job is counted as a job regardless of the time involved.
- The "Indirect Effect" rows include the economic effects of domestic (in-State) input industries that supply the providers of goods and services to the California off-highway vehicle operator. Riding requires vehicles. Vehicles require rubber tires, head gaskets, ball bearings, nuts, bolts, and other manufacturing components, inclusive of OEM (Original Equipment Manufacturer) components. Inputs purchased in support of the Direct Effect generate Indirect Effects.
- The "Induced Effect" rows are derived from activities that involve workers, proprietors, or investors spending their earnings they are paid from the direct activity and the indirect (input supply) activity on goods and services within the economy. Direct and Indirect activities generate wages, salaries, and proprietors' incomes. As the recipients spend these funds on groceries, automobiles, dance lessons, houses, bowling, and other goods/services, they induce additional economic impacts in the local economy.
- "Total Effect" is the sum of direct, indirect, and induced effects.
- The "Multiplier Effect" is simply the division of "Total Effect" by "Direct Effect." The multiplier gives a quick insight into how strong the follow-up economic activity is relative to the initial economic stimulus.

Introduction to the GIS

This entry report outlines the development of a GIS Online mapping dashboard created using ArcGIS Online. The dashboard was specifically designed for integration into an Economic and Demographic Impact Study Report, as part of a contract between the California State Parks System and the Department of Recreation Administration at CSU-Fresno. The study aims to analyze the economic and demographic impacts of off-highway vehicle (OHV) recreational activities. See link https://arcg.is/z8Grf.

Data Sources
The dashboard utilizes data primarily sourced from a survey conducted by the Department of Recreation Administration at CSU-Fresno, capturing respondents' insights on OHV usage. Additionally, data from the Department of Motor Vehicles (DMV) and the California State Parks GIS Open Library have been incorporated.

Methodology
The feature layers integrated into the dashboard were compiled and processed using Esri's Desktop application, ArcGIS Pro, and the Online GIS application, ArcGIS Online. The compilation process was undertaken without reliance on any specific method outlined in the Economic Impact Report.

Dashboard Overview
The OHV Economic and Demographic Impact Dashboard aims to illustrate the geographical distribution of California OHV owners and enthusiasts. It identifies areas where OHV recreational activities are popular and provides insights into preferred recreational destinations.

Accessing Data
Users interested in exploring the data further can access additional information and metadata by clicking on corresponding feature layers within the layer list. These links direct users to Esri's ArcGIS Online Geo Portal, where attribute information and data organization details are available. For inquiries regarding data assembly and exporting, users can contact johnbaptista@mail.fresnostate.edu.

Note on Feature Layers
It's essential to note that the current configuration of feature layers provided in the dashboard does not directly represent the findings outlined in the Economic Impact Report. Rather, they serve as interactive visual aids to complement the report's conclusions.

SECTION I. PARTICIPANT DEMOGRAPHIC CHARACTERISTICS

Section I provides a breakdown of various demographic characteristics associated with the respondents who voluntarily participated in the study. The categories of respondent demographic characteristics that can be found in the following pages include: (a) OHV/OSV Participation Rates by Jurisdiction in California; (b) tourist and user classifications; (c) age; (d) gender; (e) race/ethnicity; (f) language spoken at home; (g) education level; (h) annual household income level; (i) County of residence; and (j) State of residence. Tables illustrating statistical results have been included with each category.

OHV/OSV Participation Rates by Jurisdiction in California

This study focused on the State and Federal lands that supply OHV/OSV recreational opportunities, and therefore supporting associated jobs, income for individuals, and tax revenues for communities and the State. The OHVMR Division of California manages parks specifically designed for off-road recreational activities. The Federal government, in turn manages off-road recreational areas through the USFS, U.S. Department of Agriculture, and the BLM. The USFS manages 17 National Forests in California, and one Management Unit (Lake Tahoe Basin Management Unit). The BLM system comprises 14 District Offices, and three National Monuments. The State of California SVRA consists of nine parks, and three off-road areas in SRAs. Tables 3-5 highlight the areas that the USFS, BLM, and California SVRA supervise.

Table 3. United States Forest Service (USFS), National Forests in California 2023

U.S. Forest Service, National Forests	Counties Impacted	OHV/OSV User Counts
Angeles NF	Los Angeles, San Bernardino, Ventura	153,526
Cleveland NF	Riverside, Orange, San Diego	27,066
Eldorado NF	Alpine, Amador, El Dorado, Placer	37,959
Inyo NF	Inyo, Mono, Tulare	106,827
Klamath NF	Siskiyou	6,122
Lake Tahoe Basin Mgt Unit	El Dorado, Placer	326,012
Lassen NF	Butte, Lassen, Plumas, Shasta	11,358
Los Padres NF	Kern, Monterey, San Luis Obispo, Ventura	39,606
Mendocino NF	Colusa, Glenn, Lake, Mendocino	10,725
Modoc NF	Lassen, Modoc, Siskiyou	4,856
Plumas NF	Butte, Sierra, Lassen, Plumas, Yuba	15,074
San Bernardino NF	Riverside, San Bernardino	81,957
Sequoia NF	Fresno, Kern, Tulare	26,432
Shasta-Trinity NF	Shasta, Siskiyou, Trinity	43,871
Sierra NF	Fresno, Madera, Mariposa	30,655
Six Rivers NF	Del Norte, Humboldt, Trinity, Siskiyou	7,811
Stanislaus NF	Calaveras, Mariposa, Tuolumne	41,000
Tahoe NF	Sierra, Placer, Nevada, Yuba, Plumas, El Dorado	70,092
Total OHV/OSV User Counts		**1,040,948**

Table 4. Bureau of Land Management (BLM) District Office 2023

District Office	***Counties Impacted***	***OHV/OSV User Counts***
Applegate Field Office	Modoc, parts of Siskiyou, Shasta, Lassen	33,354
Arcata Field Office	Del Norte, Humboldt, part of Mendocino, Trinity	45,990
Bakersfield Field Office	Fresno, western Kern, Kings, Madera, San Luis Obispo, Santa Barbara, Tulare, Ventura	77,219
Barstow Field Office	Part of San Bernardino, part of Inyo	910,508
Berryessa Snow Mountain National Monument	Lake County	136,209
Bishop Field Office	Mono, part of Inyo	313,275
Central Coast Field Office	Contra Costa, Alameda, San Mateo, Santa Cruz, Monterey, San Benito, Santa Clara, parts of Stanislaus, Merced, Fresno	6,985
Eagle Lake Field Office	Plumas, Sierra, part of Lassen	341,845
El Centro Field Office	Imperial and part of San Diego	2,874,218
Mojave Trails National Monument	San Bernardino	11,979
Mother Lode Field Office	Merced, Mariposa, Tuolumne, Calaveras, Alpine, Amado, San Joaquin, El Dorado, Placer, Nevada, Yuba, Sutter, part of Stanislaus	27,305
Needles Field Office	Part of San Bernardino	54,891
Palm Springs-South Coast Field Office	Riverside, Orange, part of Los Angeles, San Bernardino, and San Diego.	387,397
Redding Field Office	Shasta, Trinity, Siskiyou	126,713
Ridgecrest Field Office	Part of Inyo, Kern and San Bernardino	691,926
Santa Rosa & San Jacinto Mountains National Monument	Riverside	2,189
Ukiah Field Office	Sonoma, Napa, Solano, Marin, Yolo, Lake, Colusa, Glenn, part of Mendocino	262,911
Total OHV/OSV User Counts		**6,304,914**

Table 5. California State Vehicular Recreation Areas (SVRA) 2023

SVRA	***Counties Impacted***	***OHV User Counts***
Carnegie	Eastern Alameda and Western San Joaquin	45,192
Clay Pit	Butte	36,215
Heber Dunes	Imperial	23,567
Hollister Hills	San Benito	68,773
Hungry Valley	Los Angeles, Kern and Ventura	118,195
Oceano Dunes	San Luis Obispo	438,589
Ocotillo Wells	Eastern San Diego and Western Imperial	867,436
Onyx Ranch	Kern	4,641
Prairie City	Sacramento	63,354
Mammoth Bar - Auburn Hills SRA	Placer	8,263
Red Rock Canyon State Park	Kern	12,391
Jasper Sears OHV - San Luis Reservoir SRA	Merced	3,473
Total OHV/OSV User Counts		**1,690,089**

As can be seen in Tables 3-5, the estimated total OHV/OSV annual user counts in California on USFS lands is 1,040,948 (2.6 average spending party size), on BLM lands is 6,304,914 (2.7 average spending party size), and SVRA lands is 1,690,089 (3.05 average spending party size) per year. The total user counts per year for OHV/OSV in California is estimated to be 9,035,951.

Estimating Visitor Use Days

To establish the total number of visitor days, we can multiply the total number of vehicles registered with DMV (631,669), and times it by the median number of year visits (15), which results in 9,475,035 OHV/OSV days. This figure supports and confirms the visitor counts as it approximates the reported visitor counts provided by the USFS, BLM, and State Parks.

Estimating the Number of Distinct OHV/OSV Users

Travel characteristics useful in reporting the actual number of distinct OHV/OSV users in California include median days per month of use (3.0), mean days per month (3.6), median months per year (5.0), mean months per year 5.), median travel party size of (4.0), median travel party size of (4.0), mean travel party size (6.2), and median travel party size (4.0).

Using The Number of DMV Registered OHV/OSV

The total number of distinct OHV/OSV users can be estimated in several ways as follows. Since there are 631,669 registered OHV/OSV vehicles in California, we can multiply this number by the travel party size. This provides an estimate of 3,916,347 (using a mean party size of 6.2) distinct users, or 2,526,667 (using a median party size of 4) distinct users.

Using The Mean/Median Times Participating in OHV/OSV Recreation

Users visit OHV/OSV sites 15 times a year (median days 3 times median months 5.0). To arrive at the total number of distinct users, we divide the total number of users (user count total = 9,035,951) by the median number of visits (15) per year which results in 602,396 distinct individuals.

This figure seems low compared to the Oregon study which estimated 671,237 (this is 15.9% of the population) distinct OHV/OSV users in a much less populated state with 4.2 million residents (Lindberg & Bertone-Riggs, 2015). Arizona has a population of 7,016,270, with 12.6 % of the population who are OHV users, or 792,109 distinct individuals. It is estimated that there are 1.7 million users counted, with a travel party size of 4.0 (median) (Chhabra, et.al., 2017).

Since both Arizona (792,109 distinct users) and Oregon (671,237 distinct users) are much smaller states in terms of population, we can assume the calculation of 602,396 distinct users in California (2023 population of 38,965,193) is unrealistic, especially given the population sizes of these states (Oregon has a population of 4.2 million, and Arizona 7 million).

Using The Travel Party Size

Another approach is to divide the total user counts (9,035,951) provided by the USFS, BLM and State Parks in California by the mean and median reported travel party size. This results in 1,457,411 (mean travel party size of 6.2) distinct individual OHV/OSV users, which equates to 3.74% of the California population. The median travel party size of 4.0 results in 2,258,987 distinct individual users, which equates to 5.7% of the California population.

Using Comparatives to Oregon and Arizona Percent of Population

As a comparative, to calculate the estimated distinct number of OHV/OSV users based upon Arizona and Oregon percentages, California may have 4,909,614 distinct users (based on Arizona's 12.6% of the population), or 6,195,465 distinct users (based on Oregon's 15.9% of the population), or the midpoint of the two adjoining states 5,649,952 distinct users (14.5% of California's population).

Recommendation on Estimation of Distinct Total OHV/OSV Users

Given these calculations, it is reasonable to assume that there are at least 1.4 million to 2.2 million OHV/OSV distinct users in California, perhaps more, as presented within these calculations. For discussion purposes and analysis, we can assume that the calculation using the total visitor count (9,035,951) and median travel party size (4) results in 2,258,987 distinct OHV/OSV users in California, which is 5.79% of the California population. Coincidentally, this number is similar to the result using registered vehicles and median travel party size resulting in 2,526,667 distinct users.

	Registered Vehicles Times Travel Party Size	Total Visitor Count Divided by Times Visited Per Year	Total Visitor Count Divided by Travel Party Size	Comparison to Arizona and Oregon*
Mean	3,916,347	492,154	1,457,411	
Median	2,526,667	602,396	2,258,987	
Based on 12.6% of the Population (Arizona)				4,909,614

	Registered Vehicles Times Travel Party Size	Total Visitor Count Divided by Times Visited Per Year	Total Visitor Count Divided by Travel Party Size	Comparison to Arizona and Oregon*
Based on 15.9 % of the Population (Oregon)				6,195,465

Table 6. Selected Respondent Demographic Characteristics (Park Management Agency)

	SVRA	USFS	BLM	Other
Age				
Mean	49	54	54	53
Median	50	54	56	54
Years visiting this park				
Mean	21	20	22	20
Median	20	18	20	20
Number of adults in travel group – 18+				
Mean	6	6	8	6
Median	4	4	6	4
Number children in travel group - Under 18				
Mean	4	3	5	4
Median	3	2	4	2

Table 6 highlights selective travel party characteristics based on the Park Management Agency type for the destination/site visited. Key findings indicate that visitors to SVRA destinations/sites, on average, tend to be slightly younger than visitors to destinations/sites managed by other agencies. The average number of years visiting that park/site remains similar across all Park Management Agencies. Moreover, the number of adults and children in visitor groups slightly varies across Park Management Agency categories, with BLM experiencing larger travel party groups.

When considering the expenditures of OHV/OSV visitors to an area, the primary purpose of the visit is the criteria in which to determine what and how much of the expenditure can be counted toward the economic impacts. For this study, the primary purpose of the visit is to participate in OHV/OSV recreation at the park/site. Table 7 illustrates percentages of individuals (using various interpretations of tourist) that were involved in the current study. The term non-local will be used to describe a tourist. This is consistent with the way in which the federal government categorizes recreational travel.

Table 7. OHV/OSV Users and Tourist Classifications*

Day Use or Overnight	Percent	Estimated Number of Users**
Day Users	51	4,608,335
Overnight Users	35.5	3,252,942
Distance from Home		
Local User – Less Than 50 miles	40	3,614,380
Non-Local- 50 miles from home	59.7	5,421,571

Day Use or Overnight	Percent	Estimated Number of Users**
Purpose of Visit		
Primary Purpose to Visit that Site for OHV	77.8	7,048,042
Engage in OHV at that Site While Traveling Elsewhere	8.2	722,876
OHV/OSV		
OHV Users	88	7,951,637
OSV Users	12	1,084,314
Special Events		
At A Special Event***	13.3	1,201,781
Pursue OHV Recreation at Site	64.5	5,873,368
Other Side Trip	9.6	903,595

*Does not round to 100% due to missing data
**Based upon 9,035,951 estimated OHV/OSV users in California.
***This figure represents 389,657 attending to compete in special events, with another 812,214 traveling to view a special event. Refer to the special event section of the report.

Fifty percent (51%) of the OHV/OSV sample were day users, representing an estimated 4,608,335 off-road enthusiast. Another 35.5% were overnight users, representing 3,252,942 off-road enthusiasts. The majority (59.7%, 5,421,571 OHV/OSV riders) of users however were considered non-local – tourists in other words. Forty percent of the users lived less than 50 miles from their home zip code, as reported in the survey. The vast majority (77.8%, equaling 7,048,042 users) of survey respondents reported their primary purpose of visiting the park/site as for participating in OHV/OSV activities. There are approximately 7,951,637 OHV users and 1,084,314 OSV users in the State of California. Special event recreationists represent 13.3% of the population studied, equaling 1,201,781 attendees (observers, supporters and participants). Therefore, the special event total participation for purpose of travel is different from the number of special event attendees noted in the Executive Summary, body of report for Special Events and the summary.

OHV/OSV Participant Demographic Characteristics – Age

The following section of the report presents (a) demographic and OHV/OSV user characteristics; (b) the travel and trip characteristics of the off-road recreation enthusiast; (c) the primary purpose of travel; and (d) the spending patterns reported by survey respondents. Where appropriate, cross tabulations with first-time and repeat visitors, overnight and day visitors, and type of park (federal and state) are presented to further describe the users and visits to OHV/OSV areas. In addition, sections of the report detail these characteristics of special event attendees at the parks/sites, and comparisons of the OHV and OSV users.

Table 8. Age of Respondents

Age Demographic	Years
Mean Age	51.3
Median Age	52.5
Oldest Respondents	85
Youngest Respondents	12
Age Range (in Years)	73

Table 8 displays the mean (average) age of survey respondents in this study (51.3 years), with a median age of 52.5 years. The oldest respondent's age was 85 years old, and the youngest respondent's age was 12 years old. The age range was 73 years. The literature review (Appendix A) revealed that studies reporting average age from 2000- 2021 for OHV/OSV studies as 46.6 years of age.

Table 9 Mean and Median Age by Gender of Respondents

Gender	Mean Age (Years)	Median Age (Years)
Female	51.5	48
Male	47.5	53
Self-Described	57.6	53
Prefer not to answer	53	60

The mean age for females in this study was 51.5 years, with a median age of 48 years (Table 9). Males reported a mean age of 47.5 years, and median age of 53 years. Those respondents reporting "self-defined" had a mean age of 57.6 years and a median age of 53 years. Those who chose not to report their gender (as an option in the survey instrument) had a mean age of 53 years and median of 60 years.

OHV/OSV Participant Demographic Characteristics – Gender

Table 10. Gender of Respondents

Gender	Percent
Female	10.9
Male	57.5
Self-Described	4.1
Prefer not to answer	2.6

The majority of survey respondents in this study were male (57.5%), with 10.9% of respondents identifying as female. Respondents who chose to indicate one's gender as "self-defined" comprised 4.1% of the group, and those respondents who preferred not to answer equaled 2.6% of the respondent group (Table 10). A review of the literature for OHV/OSV demographic and economic impact studies conducted from 2000-2021 revealed that males make up 51-97% of the OHV/OSV population, while females were reported to represent between 6.3-49% of the OHV/OSV population (Appendix A).

Table 11. Gender of Respondents and First Time & Repeat Visitors (Percent)

Gender	First Time Visitor	Repeat Visitor
Female	14.4	85.6
Male	10.1	89.9
Self-Described	4.1	4.5
Prefer not to answer	3.7	2.6

First time and repeat visitors to the OHV/OSV site last visited are presented in Table 11. When viewing the data by gender and first time and repeat visitors, females are 14.4% first-time visitors, and 85.6% repeat visitors. Males have 10.1% first time visitors and 89.9% are repeat visitors. Table 11 also illustrates that most respondents, regardless of gender, were repeat visitors to the park/site visited.

OHV/OSV Participant Demographic Characteristics – Race/Ethnicity

Table 12. Race/Ethnicity of Respondents by Percent

White or Caucasian	73.1
Hispanic/Latino	10.0
Native American	4.2
Asian	2.4
African American	1.2
Prefer not to answer	8.9
Other	0.2

Table 12 contains the statistical percentages associated with race/ethnicity for the survey respondents. The majority of respondents indicated their race/ethnicity was White or Caucasian (73.1%). Ten percent (10%) of respondents identified as Hispanic/Latino, with another 1.2% indicating African American, and 4.2% identify as Native American and 2.4% as Asian. Over eight percent (8.9%) preferred not to answer, and 0.2% identified as "Other." A review of demographic and economic OHV/OSV studies (Appendix A) demonstrates most OHV/OSV participants are White/Caucasian (ranging from 57-98.4%). The same studies identified Hispanic/Latino participants representing from 1-27% of the respondent population, African American respondents representing 1-1.4%, Native American respondents representing 2-4.2%, and Asian/Pacific Islander respondents representing 0.8-4%.

Table 13. Race/Ethnicity of First/Repeat Visitors (Percentage)

Race/Ethnicity	First Time Visitor	Repeat Visitor
African American	0.5	1.3
Native American	3.3	4.3
White or Caucasian	70.9	73.5
Hispanic/Latino	13.1	9.6
Asian	4.7	2.2
Other	0.0	0.02
Prefer Not to Answer	7.5	8.9

When viewing the race/ethnicity datapoints of first time and repeat visitors, there were a few similar results (Table 13). The majority of first-time visitors (70.9%) are White or Caucasian, which is similar to the percentage of repeat visitors who are White or Caucasian (73.5%). First time and repeat visitors who indicated Native American as their race/ethnicity were 3.3% and 4.3%, respectively. There was a slight increase of first-time visitors (13.1%) identifying as Hispanic/Latino over repeat visitors (9.6%).

OHV/OSV Participant Demographic Characteristics – Language Spoken at Home

Table 14. Language Spoken at Home

Language	Percent
Always English	65.8
Mix of English and Spanish	7.1
Always Spanish	0.5
Other	1.1

As indicated in Table 14, over 65% of the respondents reported that English was the language always spoken at home (65.8%). Another 7.1% of the respondents indicating a mix of English and Spanish was spoken at home.

Table 15. Language Spoken at Home by First Time and Repeat Visitors (Percent)

Language	First Time Visitor	Repeat Visitor
Always English	10.4	89.6
Mix of English and Spanish	13.4	86.6
Always Spanish	33.3	66.7
Other	20	80

Table 15 presents the language spoken at home sorted by first time and repeat visitors. Over ten percent (10.4%) of respondents who always speak English at home were first time visitors, and 89.6% were repeat visitors to the site/park. Respondents who indicated being first time visitors spoke "Always Spanish" (33.3%) and "Mix of English/Spanish" (13.4%). Additionally, of first-time visitors, 20% spoke "Other" languages at home. As a result, 53.3% of first-time visitors spoke a language other than English.

OHV/OSV Participant Demographic Characteristics – Education Level

Table 16. Education Level of Respondents

Education Level	Percent
Some high school	1.6
Graduated from high school or GED	21.3
Graduated from college or technical school	40.9
Postgraduate degree(s)	10.6

The largest percentage of respondents graduated from college or technical school (40.9%) and 10.6% of respondents held postgraduate degrees (Table 16). Just over one-fifth of the respondents (21.3%) graduated from high school. A comparison to previous literature revealed (Appendix A) high school or GED graduates ranged from 20.8-48.1%. College or technical school graduates represented 10-56%; and postgraduate degree completion ranged from 5-8.7% in studies reviewed.

Table 17. Level of Education by First Time Visitors/Repeat Visitors (Percent)

Education Level	First Time Visitor	Repeat Visitor
Some high school	11.9	88.1
Graduated from high school or GED	12.5	87.5
Graduated from college or technical school	9.9	90.1
Postgraduate degree(s)	11.5	88.5

Table 17 represents the highest education levels attained by first time and repeat visitors. When considering the data associated with educational attainment, nearly all categories of first time and repeat visitors are similar in their percentage distribution.

OHV/OSV Participant Demographic Characteristics – 2023 Annual Household Income

Table 18. Annual Household Income of Respondents

Income Level	Percent
Less than $9,999	0.2
$10,000-$14,999	0.2
$15,000-$24,999	1.0
$25,000-$34,999	1.9
$35,000-$49,999	2.8
$50,000-$74,999	6.7
$75,000-$99,999	8.9
$100,000-$149,999	17.9
$150,000-$199,999	10.8
$200,000 and above	14.5
Prefer not to answer	9.8

Table 18 presents the income levels as reported by the respondents. The majority of respondents (17.9%) reported income as $100,000-149,999 per year. Respondents making $100,000 and above make up 43.2% of the sample. The comparative analysis from previous research studies indicates a similar pattern in western states with incomes of $100,000 or more per year, most notably California (49% above $100,000), and Arizona (48% in one study and 27.6% in another study).

Table 19. Annual Household Income by First Time/Repeat Visitors (Percent)

Income Level	First Time Visitor	Repeat Visitor
Less than $9,999	0	.3
$10,000-$14,999	.7	.1
$15,000-$24,999	1.4	1.0
$25,000-$34,999	2.4	1.9
$35,000-$49,999	3.4	2.9
$50,000-$74,999	10.2	6.7
$75,000-$99,999	9.9	9.5
$100,000-$149,999	17.7	19.3
$150,000-$199,999	8.8	11.9
$200,000 and above	9.5	16.3
Prefer not to answer	9.2	10.7

The distribution of income levels among first time and repeat visitors reflects a majority reporting income levels between $150,000-$199,999 per year (Table 19). Repeat visitors report a higher percent of those making above $100,000 to $200,000.

OHV/OSV Participant Demographic Characteristics – County and State of Residence

Table 20. Respondents County in California and State of Residence (Percent)

CA County	***Percent***	***CA County***	***Percent***	***State***	***Percent***
Alameda	4.6	Placer	3.9	Alabama	0.1
Amador	0.5	Plumas	0.7	Arizona	0.2
Butte	1.7	Riverside	2.5	California	72.0
Calaveras	0.6	Sacramento	4.1	Colorado	0.1
Colusa	0.1	San Benito	1.3	District of Columbia	0.1
Contra Costa	5.0	San Bernardino	2.5	Florida	0
Del Norte	0.1	San Diego	4.1	Georgia	0
El Dorado	3.4	San Francisco	0.9	Idaho	0.1
Fresno	4.7	San Joaquin	2.2	Iowa	0
Glenn	0.3	San Luis Obispo	2.9	Montana	0.1
Humboldt	0.3	San Mateo	2.0	Nevada	0.6
Imperial	0.2	Santa Barbara	1.0	North Carolina	0
Inyo	0.3	Santa Clara	6.8	Oregon	0.2
Kern	2.9	Santa Cruz	1.4	Texas	0.1
Kings	0.7	Shasta	0.7	Utah	0.1
Lassen	0.3	Sierra	0.2	Washington	0.1
Los Angeles	7.0	Siskiyou	0.3		
Madera	2.2	Solano	1.2		
Maricopa	0.1	Sonoma	1.9		
Marin	0.5	Stanislaus	1.7		
Mariposa	0.2	Sutter	0.2		
Mendocino	0.3	Tehama	0.2		
Merced	0.9	Tulare	1.6		
Modoc	0.1	Tuolumne	0.7		
Mono	0.3	Ventura	2.1		
Monterey	1.0	Yolo	0.2		
Napa	0.4	Yuba	0.3		
Nevada	2.2				
Orange	1.9				

OHV/OSV enthusiasts reside in all California Counties (Table 20). The sample for this study represents respondents from each California county, except for Alpine County. Los Angeles County had the highest percent of respondents with 7% of the sample, followed by Santa Clara County (6.8%). Contra Costa County (5%), Fresno County (4.7%), Alameda (4.6%), Sacramento County (4.1%) and San Diego (4.1%) followed with the next largest percentage of respondents. The majority (72%) of respondents live in California. Residents of Nevada, Oregon and Arizona reported using California's OHV/OSV areas for their recreation. Twenty six percent (26%) of the respondents did not report their State of residence.

SECTION II. SURVEY PARTICIPANT OHV/OSV TRIP CHARACTERISTICS

Section II highlights survey participants' OHV/OSV trip characteristics documented in their responses. The categories of participant OHV/OSV trip characteristics that can be found in this section include: (a) first time/repeat visitors to destination/sites; (b) primary purpose of visit; (c) visitation frequency; (d) recreational activities at destination/site; (e) travel party size; (f) day/overnight trip classification; (g) type of lodging used; (h) fees paid for destination/site access; (i) spending per travel party (non-capital expenditures); (j) spending per travel party (capital expenditures); (k) spending per Park Management Agency Type; and (l) revenue per available visitor, or RPAV. Tables illustrating statistical results have been included with each category.

OHV/OSV Recreation Trip Characteristics – First Time/Repeat Visitors & Primary Purpose of Visit

Table 21. First Time/Repeat Visit to Destination/Site

First Visit to OHV Site?	Percent
Yes, first visit	11.9
No, I am a repeat visitor	88.1

Table 21 highlights first time and repeat visitation to the destination/site. The majority of respondents (88.1%) reported that they had visited the same park/site in the past. Nearly 12% of respondents reported that it was their first time visiting that park/site.

Table 22. Primary Purpose of Visit for Respondents

Primary Purpose for Visit	Percentage
Attending a non-race event was the primary purpose for the trip	9.7
Attending a race event was the primary purpose for the trip	1.3
Participating in a race/competition was the primary purpose for the trip	2.3
Traveling on a business or combined business/personal trip, and stopped as a part of that trip	1.1
Traveling to another primary destination, but stopped as part of that trip	3.9
Traveling to visit friends/family in the area, but stopped as part of that trip	3.2
Visiting the site was the primary purpose for the trip	64.5

Table 22 presents the primary purpose of travel for the survey respondents. This question is important for all expenditures to be calculated and considered in the total economic impact of the OHV/OSV recreation activity. The majority of respondents (64.5%) traveled for the purpose of visiting that particular OHV/OSV recreational site. Furthermore, attending a non-race event (9.7%), attending a race event (1.3%), and participating in a race/competition (2.3%) were indicated as a primary purpose for visitation. Therefore, the total percentage of visitors with a primary purpose of travel related to OHV/OSV participation is 77.8%. Given the process of collecting data (random mailed survey invitations, intercepts and the online survey), the length of time collecting data (two years), and the collection of data from State and Federal OHV/OSV areas, it is likely that the sample is representative (+/- 5%) of OHV/OSV recreation attendance in California. Those respondents traveling on business, visiting friends and family, and stopping for an OHV/OSV experience make up 8.2% of the sample. This study is similar to the other economic and demographic studies of OHV/OSV users in association with analyzing the primary purpose of visitors' trips.

Table 23. Primary Purpose of Visit for First Time/Repeat Visitors (Percent)

Primary Purpose of Visit	First Time Visitor	Repeat Visitor
Attending a non-race event was the primary purpose for the trip	11.8	88.2
Attending a race event was the primary purpose for the trip	11.4	88.6
Participating in a race/competition was the primary purpose for the trip	13.3	86.7
Traveling on a business or combined business/personal trip, but stopped as part of that trip	17.2	82.8
Traveling to another primary destination, but stopped as part of that trip	26	74
Traveling to visit friends/family in the area, and stopped as part of that trip	15.7	84.3
Visiting the site was the primary purpose for the trip	11	89

Table 23 presents first time and repeat visitors' primary purpose for visiting the destination/site. For repeat visitors, visiting the destination/site was the primary purpose for visitation with the greatest percentage of respondents (89%). For first time visitors, 26% of the respondents indicated that they stopped at the site on their way to another location.

Table 24. Purpose of Visit, Day Trip/Overnight Trips (Percent)

Purpose of Visit	Day Trip	Overnight Trip
Attending a non-race event was the primary purpose for the trip	9.2	13.5
Attending a race event was the primary purpose for the trip	1.3	1.9
Participating in a race/competition was the primary purpose for the trip	1.9	3.6
Traveling on a business or combined business/personal trip, but stopped as part of that trip	1.0	1.6
Traveling to another primary destination, but stopped as part of that trip	4.8	3.7
Traveling to visit friends/family in the area, and stopped as part of that trip	2.2	5.5
Visiting the site was the primary purpose for the trip	77.1	68.6

Table 24 highlights the primary purpose of the OHV/OSV trip in association with day trip and overnight trip participants. The data suggests that both day trip and overnight trip participants' primary purpose of visitation was for that park/site. Eight percent (8%) of day trip visitors and 10.8% of overnight visitors were on other types of travel (i.e., business, visiting friends/relatives).

OHV/OSV Recreation Trip Characteristics – Visitation Frequency

Table 25. Visitation Frequency for OHV/OSV Respondents

	Number of Years	Number of Months/Year	Number of Days/Month
Mean	20.5	5	3.7
Median	20	6	3

OHV/OSV recreation enthusiasts are committed visitors to their favorite destinations/sites. Table 25 illustrates the visitation frequency for OHV/OSV respondents at the SAME SITE/PARK they last visited. Respondents averaged 20 years visiting the same destination/site, five months a year visiting the same site, and 3.7 days a month visiting the same site. This data outlines the OHV/OSV participant commitment to not only

the destination/site they visited, but to the off-road recreation experiences as well. The estimated mean trips per year would be 3.7 days in a month x 5 months in a year = 18.5. This value compares to the previous literature (Appendix A) which ranged from 3-37.5 trips per year.

Table 26. Number of Months Per Year Participating in OHV/OSV Recreation in California

	Number of months per year
Mean Months	7.8
Median Months	8

OHV/OSV recreation enthusiasts in California are active participants who frequently visit OHV/OSV destinations/sites to enjoy off-road recreation endeavors. The mean number of months per year for OHV/OSV recreation in California was 7.8 months per year. The data in Table 26 suggests that the OHV/OSV riders are active more months per year doing OHV/OSV riding, an additional 2.8 mean months per year at other sites/parks.

Table 27. Respondents' County of Residence Compared to Destination/Site County Visited (Percent)

County of Residence	**County of Park/Site Visited**
Alameda	Alpine (3.3), Calaveras (0.8), El Dorado (2.5), Fresno (1.7), Glenn (2.5), Humboldt (0.8), Inyo (0.8), Lake (0.8), Los Angeles (0.8), Mendocino (0.8), Nevada (0.8), San Benito (13.2), San Diego (0.8), San Joaquin (52.9), San Luis Obispo (3.3), Santa Clara (1.7), Sierra (0.8), Stanislaus (2.5), Tulare (0.8), Tuolumne (0.8)
Amador	Calaveras (7.7), El Dorado (46.2), Inyo (7.7), Sacramento (7.7), San Benito (7.7), San Bernardino (7.7)
Butte	Butte (38.6), El Dorado (2.3), Lassen (4.5), Nevada (2.3), Plumas (22.7), Sacramento (4.5), San Joaquin (2.3), San Luis Obispo (4.5), Shasta (2.3), Sierra (11.4), Tulare (2.3)
Calaveras	Alpine (25), Calaveras (6.3), Sacramento (31.3), San Benito (12.5), Tuolumne (6.3),
Colusa	Alpine (33.3), Lassen (33.3), Sierra (33.3)
Contra Costa	Alameda (0.8), Alpine (0.8), Calaveras (3), Contra Costa (1.5), El Dorado (7.5), Glenn (3.8), Kern (0.8), Lake (2.3), Los Angeles (0.8), Madera (0.8), Napa (0.8), Nevada (3), Placer (3), Sacramento (3), San Benito (7.5), San Bernardino (0.8), San Joaquin (38.3), San Luis Obispo (4.5), Santa Clara (0.8), Sierra (5.3), Tuolumne (1.5)
Del Norte	Del Norte (50)
El Dorado	Alpine (23.6), El Dorado (27), Fresno (1.1), Inyo (1.1), Kern (2.2), Placer (3.4), Riverside (1.1), Sacramento (21.3), San Benito (3.4), San Bernardino (1.1), San Joaquin (2.2), San Luis Obispo (4.5), Santa Barbara (1.1), Sierra (1.1)
Fresno	Fresno (39.2), Imperial (0.8), Inyo (1.6), Kern (8), Los Angeles (0.8), Madera (8), Nevada (0.8), Sacramento (0.8), San Benito (4.8), San Bernardino (7.2), San Luis Obispo (19.2), Stanislaus (0.8), Tulare (1.6)
Glenn	Butte (28.6), Glenn (14.3), Plumas (28.6), San Bernardino (14.3), Tehama (14.3)
Humboldt	Humboldt (42.9), Inyo (14.3), Lake (14.3), Sacramento (14.35), San Joaquin (14.3)
Imperial	Imperial (100)
Inyo	Inyo (55.5), Mono (11.1), San Bernardino (33.3)
Kern	Fresno (2.6), Imperial (1.3), Inyo (5.2), Kern (28.6), Los Angeles (14.3), Madera (1.3), San Bernardino (14.3), San Luis Obispo (16.9), Tulare (5.2)

County of Residence	County of Park/Site Visited
Kings	Fresno (15.8), Kern (10.5), San Benito (15.8), San Bernardino (10.5), San Luis Obispo (42.1)
Lassen	Butte (14.3), Lassen (28.6), San Benito (14.3), San Bernardino (14.3)
Los Angeles	Fresno (1.1), Imperial (1.1), Inyo (2.1), Kern (16.3), Los Angeles (42.9), Mono (1.1), Placer (1.1), Riverside (1.6), San Bernardino (11.4), San Diego (2.7), San Luis Obispo (13.6), Siskiyou (1.1), Tulare (0.5), Ventura (1.1)
Madera	Fresno (15.5), Kern (8.6), Madera (37.9), Mariposa (1.7), Riverside (1.7), San Benito (1.7), San Bernardino (5.2), San Diego (1.7), San Luis Obispo (15.5), Sierra (1.7), *Unknown (8.6)
Maricopa	San Bernardino (50), *Unknown (50)
Marin	Lake (21.4), Mendocino (7.1), Mono (7.1), Napa (7.1), San Benito (7.1), San Joaquin (28.6), San Luis Obispo (21.4)
Mariposa	Madera (25), Stanislaus (25), *Unknown (50)
Mendocino	El Dorado (11.1), Lake (44.4), Marin (11.1), Mendocino (11.1), *Unknown (22.2)
Merced	Fresno (8.7), Los Angeles (4.3), Madera (4.3), Merced (12), Riverside (4.3), San Benito (21.7), San Luis Obispo (26.1), Tulare (4.3), Tuolumne (4.3), *Unknown (8.7)
Modoc	*Unknown (100)
Mono	Inyo (14.3), Mono (71.4), Tuolumne (14.3)
Monterey	Los Angeles (3.8), San Benito (88.5), San Luis Obispo (7.7)
Napa	Imperial (1.8), Napa (10), Nevada (10), San Benito (10), San Joaquin (10), *Unknown (20)
Nevada	Nevada (38.6), Placer (8.8), Plumas (3.5), Sacramento (3.5), San Benito (1.8), San Luis Obispo (1.8), Sierra (31.6), Yuba (1.8), *Unknown (7)
Orange	Imperial (8), Kern (4), Los Angeles (12), Madera (2), Mono (6), Riverside (2), San Bernardino (40), San Diego (20), San Luis Obispo (4*Unknown (2)
Palo Alto	Madera (100)
Placer	El Dorado (10.7), Inyo County (1), Lassen (1), Nevada (11.7), Placer (25.2), Plumas (1), Sacramento (20.4), San Benito (5.8), San Joaquin (1), San Luis Obispo (1), Sierra (13.6), Stanislaus (1), Yuba (1.9), *Unknown (4.9)
Plumas	El Dorado (5.6), Lassen (5.6), Plumas (27.8), San Benito (11.1), San Bernardino (16.7), Sierra (22.2), *Unknown (11.1)
Riverside	Imperial (7.5), Los Angeles (4.5), Riverside (10.4), San Bernardino (38.8), San Diego (32.8), San Luis Obispo (4.5), *Unknown (1.5)
Sacramento	Alpine (3.7), Butte (1.8), El Dorado (14.7), Fresno (0.9), Glenn (0.9), Inyo (2.8), Kern (0.9), Nevada (6.4), Placer (7.3), Sacramento (45), San Benito (1.8), San Bernardino (1.8), San Joaquin (0.9), San Luis Obispo (0.9), Sierra (3.7), Tulare (0.9), Yuba (1.8), (*Unknown (3.7)
San Benito	Fresno (2.9), Kern (2.9), San Benito (82.4), San Joaquin (2.9), San Luis Obispo (8.8)
San Bernardino	El Dorado (1.5), Imperial (4.5), Iyo (1.5), Kern (1.5), Los Angeles (3), Riverside (3), San Bernardino (67.2), San Diego (9), San Luis Obispo (6), Tulare (1.5), *Unknown (1.5)
San Diego	Alpine (0.9), Glenn (0.9), Imperial (20.4), Riverside (0.9), San Bernardino (7.4), San Diego (63.9), San Joaquin (0.9), San Luis Obispo (2.8), *Unknown (1.9)
San Francisco	Alpine (4), Calaveras (4), Glenn (4), Inyo (4), Nevada (4), Sacramento (4), San Benito (52), San Joaquin (4), Santa Clara (4), Solano (4), Stanislaus (4), *Unknown (8)

County of Residence	County of Park/Site Visited
San Joaquin	Alpine (1.8), Calaveras (8.8), El Dorado (5.3), Nevada (1.8), Sacramento (14), San Benito (12.3), San Joaquin (35.1), San Luis Obispo (3.5), Solano (3.5), Stanislaus (3.5), Tulare (1.8), Tuolumne (5.3), *Unknown (3.5)
San Luis Obispo	Fresno (1.3), Kern (7.8), Los Angeles (1.3), Monterey (1.3), San Benito (1.3), San Bernardino (3.9), San Diego (1.3), San Luis Obispo (67.5), Santa Barbara (2.6), Tulare (1.3), Tuolumne (3.9), *Unknown (6.5)
San Mateo	Glenn (1.9), Imperial (1.9), Nevada (1.9), Placer (3.8), San Benito (65.4), San Joaquin (1.9), San Luis Obispo (1.9), Santa Clara (7.7), Shasta (1.9), Tuolumne (1.9), *Unknown (9.6)
Santa Barbara	Kern (3.8), Los Angeles (11.5), San Luis Obispo (69.2), Santa Barbara (15.4)
Santa Clara	Alpine (4.5), Calaveras (1.7), El Dorado (3.4), Fresno (0.6), Glenn (1.7), Inyo (2.2), Merced (0.6), Placer (1.7), Sacramento (1.1), San Benito (50.8), San Bernardino (2.2), San Diego (1.1), San Joaquin (1.7), San Luis Obispo (6.7), Santa Clara (9.5), Sierra (1.7), Solano (0.6), Tuolumne (1.1), *Unknown (6.7)
Santa Cruz	Lake (2.7), Placer (2.7), Plumas (2.7), San Benito (78.4), San Joaquin (2.7), Santa Barbara (2.7), Yuba (2.7), *Unknown (5.4)
Shasta	Glenn (5.6), Humboldt (5.6), Kern (5.6), Sacramento (5.6), San Benito (5.6), San Bernardino (5.6), San Joaquin (5.6), Shasta (50), Sierra (5.6), Siskiyou (5.6)
Sierra	Sierra (50), *Unknown (50)
Siskiyou	Shasta (11.1), Siskiyou (77.8), *Unknown (11.1)
Solano	Alpine (3.1), El Dorado (15.6), Glenn (6.3), Lake (6.3), Nevada (3.1), Placer (6.3), Sacramento (28.1), San Benito (9.4), San Bernardino (3.1), San Joaquin (3.1), San Luis Obispo (3.1), Sierra (3.1), Solano (3.1), *Unknown (6.3)
Sonoma	Alpine (2), El Dorado (6), Fresno (4), Glenn (2), Lake (28), Marin (2), Mendocino (12), Nevada (6), Placer (2), Sacramento (2), San Benito (14), San Bernardino (2), San Joaquin (8), San Luis Obispo (2), Sierra (4), Tuolumne (2), *Unknown (2)
Stanislaus	Alpine (4.5), Calaveras (4.5), Fresno (4.5), Inyo (9.1), Mono (2.3), San Benito (11.4), San Bernardino (2.3), San Joaquin (13.6), San Luis Obispo (13.6), Stanislaus (11.4), Tuolumne (20.5), *Unknown (2.3)
Sutter	Butte (25), Nevada (25), Plumas (25), San Luis Obispo (25),
Tehama	Butte (25), Glenn (25), San Luis Obispo (25), *Unknown (25)
Tulare	Fresno (19.5), Inyo (2.4), Kern (9.8), Los Angeles (2.4), Mono (2.4), San Benito (2.4), San Bernardino (2.4), San Luis Obispo (26.8), Tulare (17.1), *Unknown (14.6)
Tuolumne	Alpine (10.5), Calaveras (5.3), Glenn (5.3), Sacramento (5.3), San Joaquin (5.3), San Luis Obispo (5.3), Tuolumne (57.9), 4*Unknown (5.3)
Ventura	Glenn (1.9), Imperial (1.9), Inyo (3.7), Kern (22.2), Los Angeles (31.5), Mono (5.6), Riverside (1.9), San Benito (1,9), San Bernardino (3.7), San Diego (1.9), San Luis Obispo (13), Santa Barbara (5.6), Tulare (3.7), *Unknown (1.9)
Yolo	Humboldt (20), Napa (20), Sacramento (40), Stanislaus (20)
Yuba	Nevada (12.5), Plumas (12.5), San Benito (25), San Luis Obispo (12.5), Yuba (25), *Unknown (12.5)
Other (Out of State)	Alpine (9.5), Calaveras (1.6), El Dorado (7.9), Fresno (4.8), Imperial (4.8), Inyo (6.4), Kern (3.2), Lassen (1.6), Los Angeles (3.2), Madera (1.6), Nevada (7.9), Plumas (3.2),

County of Residence	County of Park/Site Visited
Other (Out of State) Cont.	Sacramento (1.6), San Benito (4.8), San Bernardino (9.5), San Diego (4.8), San Luis Obispo (6.3), Santa Barbara (1.6), Shasta (3.2), Sierra (4.8), *Unknown (7.9)

Table 28. Respondents' County of Residence Compared to County of Destination/Site Visited (Percent)

County of Park Visited	County of Residence of Respondents Compared to Visiting County of Destination/Site Visited
Alameda	Contra Costa (100)
Alpine	Alameda (6.5), Calaveras (6.5), Colusa (1.6), Contra Costa (1.6), El Dorado (33.9), Out of State (9.7), Sacramento (6.5), San Diego (1.6), San Francisco (1.6), San Joaquin (1.6), Santa Clara (12.9), Solano (1.6), Sonoma (1.6), Stanislaus (3.2), Tuolumne (3.2), *Unknown (6.5)
Butte	Butte (68), Glenn (8), Lassen (4), Sacramento (8), Sutter (4), Tehama (4), *Unknown (4)
Calaveras	Alameda (3.8), Amador (3.8), Calaveras (3.8), Contra Costa (15.4), Out of State (3.8), San Francisco (3.8), San Joaquin (19.2), Santa Clara (11.5), Stanislaus (7.7), Tuolumne (3.8), *Unknown (23.1)
Contra Costa	Contra Costa (100)
Del Norte	Del Norte (100)
El Dorado	Alameda (2.9), Amador (5.8), Butte (1), Contra Costa (9.6), El Dorado (23.1), Mendocino (1), Napa (1.9), Out of State (4.8), Placer (10.6), Plumas (1), Sacramento (15.4), San Bernardino (1), San Joaquin (2.9), Santa Clara (5.8), Solano (4.8), Sonoma (2.9), *Unknown (5.8)
Fresno	Alameda (2.1), El Dorado (1), Fresno (51), Kern (2.1), Kings (3.1), Los Angeles (2.1), Madera (9.4), Merced (2.1), Out of State (3.1), Sacramento (1), San Benito (1), San Luis Obispo (1), Santa Clara (1), Sonoma (2.1), Stanislaus (2.1), Tulare (8.3), *Unknown (7.3)
Glenn	Alameda (11.1), Contra Costa (18.5), Glenn (3.7), Napa (7.4), Sacramento (3.7), San Diego (3.7), San Francisco (3.7), San Mateo (3.7), Santa Clara (11.1), Shasta (3.7), Solano (7.4), Sonoma (3.7), Tehama (3.7), Tuolumne (3.7), Ventura (3.7), *Unknown (7.4)
Humboldt	Alameda (16.7), Humboldt (50), Shasta (16.7), Yolo (16.7)
Imperial	Fresno (1.9), Imperial (9.4), Kern (1.9), Los Angeles (3.8), Nevada (1.9), Orange (7.5), Out of State (5.7), Riverside (9.4), San Bernardino (5.7), San Diego (41.5), San Mateo (1.9), *Unknown (7.5)
Inyo	Alameda (2.5), Amador (2.5), El Dorado (2.5), Fresno (5), Inyo (55), Kern (10), Los Angeles (24.5), Mono (16.7), Out of State (24.5), Placer (2.5), Sacramento (7.5), San Bernardino (2.5), San Francisco (2.5), Santa Clara (10), Stanislaus (2.5), Tulare (2.5), Ventura (5), *Unknown (20)
Kern	Contra Costa (0.9), El Dorado (1.8), Fresno (9), Kern (19.8), Kings (1.8), Los Angeles (27), Madera (4.5), Orange (1.8), Out of State (1.8), Sacramento (0.9), San Benito (0.9), San Bernardino (0.9), San Luis Obispo (5.4), Santa Barbara (0.9), Shasta (0.9), Stanislaus (2.7), Tulare (3.6), Ventura (10.8), *Unknown (4.5)

County of Park Visited	County of Residence of Respondents Compared to Visiting County of Destination/Site Visited
Lake	Alameda (3.2), Contra Costa (9.7), Humboldt (3.2), Marin (9.7), Mendocino (12.9), Santa Cruz (3.2), Solano (6.5), Sonoma (45.2), *Unknown (6.5)
Lassen	Alameda (0.7), Butte (25), Colusa (12.5), Lassen (25), Out of State (12.5), Placer (12.5), Plumas (12.5)
Los Angeles	Contra Costa (0.7), Fresno (0.7), Kern (8.1), Los Angeles (58.5), Merced (0/.7), Monterey (3.8), Orange (4.4), Out of State (1.5), Riverside (2.2), San Bernardino (1.5), San Luis Obispo (0.7), Santa Barbara (2.2), Tulare (0.7), Ventura (12.6), *Unknown (3.7)
Madera	Contra Costa (2.6), Fresno (25.6), Kern (2.6), Madera (56.4), Mariposa (2.6), Merced (2.6), Orange (2.6), Out of State (2.6), Palo Alto (2.6),
Marin	Mendocino (50), Sonoma (50)
Mariposa	Madera (50), *Unknown (50)
Mendocino	Alameda (9.15), Marin (9.1), Mendocino (9.1), Sonoma (54.5), *Unknown (18.3)
Merced	Merced (75), Santa Clara (25)
Modoc	*Unknown (100)
Mono	Inyo (5.6), Los Angeles (11.1), Marin (5.6), Mono (27.8), Orange (16.7), Stanislaus (5.6), Tulare (5.6), Ventura (16.7), *Unknown (5.6)
Monterey	San Luis Obispo (100),
Napa	Contra Costa (25), Marin (25), Napa (25), Yolo (25)
Nevada	Alameda (1.5), Butte (1.5), Contra Costa (6.1), Fresno (1.5), Napa (1.5), Nevada (33.3), Out of State (7.6), Placer (18.2), Sacramento (10.6), San Francisco (1.5), San Joaquin (1.5), San Mateo (1.5), Santa Clara (1.5), Solano (1.5), Sonoma (4.5), Sutter (1.5), Yuba (1.5), *Unknown (3)
Placer	Alameda (1.5), Contra Costa (6.2), El Dorado (4.6), Los Angeles (3.1), Nevada (7.7), Sacramento (12.3), San Mateo (3.1), Santa Clara (4.6), Santa Cruz (1.5), Solano (3.1), Sonoma (1.5), *Unknown (10.8)
Plumas	Butte (34.5), Glenn (6.9), Nevada (6.9), Out of State (6.9), Placer (3.4), Plumas (17.2), Santa Cruz (3.4), Sutter (3.4), Yuba (3.4), *Unknown (13.8)
Riverside	El Dorado (5), Los Angeles (15), Madera (5), Merced (5), Orange (5), Riverside (35), San Bernardino (10), San Diego (5), Ventura (5), *Unknown (10)
Sacramento	Amador (0.7), Butte (1.5), Calaveras (3.6), Contra Costa (2.9), El Dorado (13.9), Fresno (0.7), Humboldt (0.7), Nevada (1.5), Out of State (0.7), Placer (15.3), Sacramento (25.8), San Francisco (0.7), San Joaquin (5.8), Santa Clara (1.5), Shata (0.7), Solano (6.6), Sonoma (0.7), Tuolumne (0.7), Yolo (1.5), *Unknown (4.4)
San Benito	Alameda (5), Amador (0.3), Calaveras (0.6), Contra Costa (3.1), El Dorado (0.9), Fresno (1.9), Kings (0.9), Lassen (0.3), Madera (0.3), Marin (0.3), Merced (1.6), Monterey (7.2), Napa (0.3), Nevada (0.3), Out of State (0.9), Placer (1.9), Plumas (0.6), Sacramento (0.6), San Benito (8.7), San Francisco (4), San Joaquin (2.2), San Luis Obispo (0.3), San Mateo (10.6), Santa Clara (28.3), Santa Cruz (9), Shasta (0.3), Solano (0.9), Sonoma (2.2), Stanislaus (1.6), Tulare (0.3), Ventura (0.3), Yuba (0.6), *Unknown (3.4)
San Bernardino	Amador (0.5), Contra Costa (0.5), El Dorado (0.5), Fresno (4.8), Glenn (0.5), Inyo (1.6), Kern (5.9), Kings (1.1), Lassen (0.5), Los Angeles (11.2), Madera (1.6), Maricopa (0.5), Orange (10.7), Out of State (3.2), Plumas (1.6), Riverside (13.9),

County of Park Visited	County of Residence of Respondents Compared to Visiting County of Destination/Site Visited
San Bernardino Continued	Sacramento (1.1), San Bernardino (24.1), San Deigo (4.3), San Luis Obispo (1.6), Santa Clara (2.1), Shasta (0.5), Solano (0.5), Sonoma (0.5), Stanislaus (0.5), Tulare (0.5), Ventura (1.1), *Unknown (4.3)
San Diego	Alameda (0.7), Los Angeles (3.5), Madera (0.7), Orange (7), Out of State (2.1), Riverside (15.5), San Bernardino (4.2), San Diego (48.6), San Luis Obispo (0.7), Santa Clara (1.4), Ventura (0.7), *Unknown (14.8)
San Joaquin	Alameda (36.2), Butte (0.6), Contra Costa (28.8), El Dorado (1.6), Fresno (9.5), Humboldt (0.6), Marin (1.2), Napa (0.6), Placer (0.6), Sacramento (0.6), San Benito (0.6), San Diego (0.6), San Francisco (0.6), San Joaquin (11.3), San Mateo (0.6), Santa Clara (1.4), Santa Clara (1.7), Santa Cruz (0.6), Shasta (0.6), Solano (0.6), Sonoma (2.3), Stanislaus (3.4), Tuolumne (0.6), *Unknown (5.1)
San Luis Obispo	Alameda (1.6), Butte (0.8), Contra Costa (2.4), Kern (5.2), Kings (3.2), Los Angeles (9.9), Merced (2.4), Monterey (0.8), Nevada (0.4), Orange (0.8), Out of State (1.6), Placer (0.4), Riverside (1.2), Sacramento (0.4), San Benito (1.2), San Bernardino (1.6), San Diego (1.2), San Joaquin (0.8), San Luis Obispo (20.6), San Mateo (0.4), Santa Barbara (7.1), Santa Clara (4.8), Solano (0.4), Sonoma (0.4), Stanislaus (2.4), Sutter (0.4), Tehama (0.4), Tulare (4.4), Tuolumne (0.4), Ventura (2.8), Yuba (0.4), *Unknown (3.6)
Santa Barbara	El Dorado (6.7), Out of State (6.7), San Luis Obispo (13.3), Santa Barbara (26.7), Santa Cruz (6.7), Ventura (20), *Unknown (20)
Santa Clara	Alameda (7.7), Conta Costa (3.8), San Francisco (3.8), San Mateo (15.4), Santa Clara (65.4), *Unknown (3.8)
Shasta	Butte (7.1), Out of State (14.3), San Mateo (7.1), Shasta (64.3), Siskiyou (7.1)
Sierra	Alameda (1.4), Butte (6.8), Colusa (1.4), Conta Costa (9.6), El Dorado (1.4), Madera (1.4), Nevada (24.7), Ontario (1.4), Out of State (4.1), Placer (19.2), Plumas (5.5), Sacramento (5.5), Santa Clara (4.1), 1.4), Sierra (1.7), Solano (1.4), Sonoma (2.7), *Unknown (5.5)
Siskiyou	Los Angeles (20), Shasta (10), Siskiyou (70)
Solano	San Francisco (14.3), San Joaquin (28.6), Santa Clara (14.3), Solano (14.3), *Unknown (28.6)
Stanislaus	Alameda (18.8), Contra Costa (6.3), Fresno (6.3), Mariposa (6.3), Placer (6.3), San Francisco (6.3), San Joaquin (12.5), Stanislaus (31.3), Tolo (6.3)
Tehama	Glenn (50), *Unknown (50)
Tulare	Alameda (3.7), Butte (3.7), Fresno (7.4), Kern (14.8), Los Angeles (3.7), Merced (3.7), Sacramento (3.7), San Bernardino (3.7), San Joaquin (3.7), San Luis Obispo (3.7), Tulare (25.9), Ventura (7.4), *Unknown (14.8)
Tuolumne	Alameda (2.4), Calaveras (2.4), Contra Costa (4.9), Merced (2.4), Mono (2.4), San Joaquin (7.3), San Luis Obispo (7.3), San Mateo (2.4), Santa Clara (4.9), Sonoma (2.4), Stanislaus (22), Tuolumne (26.8), *Unknown (12.2)
Ventura	Los Angeles (100)
Yuba	Nevada (12.5), Placer (25), Sacramento (25), Santa Cruz (12.5), Yuba (25)

The data in Tables 27-28 are provided so that county level OHV/OSV recreation organizers and supporters can view which counties have OHV/OSV recreation enthusiasts that visit their communities. Table 28 provides the County of residence for survey respondents. The Counties that they visit for OHV/OSV recreation purposes are listed in the percentage of respondents to this survey. For example, residents of Amador County who participate in OHV/OSV recreation predominantly visit El Dorado County (46.2%), followed by Calaveras, Inyo, Sacramento, San Benito, and San Bernardino Counties (all at 7.7%) (See Table 28). Table 29 provides the data by County of park/site visited and the County of residences of survey responses. Using El Dorado County as the "County of Park Visited," we can see that OHV/OSV recreation enthusiasts reside in other Counties, such as Alameda, Amador, Butte, and Contra Costa. The data suggests that El Dorado in this example attracts OHV/OSV recreation enthusiasts from 14 other counties, some out of State (4.8%), and that Sacramento County residents make up 15.4% of the users. Businesses and chamber of commerce/visitor bureaus and OHV/OSV recreation event organizers would be able to use this data for promotional purposes for events and OHV/OSV sales.

Table 29. Frequency of Visitation to SVRAs and SRAs (Percent)

Site/Park	Regularly	Sometimes	Rarely	Never Been
Auburn SRA (Mammoth Bar OHV)	3.0	7.8	9.7	36.7
Carnegie SVRA	7.0	10.3	11.8	28.7
Clay Pit SVRA	0.6	2.2	5.1	45.3
Heber Dunes SVRA	0.5	1.9	4.0	46.3
Hollister Hills SVRA	14.4	14.8	10.7	20.5
Hungry Valley SVRA	4.5	11.3	11.6	29.5
Oceano Dunes SVRA	10.9	14.8	14.4	19.5
Ocotillo Wells SVRA	6.5	8.6	9.1	32.2
Onyx Ranch SVRA	1.1	2.3	4.2	45.1
Prairie City SVRA	6.3	11.6	11.1	28.4
San Luis Reservoir SRA (Jasper Sears OHV)	1.1	2.9	4.6	45.2

The survey questionnaire asked respondents to indicate the frequency of visitation to the State of California SVRAs and SRAs. As can be seen in Table 29, Hollister Hills SVRA and Oceano Dunes SVRA had the highest percentage of "Regularly" and "Sometimes" visitations. The percentage of respondents who had never been to the SVRAs and SRAs ranged from 19.5-46.3%. Given the wide range of OHV/OSV recreation opportunities in California, the geographic dispersion of the SVRA/SRAs, and considering the repeat visitation and number of years, months and days visiting a park, this should not be surprising. The parks with the highest percent of those indicating they have "Never Been" include Heber Dunes (46.3%), Clay Pit (45.3%), San Luis Reservoir (45.2%), and Onyx (45.1%). Onyx is a relatively new property for the SVRA system. Clay Pit, Heber Dunes and Onyx are relatively remote and rural. San Luis Reservoir SRA may not be readily identifiable for OHV/OSV recreation users.

The graphs in Appendix D represent the attendance for these parks from 1997-2023. The graphs also include a trend line with an R^2 value (ranging from 0-1, where 0 indicates the model does not explain variability, and 1 explains all variability, with the higher the value, it suggests a better fit, but not necessarily a good predictor). It should be noted that this trend line and the subsequent R^2 value suggests moderate-to-moderately weak correlations. The timeframe for this study included the COVID-19 pandemic, subsequent health emergency measures taken by the federal, state, and local government, the resulting economic slowdown along with rising fuel costs. Not surprisingly, the rates of participation at these parks did drop during this time. Another recent trend is the increased availability of federal lands partially due to social media streams that promote remote OHV/OSV recreation experiences. Another factor is when and how visitor counts were made

and recorded. Certainly in 1997 and during the earlier years of reporting visitor data, there were modifications made during subsequent years to reporting protocols. However, the trend lines for the most part seem to be steady and indications of continued demand and perhaps in some cases rising demand. Other factors contributing to these visitor statistics may include environmental, political and management, such as the changes in Oceano Dunes within the last five years. Another feature of these trends is a "leveling" off and correction since the impacts of COVID-19. The data suggests as time increases since COVID-19, there will be an upward trend in attendance.

Table 30. California SVRA Visitation Data 1997-2023.

Year	Carnegie	Clay Pit	Heber Dunes	Hollister Hills	Hungry Valley	Oceano	Ocotillo	Prairie City	Total Visitors	Mean Visitors
1997	28568	3274		70607	71172	861106	158370	45908	1193097	198850
1998	42663	6403		109694	108072	1035172	179396	52313	1481400	246900
1999	102486	4695	13917	121343	128419	1093644	193990	78355	1658494	236928
2000	118686	3784	26505	147587	352760	1243009	245761	95271	2138092	305442
2001	126928	1575	27750	145276	374031	1224126	325056	121336	2224742	317820
2002	131810	13602	34134	158378	434699	1367395	504786	140843	2644804	377829
2003	132040	32430	30249	186951	536591	1422468	609834	146751	2950563	421509
2004	127135	47841	49735	153704	544322	1762947	591048	194750	3276732	468105
2005	119937	49476	50896	166988	336302	2011417	833222	182951	3568238	509748
2006	132736	42264	49123	189780	238858	1993812	1324389	161020	3970962	567280
2007	110060	37072	28262	226985	384139	2003871	1027340	156203	3817729	545390
2008	85646	26156	23995	218951	184468	1732286	967398	146348	3238900	462700
2009	91474	23649	22252	226762	157392	1747353	796912	153760	3065794	437971
2010	67230	25104	17231	194110	161370	1500189	497580	91107	2462814	351831
2011	79306	19473	18300	182235	159084	1490704	579570	115751	2528672	361239
2012	72798	17559	21945	146210	143671	1674387	506250	90980	2582820	368974
2013	86035	20170	13292	151459	144992	1633587	543116	135988	2592651	370379
2014	97211	21928	12325	163241	152005	1749735	530438	87620	2726883	389555
2015	141593	20408	8618	119109	130695	1542699	424875	53591	2387997	341142
2016	61304	15795	8954	137882	103566	1382323	219440	79896	1929264	275609
2017	69195	18741	9168	122316	172091	1335196	318746	77937	2045453	292208
2018	61312	14572	6674	101886	107274	1470784	321203	88665	2083705	297672
2019	50650	15974	5661	95530	114410	1370695	779700	41191	2432620	347517
2020	51678	20147	1951	70677	139990	410137	222517	63718	917097	131014
2021	48554	29974	26983	75506	138282	465976	838686	84319	1623961	231994
2022	42381	44142	19660	63923	109938	519326	938678	61948	1738048	248293
2023	44641	34530	24060	66892	106366	496586	824944	62785	1598019	228288
Total Visitors	2324057	610738	551640	3813982	5734959	36540930	15303245	2811305	64879551	9332186
Mean Visitors	86076	22620	22066	141259	212406	1353368	566787	104122	2402946	345637
% Ch 2013-2023	-48.11	71.19	81.01	-55.83	-26.64	-69.60	51.89	-53.83	-38.36	-38.36
2018-2023	-27.19	136.96	260.50	-34.35	-0.85	-66.24	156.83	-29.19	-23.31	-23.31
2019-2023	-11.86	116.16	325.01	-29.98	-7.03	-63.77	5.80	52.42	-34.31	-34.31

The total number of visitors, based on visitor counts/estimates of the SVRAs from 1997 to 2023, was 64,879,551 (mean = 9,332,186 visitors counted). In 2023, the total number of visitors to SVRAs was 1,598,019 (mean = 228,288 visitors). Prior to COVID-19, the total count in 2019 was 2,432,620 visitors, nearly 1 million more visitors than in 2023 (see Table 30). When measuring percent changes in visitors from 2013 (where visitations were high) to 2023, we see the largest negative percentage changes in attendance at Oceano Dunes SVRA, Hollister Hills SVRA, and Prairie City SVRA. The COVID-19 pandemic detrimentally impacted attendance rates during the 2018–2023-time frame.

OHV/OSV Recreation Trip Characteristics – Recreational Activities at Destination/Site

Table 31. Respondents' Recreational Activity Participation at Site

Activity	Percentage
Trail Riding	24.1
RV Camping	9.4
Photography	7.1
Picnicking	6.0
Hiking	5.9
Tent Camping	5.8
Stargazing	4.7
Motocross	4.3
Self-Guided Walks	4.3
Volunteering	3.7
Bird watching/Wildlife Viewing	3.2
Other	3.2
Enduros	2.6
Target Shooting	2.6
Fishing	2.6
Mountain Biking	2.3
Poker runs	2.2
Drones/UAS	1.4
Geocaching	1.2
Rock climbing	1.0
Hunting	1.0
Backpacking/Mountaineering/Orienteering	0.9
Horseback Riding	0.4

Respondents were asked to indicate what additional recreation activities they participated in during their most recent or current OHV/OSV recreation trip. Table 31 provides these activities and the percentage of respondents who participated in them. Just over 33% of respondents indicated activities related to OHV use (trail riding, motocross, enduros, poker runs). Trail riding had the highest percentage of respondents, followed by RV camping, photography, picnicking, tent camping, hiking, stargazing, and motocross. A comparison to previous studies (Appendix A) reveals a similar pattern of recreation activities during the trip, such as hunting, camping, hiking, fishing, photography, hiking, and walking.

OHV/OSV Recreation Trip Characteristics – Travel Party Size

Table 32. Number of People in Travel Party

Individuals	Number in Travel Party
Adults (18+) Mean	6.2
Adults (18+) Median	4.0

Individuals	Number in Travel Party
Children (Under 18) Mean	3.8
Children (Under 18) Median	3.0

Travel party size, which is how many people traveled with the survey respondent as a group (including the survey respondent), is reported in Table 32. The data revealed that the mean travel party size was 6.2 persons, and four (4) people as a median travel party size. The mean number of children in the travel party was 3.8 and the median number of children was 3.0. A comparison to previous studies (Appendix A) indicated the mean travel party ranged from 3.3 to 6.3 people, with one study reporting 11.4 persons per travel party.

Table 33. Overnight/Day Trip Frequencies

Type of Trip	Percentage
Day Trip*	35.5%
Overnight Trip*	51%
Mean Number of Nights	3.27
Median Number of Nights	3.0

*Missing cases = 13.5%

The data in Table 33 suggests that just over half of the survey respondents (51%) reported staying overnight on their OHV/OSV recreation trip, with an average of 3.27 nights/trip and a median response of three (3) nights/trip. A review of previous OHV/OSV studies (Appendix A) revealed that the percentage of respondents participating in overnight OHV/OSV trips ranged from 17-95%, with an average of 58.7% of respondents reporting overnight stays – these previous results are consistent with the present study. Previous research studies also found that respondents, on average, stayed 2.6 nights on their trips. Previous research also highlighted that as many as 41.2% of respondents enjoyed OHV/OSV recreation day trips.

Connected to this data, an "activity day" for an OHV/OSV recreation enthusiast includes all OHV/OSV riding, from an hour-long ride on adjacent land to a week-long vacation hundreds of miles away. Activity days also include other non-OHV/OSV riding activities that occurred on the trip, such as exploring a town, watching wildlife, hunting, dining out, and taking part in photography.

Estimating the single recreation activity days in California can be determined by calculating the day use (35.5%) as a percentage of the total OHV/OSV users in the State (9,035,951), equating to 3,207,763 single activity day users. Similarly, calculating the multiple activity day (overnight) users as 51.5% of the total OHV/OSV participants in California, this amount equals 4,653,515 users. Multiplying the median number of nights stayed (3) times the multi activity day users (4,653,515) results in the total number of activity days (13,960,544). Adding the single activity days to the multiple activity days results in a total of 17,168,347 OHV/OSV activity days. This figure is consistent with previous studies (Appendix A) and is realistic in that the size of California's population is far greater than other States where OHV/OSV studies were completed.

OHV/OSV Recreation Trip Characteristics – Day/Overnight Trip Classification

Table 34. Day/Overnight Trips, First Time, and Repeat Visitors (Percent)

Type of Trip	First Time Visitor	Repeat Visitor
Day trip	12.8	87.2
Overnight trip	10.4	89.6

Table 34 presents data comparing day and overnight trips between first time and repeat visitors. Slightly more first-time visitors were on day trips than first time visitors on overnight trips. The results are opposite with repeat visitors; slightly more repeat visitors were overnight visitors than day trip visitors. For day trip

users, 12.8% were first time visitors and 87.2% were repeat visitors. Overnight users were 10.4% first time visitors and 89.6% were repeat visitors.

OHV/OSV Recreation Trip Characteristics – Type of Lodging Used

Table 35. Type of Lodging Used by Respondents

Type of Lodging	Percentage
Bed & Breakfast	0.2
Campground at visiting site	20.8
Campground NOT at visiting site	3.5
Hotel/Motel	2.4
In RV/vehicle in an undesignated area (i.e. street parking)	5.3
Outside the local area (just passing through)	0.3
Rented accommodation (i.e. Airbnb, VRBO)	0.8
With friends/relatives in the area	1.6

A total of 29.6% of the respondents reported camping overnight of some type. Specifically, the majority (20.8%) of visitors who stayed overnight used the campgrounds at the site they were visiting. Another 3.5% stayed at other campgrounds, while 5.3% staying in their RV/vehicle in undesignated sites. A smaller percent stayed in hotels, Bed & Breakfast lodging, and rentals like Airbnb and VRBO (Table 35). A review of previous research on OHV/OSV lodging used revealed that 10-42% of respondents camped in public or private campgrounds. Those respondents staying in hotels/motels ranged from 19-44%, with 4-34% of respondents reported staying with friends/relatives (Appendix A).

Table 36. Type of Lodging Used by First Time and Repeat Visitors (Percent)

Type of Lodging	First Time Visitor	Repeat Visitor
Bed & Breakfast	33.3	66.7
Campground at visiting site	10.4	89.6
Campground NOT at visiting site	13	87
Hotel/Motel	15.9	84.1
In RV/vehicle in an undesignated area (i.e. street parking)	7.2	92.8
Outside the local area (just passing through)	0	100
Rented accommodation (i.e. Airbnb, VrBO)	5	95
With friends/relatives in the area	4.8	95.2

When viewing the data by lodging type, those users staying in a Bed & Breakfast, 33.3% were first time users, and 66.7% were repeat visitors. Visitors camping at the site/park were 10.4% first time visitors, and 89.6% repeat visitors. Hotel/motels were filled by 15.9% first time visitors, and 84.1% repeat visitors. First time visitors reported using Bed & Breakfast lodging more so than any other lodging (33.3%), followed by hotels/motels (15.9%), campgrounds not at the destination site (13%), and campgrounds at the destination site (10.4%). Repeat visitors tended to stay with friends/relatives in the area (95.2%), rented accommodations such as Airbnb or VRBO (95%), in their RV at an undesignated area (92.8%) (Table 36).

OHV/OSV Recreation Trip Characteristics – Fees Paid for Destination/Site Access

Table 37. Fees Paid for Destination/Site Access

Paid OHV/OSV Recreation Fees	Percentage
I don't know	6.0
My group did not pay day use fees because he entrance gate was unattended	1.1
My group paid day use fees in advance	8.4
My group paid day use fees upon arrival	29.6
My group visited using an annual pass	14.1
There were no use fees required at the site	40.7

Respondents were asked to identify how they paid for park/site access (Table 37). The majority (40.7%) reported that there were no user fees required at the site. Where there was a fee, the group paid upon arrival (29.6%), and 8.4% of groups paid in advance. Just over 14% of groups had annual passes. Only 6% did not know about fees paid for entrance to the park/site.

Table 38. Fees Paid for Destination/Site Access, First Time and Repeat Visitors (Percent)

Paid OHV/OSV Recreation Fees	First Time Visitor	Repeat Visitor
My group did not pay day use fees because the entrance gate was unattended	13.0	87.0
My group paid day use fees in advance	5.7	94.3
My group paid day use fees upon arrival	13.2	86.8
My group visited using an annual pass	5.8	94.2
There were no use fees required	10.4	89.6
I don't know	31.5	68.5

Table 38 reports fees paid by first time and repeat visitors. While 31.5% of first-time visitors did not know about fees paid (as contrasted to 6% of all visitors reported in Table 38), 13.2% paid upon arrival. Another 13% reported the gate/entrance was unattended, and 10% reported no fees were required (10%). For visitors paying in advance, 5.7% were first time visitors and 94.3% were repeat visitors. Over ninety four percent (94.2%) of those using an annual pass were repeat visitors.

OHV/OSV Recreation Trip Characteristics – Expenditures Per Spending Party Size (Non-Capital Expenditures)

The following Tables present the spending patterns per "Spending Party Size". The term "Spending Party Size" is different than the term "Travel Party Size". An OHV/OSV recreation travel party size could equal six (6) people, with each person independently responsible for their own expenses. "Spending Party Size" refers to how many people the expenses (i.e., lodging, food) account for on the trip.

*Table 39. Expenditures Per Spending Party Size Traveling to/at the Destination/Site (Dollars)**

Spending Categories	Traveling to Destination/Site	Spending at Destination/Site	Total Per Party
Lodging			
Mean	252	254	506
Median	138	120	258
Transportation/Gas			
Mean	151	116	267
Median	100	80	180
Restaurant/Bar meals and drinks in town			
Mean	97	130	227
Median	50	75	125
Grocery/Convenience store food and drink			
Mean	129	94	223
Median	50	50	100
Admissions in town and festival/events			
Mean	71	121	192
Median	20	24	44
Souvenirs/Art/Crafts/ T-shirts			
Mean	98	93	191
Median	50	60	110
Buying food at the festival/event			
Mean	118	96	214
Median	50	65	115
Recreation Services (i.e. guided tours, getting vehicles washed)			
Mean	97	146	243
Median	35	34	69

*Spending Party Size Mean = 2.93 people; Median = 2.0 people

Table 39 presents the spending per party (***not*** travel party) while traveling to and at the destination/site visited. The spending party size mean = 2.93 people, and the median for spending party size = 2.0 people. This Table highlights average and median expenditures per party for various spending categories related to destination/site visits. Notable findings include that lodging and spending at the destination/site show consistent median spending. Transportation/gas and restaurant/bar meals exhibit lower median spending while groceries/convenience store purchases show consistent spending.

*Table 40. Spending Patterns for First Time and Repeat Visitors (Dollars)**

Spending Categories	*First Time Visitor Getting to Site*	*First Time at the Site*	*Repeat Visitor Getting to Site*	*Repeat Visitor at the Site*
Lodging				
Mean	289	290	282	886
Median	160	200	140	100
Restaurant/Bar meals and drinks in town				
Mean	97	138	97	129
Median	60	100	50	75
Grocery/Convenience store food and drink				
Mean	111	101	131	93
Median	50	50	50	50
Transportation/Gas				
Mean	129	117	153	115
Median	100	100	100	76
Admissions in town and festival/events				
Mean	96	314	68	97
Median	30	53	15	20
Souvenirs/Art/Crafts/T-shirts				
Mean	113	96	96	93
Median	43	60	50	60
Buying food at the festival/event				
Mean	168	137	112	91
Median	78	100	50	50
Recreation services (i.e. guided tours, getting vehicles washed				
Mean	78	363	89	111
Median	20	35	35	32

*Spending Party Size Mean = 2.93 people; Median = 2.0 people

Table 40 contrasts the spending behaviors of first time and repeat visitors for OHV/OSV recreation in California. Important findings are that first time visitors tend to spend more on lodging and admissions compared to repeat visitors. Repeat visitors allocate higher spending towards food and beverages in town. Additionally, first time visitors spend considerably more on recreation services at the sites compared to repeat visitors.

OHV/OSV Recreation Trip Characteristics – Expenditures Per Spending Party Size (Capital Expenditures)

Table 41. Capital Expense Per Spending Party Size Traveling to/at Destination/Site (Dollars)

Spending Categories	Traveling to Destination/Site	Spending at Destination/Site	Total Spending
OHV Equipment Rentals			
Mean	501	401	902
Median	315	350	665
OHV/OSV Equipment Purchases			
Mean	14,383	7,660	22,043
Median	10,000	200	12,000
OHV/OSV Equipment Repairs			
Mean	1,314	709	2,023
Median	300	200	500

Table 41 showcases capital expenses per party for destination/site visits, including rentals, purchases, and repairs of OHV/OSV equipment. Overall, there is less mean spending per party once at the destination/site than traveling to the destination/site.

Table 42. Capital Expenditures for First Time and Repeat Visitors (Dollars)

Spending Categories	First Time Traveling to Destination/ Site	First Time At Destination /Site	Repeat Visitor Traveling to Destination/Site	Repeat Visitor At Destination/Site
OHV/OSV Equipment Rentals				
Mean	1,404	414	497	396
Median	350	200	200	350
OHV/OSV Equipment Purchases				
Mean	17,077	7,864	16,121	8,853
Median	10,000	75	10,000	225
OHV/OSV Equipment Repairs				
Mean	1,780	683	1,644	1,087
Median	500	225	300	200

Capital expenses like equipment rentals, purchases, and repairs are higher for first time visitors compared to repeat visitors (see Table 42). Specifically, first time visitors spent more than three times the amount of money on rentals when traveling to the destination/site than repeat visitors. Additionally, repeat visitors spent more money than first time visitors on repairs at the destination/site.

OHV/OSV Recreation Trip Characteristics – Spending per Park Management Agency Type

Table 43. Spending Comparison Traveling to Destination/Site, by Park Management Agency Type (Dollars)

Spending Categories	SVRA	USFS	BLM	Other
Lodging				
Mean	294	284	165	304
Median	135	150	90	160
Restaurant/Bar meals and drinks in town				
Mean	107	88	71	111
Median	50	50	50	77
Grocery/Convenience store food and drink				
Mean	149	74	169	130
Median	60	40	0	50
Transportation/Gas				
Mean	145	118	226	163
Median	80	100	150	100
Admissions in town and festival/events				
Mean	44	145	124	115
Median	10	40	75	24
Souvenirs/Art/Crafts/ T-shirts				
Mean	94	87	113	98
Median	50	50	67	50
Buying food at the festival/event				
Mean	135	72	101	138
Median	40	50	75	40
Recreation Services (i.e. guided tours, getting vehicles washed)				
Mean	83	170	63	55
Median	45	30	40	35

*Spending Party Size Mean = 2.93 people; Median = 2.0 people

Table 44. Capital Expenditures Spending Comparison Traveling to Destination/Site, by Park Management Agency Type (Dollars)

	SVRA	USFS	BLM	Other
OHV/OSV Equipment Rentals				
Mean	989	200	0	327
Median	350	150	0	327
OHV/OSV Equipment Purchases				
Mean	16,250	15,134	20,705	14,586
Median	10,000	14,000	12,000	10,000
OHV/OSV Equipment Repairs				
Mean	1,786	1,445	1,499	1,827
Median	225	300	500	320

*Spending Party Size Mean = 2.93 people; Median = 2.0 people

Tables 43-44 compare spending across various categories among different destination/site types, including SVRA, USFS, BLM. The category of "Other" was used to calculate any destinations/sites that did not fall under SVRA, USFS, or BLM management. Table 43 notable findings reveal that mean spending on lodging is highest for "Other," while transportation/gas expenses are notably higher for BLM destination/sites. Admissions in town and festival/events show substantial variability across destination/site types. Additionally, mean spending on recreation services is highest for USFS destinations/sites. Within Table 44, SVRA destinations/sites witness higher spending on rentals of OHV/OSV equipment compared to other destination/site types. Furthermore, OHV/OSV Equipment Purchases is highest for BLM destinations/sites in both mean and median values.

Table 45. Spending Comparison at the Destination/Site, by Park Management Agency Type (Dollars)

Spending Categories	SVRA	USFS	BLM	Other
Lodging				
Mean	262	272	301	281
Median	135	150	153	105
Restaurant/Bar meals and drinks in town				
Mean	135	135	102	132
Median	75	75	80	80
Grocery/Convenience store food and drink				
Mean	106	79	84	98
Median	50	40	50	50
Transportation/Gas				
Mean	112	112	134	117
Median	80	75	100	60

Spending Categories	SVRA	USFS	BLM	Other
Admissions in town and festival/events				
Mean	83	135	229	211
Median	10	20	65	40
Souvenirs/Art/Crafts/T-shirts				
Mean	99	76	82	112
Median	70	60	50	55
Buying food at the festival/event				
Mean	98	96	89	95
Median	50	75	50	55
OHV/OSV Equipment Rentals				
Mean	469	271	534	221
Median	500	265	500	30
OHV/OSV Equipment Purchases				
Mean	4,262	15,234	11,240	12,805
Median	100	7,000	1,250	2,000
OHV/OSV Equipment Repairs				
Mean	758	1,216	669	2,130
Median	100	200	215	300
Recreation Services (i.e. guided tours, getting vehicles washed)				
Mean	57	368	54	130
Median	30	50	34	25

Table 46. Capital Expenditures Spending Comparison at the Destination/Site, by Park Management Agency Type (Dollars)

Spending Categories	SVRA	USFS	BLM	Other
OHV/OSV Equipment Rentals				
Mean	469	271	534	221
Median	500	265	500	30
OHV/OSV Equipment Purchases				
Mean	4,262	15,234	11,240	12,805
Median	100	7,000	1,250	2,000
OHV/OSV Equipment Repairs				
Mean	758	1,216	669	2,130
Median	100	200	215	300

Tables 45-46 compare spending based on the park management agency. Notable findings include BLM destinations/sites showing higher mean spending on lodging compared to other destinations/sites, and BLM destinations/sites witnessing higher median spending on admissions in town and festival/events. Rental expenditures are higher for visitors at BLM and SVRA destinations/sites. Repairs are more for USFS and "Other" destinations/sites. Additionally, Recreation Services associated with USFS destinations/sites is the highest of the four categories for spending.

Table 47. Travel Party Spending, by Park Management Agency Type Visited

	SVRA	USFS	BLM	Other
How many people in your group did these expenses cover?				
Mean	3.3	2.6	2.7	2.7
Median	2	2	2	2

Table 47 outlines travel party spending size based on the park management agency for the destination/site visited. The key finding illustrated here is the mean number of people covered by expenses is higher for SVRA destinations/sites compared to USFS, BLM and "Other" destinations/sites.

OHV/OSV Recreation Trip Characteristics – Revenue Per Available Visitor (RPAV)

Revenue per available visitor (RPAV) represents an important metric in the context of state park tourism, shedding light on the holistic economic value of every visitor, whether paying or non-paying. It is calculated by dividing total relevant expenditures (revenue) by the total number of visitors to a given destination. As such, RPAV encompasses the entirety of visitors' spending potential, spanning transport, recreational activities, lodging, food, and souvenirs. This contrasts with the narrow scope observed when measuring the average revenue obtained per paying visitor.

To compute RPAV, the numerator accounts for the total revenue generated across various channels, including lodging, food, off-road vehicle rentals/purchases, upkeep, gasoline, and souvenirs within the park and its surrounding areas. The denominator comprises all individuals capable of contributing revenue, encompassing both paying and non-paying visitors. Estimation methods may involve park capacity data, entrance counts, or surveys.

The advantages of RPAV are multifaceted. It provides managers with a comprehensive overview of the economic impact of state park tourism, acknowledging the contributions of all visitors, regardless of direct spending. Unlike the limited view offered by the average revenue per paying visitor, RPAV underscores the revenue potential across all visitor segments. Put another way, RPAV presents park managers with a comprehensive understanding of the average monetary worth of each visitor. Furthermore, RPAV facilitates detailed comparisons between parks, timeframes, demographics, or spending categories, enabling managers to pinpoint performance trends and areas in need of improvement.

In essence, RPAV empowers state park managers with a robust metric to assess the genuine economic value of their resources and formulate data-driven strategies for sustainable growth and prosperity. By embracing the RPAV metric, state parks can optimize their contribution to local economies and ensure a vibrant future for tourism and conservation alike. Local communities may also leverage this metric to effectively gauge the significance of off-road events and travel within and through their regions.

For this investigation, RPAV has been calculated by adding the revenue reported in each category and dividing it by the total number of usable survey responses. The results of calculating this metric have been recorded below.

Table 48. Revenue Per Available Visitor (RPAV) Travel Related Trip Expenditures (Dollars)

Spending Categories	Traveling to Destination/Site in Dollars Per Visitor	Spending at Destination/Site in Dollars Per Visitor
Lodging Travel to: $56,600 / 2,634 ≈	21.48	
Lodging Spent in Region: $95085 / 2,634 ≈		36.14
Transportation Gas travel to: $238202 / 2,634 ≈	90.54	
Transportation Gas in Region: $94325 / 2,634 ≈		35.82
Restaurant Spent traveling to: $64371 / 2,634 ≈	24.46	
Restaurant Spent in the region: $102,125 / 2,634 ≈		38.81
Buying food at the festival event spent traveling to: $15,886 / 2,634 ≈	6.03	
Buying food at the festival event the region: $14,877 / 2,634 ≈		5.65
Admission fees in town and festival event spent traveling to: $11,084 / 2,634 ≈	4.21	
Admission fees in town and festival event spent in the region: $21,441 / 2,634 ≈		8.15
Souvenirs spent traveling to: $9,555 / 2,634 ≈	3.63	
Souvenirs spent in the region: $19,936 / 2,634 ≈		7.57
Recreation services i.e. guided tour travel to $9,748 / 2,634 ≈	3.70	
Recreation services i.e. guided tours in region: $17,686 / 2,634 ≈		6.71

Table 49. Revenue Per Available Visitor (RPAV) Capital Related Expenses (Dollars)

Spending Categories	Traveling to Destination/Site in Dollars Per Visitor	Spending at Destination/Site in Dollars Per Visitor
OHV Equipment Rentals: $12,033/2,634 ≈	4.57	
OHV Equipment Rentals: $15,648/2634 ≈		5.94
OHV Equipment Purchases: $4,890,142/2,634 ≈	1,856.55	
OHV Equipment Purchases: $1,355,838/2,634 ≈		514.69
OHV Repairs: $425,614/2,634 ≈	161.63	
OHV Repairs: $165,155/2,634 ≈		62.71

To calculate the revenue per available visitor (RPAV) across all categories, we divide the total revenue by the total number of responses, which is 2,634. This yields an RPAV of approximately *$2,898.* These dollar figures in Tables 48-49 offer insights into the overall revenue generated and the average revenue per visitor across all surveyed categories. The RPAV for travel related trip expenditures is approximately $292.90. The RPAV for capital related spending is approximately $2,606. OHV/OSV park managers and communities adjacent to the OHV/OSV recreation destinations/sites can apply and estimate the potential revenues based on tickets sold, vehicular counts and attendance figures.

OHV/OSV Recreation Trip Characteristics – Estimated Direct Spending

This section presents the estimated aggregate travel spending for OHV/OSV use in California. Included are the travel costs to the destination and at the site (Table 50). Total **direct** spending was calculated for travel expenses for SVRAs, USFS and BLM sites. Median spending for all travel for the SVRAs is $70,128,920 for the USFS is $3,524,092 and for BLM users $105,764,932. Capital expenditures for SVRAs are $121,052,624 for the USFS are $8,356,719 and for BLM users are $456,002,905.

Table 50. 2023 Economic Contributions of Visitor Spending for Off-Highway Vehicular and Over-Snow Vehicular Recreation in California

Agency	Visitors	OHV/OSV Spending *Travel Related**	Total Visitor Spending *Capital***
Bureau of Land Management	**6,304,914**	**$105,764,932**	**$456,002,905**
California State Parks SVRA and SRA's	**1,690,089**	**$70,128,920**	**$121,052,624**
U.S. Forest Service	**1,040,948**	**$3,524,092**	**$8,356,719**

*Travel related spending includes lodging, fuel, food, beverage, souvenirs, admissions, and recreation guide services
**Capital related spending includes OHV/OSV rentals, purchases and repairs. All spending data is reported as "median" totals. The spending estimates are based upon the percent of the sample spending money on each category (e.g. lodging, food, fuel etc.) and applied to the total OHV/OSV population.

The Economic Impact of OHV/OSV Recreation in California

To estimate economic impacts of OHV/OSV recreation in California, outputs from each sector were examined as inputs to other sectors of the economy. The model estimates economic impacts of OHV/OSV recreation in the State of California on the total value of economic transactions, value added, and employment. The model relied on median spending data as reported by OHV/OSV recreation visitors, to avoid the risk of inflating the numbers when using average expenditure figures. Based on visitor spending data, OHV/OSV recreational users in California:

- Generated over $10 billion in economic output in the state,
- Supported over 58,000 jobs, and
- Generated nearly $1.8 billion million in tax revenues, collected as $508 million in state tax revenue, $340 million in county tax revenue, and $952 million in federal tax revenue.

Table 51. Overall Impacts of OHV/OSV Recreation in 2023 Dollars

Impact	Employment	Labor Income	Value Added	Output
Direct	35,566	1,983,035,735	3,166,494,891	5,143,987,727
Indirect	10,318	879,126,707	1,389,739,155	2,384,588,854
Induced	12,146	865,684,848	1,591,394,981	2,563,579,145
Total	58,030	3,727,847,290	6,147,629,027	10,092,155,725

Table 51 above highlights the overall impact of OHV/OSV recreation in California. Direct impacts (inputs) are injections in the economy that are multiplied further, based on linkages of different economic sectors in the area. Direct effects are the economic impacts in different economic sectors that are derived directly from the injection of these inputs. Indirect effects measure the total value of supplies and services supplied to related businesses. Induced effects accrue when related businesses and businesses in the indirect industries spend their earnings (wages, salaries, profits, rent and dividends) in goods and services in the area. The total impacts are the sum of direct, indirect and induced effects and are the total of transactions attributable directly to expenditures of OHV/OSV users in the state.

Table 52. Impact Multipliers

Employment	Labor Income	Value Added	Output
1.63	1.88	1.94	1.96

Multipliers (Table 52) measure an industry's connection to the wider local economy; the multiplier effect refers to the number of times a dollar “changes hands” within the community before it “leaks out” of the community. For example, the visitor pays the local merchant, the local merchant spends money at the grocery store, the grocery store pays its cashier, and so on. For ease of interpretation, this number of times a dollar “changes hands” within the community is quantified as one number by which all expenditures are multiplied. It should be remembered however that a multiplier represents an estimate and should be interpreted respectively.

Table 53. Impacts of OHV/OSV Recreation Spending on Sales/Output (Top 10 Industries)

Industry/ Impacts	Direct	Indirect	Induced	Total
Durable goods merchant wholesalers	$1,466,426,088	$19,720,942	$17,254,114	$1,503,401,144
Hotels and motels, including casino hotels	$1,165,637,679	$2,209,484	$6,699,877	$1,174,547,040
Full-service restaurants	$564,746,938	$19,122,631	$63,378,416	$647,247,985
All other food and drinking places	$519,567,183	$55,868,059	$26,197,695	$601,632,936
Other real estate	$0	$296,752,646	$88,311,198	$385,063,844
Travel arrangement and reservation services	$311,740,310	$10,187,303	$9,219,509	$331,147,121
Miscellaneous store retailers	$284,299,279	$2,040,236	$13,927,899	$300,267,414
Owner-occupied dwellings	$0	$0	$264,145,131	$264,145,131
Personal and household goods repair and maintenance	$238,323,250	$5,053,089	$3,413,191	$246,789,531
Management of companies and enterprises	$0	$185,576,010	$31,590,726	$217,166,736
Total	$5,143,987,727	$2,384,588,854	$2,563,579,145	$10,092,155,725

Table 53 above reports the estimated effects of expenditures of OHV/OSV recreation users on the total value of economic transactions in the State. Direct injections in the state economy are estimated at $5.2 billion. Indirect effects of $2.4 billion represent linkages with other local suppliers of products and services, and induced effects of $2.6 billion are attributed to further expenditures and turnovers resulting in further employment and revenues. In total, direct, indirect, and induced impacts of expenditures account for $10 billion in output/sales in the State. These numbers produce an estimated gross output multiplier of 1.96 (total/direct output effects), which could be interpreted as an output of $1.96 for each $1 that is spent by the OHV/OSV recreation user in the State (the original dollar and an additional $0.96).

Table 54 below displays industries that grew by the largest dollar value in output/sales.

Table 54. Top 10 Industries by Estimated Growth (Percent)

Industry	Industry Total Output	Impact Output	Estimated Growth Percentage
Other amusement and recreation industries	$2,971,206,241	$202,248,860	6.81%
Personal and household goods repair and maintenance	$5,217,633,914	$246,789,531	4.73%

Industry	Industry Total Output	Impact Output	Estimated Growth Percentage
Hotels and motels, including casino hotels	$26,760,779,532	$1,174,547,040	4.39%
Durable goods merchant wholesalers	$53,117,041,862	$1,503,401,144	2.83%
Travel arrangement and reservation services	$15,759,201,881	$331,147,121	2.10%
Retail - Miscellaneous store retailers	$17,191,183,967	$300,267,414	1.75%
All other food and drinking places	$35,179,441,152	$601,632,936	1.71%
Retail - Gasoline stores	$14,406,619,710	$215,466,642	1.50%
Full-service restaurants	$71,137,038,967	$647,247,985	.91%
General and consumer goods rental except video tapes and discs	$5,939,508,990	$43,646,172	.73%

Table 55 below reports impacts across four components of value added (employee compensation, proprietor income, taxes on production and imports net of subsidies, and other property income). Value added is equivalent to the industry's contribution to a State's Gross Domestic Product (GDP). Whereas output is simply a measure of the total value of all goods produced, value added is a subset of output and is a useful measure of wealth created by an economy. For every dollar of direct value added by OHV/OSV recreation users, $1.94 was generated in the State economy.

Table 55. Value Added Impacts of OHV/OSV Recreation Spending (Top 10 Industries)

Industry/ Impacts	Direct	Indirect	Induced	Total
Hotels and motels, including casino hotels	$2,971,206,241	$202,248,860	6.81%	$2,971,206,241
Durable goods merchant wholesalers	$5,217,633,914	$246,789,531	4.73%	$5,217,633,914
All other food and drinking places	$26,760,779,532	$1,174,547,040	4.39%	$26,760,779,532
Full-service restaurants	$53,117,041,862	$1,503,401,144	2.83%	$53,117,041,862
Owner-occupied dwellings	$15,759,201,881	$331,147,121	2.10%	$15,759,201,881

Industry/ Impacts	Direct	Indirect	Induced	Total
Retail - Miscellaneous store retailers	$17,191,183,967	$300,267,414	1.75%	$17,191,183,967
Other real estate	$35,179,441,152	$601,632,936	1.71%	$35,179,441,152
Personal and household goods repair and maintenance	$14,406,619,710	$215,466,642	1.50%	$14,406,619,710
Retail - Gasoline stores	$71,137,038,967	$647,247,985	.91%	$71,137,038,967
Travel arrangement and reservation services	$5,939,508,990	$43,646,172	.73%	$5,939,508,990
Total	$3,166,494,891	$1,389,739,155	$1,591,394,981	$6,147,629,027

The top 10 employment industries are listed in Table 56 below. It is important to note that employment numbers reported do not equal to full time equivalents, and are rather a mix of full-time, part-time and seasonal employment including the self-employed.

Table 56. Impacts of OHV/OSV Recreation Spending on Employment (Top 10 Industries)

Industry/ Impacts	Direct	Indirect	Induced	Total
Hotels and motels, including casino hotels	8,166	15	47	8,228
All other food and drinking places	5,708	614	288	6,610
Full-service restaurants	5,297	179	594	6,071
Other amusement and recreation industries	4,100	11	60	4,172
Durable goods merchant wholesalers	3,889	52	46	3,987
Retail - Miscellaneous store retailers	3,842	28	188	4,058
Personal and household goods repair and maintenance	1,512	32	22	1,566
Retail - Food and beverage stores	1,335	12	270	1,617
Travel arrangement and reservation services	783	26	23	832
Retail - Gasoline stores	728	4	48	779
Total	35,566	10,318	12,146	58,030

Lastly, Table 57 below provides fiscal (tax revenue) impact of OHV/OSV recreation spending across all levels of government. They include direct tax revenues supported by the OHV/OSV recreation users, as well as indirect tax revenues resulting from increased economic activity in related sectors.

Table 57. Fiscal (Tax Revenue) Impact of OHV/OSV Recreation Spending

Impact	Sub County/ General	Sub County/ Special Districts	County	State	Federal	Total
Direct	$76,991,906	$88,740,868	$60,479,355	$294,938,003	$486,782,798	$1,007,932,930
Indirect	$12,575,483	$14,580,546	$9,940,832	$88,108,285	$214,966,081	$340,171,227
Induced	$26,427,616	$30,489,298	$20,780,584	$123,585,794	$221,611,054	$422,894,347
Total	$115,995,005	$133,810,712	$91,200,771	$506,632,083	$923,359,934	$1,770,998,504

ECONOMIC IMPACTS OF OHV/OSV RECREATION BY SVRA AND COUNTIES

To estimate economic impacts of OHV/OSV recreation in Carnegie, Clay Pit, Heber Dunes, Hollister Hills, Hungry Valley, Oceano Dunes, Ocotillo Wells, and Prairie City SVRAs, outputs from each sector were examined as inputs to other sectors of the economy. Eight multi-regional input-output (MRIO) models for each SVRA - to include a base county along with adjacent counties - estimate economic impacts of OHV/OSV recreation in these regions on the total value of economic transactions, value added, and employment. The models relied on median spending data as reported by OHV/OSV visitors, to avoid the risk of inflating the numbers when using average expenditure figures. Impacts for each SVRA are reported below.

Carnegie SVRA

Based on visitor spending data, OHV/OSV recreational users in Carnegie SVRA:

- Generated near $39 million in economic output in the state,
- Supported 260 jobs, and
- Generated nearly $7 million in tax revenues, including $3.5 million in state and county revenue ($2 million in state tax revenues, and $1.5 in county revenues).

Table 58. Overall impacts of OHV/OSV recreation in Carnegie SVRA (to include San Joaquin and contiguous counties)

Impact	Employment	Labor Income	Value Added	Output
Direct	180	7,939,397	13,270,534	23,594,392
Indirect	48	3,323,698	5,319,458	9,811,076
Induced	32	1,777,251	3,508,360	5,578,908
Total	260	13,040,347	22,098,352	38,984,376

Table 59. Impact Multipliers

Employment	Labor Income	Value Added	Output
1.45	1.64	1.67	1.65

Table 60. Overall impacts of OHV/OSV recreation in Carnegie SVRA (to include San Joaquin County only)

Impact	Employment	Labor Income	Value Added	Output
Direct	180	7,939,397	13,270,534	23,594,392
Indirect	39	2,209,518	3,316,870	6,282,802
Induced	25	1,322,924	2,655,716	4,245,430
Total	244	11,471,839	19,243,119	34,122,624

Table 61. Impact Multipliers

Employment	Labor Income	Value Added	Output
1.36	1.44	1.45	1.45

Clay Pit SVRA

Based on visitor spending data, OHV/OSV recreational users in Clay Pit SVRA:

- Generated near $30 million in economic output in the state,
- Supported over 200 jobs, and
- Generated over $5 million in tax revenues, including $2.6 million in state and county tax revenues ($1.8 million in state, and $842 thousand in county revenue).

Table 62. Overall impacts of OHV/OSV recreation in Clay Pit SVRA (to include Butte and contiguous counties)

Impact	Employment	Labor Income	Value Added	Output
Direct	146	6,504,356	10,705,877	18,907,569
Indirect	33	1,772,990	2,777,516	5,725,190
Induced	29	1,585,921	3,011,211	5,015,012
Total	208	9,863,267	16,494,604	29,647,771

Table 63. Impact Multipliers

Employment	Labor Income	Value Added	Output
1.43	1.52	1.54	1.57

Table 64. Overall impacts of OHV/OSV recreation in Clay Pit SVRA (to include Butte County only)

Impact	Employment	Labor Income	Value Added	Output
Direct	146	6,504,356	10,705,877	18,907,569
Indirect	31	1,655,338	2,620,317	5,391,165

Impact	Employment	Labor Income	Value Added	Output
Induced	28	1,503,488	2,838,855	4,732,486
Total	205	9,663,182	16,165,049	29,031,219

Table 65. Impact multipliers

Employment	Labor Income	Value Added	Output
1.40	1.49	1.51	1.54

Heber Dunes SVRA

Based on visitor spending data, OHV/OSV recreational users in Heber Dunes SVRA:

- Generated over $18 million in economic output in the state,
- Supported 130 jobs, and
- Generated over $3 million in tax revenues, including over $1.7 million in state and county tax revenues ($1 million in state and $700,000 in county revenue).

Table 66. Overall impacts of OHV/OSV recreation in Heber Dunes SVRA (to include Imperial and contiguous counties)

Impact	Employment	Labor Income	Value Added	Output
Direct	94	3,967,178	6,700,945	12,304,697
Indirect	23	1,158,362	1,774,757	3,783,360
Induced	13	613,090	1,265,539	2,143,699
Total	130	5,738,631	9,741,241	18,231,757

Table 67. Impact Multipliers.

Employment	Labor Income	Value Added	Output
1.38	1.45	1.45	1.48

Table 68. Overall impacts of OHV/OSV recreation in Heber Dunes SVRA (to include Imperial County only)

Impact	Employment	Labor Income	Value Added	Output
Direct	94	3,967,178	6,700,945	12,304,697
Indirect	17	803,243	1,217,448	2,757,704
Induced	11	483,836	1,019,949	1,744,022
Total	122	5,254,257	8,938,342	16,806,423

Table 69. Impact multipliers

Employment	Labor Income	Value Added	Output
1.30	1.32	1.33	1.37

Hollister Hills SVRA

Based on visitor spending data, OHV/OSV recreational users in Hollister Hills SVRA:

- Generated near $49 million in economic output in the state,
- Supported over 360 jobs, and
- Generated over $8 million in tax revenues, including $4.8 million in state and county tax revenues ($2.5 million in state and $2.3 million in county revenues).

Table 70. Overall impacts of OHV/OSV recreation in Hollister Hills SVRA (to include San Benito and contiguous counties)

Impact	Employment	Labor Income	Value Added	Output
Direct	280	11,196,659	18,760,539	33,326,906
Indirect	54	3,730,454	5,975,016	10,611,750
Induced	28	1,416,794	3,207,019	5,003,755
Total	361	16,343,907	27,942,574	48,942,411

Table 71. Impact Multipliers

Employment	Labor Income	Value Added	Output
1.29	1.46	1.49	1.47

Table 72. Overall impacts of OHV/OSV recreation in Hollister Hills SVRA (to include San Benito County only)

Impact	Employment	Labor Income	Value Added	Output
Direct	280	11,196,659	18,760,539	33,326,906
Indirect	38	1,813,856	2,613,254	5,374,853
Induced	17	709,912	1,880,184	2,994,593
Total	335	13,720,426	23,253,977	41,696,352

Table 73. Impact Multipliers

Employment	Labor Income	Value Added	Output
1.20	1.23	1.24	1.25

Hungry Valley SVRA

Based on visitor spending data, OHV/OSV recreational users in Hungry Valley SVRA:

- Generated near $117 million in economic output in the state,
- Supported 676 jobs, and
- Generated over $20 million in tax revenues, including $9.6 million in state and county tax revenues ($5.5 million in state tax revenues, and $4.1 million in county tax revenues).

Table 74. Overall impacts of OHV/OSV recreation in Hungry Valley SVRA (to include Los Angeles and contiguous counties)

Impact	Employment	Labor Income	Value Added	Output
Direct	411	23,390,043	37,838,732	61,708,026
Indirect	131	10,577,882	16,547,713	28,890,511
Induced	134	8,950,920	16,547,959	26,277,387
Total	676	42,918,845	70,934,404	116,875,923

Table 75. Impact Multipliers

Employment	Labor Income	Value Added	Output
1.65	1.83	1.87	1.89

Table 76. Overall impacts of OHV/OSV recreation in Hungry Valley SVRA (to include Los Angeles County only)

Impact	Employment	Labor Income	Value Added	Output
Direct	411	23,390,043	37,838,732	61,708,026
Indirect	120	9,628,028	15,171,862	26,347,297
Induced	117	7,919,430	14,612,245	23,217,465
Total	648	40,937,501	67,622,839	111,272,787

Table 77. Impact Multipliers

Employment	Labor Income	Value Added	Output
1.58	1.75	1.79	1.80

Oceano Dunes SVRA

Based on visitor spending data, OHV/OSV recreational users in Oceano Dunes SVRA:

- Generated over $379 million in economic output in the state,
- Supported over 2,600 jobs, and
- Generated over $63 million in tax revenues, including over $32.8 million in state and county tax revenues ($18 million in state tax revenue and $14.8 million in county tax revenue).

Table 78. Overall impacts of OHV/OSV recreation in Oceano Dunes SVRA (to include San Luis Obispo and contiguous counties)

Impact	Employment	Labor Income	Value Added	Output
Direct	1,731	78,642,593	127,932,052	228,982,623
Indirect	527	28,150,290	42,653,389	85,630,400
Induced	378	19,961,069	39,067,843	64,522,439
Total	2,636	126,753,952	209,653,283	379,135,462

Table 79. Impact Multipliers

Employment	Labor Income	Value Added	Output
1.52	1.61	1.64	1.66

Table 80. Overall impacts of OHV/OSV recreation in Oceano Dunes SVRA (to include San Luis Obispo County only)

Impact	Employment	Labor Income	Value Added	Output
Direct	1,731	78,642,593	127,932,052	228,982,623
Indirect	417	20,000,579	31,169,600	64,477,311
Induced	328	16,867,883	33,342,068	55,369,028
Total	2,476	115,511,056	192,443,720	348,828,961

Table 81. Impact Multipliers

Employment	Labor Income	Value Added	Output
1.43	1.47	1.50	1.52

Ocotillo Wells SVRA

Based on visitor spending data, OHV/OSV recreational users in Ocotillo Wells SVRA:

- Generated over $800 million in economic output in the state,
- Supported over 5,000 jobs, and
- Generated near $140 million in tax revenues, including $69 million in state and county tax revenues ($41 million in state tax revenue and $28 million on county revenue).

Table 82. Overall impacts of OHV/OSV recreation in Ocotillo Wells SVRA (to include San Diego and contiguous counties)

Impact	Employment	Labor Income	Value Added	Output
Direct	3,171	166,146,335	272,899,783	452,878,588
Indirect	924	65,787,659	101,074,113	180,261,081
Induced	935	56,927,695	107,835,336	172,784,148
Total	5,031	288,861,689	481,809,231	805,923,817

Table 83. Impact Multipliers

Employment	Labor Income	Value Added	Output
1.59	1.74	1.77	1.78

Table 84. Overall impacts of OHV/OSV recreation in Ocotillo Wells SVRA (to include San Diego County only)

Impact	Employment	Labor Income	Value Added	Output
Direct	3,171	166,146,335	272,899,783	452,878,588
Indirect	834	59,460,722	92,730,638	164,904,760
Induced	875	53,618,651	101,599,662	162,467,525
Total	4,880	279,225,708	467,230,082	780,250,872

Table 85. Impact Multipliers

Employment	Labor Income	Value Added	Output
1.54	1.68	1.71	1.72

Prairie City SVRA

Based on visitor spending data, OHV/OSV recreational users in Prairie City SVRA:

- Generated over $59 million in economic output in the state,
- Supported 385 jobs, and
- Generated over $9 million in tax revenues, including nearly $4.9 million in state and county tax revenues ($3 million in state and $1.9 million in county tax revenue).

Table 86. Overall impacts of OHV/OSV recreation in Prairie City SVRA (to include Sacramento and contiguous counties)

Impact	Employment	Labor Income	Value Added	Output
Direct	245	11,650,680	19,246,318	33,076,746
Indirect	78	5,198,582	8,065,530	15,045,962

Impact	Employment	Labor Income	Value Added	Output
Induced	62	3,768,905	7,047,075	11,337,024
Total	385	20,618,167	34,358,923	59,459,732

Table 87. Impact Multipliers

Employment	Labor Income	Value Added	Output
1.57	1.77	1.79	1.80

Table 88. Overall impacts of OHV/OSV recreation in Prairie City SVRA (to include Sacramento County only)

Impact	Employment	Labor Income	Value Added	Output
Direct	245	11,650,680	19,246,318	33,076,746
Indirect	72	4,704,370	7,225,833	13,326,305
Induced	48	2,999,446	5,554,547	8,914,228
Total	365	19,354,496	32,026,698	55,317,278

Table 89. Impact Multipliers

Employment	Labor Income	Value Added	Output
1.49	1.66	1.66	1.67

ECONOMIC IMPACTS OF OHV/OSV IN STATE RECREATION AREAS (SRA's)

In order to estimate economic impacts of OHV/OSV recreation in Mammoth Bar - Auburn State Recreation Area, Red Rock Canyon State Park, and Jasper Sears OHV - San Luis Reservoir State Recreation Area, outputs from each sector were examined as inputs to other sectors of the economy. Three multi-regional input-output (MRIO) models for each SRA - to include a base county along with adjacent counties - estimate economic impacts of OHV/OSV recreation in these regions on the total value of economic transactions, value added, and employment. The models relied on median spending data as reported by OHV/OSV visitors, to avoid the risk of inflating the numbers when using average expenditure figures. Impacts for each SRA are reported below.

Mammoth Bar - Auburn State Recreation Area

Based on visitor spending data, OHV/OSV recreational users in Mammoth Bar - Auburn State Recreation Area:

- Generated $7.2 million in economic output in the state,
- Supported 48 jobs, and
- Generated next $1.2 million in tax revenues, including $350 thousand in state tax revenues, and 261,962 in county revenue.

Table 90. Overall impacts of OHV/OSV recreation in Mammoth Bar - Auburn State Recreation Area (to include Placer and contiguous counties).

Impact	Employment	Labor Income	Value Added	Output
Direct	32	1,512,296	2,491,635	4,314,307
Indirect	8	536,487	836,807	1,524,159
Induced	7	437,424	820,227	1,340,850
Total	48	2,486,208	4,148,669	7,179,316

Table 91. Impact multipliers.

Employment	Labor Income	Value Added	Output
1.50	1.64	1.67	1.66

Table 92. Table 92. Overall impacts of OHV/OSV recreation in Mammoth Bar - Auburn State Recreation Area (to include Placer County only).

Impact	Employment	Labor Income	Value Added	Output
Direct	32	1,512,296	2,491,635	4,314,307
Indirect	8	518,410	812,242	1,475,030
Induced	6	334,157	624,040	1,021,158
Total	45	2,364,864	3,927,917	6,810,495

Table 93. Impact multipliers.

Employment	Labor Income	Value Added	Output
1.43	1.56	1.58	1.58

Red Rock Canyon State Park

Based on visitor spending data, OHV/OSV recreational users in Red Rock Canyon State Park:

- Generated near $11 million in economic output in the state,
- Supported 73 jobs, and
- Generated $1.9 million in tax revenues, including almost $600 thousand in state tax revenues, and $368 million in county revenue.

Table 94. Overall impacts of OHV/OSV recreation in Red Rock Canyon State Park (to include Kern and contiguous counties).

Impact	Employment	Labor Income	Value Added	Output
Direct	48	2,204,335	3,686,116	6,468,846
Indirect	14	947,198	1,454,723	2,692,626

Impact	Employment	Labor Income	Value Added	Output
Induced	10	554,293	1,088,931	1,765,425
Total	73	3,705,826	6,229,770	10,926,897

Table 95. Impact multipliers.

Employment	Labor Income	Value Added	Output
1.51	1.68	1.69	1.69

Table 96. Overall impacts of OHV/OSV recreation in Red Rock Canyon State Park (to include Kern County only).

Impact	Employment	Labor Income	Value Added	Output
Direct	48	2,204,335	3,686,116	6,468,846
Indirect	11	628,675	904,056	1,700,531
Induced	8	429,593	855,827	1,392,759
Total	67	3,262,603	5,446,000	9,562,136

Table 97. Impact multipliers.

Employment	Labor Income	Value Added	Output
1.40	1.48	1.48	1.48

Jasper Sears OHV - San Luis Reservoir State Recreation Area

Based on visitor spending data, OHV/OSV recreational users in Jasper Sears OHV - San Luis Reservoir State Recreation Area:

- Generated $2.8 million in economic output in the state,
- Supported 20 jobs, and
- Generated $476 thousand in tax revenues, including $156 thousand in state tax revenues, and $103 thousand in county revenue.

Table 98. Overall impacts of OHV/OSV recreation in Jasper Sears OHV - San Luis Reservoir State Recreation Area (to include Merced and contiguous counties).

Impact	Employment	Labor Income	Value Added	Output
Direct	14	564,437	965,969	1,812,793
Indirect	4	211,280	323,209	619,910
Induced	2	105,286	209,615	346,049
Total	20	881,003	1,498,792	2,778,751

Table 99. Impact multipliers.

Employment	Labor Income	Value Added	Output
1.40	1.56	1.55	1.53

Table 100. Overall impacts of OHV/OSV recreation in Jasper Sears OHV - San Luis Reservoir State Recreation Area (to include Merced County only).

Impact	Employment	Labor Income	Value Added	Output
Direct	14	564,437	965,969	1,812,793
Indirect	3	154,587	218,549	448,192
Induced	2	79,291	160,918	269,495
Total	19	798,315	1,345,436	2,530,480

Table 101. Impact multipliers.

Employment	Labor Income	Value Added	Output
1.34	1.41	1.39	1.40

SECTION III. SPECIAL EVENT PARTICIPANT CHARACTERISTICS AND SPENDING PATTERNS

Section III presents data on the characteristics of Special Event Participants, as contrasted with recreationists who were either on a side trip and stopped at the site for off-road recreation or those users who purposely visited that site for OHV/OSV recreation. This section illustrates a comparative analysis between findings associated with Special Events and other purposes of visiting a park/site. The categories of comparative statistics that can be found in this section include: (a) first time/repeat visitors to destination/sites; (b) overnight trips; (c) visitation frequency; (d) participants' age; (e) participants' gender; (f) language spoken at home; (g) educational level; (h) annual household income; (i) purpose of visit to destination/site; (j) type of lodging used; (k) travel party size; (l) spending per travel party (non-capital expenditures); and (m) spending per travel party (capital expenditures). Tables illustrating statistical results have been included with each category below.

Table 102. Special Event Attendance by Park Type and Travel Party Size

Park Ownership Type	Percent of Visitors Attending Special Events	Total Number of OHV/OSV User Counts	Estimated Total Number of Special Event Attendees/ Year	Number of Travel Parties Over 18+ Years of Age*	Number of Spending Travel Parties Size**
SVRA	7.6	1,690,089	128,447	25,689	64,223
USFS	4.5	1,040,948	46,843	9,369	23,421
BLM	3.4	6,304,914	214,367	42,873	107,184
Total	15.5	9,035,951	389,657	77,931	194,828

*Five (5) people in travel party
**Two (2) people in spending party

Table 102 provides information on the number of estimated OHV/OSV visitors who are considered special event attendees. There are an estimated 128,447 special event attendees at California SVRAs, another 46,843 who attend special events on USFS lands, and 214,367 visitors who attend special events on BLM lands. There is a total of 9,035,951 OHV/OSV user counts, of which 389,657 attend to compete in special events, with another 812,214 traveling to view a special event (Refer to Table 7 as purpose of visit). The median (n=5) number of individual travel parties (18+ years of age) is 77,931. The median (n=2 persons per spending party) number of spending travel parties is 194,828.

Special Event Comparison Statistics – First Time/Repeat Visitors

Table 103. First Time and Repeat Visitor Special Event Respondents (Percent)

Visitor Type	Special Events	Visit That Site/Park	Side Trip
First Time Visitor	12	11	20.8
Repeat Visitor	88	89	79.2

Table 103 illustrates the number of first time and repeat visitors who participated in the study. An overwhelming majority of the participants were repeat visitors. 88% of the special event users were repeat visitors. There were more first-time visitors (20.8%) who were on a side-trip.

Special Event Comparison Statistics – Overnight Trips

Table 104. Overnight Trip or Day Trip, Special Event Visitors, in Percent

Day/Overnight	Special Events	Visit That Site/Park	Side Trip
Day	47	61	50.2
Overnight	50.7	37.8	46.5

Table 105. Overnight Trip Mean/Median Number of Nights Stayed, OHV/OSV Visitors

Number of Nights	Special Events	Visit That Site/Park	Side Trip
Mean	2.9	3.4	2.9
Median	3.0	3.0	3.0

Tables 104-105 outline the percentage of special event users staying overnight and the average number of nights visitors spent on their trip. Special Event users averaged nearly three (3) nights per trip when attending an event, while users who were visiting that site/park as their primary purpose averaged 3.4 nights. Over half of the special event users spent an overnight, while the majority of those visiting for the purpose of going to that park/site and a side trip were day users. The number of nights per trip includes the nights spent at the destination, as well as the nights spent traveling to the destination.

Special Event Comparison Statistics – Visitation Frequency

Table 106. Visitation Time Frames at Destination/Site

Purpose of Visit and Visitation Frequency	Mean	Median
Years Visiting Park/Site		
Special Event **-** Years Visiting Park/Site	24.2	20
Visit That Park - Years Visiting Park/Site	20.2	20
Side Trip - Years Visiting Park/Site	18	15
Months Per Year Visiting		
Special Event - Months a Year Visiting Park/Site	5.2	6
Visit That Park - Months a Year Visiting Park/Site	5.2	6
Side Trip - Months a Year Visiting Park/Site	5	5
Days Per Month Visiting		
Special Event - Days Per Month Visiting Park/Site	3.6	3
Visit That Park - Days Per Month Visiting Park/Site	3.7	3
Side Trip - Days Per Month Visiting Park/Site	2.9	2

Table 106 highlights several significant timeframes regarding frequency of use – the number of years, number of months, and number of days per month visiting their destination site. Special event users on average had visited their destination/site for at least 24 years on average, while those visiting for the purpose of being at that park reported on average 20 years. Each year, all users spent an average of just over five (5) months visiting their destination site. Additionally, special event users averaged just over three (3.6) days per month visiting their destination site. Similar results were seen for those users whose primary purpose of visitation was for that park/site.

Table 107. Number of Months/Year Participating in OHV/OSV Recreation in California

Number of Months/Year	Special Events	Visit That Site/Park	Side Trip
Mean	7.9	7.9	6.3
Median	8	8	6

Table 107 highlights the average number of months per year that users participated in off-road and snow vehicular recreation in California. This data is meant to illustrate the frequency of any OHV/OSV recreation participation, as contrasted by the data in Table 106 which suggests visiting a particular park/site. Both Special Events and those purposely visiting that site/park spent about eight (8) months on average enjoying their recreational endeavors at the destinations/sites associated with their experiences. Those on side trips visited about two (2) months less than the other groups.

Special Event Comparison Statistics – Participants' Age

Table 108. Age of Special Event Respondents (Years)

Age	Special Events	Visit That Site/Park	Side Trip
Mean	56.3	50.7	48.6
Median	59	52	48
Oldest User(s)	85	85	81
Youngest (s)	16	12	17
Range	69	73	64

Table 108 illustrates the age demographics associated with the participants. The age range for special event users was 69 years, with the average age of 56.3 and 59 years as the median age. For those whose primary purpose of visiting that particular park, the average was 50.7, with a median age of 52, and a range of 73 years. The users who were on a side trip reported an average age of 48.6, (just over 7 years younger than the special event users), and a range of 64 years.

Special Event Comparison Statistics – Participants' Gender

Table 109. Gender Comparison of OSV and OHV Users (Percent)

Gender	Special Events	Visit That Site/Park	Side Trip
Female	9.7	11.4	21.7
Male	67.5	66.4	53
Self-Defined	6.6	4.4	5.1
Prefer not to answer	3.4	2.9	2.8

Table 109 outlines the gender comparison for special event users involved in the study. Over sixty-seven percent (67.5%) of the special event users were male, as compared to 53% males visiting as a side trip. Over twenty (21.7%) of those on a side trip were female. The gender characteristics of special event users and those visiting for that park are similar in their distribution.

Special Event Comparison Statistics – Language Spoken at Home

Table 110. Language Spoken at Home (Percent)

Language	Special Events	Visit That Site/Park	Side Trip
Always English	79.2	75.2	64.5
Mix of English and Spanish	6.8	7.1	16.1
Always Spanish	0.0	.2	3.7
Other	.6	1.6	0.0

Table 110 displays the language that was spoken at home for visitors. English is always spoken at home for an overwhelmingly large percent of the participants, but with some differences. Those on a side trip had a lower percent "always speaking English," and significantly more speaking a mix of Spanish and English at home (16.1%), as well as always Spanish (3.75). It should be noted that nearly 90% of all survey respondents indicated always speaking English at home.

Special Event Comparison Statistics – Educational Level

Table 111. Highest Education Level (Percent)

Education Level	Special Events	Visit That Site/Park	Side Trip
Some high school	1.7	1.3	5.5
Graduated from high school or GED	26.2	23.1	28.6
Graduated from college or technical school	49.3	47.1	39.2
Postgraduate degree(s)	9.7	12.4	10.1

Table 111 illustrates the highest level of education for special event users involved in the study. For special event users, nearly half of the respondents (49.3%) graduated from college or technical school. Another 9.7% of special event users completed a postgraduate degree, while 26.2% had a high school education, a high school diploma, or a GED. Those that visited the park as the primary purpose, had a similar distribution as the special event users. Those on a side trip, had about 10% less who graduated from college or a technical school, and slightly higher percent who had some high school.

Special Event Comparison Statistics – Annual Household Income

Table 112. Annual Household Income (Percent)

Income Level	Special Events	Visit That Site/Park	Side Trip
Less than 9,999	0.0	0.3	0.5
10,000-14,999	0.3	0.2	0.5
15,000-24,999	0.6	1.2	1.4
25,000-34,999	3.1	1.9	1.4
35,000-49,999	4.0	2.7	6.5
50,000-74999	8.8	6.9	12.0
75,000-99,999	12.5	9.3	13.4
100,000-149,000	17.1	21.4	18.0
150,000-199,999	13.7	12.5	8.3
200,000 and above	16.2	17.4	10.6
Prefer not to answer	10.5	11.0	10.6

Table 112 outlines the annual household income ranges. Special event users who made between $100,000-$149,000 comprised 17.1% of that user group. Similarly, 21.4% of those whose primary purpose of visiting that site/park earned the same amount, and 18% of those on a side visit. Over 16% of the special event users and 17.4% of those that purposely visited the site/park earned $200,000 and above.

Special Event Comparison Statistics – Purpose of Visit to Destination/Site

Table 113. Purpose of Visit (Percent)

Purpose of Visit to Destination/Site	Special Events	Visit That Site/Park	Side Trip
Attending a non-race event was the primary purpose for the trip	72.6	0.0	0.0
Attending a race event was the primary purpose for the trip	10.0	0.0	0.0
Participating in a race/competition was the primary purpose for the trip	17.4	0.0	0.0
Traveling on a business or combined business/personal trip, but stopped as part of that trip	0.0	0.0	13.4
Traveling to another primary destination, but stopped as part of that trip	0.0	0.0	47.9
Traveling to visit friends/family in the area, and stopped as part of that trip	0.0	0.0	38.7
Visiting the site was the primary purpose for the trip	0.0	74.9	0.0

Table 113. outlines the purpose of special event users' and the other two groups' visits to destination sites. For those attending special events, it was a non-race type of event (72.6%), attending a race event (10%), and participating in a race/competition (17.4%). Those visiting the park as the primary purpose represented nearly 75% (74.9%) of that group. Finally, nearly half (47.9%) of those on a side trip were traveling to another primary destination, and another 38.7% were visiting friends and relatives.

Special Event Comparison Statistics – Type of Lodging Used

Table 114. Lodging Type Used (Percent)

Type of Lodging	Special Events	Visit That Site/Park	Side Trip
Bed & Breakfast	0.6	0.1	.09
Campground at site visited	31.3	23.3	16.6
Campground NOT at site visited	2.8	3.7	8.8
Hotel/Motel	2.3	2.6	5.1
In our RV/vehicle in an undesignated area (i.e. street parking)	10.3	5.2	4.1
Outside the local area (just passing through)	0.3	0.1	1.8
Rented accommodation (i.e. Airbnb, VrBO)	0.9	0.8	1.4
With friends/relatives in the area	0.9	1.4	6.9

*Does not round to 100% due to missing data and those who did not stay overnight.

The lodging type chosen by special event users is highlighted in Table 144. The majority of special event users stayed in a campground at the site (31.3%), followed by staying in their RV in undesignated areas (10.3%). A similar pattern is found within the group visiting that park. Those on a side trip had a higher percent staying with relatives (6.9%), at campgrounds elsewhere (8.8%) and in hotels/motels (5.1%). Interestingly, more special event attendees utilized the campgrounds (31.3%) at the sites as compared to those on side trips (16.6%) and those visiting that park (23.3%) for OHV/OSV recreation.

Special Event Comparison Statistics – Travel Party Size

Table 115. Number of Individuals in Travel Group (Including Respondent)

Individuals	Special Events	Visit That Site/Park	Side Trip
Adults (18+ Years of Age) Mean	8.5	5.6	6.4
Adults (18+ Years of Age) Median	5.0	4.0	4.0
Children (Under 18 Years of Age) Mean	4.7	3.7	3.9
Children (Under 18 Years of Age) Median	4.0	3.0	3.0

The travel group size for special event users is outlined in Table 115. For special event users, travel groups averaged 8 adults per group, and 4 children. The other two groups had smaller sized travel groups.

Special Event Comparison Statistics – Type of Park Management Area Visited

Table 116. Type of Park Visited by Management Agency (Percent)

Type of Park	Special Events	Visit That Site/Park	Side Trip
SVRA	41.6	44.5	48.8
USFS	22.5	29.2	27.2
BLM	14.0	12.2	12.0
Other (private, municipal)	21.9	14.0	12.0

Table 116 illustrates the type of jurisdictional management area that those participating in special events utilized for their off-road recreation activities. Most participants by purpose of visit utilized the SVRAs. It appears that those attending special events primarily utilized the California SVRAs (41.6%), then the Other (21.9%, private/municipal), the USFS (22.5%) and the BLM (14%).

Special Event Comparison Statistics – Spending per Travel Party (Non-Capital Expenditures)

Table 117. Comparison of Spending Traveling to the Destination/Site by Purpose of Visit (Dollars).

Spending Categories	Special Event	Other Purpose/Side Trip	Visit Destination/Site
Lodging			
Mean	260	453	226
Median	100	300	120
Restaurant/Bar meals and drinks in town			
Mean	110	200	83
Median	60	100	50
Grocery/Convenience store food and drink			
Mean	127	310	102
Median	50	200	50
Transportation/Gas			
Mean	171	199	142
Median	100	105	100

Spending Categories	Special Event	Other Purpose/Side Trip	Visit Destination/Site
Admissions in town and festival/events			
Mean	92	105	57
Median	50	22	6
Souvenirs/Art/Crafts/T-shirts			
Mean	118	180	67
Median	60	150	50
Buying food at the festival/event			
Mean	90	351	99
Median	50	60	50
Recreation Services - Guide Services			
Mean	372	513	95
Median	50	30	30

Table 118. Comparison of Spending in the Region of the Destination/Site by Purpose of Visit (Dollars)

Spending Categories	Special Event	Other Purpose/Side Trip	Visit Destination/Site
Lodging			
Mean	236	289	252
Median	125	120	114
Restaurant/Bar meals and drinks in town			
Mean	108	173	130
Median	60	100	75
Grocery/Convenience store food and drink			
Mean	82	98	96
Median	45	55	50
Transportation/Gas			
Mean	112	110	117
Median	80	80	80
Admissions in town and festival/events			
Mean	396	52	47
Median	100	25	10
Souvenirs/Art/Crafts/T-shirts			
Mean	103	133	86
Median	55	73	50

Spending Categories	Special Event	Other Purpose/Side Trip	Visit Destination/Site
Buying food at the festival/event			
Mean	111	72	92
Median	50	74	53
Recreation Services - Guide Services			
Mean	60	96	104
Median	50	50	25

Those users who were on a side trip out spent the other special event and those visiting that park in the lodging category both traveling to the destination (Table 117) and at the destination (Table 118). Furthermore, those on a side trip spent more at restaurants and bars, and groceries while traveling to and at the destination. Admissions expenditures for those traveling for a special event spending party are significantly higher than the other two groups of travelers, due to entry fees for competition. As for recreational type services such as guides, those on a side trip spent more while traveling to the park/site, with those engaging in a special event following closely.

Table 119. Capital Expenditures by Purpose of Visit (Dollars)

Spending Categories	Other Purpose/Side Trip Traveling to	Other Purpose/Side Trip At Site	To Visit Site Traveling to	To Visit Site At Site	Special Event Traveling to	Special Event At Site
OHV/OSV Equipment Rentals						
Mean	1,219	498	304	404	300	266
Median	340	500	150	350	300	200
OHV/OSV Equipment Purchases						
Mean	20,614	8,345	15,505	9,413	12,701	4,843
Median	14,500	9,413	12,701	200	10,000	500
OHV/OSV Equipment Repairs						
Mean	5,239	333	1,390	1,166	769	591
Median	1,550	200	300	200	200	200

Finally, capital type costs were higher for those engaged in special events in purchases, which makes some sense due to the nature of the recreational sport (Table 119). Those on a side trip spent considerably more on rentals, equipment purchases, and repairs while traveling to the destination and at the destination.

SECTION IV. OFF-HIGHWAY VEHICLE & OVER SNOW VEHICLE USER COMPARISONS

Section IV illustrates a comparative analysis between findings associated with the type of off-highway recreation vehicle usage (OSV compared to OHV). The categories of comparative statistics that can be found in this section include: (a) first time/repeat visitors to destination/sites; (b) overnight trips; (c) visitation frequency; (d) participants' age; (e) participants' gender; (f) language spoken at home; (g) educational level; (h) annual household income; (i) purpose of visit to destination/site; (j) type of lodging used; (k) travel party size; (l) fees paid for destination/site access; (m) spending per travel party (non-capital expenditures); and (j) spending per travel party (capital expenditures). As noted in the first section of the report, there are an estimated 1,084,314 OSV user counts (235,720 distinct OSV riders in California, calculated by the total user count divided by mean travel party size of 4.6) in the State of California, and another 7,951,637 OHV user counts (over 2 million distinct OHV riders, see Section I for calculations). It should be noted that survey respondents reported owning both snow and off-road capable vehicles. Tables illustrating statistical results have been included with each category below.

Off-Highway Recreation Vehicle Usage Comparisons – First Time/Repeat Visitors

Table 120. First Time and Repeat Visitors (Percent)

Visitor Type	OSV	OHV
First Time Visitor	4.0	11.7
Repeat Visitor	96.0	88.3

Table 120 illustrates the number of first time and repeat visitors who participated in the study. An overwhelming majority of the participants were repeat visitors. Over 85% of the OHV users were also repeat visitors, and 96% of OSV users were repeat visitors. There were more OHV first time visitors (11.7%) than there were OSV first time visitors (4%).

Off-Highway Recreation Vehicle Usage Comparisons – Overnight Trips

Table 121. Overnight Trip Mean/Median Number of Nights Stayed

Number of Nights	OSV	OHV
Mean	4.65	3.23
Median	3.0	3.0

Table 121 outlines the average number of nights visitors spent on their trip. OSV users averaged nearly five (5) nights per trip when recreating, and OHV users averaged over three (3) nights per trip. The number of nights per trip includes the nights spent at the destination, as well as the nights spent traveling to the destination.

Off-Highway Recreation Vehicle Usage Comparisons – Visitation Frequency

Table 122. Visitation Timeframes at Destination/Site

	OSV – Years Visiting Site	**OSV –** Months/Year Visiting Site	**OSV –** Days/Month Visiting Site	**OHV –** Years Visiting Site	**OHV –** Months/Year Visiting Site	**OHV –** Days/Month Visiting Site
Mean	20.7	5.1	5.2	20.9	5.6	3.5
Median	20	6	4.0	20	5.0	2

Table 122 highlights several significant timeframes regarding OSV and OHV usage – the number of years, number of months, and number of days per month visiting their destination site. OSV users on average had visited their destination/site for at least 20 years. Each year, OSV users spent an average of just over five (5) months visiting their destination site. Additionally, OSV users averaged just over five (5) days per month visiting their destination site. Similar results were seen for OHV users. OHV users on average had visited their

destination site for nearly 21 years. Each year, OHV users spent an average of just over 5½ months at their destination site. Finally, OHV users spent an average of 3.5 days per month visiting their destination site.

Table 123. Number of Months/Year Participating in Off-Highway Recreation

Number of Months/Year	OHV	OSV
Mean	8.0	8.1
Median	8.0	7.0

Table 123 highlights the average number of months per year that users participated in off-road and snow vehicular recreation. Both OSV and OHV users spent about eight (8) months on average enjoying their recreational endeavors at the destinations/sites associated with their experiences

Off-Highway Recreation Vehicle Usage Comparisons – Participants' Age

Table 124. Age of Respondents (Years)

Age	OSV	OHV
Mean	50.1	51.6
Median	52	53
Oldest User(s)	80	85
Youngest (s)	20	12
Range	60	88

Table 124 illustrates the age demographics associated with the participants. The age range for OSV users was 20-60 years, 80 years as the oldest and 20 years as the youngest, with the average OSV user age at 51 years and the median age at 52 years. For OHV users, the age range was 12-88 years, with the average OHV user age at nearly 52 years. The median age for OHV users was 53 years.

Off-Highway Recreation Vehicle Usage Comparisons – Participants' Gender

Table 125. Gender Comparison of Users (Percent)

Gender	OSV	OHV
Female	11.0	13.3
Male	75.3	73.3
Self-Defined	6.2	5.2
Prefer not to answer	3.5	3.3

Table 125 outlines the gender comparison for users involved in the study. Over 75% of OSV users identified as male, with 11% identifying as female. Nearly 10% of the OSV users either self-defined their gender or chose not to answer. The gender comparison statistics for OHV users was nearly identical, with over 73% of OHV users identifying as male, and over 13% identifying as female. Finally, 8.5% of the OHV users either self-defined their gender or chose not to answer.

Off-Highway Recreation Vehicle Usage Comparisons – Language Spoken at Home

Table 126. Language Spoken at Home (Percent)

Language	OSV	OHV
Always English	89.9	82.9
Mix of English and Spanish	3.5	9.5
Always Spanish	0.0	0.5
Other	1.3	1.5

Table 126 displays the language that was spoken at home for OSV and OHV users. For OSV users, English is always spoken at home for an overwhelmingly large percent of the participants in the study (90%). A mix of English and Spanish, or another language, was spoken at home by nearly 5% of the OSV users. For OHV users, English is always spoken at home by nearly 83% of the participants. A mix of English and Spanish occurs at nearly 10% of the OHV users' homes, while only Spanish or another language is spoken by 2% of OHV users.

Off-Highway Recreation Vehicle Usage Comparisons – Educational Level

Table 127. Highest Education Level (Percent)

Education Level	OSV	OHV
Some high school	0.9	2.1
Graduated from high school or GED	26.4	27.4
Graduated from college or technical school	49.8	52.1
Postgraduate degree(s)	18.1	12.6

Table 127 illustrates the highest level of education for users involved in the study. For OSV users, nearly 50% graduated from college or technical school. Another 18% of OSV users completed a postgraduate degree. Over 27% of OSV users had either some high school education, a high school diploma, or a GED. For OHV users, the results nearly mirror OSV users in a few categories. Just over 50% of OHV users graduated from college or technical school, while over 12% completed a postgraduate degree. Over 29% of OHV users had either some high school education, a high school diploma, or a GED.

Off-Highway Recreation Vehicle Usage Comparisons – Annual Household Income

Table 128. Annual Household Income (Percent)

Income Level	OSV	OHV
Less than 9,999	0.0	0.3
10,000-14,999	0.0	0.2
15,000-24,999	0.4	1.4
25,000-34,999	1.3	2.4
35,000-49,999	1.8	3.7
50,000-74999	8.4	8.6
75,000-99,999	9.3	11.3
100,000-149,000	24.7	22.6
150,000-199,999	15.0	13.7
200,000 and above	22.0	18.2
Prefer not to answer	12.3	12.4

Table 128 outlines the annual household income ranges for users. OSV users who made between $100,000-$149,000 comprised over 24% of the participant population, while 37% of OSV users indicated making $150,000 or more annually. Over 12% of OSV users chose not to answer. Similar results were found in numerous income ranges for OHV users. As found with OSV users, OHV users who made between $100,000-$149,000 comprised nearly 23% of the participant population, while nearly 32% of OHV users made $150,000 or more annually. Again, as found with OSV users, over 12% of OHV users chose not to answer.

Off-Highway Recreation Vehicle Usage Comparisons – Purpose of Visit to Destination/Site

Table 129. Purpose of Visit (Percent)

Purpose of Visit to Destination/Site	OSV	OHV
Attending a non-race event was the primary purpose for the trip	6.6	11.9
Attending a race event was the primary purpose for the trip	0.0	1.7
Participating in a race/competition was the primary purpose for the trip	0.4	2.7
Traveling on a business or combined business/personal trip, but stopped as part of that trip	0.9	1.2
Traveling to another primary destination, but stopped as part of that trip	4.0	4.3
Traveling to visit friends/family in the area, and stopped as part of that trip	1.8	3.6
Visiting the site was the primary purpose for the trip	84.6	73.1

Table 129 outlines the purpose of users' visits to destination sites by OSV and OHV. Visiting and recreating at the destination site was the overwhelming purpose of the trip for both OSV users (84.6%) and OHV users (73.1%). Attending some type of a non-race event was also the primary purpose of the visit to the destination site for OSV users (6.6%) and OHV users (11.9%). Finally, a small percentage of OSV users (4%) and OHV users (4.3%) stopped at a site as part of their excursion to a different final destination site.

Off-Highway Recreation Vehicle Usage Comparisons – Type of Lodging Used

Table 130. Lodging Type Used (Percent)

Type of Lodging	OSV	OHV
Bed & Breakfast	0.4	0.3
Campground at site visited	4.8	26.4
Campground NOT at site visited	1.3	4.2
Hotel/Motel	4.0	2.7
In our RV/vehicle in an undesignated area (i.e. street parking)	0.4	6.9
Outside the local area (just passing through)	0.4	0.3
Rented accommodation (i.e. Airbnb, VrBO)	3.5	0.6
With friends/relatives in the area	8.8	1.1

OSV users reported 72.7% were day users and 26% overnight users. OHV users reported 56.6% as day users and 43% overnight users. The type of lodging for overnight users is highlighted in Table 130. If overnight stays did occur as part of the overall trip, OSV users stayed with friends or relatives in the area (8.8%), stayed at the campground at their destination site (4.8%), a campground at a different location (4.8%), or at a hotel or motel (4%). OHV users that stayed overnight used the campground at their destination site (26.4%), stayed in a Recreational Vehicle (RV) or a different type of vehicle in an undesignated area for overnight stays (6.9%), or at a campground at a different location (4.2%).

Off-Highway Recreation Vehicle Usage Comparisons – Travel Party Size

Table 131. Mean Number of Individuals in Travel Group (Including Respondent)

Individuals	OSV	OHV
Adults (18+ Years of Age) Mean	4.6	7.9
Adults (18+ Years of Age) Median	4.0	4.0
Children (Under 18 Years of Age) Mean	2.6	5.5
Children (Under 18 Years of Age) Median	2.0	3.0

The travel group size for users is outlined in Table 131. For OSV users, travel groups averaged at least four adults per group, while travel groups also averaged at least two children per group. For OHV users, travel groups averaged at least seven adults per group and at least 5 children per group.

Off-Highway Recreation Vehicle Usage Comparisons – Fees Paid for Destination/Site Access

Table 132. Destination/Site Fee Paid for Off-Highway Recreation Usage (Percent)

Destination/Site Fee Paid	OSV	OHV
My group did not pay day use fees because the entrance gate was unattended	0.0	1.0
My group paid day use fees in advance	7.0	7.7
My group paid day use fees upon arrival	4.0	30.2
My group visited using an annual pass	34.4	10.6
There were no use fees required	50.7	35.9
I don't know	3.5	5.0

Table 132 illustrates a few items associated with user fees – whether fees were required at all for usage at the destination site, and when user fees were paid. Over 50% of OSV users indicated no user fees were required to recreate at their destination site. If a fee was required for an OSV user, nearly 35% of users owned an annual pass to the destination site. Seven percent (7%) of OSV users paid the user fees prior to arrival, and 4% paid the user fees upon arrival. Over one-third (35.9%) of OHV users recreated at destination sites that did not require user fees. Over 10% of OHV users held an annual pass for recreation at the destination site. A small portion of OHV users paid the user fees prior to arrival (7.7%), and over 30% of OHV users paid the users fees upon arrival.

Off-Highway Recreation Vehicle Usage Comparisons – Spending per Travel Party (Non-Capital Expenditures)

Table 133. Spending for Users Traveling to/at Destination/Site (Dollars)

Spending Categories	OSV Traveling to Destination/ Site	OSV At Site	OHV Traveling to Destination/ Site	OHV At Site
Lodging				
Mean	450	4,000	267	475
Median	250	500	127	100
Restaurant/Bar meals and drinks in town				
Mean	107	186	95	122
Median	60	121	50	75
Grocery/Convenience store food and drink				
Mean	65	110	128	91
Median	30	50	50	50
Transportation/Gas				
Mean	115	141	155	112
Median	100	100	100	80
Admissions in town & festival/event				
Mean	31	77	73	122
Median	32	40	15	20

Spending Categories	OSV Traveling to Destination/ Site	OSV At Site	OHV Traveling to Destination/ Site	OHV At Site
Souvenirs/Art/Crafts/T-shirts				
Mean	67	79	99	94
Median	50	75	50	57
Buying food at the festival/event				
Mean	59	114	121	97
Median	45	50	50	58
Recreation services (i.e. guided tours, getting vehicles washed)				
Mean	279	224	75	139
Median	80	80	30	30

To enjoy a recreation trip of this nature, many users spend money in various areas while traveling to their destination site and when on location (Table 133). OSV users saw drastic differences in spending patterns related to lodging. OSV users spent an average of $450 in lodging while traveling to their destination site, and an average of $4,000 in lodging at their destination site. The difference in these two spending categories was not nearly as extreme for OHV users. On average, OHV users spent $267 on lodging while in transit to their destination site and averaged $475 in lodging at their destination site.

For dining and socializing at bars and restaurants, OSV users spent an average of just over $100 in transit, while spending nearly an average of $200 once at their destination site. Again, the difference of OHV users was not as significant. An average of almost $100 spent by OHV users while traveling to the destination site, but only an average of $122 spent while on location.

For OSV and OHV users, food and other items were purchased at grocery stores and convenience stores as well. For OSV users, an average of $65 was spent in transit to the destination site, while $110 on average was spent at grocery stores and convenience stores upon arrival. For OHV users, an average of $128 was spent in transit to the destination site, while less money was spent on average once at the destination site ($91).

Gas, fuel and transportation costs for all vehicles are a necessity to enjoy a recreation experience of this nature. For OSV users on average, they spent $115 in transit, and averaged just over $140 once at the destination site. OHV users saw a higher average on these costs in transit ($155), but a lower cost on these items once on location ($112).

In many cases, OSV and OHV events may require an admission, attendance, or participation fee. OSV users spent an average of just over $30 on these types of fees while traveling to their destination site. Once at the destination site, OSV users spent over twice that amount ($77) on these fees. On average, OHV users paid higher fees of this nature while traveling to their destination site ($73) and on location ($122).

No OSV or OHV recreation trip is complete until an enthusiast finds an appealing souvenir, art or craft item, or a t-shirt. OSV users spent an average of $67 on these memorabilia while traveling to their destination site, and an average of $79 once at the destination site. OHV users spent a bit more on these items in both categories. While traveling to their destination site, OHV users averaged just under $100 on souvenirs, arts and crafts items, and t-shirts, while spending just a bit less once at their destination site ($94).

In many instances, OSV and OHV events serve food for all-day enthusiasts and spectators. Additionally, buying food at festivals or events that are a part of the travel plan to the destination site may also occur. OSV users averaged $59 on food purchased at these events while traveling to the destination site, and over twice that

amount on average at the destination site event ($114). OHV users averaged over $120 on this food while traveling to the destination site and spent less on average ($97) at the destination site event.

Finally, additional recreation services, such as guided tours of the area, can serve to enhance the OSV and OHV users' experiences. OSV users averaged $279 on these additional recreation services while traveling to the destination site, and $224 on these services once at the destination site. OHV users saw a significantly less amount of money spent in both categories related to additional recreation services. While traveling to the destination site, OHV users averaged $75 on these services. Upon arrival, OHV users spent an average of just under $140 on these additional recreation services.

Off-Highway Recreation Vehicle Usage Comparisons – Spending per Travel Party (Capital Expenditures)

Table 134. Capital Expenditures Spending for Users Traveling to/at Destination/Site (Dollars)

Spending Categories	OSV Traveling to Destination/Site	OSV At Site	OHV Traveling to Destination/Site	OHV At Site
OHV/OSV Equipment Rentals				
Mean	0.0	277	760	449
Median	0.0	265	300	400
OHV/OSV Equipment Purchases				
Mean	20,719	15,728	1,5237	7,810
Median	20,000	14,000	10,000	200
OHV/OSV Equipment Repairs				
Mean	1,200	1,176	1,468	1,048
Median	500	350	250	200

Spending Party Size: OSV Mean 2.5 persons (Median 2.0); & OSV Mean persons 3.4 (Median 2.0)

Table 134 outlines the capital expenditures by users; these figures are broken down into two categories – expenditures in transit to the destination site, and once the travel group was at the destination site. For OSV users, all equipment rentals occurred at the destination site, with $277 as the average cost for renting equipment. While in transit OSV users on average spent over $20,000 purchasing equipment; once at the destination site, OSV users spent an average of over $15,000 on purchasing equipment. Additionally, OSV users spent an average of $1,200 on repairs to their equipment in transit, while spending nearly as much on average ($1,176) in repairs once at the destination site.

For OHV users, equipment rental occurred in transit and on location. OHV users averaged $760 in transit equipment rentals, while averaging a lower cost for equipment rental ($449) at the destination site. Similar to OSV users, OHV users also saw a higher average purchasing cost for equipment in transit ($15,327) when compared to purchasing at the destination site ($7,810). Finally, OHV users spent a bit more in equipment repair in transit ($1,468) than at their destination site ($1,048).

SECTION V. VEHICLE OWNERSHIP AND REGISTRATION INFORMATION

Section V presents OHV/OSV ownership and registration information, as well as tax revenue generated from OHV/OSV sales in California. The section provides ownership and registration information via the Department of Motor Vehicles (DMV) in California, as well as ownership and registration information associated with the study participants. Section categories are as follows: (a) types of OHV/OSVs owned and registered in California; (b) estimated tax revenue generated from OHV/OSV sales; and (c) projected OHV/OSV Ownership Trends; and (d) survey respondents' ownership statistics based on vehicle type. Tables illustrating statistical results have been included with each category.

OHV/OSV Ownership and Registration Information – State of California

The following data tables present the registered OHV/OSV vehicle ownership and future estimates of vehicular ownership by County in California. The OHV/OSV ownership is presented as a percentage of the county population. The ownership patterns by County are also presented by lowest to highest County population, and by the total number of OHV/OSV by County. The California Department of Motor Vehicles (DMV) currently has 631,669 registered off-road vehicles. The DMV lists 1.6 million off road vehicles that were previously registered. The following tables further illustrate the registration breakdown by County within California, inclusive of County population percentage.

Table 135. Vehicle Type Registered with DMV, California

Vehicle Type Registered	Percent
Recreation Motorcycle/Motorbike	60.6
Quads	21.3
Side-by-sides (SxSs)	17.4
Snow-Specialized Recreational Vehicle	0.68

Over 60% of the vehicles fall into the recreational motorcycle/motorbike category. Another 21% of vehicles are quads, 17% are side-by-sides (SxSs), and less than 1% are snow specialized recreational vehicles (Table 135).

Table 136. Registered Ownership by County

Registered Ownership as a Percent of Population							
County	**Population**	**Total Number**	**% OF POP.**	**County**	**Population**	**Total Number**	**% OF POP.**
Alameda	1673133	15160	0.91%	Orange	3182923	38648	1.21%
Alpine	1344	91	6.77%	Placer	400330	13738	3.43%
Amador	40095	2547	6.35%	Plumas	19631	1771	9.02%
Butte	217884	8035	3.69%	Riverside	2409331	53590	2.22%
Calaveras	45349	3040	6.70%	Sacramento	1571767	19370	1.23%
Colusa	21780	1276	5.86%	San Benito	63329	2572	4.06%
Contra Costa	1161643	17111	1.47%	San Bernardino	2171071	45281	2.09%
Del Norte	27655	446	1.61%	San Diego	3296317	58909	1.79%
El Dorado	190568	10038	5.27%	San Francisco	865933	4858	0.56%
Fresno	1003150	14962	1.49%	San Joaquin	771406	13371	1.73%
Glenn	28675	1847	6.44%	San Luis Obispo	282771	8304	2.94%
Humboldt	137014	4628	3.38%	San Mateo	762488	8303	1.09%
Imperial	180051	5331	2.96%	Santa Barbara	447651	6994	1.56%
Inyo	18804	1426	7.58%	Santa Clara	1932022	19896	1.03%
Kern	905644	18547	2.05%	Santa Cruz	272138	6182	2.27%
Kings	151887	2905	1.91%	Shasta	181935	8623	4.74%

County	Population	Total Number	% OF POP.	County	Population	Total Number	% OF POP.
Lake	67749	2766	4.08%	Sierra	3079	268	8.70%
Lassen	32949	1800	5.46%	Siskiyou	44151	1831	4.15%
Los Angeles	10019635	93405	0.93%	Solano	451432	7906	1.75%
Madera	156304	4546	2.91%	Sonoma	492498	11738	2.38%
Marin	262387	3381	1.29%	Stanislaus	550842	11313	2.05%
Mariposa	17225	1153	6.69%	Sutter	99080	2911	2.94%
Mendocino	91534	4184	4.57%	Tehama	65345	3012	4.61%
Merced	279150	5380	1.93%	Trinity	15818	752	4.75%
Modoc	8723	479	5.49%	Tulare	470999	9918	2.11%
Mono	13291	974	7.33%	Tuolumne	55243	2818	5.10%
Monterey	438953	6655	1.52%	Ventura	845255	17241	2.04%
Napa	138795	3302	2.38%	Yolo	216703	4065	1.88%
Nevada	102090	5898	5.78%	Yuba	80404	2653	3.30%

Source: California Department of Motor Vehicles 2020-2023.

Counties with ownership as a percentage of the population at 2% or less include Alameda, Contra Costa, Del Norte, Fresno, Kings, Los Angele, Marin, Merced, Monterey, Orange Sacramento, San Diego, San Francisco, San Mateo, Santa Barbara, Santa Clara, Solano, and Yolo. Counties with 5% or higher OHV/OSV ownership include Alpine, Amador, Calaveras, Colusa, El Dorado, Glenn, Inyo, Lassen, Mariposa, Modoc, Mono, Nevada, Plumas, Sierra, and Tuolumne.

Table 137. County Population, by Percent of Population and Total Number of OHV/OSV Registered

Population Sorted by Low to High

County	Population	Total Number	% OF POP.	County	Population	Total Number	% OF POP.
Alpine	1,344	91	6.77%	El Dorado	190,568	10,038	5.27%
Sierra	3,079	268	8.70%	Yolo	216,703	4,065	1.88%
Modoc	8,723	479	5.49%	Butte	217,884	8,035	3.69%
Mono	13,291	974	7.33%	Marin	262,387	3,381	1.29%
Trinity	15,818	752	4.75%	Santa Cruz	272,138	6,182	2.27%
Mariposa	17,225	1,153	6.69%	Merced	279,150	5,380	1.93%
Inyo	18,804	1,426	7.58%	San Luis Obispo	282,771	8,304	2.94%
Plumas	19,631	1,771	9.02%	Placer	400,330	13,738	3.43%
Colusa	21,780	1,276	5.86%	Monterey	438,953	6,655	1.52%
Del Norte	27,655	446	1.61%	Santa Barbara	447,651	6,994	1.56%
Glenn	28,675	1,847	6.44%	Solano	451,432	7,906	1.75%
Lassen	32,949	1,800	5.46%	Tulare	470,999	9,918	2.11%
Amador	40,095	2,547	6.35%	Sonoma	492,498	11,738	2.38%
Siskiyou	44,151	1,831	4.15%	Stanislaus	550,842	11,313	2.05%
Calaveras	45,349	3,040	6.70%	San Mateo	762,488	8,303	1.09%
Tuolumne	55,243	2,818	5.10%	San Joaquin	771,406	13,371	1.73%
San Benito	63,329	2,572	4.06%	Ventura	845,255	17,241	2.04%
Tehama	65,345	3,012	4.61%	San Francisco	865,933	4,858	0.56%

County	Population	Total Number	% OF POP.	County	Population	Total Number	% OF POP.
Lake	67,749	2,766	4.08%	Kern	905,644	18,547	2.05%
Yuba	80,404	2,653	3.30%	Fresno	1,003,150	14,962	1.49%
Mendocino	91,534	4,184	4.57%	Contra Costa	1,161,643	17,111	1.47%
Sutter	99,080	2,911	2.94%	Sacramento	1,571,767	19,370	1.23%
Nevada	102,090	5,898	5.78%	Alameda	1,673,133	15,160	0.91%
Humboldt	137,014	4,628	3.38%	Santa Clara	1,932,022	19,896	1.03%
Napa	138,795	3,302	2.38%	San Bernardino	2,171,071	45,281	2.09%
Kings	151,887	2,905	1.91%	Riverside	2,409,331	53,590	2.22%
Madera	156,304	4,546	2.91%	Orange	3,182,923	38,648	1.21%
Imperial	180,051	5,331	2.96%	San Diego	3,296,317	58,909	1.79%
Shasta	181,935	8,623	4.74%	Los Angeles	10,019,635	93,405	0.93%

Source: California Department of Motor Vehicles 2020-2023.

Not surprisingly, when viewing the same data by lowest to highest population, Counties with populations under 100,000 have higher percentages of the population owning OHV/OSVs. Del Norte is a notable exception. Rural counties tend to have a higher percentage of OHV/OSV ownership, due to population size.

Table 138. Total Number of OHV/OSVs Registered by County and Percent of County
Sorted by Total Number of Vehicles Lowest to Highest

County	Population	Total Vehicles	% of Pop.	County	Population	Total Vehicles	% of Pop.
Alpine	1,344	91	6.77%	Imperial	180,051	5,331	2.96%
Sierra	3,079	268	8.70%	Merced	279,150	5,380	1.93%
Del Norte	27,655	446	1.61%	Nevada	102,090	5,898	5.78%
Modoc	8,723	479	5.49%	Santa Cruz	272,138	6,182	2.27%
Trinity	15,818	752	4.75%	Monterey	438,953	6,655	1.52%
Mono	13,291	974	7.33%	Santa Barbara	447,651	6,994	1.56%
Mariposa	17,225	1,153	6.69%	Solano	451,432	7,906	1.75%
Colusa	21,780	1,276	5.86%	Butte	217,884	8,035	3.69%
Inyo	18,804	1,426	7.58%	San Mateo	762,488	8,303	1.09%
Plumas	19,631	1,771	9.02%	San Luis Obispo	282,771	8,304	2.94%
Lassen	32,949	1,800	5.46%	Shasta	181,935	8,623	4.74%
Siskiyou	44,151	1,831	4.15%	Tulare	470,999	9,918	2.11%
Glenn	28,675	1,847	6.44%	El Dorado	190,568	10,038	5.27%
Amador	40,095	2,547	6.35%	Stanislaus	550,842	11,313	2.05%
San Benito	63,329	2,572	4.06%	Sonoma	492,498	11,738	2.38%
Yuba	80,404	2,653	3.30%	San Joaquin	771,406	13,371	1.73%
Lake	67,749	2,766	4.08%	Placer	400,330	13,738	3.43%
Tuolumne	55,243	2,818	5.10%	Fresno	1,003,150	14,962	1.49%
Kings	151,887	2,905	1.91%	Alameda	1,673,133	15,160	0.91%
Sutter	99,080	2,911	2.94%	Contra Costa	1,161,643	17,111	1.47%
Tehama	65,345	3,012	4.61%	Ventura	845,255	17,241	2.04%

County	Population	Total Vehicles	% of Pop.	County	Population	Total Vehicles	% of Pop.
Calaveras	45,349	3,040	6.70%	Kern	905,644	18,547	2.05%
Napa	138,795	3,302	2.38%	Sacramento	1,571,767	19,370	1.23%
Marin	262,387	3,381	1.29%	Santa Clara	1,932,022	19,896	1.03%
Yolo	216,703	4,065	1.88%	Orange	3,182,923	38,648	1.21%
Mendocino	91,534	4,184	4.57%	San Bernardino	2,171,071	45,281	2.09%
Madera	156,304	4,546	2.91%	Riverside	2,409,331	53,590	2.22%
Humboldt	137,014	4,628	3.38%	San Diego	3,296,317	58,909	1.79%
San Francisco	865,933	4,858	0.56%	Los Angeles	10,019,635	93,405	0.93%

Source: California Department of Motor Vehicles 2020-2023.

The Counties with the highest number of registered OHV/OSVs (11,313 – 93,405 registered) are, not surprisingly, the most populated. These include Los Angeles, San Diego, Riverside, San Bernardino, Orange, Santa Clara, Sacramento, Kern, Ventura, Contra Costa, Alameda, Fresno, Placer, San Joaquin, Sonoma, and Stanislaus. Counties with fewer than 2,000 registered vehicles include Alpine, Sierra, Del Norte, Modoc, Trinity, Mono, Mariposa, Colusa, Inyo, Plumas, Lassen, Siskiyou, and Glenn.

Table 139. Registered Vehicle Type by County

County	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
Alameda	7,937	4,159	26	322	4	923	13,370
Alpine	14	25	4	79	1	36	157
Amador	940	1,719	46	165	2	673	3,545
Butte	2,710	5,487	103	989	6	2,649	11,944
Calaveras	1,314	1,860	43	338	4	647	4,205
Colusa	329	1,046	16	274		476	2,142
Contra Costa	10,530	5,094	31	441	6	1,389	17,489
Del Norte	79	285	6	2		96	468
El Dorado	4,705	4,855	115	1,090	38	2,277	13,079
Fresno	4,568	10,314	53	538	16	3,633	19,122
Glenn	379	1,546	30	213		574	2,742
Humboldt	1,559	3,954	221	58	1	1,028	6,821
Imperial	1,156	4,810	510	2	11	1,591	8,080
Inyo	540	916	16	82	1	319	1,874
Kern	7,479	12,795	160	268	7	4,794	25,503
Kings	772	2,508	25	61	5	900	4,272
Lake	1,317	1,625	13	16	4	656	3,631
Lassen	444	798	78	272	1	1,262	2,855
Los Angeles	39,206	44,823	1,125	338	63	14,376	99,930
Madera	1,386	3,526	38	214	7	1,185	6,355
Marin	1,470	663	5	96	3	221	2,458
Mariposa	358	886	16	26	2	279	1,566
Mendocino	1,502	2,718	18	25	3	1,084	5,350
Merced	1,657	4,227	39	84	1	1,147	7,155

County	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
Modoc	71	252	25	45		492	885
Mono	320	357	7	698	1	150	1,533
Monterey	2,953	3,637	32	50	7	756	7,435
Napa	1,475	2,078	13	89	4	535	4,195
Nevada	2,411	2,482	66	1,066	8	2,243	8,275

Source: California Department of Motor Vehicles 2020-2023.

Table 140. Registered Vehicle Type by County

County	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
Orange	18,534	16,646	779	156	19	6,242	42,375
Placer	6,849	6,199	216	1,290	27	2,088	16,668
Plumas	466	692	57	844		989	3,048
Riverside	20,763	30,748	2,875	75	38	13,262	67,760
Sacramento	9,084	9,323	163	728	24	2,683	22,005
San Benito	1,698	1,290	11	25	5	237	3,266
San Bernardino	16,470	30,207	1,653	93	51	11,322	59,795
San Diego	23,123	31,863	1,187	105	67	11,841	68,185
San Francisco	1,037	419	70	56		162	1,743
San Joaquin	6,621	8,170	103	372	6	1,772	17,044
San Luis Obispo	3,751	4,423	97	54	16	1,681	10,022
San Mateo	4,376	2,134	29	212	3	446	7,199
Santa Barbara	3,088	3,591	81	99	4	721	7,584
Santa Clara	10,825	4,729	32	347	13	1,057	17,004
Santa Cruz	4,022	1,395	12	126	10	275	5,841
Shasta	2,867	4,303	303	379	2	4,283	12,136
Sierra	66	146	11	173		135	531
Siskiyou	415	753	46	470	2	1,149	2,835
Solano	3,922	3,398	69	174	5	972	8,539
Sonoma	5,334	5,474	28	230	20	1,766	12,851
Stanislaus	4,877	8,080	130	466	8	1,794	15,354
Sutter	766	2,187	45	1,132	1	980	5,111
Tehama	651	1,950	36	119	2	1,721	4,480
Trinity	242	506	50	37	1	403	1,238
Tulare	3,323	7,579	133	200	5	2,224	13,463
Tuolumne	1,279	1,516	33	345	4	722	3,898
Ventura	10,293	6,740	252	93	8	1,980	19,366
Yolo	1,185	2,540	58	173	1	667	4,624
Yuba	842	1,773	36	310	4	889	3,853

Source: California Department of Motor Vehicles 2020-2023.

Table 139 and 140 above provides the type of registered OHV/OSV by County (RO veh =recreational off-road vehicle). Counties with the highest number of motorcycle and ¾ wheel motorcycle include Alameda, Butte, Contra Costa, El Dorado, Fresno, Kern, Los Angeles, Orange, Placer, Riverside, Sacramento, San Bernardino, San Diego, San Joaquin, Santa Clara, Shasta, Solano, Sonoma, Stanislaus, Tulare, and Ventura. Counties with over 300 snowmobiles include Alameda, Butte, Calaveras, Contra Costa, El Dorado, Fresno, Los Angeles, Mono, Nevada, Placer, Plumas, Sacramento, San Joaquin, Santa Clara, Shasta, Siskiyou, Stanislaus, Sutter, Tuolumne, and Yuba. Notably, Sutter, Nevada, Placer, and El Dorado have over 1,000 snowmobiles registered.

OHV/OSV Ownership and Registration Information – Estimated Tax Revenue

Table 141. Estimated Taxes Statewide for OHV/OSV Vehicle Sales

	Tax Paid Per Vehicle	Number of Vehicles	Total Tax Collected
Mean	$309.81	10,706	$4,183,177.69
Median	$309.92	4,858	$1,594,706.56
Total		631,669	$246,807,483.64

Table 141 presents the taxes collected from the sale of OHV/OSV sales and registrations, and Table 142 specifies the taxes collected in association with OHV/OSV sales registration per County in California. The total tax collected in California for OHV/OSV vehicles sold (631,669 vehicles) was $246,807,483 per the DMV records reviewed (2018-2023).

Table 142. Taxes Collected by County for OHV/OSV Registrations

County	Price Paid	Sales Tax Rate	Price With Tax	Total Cost	Total Number of Vehicles	Total Vehicles Times Total Cost	Total Tax Collected
Alameda	4,051.34	10.75%	435.52	4,487	15,160	68,020,783	6,602,469
Alpine	4,274.78	7.25%	309.92	4,585	91	417,208	28,203
Amador	3,496.46	8.25%	288.46	3,785	2,547	9,640,186	734,702
Butte	3,978.35	8.25%	328.21	4,307	8,035	34,603,241	2,637,198
Calaveras	3,705.23	7.75%	287.16	3,992	3,040	12,136,851	872,952
Colusa	3,570.72	7.75%	276.73	3,847	1,276	4,909,347	353,109
Contra Costa	4,185.30	10.75%	449.92	4,635	17,111	79,313,245	7,698,577
Del Norte	3,538.52	8.25%	291.93	3,830	446	1,708,380	130,200
El Dorado	3,890.38	8.75%	340.41	4,231	10,038	42,468,652	3,417,018
Fresno	4,031.26	9.23%	371.88	4,403	14,962	65,879,837	5,564,124
Glenn	3,607.77	7.75%	279.60	3,887	1,847	7,179,976	516,425
Humboldt	3,425.39	9.25%	316.85	3,742	4,628	17,319,080	1,466,375
Imperial	4,783.82	8.75%	418.58	5,202	5,331	27,734,017	2,231,473
Inyo	3,750.67	8.75%	328.18	4,079	1,426	5,816,445	467,990
Kern	4,276.75	9.50%	406.29	4,683	18,547	86,856,366	7,535,484
Kings	4,143.21	8.25%	341.81	4,485	2,905	13,028,997	992,972
Lake	3,818.01	8.75%	334.08	4,152	2,766	11,484,670	924,054
Lassen	3,833.43	7.25%	277.92	4,111	1,800	7,400,437	500,263
Los Angeles	4,758.63	10.50%	499.66	5,258	93,405	491,150,218	46,670,383
Madera	3,926.97	8.75%	343.61	4,271	4,546	19,414,056	1,562,050

County	Price Paid	Sales Tax Rate	Price With Tax	Total Cost	Total Number of Vehicles	Total Vehicles Times Total Cost	Total Tax Collected
Marin	3,329.03	9%	299.61	3,629	3,381	12,268,441	1,012,991
Mariposa	3,330.57	7.88%	262.28	3,593	1,153	4,142,559	302,412
Mendocino	3,604.18	9.13%	328.88	3,933	4,184	16,455,929	1,376,040
Merced	3,885.15	8.75%	339.95	4,225	5,380	22,731,041	1,828,934
Modoc	3,382.83	7.25%	245.26	3,628	479	1,737,853	117,477
Mono	4,130.08	7.75%	320.08	4,450	974	4,334,457	311,759
Monterey	4,094.79	9.50%	389.01	4,484	6,655	29,839,656	2,588,829
Napa	3,523.72	8.50%	299.52	3,823	3,302	12,624,326	989,002
Nevada	4,015.47	8.50%	341.31	4,357	5,898	25,696,318	2,013,076
Orange	4,822.01	10.25%	494.26	5,316	38,648	205,463,049	19,102,007
Placer	4,134.80	7.75%	320.45	4,455	13,738	61,206,183	4,402,301
Plumas	3,723.06	8.25%	307.15	4,030	1,771	7,137,506	543,967
Riverside	4,925.60	9.25%	455.62	5,381	53,590	288,379,473	24,416,569
Sacramento	4,278.82	8.75%	374.40	4,653	19,370	90,132,808	7,252,065
San Benito	3,797.72	9.25%	351.29	4,149	2,572	10,671,251	903,516
San Bernardino	4,879.84	10.25%	500.18	5,380	45,281	243,612,849	22,648,814
San Diego	4,751.51	8.75%	415.76	5,167	58,909	304,398,539	24,491,836
San Francisco	3,619.35	9.88%	357.41	3,977	4,858	19,319,104	1,736,302
San Joaquin	4,010.35	10.25%	411.06	4,421	13,371	59,118,685	5,496,295
San Luis Obispo	3,828.96	8.75%	335.03	4,164	8,304	34,577,806	2,782,122
San Mateo	3,827.94	9.88%	378.01	4,206	8,303	34,921,995	3,138,609
Santa Barbara	3,172.39	9%	285.52	3,458	6,994	24,184,588	1,996,893
Santa Clara	2,653.43	9.88%	262.03	2,915	19,896	58,005,917	5,213,274
Santa Cruz	2,645.74	9.75%	257.96	2,904	6,182	17,950,671	1,594,707
Shasta	2,569.61	7.75%	199.14	2,769	8,623	23,874,972	1,717,225
Sierra	2,412.55	8.25%	199.04	2,612	268	699,905	53,341
Siskiyou	2,358.42	7.75%	182.78	2,541	1,831	4,652,933	334,666
Solano	2,626.72	8.38%	219.99	2,847	7,906	22,506,072	1,739,224
Sonoma	2,583.13	9.50%	245.40	2,829	11,738	33,201,254	2,880,474
Stanislaus	2,521.27	8.63%	217.46	2,739	11,313	30,983,247	2,460,120
Sutter	2,796.60	7.75%	216.74	3,013	2,911	8,771,823	630,920
Tehama	2,532.96	7.75%	196.30	2,729	3,012	8,220,544	591,269
Trinity	2,436.20	7.75%	188.81	2,625	752	1,974,004	141,982
Tulare	2,555.67	9.25%	236.40	2,792	9,918	27,691,745	2,344,610
Tuolumne	2,616.65	7.75%	202.79	2,819	2,818	7,945,183	571,463
Ventura	2,869.37	9.50%	272.59	3,142	17,241	54,170,535	4,699,727
Yolo	2,452.61	8.75%	214.60	2,667	4,065	10,842,222	872,363
Yuba	2,760.90	8.25%	227.77	2,989	2,653	7,928,953	604,285

The average tax collected for all Counties is $4,183,177, with a median of $1,594706, and a total tax collected statewide of $246,807,483. Following the same trends as described above, the more populated Counties paid more in the taxes for OHV/OSVs. However, the smaller Counties still reported significant taxes collected during the vehicle registration process.

OHV/OSV Ownership and Registration Information – Projected OHV/OSV Ownership Trends

Table 143. Estimated Growth in Ownership and Type of OHV/OSV by County (Percent), 2016-2027

County	Motorcycle	3/4 Wheel M/C	RO veh*	Snowmobile	Pickup	All Others	Overall Change in Percent
Alameda	20.5	25.1	100	-1.7	42.9	59.4	26
Alpine	40.1	4.9	100	-40.6	1	23.6	22.8
Amador	44.1	25.3	97.8	9.9	57.5	47.6	37.6
Butte	22.7	15.9	99.6	9.4	66.9	33.8	24.5
Calaveras	51.7	37.5	98.8	47.7	46.1	59.6	48.5
Colusa	19.6	25.1	100	2.55	1	39.1	27.2
Contra Costa	28.1	26.6	99	8.92	-20	65.7	32.4
Del Norte	56	0.12	100	-23.5	1	58.9	31.6
El Dorado	35.1	31.7	98.7	12.82	-12.1	46.9	36.3
Fresno	45.5	9.72	98	0.78	45	69.8	37.5
Glenn	45.2	24.8	100	30.5	1	52.4	38
Humboldt	26.4	-14.7	100	-23	44	41.4	11.6
Imperial	47.2	12	99	74	-28	48.5	42.6
Inyo	21.7	-12.5	98	17.4	100	64.8	22.8
Kern	30.3	-3.3	98	0.86	-36	62.4	28.2
Kings	36.2	3.42	100	2.94	47.6	58.9	28.4
Lake	40.2	22.6	97	30.2	67.4	70.4	42.4
Lassen	30.6	18.5	100	18.7	1	12.5	27.1
Los Angeles	18	3	99	-15.9	0.1	60.9	24.8
Madera	42.1	13.5	96	11.1	34.5	74.5	39.6
Marin	22.3	17.3	100	16.8	14.2	66	27.6
Mariposa	36.8	23	90	9.9	1	69.7	39.7
Mendocino	40.6	-2.6	100	54.1	-33	68.7	34.5
Merced	45.8	28.4	95	-2.4	56.2	72.9	43.8
Modoc	33.4	38.7	100	52.8	0	6.2	27.1
Mono	-1.4	2.79	96	16.16	12.5	66.5	19.8
Monterey	37.6	36.3	100	-1.78	46.1	71.7	42.9
Napa	28	15.6	100	-6.3	-50	65.2	29.7
Nevada	38.6	31.8	97	22.6	80	84	57.9

Note: 3/4 Wheel M/C Column Includes Body Types 3W, 3WMC, 4W, ATV and MCATV. RO stands for Recreational Off-Highway Vehicle. The pickup, RO and All Other categories have a wide-ranging variation in percent. RO category is a Recreational Off-Highway Vehicle and is designated specifically for recreational use rather than construction, farm, or other utility use. An ROveh is commonly referred to as a Side-by-Side, Recreational Utility Vehicle (RUV), or a Utility Terrain Vehicle (UTV). DMV registrations fluctuate by month, and

in June of each year they begin a new count, therefore counts from year to year are considered rather unstable. The projected changes in vehicular registrations for off-road and over snow are based on actual DMV data from 2016-2022 and projected out until 2027, showing the potential change from 2016.

Table 144. Estimated Growth in Ownership and Type of OHV/OSV by County (Percent), 2016-2027

County	Motorcycle	3/4 Wheel M/C	RO veh*	Snowmobile	Pickup	All Others	Overall Change in Percent
Orange	10.9	-11.3	99	-8.7	-36	39.7	12.4
Placer	36.9	29.8	98	40.5	59.4	51	39.1
Plumas	45.1	18.1	100	-1.5	0	44.6	31.7
Riverside	38.4	14.8	99	47.3	11	55.6	41.4
Sacramento	30	22.5	98	18.5	-5.8	57.2	33.3
San Benito	46.2	41.3	100	17.6	-50	68.6	46.9
San Bernardino	33.7	1.8	99	24.1	5	62.1	35.1
San Diego	33.9	12	99	35	-13.5	53.3	33.3
San Francisco	35.2	-26.1	100	56.8	0	69.2	40.1
San Joaquin	40.1	22.9	99	16.4	84	64.3	37.4
San Luis Obispo	22.4	9.4	99	41.3	-15	50.25	25.8
San Mateo	25.7	-2.3	98	32.1	-50	53.9	22.9
Santa Barbara	19.4	26.1	96	82	86.5	65.4	32.5
Santa Clara	11.8	-6.3	100	-14.6	-7.1	51.5	11.2
Santa Cruz	24.1	33.4	100	41.3	71.5	66.8	30.7
Shasta	43.3	9.5	99	3.9	0	27.2	31.7
Sierra	26	-5.2	100	-18.4	0	27.5	8.4
Siskiyou	39.5	15.9	98	1.5	3.4	9.2	20.5
Solano	39.5	26.1	100	39	-40	62.9	39.8
Sonoma	33.4	6.5	98	34.2	-39	75	35.4
Stanislaus	38.8	18.9	98	23.4	1	65.1	35
Sutter	42.2	30.4	100	79.3	1	51	50.4
Tehama	56.3	19.1	99	40.3	69.5	50	41.4
Trinity	6.1	-6.5	100	39.9	1	11.3	14
Tulare	34.9	5.3	100	-6.8	71.4	71.6	33.3
Tuolumne	36.7	38.5	98	24	-20	43.3	38.9
Ventura	16	-4.9	97	-14.1	-50	56.03	18.6
Yolo	23.4	26.1	99	3.9	1	54.9	33.5
Yuba	49.3	36.6	100	23.1	63.1	61.5	47.1

Source: California Department of Motor Vehicles

Humboldt, Santa Clara, Sierra, Orange, and Trinity Counties have the lower rates of projected vehicular registrations. Counties with the highest projected rates of vehicular registrations in the future include Amador, Calaveras, Imperial, Lake, Merced, Monterey, Nevada, San Benito, Sutter, Tehama, and Yuba.

OHV/OSV Ownership and Registration Information – Survey Respondents' Ownership Statistics (Vehicle Type)

Table 145. Vehicle Type Owned (Percent)*

OHV/OSV Type	Percent
Recreation Motorcycle / Motorbike	31.4
All-Terrain Vehicle	12.7
Recreational Off-Highway Vehicle	13.8
Sand-Specialized Recreational Vehicle	3.0
Rock-Specialized Recreational Vehicle	4.7
Snow-Specialized Recreational Vehicle	6.9
Amphibious Recreational Vehicle	0.3
Vehicle used ONLY for Backcountry	27.2

*Respondents could select multiple vehicles owned, does not round To 100% due to missing cases

Survey respondents reported the types of OHV/OSVs they owned in Table 145. Over 27% of the respondents reported owning a vehicle used ONLY for backcountry. The largest percentage of participants owned recreational motorcycles/motorbikes (31.4%). Only 0.3% of the respondents owned amphibious recreational vehicles, making up the smallest percentage of the overall group.

Table 146. OHV/OSVs Owned by Type, Respondent Reported (Percent)*

Vehicle Type	1	2	3	4+	None
Recreation Motorcycle / Motorbike	5.9	9.2	5.8	15	3.1
All-Terrain Vehicle	3.9	3.4	1.1	3.3	2.2
UTV, SxSs, ROV, Go-Kart	5.8	2.9	1.3	3.2	1.5
Sand-Specialized Recreational Vehicle	1.5	0.6	0.3	0.4	0.5
Rock-Specialized Recreational Vehicle	2.6	0.9	0.4	0.6	0.2
Snow-Specialized Recreational Vehicle	0.9	2.4	1.4	3.1	0.7
Amphibious Recreational Vehicle	0.1	0	0	0	0
Vehicle used ONLY for Backcountry	0.7	0.3	0	0.1	0.2
Street Licensed Vehicle	13.4	5.9	2.3	6.3	1.0

*Respondents could select multiple vehicles owned

Table 146 reports the ownership of vehicles by type and number of vehicles used. Nearly 10% of riders owned two motorcycles, with another 15% of riders reporting owning 4+ motorcycles. This is logical when viewing the travel party size, and that most visitors were using motorcycles (families owning multiple motorcycles for members of the family to use). Nearly 6% of riders owned a UTV, SxS, ROV, or Go-Kart, and 13% of riders owned one street licensed vehicle, 5.9% two, 2.3% three and 6.3% of riders owned 4+ street licensed vehicles. In terms of owning 2+ OHV/OSVs, (a) 30% of respondents owned 2+ motorcycles; (b) 7.8% owned 2+ ATV's; (c) 7.4% owned 2+ UTVs, SxSs, ROV, or Go-Karts; (d) 6.9% owned 2+ snow-specialized vehicles; and (e) 14.5% owned 2+ street licensed off-road vehicles. Participants who owned one vehicle owned a street licensed vehicle more than other OHVs/OSVs. Participants who owned 2+ vehicles were prone to have recreational motorcycles/motorbikes more than other OHVs/OSVs.

Table 147. First Time or Repeat Visitors, by Vehicle Type Owned (Percent)

Vehicle Type	First Time Visitor	Repeat Visitor
Recreation Motorcycle / Motorbike	7.5	92.5
All-Terrain Vehicle	10.4	89.6
UTV, SxSs, ROV, Go-Kart	9.5	90.5
Sand-Specialized Recreational Vehicle	13.1	86.9
Rock-Specialized Recreational Vehicle	11	89
Snow-Specialized Recreational Vehicle	3.5	96.5
Amphibious Recreational Vehicle	11.1	88.9
Vehicle used ONLY for Backcountry	12.2	87.8

As reported by survey respondents, Table 147 outlines the types of OHVs/OSVs owned for two different types of trips – first time visits and repeat visits to the destination site. Sand-specialized recreational vehicles were owned by participants most frequently during first-time visits to the destination site (13.1%). For those participants who returned to the same destination site, snow-specialized recreational vehicles were most frequently owned (96.5%). Overall, more than 85% of participants indicated owning their OHVs/OSVs, regardless of vehicle type, during repeat visits to the same destination site.

Table 148. Vehicle Type Owned and Site Visited by Survey Respondents (Percent)

Vehicle Type	SVRA	USFS	BLM	Other
Recreation Motorcycle / Motorbike	54	22	12	12
All-Terrain Vehicle	60	17	14	9
UTV, SxSs, ROV, Go-Kart	42	23	21	14
Sand-Specialized Recreational Vehicle	65	2	22	11
Rock-Specialized Recreational Vehicle	32	34	11	23
Snow-Specialized Recreational Vehicle	2	80	2	16
Amphibious Recreational Vehicle	0	50	0	50
Street Licensed Vehicle	42	25	15	18
Vehicle used ONLY for Backcountry	29	23	24	24

As reported by survey respondents, the highest percentage of vehicles for SVRA users are motorcycles, ATV's, sand-specialized and street licensed OHVs. For the USFS, snow-specialized, rock-specialized, amphibious are more prevalent. BLM land users mostly use sand, recreational off-highway, and back country only vehicles. Table 148 describes which vehicle types participants in the study owned when considering the park type they visited. Sand-specialized recreational vehicles (65%) were owned by participants who most frequently visited SVRAs, followed by owners of ATVs (60%), and recreational motorcycle/motorbikes (54%). Snow-specialized recreational vehicles (80%) were owned by participants who most frequently visited USFS landscapes, followed by owners of amphibious recreational vehicles (50%), and rock-specialized recreational vehicles (34%). Backcountry only vehicles were owned by participants who most frequently visited BLM landscapes, followed by owners of sand-specialized recreational vehicles (22%), and recreational OHVs (21%).

Table 149. Vehicle Type Owned by Gender (Percent)

Vehicle Type	Male	Female	Self-described	Prefer not to answer
Recreation Motorcycle / Motorbike	82.4	9.4	5.5	2.8
All-Terrain Vehicle	75.2	14.4	5.0	5.4
UTV, SxSs, ROV, Go-Kart	74.8	15	5.4	4.8
Sand-Specialized Recreational Vehicle	70.1	17.5	6.2	6.2
Rock-Specialized Recreational Vehicle	81.2	9.4	4.7	4.7

Vehicle Type	Male	Female	Self-described	Prefer not to answer
Snow-Specialized Recreational Vehicle	79.5	9.5	6.8	4.1
Amphibious Recreational Vehicle	100	0	0	0
Vehicle used ONLY for Backcountry	77.8	12	5.8	4.4

Table 149 highlights OHV/OSV ownership in comparison to participants' gender. Over 70% of all male participants owned their OHV/OSV, regardless of vehicle type. Sand-specialized recreational vehicles were owned by 17.5% of female participants, while 14.4% of female participants owned ATVs. Sand-specialized recreational vehicles were owned by 6.2% of the participant population who self-described their gender. Sand-specialized recreational vehicles (6.2%), ATVs (5.4%), and recreational OHVs (4.8%) were owned by participants who chose not to indicate their gender.

*Table 150. Vehicle Type Used on Last Trip at Destination/Site**

Vehicle Type	Percent
Recreation Motorcycle / Motorbike	33.6
All-Terrain Vehicle	12.1
UTV, SxSs, ROV, Go-Kart	13.6
Sand-Specialized Recreational Vehicle	2.9
Rock-Specialized Recreational Vehicle	4.2
Snow-Specialized Recreational Vehicle	7.3
Amphibious Recreational Vehicle	0.1
Street Licensed Vehicle	24.9
Vehicle used ONLY for Backcountry	1.3

*Respondents could select multiple vehicles used during the last trip

Table 150 presents the types of OHV/OSV vehicles used by survey respondents for their current or last trip. Recreational motorcycles/motorbikes were the most frequently used OHV/OSV based on participants' responses, followed by street licensed vehicles. Amphibious recreational vehicles were the least used type of OHV/OSV during the participant's most recent trip. The recreational motorcycle/motorbike was used by 33% of the survey respondents, with another 24% using street licensed off road vehicles (jeeps, pickups etc.), followed by recreational off-highway vehicles (13.6%) and ATVs (12.1%).

Table 151. Vehicle Type Used on Last Trip by First Time and Repeat Visitors (Percent)

Vehicle Type	First Time Visitor	Repeat Visitor
Recreation Motorcycle / Motorbike	7.4	92.6
All-Terrain Vehicle	9.7	90.3
UTV, SxSs, ROV, Go-Kart	8.6	91.4
Sand-Specialized Recreational Vehicle	10.1	89.9
Rock-Specialized Recreational Vehicle	12.5	87.5
Snow-Specialized Recreational Vehicle	4.0	96
Amphibious Recreational Vehicle	0	100
Street Licensed Vehicle	12.1	87.9
Vehicle used ONLY for Backcountry	20.5	79.5

Table 151 highlights two different groups of participant responses. The left column indicates which vehicle participants used on their initial visit to the site, and the right column indicates which vehicle participants used upon repeat visits to the same site. Interestingly, first time visitors reported, in order of percentage used, vehicles used ONLY for backcountry (20.5%), rock specialized (12.5%), street licensed (12.1%), sand specialized (10.1%), and ATV (9.7%). Motorcycles made up 7.4% of first-time users' vehicles

used but constituted 92.6% of the repeat visitors. Snow specialized vehicles were used by 4% of first-time visitors, with the remaining 96% of snow specialized users reporting they were repeat visitors.

Table 152. Vehicle Type Used on Last Trip by Day/Overnight Trips (Percent)

Vehicle Type	Day Trip	Overnight Trip
Recreation Motorcycle / Motorbike	62.5	37.5
All-Terrain Vehicle	42.9	57.1
UTV, SxSs, ROV, Go-Kart	38.4	61.6
Sand-Specialized Recreational Vehicle	23.3	76.7
Rock-Specialized Recreational Vehicle	10.6	59.4
Snow-Specialized Recreational Vehicle	74	26
Amphibious Recreational Vehicle	50	50
Street Licensed Vehicle	51.1	48.9
Vehicle used ONLY for Backcountry	59	41

Table 152 outlines the OHVs/OSVs used at the destination site for two different types of trips – day trips and overnight trips. Snow-specialized recreational vehicles were the most frequently used vehicle at the destination site for day trips (74%), followed by recreational motorcycles/motorbikes (62.5%) and backcountry only vehicles (59%). For trips that involved an overnight stay, sand-specialized recreational vehicles were used at the site most frequently (76.7%), followed by recreational OHVs (61.6%), and rock-specialized recreational vehicles (59.4%).

Table 153. Vehicle Type Used on Last Trip by Purpose of Visit (Percent)

Vehicle Type	Traveling to another primary destination, but stopped as part of that trip	Visiting the site was the primary purpose for the trip	Attending a race event at the site was the primary purpose for the trip	Traveling to visit friends/family in the area, and stopped as part of that trip	Attending a non-race event at the site was the primary purpose for the trip	Participate in a race/competition at the site was the primary purpose for the trip	Traveling on a business or combined business /personal trip, and stopped as part of that trip
Recreation Motorcycle / Motorbike	3.1	7.8	1.5	2.7	10.3	3.6	0.9
All-Terrain Vehicle	3.6	78.2	0.6	7.4	8.0	1.4	0.8
UTV, SxSs, ROV, Go-Kart	4.3	74.4	2.4	3.1	10.8	3.1	1.9
Sand-Specialized Recreational Vehicle	2.2	80	1.1	4.4	8.9	3.3	0
Rock-Specialized Recreational Vehicle	1.6	64.8	3.1	3.1	12.4	14.6	0
Snow-Specialized Recreational Vehicle	4.1	86	0	1.8	6.8	0.5	0.9
Amphibious Recreational Vehicle	0	100	0	0	0	0	0

Vehicle Type	Traveling to another primary destination, but stopped as part of that trip	Visiting the site was the primary purpose for the trip	Attending a race event at the site was the primary purpose for the trip	Traveling to visit friends/family in the area, and stopped as part of that trip	Attending a non-race event at the site was the primary purpose for the trip	Participate in a race/competition at the site was the primary purpose for the trip	Traveling on a business or combined business /personal trip, and stopped as part of that trip
Street Licensed Vehicle	4.6	74.2	1.4	2.5	15.1	1.6	0.7
Vehicle used ONLY for Backcountry	10.3	66.7	2.6	5.1	15.4	0	0

Table 153 illustrates which vehicles the participants used during their visit, based on the purpose of the visit. Backcountry only vehicles were used the most by participants who were traveling to another destination but stopped as part of the trip (10.3%). Snow-specialized recreational vehicles (86%), sand-specialized recreational vehicles (80%), and all-terrain vehicles (78.2%) were most frequently used when visiting the destination site was the primary purpose of the trip. Rock-specialized recreational vehicles were used most frequently when attending a race was the primary purpose for the trip. If participants were traveling to visit friends and family as part of their trip, and needed to stop, all-terrain vehicles were most used (7.4%), followed by backcountry only vehicles (5.1%) and sand-specialized recreational vehicles (4.4%). Participants who were attending a non-race event at the destination site mostly used backcountry only vehicles (15.4%), street licensed vehicles (15.1%), and rock-specialized vehicles (12.4%). If participants were involved in a race or competition at the destination site, rock-specialized recreational vehicles were used (14.6%) with significantly greater frequency than other OHVs/OSVs. Finally, if participants were traveling for a business and/or personal trip, recreational off-highway vehicles were used most frequently at the destination site (1.9%). Additionally, due to the specialized nature of amphibious recreational vehicles, their usage only occurred when the destination site was purposefully designed to accommodate them.

Table 154. Vehicle Type Used on Last Trip by Gender (Percent)

Vehicle Type	Male	Female	Self-described	Prefer not to answer
Recreation Motorcycle / Motorbike	81.3	10.3	5.7	2.7
All-Terrain Vehicle	71.7	19.8	3.5	5.0
UTV, SxSs, ROV, Go-Kart	72.4	18	4.5	5.0
Sand-Specialized Recreational Vehicle	71.4	19	4.8	4.8
Rock-Specialized Recreational Vehicle	79.5	10.7	4.9	4.9
Snow-Specialized Recreational Vehicle	78.3	11.5	6.5	3.7
Amphibious Recreational Vehicle	100	0	0	0
Street Licensed Vehicle	75.2	14.5	6.0	4.2
Vehicle used ONLY for Backcountry	78.8	15.2	3.0	3.0

The data in Table 154 is very similar to the data previously reporting the type of vehicle owned. A higher percentage of females reported using ATVs, recreational off-highway, sand-specialized, vehicles for backcountry, and street licensed vehicles slightly more than the other vehicle types. Table 152 highlights the type of vehicle used at the destination site when compared to the gender of participants. Male participants in the study indicated using recreational motorcycles/motorbikes most frequently at the destination site (81.3%), followed by rock-specialized recreational vehicles (79.5%), and snow-specialized recreational vehicles (78.3%). Female participants in the study indicated using all-terrain vehicles (ATVs) most frequently at the destination site (19.8%), followed by sand-specialized recreational vehicles (19%), and recreational OHVs (18%). For those participants in the study who self-describe their gender, recreational motorcycles/motorbikes were most

frequently used at the destination site (5.7%), and for those participants in the study preferred not to identify a gender, ATVs and recreational OHVs were most frequently used at the destination site (5% each). Additionally, male participants in the study were the only individuals who indicated using amphibious recreational vehicles.

Table 155. Vehicle Type Used by Race/Ethnicity (Percent)

Vehicle Type	White or Caucasian	Hispanic / Latino	African American	Native American	Asian	Prefer not to answer	Other
Recreation Motorcycle / Motorbike	75.9	6.6	1.7	2.5	2.7	8.4	2.2
All-Terrain Vehicle	60.9	20.6	0.9	1.8	2.1	9.4	4.4
UTV, SxSs, ROV, Go-Kart	71.7	9.9	2.0	3.1	1.0	9.9	2.3
Sand-Specialized Recreational Vehicle	75.9	10.8	2.4	2.4	1.2	4.8	2.4
Rock-Specialized Recreational Vehicle	78	5.1	0	2.5	3.4	9.3	1.7
Snow-Specialized Recreational Vehicle	80.9	0.9	0.5	2.3	1.9	10.2	3.3
Amphibious Recreational Vehicle	100	0	0	0	0	0	0
Street Licensed Vehicle	74	7.6	0.6	2.5	3.2	10.5	1.7
Vehicle used ONLY for Backcountry	84.4	3.1	3.1	3.1	3.1	3.1	0

Table 155 above illustrates the type of vehicle used by participants at the destination site in comparison with participants' race/ethnicity. Over 60% of the participants who used each vehicle type indicated they were White or Caucasian. Over twenty percent (20.6%) of the participants who used ATVs and over ten percent (10.8%) of the participants who used sand-specialized recreational vehicles indicated they were Hispanic/Latino.

Table 156. Vehicle Type Last Used by Language Spoken at Home (Percent)

Vehicle Type	Always English	Mix of English and Spanish	Always Spanish	Other
Recreation Motorcycle / Motorbike	89.9	8	0.4	1.6
All-Terrain Vehicle	75.7	19.6	2	2.6
UTV, SxSs, ROV, Go-Kart	86.1	12.7	0.5	0.8
Sand-Specialized Recreational Vehicle	83.1	14.5	1.2	1.2
Rock-Specialized Recreational Vehicle	85.6	12.7	0	1.7
Snow-Specialized Recreational Vehicle	94.9	3.7	0	1.4
Amphibious Recreational Vehicle	100	0	0	0

Vehicle Type	Always English	Mix of English and Spanish	Always Spanish	Other
Street Licensed Vehicle	89.1	9.1	0	1.8
Vehicle used ONLY for Backcountry	93.9	6.1	0	0

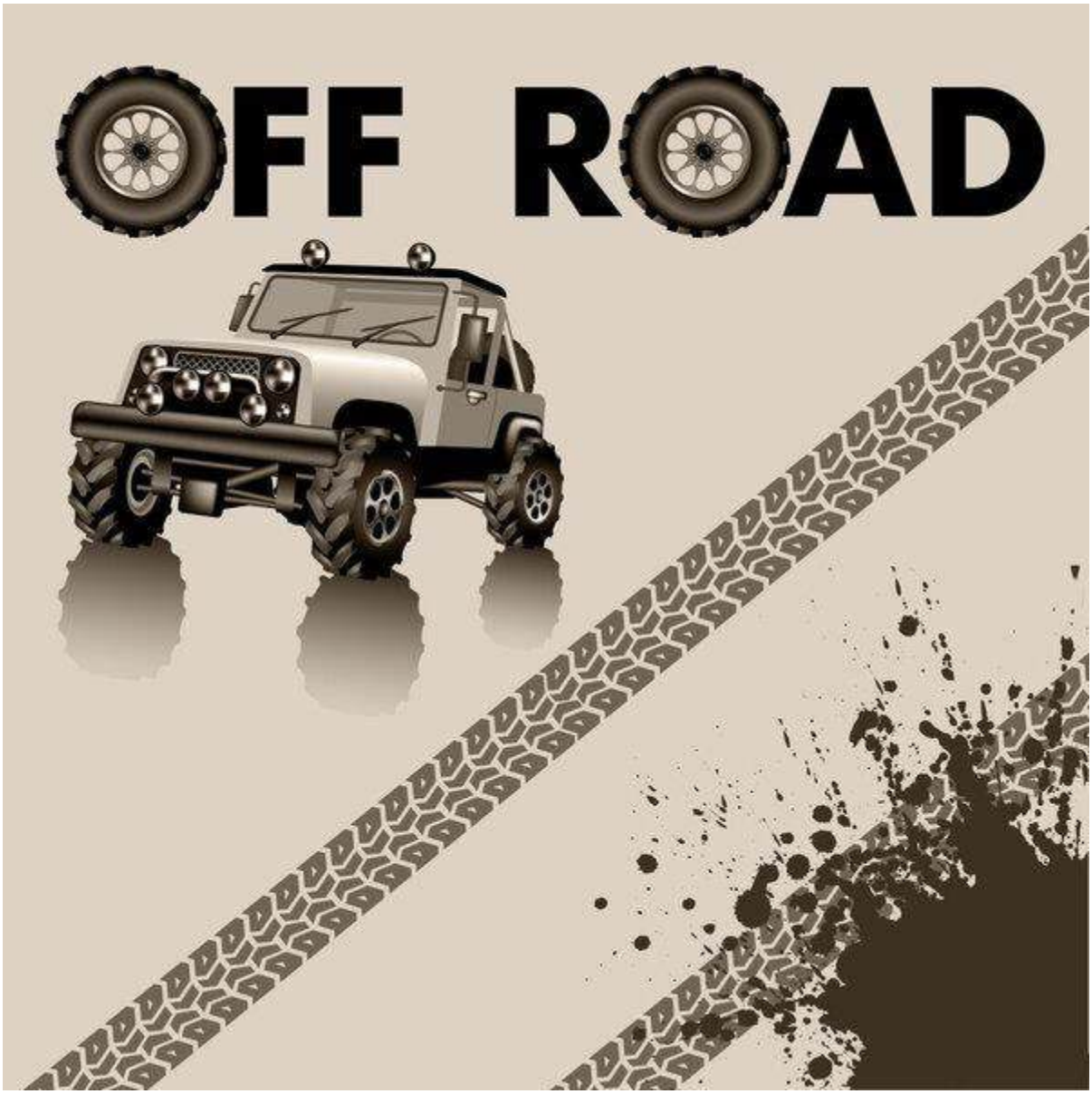
Table 156 indicates participants' vehicle usage at the destination site in comparison to the language spoken in the participants' homes. English was the only language spoken by over 75% of participants in the study, regardless of the type of vehicle used at the destination site. Nearly 20% of participants who used ATVs spoke a mixture of English and Spanish. Finally, less than 3% of participants in the study spoke only Spanish or another language, regardless of vehicle type used at the destination site.

Table 157. Vehicle Type Last Used by Education Level (Percent)

Vehicle Type	Some high school	Graduated from high school or GED	Graduated from college or technical school	Postgraduate Degree(s)
Recreation Motorcycle / Motorbike	2.7	28.7	55.4	13.2
All-Terrain Vehicle	3.9	32	52.2	11.9
UTV, SxSs, ROV, Go-Kart	1.8	31.8	54.7	11.7
Sand-Specialized Recreational Vehicle	3.6	33.7	50.6	12
Rock-Specialized Recreational Vehicle	1.7	30	56.7	11.7
Snow-Specialized Recreational Vehicle	0.9	27.9	52.1	19.1
Amphibious Recreational Vehicle	0	0	100	0
Street Licensed Vehicle	1.2	28.1	56	14.7
Vehicle used ONLY for Backcountry	2.9	11.8	64.7	20.6

Table 157 outlines participants' education level in comparison to the types of vehicles they used at the destination site. Regardless of vehicle type, over 50% of all participants in the study graduated from college or technical school, with backcountry only vehicle usage topping out at 64.7%. Over 20% of participants who used backcountry only vehicles also had postgraduate degrees. Less than 4% of all participants, regardless of vehicle type, had only some high school education.

SECTION VI. SUMMARY OF STUDY FINDINGS AND OBSERVATIONS



Source: California State Parks OHV Division, retrieved 4/19/2024 https://ohv.parks.ca.gov/?page_id=1233

The scope of work for this project was to develop and administer a study, analyze data, and prepare a report that examines the demographics of OHV/OSV recreationists and the economic contributions of off-highway motor vehicle recreation throughout California. The purpose of the study was to document the demographics of OHV/OSV recreationists and the economic contributions of OHV/OSV recreation throughout California. A summary of the findings/observations is included below.

Survey Description and Methodology

To calculate demographics and economic impacts for sites, the following were used:

- Data from all the USFS jurisdictions in California using the National Visitor Use Monitoring system which has counts for visitors and their activities, as well as demographics.
- Visitor data counts from all BLM Field Offices/Regions for OHV/OSV users.
- SVRA data counts to estimate visitors and activities as well as demographics.
- Survey data was utilized to estimate visitor demographics and spending based on the sites visited.
- Mean/median spending and spending party size were determined to estimate economic impacts of OHV/OSV users at USFS and BLM parks/sites.

Surveys were collected online, in person (intercepts) and via paper copies mailed to homes. Survey contacts and distributions were created by posting survey links (English and Spanish) on the State Parks OHV website. Invitations to participate in the survey were distributed via emails, personal visits to parks, retails establishments, clubs, and associations. A list of California Department of Motor Vehicles (DMV) registered OHV/OSV owners was obtained, and surveys mailed to randomly selected households on this list. Postcards with QR codes were distributed at entry points to sites that were staffed. At unstaffed sites students provided postcards with QR codes on selected days/times. Posters were made in English and Spanish and distributed to State of California OHV/OSV sites and federal lands.

Managing Recall/Non-response Bias and Error in Measuring Travel and Trip Characteristics

Recall bias is a systematic error that occurs when participants do not remember previous events or experiences accurately or omit details. The accuracy and volume of memories may be influenced by subsequent events and experiences. Non-response bias is ignoring the survey and prompts or not finishing the survey or skipping questions because the seemingly lack of relevance to the stated purpose of the study. Determining the quantity and direction of recall error is surprisingly difficult. The problem is that one rarely knows the true number of trips taken by any individual, so there is no benchmark against which to compare memory-reported trips.

This study design incorporated intercept surveys taken onsite to determine trip characteristics. In addition, the online survey and mail-out survey framed the questions using “the most recent trip” to address potential recall resulting in errors in self-reporting the last OHV/OSV trip taken (Howard, Lankford & Havitz, 1991). Given the process of collecting data (random mailed survey invitations, on-site intercepts and the online survey), the length of time collecting data (two years), and the collection of data from state and federal OHV/OSV areas, it is likely that the sample is representative (+/- 5%) to any given OHV/OSV attendance in California.

A total of 2,695 usable surveys were collected for analysis (160 mail-out, 2,234 English and 13 Spanish online surveys to total 2,256, and 279 intercept surveys). The mail out version of the survey resulted in a 60.3% (n=160) response rate. The online survey netted 2,247 surveys, and the intercept survey used at parks and sites netted another 279 surveys.

Estimating Economic Impacts

OHV/OSV user spending data collected through this study design was analyzed using the Impact Analysis and Planning (IMPLAN) modeling system. The IMPLAN model is a basic input-output economic model that was developed by the USFS in the 1970s as a resource management planning tool (https://implan.com/history/).

Many studies rely on estimates of visitor expenditures and visitor data, collected for the purpose of the study. Therefore, it is usually recommended that economic impact studies are customized for a specific area, and not rely on estimated expenditure averages. Otherwise, the likelihood of overemphasizing the impacts generated by sectors, and creating a misleading statement of the impacts, increases. This study was designed to collect the primary data from actual OHV/OSV users and owners of the equipment.

In summary, there are three elements that contribute to the total impact of visitor spending: (a) direct effect, which is the first-round effect of visitor spending; (b) indirect effect, which is the ripple impact of additional rounds of recirculating the initial visitors' dollars; and (c) induced effect, which is further ripple effects caused by employees of impacted business spending some of their salaries and wages in other business in the host community (Howard & Crompton, 1995). These three effects, when examined in totality, create a multiplier effect.

Study Objectives and Related Observations from this Research Project

Demographic and Recreation Use Information

Demographics of California OHV/OSV Users. The mean (average) age of survey respondents in this study (51.3 years), with a median age of 52.5 years. The oldest respondent's age was 85 years old, and the youngest respondent's age was 12 years old. The age range was 73 years.

Most survey respondents in this study were male (57.5%), with 10.9% of respondents identifying as female. Respondents who chose to indicate one's gender as "self-defined" comprised 4.1% of the group, and those respondents who preferred not to answer equaled 2.6% of the respondent group (does not round to 100% due to missing data). Females make up 14.4% of the first-time visitors, while males represent 10% of first-time visitors to the OHV/OSV sites that respondents identified as their most recent destination for OHV/OSV recreation. Most respondents, regardless of gender, were repeat visitors to the park/site visited.

Most respondents indicated their race/ethnicity was White or Caucasian (73.1%). Ten percent (10%) of respondents identified as Hispanic/Latino, with another 1.2% indicating African American, and 4.2% identify as Native American and 2.4% as Asian. Over eight percent (8.9%) preferred not to answer, and 0.2% identified as "Other." When viewing the race/ethnicity datapoints of first time and repeat visitors, there were a few similar results. Most first-time visitors (70.9%) are White or Caucasian, which is similar to the percentage of repeat visitors who are White or Caucasian (73.5%). First time and repeat visitors who indicated Native American as their race/ethnicity were 3.3% and 4.3%, respectively.

Over 65% of the respondents reported that English was the language always spoken at home (65.8%). Another 7.1% of the respondents indicated a mix of English and Spanish was spoken at home. Respondents who indicated being first time visitors spoke "Always Spanish" (33.3%) and "Mix of English/Spanish" (13.4%). Additionally, of first-time visitors, 20% spoke "Other" languages at home. As a result, 53.3% of first-time visitors spoke a language other than English.

The majority of respondents graduated from college or technical school (40.9%) and 10.6% of respondents held postgraduate degrees. Just over one-fifth of the respondents (21.3%) graduated from high school.

Most respondents (17.9%) reported income as $100,000-149,999 per year. Respondents making $100,000 and above make up 43.2% of the sample. The comparative analysis from previous research studies (cited in body of this report and in the appendix) indicates a similar pattern in western states with incomes of $100,000 or more per year, most notably California (49% above $100,000), and Arizona (48% in one study and 27.6% in another study).

OHV/OSV Travel and Trip Characteristics

The majority of respondents (88.1%) reported that they had visited the same park/site in the past. Additionally, most respondents (64.5%) traveled for the purpose of visiting that particular OHV/OSV recreational site. Furthermore, attending a non-race event (9.7%), attending a race event (1.3%), and participating in a race/competition (2.3%) were indicated as a primary purpose for visitation. Therefore, the total percentage of visitors with a primary purpose of travel related to OHV/OSV participation is 77.8%.

For repeat visitors, visiting the destination/site was the primary purpose for visitation with the greatest percentage of respondents (89%). For first time visitors, 26% of the respondents indicated that they stopped at the site on their way to another location.

OHV/OSV recreation enthusiasts are committed visitors to their favorite destinations/sites. Respondents averaged 20 years visiting the same destination/site, five months a year visiting the same site, and 3.7 days a month visiting the same site. This data outlines the OHV/OSV participant commitment to not only the destination/site they visited, but to the off-road recreation experiences as well. The estimated mean trips per year would be 3.7 days in a month x 5 months in a year = 18.5. OHV/OSV recreation enthusiasts in California are active participants who frequently visit OHV/OSV destinations/sites to enjoy off-road recreation adventures. Another question asked respondents to indicate how many months per year they participated in any outdoor recreation activity. The mean number of months per year for any type of outdoor recreation in California was 7.8 months per year.

The survey questionnaire asked respondents to indicate the frequency of visitation to the State of California SVRAs and SRAs. Hollister Hills SVRA and Oceano Dunes SVRA had the highest percentage of "Regularly" and "Sometimes" visitations according to the survey respondents. The percentage of respondents who had never been to the SVRAs and SRAs ranged from 19.5-46.3%. Given the wide range of OHV/OSV opportunities in California, and considering the repeat visitation and number of years, months and days visited a park by respondents this should not be surprising. The parks with the highest percent of those indicating they have "Never Been" include Heber Dunes (46.3%), Clay Pit (45.3%), San Luis Reservoir (45.2%), and Onyx (45.1%). Onyx is a relatively new property for the SVRA system. Clay Pit, Heber Dunes and Onyx are relatively remote and rural. San Luis Reservoir SRA may not be readily identifiable for OHV/OSV users.

The total number of visitors, based on visitor counts/estimates of the SVRAs from 1997 to 2023, was 64,879,551 (mean = 9,332,186 visitor counts). In 2023, the total number of visitor counts to SVRAs was 1,598,019. Prior to COVID-19, the total count in 2019 was 2,432,620 visitor counts, nearly 1 million more visitors than in 2023. When measuring percent changes in visitors from 2013 (where visitations were high) to 2023, we see the largest negative percentage changes in attendance at Oceano Dunes SVRA, Hollister Hills SVRA, and Prairie City SVRA. The COVID-19 pandemic detrimentally impacted attendance rates during the 2018–2023-time frame.

Respondents were asked to indicate what additional recreation activities they participated in during their most recent or current OHV/OSV trip. Just over one-third of the respondents indicated activities related to OHV related use (trail riding, motocross, enduros, poker runs). Trail riding had the highest percentage of respondents, followed by RV camping, photography, picnicking, tent camping, hiking, stargazing, and motocross.

Travel party size, which is how many people traveled with the survey respondent as a group (including the survey respondent). The data revealed that the mean travel party size was 6.2 persons, and 4 people as a median travel party size. The mean number of children in the travel party was 3.8 and the median number of children was 3.0.

Just over half of the survey respondents (51%) reported staying overnight on their OHV/OSV trip, with an average of 3.27 nights/trip and a median response of three (3) nights/trip. Slightly more first-time visitors were on day trips than first time visitors on overnight trips. The results are opposite with repeat visitors; slightly more repeat visitors were overnight visitors than day trip visitors.

A total of 29.6% of the respondents reported camping overnight of some type. Specifically, the majority (20.8%) of visitors who stayed overnight used the campgrounds at the site they were visiting. Another 3.5% stayed at other campgrounds, while 5.3% stayed in their RV/vehicle in undesignated sites. A smaller percent stayed in hotels, Bed & Breakfast lodging, and rentals like Airbnb and VRBO. First time visitors reported using Bed & Breakfast lodging more so than any other lodging (33.3%), followed by hotels/motels (15.9%), campgrounds not at the destination site (13%), and campgrounds at the destination site (10.4%). Repeat visitors tended to stay with friends/relatives in the area, rented accommodations such as Airbnb or VRBO, in their RV at an undesignated area, and at campgrounds at the site.

Respondents were asked to identify how they paid for park/site access. The majority (40.7%) reported that there were no user fees required at the site. Where there was a fee, the group paid upon arrival (29.6%), and 8.4% of groups paid in advance. Just over 14% of groups had annual passes. Only 6% did not know about fees paid for entrance to the park/site.

Over Snow Vehicular (OSV) Recreation Compared to Off-Highway Vehicular (OHV) Recreation

As noted in the first section of the report, there are an estimated 1,084,314 OSV user counts (235,720 distinct OSV riders in California, calculated by the total user count divided by mean travel party size of 4.6) in the State of California, and another 7,951,637 OHV user counts (over 2 million distinct OHV riders, see Section I for calculations).

OSV users averaged nearly five (5) nights per trip when recreating, and OHV users averaged over three (3) nights per trip. The number of nights per trip includes the nights spent at the destination, as well as the nights spent traveling to the destination.

OSV users on average had visited their destination/site for at least 20 years. Each year, OSV users spent an average of just over five (5) months visiting their destination site. Additionally, OSV users averaged just over five (5) days per month visiting their destination site. Similar results were seen for OHV users. OHV users on average had visited their destination site for nearly 21 years. Each year, OHV users spent an average of just over 5½ months at their destination site. Finally, OHV users spent an average of 3½ days per month visiting their destination site.

The age range for OSV users was 20-99 years, with the average OSV user age at 51 years and the median age at 52 years. For OHV users, the age range was 12-100 years, with the average OHV user age at nearly 52 years. The median age for OHV users was 53 years.

The majority (75%) of OSV users identified as male, with 11% identifying as female. Nearly 10% of the OSV users either self-defined their gender or chose not to answer. The gender comparison statistics for OHV users was nearly identical, with over 73% of OHV users identifying as male, and over 13% identifying as female.

Over 75% of OSV users and over 50% of OHV users indicated they did not stay overnight at their destination site. If overnight stays did occur as part of the overall trip, OSV users stayed with friends or relatives in the area (8.8%), stayed at the campground at their destination site (4.8%), a campground at a different location (4.8%), or at a hotel or motel (4%). OHV users that stayed overnight used the campground at their destination site (26.4%), stayed in a Recreational Vehicle (RV) or a different type of vehicle in an undesignated area for overnight stays (6.9%), or at a campground at a different location (4.2%).

For OSV users, travel groups averaged at least four adults per group, while travel groups also averaged at least two children per group. For OHV users, travel groups averaged at least seven (7) adults per group and at least five (5) children per group.

OSV users saw drastic differences in spending patterns related to lodging. OSV users spent an average of $450 in lodging while traveling to their destination site, and an average of $4,000 in lodging at their destination site (note that some respondents reported longer stays, thereby increasing lodging costs which skewed the average). The difference in these two spending categories was not nearly as extreme for OHV users. On average, OHV users spent $267 on lodging while in transit to their destination site and averaged $475 in lodging at their destination site.

For dining and socializing at bars and restaurants, OSV users spent an average of just over $100 in transit, while spending nearly an average of $200 once at their destination site. Again, the difference of OHV users was not as significant. An average of almost $100 spent by OHV users while traveling to the destination site, but only an average of $122 spent while on location.

For OSV and OHV users, food and other items were purchased at grocery stores and convenience stores as well. For OSV users, an average of $65 was spent in transit to the destination site, while $110 on average was spent at grocery stores and convenience stores upon arrival. For OHV users, an average of $128 was spent in transit to the destination site, while less money was spent on average once at the destination site ($91).

Gas, fuel and transportation costs for all vehicles are a necessity to enjoy a recreation experience of this nature. For OSV users on average, they spent $115 in transit, and averaged just over $140 once at the destination site. OHV users saw a higher average on these costs in transit ($155), but a lower cost on these items once on location ($112).

In many cases, OSV and OHV events may require an admission, attendance, or participation fee. OSV users spent an average of just over $30 on these types of fees while traveling to their destination site. Once at the destination site, OSV users spent over twice that amount ($77) on these fees. On average, OHV users paid higher fees of this nature while traveling to their destination site ($73) and on location ($122).

In many instances, OSV and OHV events serve food for all-day enthusiasts and spectators. Additionally, buying food at festivals or events that are a part of the travel plan to the destination site may also occur. OSV users averaged $59 on food purchased at these events while traveling to the destination site, and over twice that amount on average at the destination site event ($114). OHV users averaged over $120 on this food while traveling to the destination site and spent less on average ($97) at the destination site event.

Finally, additional recreation services, such as guided tours of the area, can serve to enhance the OSV and OHV users' experiences. OSV users averaged $279 on these additional recreation services while traveling to the destination site, and $224 on these services once at the destination site. OHV users saw a significantly less amount of money spent in both categories related to additional recreation services. While traveling to the destination site, OHV users averaged $75 on these services. Upon arrival, OHV users spent an average of just under $140 on these additional recreation services.

For OSV users, all equipment rentals occurred at the destination site, with $277 as the average cost for renting OSV equipment. While in transit OSV users on average spent over $20,000 purchasing equipment; once at the destination site, OSV users spent an average of over $15,000 on purchasing equipment. Additionally, OSV users spent an average of $1,200 on repairs to their equipment in transit, while spending nearly as much on average ($1,176) in repairs once at the destination site.

For OHV users, equipment rental occurred in transit and on location. OHV users averaged $760 on in transit equipment rental, while averaging a lower cost for equipment rental ($449) at the destination site. Similar to OSV users, OHV users also saw a higher average purchasing cost for equipment in transit ($15,327) when compared to purchasing at the destination site ($7,810). Finally, OHV users spent slightly more on equipment repair in transit ($1,468) than at their destination site ($1,048).

Economic Contributions of OHV/OSV Recreation

The average tax collected for OHV/OSV purchases for all counties is $4,183,177, with a median of $1,594,706, and a total tax collected statewide of $246,807,483. Residents of the more populated Counties paid more in taxes for OHV/OSVs. However, the smaller Counties still reported significant taxes collected during the vehicle registration process. Counties with $2,000,000 or more in taxes collected on OHV/OSV sales and registrations include Alameda (over $6M), Butte (over $2M), Contra Costa (over $7M), El Dorado (over $3M), Fresno (over $5M), Imperial (over $2M), Kern (over $7M), Los Angeles (over $46M), Monterey (over $2M), Nevada (over $2M), Orange (over $19M), Riverside (over $24M), Sacramento (over $7M), San Bernardino (over $22M), San Diego (over $24M), San Joaquin (over $5M), San Luis Obispo (over $2M), San Mateo (over $3M), Santa Clara (over $5M), Sonoma (over $2M), Stanislaus (over $2M), Tulare (over $2M), and Ventura (over $4M).

The spending party size mean=2.93 people, and the median for spending party size = 2.0 people. Calculations were made to identify the average and median expenditures per party for various spending categories related to destination/site visits. Per trip and per spending party, notable findings (median spending as conservative estimates) include lodging ($258 per trip), transportation ($180 per trip), restaurants and bars ($125 per trip), and groceries ($100 per trip). Spending at the destination/site includes admissions ($44 per trip), souvenirs ($110), food at the event/site ($115), and recreation guides services ($69).

Capital expenses per spending party for destination/site visits, includes rentals, purchases, and repairs of OHV/OSV equipment. A finding is that OHV/OSV equipment rentals show higher mean spending compared to purchases and repairs. Overall, there is less mean spending per party once at the destination/site than traveling to the destination/site. In terms of median spending, OHV rentals were $665 per trip, OHV purchases $12,000, and repairs $500. It should be noted that only a small percentage of survey respondents (1-2%) on capital expenses.

Spending varied across categories among different destination/site types, including SVRA, USFS, BLM. The category of “Other” was used to calculate any destinations/sites that did not fall under SVRA, USFS, or BLM management. Notable findings reveal that mean spending on lodging is highest for "Other", while transportation/gas expenses are notably higher for BLM destination/sites. Admissions in town and festival/events show substantial variability across destination/site types. Additionally, mean spending on recreation services is highest for USFS destinations/sites. SVRA destinations/sites witness higher spending on rentals of OHV/OSV equipment compared to other destination/site types. Furthermore, OHV/OSV Equipment Purchases is highest for BLM destinations/sites in both mean and median values.

Total **direct** spending (reported expenses for trip on survey data collected) was calculated for travel expenses for SVRAs, USFS and BLM sites. Median spending for all travel for the SVRAs is $70,128,920, for the USFS is $3,524,092, and for BLM users $105,764,932. Capital expenditures for SVRAs are $121,052,624, for the USFS are $8,356,719, and for BLM users are $456,002,905.

Revenue Per Available Visitor (RPAV) represents an important metric in the context of state park tourism, shedding light on the holistic economic value of every visitor, whether paying or non-paying. It is calculated by dividing total relevant expenditures (revenue) by the total number of visitors to a given destination. As such, RPAV encompasses the entirety of visitors' spending potential, spanning transport, recreational activities, lodging, food, and souvenirs. The RPAV for travel related trip expenditures is approximately $292.90. The RPAV for capital related spending is approximately $2,606. OHV/OSV park managers and communities adjacent to the OHV/OSV recreation destinations/sites can apply and estimate the potential revenues based on tickets sold, vehicular counts and attendance figures.

IMPLAN Economic Models

To estimate the economic impacts of OHV/OSV recreation in California, outputs from each sector were examined as inputs to other sectors of the economy. Resulting model estimates economic impacts of OHV/OSV recreation in the state of California on the total value of economic transactions, value added, and employment. The model relied on median spending data as reported by OHV/OSV visitors, to avoid the risk of inflating the numbers when using average expenditure figures. Based on visitor spending data, OHV/OSV recreational users in California:

- Generated over $10 billion in economic output in the state,
- Supported over 58,000 jobs, and
- Generated nearly $1.8 billion million in tax revenues, including $508 million in state tax revenues.

Based on visitor spending data, OHV/OSV recreational users' economic impacts on the counties where the SVRA's are located, and adjacent counties is reported as follows.

Carnegie SVRA

Based on visitor spending data, OHV/OSV recreational users in Carnegie SVRA:

- Generated near $39 million in economic output in the state,
- Supported 260 jobs, and
- Generated nearly $7 million in tax revenues ($3,501,038 million in state and county tax revenues).

Clay Pit SVRA

Based on visitor spending data, OHV/OSV recreational users in Clay Pit SVRA:

- Generated near $30 million in economic output in the state,
- Supported over 200 jobs, and
- Generated over $5 million in tax revenues ($2,642,225 in state and county tax revenues).

Heber Dunes SVRA

Based on visitor spending data, OHV/OSV recreational users in Heber Dunes SVRA:

- Generated over $18 million in economic output in the state,
- Supported 130 jobs, and
- Generated over $3 million in tax revenues ($1,729,430 million in state and county tax revenues).

Hollister Hills SVRA

Based on visitor spending data, OHV/OSV recreational users in Hollister Hills SVRA:

- Generated near $49 million in economic output in the state,
- Supported over 360 jobs, and
- Generated over $8 million in tax revenues ($4,817,371 million in state and county tax revenues).

Hungry Valley SVRA

Based on visitor spending data, OHV/OSV recreational users in Hungry Valley SVRA:

- Generated near $117 million in economic output in the state,
- Supported 676 jobs, and
- Generated over $20 million in tax revenues ($9,642,075 million in state and county tax revenues).

Oceano Dunes SVRA

Based on visitor spending data, OHV/OSV recreational users in Oceano Dunes SVRA:

- Generated over $379 million in economic output in the state,
- Supported over 2,600 jobs, and
- Generated over $63 million in tax revenues ($32,856,861 million in state and county tax revenues.

Ocotillo Wells SVRA

Based on visitor spending data, OHV/OSV recreational users in Ocotillo Wells SVRA:

- Generated over $800 million in economic output in the state,
- Supported over 5,000 jobs, and
- Generated near $140 million in tax revenues ($69,073,783 million in state and county tax revenues)

Prairie City SVRA

Based on visitor spending data, OHV/OSV recreational users in Prairie City SVRA:

- Generated over $59 million in economic output in the state,
- Supported 385 jobs, and
- Generated over $9 million in tax revenues ($4,994,379 million in state and county tax revenues).

Mammoth Bar – Auburn State Recreation Area

Based on visitor spending data, OHV/OSV recreational users in Mammoth Bar SRA:

- Generated nearly $7.2 million in economic output in the state,
- Supported 48 jobs, and
- Generated over $1.2 million in tax revenues ($611,962 thousand in state and county tax revenues).

Red Rock Canyon State Park

Based on visitor spending data, OHV/OSV recreational users in Red Rock Canyon SRA:

- Generated nearly $11 million in economic output in the state,
- Supported 73 jobs, and
- Generated over $1.9 million in tax revenues ($968,050 thousand in state and county tax revenues).

Jasper Sears OHV – San Luis Reservoir SRA

Based on visitor spending data, OHV/OSV recreational users in Jasper Sears:

- Generated nearly $2.8 million in economic output in the state,
- Supported 20 jobs, and
- Generated over $476 thousand in tax revenues ($259,640 thousand in state and county tax revenues).

Table 158. Summary of the Economic Output Associated with State Vehicular Recreation Areas (SVRA) and State Recreation Areas (SRA) in 2023 Dollars.

Park	County & Contiguous Counties $ of Output	County of Park $ of Output	State & County Tax Revenues in Dollars	Jobs
Carnegie	38,984,376	34,122,624	3,501,038	260
Clay Pit	29,647,771	29,031,219	2,642,225	200
Heber Dunes	18,231,757	16,806,423	1,729,430	130
Hollister Hills	48,942,411	41,696,352	4,817,371	360
Hungry Valley	116,875,923	111,272,787	9,642,075	676
Oceano Dunes	379,135,462	348,828,961	32,856,861	2,600
Ocotillo Wells	805,923,817	780,250,872	69,073,783	5,000
Prairie City	59,459,732	55,317,278	4,994,379	385
Mammoth Bar SRA	7,179,316	6,810,495	611,962	48
Red Rock Canyon SRA	10,926,897	9,562,136	968,050	73
Jasper Sears SRA	2,778,751	2,530,480	259,640	20
Statewide	10,092,155,725	N/A	847,638,570	58,000

Note: Statewide includes OHV/OSV recreation on federal lands.

Special Event Economic Impacts and Visitor Characteristics

There are an estimated 128,447 special event attendees at California SVRAs, another 46,843 who attend special events on USFS lands, and 214,367 visitors who attend special events on BLM lands. There is a total of 9,035,951 OHV/OSV users, of which 389,657 OHV/OSV riders participate (race or compete) in a special event. The median (n=5) number of individual travel parties (18+ years of age) is 77,931. The median (n=2 persons per spending party) number of spending travel parties is 194,828. When looking at the purpose of the visit, a total of 1,201,781 OHV/OSV enthusiasts travel to attend and or participate in a special event.

An overwhelming majority of the participants were repeat visitors. 88% of the special event users were repeat visitors. There were more first-time visitors (20.8%) who were on a side-trip.

Special Event users averaged nearly three (3) nights per trip when attending an event, while users who were visiting that site/park as their primary purpose averaged 3.4 nights. Fifty percent of the special event users spent an overnight, while the majority of those visiting for the purpose of going to that park/site and a side trip were day users. The number of nights per trip includes the nights spent at the destination, as well as the nights spent traveling to the destination.

Special event users on average had visited their destination/site for at least 24 years on average, while those visiting for the purpose of being at that park reported on average 20 years. Each year, all users spent an average of just over five (5) months visiting their destination site. Additionally, special event users averaged just over three (3.6) days per month visiting their destination site. Similar results were seen for those users whose primary purpose of visitation was for that park/site.

The age range for special event users was 69 years, with the average age of 56.3 and 59 years as the median age. For those whose primary purpose of visiting that park/site, the average was 50.7, with a median age of 52, and a range of 73 years. The users who were on a side trip reported an average age of 48.7, (nearly 8 years younger than the special event users), and a range of 64 years.

Over sixty-seven (67.5%) percent of the special event users were male, as compared to 53% males visiting as a side trip. Over twenty (21.7%) percent of those on a side trip were female.

English is always spoken at home for an overwhelmingly large percent of the participants, but with some differences. Those on a side trip had a lower percent "always speaking English," and significantly more speaking a mix of Spanish and English at home (16.1%), as well as always Spanish (3.75). It should be noted that nearly 90% of all survey respondents indicated always speaking English at home.

For special event users, nearly 50% (49.3%) graduated from college or technical school. Another 9.7% of special event users completed a postgraduate degree, while 26.2% had a high school education, a high school diploma, or a GED. Those that visited the park as their primary purpose of visit, had a similar distribution as the special event users. Those on a side trip, had about 10% less who graduated from college or a technical school, and slightly higher percent who had some high school.

Special event users who made between $100,000-$149,000 comprised 17.1% of that user group. Similarly, 21.4% of those whose primary purpose of visiting that site/park earned the same amount, and 18% of those on a side visit. Over 16% of the special event users and 17.4% of those that purposely visited the site/park earned $200,000 and above.

For those attending special events, it was a non-race type of event (72.6%), attending a race event (10%), and participating in a race/competition (17.4%). Those visiting the park as the primary purpose represented nearly 75% (74.9%) of that group. Finally, nearly half (47.9%) of those on a side trip were traveling to another primary destination, and another 38.7% were visiting friends and relatives.

Most special event users stayed in a campground at the site (31.3%), followed by staying in their RV in undesignated areas (10.3%). A similar pattern is found within the group visiting that park. Those on a side trip had a higher percent staying with relatives (6.9%), at campgrounds elsewhere (8.8%) and in hotels/motels (5.1%).

For special event users, travel groups averaged 8 adults per group, and 4 children. The other two groups had smaller sized travel groups. Most participants by purpose of visit utilized the SVRAs. It appears that those attending special events primarily utilized the California State Vehicle Recreation Areas (41.6%), then the Other (21.9%, private/municipal), then the USFS (22.5%) and BLM (14%).

Those users who were on a side trip out spent the other special event and those visiting that park in the lodging category both traveling to the destination and at the destination. Furthermore, those on a side trip spent more at restaurants and bars, and groceries while traveling to and at the destination. Admissions expenditures for those traveling for a special event are significantly higher than the other two groups of travelers. This makes sense due to entry fees for special events. As for recreational type services such as guides, those on a side trip spent more while traveling to the park/site, with those engaged in a special event following closely.

Estimate the Current Number of Visitors

The following figures can be viewed within the context of repeat visitors or how many trips per month and year. However, using available visitor counts provided by the resource management agencies we can estimate the number of users. As can be seen in Tables 3-6 in the report, the estimated total OHV/OSV user counts in California on United States Forest Service (USFS) lands is 1,040,948 (2.6 average number of people in the spending party); on Bureau of Land Management (BLM) lands is 6,304,914 (2.7 average number of people in the spending party); and State Vehicular Recreation Area (SVRA) lands is 1,690,089 (3.05 average number of people in the spending party) per year. The total number of OHV/OSV user counts in California is estimated to be 9,035,951.

Estimation of Distinct Total OHV/OSV Users

Given these calculations, it is reasonable to assume that there are at least 1.4 million to 2.2 million OHV/OSV distinct users in California, perhaps more, as presented within these calculations. For discussion purposes and analysis, we can assume that the calculation using the total visitor count (9,035,951) and median travel party size (4) results in 2,258,987 distinct OHV/OSV users in California, which is 5.79% of the California population. Coincidentally, this number is similar to the result using registered vehicles and median travel party size resulting in 2,526,667 distinct users.

Table 159. Estimated Number of Distinct OHV/OSV Users in California

	Registered Vehicles Times Travel Party Size	Total Visitor Count Divided by Times Visited Per Year	Total Visitor Count Divided by Travel Party Size	Comparison to Arizona and Oregon Percentage of Population*
Mean	3,916,347	492,154	1,457,411	
Median	2,526,667	602,396	2,258,987	
*Based on 12.6% of the Population (Arizona)				4,909,614
*Based on 15.9 % of the Population (Oregon)				6,195,465

When considering the expenditures of OHV/OSV recreation visitors to an area, the primary purpose of the visit is the criteria in which to determine what and how much of the expenditure can be counted toward the economic impacts. For this study, the primary purpose of the visit is to participate in OHV/OSV recreation at the park/site. Seventy-seven (77.8%) of the OHV users had as a primary purpose to engage in OHV/OSV at the park/site, with another 8.2% engaging in OHV/OSV activities while on a trip elsewhere. Therefore, 6,957,682 million OHV/OSV user counts travel for the specific purpose of engaging in off-road recreation. There are 4,608,335-day user counts and 3,207,762 overnight user counts engaged in off-road recreation. OHV/OSV

recreation enthusiasts who are considered local and traveling less than 50 miles from home are estimated to be 3,614,380 user counts, and those considered non-local equal 5,394,462 user counts engaged in off-road recreation in California.

OHV/OSV enthusiasts reside in all California counties. The sample for this study represents respondents from each California county, except for Alpine County. Los Angeles County had the highest percent of respondents with 7% of the sample, followed by Santa Clara County (6.8%). Contra Costa County (5%), Fresno County (4.7%), Alameda (4.6%), Sacramento County (4.1%) and San Diego (4.1%) followed with the next largest percentage of respondents.

- **Forecast OHV/OSV Ownership Projections and Trends by Type of Vehicle**

Nearly 10% of riders owned two (2) motorcycles, with another 15% of riders reporting owning 4+ motorcycles. This is logical when viewing the travel party size, and that most visitors were using motorcycles (families owning multiple motorcycles for members of the family to use). Nearly 6% of riders owned a UTV, SxS, ROV, or Go-Kart, and 13% of riders owned a street licensed vehicle – of which 6.3% of riders owned 4+ street licensed vehicles. In terms of owning 2+ OHV/OSVs, (a) 30% of respondents owned 2+ motorcycles; (b) 7.8% owned 2+ ATV's; (c) 7.4% owned 2+ UTVs, SxSs, ROV, or Go-Karts; (d) 6.9% owned 2+ snow-specialized vehicles; and (e) 14.5% owned 2+ street licensed off-road vehicles. Participants who owned one vehicle owned a street licensed vehicle more than other OHVs/OSVs. Participants who owned 2+ vehicles were prone to have recreational motorcycles/motorbikes more than other OHVs/OSVs.

The highest percentage of vehicles used at SVRAs are motorcycles, ATVs, sand-specialized and street licensed OHVs. For the USFS, snow-specialized, rock-specialized, amphibious are more prevalent. BLM land users mostly use sand, recreational off-highway, and back country only vehicles. Sand-specialized recreational vehicles (65%) were owned by participants who most frequently visited SVRAs, followed by owners of ATVs (60%), and recreational motorcycle/motorbikes (54%). Snow-specialized recreational vehicles (80%) were owned by participants who most frequently visited USFS landscapes, followed by owners of amphibious recreational vehicles (50%), and rock-specialized recreational vehicles (34%). Backcountry only vehicles were owned by participants who most frequently visited BLM landscapes, followed by owners of sand-specialized recreational vehicles (22%), and recreational OHVs (21%).

The types of OHV/OSV vehicles used by survey respondents for their current or last trip were identified in the survey. Recreational motorcycles/motorbikes were the most frequently used OHV/OSV based on participants' responses, followed by street licensed vehicles. Amphibious recreational vehicles were the least used type of OHV/OSV during the participant's most recent trip. The recreational motorcycle/motorbike was used by 33% of the survey respondents, with another 24% using street licensed off road vehicles (jeeps, pickups etc.), followed by recreational off-highway vehicles (13.6%) and ATVs (12.1%).

OHVs/OSVs used at the destination site for two different types of trips – day trips and overnight trips were identified. Snow-specialized recreational vehicles were the most frequently used vehicle at the destination site for day trips (74%), followed by recreational motorcycles/motorbikes (62.5%) and backcountry only vehicles (59%). For trips that involved an overnight stay, sand-specialized recreational vehicles were used at the site most frequently (76.7%), followed by recreational OHVs (61.6%), and rock-specialized recreational vehicles (59.4%).

A higher percentage of females reported using ATVs, recreational off-highway, sand-specialized, vehicles for backcountry, and street licensed vehicles slightly more than the other vehicle types. Male participants in the study indicated using recreational motorcycles/motorbikes most frequently at the destination site (81.3%), followed by rock-specialized recreational vehicles (79.5%), and snow-specialized recreational vehicles (78.3%). Female participants in the study indicated using all-terrain vehicles (ATVs) most frequently at the destination site (19.8%), followed by sand-specialized recreational vehicles (19%), and recreational OHVs

(18%). For those participants in the study who self-describe their gender, recreational motorcycles/motorbikes were most frequently used at the destination site (5.7%), and for those participants in the study who preferred not to identify a gender, ATVs and recreational OHVs were most frequently used at the destination site (5% each). Additionally, male participants in the study were the only individuals who indicated using amphibious recreational vehicles.

Counties with ownership as a percentage of the population at 2% or under include Alameda, Contra Costa, Del Norte, Fresno, Kings, Los Angele, Marin, Merced, Monterey, Orange Sacramento, San Diego, San Francisco, San Mateo, Santa Barbara, Santa Clara, Solano, and Yolo. Counties with 5% or higher OHV/OSV ownership include Alpine, Amador, Calaveras, Colusa, El Dorado, Glenn, Inyo, Lassen, Mariposa, Modoc, Mono, Nevada, Plumas, Sierra, and Tuolumne.

Currently registered OHV/OSV by County was reviewed. Counties with the highest number of motorcycle and ¾ wheel motorcycle include Alameda, Butte, Contra Costa, El Dorado, Fresno, Kern, Los Angeles, Orange, Placer, Riverside, Sacramento, San Bernardino, San Diego, San Joaquin, Santa Clara, Shasta, Solano, Sonoma, Stanislaus, Tulare, and Ventura. Counties with over 300 snowmobiles include Alameda, Butte, Calaveras, Contra Costa, El Dorado, Fresno, Los Angeles, Mono, Nevada, Placer, Plumas, Sacramento, San Joaquin, Santa Clara, Shasta, Siskiyou, Stanislaus, Sutter, Tuolumne, and Yuba. Notably, Sutter, Nevada, Placer, and El Dorado have over 1000 snowmobiles registered.

Using DMV data from 2016-2023, calculations were made as to the increase or decrease in DMV registered vehicles by type out to the year 2027. Overall projected rates of change for all types of registered OHV/OSV from 2016 to 2027 are as follows. Humboldt, Santa Clara, Sierra, Orange, and Trinity Counties have the lower rates of projected vehicular registrations (15% or less). From 2016-2027, Counties with the highest projected rates of vehicular registrations (40% growth rate) in the future include Calaveras (48.5%), Imperial (42.6%), Lake (42.4%), Merced (43.8%), Monterey (42.9%), Nevada (57.9%), Riverside (41.4%), San Benito (46.9%), San Francisco (40.1%), Sutter (50.4%), Tehama (41.4%) and Yuba (47.1%).

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APPENDIX A – LITERATURE REVIEW OF PREVIOUS ECONOMIC IMPACT STUDIES

NOTES:

1) N/A -> This information was not present in the Technical Report or was not included in the survey design.
2) Bold variable -> largest variable in the category if multiple entries exist.
3) Southwick & Associates (2012-2013) Technical Report involving the Western Governors Association. The following States are a part of the Western Governors Association: Alaska, Arizona, California, Colorado, Hawai'i, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, Wyoming.
4) Backcountry Discovery Routes (2018) Report involved the following States: Arizona, Utah, Colorado, Idaho, Washington, Nevada, New Mexico.

Literature Review – Demographic Characteristics

	Gender	Race/ Ethnicity	Mean Age/ Median Age	Age Ranges	Education Level	Yearly Income
Nelson et al. (2000) – Michigan	**Male – 93.7%** Female – 6.3%	N/A	43.8 years/ N/A	N/A	Equal to/greater than 1 year of college education = 47.9%	Median - $40,000-$59,999
Silberman (2003) – Arizona	N/A	N/A	47 years/ N/A	N/A	College Degree - 32.2%	Less than $25,000 – 8.7% **More than $75,000 – 27.6%**
Okrant & Goss (2004) – New Hampshire	N/A	N/A	N/A	N/A	N/A	N/A
Wisconsin Department of Tourism Research (2004) – Wisconsin	**Male – 75%** Female – 25%	N/A	40 years/ N/A	N/A	Education beyond HS – 64%	Less than $10,000 - 0.8% $10,000-$20,000 - 3.7% $21,000-$40,000 - 22% **$41,000-$60,000 - 29.9%** $61,000-$80,000 - 23.7% $81,000-$100,000 - 12.5% $100,000+ - 7.5%
Rubin & Morris (2005) – Maine	**Male – 87.6%** Female – 12.4%	N/A	47.4 years/ N/A	Less Than 29 years - 9.2% 30-39 years - 20.2% **40-49 years - 29%** 50-59 years - 22.7% 60+ years - 18.9%	**Some HS/HS Degree/GED - 48.1%** Some College/2-year Degree - 37.4% Bachelor's Degree/Graduate College Coursework - 14.5%	Less than $25,000 - 11% $25,000-$39,999 - 13% $35,000-$49,999 - 22% **$50,000-$74,999 - 29%** $75,000-$99,999 - 13% $99,000+ - 12%

	Gender	Race/ Ethnicity	Mean Age/ Median Age	Age Ranges	Education Level	Yearly Income
Parent et al. (2007) – Florida	**Male – 84.5%** Female – 15.5%	African- American – 1.4% Hispanic/Latino – 3.5% **Caucasian – 91%** Native American – 4.2%	N/A	18-29 years – 17% 30-39 years – 23% 40-49 years – 48% 50+ years – 12%	N/A	N/A
Jakus et al. (2008) – Utah	N/A	**Caucasian – 98.4%** Other – 1.6%	N/A	<30 years – 6.9% **30-50 years – 49%** 50+ years – 45%	Less than High School – 2.3% High School Graduate – 20.8% **Some college – 48.5%** Bachelor's degree – 19.0% Post-graduate degree – 8.7%	Less than $49,999 – 19.6% **$50,000 - $74,999 – 27.6%** $75,000 - $99,999 – 25.5% $100,000 - $149,999 – 17.7% Over $150,000 – 9.6%
Martin et al. (2010) – Ohio	**Male – 89%** Female – 6.3%	**Caucasian – 93.7%** Native American – 2.5% Asian/Pacific Islander – 0.8% Hispanic/Latino – 0.1%	38.7 years	N/A	**HS/GED - 33.8%** Trade/Vocational School - 16.7% Some College Education - 21.7% 2-year Degree - 10.8% Bachelor's Degree - 15.8% Graduate Degree - 1.3%	Less than $25,000 - 9.4% **$25,000-$49,999 - 28.2%** $50,000-$74,999 - 25.6% $75,000-$99,999 - 18.8% $100,000-$124,999 - 11.2% $125,000+ - 6.7%
Thompson et al. (2012) – Minnesota	**Male – 76.6%** Female – 23.4%	N/A	Over 18 years	Less than 13 years - 10% 13-18 years - 7.4% **18+ years - 82.6%**	N/A	N/A
Carper et al. (2013) – Wisconsin	**N/A**	N/A	45.6 years	N/A	Some high school – 4% **HS Graduate – 35%** Some college/technical school – 26% Associate Degree/Certification – 9% College Degree – 18.75% Some Graduate School – 1.75% Graduate Degree – 4% Other – 1%	Less than $25,000 – 7.5% $25,000-$49,999 – 22.5% **$50,000-$74,999 – 32.5%** $75,000-$99,999 – 19.25% $100,000-$149,999 – 12.25% $150,000+ - 6%

	Gender	Race/ Ethnicity	Mean Age/ Median Age	Age Ranges	Education Level	Yearly Income
Pardue et al. (2014) – West Virginia	**N/A**	N/A	N/A	18-24 years - 2% 25-34 years - 12% 35-44 years - 28% **45-54 years - 33%** 55-64 years - 19% 65+ years - 6%	N/A	Less than $25,000 - 1% $25,000-$49,999 - 8% $50,000-$74,999 - 19% $75,000-$99,999 - 20% $100,000-$199,999 - 28% $200,000+ - 6%
Lindberg & Bertone-Riggs (2015) – Oregon	**Male – 89%** Female – 11%	N/A	N/A	**18-29 years - 30%** 30-39 years - 21% 40-49 years - 22% 50-59 years - 15% 60-69 years - 8% 70+ years - 4%	N/A	Less than $25,000 - 7% $25,000-$34,999 - 7% $35,000-$44,999 - 14% **$50,000-$74,999 - 25%** $75,000-$99,999 - 19% $100,000-$149,999 - 21% $150,000+ - 8%
Janke & Trechter (2015) – Wisconsin	**Male – 69%** Female – 31%	N/A	N/A	18-24 years - 7% 25-34 years - 15% 35-44 years - 20% **45-54 years - 33%** 55-64 years - 17% 65+ years - 8%	**HS/GED - 33%** Some college/trade/vocational school - 26% 2-year degree - 19% Bachelor's degree - 18% Graduate Degree - 5%	Less than $25,000 - 2% $25,000-$49,999 - 18% **$50,000-$74,999 - 27%** $75,000-$99,999 - 21% $100,000-$149,999 - 25% $150,000+ - 7%
Chhabra (2017) – Arizona	**Male – 87%** Female – 13%	Caucasian – 90%	55 years 56 years	N/A	Some college, trade, vocational school - 41.4% **College Graduate - 56%**	Less than $40,000 - 7.4% **$100,000+ - 48.6%**
Oceano Dunes – SMG Consulting (2017) – California	**Male – 51%** Female – 49%	**Caucasian– 57%** Hispanic – 27% Prefer Not to Answer – 7% Asian – 4% Native American – 2% African American – 1% Not Sure – 1% Other – 1%	42 years 41 years	Under 25 years - 8% 25-30 years - 14% **31-40 years - 30%** 41-50 years - 22% 51-60 years - 15% 60+ years - 11%	N/A	Less than $49,999 - 16% **$50,000-$99,999 - 38%** $100,000-$149,999 - 23% $150,000-$199,999 - 12% $200,000-$249,999 - 6% $250,000+ - 5%
Backcountry Discovery Routes (2018)	**Male – 97%** Female – 3%	N/A	N/A 57 years	N/A	N/A	Median Income - $113,000

	Gender	Race/ Ethnicity	Mean Age/ Median Age	Age Ranges	Education Level	Yearly Income
Hadley et al. (2019) -	**Male – 66%** Female – 34%	N/A	N/A	18-24 years - 2% 25-34 years - 12% 35-44 years - 17% **45-54 years - 32%** 55-64 years - 26% 65+ years - 11%	**HS/GED - 34%** Some college, trade, vocational school - 19% 2-year degree - 25% Bachelor's degree - 14% Graduate Degree - 7%	Less than $25,000 - 0% $25,000-$49,999 - 13% **$50,000-$74,999 - 26%** $75,000-$99,999 - 24% $100,000-$149,999 - 22% $150,000+ - 14%
Imerman (2019) – Iowa	**Male – 65.2%** Female – 34.8%	N/A	N/A	12-19 years - 23.5% 20-39 years - 27.1% **40-59 years - 31.6%** 60+ years - 17.8%	Less than HS - 0.35% **HS Degree/GED - 41.3%** Some College, Trade, Vocational School - 37.8% Bachelor's Degree - 13.6% Graduate Degree - 7%	Less than $25,000 - 3.3% $25,000-$34,999 - 2.6% $35,000-$49,999 - 8.2% $50,000-$74,999 - 25.6% $75,000-$99,999 - 26.7% **$100,000+ - 33.7%**
Erickson et al. (2021) – Wisconsin	**Male – 59%** Female – 41%	N/A	N/A	**18-29 years - 34%** 30-39 years - 22% 40-49 years - 19% 50-59 years - 18% 60-69 years - 6% 70+ years - 2%	N/A	N/A

Back to Section I – Participant Demographic Characteristics

Literature Review – Riding Characteristics

	Licensed ORVs in State	**Recreational Activities During Trip**	**Average # of Trips/Year**	**Total # of Trips/Year**	**# of Activity Days**
Nelson et al. (2000) – Michigan	Off-Road Motorcycle - 23.4% (n=29,202) **ATV - 57.4% (n=71,656)** SUV - 19.1% (n=23,865)	**Deer Hunting - 60.2%** Camping 40.8% Ice Fishing - 33.3% Snowmobiling - 32.5% Hiking - 18.1% Mountain Biking - 13.2% Cross-Country Skiing - 9.1% Backpacking - 5.8%	N/A	N/A	4,204,246
Raffield & Berwager (2001) – Pennsylvania	**ATV - 46% (n=69)** Trail bike - 30% (n=45) Both - 22% (n=34)	N/A	3	Less than 1 trip - 20% (n=31) **2-3 trips - 44% (n=66)** 4-8 trips - 26% (n=39) 9+ trips - 9% (n=13)	N/A
Silberman (2003) = Arizona	N/A	**Driving back roads - 74.1%** Sightseeing - 52.1% Hiking/Walking - 38.9% Picnicking - 35.7% Camping - 31.6%	N/A	N/A	12,224,907
Okrant & Goss (2004) – New Hampshire	**ATV - 86.5% (n=22,073)** Trailbikes - 14.5% (n=4,571)	N/A	**Resident – 14.4** Non-resident – 11.2	158,160	1,564,277
Wisconsin Department of Tourism Research (2004) – Wisconsin	ATVs – 192,211	N/A	6	N/A	N/A
Rubin & Morris (2005) – Maine	**4 Wheel ATVs - 94.5%** 2 Wheel ATVs (Dirt Bikes) - 7% 3 Wheel ATVs - 5.4% 5+ Wheel ATVs - <1%	N/A	N/A	N/A	N/A
Parent et al. (2007) – Florida	Utility ATV – 26% **Sport Quad – 27.8%** Motorcross Bike – 26% Trail/Enduro Bike – 18% Trails Bike – 1.5%	N/A	28	1-3 trips - 6% 4-10 trips - 21.5% 11-15 trips - 13.4% 16-20 trips - 7.4% **21+ trips - 51.7%**	71,500

	Licensed ORVs in State	Recreational Activities During Trip	Average # of Trips/Year	Total # of Trips/Year	# of Activity Days
Jakus et al. (2008) – Utah	N/A	N/A	10.5	N/A	N/A
Lindberg (2009) – Oregon	**Class I - 61.5% (n=102,842)** Class II - 18.1% (n=30,252) Class III - 20.4% (n=34,190)	N/A	N/A	N/A	2,640,450
Louis Berger Group (2009) – Colorado	**ATVs - 43.1% (n=92,294)** Dual Purpose/Dirt Bikes - 23.1% (n=49,350) Snowmobiles 8.1% (n=17,356) 4WD Vehicles 25.7% (n=54,986)	N/A	N/A	2,290,568 (Day Trips – 1,500,997 Overnight Trips – 789,751)	N/A
Martin et al. (2010) – Ohio	N/A	**Picnicking 26% (n=63)** Hunting 18.5% (n=46) Hiking 17.7% (n=44) Fishing 16.1% (n=40) Touring historical sites 10.5% (n=26) Shooting 9.7% (n=24) Shopping/Antiquing 7.3% (n=18) Birdwatching 7.3% (n=18) Mountain biking 5.2% (n=13) Rock climbing 4.4% (n=11) Boating/Jet skiing 2.8% (n=7)	4.6	N/A	N/A
Thompson et al. (2012) – Minnesota	**ATV - 74.9% (n=105)** Off-Road Motorcycle - 19.6% (n=27) ORV - 5.5% (n=8)	N/A	N/A	**1 trip -79** 2-5 trips - 42 6-10 trips - 11 11+ trips – 8	N/A
Southwick & Associates (2012/13) – Western Governors' Association	N/A	N/A	N/A	Day Trips (resident + nonresident): Motorcycle Riding – 58,042,198 **Off-Road Riding – 85,775,901** Snowmobiling – 2,342,774 Overnight (resident + nonresident): Motorcycle Riding – 21,098,835 **Off-Road Riding – 54,007,406** Snowmobiling – 1,861,365	N/A

	Licensed ORVs in State	Recreational Activities During Trip	Average # of Trips/Year	Total # of Trips/Year	# of Activity Days
Southwick & Associates (2012/13) – United States	N/A	N/A	N/A	Day Trips (resident + nonresident): Motorcycle Riding – 192,734,246 **Off-Road Riding – 221,843,592** Snowmobiling – 5,161,048 Overnight (resident + nonresident): Motorcycle Riding – 51,868,050 **Off-Road Riding – 122,307,580** Snowmobiling – 8,474,377	N/A
Carper et al. (2013) – Wisconsin	N/A	**Dining – 50.5%** Shopping – 15% Area Attractions – 4.5% Other – 8% Visiting Family/Friends – 7% Festival/Event – 3% Museums/Historic Sites – 2.5% Auto Races – 4% Factory Tours – 1.5% Boating/Fishing – 2% Casino – 2%	N/A	N/A	90,060
Anderson & Taylor (2014) – Idaho	**ATVs - 67%** Dirt Bikes - 24% UTVs/SxSs - 7% Other - 2%	**Camping/Picnics - 26%** Driving backcountry roads - 19% Fishing/Hunting - 18% Visiting Historical Sites - 16% Cabin - 5% Other - 3% Work - 1%	12	N/A	N/A
Pardue et al. (2014) – West Virginia	N/A	N/A	1.5	N/A	N/A
Sylvester (2014) – Montana	77,200	N/A	N/A	N/A	5,005,000

	Licensed ORVs in State	Recreational Activities During Trip	Average # of Trips/Year	Total # of Trips/Year	# of Activity Days
Lindberg & Bertone-Riggs (2015) – Oregon	N/A	**Explore Town - 46%** Watch wildlife - 45% Fish/Crab - 44% Other Outdoor Activities - 42% Hunt - 40% Dine Out - 38% Photography - 32% Visit Historic Places - 29% Visit Brewpubs - 24% Shop - 19% Visit Wineries - 5% Ranger Programs - 5% Other - 13%	N/A	N/A	**Class I - 1,684,520** Class II - 541,173 Class III - 671,323 Class IV - 217,337
Pinyon (2016) – Colorado	**OHV - 64% (n=127,520)** Snowmobiles - 8.5% (n=16,977) 4WD - 27.5% (n=54,832)	N/A	37.5	3,010,891	N/A
Chhabra – (2017) – Arizona	**UTV/SxS – 43%** SUV/Jeep – 18% ATV – 15.3% Dirt Bike – 13.4%	N/A	21	N/A	N/A
Idaho's Billion $ Industry (2017) – Idaho	N/A	N/A	N/A	N/A	1,148,680
Oceano Dunes – SMG Consulting (2017) – California	N/A	**ATV Riding – 62%** Enjoying a beach bonfire – 57% Enjoying the sunsets – 56% Walking/Running – 51% Photography – 43% Swimming/Wading in Ocean – 42% Jeep/Dunebuggy Recreation – 38% Picnicking – 37% SxS Recreation – 33% Motorcycling – 28%	N/A	N/A	2,213,656
Hadley et al. (2019)	ATV - 47% (n=112) **UTV - 48% (n=115)** Other - 5% (n=12)	N/A	N/A	N/A	N/A

	Licensed ORVs in State	Recreational Activities During Trip	Average # of Trips/Year	Total # of Trips/Year	# of Activity Days
Imerman (2019) – Iowa	**ATVs - 53.3% (n=21,603)** Off-Road Motorcycles 12.3% (n=5,148) UTVs/SxSs - 34.4% (n=16,659)	N/A	N/A	N/A	N/A
Rubicon Trail (2019) – California	N/A	N/A	4.3	N/A	10,400
Erickson (2021) – Wisconsin	N/A	N/A	N/A	N/A	15,757,000

Back to Section II – Recreation Trip Characteristics

Literature Review – Spending Patterns of Riders/Users

	Average Spending/Trip (Resident)	Average Spending/Trip (Non-resident)	Annual Spending (Resident + Non-resident)
Nelson et al. (2000) – Michigan	Lodging - 11% ($42.11) Restaurant/Bar - 16% ($57.73) **Food - 30% ($111.53)** Auto/Towing Vehicle - 18% ($65.52) ORV - $13% ($47.18) Sporting Goods - 4% ($16.36) Other Goods - 8% ($27.85)	N/A	Lodging - $6,400,000 Restaurant/Bar - $8,780,000 **Food - $16,950,000** Auto/Towing Vehicle - $9,960,000 ORV - $7,170,000 Repair/Maintenance - $15,600,000 Insurance - $9,900,000 Sporting Goods - $2,490,000 Other Goods - $4,230,000
Raffield & Berwager (2001) – Pennsylvania	Lodging - $150 **Food - $225** Gas - $180 OHV-related Items (fees, parts) - $105 Non-OHV-related items (souvenirs, clothing, other) - $75	N/A	Lodging - $12,867,000 **Food - $19,302,000** Gas - $15,441,000 OHV-related items (fees, parts) - $9,007,000 Non OHV-related items (souvenirs, clothing, other) - $6,434,000
Silberman (2003) – Arizona	N/A	N/A	Fuel - $257,507,000 Lodging - $94,400,000 Restaurant/Bars - $156,800,000 Groceries/Liquor - $192,800,000 Park/Park Fees - $32,900,000 Entertainment - $$65,500,000 Souvenirs/Shirts/Shopping - $42,300,000 Repairs/Parts - $152,000,000 **Insurance - $286,778,000** Equipment Rental/Towing – $17,195,035
Okrant & Goss (2004) – New Hampshire	Lodging - 17.6% ($95.58) **Restaurants/Beverage - 20.3% ($110.34)** State Liquor Store - 4.2% ($23.10) Transportation - 17.1% ($93.35) Recreation - 12.3% ($67.11) Retail - 15.5% ($84.30) Other - 13% ($70.60)	N/A	Eating/Drinking - $21,600,000 Lodging - $14,700,000 Recreation - $10,000,000 Food Stores - $9,500,000 **Other Retail Stores - $37,500,000** Ground Transportation - $13,900,000 Services & Other - $16,600,000

	Average Spending/Trip (Resident)	Average Spending/Trip (Non-resident)	Annual Spending (Resident + Non-resident)
Wisconsin Department of Tourism Research (2004) – Wisconsin	**Lodging - 23% ($118.02)** Food/Drink - 16.7% ($87.65) Entertainment - 7.9% ($41.56) Shopping - 13.6% ($71.04) Gas/Transportation - 15.7% ($82.10) Convenience Stores - 5.7% ($29.63) Gaming - 7.3% ($38.41) Other - 10.5% ($54.92)	**Lodging - 22.7% ($129.90)** Food/Drink - 17% ($97.64) Entertainment - 7.7% ($44.09) Shopping - 13.2% ($75.57) Gas/Transportation - 16% ($91.36) Convenience Stores - 5.6% ($32.02) Gaming - 8% ($45.32) Other - 10% ($57.55)	**Lodging - $66,600,000** Food/Drink - $49,500,000 Entertainment - $23,400,000 Shopping - $40,000,000 Gas/Transportation - $46,300,000 Convenience Stores - $16,700,000 Gaming - $21,700,000 Other - $31,000,000
Rubin & Morris (2005) – Maine	**Gas/Oil for Towing Vehicle - 36.6% ($120.44)** Turnpike Tolls for Towing Vehicle - 1.8% ($5.94) Restaurant/Lounge Expenses - 19% ($62.41) Food/Drink - 23% ($75.85) Overnight Lodging - 12.3% ($40.56) Guides/Tour Packages - 0.34% ($1.15) Club Membership/Dues/Donations - 2% ($6.60) Souvenirs/Gifts - 3% ($9.83) Other - 2% ($6.47)	N/A	**ATV Parts/Accessories - $413.75** Gas/oil for ATVs - $153.97 ATV service/repair - $241.24 ATV storage - $288.80 ATV insurance - $193.14 Other - $298.21
Parent et al. (2007) – Florida	**OHV related purchases (gas, equipment) - 46.1% ($88)** Transportation related purchases (gas, tolls) - 18.8% ($36) Food/Drink - 23% ($44) Lodging - 6.3% ($12) Entertainment/Souvenirs - 1.6% ($3) Other - 4.2% ($8)	OHV related purchases (gas, equipment) - 20.5% ($72) **Transportation related purchases (gas, tolls) - 35.8% ($126)** Food/Drink - 22.4% ($79) Lodging - 11.6% ($41) Entertainment/Souvenirs - 3.4% ($12) Other - 6.5% ($23)	OHV related purchases (gas, equipment) - $1,700,000 **Transportation related purchases (gas, tolls) - $2,260,000** Food/Drink - $1,560,000 Lodging - $750,000 Entertainment/Souvenirs - $220,000 Other - $420,000
Lindberg (2009) – Oregon	**Gas/Oil - $50.50** Restaurants - $9.50 Groceries - $27 Hotel/Motel - $4.50 Camping/RV - $6.50 Amusements - $1 OHV Rentals - $0.50 Repair/Maintenance - $4 Other Retail - $8.50 Other - $1.50	**Gas/Oil - $54** Restaurants - $19 Groceries - $33 Hotel/Motel - $5 Camping/RV - $23 Amusements - $4 OHV Rentals - $3 Repair/Maintenance - $18 Other Retail - $10 Other - $1	**Vehicles (OHVs) - $108,900,000** Trailers - $34,200,000 Insurance - $8,100,000 Storage - $3,400,000 Repair/Maintenance - $20,200,000 Modifications - $23,800,000 Accessories - $15,100,000 Other - $1,500,000 Tow vehicle - $75,400,000

	Average Spending/Trip (Resident)	Average Spending/Trip (Non-resident)	Annual Spending (Resident + Non-resident)
Louis Berger Group (2009) – Colorado	Gas/Oil for OHVs/OSVs - $77,633,701 Gas/Oil for Towing Vehicle - $120,391,109 Restaurant/Lounge Expenses - $98,659,559 Food/Drink - $106,439,975 Lodging - $58,032,284 Guides/Tours - $3,202,372 Repairs - $10,213,606 Fees/Donations - $8,970,714 Souvenirs - $26,395,971 Other - $32,055,203	Resident + Nonresident calculated together	Repairs/Parts - $54,959,229 Vehicle Storage - $265,824 Motorized Recreational Accessories (covers, saddle or tank bags, ski skins, studs, carbides, mirrors, etc.) - $12,688,679 Clothing (suits, pants, gloves, etc.) - $13,260,764 Safety Equipment (helmets, tools, first aid, etc.) - $8,551,837 Annual Insurance Payment - $8,539,437 Registration/Permit Fees - $5,505,048 Club Memberships - $331,375 Magazine Subscriptions - $407,955 Other - $4,063,561 **Vehicle Sales - $133,299,003**
Thompson et al. (2012) – Minnesota	Lodging - 4% ($3.32) Groceries - 11.6% ($9.68) Food/Drink - 21.7% ($18.16) Entertainment - 2.3% ($1.94) Shopping - 3.4% ($2.86) **Transportation/Gas - 53.8% ($44.94)** Other - 3.1% ($2.61)	N/A	N/A
Southwick & Associates (2012/13) – Western Governors' Association	<u>Day Trip</u>: Food/Drink - $156.61 Transportation – $176.11 Recreation – $203.65 Souvenirs – $152.52 Other – $172.01 <u>Overnight Trip</u>: Food/Drink - $178.33 Transportation – $209.02 Recreation – $134.37 Souvenirs – $133.38 Lodging – $231.64 Other – $182.62	N/A	Food/Drink - $10,549,292,604 **Transportation – $12,847,208,471** Recreation – $10,703,859,041 Souvenirs – $9,594,611,821 Lodging – $5,310,685,975 Other – $12,483,739,522

	Average Spending/Trip (Resident)	Average Spending/Trip (Non-resident)	Annual Spending (Resident + Non-resident)
Southwick & Associates (2012/13) – United States	Day Trip: Food/Drink - $139.20 Transportation – $138.26 Recreation – $201.99 Souvenirs – $149.61 Other – $202.50 Overnight Trip: Food/Drink - $162.95 Transportation – $172.08 Recreation – $161.39 Souvenirs – $132.84 Lodging – $201.04 Other – $164.06	N/A	Food/Drink - $28,263,458,024 Transportation – $30,992,133,870 Recreation – $30,159,731,150 Souvenirs – $25,539,836,134 Lodging – $12,844,629,295 **Other – $32,961,296,473**
Carper et al. (2013) – Wisconsin	N/A	N/A	**Food/Drink - $4,794,350** Gas - $4,423,892 Lodging - $2,552,271 Shopping - $1,231,692 Convenience - $681,985 Rentals - $943,207 Other - $414,170 Entertainment - $215,238 Gaming - $97,903
Anderson & Taylor (2014) – Idaho	N/A	N/A	**Gas - $72,500,000** Groceries - $50,200,000 Dining - $26,000,000 Retail - $16,700,000 Lodging - $16,700,000 Other - $3,700,000
Pardue et al. (2014) – West Virginia	Food – 13.7% ($66.78) Groceries – 11.7% ($56.72) Entertainment – 3.1% ($14.96) **Lodging – 30.4% ($148.03)** Retail shopping – 7.5% ($36.54) Visiting attractions – 2% ($9.95) Fuel for vehicles – 20.8% ($101.05) Fuel for trail vehicles – 7.4% ($35.97) Trail vehicle repair – 3.4% ($16.41)	Food – 12.2% ($105.54) Groceries – 10.7% ($92.33) Entertainment – 4.1% ($35.63) **Lodging – 28.3% ($244.80)** Retail Shopping – 7.1% ($60.94) Visiting Attractions – 2.4% ($20.92) Fuel for Towing Vehicle – 22.4% ($193.93) Fuel for OHVs – 7.7% ($66.91) OHV Repair – 4.9% ($42.58)	N/A

	Average Spending/Trip (Resident)	Average Spending/Trip (Non-resident)	Annual Spending (Resident + Non-resident)
Sylvester (2014) – Montana	(Median) Gas OHV - $12 Gas for Tow Vehicle - $23 Restaurants/Bars - $2	N/A	Gas for OHV - $60,000,000 **Gas for Towing/Transportation - $115,000,000** OHV related - $9,665,000 Tow Trailer - $1,415,000 OHV clothing - $3,628,000 Safety Equipment - $2,162,000 OHV Repair/Maintenance - $15,208,000 OHV Registration/Licensing - $305,000 Other - $40,000
Janke & Trechter (2015) – Wisconsin	**Lodging - 28.7% ($112.38)** Food/Drink - 22.5% ($87.98) Entertainment - 3.4% ($13.30) Shopping - 4.8% ($18.83) Gas & Repairs - 17.2% ($67.36) Convenience Stores - 6.7% ($26.29) ATV Rental - 2.5% ($9.68) Gaming - 9.8% ($38.15) Other - 4.4% ($17.16)	N/A	**Lodging - $2,430,000** Food/Drink - $1,900,000 Entertainment - $287,280 Shopping - $406,728 Gas & Repairs - $$1,900,000 Convenience Stores - $567,864 ATV Rental - $209,088 Gaming - $824,040 Other - $370,656
Pinyon (2016) – Colorado	**Gas/Oil for OHVs - 21.6% ($79.10)** Gas/Oil for OHVs - 17.8% ($65.92) Restaurant/Lounge Expenses - 15.9% ($58.21) Food/Drink - 13.72% ($50.30) Overnight Lodging - 21.3% ($78.05) Guides/Tour Packages - 0.06% ($2.08) Memberships/Dues/Donations - 2.8% ($10.12) Souvenirs/Gifts/Entertainment - 3.6% ($13.25) Other - 2.6% ($9.67)	Gas/Oil for OHVs - 9.5% ($410.40) Gas/Oil for Tow Vehicles - 23.2% ($999.35) Restaurant/Lounge Expenses - 15.3% ($656.20) Food/Drink - 10.8% ($462.75) **Overnight Lodging - 25.4% ($1,091.24)** Guides/Tour Packages - 2.4% ($101.05) Memberships/Dues/Donations - 4.5% ($195.62) Souvenirs/Gifts/Entertainment - 5% ($213.83) Other - 3.9% ($168.98)	Gas/Oil for OHVs - $251,500,000 Gas/Oil for Tow Vehicles - $308,900,000 Restaurant/Lounge Expenses - $268,700,000 Food/Drink - $248,700,000 **Overnight Lodging - $347,600,000** Guides/Tour Packages - $18,500,000 Memberships/Dues/Donations - $80,600,000 Souvenirs/Gifts/Entertainment - $65,900,000 Other - $56,300,000 Repairs/Parts - $222,268,277

	Average Spending/Trip (Resident)	Average Spending/Trip (Non-resident)	Annual Spending (Resident + Non-resident)
Smith Gunther (2016) – Canada	N/A	N/A	**OHV Repair/Maintenance - $1,328,150,000** Gas for ATVs/SxSs - $836,000,000 Food/Drink - $744,500,000 Lodging/RV - $356,000,000 Transportation of ATVs/SxSs - $202,500,000 Club/Trail Fees - $489,500,000 Entertainment - $211,000,000 Other - $195,500,000 Licenses - $111,000,000
Idaho's Billion $ Industry (2017) – Idaho	N/A	N/A	**Machines & Equipment - $55,300,000** Food/Drink - $45,430,000 Gas - $43,450,000 Retail - $31,600,000 Lodging - $17,780,000 Maintenance/Repair - $3,950,000
Oceano Dunes – SMG Consulting (2017) – California	**Food/Drink - 21% ($296)** Lodging - 19% ($262) Transportation -17% ($229) Retail Shopping - 16% ($224) Recreation Activities - 11% ($157) Other - 10% ($135) Fees - 6% ($86)	N/A	N/A
Imerman (2019) – Iowa	Registration/Fees/Permits - $1,824,943 Insurance - $4,626,215 **Repairs - $6,649,838** Gas/Oil - $4,993,453 Membership/Dues - $240,997 Accessories (clothing, etc.) - $2,883,067 Gas/Oil for Tow Vehicle - $4,556,640 Food/Drink - $3,052,765 Lodging - $1,357,517 Other - $711,781 Maps/Guides - $8,741	Registration/Fees/Permits - $548,337 Insurance - $334,544 Repairs - $925,876 Gas/Oil - $533,368 Membership/Dues - $42,953 Accessories (clothing, etc.) - $751,326 Gas/Oil for Tow Vehicle - $3,057,529 Food/Drink - $1,942,583 **Lodging - $3,715,408** Other - $820,742	In-State - $51,623,170 Out-of-State - $20,805,557

	Average Spending/Trip (Resident)	Average Spending/Trip (Non-resident)	Annual Spending (Resident + Non-resident)
Rubicon Trail (2019) – California	Hotel - $144	N/A	Tow Trailer - $1,706,887 OHV Modifications - $22,344,300 Maintenance - $10,439,550 Supplies - $4,617,600 Hotel/Motel - $961,759 Tours/Events - $973,594 Ca $4,617,600
Wisconsin Office of Outdoor Recreation (2020) – Wisconsin	N/A	N/A	$545,000,000
Erickson et al. (2021) – Wisconsin	Groceries/Liquor - 7.8% ($3.43) Restaurants/Drinks - 18.5% ($8.14) Gas, Auto Service - 15.2% ($6.68) Recreational Equipment - 0.6% ($0.26) Other Retail/Shopping - 2.9% ($1.27) Casino/Gambling - 5.8% ($2.54) **Overnight Lodging - 40.8% ($17.96)** Rental/Repair - 3.2% ($1.40) Payments/Fees to Public Agencies - 5.2% ($2.28)	N/A	N/A

Literature Review – OHV/OSV Sales Data

	Estimated New Sales of OHVs/OHVs	**Average Sale Price of New OHVs/OSVs**	**Average Sale Price of Used OHVs/OSVs**	**New Sales ($) – State Total**	**Used Sales – State Total**
Rubin & Morris (2005) – Maine	N/A	ATVs - $7,081	ATVs - $3,107.59	**ATV - $80,030,044**	**ATV - $8,261,457**
Louis Berger (2009) – Colorado	**ATVs - 9,178** Off-Road Motorcycles - 4,222 Snowmobiles - 3,841 4WDs - 385	ATV - $7,082 Off-Road Motorcycle - $6,564 Snowmobile - $7,532 4WD - $29,613	N/A	**ATV - $64,699,061** Off-Road Motorcycle - $27,711,760 Snowmobile - $29,187,355 4WD - $11,400,826	N/A
Southwick & Associates – Western Governors' Association (2012/13)	N/A	Motorcycle - $8,644.91 Off-Road - $8,801.46 Snowmobile - $7,110.63	Motorcycle - $1,966.70 Off-Road - $2,251.85 Snowmobile - $4,283.40	Motorcycling - $1,272,670,228 **Off-Road Riding - $2,547,182,439** Snowmobiling - $182,847,337	Motorcycling - $877,762,552 **Off-Road Riding - $1,199,963,346** Snowmobiling - $259,230,783
Southwick & Associates – United States (2012/13)	N/A	Motorcycle - $10,308.43 Off-Road - $9,354,41 Snowmobile - $7,044.44	Motorcycle - $2,515.83 Off-Road - $3,529.45 Snowmobile - $3,029.76	**Motorcycling - $4,410,925,249** Off-Road Riding - $6,644,222,105 Snowmobiling - $310,279,465	**Motorcycling - $2,409,890,416** Off-Road Riding - $4,374,538,413 Snowmobiling - $418,751,814
Smith Gunther (2016) – Canada	**ATVs - 50,186** UTVs/SxSs - 24,597	N/A	N/A	**ATVs - $643,776,000** SxSs - $378,628,000	N/A
Pinyon (2016) – Colorado	**ATVs - 5,140** Off-Road Motorcycles - 4,440 UTVs/SxSs - 3,300 Snowmobiles - 2,216 4WDs - 496	ATV - $8,412 Off-Road Motorcycle - $7,276 UTVs/SxSs - $15,000 Snowmobile - $10,000 4WDs - $32,217	N/A	ATV - $43,237,680 Off-Road Motorcycle - $32,305,440 **UTVs/SxSs - $49,500,000** Snowmobiles - $22,160,000 4WDs - $15,979,632	N/A
Imerman (2019) – Iowa	**ATVs – 996** Off-Road Motorcycles – 534 UTVs/SxSs – 2,840	ATV - $7,415 Off-Road Motorcycle - $6,443 UTV/SxSs - $16,801	N/A	ATV - $7,385,340 Off-Road Motorcycle - $3,440,562 **UTV/SxS - $47,714,840**	N/A
Rubicon Trail (2019) – California	N/A	OHV - $64,400	N/A	N/A	N/A

Literature Review – Economic Impact Data

	Output Impact (Multiplier)	**Value Added Impact (Multiplier)**	**Employment Impact (Multiplier)**	**Labor Income Impact (Multiplier)**	**Tax Impact**
Nelson et al. (2000) – Michigan	Total - $40,000,000 (1.59)	Total - $15,623,000 (1.68)	Total - 596 (1.38)	Total - 9,894,000 (1.66)	State - $336,000 Sales - $2,400,000
Raffield & Berwager (2001) – Pennsylvania	Total - $68,540,505	N/A	N/A	N/A	N/A
Silberman (2003) – Arizona	Total - $4,252,000,000 (1.39)	N/A	Total - 36,951	Total - $1,088,000,000	State - $187,000,000
Okrant & Goss (2004) – New Hampshire	DE - $123,800,000 IE - $51,700,000 INE - $194,600,000 Total - $318,400,000 (1.57)	N/A	DE – 1,995 IE – 384 INE – 512 Total – 2,891 (1.45)	N/A	State - $12,400,000 Local - $2,500,000
Wisconsin Department of Tourism Research (2004) – Wisconsin	Total - $56,000,000 (1.69)	DE - $18,000,000 IE+INE - $13,000,000 Total - $31,000,000 (1.72)	DE – 815 IE+INE – 270 Total – 1,085 (1.33)	N/A	N/A
Rubin & Morris (2005) – Maine	DE - $156,039,412 IE+INE - $43,994,754 Total - $200,034,166 (1.28)	N/A	DE - 1,400 IE+INE - 574 Total - 1,974 (1.41)	DE - $26,930,931 IE+INE - $15,747,285 Total - $42,678,216 (1.58)	Sales - $6,400,000
Parent (2007) – Florida	DE - $13,590,000 IE - $1,500,000 INE - $6,570,000 Total - $21,660,000 (1.59)	DE - $9,550,000 IE - $820,000 INE - $4,320,000 Total - $14,690,000 (1.54)	DE - 215 IE - 16 INE - 87 Total – 318 (1.48)	DE - $6,130,000 IE - $500,000 INE - $2,750,000 Total - $9,380,000 (1.53)	State - $2,140,000
Jakus & Keith (2008) – Utah	N/A	DE - $18,377,206 IE+INE - $8,030,923 Total - $26,408,129 (1.43)	DE - 676.6 IE+INE - 163.5 Total - 840.1 (1.24)	DE - $11,663,578 IE+INE - $4,261,706 Total - $15,925,284 (1.36)	N/A
Louis Berger Group (2009) – Colorado	DE- $706,500,000 IE+INE - $243,000,000 Total - $949,500,000 (1.34)	DE - $75,603,037 IE+INE -$53,969,538 Total - $129,572,575 (1.71)	DE – 10,009 IE+INE – 2,039 Total – 12,048 (1.20)	DE - $294,626,608 IE+INE - $75,952,710 Total - $370,579,318 (1.26)	N/A
Lindberg (2009) – Oregon	Total - $245,100,000	N/A	Total – 2,369	Total - $64,100,000	N/A

	Output Impact (Multiplier)	**Value Added Impact (Multiplier)**	**Employment Impact (Multiplier)**	**Labor Income Impact (Multiplier)**	**Tax Impact**
Martin et al. (2010) – Ohio	Total - $1,842,266	N/A	Total – 26.26	Total - $656,981	N/A
Southwick & Associates (2012/13) – Western Governors' Association	Total - $40,913,003,679	Total - $20,314,849,089	Total – 406,273	N/A	Federal - $2,808,634,962 State/Local - $2,472,147,469
Southwick & Associates (2012/23) – United States	DE - $109,021,547,334 IE+INE - $158,097,472,891 Total - $267,119,020,225 (1.45)	DE –$54,415,823,814 IE+INE – $85,257,599,907 Total – $139,673,423,731 (1.57)	DE – 1,095,436 IE+INE – 945,058 Total – 2,040,493 (1.16)	N/A	Federal - $17,663,684,807 State/Local - $16,316,309,242
Carper et al. (2013) – Wisconsin	DE - $8,815,000 IE - $1,341,000 INE - $1,655,000 Total - $11,811,000 (1.34)	DE - $2,118,334 IE - $367,725 INE - $460,102 Total - $2,946,161 (1.39)	DE – 160 IE – 13 INE – 16 Total – 189 (1.18)	N/A	N/A
Pardue et al. (2014) – West Virginia	DE - $14,280,287 IE - $3,460,349 INE - $4,506,992 Total - $22,247,694 (1.56)	DE - $7,846,483 IE - $1,896,877 INE - $2,612,834 Total - $12,356,195 (1.57)	DE – 174 IE - 27 INE - 36 Total – 237 (1.61)	DE - $4,902,965 IE - $1,185,153 INE - $1,407,826 Total - $7,495,944 (1,53)	State - $455,565 Local - $119,663 Sales - $1,500,000
Janke & Trechter (2015) – Wisconsin	DE - $6,699,000 IE - $1,067,000 INE - $781,000 Total - $8,546,000 (1.28)	DE - $3,179,500 IE - $583,500 INE - $470,500 Total - $4,233,000 (1.33)	DE – 114 IE – 9 INE – 6 Total – 125 (1.10)	DE - $1,672,000 IE - $310,000 INE - $217,500 Total - $2,200,000 (1.32)	N/A
Lindberg & Bertone-Riggs (2015) – Oregon	Total - $74,834,200	Total - $44,999,500	Total – 1,120	Total - $28,986,000	N/A
Smith Gunther (2016) – Canada	DE - $5,501,040,000 IE+INE - $1,535,382,000 Total - $7,036,422,000 (1.28)	DE - $4,167,000,000 IE - $2,532,000,000 INE - $1,800,000,000 Total - $8,499,000,000 (2.04)	DE - 27,385 IE - 11,791 INE - 8,753 Total - 47,929 (1.75)	DE - $1,416,000,000 IE - $780,000,000 INE - $496,000,000 Total - $2,692,000,000 (1.90)	Country - $1,540,643,000

	Output Impact (Multiplier)	**Value Added Impact (Multiplier)**	**Employment Impact (Multiplier)**	**Labor Income Impact (Multiplier)**	**Tax Impact**
Pinyon (2016) - Colorado	DE - $913,900,608 IE+INE - $881,915,240 Total - $1,795,815,847 (1.96)	DE - $546,001,560 IE+INE - $494,373,079 Total - $1,040,374,639 (1.90)	DE - 10,933 IE+INE - 5,820 Total - 16,753 (1.53)	DE - $379,351,682 IE+INE - $292,509,619 Total - $671,861,301 (1.77)	State/Local - $107,192,074 Federal - $157,926,779
Idaho's Billion $ Industry (2017) – Idaho	Total - $157,000,000	Total - $160,000,000	Total – 4,062	Total - $108,000,000	N/A
Chhabra (2017) – Arizona	Total - $2,637,044,177	Total - $$1,599,415,134	Total – 21,077	Total - $940,319,938	N/A
Oceano Dunes – SMG Consulting (2017) – California	DE - $158,861,742 IE - $38,135,136 INE - $46,584,041 Total - $243,580,919 (1.53)	N/A	DE - 2,613 IE - 313 INE - 377 Total - 3,302 (1.26)	N/A	State/Local - $1,903,607
Imerman (2019) – Iowa	DE - $42,832,916 IE - $12,389,864 INE - $13,543,336 Total - $68,766,116 (1.61)	DE - $24,569,679 IE - $7,107,712 INE - $7,704,583 Total - $39,381,974 (1.60)	DE - 355.6 IE - 73.3 INE - 103.7 Total - 532.7 (1.50)	DE - $14,934,219 IE - $3,679,649 INE - $4,211,900 Total - $22,825,768 (1.53)	N/A
Rubicon Trail (2019) – Oregon	DE - $18,261,611 IE - $3,476,844 INE - $4,063,242 Total - $25,801,697 (1.41)	N/A	Total – 123.7	N/A	N/A
Wisconsin Office of Outdoor Recreation (2020) – Wisconsin	Total - $1,100,000,000	N/A	N/A	N/A	N/A
Erickson (2021) – Wisconsin	DE - $3,471,000 IE - $1,322,000 INE - $1,177,000 Total - $5,970,000 (1.72)	DE - $1,897,000 IE - $786,000 INE - $673,000 Total - $3,356,000 (1.77)	DE - 42.2 IE - 8.1 INE - 8.1 Total - 58.4 (1.38)	DE - $1,193,000 IE - $430,000 INE - $350,000 Total - $1,973,000 (1.65)	N/A
BEA – California (2021)	N/A	Total - $827,384,000	N/A	N/A	N/A

Literature Review – Trip and Lodging Characteristics

	Day/Overnight Trips	# of Nights (Overnight Trip)	Primary Type of Lodging	Travel Party Size	Primary Purpose of Trip
Nelson et al. (2000) – Michigan	Day Trips – 5% **Overnight Trips – 95%**	4	Hotel/Motel - 19% Camping – 26% Second Home – 16% Friends/Relatives – 34%	5.4	N/A
Raffield & Berwager (2001) – Pennsylvania	Day Trips – 23% **Overnight Trips – 77%**	N/A	Do not stay in area – 13% Seasonal residence – 18% Stay free with friends – 14% **Hotel / Motel – 33%** Non-forest service campground – 10% Forest service developed Campground – 14% Forest service undeveloped Campground – 11% Own property – 16% No response – 2%	N/A	N/A
Okrant & Goss (2004) – New Hampshire	Day Trips – 35.6% **Overnight Trips – 64.4%**	1 night	**Hotel/Motel/Resort – 25.5%** Campground – 14.7% Friend/Relative – 9.8% Second Home/Condo – 6.4% B&B/Inn – 4.5% Other – 2.9% Timeshare – 0.6%	**Resident – 4.6** Non-resident – 4.4	N/A
Rubin & Morris (2005) – Maine	Day Trips – 36.3% **Overnight Trips – 63.7%**	N/A	N/A	N/A	N/A
Parent (2007) – Florida	N/A	N/A	N/A	1 person – 15% **2 people – 26.5%** 3 people – 25.2% 4 people – 13.6% 5+ people – 19.7%	N/A
Louis Berger Group (2009) – Colorado	**Day Trips – 65.5%** Overnight Trips – 34.5%	N/A	N/A	N/A	N/A
Lindberg (2009) – Oregon	N/A	Day Trips – 1.8	N/A	N/A	N/A

	Day/Overnight Trips	# of Nights (Overnight Trip)	Primary Type of Lodging	Travel Party Size	Primary Purpose of Trip
Martin et al. (2010) – Ohio	N/A	**Day Trips – 2.4** Overnight Trips – 1.7	N/A	3.3	N/A
Thompson et al. (2012) – Minnesota	**Day Trips – 83%** Overnight Trips – 17%	N/A	**Campers – 11%** Relative's/Friend's House – 4% RV – 2%	N/A	N/A
Carper et al. (2013) – Wisconsin	**Day Trips – 74%** Overnight Trips – 26%	Day Trip – 1 Overnight Trip – 1.66	Hotel/Motel – 38% Private Home Rental – 3% Friend/Relative – 5% B&B -1% **Campground – 42%** Second Vacation Home – 2% Rental Cabin – 9% Other – 1%	3.2	**To ride this trail/other trails in area – 75%** Leisure Trip – 9% Live here, use trail as primary mode of transportation – 6% Visiting family/friends – 4% Other – 4.5% Attend a special event/festival – 1.5%
Pardue et al. (2014) – West Virginia	N/A	2-3 days – 43.2% 4-5 days – 36.9%	**Cabin/Lodge – 67.8%** Campground – 27.2% Hotel/Motel – 23%	N/A	N/A
Janke & Trechter (2015) – Wisconsin	Day Trips – 40% **Overnight Trips – 60%**	1 night – 10% 2 nights – 36% **3 nights – 38%** 4 nights – 10% 5+ nights – 6% Average # of Nights – 2.9	**Hotel/Motel -44%** Camping – 42% Cabin/House Rental – 6% Friend/Relative – 4% Other – 3% Resort - <1%	5	**To ride this trail/other trails in area – 69%** Leisure Trip – 15% Live here, use trail as primary mode of transportation – 7% Visiting family/friends – 4% Other – 3% Attend special event/festival – 2%

	Day/Overnight Trips	# of Nights (Overnight Trip)	Primary Type of Lodging	Travel Party Size	Primary Purpose of Trip
Lindberg & Bertone-Riggs (2015) – Oregon	Day Trip in past 12 months – 96% Overnight Trip in past 12 months – 86%	5.2	**RV or tent, dispersed – 41%** RV / camper, Campground – 38% Tent, Campground – 31% RV / camper area, group – 17% Friends / family – 14% Tent, group – 13% Hotel / motel – 13% Other – 9%	3.5 – Day Trips 4 – Overnight Trips	N/A
Chhabra (2017) – Arizona	Day Trip – 34% **Overnight Trip – 66%**	N/A	N/A	N/A	Trail riding on a Side by Side/UTV Trail riding/ATVs Driving back roads
Oceano Dunes – SMG Consulting (2017) – California	Day Trip – 17% **Overnight Trip – 83%**	3.1 1 night -7% 2 nights – 30% **3 nights – 33%** 4 nights – 13% 5 nights – 9% 6 nights – 3% 7 nights – 2% 8+ nights – 3%	<u>Lodging within the District</u> **Trailer/5th Wheel – 55%** Tent – 32% RV – 9% Truck Camper – 4% <u>Lodging Outside the District</u> **Hotel/Motel – 33%** Public Campground – 18% Other – 17% Private Campground – 16% Friends/Family – 12% Condo – 3% Timeshare – 1%	11.4 1 person – 1% 2 people – 11% 3 people – 5% 4 people – 12% 5-6 people – 16% 7-10 people – 13% **10+ people – 42%**	N/A
Hadley et al. (2019) – Wisconsin	N/A	N/A	N/A	6.3	**To ride this trail/other trails in area – 67%** Leisure Trip – 23% Live here, use trail as primary mode of transportation – 4% Visiting family/friends – 1% Other – 5%

	Day/Overnight Trips	# of Nights (Overnight Trip)	Primary Type of Lodging	Travel Party Size	Primary Purpose of Trip
Rubicon Trail (2019) – Oregon	N/A	Length of Trip – 2.8 days # of nights – 1.9 1 day – 7.78% 2 days – 25.68% **3 days – 48.9%** 4 days – 13.75% 5 days – 2.85% 6+ days – 1.04%	N/A	N/A	N/A

Back to SECTION I – OHV/OSV Participant Demographic Characteristics

Back to SECTION II - OHV/OSV Recreation Trip Characteristics

APPENDIX B - PREVIOUS OHV/OSV ECONOMIC IMPACT STUDIES, SAMPLE SIZE AND RESPONSE RATES FOR DATA COLLECTION

Researcher(s) and Year	State or Region	Sample Size	Response Rate	Percent Response Rate
Nelson, Lynch & Stynes (2000)	Michigan	5,008	2,405	48
Raffield & Berwager (2001)	Pennsylvania	500	150	30
Coupal, Bastian, Spear K Enterprises & Taylor (2001)	Wyoming	1,432	818	57
Silberman (2003)	Arizona	3,118	1,269	41
Wisconsin ATV Association & Department of Urban Planning, University of Wisconsin-Madison Extension (2004)	Wisconsin	1,100	1,100	100
Okrant & Goss (2004)	New Hampshire	1,638	562	34
Morris, Allen, Rubin, Bronson, & Bastey (2005)	Maine	1,175	748	64
Parent, Alavapati, Stein, & Hodges (2007)	Florida	420	150	36
Jakus, Keith & Liu (2008)	Utah	1,416	600	42
Lindberg (2009)	Oregon	4,850	1,596	33
Martin, Meng, Li, & Tanzer (2010)	Ohio	282	282	100
Nelson, Stynes, Wu, McCarty & Hughes (2010)	Michigan	2,669	861	32
Asche, Beyer & Thompson (2012)	Minnesota	205	140	68
Carper, Guth, Kakde, Marcoullier, Ohlrogge & Wolf (2013)	Wisconsin	753	753	100
Sylvester (2013)	Montana	1,398	284	20
Anderson & Taylor (2013-2014)	Idaho	2,000	1,630	82
Pardue, Shand, Hioki & Parrish (2014)	West Virginia	24,111	2,411	10
Lindberg & Bertone-Riggs (2015)	Oregon	10,084	2,569	25
Janke & Trechter (2015)	Wisconsin	400	129	32
Pinyon (2016)	Colorado	198,629	1,800	1
Arizona State University School of Community Resources and Development (2016-2017)	Arizona	3,692	1,796	49
Backcountry Discovery Routes (2018)	Utah, Idaho, Washington, Nevada, Arizona, Colorado, New Mexico	7,862	2,120	27
Trechter & Parks (2019)	Wisconsin	400	113	28
Imerman (2019)	Iowa	1,487	302	20

Back to Table 4 – Survey Response Rates

APPENDIX C - ECONOMIC IMPACTS OF SPECIAL EVENT OHV/OSV RECREATION

The model specifically examined those participants attending OHV/OSV recreation special events - whether as competitors or as spectators. This population group accounted for about 13.3% of all OHV/OSV visitors in the State.

Based on visitor spending data, special event OHV/OSV recreational users in California:

- Generated a total of $5.5 billion in economic economic output in the State,
- Supported over 25,000 jobs, and
- Generated over $975 million in tax revenues, including $293 million in State tax revenues.

The model relied on median spending data as reported by OHV/OSV recreation visitors, to avoid the risk of inflating the numbers when using average expenditure figures. Compared to other OHV/OSV recreation users, special events attendees reported higher spending on admissions, guided tours and souvenirs, while spending comparably similar amounts on other travel items.

Table 160. Overall Impacts of OHV/OSV Special Event Recreation

Impact	Employment	Labor Income	Value Added	Output
Direct	12,944	917,384,999	1,602,845,652	2,790,745,204
Indirect	6,444	542,098,350	849,905,482	1,430,850,256
Induced	6,179	440,686,846	811,083,344	1,308,514,067
Total	25,567	1,900,170,195	3,263,834,478	5,530,109,526

Table 161. Economic Impact Multipliers

Employment	Labor Income	Value Added	Output
1.98	2.07	2.04	1.98

It is important to note that among the three types of multipliers reported, the employment one is usually believed to be the least reliable and should be interpreted with most caution. For this study it means the number of jobs created is most likely part-time and seasonal employment for the duration of the event, rather than a number of full-time jobs.

Table 162. Impacts of OHV/OSV Special Event Recreation Spending on Sales/Output (Top 10 Industries)

Industry/ Impacts	Direct	Indirect	Induced	Total
Durable goods merchant wholesalers	$1,744,169,168	$13,202,466	$8,808,550	$1,766,180,184

Industry/ Impacts	Direct	Indirect	Induced	Total
General and consumer goods rental except video tapes and discs	$301,696,167	$2,231,823	$2,313,874	$306,241,864
Personal and household goods repair and maintenance	$239,692,231	$3,305,842	$1,753,470	$244,751,543
Other real estate	$0	$183,452,531	$45,014,429	$228,466,960
Hotels and motels, including casino hotels	$136,301,128	$1,257,107	$3,444,540	$141,002,775
Owner-occupied dwellings	$0	$0	$134,455,365	$134,455,365
Full-service restaurants	$71,750,411	$11,453,768	$32,156,809	$115,360,989
Management of companies and enterprises	$0	$91,481,699	$16,129,565	$107,611,264
Other amusement and recreation industries	$89,370,316	$178,924	$1,475,515	$91,024,755
Internet publishing and broadcasting and web search portals	$0	$70,496,139	$19,211,533	$89,707,672
Total	$2,790,745,204	$1,430,850,256	$1,308,514,067	$5,530,109,526

Table 162 above reports the estimated effects of expenditures of OHV/OSV recreation users on the total value of economic transactions in the State. Direct injections in the State economy are estimated at $2.8 billion. Indirect effects of $1.4 billion represent linkages with other local suppliers of products and services, and induced effects of $1.3 billion are attributed to further expenditures and turnovers resulting in further employment and revenues. In total, direct, indirect, and induced impacts of expenditures of commuters account for $5.5 billion in output/sales in the State. These numbers produce an estimated gross output multiplier of 1.98 (total/ direct output effects), which could be interpreted as an output of $1.98 for each $1 that is spent by the OHV/OSV recreation user in the State (the original dollar and an additional $0.98). Table 163 below displays industries that grew by the largest dollar value in output/sales.

Table 163. Top 10 Industries by Estimated Growth (Percent)

Industry	Industry Total Output	Impact Output	Estimated Growth Percentage
General and consumer goods rental except video tapes and discs	$5,939,508,990.24	$306,241,864.17	5.16%
Personal and household goods repair and maintenance	$5,217,633,914.20	$244,751,542.56	4.69%
Durable goods merchant wholesalers	$53,117,041,862.15	$1,766,180,183.51	3.33%
Other amusement and recreation industries	$2,971,206,241.44	$91,024,755.19	3.06%
Hotels and motels, including casino hotels	$26,760,779,532.27	$141,002,775.41	.53%
Travel arrangement and reservation services	$15,759,201,880.79	$71,211,054.86	.45%
Wholesale - Wholesale electronic markets and agents and brokers	$8,206,212,292.72	$24,936,647.63	.30%
Retail - Miscellaneous store retailers	$17,191,183,966.81	$47,715,656.63	.28%
Postal service	$6,550,443,379.90	$17,054,097.56	.26%
All other food and drinking places	$35,179,441,152.13	$84,410,588.19	.24%
General and consumer goods rental except video tapes and discs	$5,939,508,990.24	$306,241,864.17	5.16%

Table 164 below reports impacts across four components of value added (employee compensation, proprietor income, taxes on production and imports net of subsidies, and other property income). For every dollar of direct value added by OHV/OSV special event recreation, $2.04 was generated in the State economy.

Table 164. Value Added Impacts of OHV/OSV Special Event Recreation Spending (Top 10 Industries)

Industry/ Impacts	Direct	Indirect	Induced	Total
Durable goods merchant wholesalers	$890,103,163	$6,737,624	$4,495,274	$901,336,061
General and consumer goods rental except video tapes and discs	$208,078,790	$1,539,280	$1,595,871	$211,213,942
Personal and household goods repair and maintenance	$176,181,202	$2,429,896	$1,288,855	$179,899,953
Other real estate	$0	$92,920,924	$22,800,352	$115,721,277
Owner-occupied dwellings	$0	$0	$111,411,612	$111,411,612
Hotels and motels, including casino hotels	$95,071,241	$876,843	$2,402,597	$98,350,682
Management of companies and enterprises	$0	$61,161,097	$10,783,598	$71,944,695
Full-service restaurants	$41,825,885	$6,676,812	$18,745,356	$67,248,053
Other amusement and recreation industries	$63,841,039	$127,813	$1,054,023	$65,022,876
All other food and drinking places	$39,577,340	$7,519,306	$8,776,147	$55,872,793
Total	$1,602,845,652	$849,905,482	$811,083,344	$3,263,834,478

The top 10 employment industries are listed in Table 165 below. It is important to note that employment numbers reported do not equal to full time equivalents, and are rather a mix of full-time, part-time and seasonal employment, including the self-employed.

Table 165. Impacts of OHV/OSV Special Event Recreation Spending on Employment (Top 10 Industries)

Industry/ Impacts	Direct	Indirect	Induced	Total
Durable goods merchant wholesalers	4,618	35	23	4,677
Other amusement and recreation industries	1,859	4	31	1,894
General and consumer goods rental except video tapes and discs	1,707	13	13	1,733

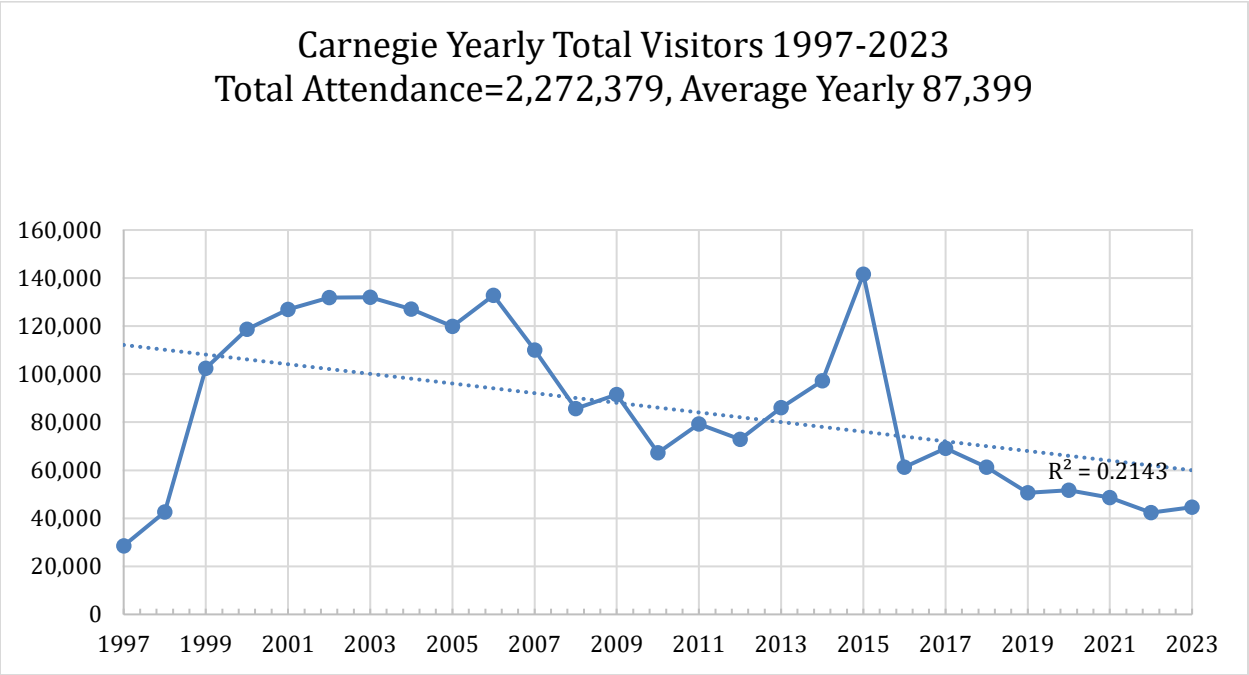
Industry/ Impacts	Direct	Indirect	Induced	Total
Personal and household goods repair and maintenance	1,525	21	11	1,557
Hotels and motels, including casino hotels	947	9	24	980
Full-service restaurants	676	108	303	1,087
All other food and drinking places	660	125	146	932
Retail - Miscellaneous store retailers	534	9	96	639
Retail - Food and beverage stores	169	3	137	309
Travel arrangement and reservation services	151	12	12	175
Total	6,444	6,179	25,567	12,944

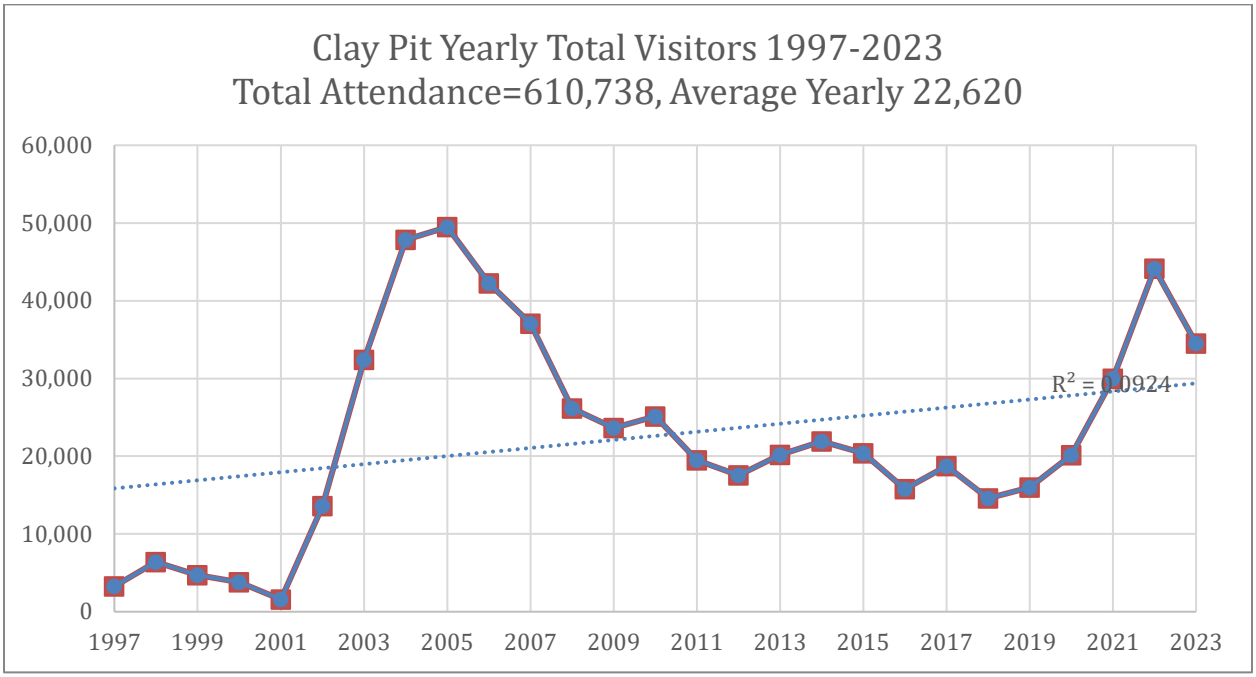
Lastly, Table 166 below provides fiscal (tax revenue) impact of OHV/OSV special event recreation spending across all levels of government. They include direct tax revenues supported by the OHV/OSV recreation users, as well as indirect tax revenues resulting from increased economic activity in related sectors.

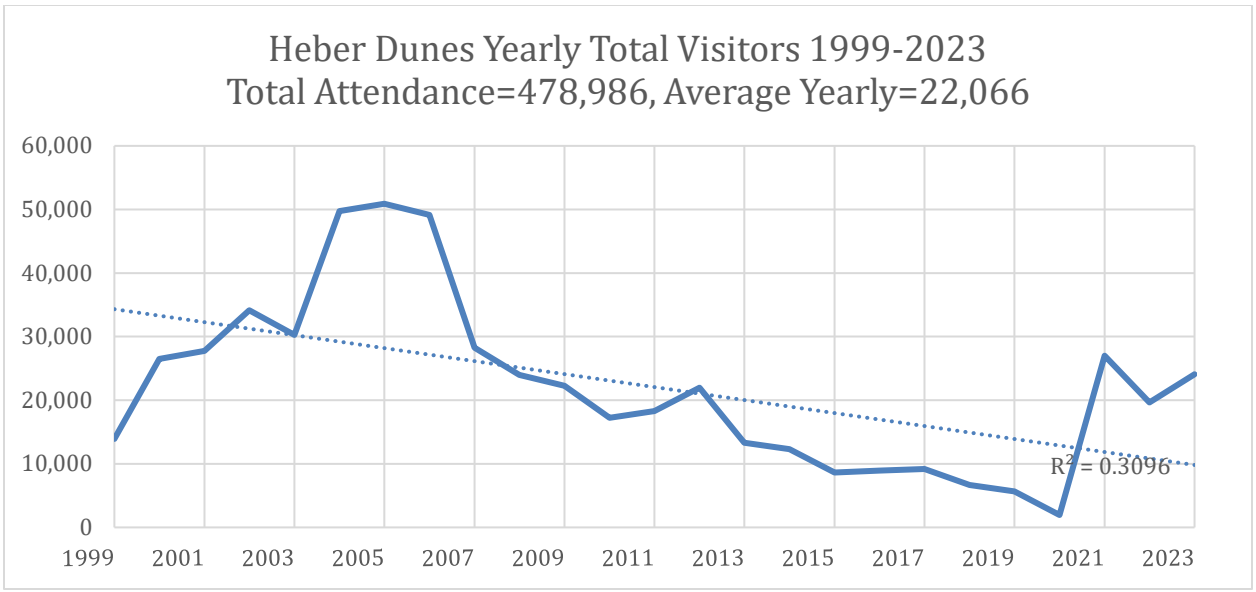
Table 166. Fiscal (Tax revenues) Impact of OHV/OSV Special Event Recreation Spending

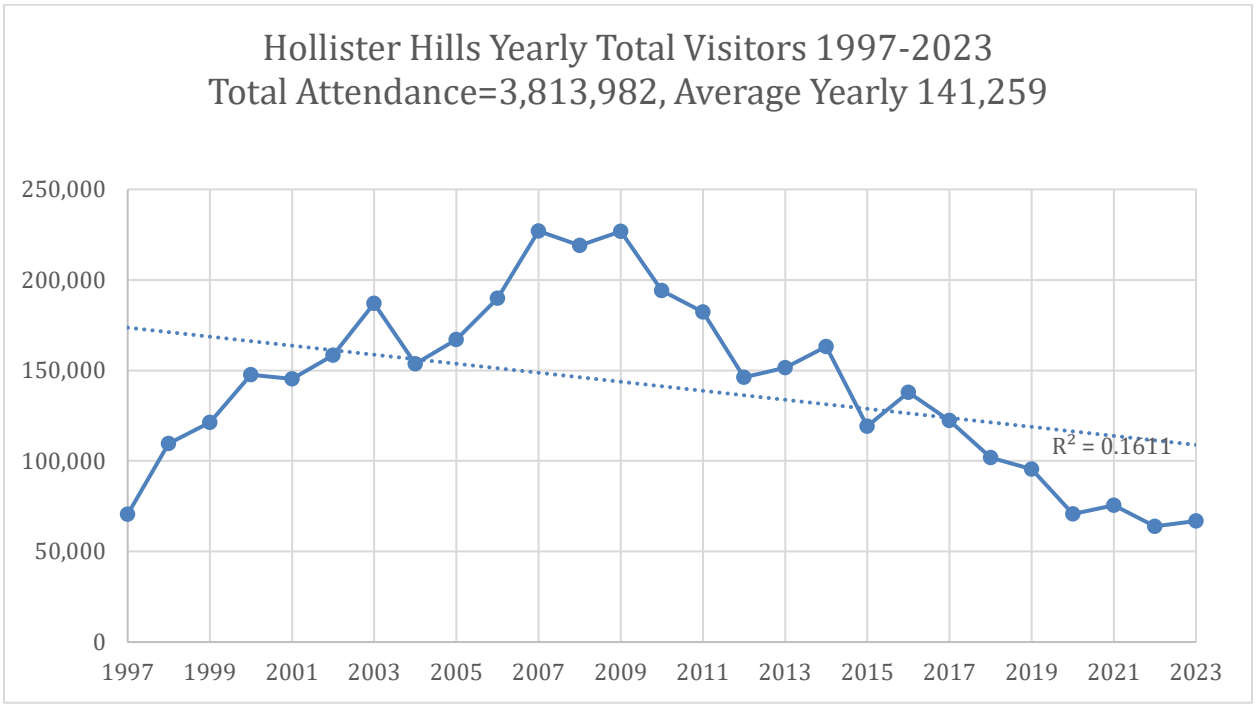
Impact	Sub County General	Sub County Special Districts	County	State	Federal	Total
Direct	$53,256,701	$62,983,471	$28,623,255	$174,647,948	$231,454,257	$550,965,633
Indirect	$8,054,299	$9,594,270	$4,357,461	$54,318,452	$132,532,383	$208,856,866
Induced	$14,242,584	$16,877,293	$7,668,680	$63,951,431	$113,133,454	$215,873,441
Total	$75,553,585	$89,455,034	$40,649,396	$292,917,831	$477,120,094	$975,695,940

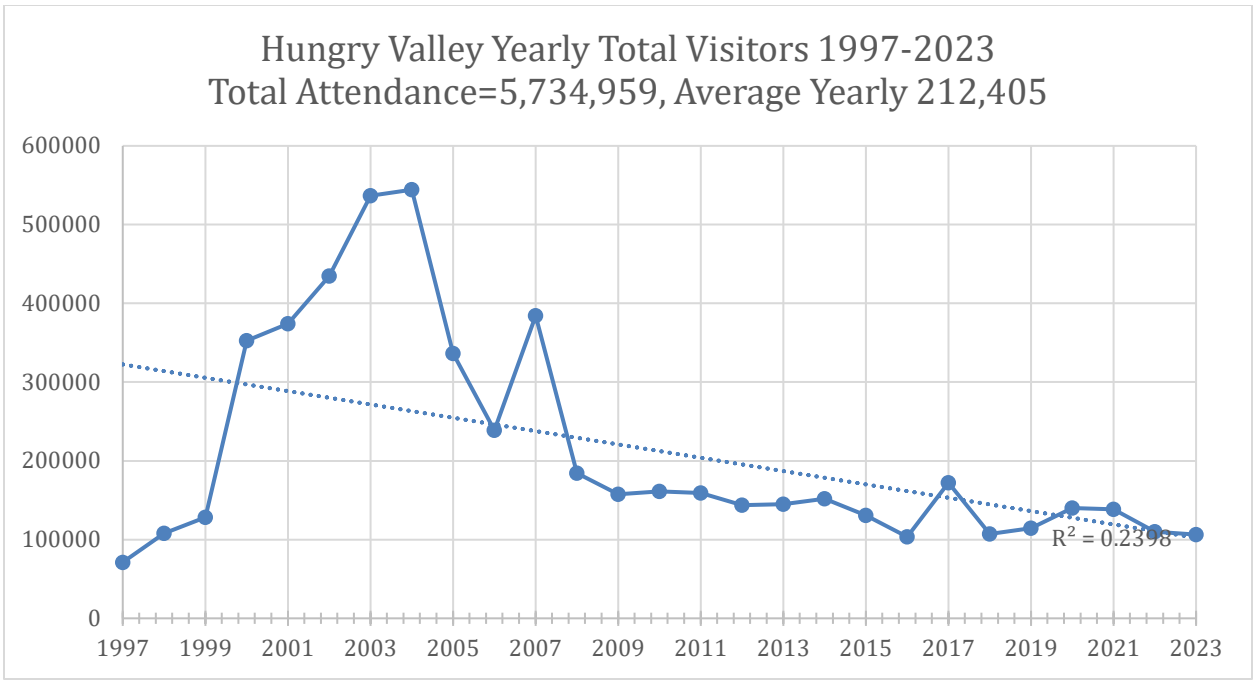
APPENDIX D. OHV/OSV ATTENDANCE RATES, 2017-2023

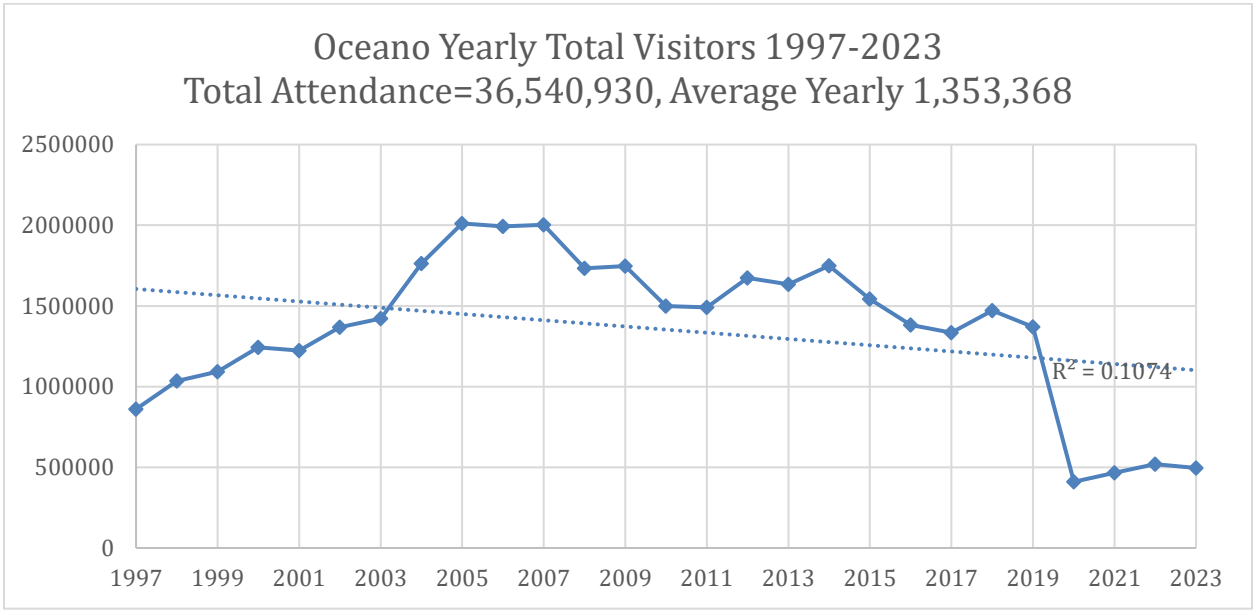





Heber Dunes Yearly Total Visitors 1999-2023
Total Attendance=478,986, Average Yearly=22,066
60,000
50,000
40,000
30,000
20,000
10,000
0
1999
2001
2003
2005
2007
2009
2011
2013
2015
2017
2019
2021
2023
R² = 0.3096


Hollister Hills Yearly Total Visitors 1997-2023
Total Attendance=3,813,982, Average Yearly 141,259
250,000
200,000
150,000
100,000
50,000
0
1997
1999
2001
2003
2005
2007
2009
2011
2013
2015
2017
2019
2021
2023
R² = 0.1611


Hungry Valley Yearly Total Visitors 1997-2023
Total Attendance=5,734,959, Average Yearly 212,405
600000
500000
400000
300000
200000
100000
0
1997
1999
2001
2003
2005
2007
2009
2011
2013
2015
2017
2019
2021
2023
R² = 0.2398


Oceano Yearly Total Visitors 1997-2023
Total Attendance=36,540,930, Average Yearly 1,353,368
2500000
2000000
1500000
1000000
500000
0
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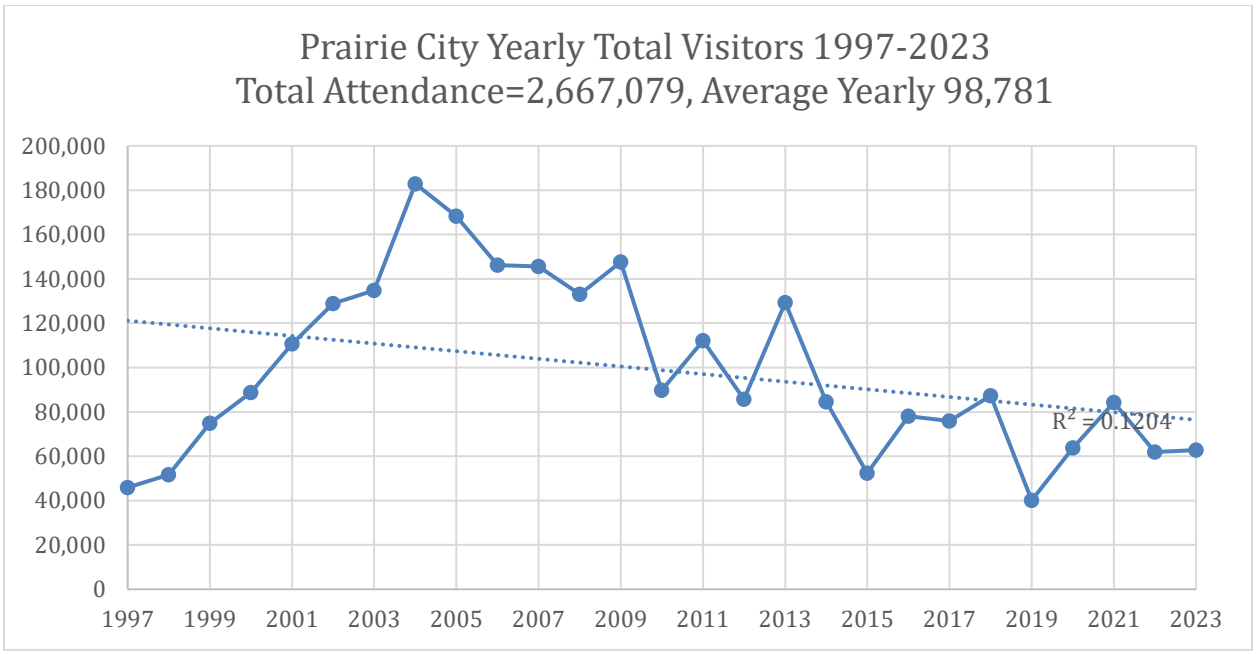
1999
2001
2003
2005
2007
2009
2011
2013
2015
2017
2019
2021
2023
R² = 0.1074



Back to Section II - OHV/OSV Recreation Trip Characteristics – Visitation Frequency

APPENDIX E – MAIL OUT SURVEY

Economic Impacts of
Snowmobile and Off-Highway Vehicle Use in the State of California

The California State Parks Off-Highway Vehicle/Over Snow Vehicle (OHV/OSV) Division is identifying the economic impacts resulting from visitation associated to off road and snowmobile areas within California. Your assistance in this effort if appreciated – please take a few minutes to respond to the following questions. Your help is voluntary, and responses are anonymous and confidential. Thank you!

OHV Definition For the purposes of this survey, OHV recreation is defined as: Operating any motorized vehicle, including over-snow vehicles (OSV), at designated recreation sites for the purpose of outdoor recreation.

Which off-road area/park OR snowmobile area did you last visit?

State of California Snowmobile Area was: _____

OR - I did not visit a state park/area, but visited a United States Forest (USFS) or Bureau of Land Management (BLM) or Private Off Road Area:
Please identify the place you last visited: _____

1. What is the zip code of where you live? Zip _____
2. Was this your first visit for OHV/OSV recreation at this place? (If yes, skip to question 3)
   - □ Yes (skip to question 3 below)
   - □ No, I have been here before, please tell us how often:
     a. How long have you visited this place?

_____ Years, _____ Number of Months

     b. How many days per month have you visited this place?

_____ Days Per Month

     c. How many months per year do you participate in OHVOSV recreation in California?

____Months per year

     d. Regarding this last visit, **how many people** were in your group including yourself?

Adults (18+) _____ Children (Under 18) _____

3. What was the primary purpose of your most recent visit? (Select ONE)
   - □ Visiting the site was the primary purpose for the trip
   - □ Participating in a race/competition was the primary purpose for the trip
   - □ Attending a race event was the primary purpose for the trip
   - □ Attending a non-race event was the primary purpose for the trip
   - □ Traveling to another primary destination, but stopped as part of that trip
   - □ Traveling to visit friends/family in the area, and stopped as part of that trip
   - □ Traveling on a business or combined business/personal trip, and stopped as part of that trip

4. Which of the following best applies to your most recent visit?

Please Check One	***How Did You Pay Fee For The Visit?***
	My group paid day use fees upon arrival.
	My group paid day use fees in advance.
	My group did not pay day use fees because the entrance gate was unattended.
	My group visited using an annual pass
	There are no use fees required.
	I don't know

5. Which of the following best describes your most recent visit for OHV recreation? (If your visit was part of a longer overall trip, please limit your response to just the day(s) you were off roading or snowmobiling at this site.) (If you selected Day Trip, skip to question 6)

   a. _____ Day Trip OR ____ Overnight Trip, how many nights did you stay? _____ Nights

   b. Where did you stay for this visit? (Please check one)

___ Hotel/Motel
___ B & B
___ Rented VRBO/AirBnB
___ In RV/vehicle in an undesignated area (i.e., street parking, boondocking)
___ Stayed overnight outside local area or just passing through
____ Campground NOT at visiting site
____ With friends/relatives in the area
____ Campground at visiting site

6. In each category below, how much did you spend on the trip for yourself and, if applicable, for the group of people for which you were financially responsible? *(Enter amount rounded to the nearest dollar. If not applicable, leave it blank.)*

Spending categories	**Spending to get to this Park/Site**	**Spending at this Park/Site**
Lodging (hotel, motel, campground, cabin)	$	$
Restaurant and bar meals and drinks in town	$	$
Grocery/convenience store food and drink	$	$
Transportation/Gas	$	$
Admissions in town & festival/event	$	$
Souvenirs/Art/Crafts/T-Shirts	$	$
Buying food at the festival/event	$	$
Rental of OHV/OSV equipment	$	$
Buying of OHV/OSV equipment	$	$
Repairs of OHV/OSV equipment	$	$

a. How many people in your group (**including yourself**) did these travel expenses cover? _____

7. Please select the types of vehicles that you and your group used for OHV recreation. "Your group" is the group of people for which you were financially responsible on this trip. Please check all that apply:

Check Which Ones	*Types of Vehicles*	*How many owned?*	*How many rented?*	*How many borrowed?*	*How Many Electric?*	*How Many Tracked for snow?*
	Recreational Motorcycle/Motorbike (including any tracked for snow) - Dual-Sport, Dirt Bike, Motocross, Trials, Mini, Enduro, Motorized Bike, Pit Bike, Timber Bike					
	All-Terrain Vehicle (including any tracked for snow) - ATV, 2-Up ATV					
	Recreational Off-Highway Vehicle (including any tracked for snow) - UTV, Side-by-Side, SxS, ROV, Go-Kart					
	Sand-Specialized Recreational Vehicle - Dune Buggy, Sand Rail					
	Rock-Specialized Recreational Vehicle - Rock Crawler, Rock Buggy					
	Snow-Specialized Recreational Vehicle - Snowmobile, Snow Bike					
	Amphibious Recreational Vehicle - Argo					
	Street Licensed Vehicle used for Off-Road Recreation – Jeep/AWD/4WD/SUV/Truck/RUV					
	Vehicle Used ONLY for Backcountry Access (i.e., to access areas for non-motorized recreation)					

8. Which recreational activities did you and your group participate in during your last visit? (CHECK ALL THAT APPLY)

- □ Trail Riding
- □ Motocross
- □ Enduros
- □ Poker runs
- □ Tent Camping
- □ RV Camping
- □ Volunteering
- □ Picnicking
- □ Geocaching
- □ Guided Walks (Nature, History) and Ranger Programs (ride with a ranger, Campfire Programs, etc.)
- □ Hiking
- □ Mountain biking
- □ Self-Guided Walks (Nature, History)
- □ Bird Watching/Wildlife Viewing
- □ Photography
- □ Stargazing
- □ Target Shooting
- □ Fishing
- □ Hunting
- □ Non-motorized Snowsports (ski, snowboard, sledding, tubing, snowshoe, snow bike)
- □ Non-motorized Watersports (swim, scuba, surf, paddleboard, kayak, free diving)
- □ Motorized Watersports (boating, jet ski)
- □ Backpacking/Mountaineering/Orienteering
- □ Rock climbing
- □ Horseback riding
- □ Drone/sUAS
- □ Other (please list)

9. How often do you visit any of the following State of California Vehicular Recreation Areas?

	Regularly	Sometimes	Rarely	Never Been
Auburn SRA (Mammoth Bar OHV Area)				
Carnegie SVRA				
Clay Pit SVRA				
Heber Dunes SVRA				
Hollister Hills SVRA				
Hungry Valley SVRA (aka Gorman)				
Oceano Dunes SVRA (aka Pismo)				
Ocotillo Wells SVRA				
Onyx ranch SVRA				
Prairie City SVRA				
San Luis SRA (Jasper Sears OHV Area)				

10. Where do you live? City _____ State _____
11. What is your age? _____
12. What is your gender?
    - □ Male
    - □ Female
    - □ Self-describe as: _____
    - □ Prefer not to answer.
13. What is your race/ ethnicity? (Check all that apply)

___ African American
___ Native American
___ White or Caucasian
___ Other (specify _____)
___ Prefer Not To Answer
___ Hispanic/Latino (specify ethnic origin _____)
___ Asian (specify ethnic origin _____)
___ Other (specify _____)

14. What language do you speak at home? (Check ONE response)
___ Always English ___ Mix of English and Spanish
___ Always Spanish ___ Other (Please specify: _____)

15. What is the highest level of education you have completed? (Please check ONE response)
___ Some High School
___ Graduated from High School or GED
___ Graduated from College or Technical School
___ Postgraduate degree(s)

16. Which statement best describes your total annual household income (from all sources and before taxes)? (Check ONE income)

CHECK	INCOME
	Less than $9,999
	$10,000-14,999
	$15,000-24,999
	$25,000-34,999
	$35,000-49,999
	$50,000-74,999
	$75,000-99,999
	$100,000-149,999
	$150,000-199,999
	$200,000 and above
	Choose not to answer

APPENDIX F – PROTOCOL FOR INTERCEPT SURVEY

California State Parks Off-Highway Vehicle/Over Snow Vehicle Division
Trip Information

Expense Procedures

You will be reimbursed for mileage – the university uses google maps to identify the number of miles from your starting point to your destination. Submit your starting and destination points. Likely there will be a check point/fee area to enter the State Recreation Area. Just pay the fee, making sure that you get a receipt. Submit receipt. When appropriate, food and lodging will be paid. Alcohol won't be a covered expense. Try to be conservative. Submit receipts.

The gate person may not be aware of the project. Make sure you mentally answer the survey yourself before you hand it out to others. You want to be familiar with the survey in case you get questions. Wear your Fresno State shirt and name tag.

Prepare a cover sheet for the batch of surveys you collect that day noting, site name, time duration at site, temperature, how many groups/individuals you approached in total. What was the use pattern, i.e. did most people show up early in the morning, after lunch or another time? Groups usually arrived around_____.

Sample Script:
Hi – I'm hoping you could fill out this survey – it's to look at the economic impact of OHVer's to this area & the rest of the state.

I'm _____, here working for the State Recreation Vehicle Area Office. I'm a Fresno State student.

2nd Effort: You can also access the survey on this postcard using this QR code.

Try to schedule a trip so you can reach users on a weekday and a weekend. There will be multiple trips to these sites so try to capture users on different days i.e., if you go to Carnegie SVRA on Friday & Saturday one week, try to capture Sunday & Monday on next visit.

When you're visiting an area, allow time to check in with retail shops to drop off postcards/posters. If they don't want the poster, don't leave it with them.

APPENDIX G – INTERCEPT SURVEY

Economic Impact Study of OHV/OSV in California

The California State Parks Off-Highway Vehicle/Over Snow Vehicle (OHV/OSV) Division is identifying the economic benefits associated with OHV/OSV users within California. The Fresno State Department of Recreation Administration is assisting with this research. Your assistance in this effort is appreciated – please take a few minutes to respond to the following questions. Your help is voluntary, and responses are anonymous and confidential. Thank you!

1. Is this your first visit to this site? □ Yes (If **YES**, please skip to question 2) □ No

   1a. How long have you been coming to this site? _____ Years and/or _____ Months

   1b. How often do you visit this site? (Please check **ONE** response**)**

   □ More than once a week □ About once a month
   □ About once a week □ Several times a year
   □ More than once a month □ About once a year

2. What is the primary purpose of your visit? **(**Please Check **ONE** response**)**
   □ Specifically, to attend an event □ A side trip or stop on a trip to another primary destination
   □ Visiting friends or relatives □ Business or combined business/pleasure trip
   □ Other: _____

3. What is the main Recreational ACTIVITY you are doing on your visit today? (Please write your response)

   _____

   3.a. What type of OHV are **you** using today?

   _____

   3.b. What type of OHV are **others in your travel party** using today?

   _____

4. How many people are in your group today (including yourself)? _____ people

   4a. How many people in your group today are **under age 18**? _____ people

   4b. Did you travel to this park/site as part of an organized group? □ Yes □ No

   4c. If you are part of an organized group today, please name the organization:

   _____

5. Is your visit part of a: □ Day trip or □ Overnight trip How many nights _____?

   5c. If an overnight trip, what type of lodging are you using or do you plan to use in the local area?

   □ Hotel/motel □ Campground NOT at visiting site
   □ B & B □ With friends or relatives in the area
   □ Rented VRBO/Airbnb □ Campground at visiting site
   □ in RV/vehicle in an undesignated area (i.e., street parking, boondocking)
   □ Stayed overnight outside local area or just passing through

6. What were the main sources used to find out information about this site? *(*Check **ALL** that apply*)*

□ Local Visitor Center □ Chamber of Commerce Website
□ Travel publication □ Brochure
□ Newspaper □ Cell Phone APP
□ Word of mouth □ State Parks publication (Please List)

□ Magazine □ Other: _____

PLEASE TURN PAGE OVER AND CONTINUE, THANK YOU!

7. How much money do you and other members of your immediate travel party plan to spend on your trip? Include the amount of money spent so far and money you intend to spend. Report all spending **within the region of the park/site.** (*Enter spending to the nearest dollar in each category below. Leave space blank if you spent nothing in a category.*)

Spending categories	**Spending to Get to this Park/ Site**	**Spending At the Park/ Site**
Lodging (hotel, motel, campground, cabin)	$	$
Restaurant and bar meals and drinks in town	$	$
Grocery/convenience store food and drink	$	$
Transportation/Gas	$	$
Admissions in town & festival/event	$	$
Souvenirs/Art/Crafts/T-Shirts	$	$
Buying food at the festival/event	$	$
Rentals of OHV/OSV equipment	$	$
Buying of OHV/OSV equipment	$	$
Repairs of OHV/OSV equipment	$	$

8. How many people in **your travel party (including yourself)** do these expenses cover? _____

About You

9. Where do you live? City _____State _____ Country_____ Postal zip code _____
10. What is your age: _____ years old?
11. What is your gender: □ Female □ Male □ Self defined as _____?
□ Prefer Not to Answer
12. What is your race/ethnicity? (Check **ALL** that apply.)
□ African American □ Native American □ White or Caucasian
□ Hispanic/Latino (specify ethnic origin):
_____
□ Asian (specify ethnic origin):
_____
□ Other:
_____
□ Prefer Not to Answer

13. What language do you speak at home? (Check **ONE** response)
    □ Always English □ Always Spanish
    □ Mix of English and Spanish □ Other (Please specify):

14. What is the highest level of education you have completed? (Please check **ONE** response)

    □ Some high school □ Graduated from college or technical school
    □ Graduated from high school or GED □ Postgraduate degree(s)

15. Which statement best describes your total annual household income (from all sources and before taxes)? (Check **ONE** response)
    □ Less than $9,999 □ $25,000-34,999 □ $75,000-99,999 □ $200,000 and above
    □ $10,000-14,999 □ $35,000-49,999 □ $100,000-149,999 □ Choose not to answer
    □ $15,000-24,999 □ $50,000-74,999 □ $150,000-199,999

THANK YOU VERY MUCH FOR YOUR INFORMATION - ENJOY YOUR DAY!

APPENDIX H – POSTCARD SURVEY

OHV Survey

Start of Block: GIS

Q1 You have indicated that the off-highway recreation site you visited most recently in California is ${e://Field/ParkName}. If this is not correct, please return to the map and select again. Otherwise, please move forward to the survey.

End of Block: GIS

Start of Block: Definitions

Q OHV Definition For the purposes of this survey, OHV recreation is defined as: Operating any motorized vehicle, including over-snow vehicles (OSV), at designated recreation sites for the purpose of outdoor recreation.

This term will appear throughout this survey.

End of Block: Definitions

Start of Block: Zip Code

Q2 What is the zip code where you live?

End of Block: Zip Code

Start of Block: First Visit

Q3 Was this your first visit to ${e://Field/ParkName} for OHV recreation?

- ○ Yes
- ○ No

Display This Question:

If Was this your first visit to ${e://Field/ParkName} for OHV recreation? = No

Q4 How long have you been visiting ${e://Field/ParkName} for OHV recreation?

- ○ Years _____
- ○ Months _____

Display This Question:

If Was this your first visit to ${e://Field/ParkName} for OHV recreation? = No

Q5 How many days per month do you visit ${e://Field/ParkName} for OHV recreation?

- ○ Days per month _____

Q6 How many months per year do you participate in OHV recreation in California?

○ Months per year _____

Q7 Regarding this last visit to ${e://Field/ParkName}, how many people were in your group including yourself?

○ Adults (18+) _____

○ Children (Under 18) _____

End of Block: First Visit

Start of Block: Primary Purpose

Q8 What was the primary purpose of your most recent visit to ${e://Field/ParkName}? (Select ONE)

○ Visiting ${e://Field/ParkName} was the primary purpose for the trip

○ Participating in a race/competition at ${e://Field/ParkName} was the primary purpose for the trip

○ Attending a race event at ${e://Field/ParkName} was the primary purpose for the trip

○ Attending a non-race event at ${e://Field/ParkName} was the primary purpose for the trip

○ Traveling to another primary destination, but stopped as part of that trip

○ Traveling to visit friends/family in the area, and stopped as part of that trip

○ Traveling on a business or combined business/personal trip, and stopped as part of that trip

End of Block: Primary Purpose

Start of Block: Fees

Q9 Which of the following best applies to your most recent visit to ${e://Field/ParkName}?

○ My group paid day use fees upon arrival.

○ My group paid day use fees in advance.

○ My group did not pay day use fees because the entrance gate was unattended.

○ My group visited using an annual pass.

○ There are no use fees required at ${e://Field/ParkName}.

○ I don't know.

End of Block: Fees

Start of Block: Overnight Trip

Q10 Which of the following best describes your most recent visit to ${e://Field/ParkName} for OHV

recreation? (If your visit was part of a longer overall trip, please limit your response to just the day(s) you recreated at this site.)

- ○ Day Trip
- ○ Overnight Trip

Q11 How many nights did you stay?

Q12 Where did you stay?

- ○ Hotel/Motel
- ○ Bed & Breakfast
- ○ Campground at ${e://Field/ParkName}
- ○ Campground NOT at ${e://Field/ParkName}
- ○ With friends/relatives in the area
- ○ Rented accommodation (i.e. Airbnb/VrBO)
- ○ In our RV/vehicle in an undesignated area (i.e. street parking, etc.)
- ○ Outside the local area (just passing through)

End of Block: Overnight Trip

Start of Block: Group Spend

Q13 In each category below, how much did you spend on the trip to ${e://Field/ParkName} for yourself and, if applicable, for the group of people for which you were financially responsible? (Enter amount rounded to the nearest dollar. If not applicable, leave blank.)

	Spent traveling to ${e://Field/ParkName} (in $)	Spent in the region of ${e://Field/ParkName} (in $)
Lodging (hotel, motel, campground, cabin)		
Transportation/Gas		
Restaurant and bar meals and drinks in town		
Buying food at the festival/event (if applicable)		
Grocery/convenience store food and drink		
Admission fees (in town & festival/event)		
Souvenirs/Art/Crafts/T-Shirts		
Rentals of OHV equipment		
Buying of OHV equipment		
Repairs of OHV equipment		
Recreation services (i.e. guided tours, getting vehicles washed, etc.)		

Q14 How many people in your group (including yourself) did these travel expenses cover?

End of Block: Group Spend

Start of Block: Vehicles Used

${e://Field/ParkName}. "Your group" is the group of people for which you were financially responsible on this trip.

Please check all that apply:

☐ Recreational Motorcycle/Motorbike (including any tracked for snow) - Dual-Sport, Dirt Bike, Motocross, Trials, Mini, Enduro, Motorized Bike, Pit Bike, Timber Bike

☐ All-Terrain Vehicle (including any tracked for snow) - ATV, 2-Up ATV

☐ Recreational Off-Highway Vehicle (including any tracked for snow) - UTV, Side-by-Side, SxS, ROV, Go-Kart

☐ Sand-Specialized Recreational Vehicle - Dune Buggy, Sand Rail

☐ Rock-Specialized Recreational Vehicle - Rock Crawler, Rock Buggy

☐ Snow-Specialized Recreational Vehicle - Snowmobile, Snow Bike

☐ Amphibious Recreational Vehicle - Argo

☐ Street Licensed Vehicle used for Off-Road Recreation – Jeep/AWD/4WD/SUV/Truck/RUV

☐ Vehicle Used ONLY for Backcountry Access (i.e. to access areas for non-motorized recreation)

Q15.1.1 You indicated that **Recreational Motorcycle/Motorbike (including any tracked for snow) - Dual-Sport, Dirt Bike, Motocross, Trials, Mini, Enduro, Motorized Bike, Pit Bike, Timber Bike** were used by your group during your most recent visit to ${e://Field/ParkName}. How many of those used were owned, rented, or borrowed?

Mini, Enduro, Motorized Bike, Pit Bike, Timber Bike used on the trip.)

	How many owned?	How many rented?	How many borrowed?
Recreational Motorcycle/Motorbike (including any tracked for snow) - Dual-Sport, Dirt Bike, Motocross, Trials, Mini, Enduro, Motorized Bike, Pit Bike, Timber Bike	▼ None ... 4+	▼ None ... 4+	▼ None ... 4+

Display This Question:

If Please select the types of vehicles that you and your group used for OHV recreation at ... = Recreational Motorcycle/Motorbike (including any tracked for snow) - Dual-Sport, Dirt Bike, Motocross, Trials, Mini, Enduro, Motorized Bike, Pit Bike, Timber Bike

Q15.1.2 On your most recent visit to ${e://Field/ParkName}, how many of the "**Recreational Motorcycle/Motorbike (including any tracked for snow) - Dual-Sport, Dirt Bike, Motocross, Trials, Mini, Enduro, Motorized Bike, Pit Bike, Timber Bike**" used by your group are electric? How many were tracked for snow during the trip?

	How many electric?	How many tracked for snow?
Recreational Motorcycle/Motorbike (including any tracked for snow) - Dual-Sport, Dirt Bike, Motocross, Trials, Mini, Enduro, Motorized Bike, Pit Bike, Timber Bike	▼ None ... 4+	▼ None ... 4+

Page Break

Q15.2.1 You indicated that **All-Terrain Vehicle (including any tracked for snow) - ATV, 2-Up ATV** were used by your group during your most recent visit to ${e://Field/ParkName}. How many of those used were owned, rented, or borrowed?

(The total of these three categories should equal the total number of number of All-Terrain Vehicle (including any tracked for snow) - ATV, 2-Up ATV used on the trip.)

	How many owned?	How many rented?	How many borrowed?
All-Terrain Vehicle (including any tracked for snow) - ATV, 2-Up ATV	▼ None ... 4+	▼ None ... 4+	▼ None ... 4+

Q15.2.2 On your most recent visit to ${e://Field/ParkName}, how many of the "**All-Terrain Vehicle (including any tracked for snow) - ATV, 2-Up ATV**" used by your group are electric? How many were tracked for snow during the trip?

	How many electric?	How many tracked for snow?
All-Terrain Vehicle (including any tracked for snow) - ATV, 2-Up ATV	▼ None ... 4+	▼ None ... 4+

Page Break

Q15.3.1 You indicated that **Recreational Off-Highway Vehicle (including any tracked for snow) - UTV, Side-by-Side, SxS, ROV, Go-Kart** were used by your group during your most recent visit to ${e://Field/ParkName}. How many of those used were owned, rented, or borrowed?

(The total of these three categories should equal the total number of number of Recreational Off-Highway Vehicle (including any tracked for snow) - UTV, Side-by-Side, SxS, ROV, Go-Kart used on the trip.)

	How many owned?	How many rented?	How many borrowed?
Recreational Off-Highway Vehicle (including any tracked for snow) - UTV, Side-by-Side, SxS, ROV, Go-Kart	▼ None ... 4+	▼ None ... 4+	▼ None ... 4+

Page Break

Q15.3.2 On your most recent visit to ${e://Field/ParkName}, how many of the "**Recreational Off-Highway Vehicle (including any tracked for snow) - UTV, Side-by-Side, SxS, ROV, Go- Kart**" used by your group are electric? How many were tracked for snow during the trip?

	How many electric?	How many tracked for snow?
Recreational Off-Highway Vehicle (including any tracked for snow) - UTV, Side-by- Side, SxS, ROV, Go-Kart	▼ None ... 4+	▼ None ... 4+

Page Break

Q15.4.1 You indicated that **Sand-Specialized Recreational Vehicle - Dune Buggy, Sand Rail** were used by your group during your most recent visit to ${e://Field/ParkName}. How many of those used were owned, rented, or borrowed?

(The total of these three categories should equal the total number of number of Sand- Specialized Recreational Vehicle - Dune Buggy, Sand Rail used on the trip.)

	How many owned?	How many rented?	How many borrowed?
Sand-Specialized Recreational Vehicle - Dune Buggy, Sand Rail	▼ None ... 4+	▼ None ... 4+	▼ None ... 4+

Page Break

Q15.4.2 On your most recent visit to ${e://Field/ParkName}, how many of the "**Sand- Specialized Recreational Vehicle - Dune Buggy, Sand Rail**" used by your group are electric? How many were tracked for snow during the trip?

	How many electric?	How many tracked for snow?
Sand-Specialized Recreational Vehicle - Dune Buggy, Sand Rail	▼ None ... 4+	▼ None ... 4+

Page Break

Q15.5.1 You indicated that **Rock-Specialized Recreational Vehicle - Rock Crawler, Rock Buggy** were used by your group during your most recent visit to ${e://Field/ParkName}. How many of those used were owned, rented, or borrowed?

(The total of these three categories should equal the total number of number of Rock- Specialized Recreational Vehicle - Rock Crawler, Rock Buggy used on the trip.)

	How many owned?	How many rented?	How many borrowed?
Rock-Specialized Recreational Vehicle - Rock Crawler, Rock Buggy	▼ None ... 4+	▼ None ... 4+	▼ None ... 4+

Page Break

Q15.5.2 On your most recent visit to ${e://Field/ParkName}, how many of the "**Rock- Specialized Recreational Vehicle - Rock Crawler, Rock Buggy**" used by your group are electric? How many were tracked for snow during the trip?

	How many electric?	How many tracked for snow?
Rock-Specialized Recreational Vehicle - Rock Crawler, Rock Buggy	▼ None ... 4+	▼ None ... 4+

Page Break

Q15.6.1 You indicated that **Snow-Specialized Recreational Vehicle - Snowmobile, Snow Bike** were used by your group during your most recent visit to ${e://Field/ParkName}. How many of those used were owned, rented, or borrowed?

(The total of these three categories should equal the total number of Snow- Specialized Recreational Vehicle - Snowmobile, Snow Bike used on the trip.)

	How many owned?	How many rented?	How many borrowed?
Snow-Specialized Recreational Vehicle - Snowmobile, Snow Bike	▼ None ... 4+	▼ None ... 4+	▼ None ... 4+

Page Break

Q15.6.2 On your most recent visit to ${e://Field/ParkName}, how many of the "**Snow-Specialized Recreational Vehicle - Snowmobile, Snow Bike**" used by your group are electric? How many were tracked for snow during the trip?

	How many electric?	How many tracked for snow?
Snow-Specialized Recreational Vehicle - Snowmobile, Snow Bike	▼ None ... 4+	▼ None ... 4+

Page Break

Q15.7.1 You indicated that **Amphibious Recreational Vehicle - Argo** were used by your group during your most recent visit to ${e://Field/ParkName}. How many of those used were owned, rented, or borrowed?

(The total of these three categories should equal the total number of number of Amphibious Recreational Vehicle - Argo used on the trip.)

	How many owned?	How many rented?	How many borrowed?
Amphibious Recreational Vehicle - Argo	▼ None ... 4+	▼ None ... 4+	▼ None ... 4+

Page Break

Q15.7.2 On your most recent visit to ${e://Field/ParkName}, how many of the "**Amphibious Recreational Vehicle - Argo**" used by your group are electric? How many were tracked for snow during the trip?

	How many electric?	How many tracked for snow?
Amphibious Recreational Vehicle - Argo	▼ None ... 4+	▼ None ... 4+

Page Break

Q15.8.1 You indicated that **Street Licensed Vehicle used for Off-Road Recreation – Jeep/AWD/4WD/SUV/Truck/RUV** were used by your group during your most recent visit to ${e://Field/ParkName}. How many of those used were owned, rented, or borrowed?

(The total of these three categories should equal the total number of number of Street Licensed Vehicle used for Off-Road Recreation – Jeep/AWD/4WD/SUV/Truck/RUV used on the trip.)

	How many owned?	How many rented?	How many borrowed?
Street Licensed Vehicle used for Off-Road Recreation – Jeep/AWD/4WD/SUV/Truck/RUV	▼ None ... 4+	▼ None ... 4+	▼ None ... 4+

Page Break

Q15.8.2 On your most recent visit to ${e://Field/ParkName}, how many of the "**Street Licensed Vehicle used for Off-Road Recreation – Jeep/AWD/4WD/SUV/Truck/RUV**" used by your group are electric? How many were tracked for snow during the trip?

	How many electric?	How many tracked for snow?
Street Licensed Vehicle used for Off-Road Recreation – Jeep/AWD/4WD/SUV/Truck/RUV	▼ None ... 4+	▼ None ... 4+

Page Break

Q15.9.1 You indicated that **Vehicle Used ONLY for Backcountry Access (i.e. to access areas for non-motorized recreation)** were used by your group during your most recent visit to ${e://Field/ParkName}. How many of those used were owned, rented, or borrowed?

(The total of these three categories should equal the total number of number of Vehicle Used ONLY for Backcountry Access (i.e. to access areas for non-motorized recreation) used on the trip.)

	How many owned?	How many rented?	How many borrowed?
Vehicle Used ONLY for Backcountry Access (i.e. to access areas for non-motorized recreation)	▼ None ... 4+	▼ None ... 4+	▼ None ... 4+

Page Break

Q15.9.2 On your most recent visit to ${e://Field/ParkName}, how many of the "**Vehicle Used ONLY for Backcountry Access (i.e. to access areas for non-motorized recreation)**" used by your group are electric? How many were tracked for snow during the trip?

	How many electric?	How many tracked for snow?
Vehicle Used ONLY for Backcountry Access (i.e. to access areas for non-motorized recreation)	▼ None ... 4+	▼ None ... 4+

End of Block: Vehicles Used

Start of Block: Vehicles Owned

Q16 Which of the following types of OHV recreation vehicles do you own?

Please check all that apply:

☐ Recreational Motorcycle/Motorbike (including any tracked for snow) - Dual-Sport, Dirt Bike, Motocross, Trials, Mini, Enduro, Motorized Bike, Pit Bike, Timber Bike

☐ All-Terrain Vehicle (including any tracked for snow) - ATV, 2-Up ATV

☐ Recreational Off-Highway Vehicle (including any tracked for snow) - UTV, Side-by-Side, SxS, ROV, Go-Kart

☐ Sand-Specialized Recreational Vehicle - Dune Buggy, Sand Rail

☐ Rock-Specialized Recreational Vehicle - Rock Crawler, Rock Buggy

☐ Snow-Specialized Recreational Vehicle - Snowmobile, Snow Bike

☐ Amphibious Recreational Vehicle - Argo

☐ Vehicle Designed for and Used Regularly for Off-Road Recreation - Jeep/AWD/4WD/SUV/Truck/RUV

Q16.1.1 You indicated that you own at least one **Recreational Motorcycle/Motorbike (including any tracked for snow) - Dual-Sport, Dirt Bike, Motocross, Trials, Mini, Enduro, Motorized Bike, Pit Bike, Timber Bike**. Could you please indicate how many you own?

	Number Owned
	▼ None ... 4+

Display This Question:

If Which of the following types of OHV recreation vehicles do you own? Please check all that apply: = Recreational Motorcycle/Motorbike (including any tracked for snow) - Dual-Sport, Dirt Bike, Motocross, Trials, Mini, Enduro, Motorized Bike, Pit Bike, Timber Bike

Q16.1.2 How many of those are electric and were purchased new in the last three years?

	How many are electric?	How many were purchased new in the last three years?
	▼ None ... 4+	▼ None ... 4+

Page Break

Display This Question:

If Which of the following types of OHV recreation vehicles do you own? Please check all that apply: = All-Terrain Vehicle (including any tracked for snow) - ATV, 2-Up ATV

Q16.2.1 You indicated that you own at least one **All-Terrain Vehicle (including any tracked for snow) - ATV, 2-Up**. Could you please indicate how many you own?

	Number Owned
	▼ None ... 4+

Q16.2.2 How many of those are electric and were purchased new in the last three years?

How many are electric?	How many were purchased new in the last three years?
▼ None ... 4+	▼ None ... 4+

Page Break

Display This Question:

If Which of the following types of OHV recreation vehicles do you own? Please check all that apply: = Recreational Off-Highway Vehicle (including any tracked for snow) - UTV, Side-by-Side, SxS, ROV, Go- Kart

Q16.3.1 You indicated that you own at least one **Recreational Off-Highway Vehicle (including any tracked for snow) - UTV, Side-by-Side, SxS, ROV, Go-Kart**. Could you please indicate how many you own?

Number Owned
▼ None ... 4+

Display This Question:

If Which of the following types of OHV recreation vehicles do you own? Please check all that apply: = Recreational Off-Highway Vehicle (including any tracked for snow) - UTV, Side-by-Side, SxS, ROV, Go- Kart

Q16.3.2 How many of those are electric and were purchased new in the last three years?

How many are electric?	How many were purchased new in the last three years?
▼ None ... 4+	▼ None ... 4+

Page Break

Q16.4.1 You indicated that you own at least one **Sand-Specialized Recreational Vehicle - Dune Buggy, Sand Rail**. Could you please indicate how many you own?

Number Owned
▼ None ... 4+

Display This Question:

If Which of the following types of OHV recreation vehicles do you own? Please check all that apply: = Sand-Specialized Recreational Vehicle - Dune Buggy, Sand Rail

Q16.4.2 How many of those are electric and were purchased new in the last three years?

How many are electric?	How many were purchased new in the last three years?
▼ None ... 4+	▼ None ... 4+

Page Break

Q16.5.1 You indicated that you own at least one **Rock-Specialized Recreational Vehicle - Rock Crawler, Rock Buggy**. Could you please indicate how many you own?

Number Owned
▼ None ... 4+

Display This Question:

If Which of the following types of OHV recreation vehicles do you own? Please check all that apply: = Rock-Specialized Recreational Vehicle - Rock Crawler, Rock Buggy

Q16.5.2 How many of those are electric and were purchased new in the last three years?

How many are electric?	How many were purchased new in the last three years?
▼ None ... 4+	▼ None ... 4+

Page Break

Q16.6.1 You indicated that you own at least one **Snow-Specialized Recreational Vehicle - Snowmobile, Snow Bike**. Could you please indicate how many you own?

Number Owned
▼ None ... 4+

Display This Question:

If Which of the following types of OHV recreation vehicles do you own? Please check all that apply: = Snow-Specialized Recreational Vehicle - Snowmobile, Snow Bike

Q16.6.2 How many of those are electric and were purchased new in the last three years?

How many are electric?	How many were purchased new in the last three years?
▼ None ... 4+	▼ None ... 4+

Page Break

Q16.7.1 You indicated that you own at least one **Amphibious Recreational Vehicle - Argo** Could you please indicate how many you own?

	Number Owned
	▼ None ... 4+

Display This Question:

If Which of the following types of OHV recreation vehicles do you own? Please check all that apply: = Amphibious Recreational Vehicle - Argo

Q16.7.2 How many of those are electric and were purchased new in the last three years?

	How many are electric?	How many were purchased new in the last three years?
	▼ None ... 4+	▼ None ... 4+

Page Break

Q16.8.1 You indicated that you own at least one **Vehicle Designed for and Used Regularly for Off-Road Recreation - Jeep/AWD/4WD/SUV/Truck/RUV**. Could you please indicate how many you own?

	Number Owned
	▼ None ... 4+

Display This Question:

If Which of the following types of OHV recreation vehicles do you own? Please check all that apply: = Vehicle Designed for and Used Regularly for Off-Road Recreation - Jeep/AWD/4WD/SUV/Truck/RUV

Q16.8.2 How many of those are electric and were purchased new in the last three years?

	How many are electric?	How many were purchased new in the last three years?
	▼ None ... 4+	▼ None ... 4+

End of Block: Vehicles Owned

Start of Block: Recreational Activities

Q17 Which recreational activities did you and your group participate in during your last visit to ${e://Field/ParkName}? (CHECK ALL THAT APPLY)

- [ ] Trail Riding
- [ ] Motocross
- [ ] Enduros
- [ ] Poker runs
- [ ] Tent Camping
- [ ] RV Camping
- [ ] Volunteering
- [ ] Picnicking
- [ ] Geocaching
- [ ] Guided Walks (Nature, History) and ranger Programs (ride with a ranger, Campfire Programs, etc.)
- [ ] Self-Guided Walks (Nature, History)
- [ ] Bird Watching/Wildlife Viewing
- [ ] Hiking
- [ ] Mountain Biking
- [ ] Photography
- [ ] Stargazing

- [ ] Target Shooting
- [ ] Fishing
- [ ] Hunting
- [ ] Non-motorized Snowsports (ski, snowboard, sledding, tubing, snowshoe, snowbike)
- [ ] Non-motorized Watersports (swim, scuba, surf, paddleboard, kayak, free diving)
- [ ] Motorized Watersports (boating, jetski)
- [ ] Backpacking/Mountaineering/Orienteering
- [ ] Rockclimbing
- [ ] Horseback riding
- [ ] Drone/sUAS
- [ ] Other _____
- [ ] Other _____
- [ ] Other _____

End of Block: Recreational Activities

Start of Block: Recreating at State Vehicular Recreation Areas

Q18 How often do you recreate at the following State Vehicular Recreation Areas?

	Regularly	Sometimes	Rarely	Never Been
Auburn SRA (Mammoth Bar OHV Area)	○	○	○	○
Carnegie SVRA	○	○	○	○
Clay Pit SVRA	○	○	○	○
Heber Dunes SVRA	○	○	○	○
Hollister Hills SVRA	○	○	○	○
Hungry Valley SVRA (aka Gorman)	○	○	○	○
Oceano Dunes SVRA (aka Pismo)	○	○	○	○
Ocotillo Wells SVRA	○	○	○	○
Onyx ranch SVRA	○	○	○	○
Prairie City SVRA	○	○	○	○
San Luis SRA (Jasper Sears OHV Area)	○	○	○	○

End of Block: Recreating at State Vehicular Recreation Areas

Start of Block: Demographics

Q19 Where do you live?

- ○ City _____
- ○ State _____

Q20 What is your age?

Q21 What is your gender?

- ○ Male
- ○ Female
- ○ Self-describe as: _____
- ○ Prefer not to answer

Q22 What is your race/ ethnicity? (Check all that apply)

- ☐ African American
- ☐ Native American
- ☐ White or Caucasian
- ☐ Hispanic/Latino (specify ethnic origin):
- ☐ Asian (specify ethnic origin):
- ☐ Other: _____
- ☐ Prefer Not to Answer

Q23 What language do you speak at home? (Check ONE response)

- ○ Always English
- ○ Always Spanish
- ○ Mix of English and Spanish
- ○ Other (Please specify): _____

Q24 What is the highest level of education you have completed? (Please check ONE response)

- ○ Some high school
- ○ Graduated from high school or GED
- ○ Graduated from college or technical school
- ○ Postgraduate degree(s)

Q25 Which statement best describes your total 2020 annual household income (from all sources and before taxes)? (Check ONE response)

- ○ Less than $9,999
- ○ $10,000-14,999
- ○ $15,000-24,999
- ○ $25,000-34,999
- ○ $35,000-49,999
- ○ $50,000-74,999
- ○ $75,000-99,999
- ○ $100,000-149,999
- ○ $150,000-199,999
- ○ $200,000 and above
- ○ Choose not to answer

End of Block: Demographics

APPENDIX J – CALIFORNIA DEPARTMENT OF MOTOR VEHICLES (DMV) REGISTERED VEHICLES (BY COUNTY), 2016-2023

Alameda County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	7635	3863	0	322	4	714	12538
2017	7379	3867	3	329	4	713	12295
2018	7127	3826	10	299	3	738	12003
2019	8750	4581	10	351	4	956	14660
2020	8654	4552	27	336	5	1058	14631
2021	8558	4523	43	320	6	1160	14610
2022	8171	4291	63	308	5	1259	14097
2023	7937	4159	26	322	4	923	13367

Alpine County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	14	25	0	118	1	34	192
2017	13	23	0	83	0	31	150
2018	8	24	0	62	0	33	127
2019	9	29	0	68	0	41	147
2020	13	28	2	69	0	41	152
2021	16	27	3	70	0	40	156
2022	22	22	4	70	0	35	153
2023	14	25	4	79	1	36	154

Amador County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	806	1594	4	161	2	569	3136
2017	811	1581	19	163	1	560	3135
2018	814	1626	25	145	2	585	3197
2019	1009	1864	39	191	3	703	3809
2020	1057	1850	61	179	3	745	3894
2021	1104	1836	82	167	3	786	3978
2022	1095	1812	107	161	3	836	4014
2023	940	1719	46	165	2	673	3545

Butte County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	2601	5196	2	959	5	2455	11218
2017	2493	5234	11	951	3	2376	11068
2018	2438	5337	26	960	1	2315	11077
2019	2922	5988	39	1094	8	2678	12729
2020	2909	5820	123	1047	9	2837	12744
2021	2895	5651	207	1000	10	2995	12758
2022	2911	5515	333	969	8	3076	12812
2023	2710	5487	103	989	6	2649	11944

Calaveras County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	1055	1634	2	262	2	483	3438
2017	1094	1622	14	305	4	517	3556
2018	1123	1726	28	317	5	552	3751
2019	1447	2031	33	391	5	666	4573
2020	1504	2055	54	390	4	735	4742
2021	1561	2079	75	389	3	803	4910
2022	1605	2069	105	364	3	858	5004
2023	1314	1860	43	338	4	647	4205

Colusa County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	324	972	0	276	0	433	2005
2017	308	1000	5	274	0	435	2022
2018	284	960	5	252	0	393	1894
2019	351	1099	9	294	0	457	2210
2020	352	1103	15	289	0	504	2262
2021	352	1107	21	283	0	551	2314
2022	355	1138	41	266	0	588	2388
2023	329	1046	16	274	0	476	2139

Contra Costa County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	9837	4706	1	440	5	999	15988
2017	9672	4735	7	426	4	1024	15868
2018	9318	4668	9	394	8	1064	15461
2019	11415	5577	14	491	8	1380	18885
2020	11505	5551	38	478	6	1628	19205
2021	11594	5524	62	464	4	1876	19524
2022	11342	5351	90	430	4	1988	19205
2023	10530	5094	31	441	6	1389	17489

Del Norte County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	60	293	0	2	0	73	428
2017	75	270	2	2	0	75	424
2018	61	268	2	0	0	79	410
2019	83	315	3	2	0	102	505
2020	87	297	7	1	0	107	497
2021	90	278	10	0	0	111	489
2022	107	286	11	0	0	134	538
2023	79	285	6	2	0	96	466

El Dorado County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	4291	4388	6	1059	41	1926	11711
2017	4175	4387	37	1043	36	1951	11629
2018	4069	4508	68	1009	35	1965	11654
2019	5071	5254	93	1224	42	2336	14020
2020	5202	5303	156	1171	39	2505	14375
2021	5332	5351	219	1118	36	2673	14729
2022	5289	5240	269	1087	37	2809	14731
2023	4705	4855	115	1090	38	2277	13079

Fresno County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	4008	10065	4	546	13	2421	17057
2017	3921	10018	14	521	10	2629	17113
2018	3662	9663	35	503	17	2766	16646
2019	4662	11469	49	599	22	3662	20463
2020	5062	11023	72	569	20	4322	21067
2021	5461	10577	95	539	17	4981	21670
2022	5695	10094	121	521	16	5337	21784
2023	4568	10314	53	538	16	3633	19122

Glenn County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	326	1400	0	191	0	478	2395
2017	329	1471	4	186	0	458	2448
2018	316	1499	8	208	0	479	2510
2019	391	1686	12	240	0	575	2904
2020	415	1661	31	232	0	641	2979
2021	438	1635	50	224	0	706	3053
2022	471	1587	78	227	0	750	3113
2023	379	1546	30	213	0	574	2737

Humboldt County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	1475	4230	0	68	1	906	6680
2017	1434	4088	91	58	0	915	6586
2018	1349	3806	122	51	1	862	6191
2019	1724	4302	161	68	2	1071	7328
2020	1717	4015	247	63	2	1124	7167
2021	1710	3727	332	58	1	1177	7005
2022	1663	3569	399	47	1	1235	6914
2023	1559	3954	221	58	1	1028	6784

Imperial County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	962	4682	1	1	14	1343	7003
2017	1012	4683	25	1	11	1332	7064
2018	955	4361	213	1	9	1296	6835
2019	1288	5415	422	1	11	1742	8879
2020	1327	5181	745	2	12	1800	9066
2021	1365	4947	1067	3	12	1858	9252
2022	1354	4771	1331	2	10	1976	9444
2023	1156	4810	510	2	11	1591	8080

Inyo County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	515	962	1	79		223	1780
2017	503	874	5	87	1	240	1710
2018	487	908	11	64	1	269	1740
2019	592	1002	16	91	1	334	2036
2020	588	949	21	88	1	373	2018
2021	583	895	25	84	1	411	1999
2022	558	857	39	88	1	434	1977
2023	540	916	16	82	1	319	1874

Kern County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	7028	12936	8	273	11	3634	23890
2017	6698	12616	44	257	6	3560	23181
2018	6410	12245	75	250	4	3564	22548
2019	8159	14241	118	296	7	5038	27859
2020	8246	13472	218	285	7	5676	27903
2021	8333	12703	318	273	7	6313	27947
2022	8247	12030	398	257	8	6653	27593
2023	7479	12795	160	268	7	4794	25503

Kings County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	721	2481	0	59	4	684	3949
2017	687	2453	6	63	4	727	3940
2018	617	2381	16	59	6	721	3800
2019	800	2832	21	66	7	963	4689
2020	848	2676	30	63	7	1041	4663
2021	896	2519	39	59	6	1118	4637
2022	910	2382	45	60	5	1188	4590
2023	772	2508	25	61	5	900	4268

Lake County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	1166	1524	1	13	3	431	3138
2017	1158	1563	0	16	2	476	3215
2018	1126	1484	0	16	3	503	3132
2019	1406	1737	3	17	3	659	3825
2020	1460	1736	12	16	5	773	4001
2021	1514	1734	21	14	6	887	4176
2022	1532	1709	27	18	6	981	4273
2023	1317	1625	13	16	4	656	3627

Lassen County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	405	757	0	268	1	1217	2648
2017	404	767	26	257	1	1159	2614
2018	402	742	50	231	1	1163	2589
2019	491	866	72	292	1	1324	3046
2020	494	853	91	292	1	1343	3073
2021	496	840	110	291	1	1361	3099
2022	468	816	132	290	1	1347	3054
2023	444	798	78	272	1	1262	2842

Los Angeles County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	38225	44991	21	363	64	10786	94450
2017	36754	43644	304	350	63	11072	92187
2018	34706	41768	633	329	54	11616	89106
2019	43419	49929	1030	369	70	15154	109971
2020	42662	47675	1601	345	67	16719	109068
2021	41904	45421	2172	321	63	18283	108164
2022	40226	43183	2589	298	61	19347	105704
2023	39206	44823	1125	338	63	14376	99930

Madera County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	1199	3349	4	206	5	695	5458
2017	1172	3299	22	203	8	802	5506
2018	1295	3580	32	215	7	1005	6133
2019	1417	3861	41	227	6	1207	6759
2020	1496	3713	50	222	7	1417	6904
2021	1575	3564	59	217	7	1627	7049
2022	1657	3501	70	214	7	1775	7224
2023	1386	3526	38	214	7	1185	6355

Marin County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	1377	617	0	97	3	153	2247
2017	1316	622	0	82	2	157	2179
2018	1459	675	3	92	3	193	2422
2019	1601	727	3	102	3	228	2664
2020	1568	713	5	101	3	255	2644
2021	1534	699	6	100	3	281	2623
2022	1534	641	8	105	3	312	2603
2023	1470	663	5	96	3	221	2456

Mariposa County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	320	808	4	24	0	177	1333
2017	312	818	11	27	2	211	1381
2018	338	894	16	26	2	243	1518
2019	363	970	20	25	2	275	1655
2020	382	946	22	26	2	319	1695
2021	401	921	24	26	1	362	1735
2022	415	904	23	26	1	403	1772
2023	358	886	16	26	2	279	1566

Mendocino County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	1349	2751	0	19	3	736	4858
2017	1322	2726	1	26	5	816	4896
2018	1234	2569	7	18	3	807	4638
2019	1557	2940	11	27	3	1077	5615
2020	1657	2831	21	27	2	1277	5814
2021	1757	2721	31	27	1	1476	6013
2022	1791	2603	40	34	1	1594	6063
2023	1502	2718	18	25	3	1084	5347

Merced County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	1446	3880	5	81	1	707	6120
2017	1408	3883	28	91	1	840	6251
2018	1348	3875	38	85	1	884	6231
2019	1715	4650	43	88	2	1137	7635
2020	1838	4598	51	86	2	1358	7933
2021	1961	4546	59	83	2	1579	8230
2022	2064	4529	58	75	1	1735	8462
2023	1657	4227	39	84	1	1147	7155

Modoc County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	64	203	0	31	0	499	797
2017	64	247	13	44	0	474	842
2018	60	246	8	45	0	455	814
2019	79	279	26	55	0	519	958
2020	84	275	31	52	0	509	950
2021	88	271	36	48	0	499	942
2022	68	266	41	49	0	508	932
2023	71	252	25	45	0	492	881

Mono County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	344	366	1	680	1	103	1495
2017	302	339	3	682	1	115	1442
2018	282	337	5	616	1	125	1365
2019	329	375	5	742	1	148	1600
2020	332	374	10	742	1	172	1629
2021	335	372	14	741	1	195	1658
2022	326	352	16	724	1	215	1634
2023	320	357	7	698	1	150	1532

Monterey County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	2644	3227	0	49	6	509	6435
2017	2625	3219	5	50	4	526	6429
2018	2500	3267	20	47	6	510	6350
2019	3270	4037	25	59	10	699	8100
2020	3319	4047	36	56	9	893	8360
2021	3368	4057	46	53	8	1087	8619
2022	3313	4014	64	41	7	1207	8646
2023	2953	3637	32	50	7	756	7430

Napa County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	1371	1990	0	94	6	367	3828
2017	1382	1955	5	89	3	419	3853
2018	1299	2003	9	82	5	450	3848
2019	1590	2270	10	90	5	564	4529
2020	1603	2214	13	93	4	636	4563
2021	1616	2158	16	96	3	707	4596
2022	1593	2091	27	82	3	705	4501
2023	1475	2078	13	89	4	535	4193

Nevada County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	2155	2252	7	1014	4	1146	6578
2017	2140	2262	21	997	3	1145	6568
2018	2064	2256	40	961	8	1118	6447
2019	2559	2671	57	1152	9	1311	7759
2020	2674	2706	88	1145	11	4260	10884
2021	2789	2741	118	1138	13	7209	14008
2022	2759	2707	153	1131	11	1529	8290
2023	2411	2482	66	1066	8	2243	8275

Orange County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	18487	17693	14	160	25	5585	41964
2017	17652	16730	240	162	20	5441	40245
2018	16554	15796	502	150	17	5276	38295
2019	20581	18359	766	166	19	6683	46574
2020	20069	17286	1103	158	18	6946	45580
2021	19557	16213	1440	150	16	7209	44585
2022	18375	15082	1713	146	16	7256	42588
2023	18534	16646	779	156	19	6242	42375

Placer County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	6152	5615	13	1085	22	1736	14623
2017	6054	5663	72	1177	18	1773	14757
2018	5963	5799	133	1164	23	1711	14793
2019	7418	6793	192	1462	27	2078	17970
2020	7607	6758	297	1449	32	2303	18445
2021	7795	6723	402	1436	37	2527	18920
2022	7711	6598	481	1414	37	2702	18943
2023	6849	6199	216	1290	27	2088	16668

Plumas County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	401	666	0	873	1	836	2777
2017	390	657	6	879	1	859	2792
2018	384	641	15	774	1	847	2662
2019	529	737	81	862	0	1114	3323
2020	534	733	85	854	0	1123	3329
2021	540	730	89	847	0	1131	3335
2022	550	722	96	831	0	1148	3347
2023	466	692	57	844		989	3039

Riverside County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	18663	29862	103	61	35	10587	59311
2017	18326	29296	805	59	40	10605	59131
2018	17250	28094	1618	73	35	10678	57748
2019	22820	34202	2666	87	45	14062	73882
2020	23454	33132	4061	85	41	15217	75989
2021	24087	32062	5456	83	36	16371	78095
2022	23430	30973	6599	87	37	17268	78394
2023	20763	30748	2875	75	38	13262	67760

Sacramento County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	8422	8762	10	697	26	2133	20050
2017	8207	8640	42	690	18	2130	19727
2018	7956	8711	82	663	23	2143	19578
2019	9877	10253	135	811	30	2673	23779
2020	9991	10120	225	791	26	3015	24168
2021	10104	9987	315	771	22	3357	24556
2022	9937	9587	392	738	23	3660	24337
	9084	9323	163	728	24	2683	22005

San Benito County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	1438	1080	0	23	8	165	2714
2017	1462	1162	3	23	4	166	2820
2018	1417	1187	4	23	4	174	2809
2019	1860	1442	8	32	6	242	3590
2020	1925	1439	13	30	6	282	3694
2021	1990	1436	17	27	5	322	3797
2022	2021	1432	23	21	4	355	3856
2023	1698	1290	11	25	5	237	3264

San Bernandino County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	15166	30563	17	91	54	8415	54306
2017	14697	29360	355	78	47	8708	53245
2018	13919	28111	858	77	42	8894	51901
2019	18208	33401	1412	115	54	11834	65024
2020	18434	31915	2325	111	53	13207	66044
2021	18660	30429	3237	107	52	14579	67064
2022	18168	29378	4040	89	54	15499	67228
2023	16470	30207	1653	93	51	11322	59795

San Diego County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	21117	31088	30	92	74	9497	61898
2017	20630	30391	317	98	60	9787	61283
2018	19899	29594	642	93	65	9825	60118
2019	25660	35673	1124	118	77	12710	75362
2020	25853	34281	1721	118	70	13422	75464
2021	26045	32888	2318	118	62	14134	75565
2022	25386	31542	2688	111	64	15092	74883
2023	23123	31863	1187	105	67	11841	68185

San Francisco County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	924	432	0	42	0	110	1508
2017	940	444	5	46	0	126	1561
2018	919	426	6	46	0	120	1517
2019	1140	471	9	64	0	140	1824
2020	1151	429	88	68	0	182	1917
2021	1161	387	167	72	0	223	2010
2022	1136	351	165	64	0	250	1966
2023	1037	419	70	56	#DIV/0!	162	1731

San Joaquin County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	5816	7656	4	369	2	1323	15170
2017	5845	7628	31	355	2	1311	15172
2018	5694	7645	63	319	9	1316	15046
2019	7213	8867	86	399	10	1726	18301
2020	7412	8783	140	399	9	2054	18795
2021	7611	8698	193	399	7	2381	19289
2022	7545	8526	243	390	6	2574	19284
2023	6621	8170	103	372	6	1772	17044

San Luis Obispo County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	3618	4269	3	47	20	1413	9370
2017	3433	4247	23	49	15	1420	9187
2018	3288	4301	103	46	14	1357	9109
2019	4181	4981	139	54	16	1707	11078
2020	4112	4730	145	62	17	1882	10947
2021	4042	4479	151	70	17	2057	10816
2022	3944	4258	163	57	15	2132	10569
2023	3751	4423	97	54	16	1681	10022

San Mateo County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	4525	1854	1	253	4	318	6955
2017	2759	2936	67	20	2	489	6273
2018	4223	1844	6	225	3	365	6666
2019	5113	2124	11	253	3	441	7945
2020	4992	2093	23	259	3	483	7853
2021	4871	2062	35	264	3	525	7760
2022	4764	1984	52	259	2	535	7596
2023	4376	2134	29	212	3	446	7199

Santa Barbara County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	2989	3133	10	34	1	480	6647
2017	2874	3035	39	27	2	485	6460
2018	2759	2936	67	20	2	489	6273
2019	3418	6256	28	432	20	1257	11411
2020	3353	4707	95	236	11	1020	9421
2021	3288	3157	161	40	1	783	7430
2022	3199	3032	181	39	1	833	7285
2023	3088	3591	81	99	4	721	7584

Santa Clara County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	10683	5100	0	381	14	934	17112
2017	10303	5197	14	387	14	969	16882
2018	9922	5293	14	393	13	1003	16638
2019	11901	1502	6	131	10	270	13820
2020	11620	3631	30	268	12	905	16465
2021	11339	5760	53	404	14	1539	19109
2022	10802	5524	75	387	14	1628	18430
2023	10825	4729	32	347	13	1057	16999

Santa Cruz County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	3771	1254	0	109	6	201	5341
2017	3729	1264	4	112	7	197	5312
2018	3687	1273	4	114	8	192	5278
2019	4429	1502	6	131	10	270	6348
2020	4380	1520	11	142	13	327	6391
2021	4330	1538	15	153	15	383	6434
2022	4187	1540	32	139	12	410	6320
2023	4022	1395	12	126	10	275	5839

Shasta County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	2507	4265	1	393	2	4047	11215
2017	2463	4149	78	366	2	3938	10994
2018	2418	4033	154	338	2	3828	10773
2019	3047	4563	250	394	2	4458	12714
2020	3197	4513	413	387	2	4558	13070
2021	3347	4463	576	380	1	4658	13425
2022	3420	4343	759	401	0	4771	13694
2023	2867	4303	303	379	2	4283	12136

Sierra County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	61	151	0	195	0	127	534
2017	61	145	4	177	0	125	511
2018	60	139	4	158	0	122	483
2019	72	159	5	175	0	143	554
2020	72	150	13	169	0	144	547
2021	72	140	20	162	0	145	539
2022	68	142	22	171	0	151	554
2023	66	146	11	173		135	529

Siskiyou County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	374	720	3	468	2	1132	2699
2017	362	719	13	458	2	1110	2663
2018	350	717	23	447	2	1087	2626
2019	433	821	37	534	2	1240	3067
2020	453	797	58	499	2	1200	3007
2021	472	773	78	463	1	1160	2947
2022	496	770	124	449	3	1167	3009
2023	415	753	46	470	2	1149	2835

Solano County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	3496	3144	0	142	5	722	7509
2017	3421	3146	21	157	5	744	7493
2018	3346	3147	21	171	5	766	7456
2019	4232	3714	43	212	5	962	9168
2020	4366	3693	81	202	5	1113	9459
2021	4500	3672	119	191	4	1263	9749
2022	4534	3563	140	173	3	1376	9789
2023	3922	3398	69	174	5	972	8527

Sonoma County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	4918	5383	2	205	23	1073	11604
2017	4775	5319	9	207	22	1170	11500
2018	4631	5254	15	208	21	1266	11395
2019	5674	5998	21	254	22	1668	13637
2020	5848	5767	38	253	19	2099	14023
2021	6022	5536	54	251	16	2529	14408
2022	5987	5352	66	253	14	2888	14560
2023	5334	5474	28	230	20	1766	12851

Stanislaus County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	4360	7708	6	435	8	1318	13835
2017	4268	7606	58	434	8	1332	13704
2018	4176	7504	109	432	7	1345	13573
2019	5275	8878	151	517	10	1723	16554
2020	5435	8680	185	501	9	2077	16885
2021	5594	8481	218	484	8	2431	17216
2022	5586	8303	240	492	7	2614	17242
2023	4877	8080	130	466	8	1794	15354

Sutter County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	684	1971	0	417	2	843	3917
2017	652	2003	20	396	2	806	3878
2018	620	2035	20	375	1	768	3819
2019	828	2416	37	4721	1	930	8933
2020	868	2387	52	2584	1	1072	6962
2021	907	2357	66	446	0	1214	4990
2022	903	2341	82	436	0	1320	5082
2023	766	2187	45	1132	1	980	5103

Tehama County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	511	1865	1	108	1	1428	3914
2017	519	1835	7	104	1	1440	3905
2018	526	1804	13	99	1	1452	3895
2019	718	2131	27	124	2	1798	4800
2020	771	2090	47	130	2	1936	4975
2021	824	2048	67	135	2	2074	5150
2022	810	2019	101	147	2	2135	5214
2023	651	1950	36	119	2	1721	4480

Trinity County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	250	522	0	33	1	407	1213
2017	232	507	23	32	1	385	1179
2018	213	491	23	30	0	363	1120
2019	255	550	31	40	0	416	1292
2020	249	525	58	41	0	419	1291
2021	243	499	85	42	0	421	1290
2022	258	467	88	43	0	427	1283
	242	506	50	37	1	403	1229

Tulare County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	3050	7491	0	205	3	1445	12194
2017	2948	7342	78	202	3	1553	12125
2018	2845	7192	78	198	3	1661	11977
2019	3571	8493	100	215	5	2202	14586
2020	3644	8073	141	206	6	2640	14708
2021	3716	7652	182	197	6	3077	14830
2022	3808	7303	227	183	7	3408	14936
2023	3323	7579	133	200	5	2224	13441

Tuolumne County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	1162	1314	2	328	5	617	3428
2017	1130	1354	14	319	5	630	3451
2018	1097	1394	25	310	4	643	3473
2019	1358	1642	38	367	5	760	4170
2020	1410	1677	45	371	5	794	4299
2021	1461	1711	51	374	4	827	4428
2022	1465	1682	66	369	4	852	4438
2023	1279	1516	33	345	4	722	3898

Ventura County

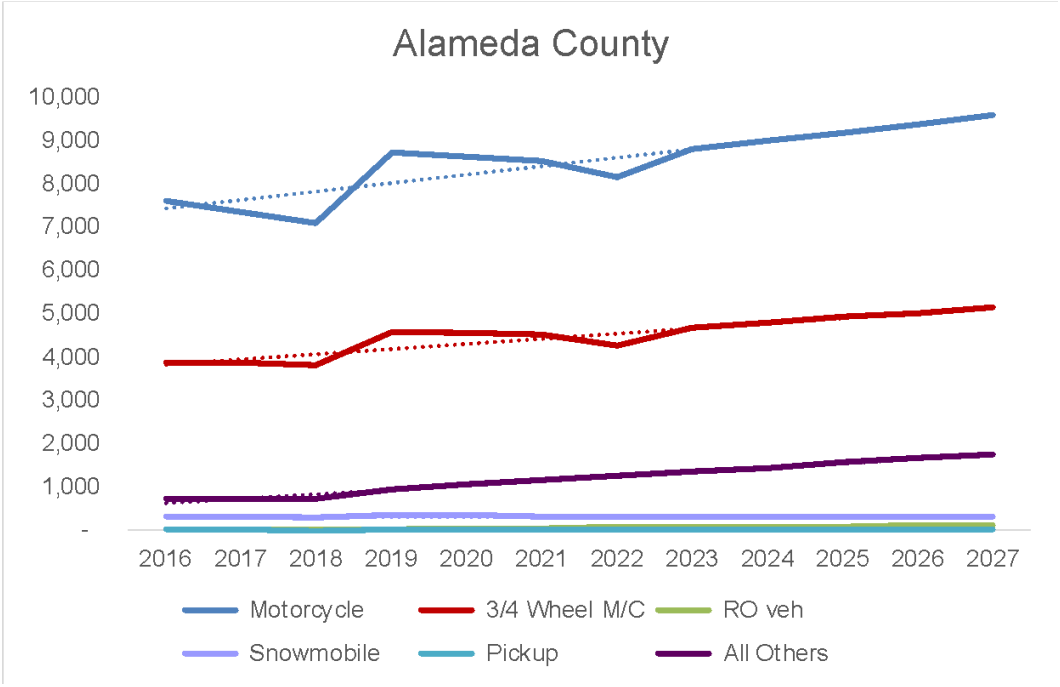
Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	10133	6949	25	99	10	1594	18810
2017	9657	6676	101	94	9	1577	18113
2018	9180	6403	177	88	8	1560	17416
2019	11284	7429	277	94	9	2036	21129
2020	11099	7059	358	91	8	2261	20876
2021	10914	6688	439	88	7	2486	20622
2022	10591	6297	494	93	4	2627	20106
2023	10293	6740	252	93	8	1980	19366

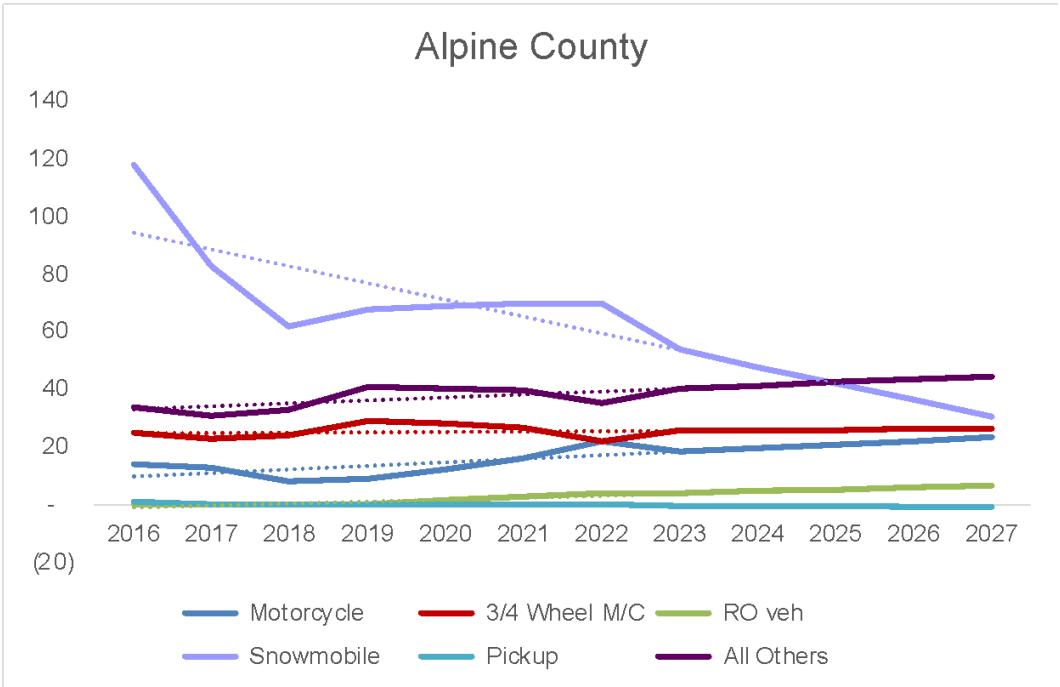
Yolo

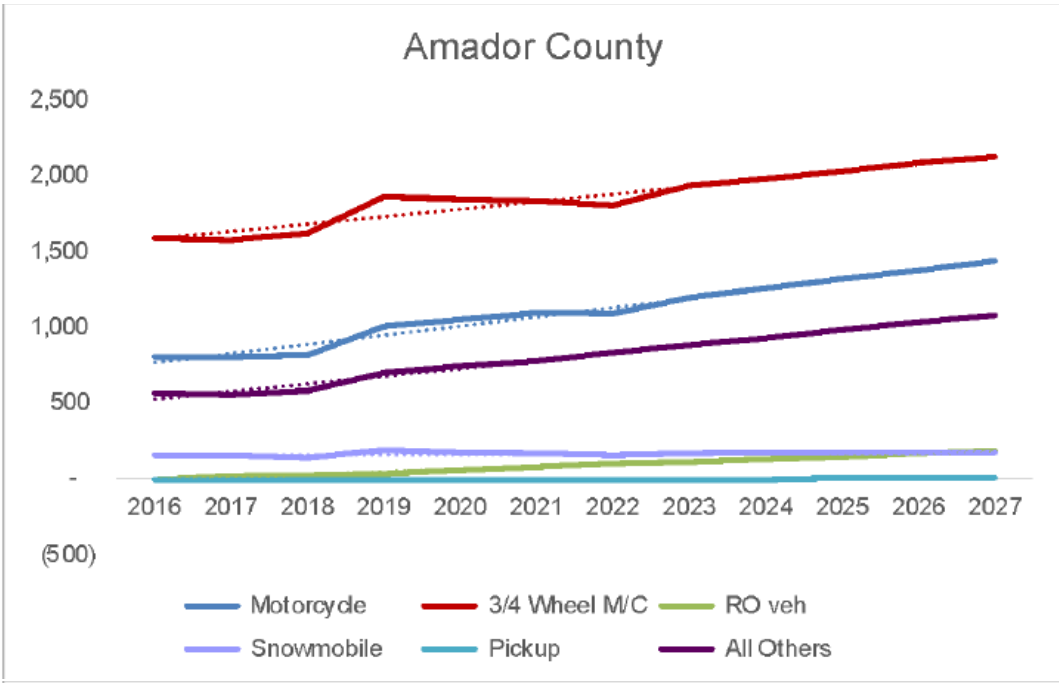
Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	1135	2342	2	166	2	540	4187
2017	1095	2358	10	171	2	541	4176
2018	1055	2374	17	176	1	542	4165
2019	1276	2763	43	187	1	664	4934
2020	1283	2736	82	177	1	748	5027
2021	1290	2708	121	167	1	832	5119
2022	1259	2694	157	168	1	883	5162
2023	1185	2540	58	173	1	667	4624

Yuba County Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	706	1561	0	294	3	689	3253
2017	698	1587	11	288	3	680	3266
2018	689	1613	11	281	3	671	3268
2019	920	1970	23	333	4	839	4089
2020	975	1972	39	336	5	988	4315
2021	1029	1974	55	339	6	1137	4540
2022	1010	1934	78	323	5	1317	4667
2023	842	1773	36	310	4	889	3847

APPENDIX K – OHV/OSV TRENDS, CALIFORNIA (COUNTY), 2016-2027



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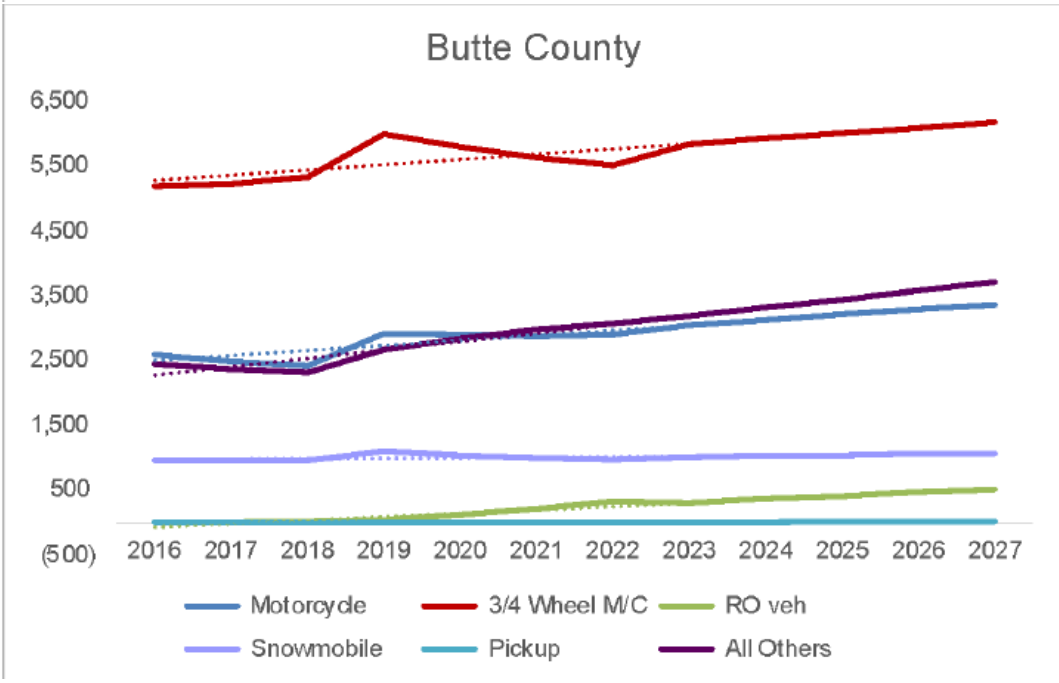
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others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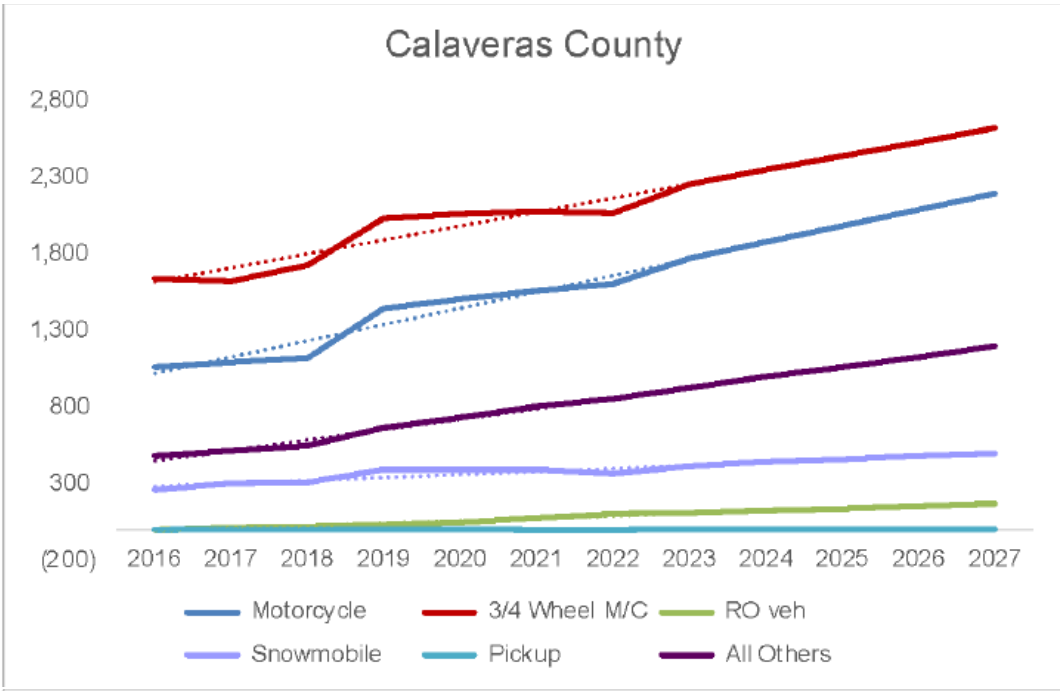
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others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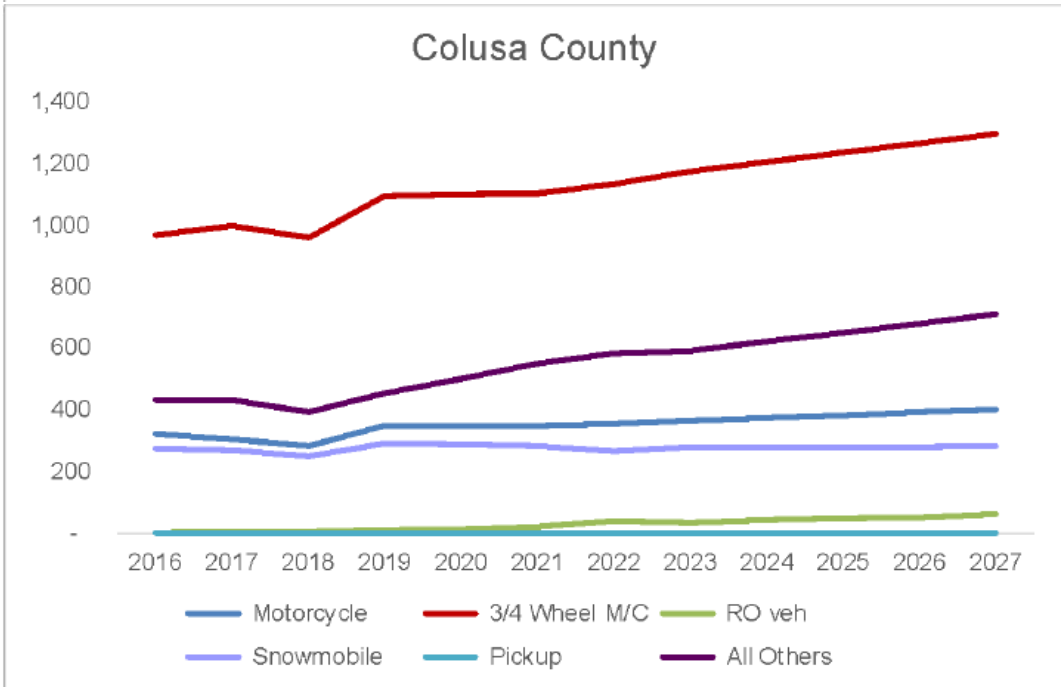
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others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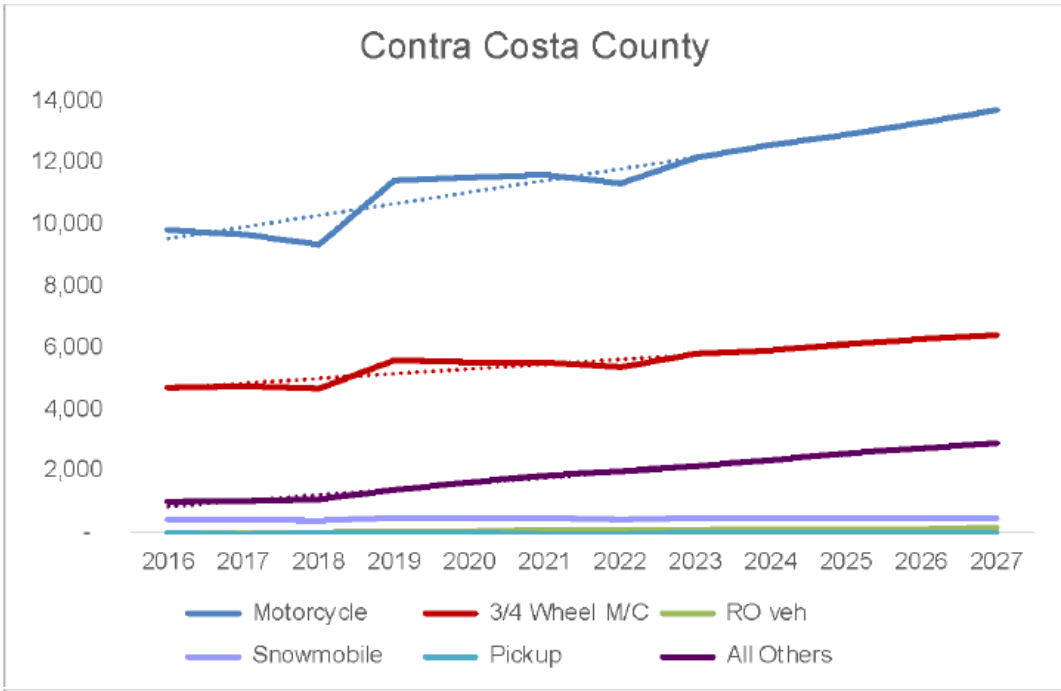
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others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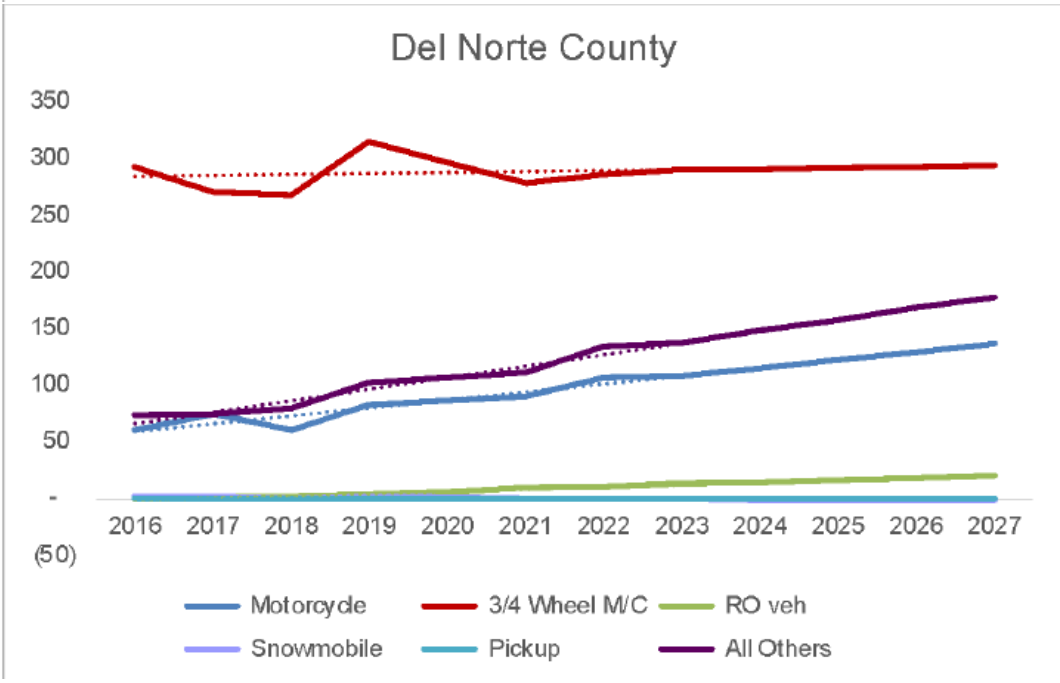
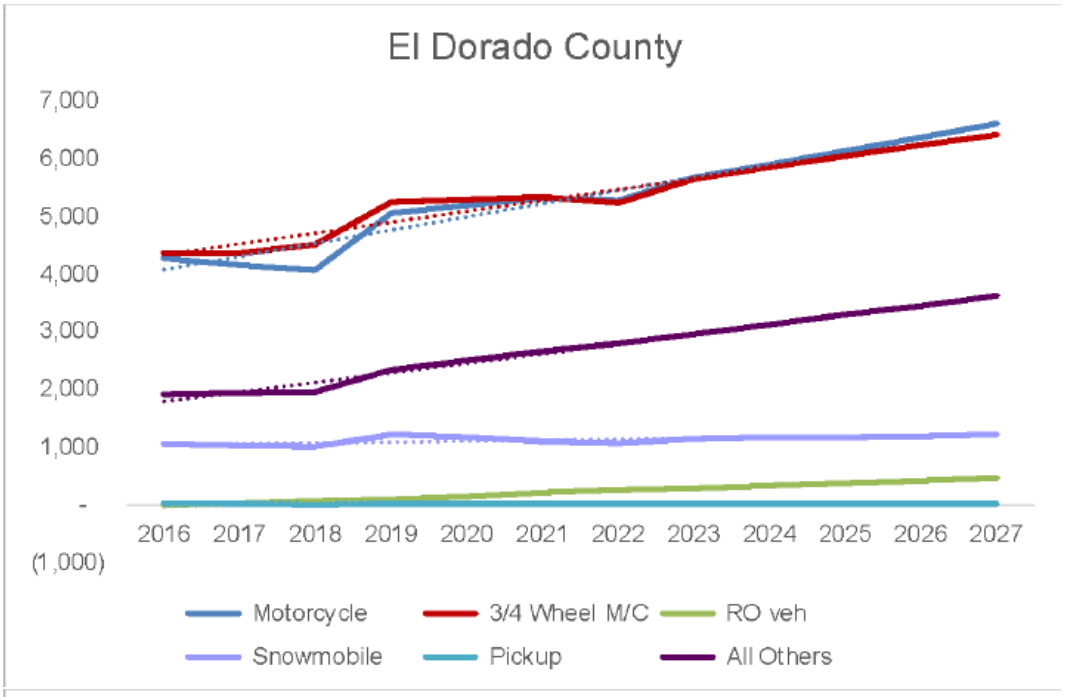
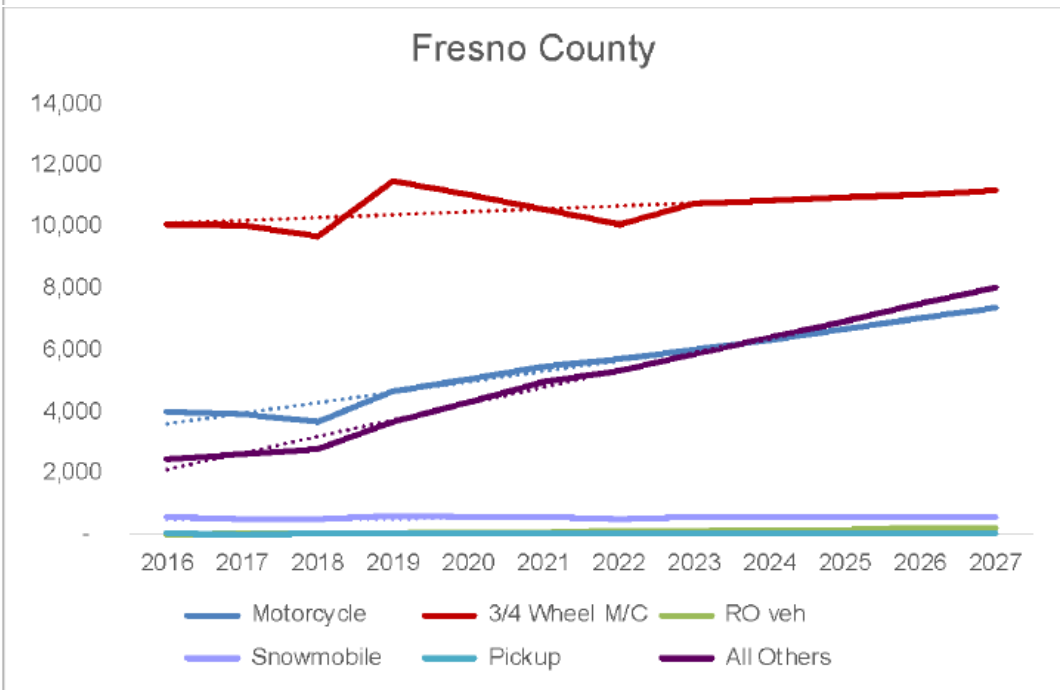
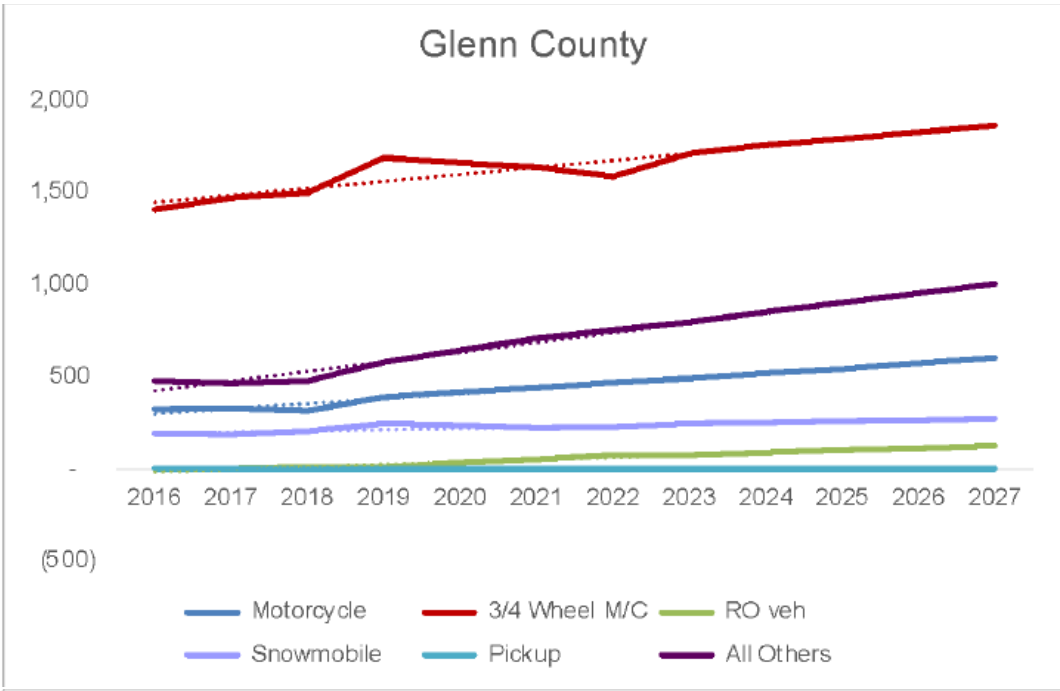
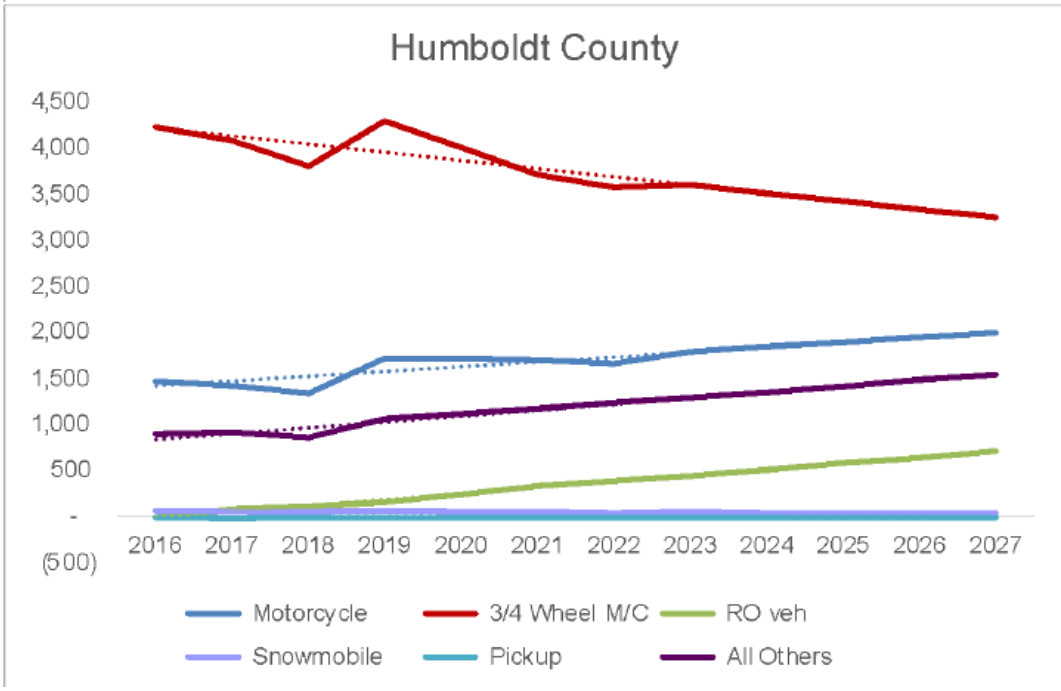
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

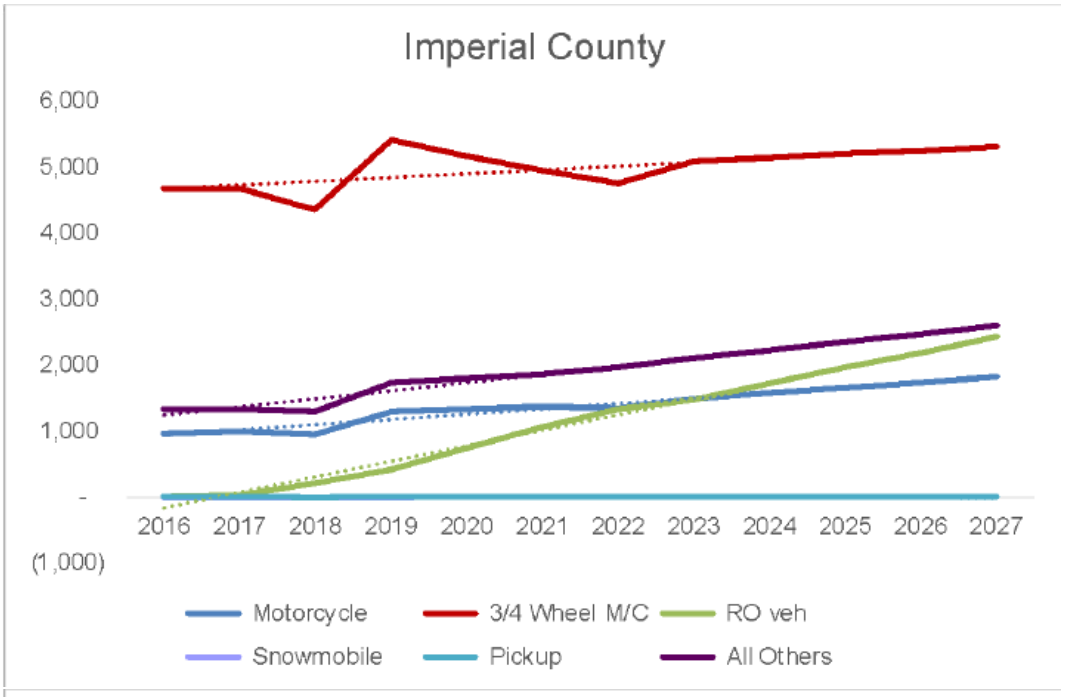

Del Norte County
350
300
250
200
150
100
50
-
(50)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

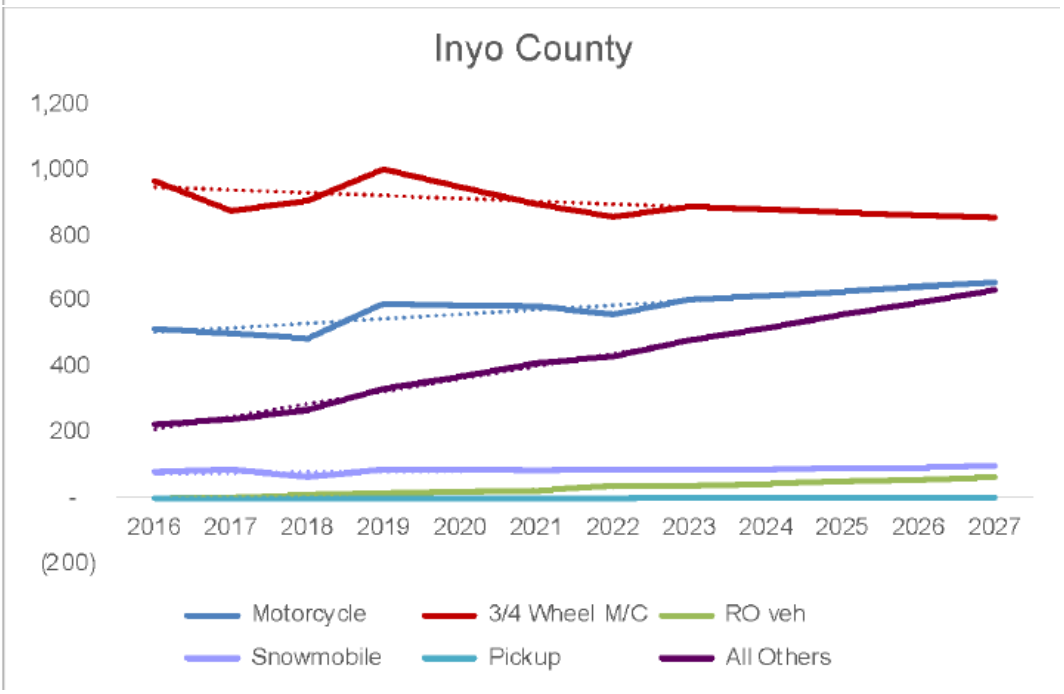

El Dorado County
7,000
6,000
5,000
4,000
3,000
2,000
1,000
-
(1,000)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

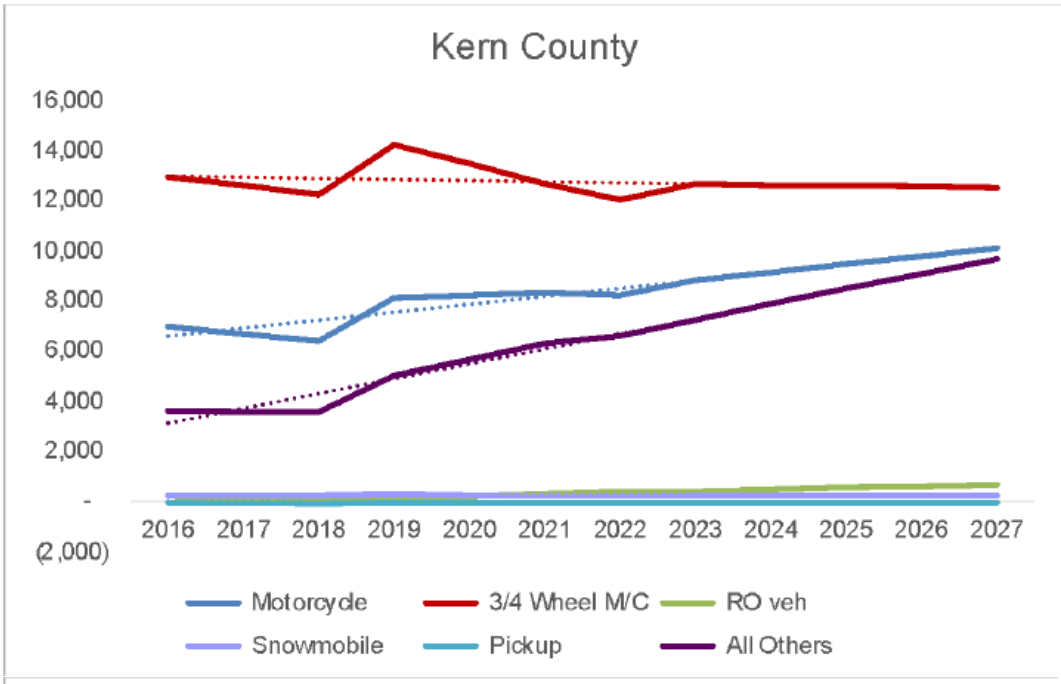

Fresno County
14,000
12,000
10,000
8,000
6,000
4,000
2,000
-
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

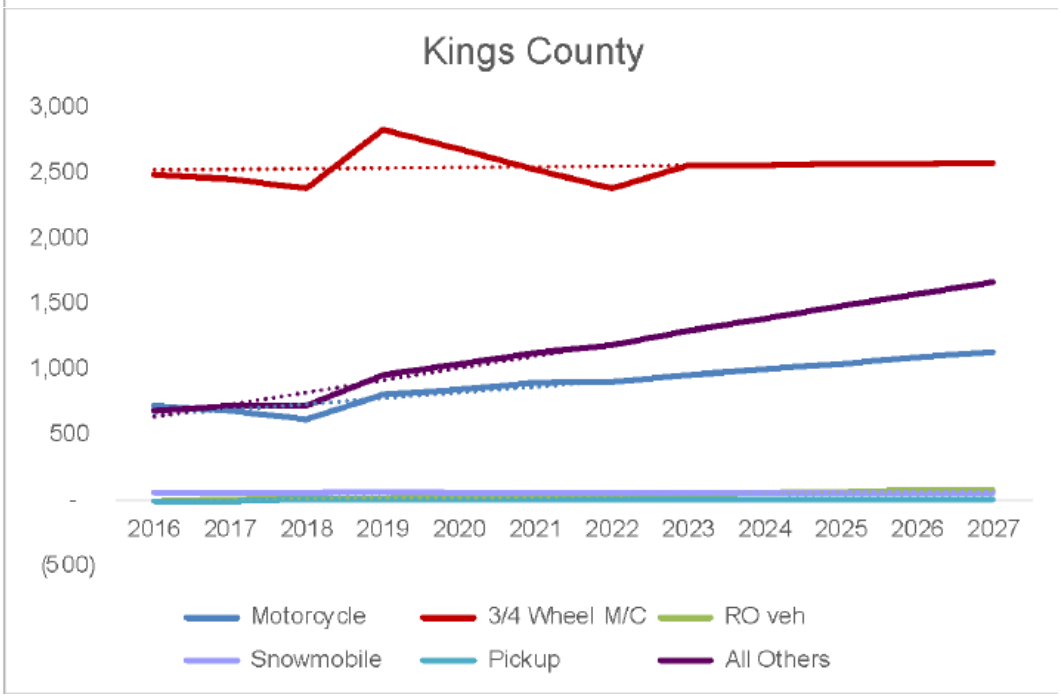

Glenn County
2,000
1,500
1,000
500
-
(500)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

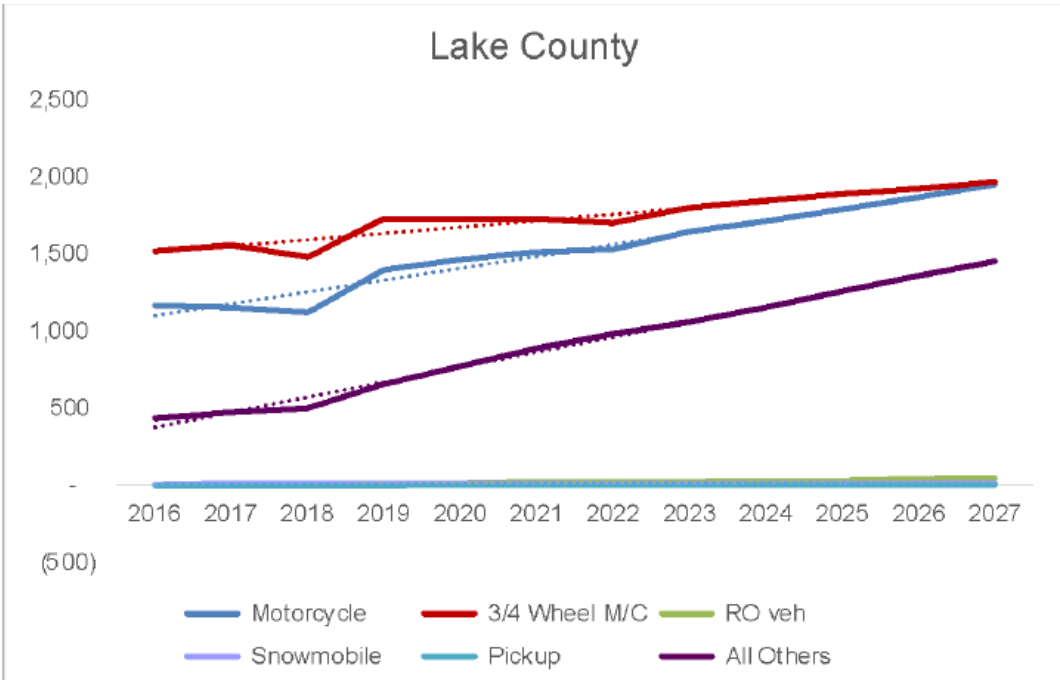

Humboldt County
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
-
(500)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

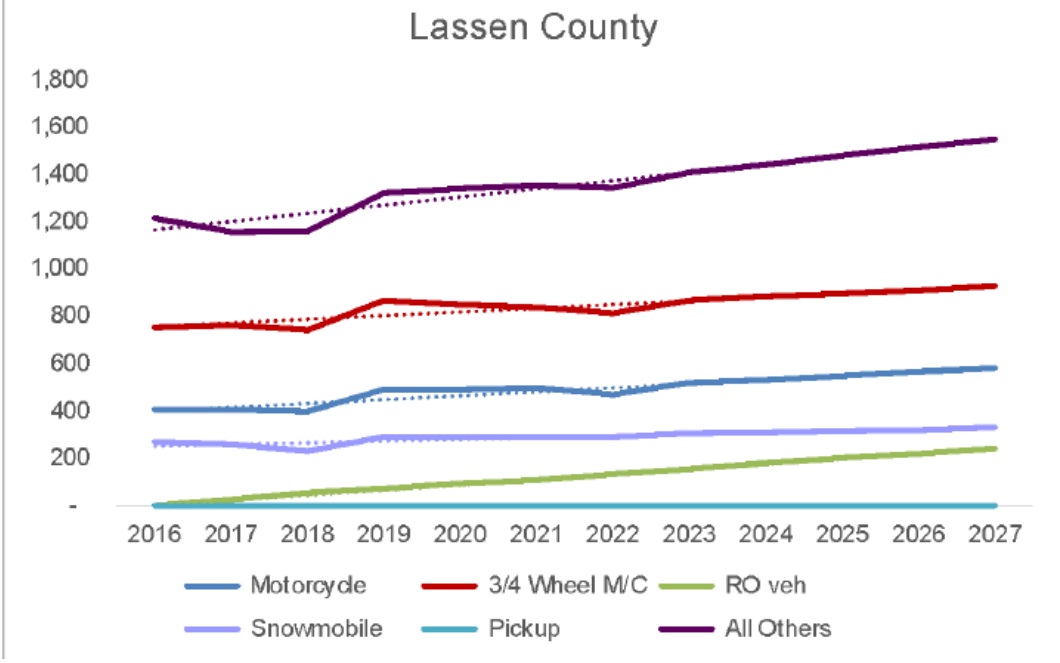

Imperial County
6,000
5,000
4,000
3,000
2,000
1,000
-
(1,000)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

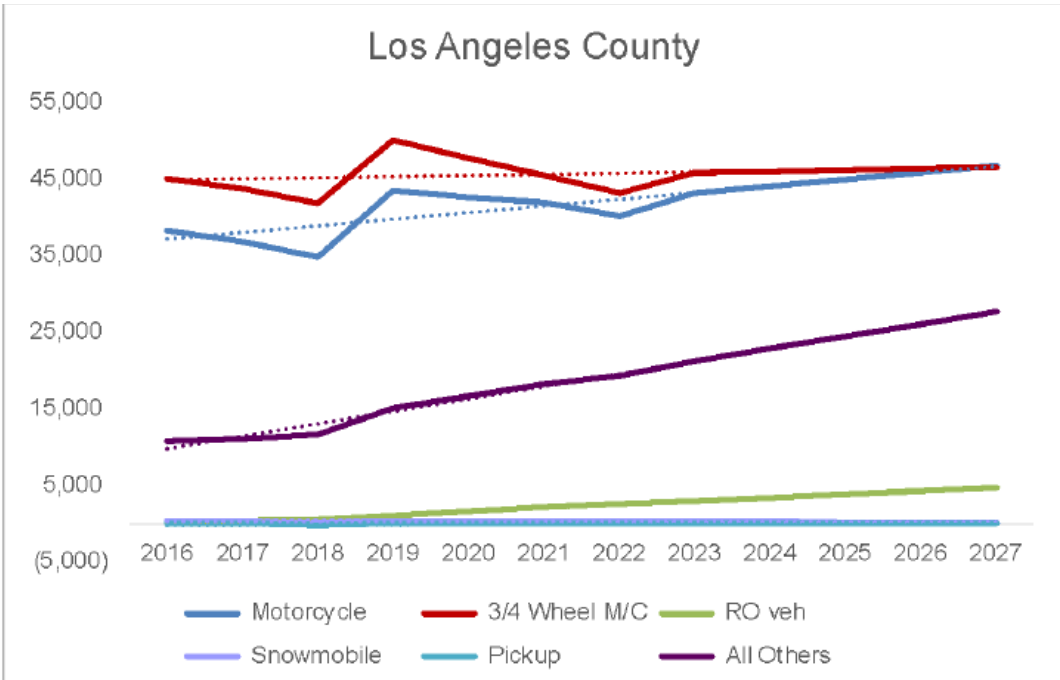

Inyo County
1,200
1,000
800
600
400
200
-
(200)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

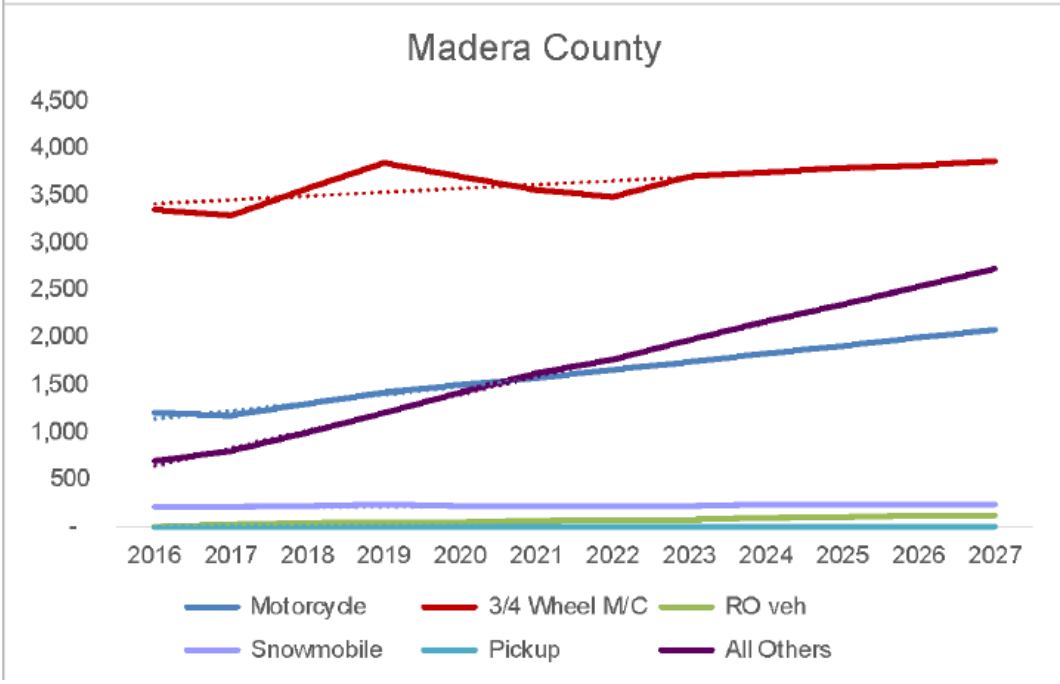

Kern County
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
-
(2,000)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

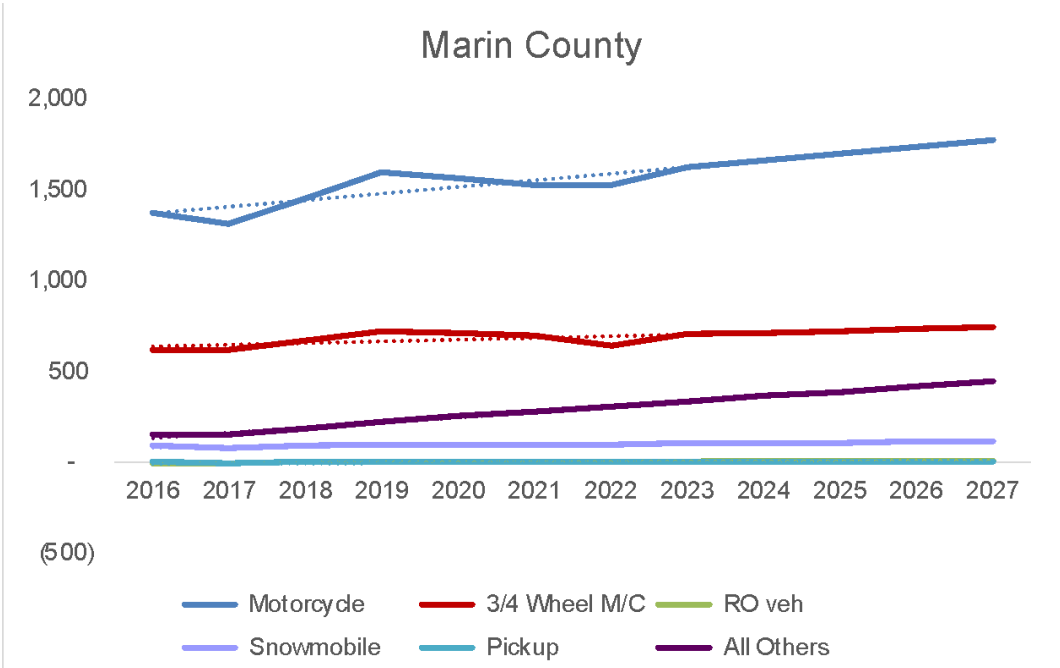

Kings County
3,000
2,500
2,000
1,500
1,000
500
-
(500)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

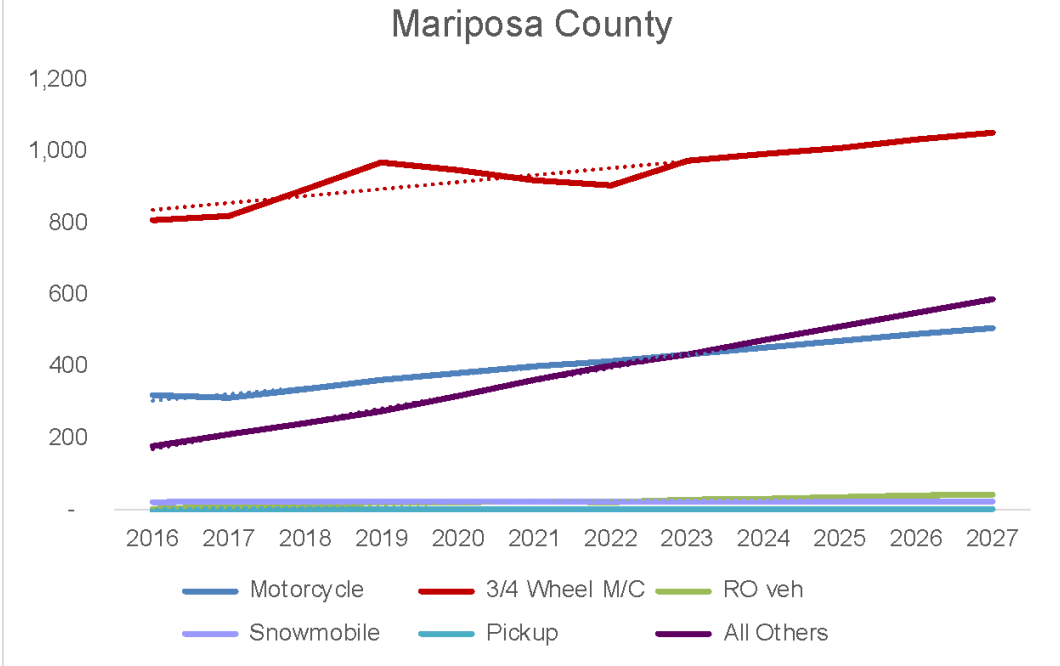

Lake County
2,500
2,000
1,500
1,000
500
-
(500)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

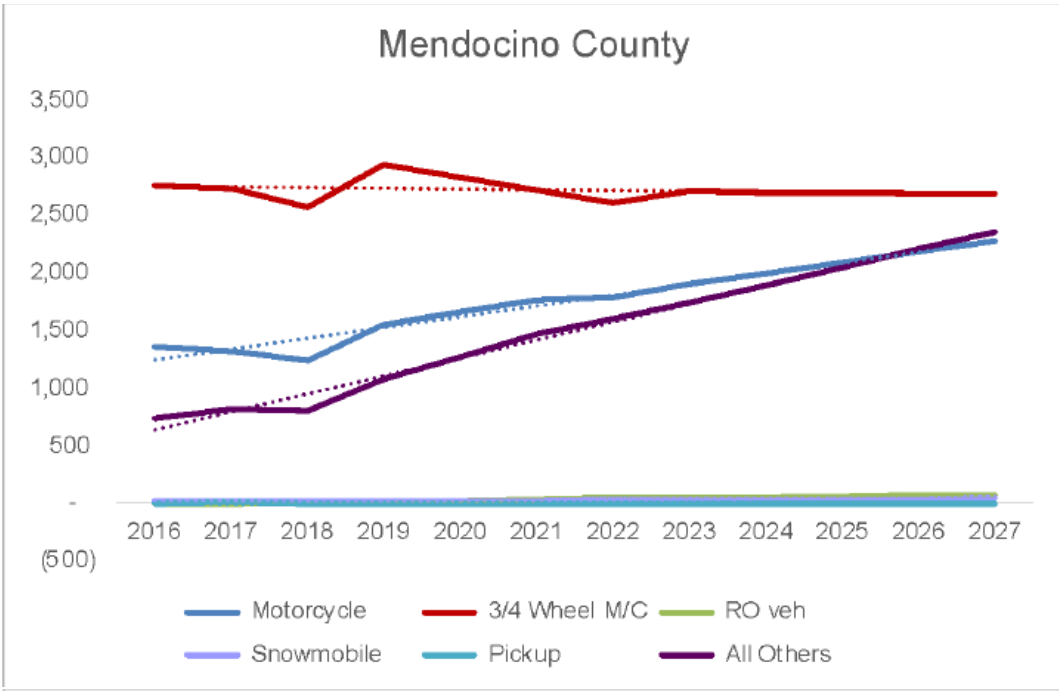

Lassen County
1,800
1,600
1,400
1,200
1,000
800
600
400
200
-
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

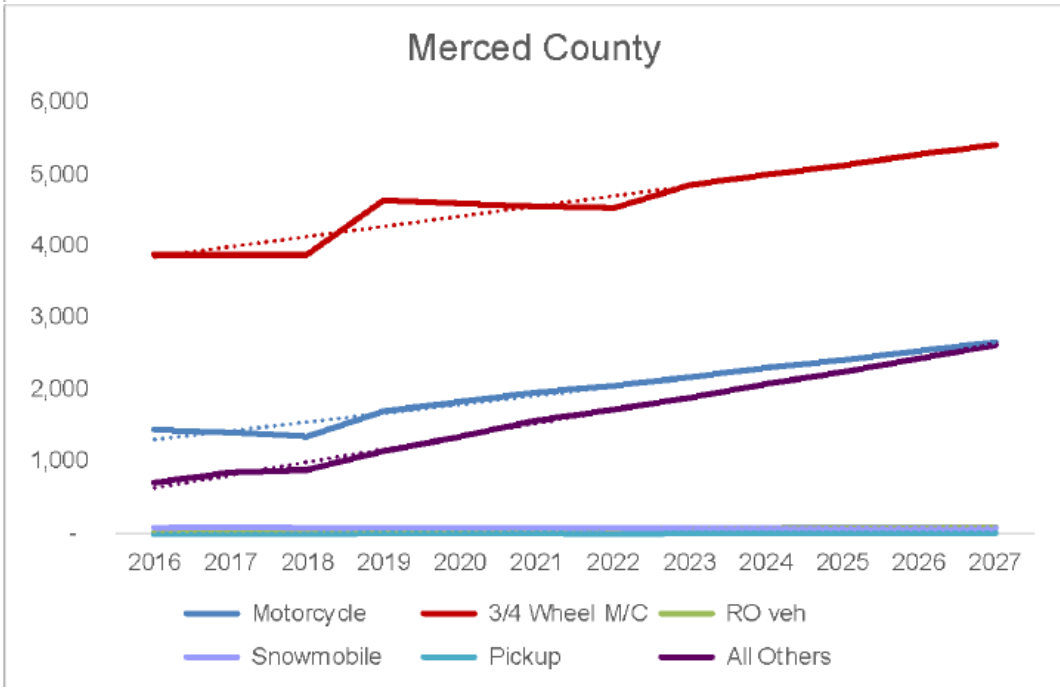

Los Angeles County
55,000
45,000
35,000
25,000
15,000
5,000
(5,000)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

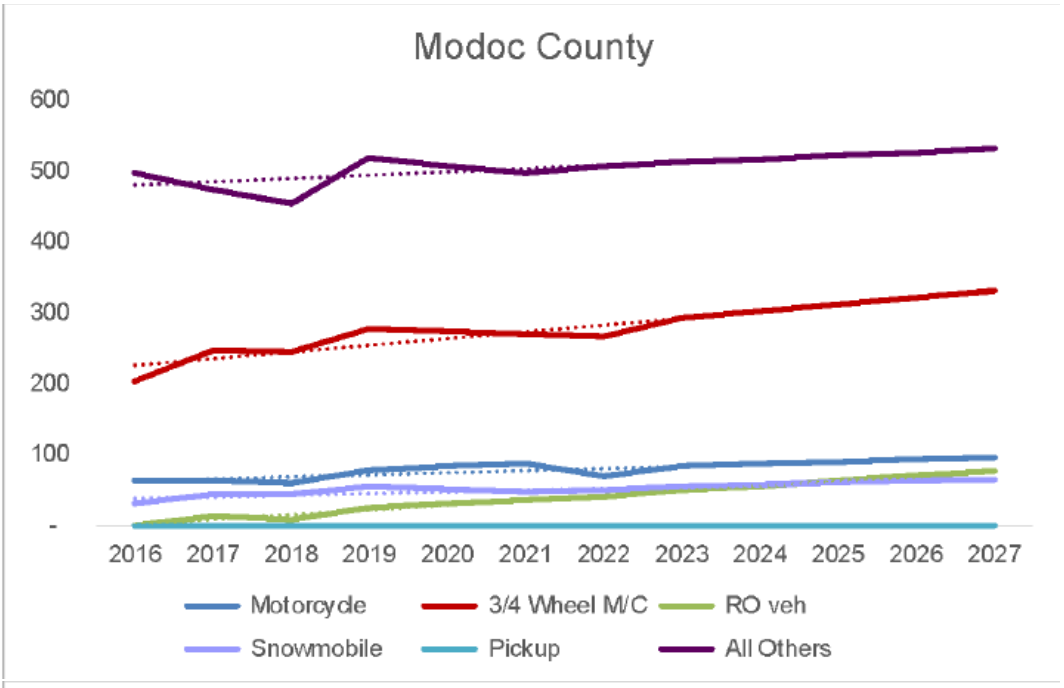

Madera County
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
-
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

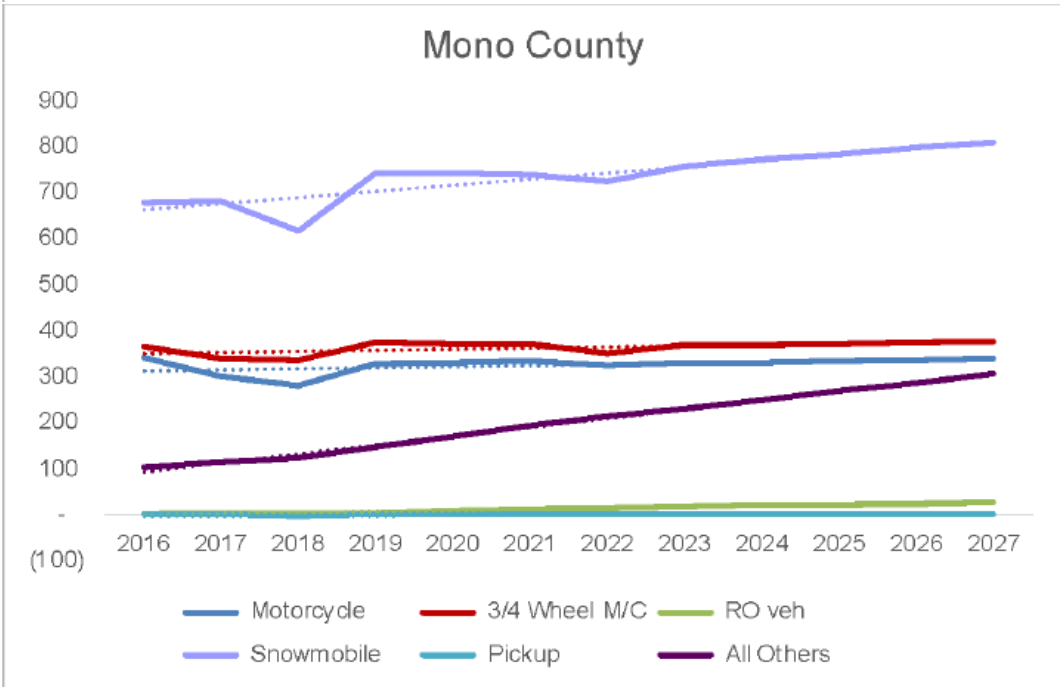

Marin County
2,000
1,500
1,000
500
-
(500)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

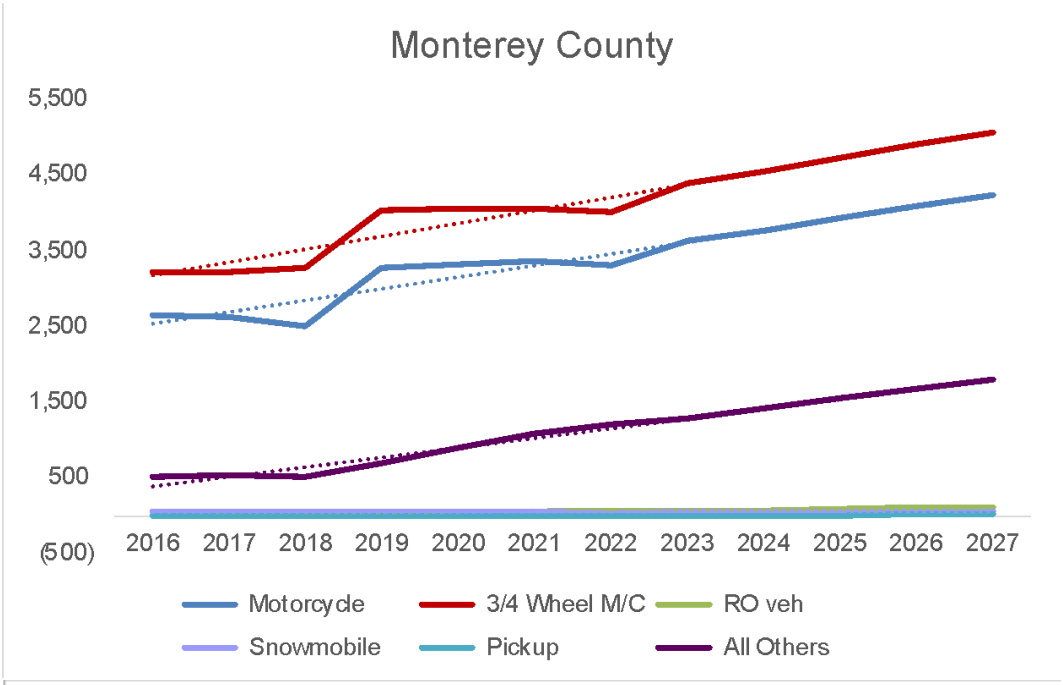

Mariposa County
1,200
1,000
800
600
400
200
-
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

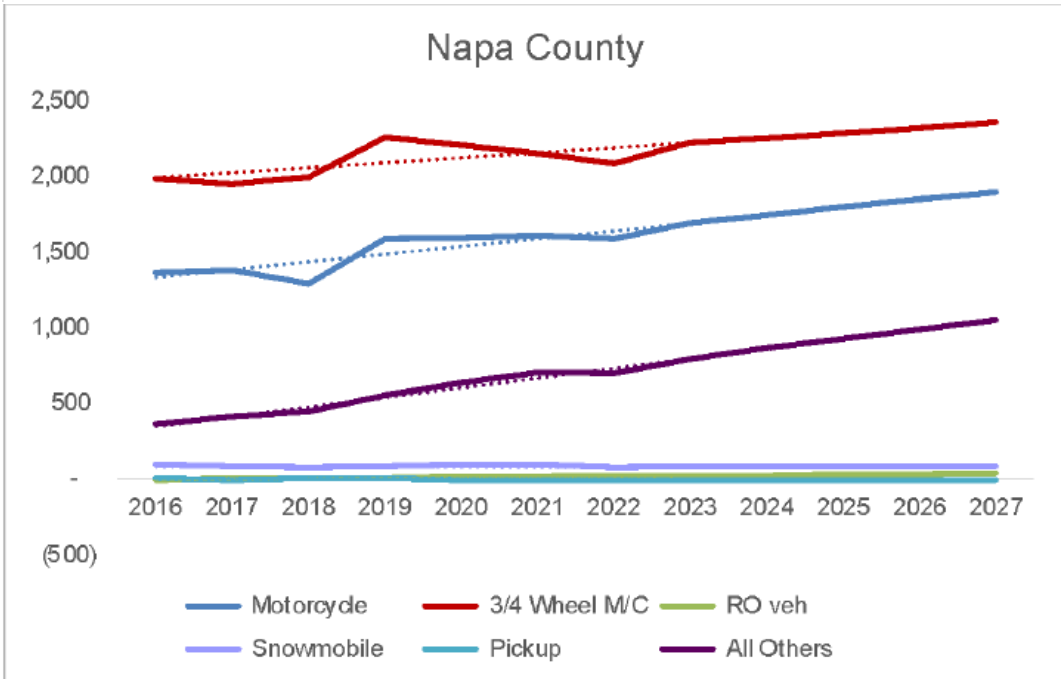

Mendocino County
3,500
3,000
2,500
2,000
1,500
1,000
500
-
(500)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

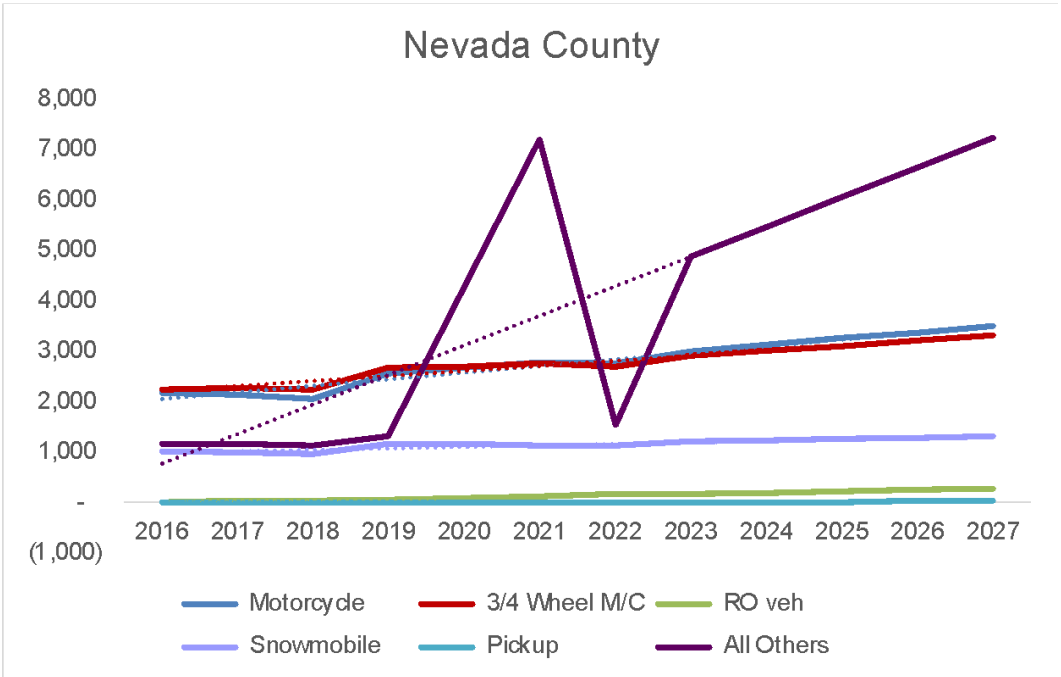

Merced County
6,000
5,000
4,000
3,000
2,000
1,000
-
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

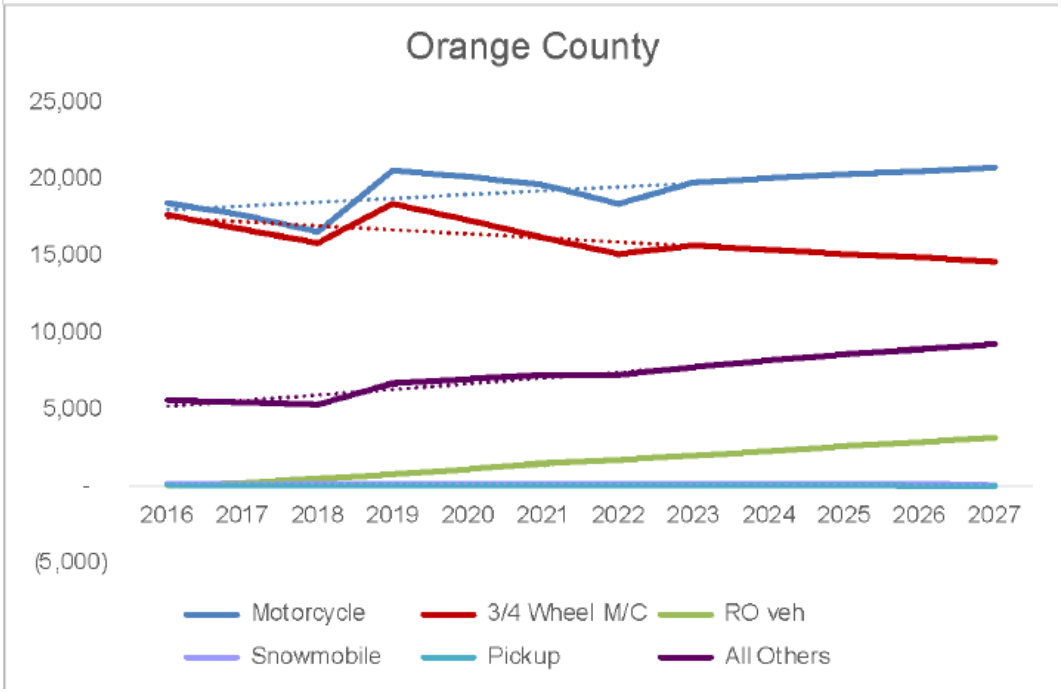

Modoc County
600
500
400
300
200
100
-
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

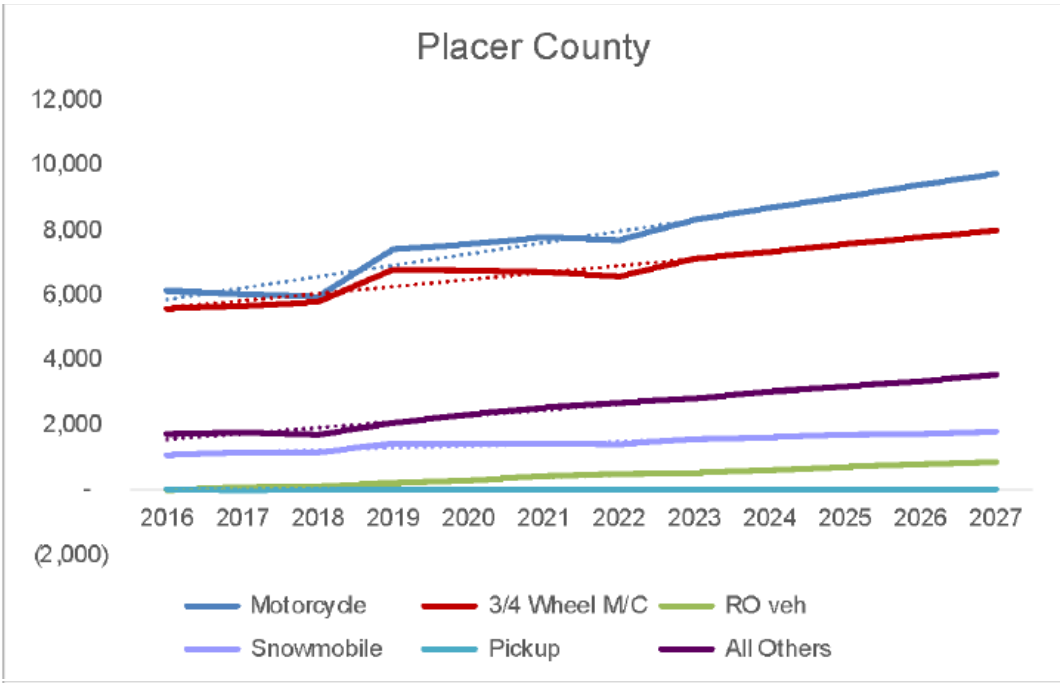

Mono County
900
800
700
600
500
400
300
200
100
-
(100)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

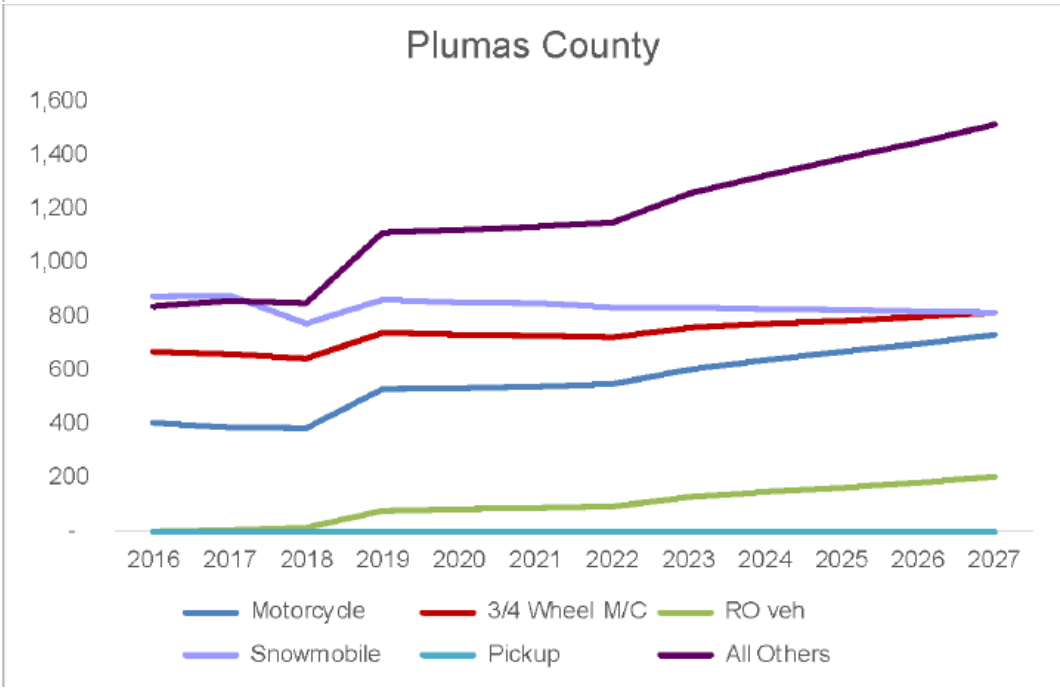

Monterey County
5,500
4,500
3,500
2,500
1,500
500
(500)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

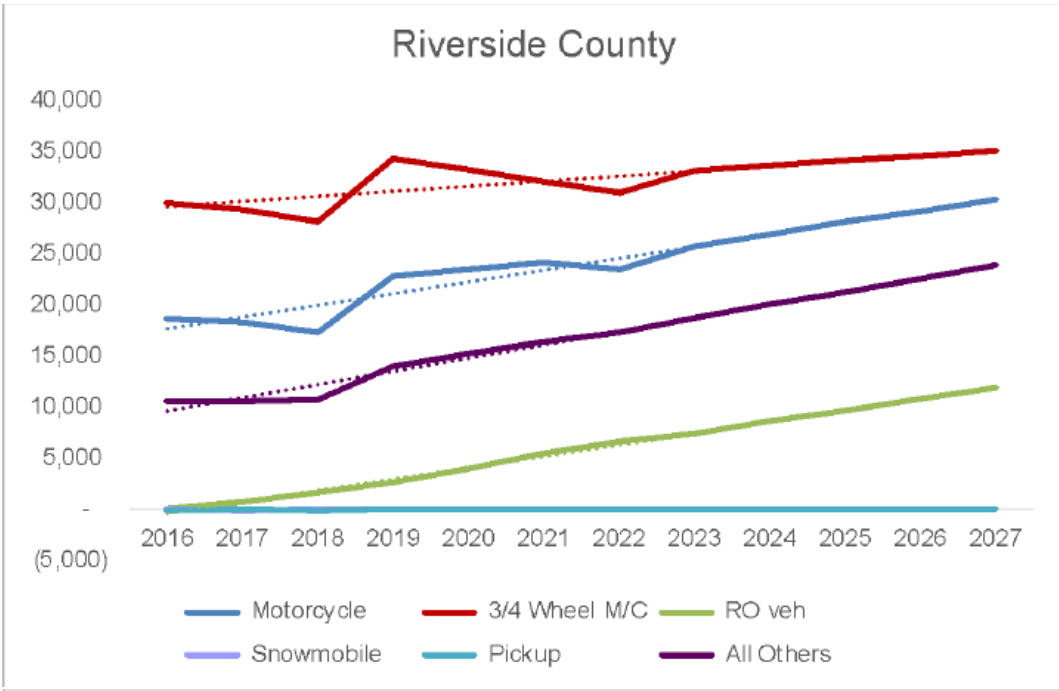

Napa County
2,500
2,000
1,500
1,000
500
-
(500)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

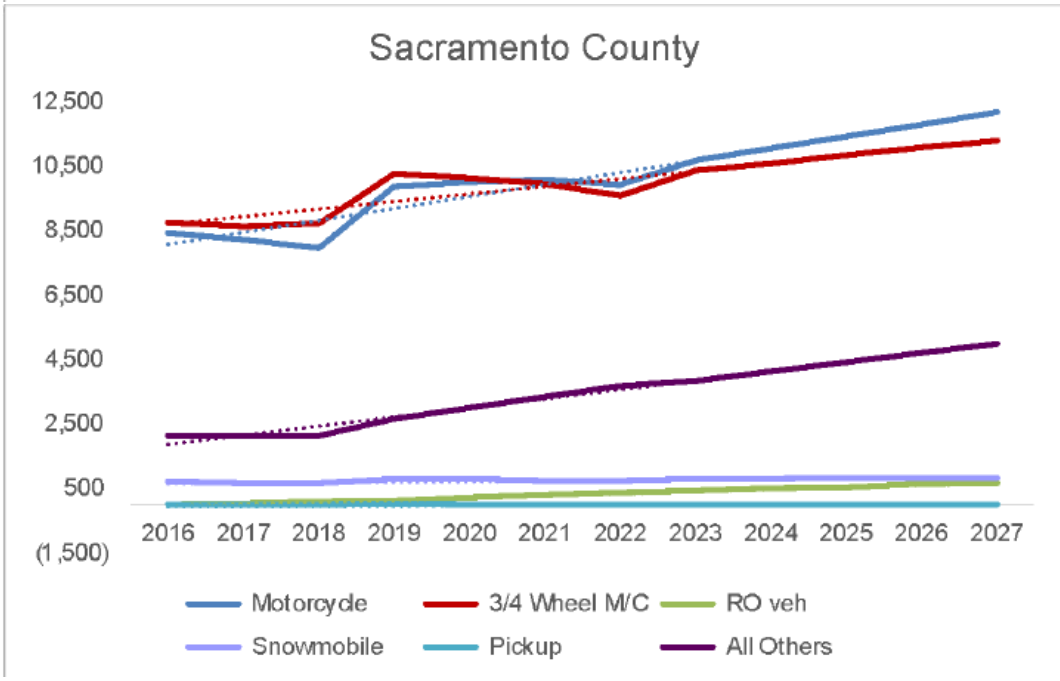

Nevada County
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
-
(1,000)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

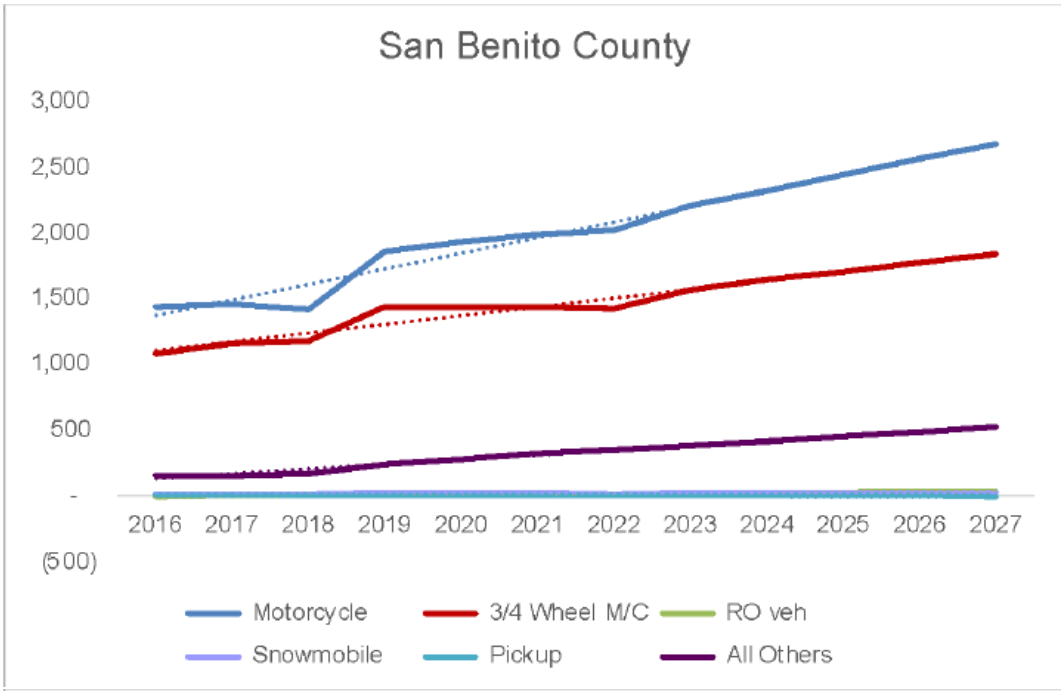

Orange County
25,000
20,000
15,000
10,000
5,000
-
(5,000)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

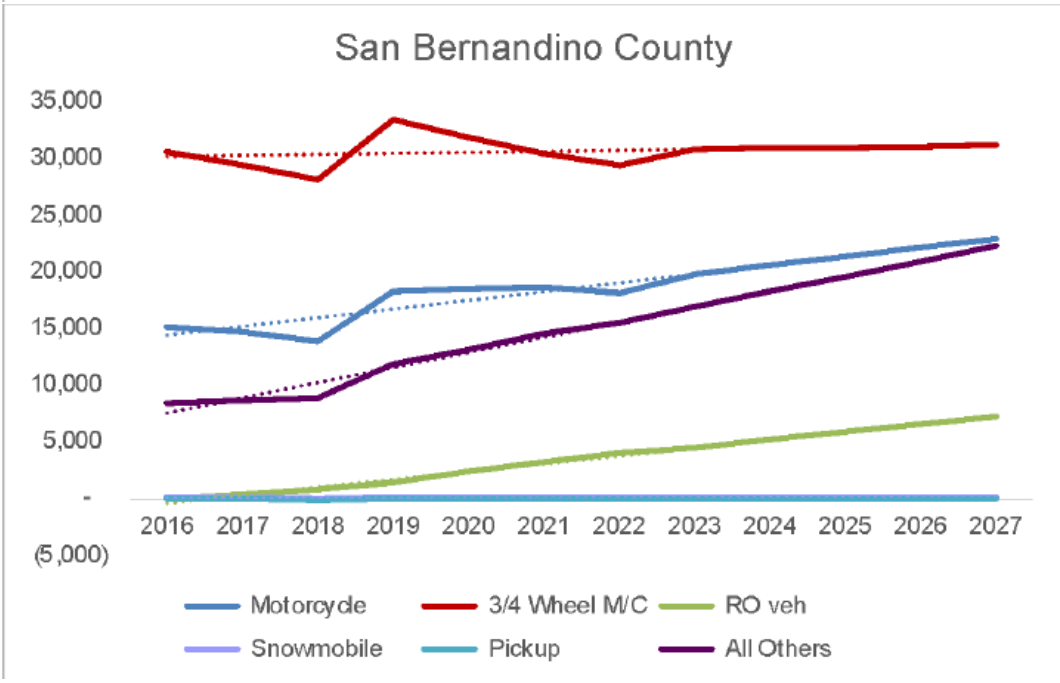

Placer County
12,000
10,000
8,000
6,000
4,000
2,000
-
(2,000)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

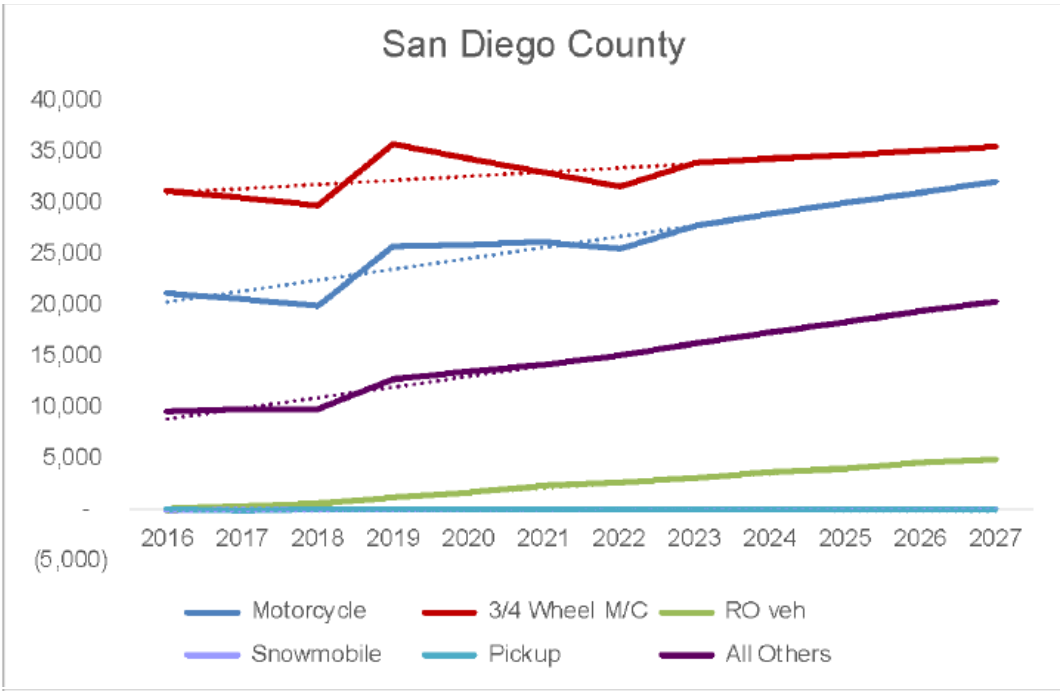

Plumas County
1,600
1,400
1,200
1,000
800
600
400
200
-
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

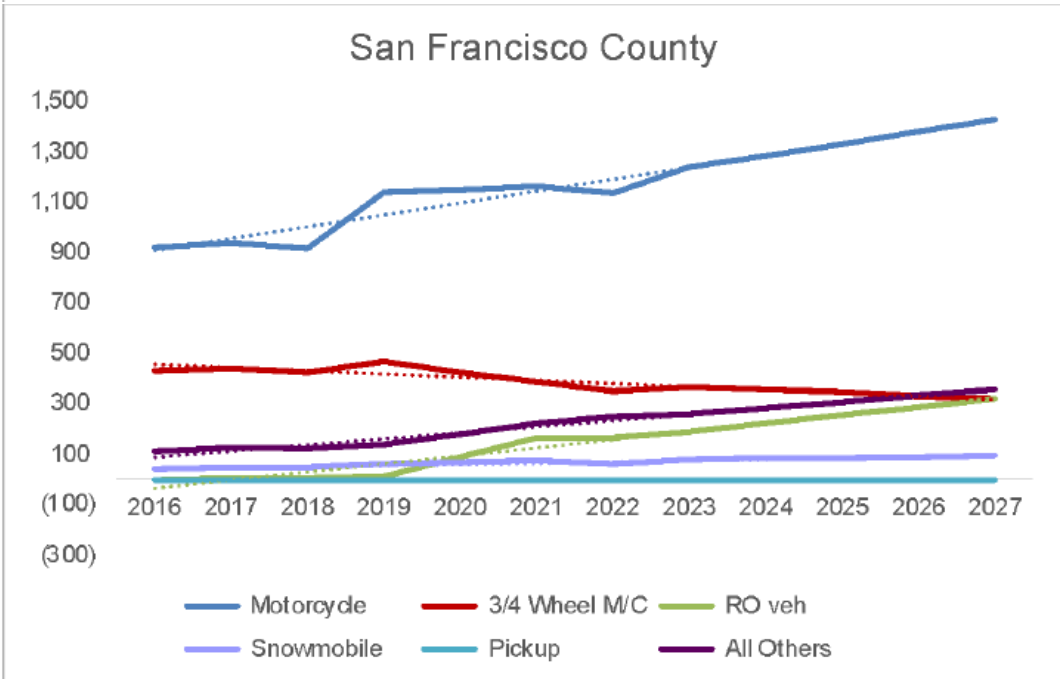

Riverside County
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
-
(5,000)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

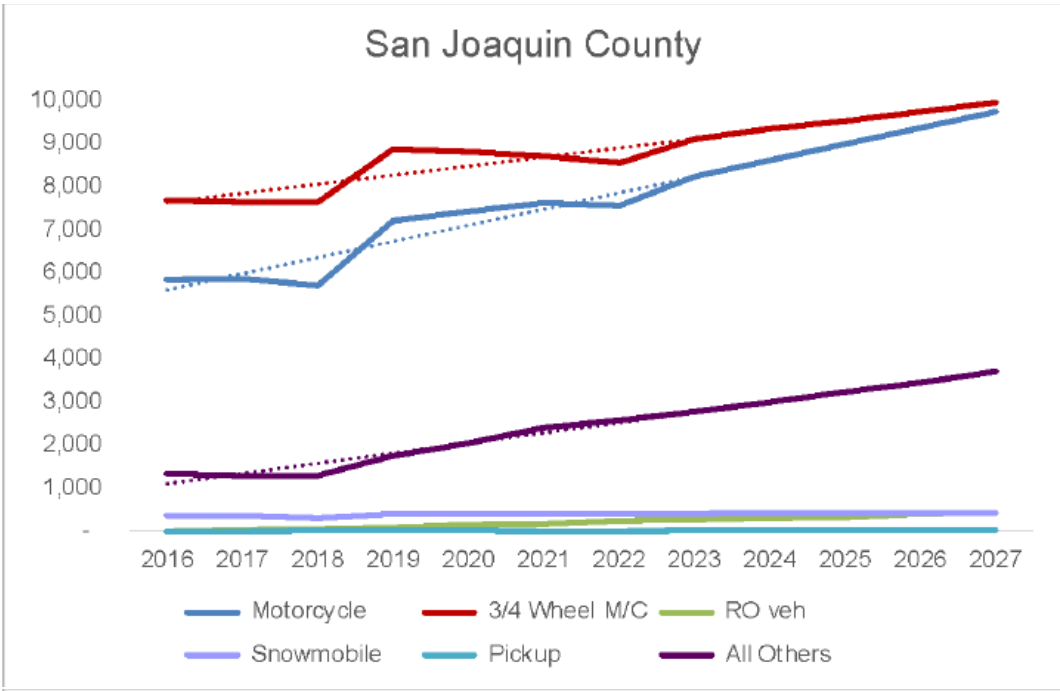

Sacramento County
12,500
10,500
8,500
6,500
4,500
2,500
500
(1,500)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

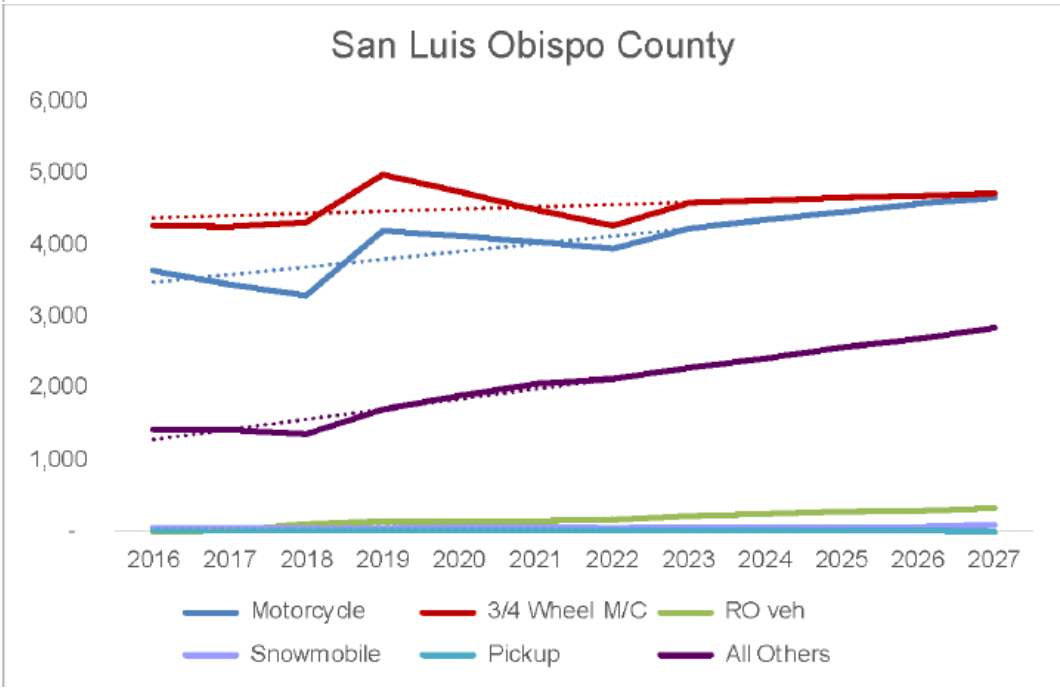

San Benito County
3,000
2,500
2,000
1,500
1,000
500
-
(500)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

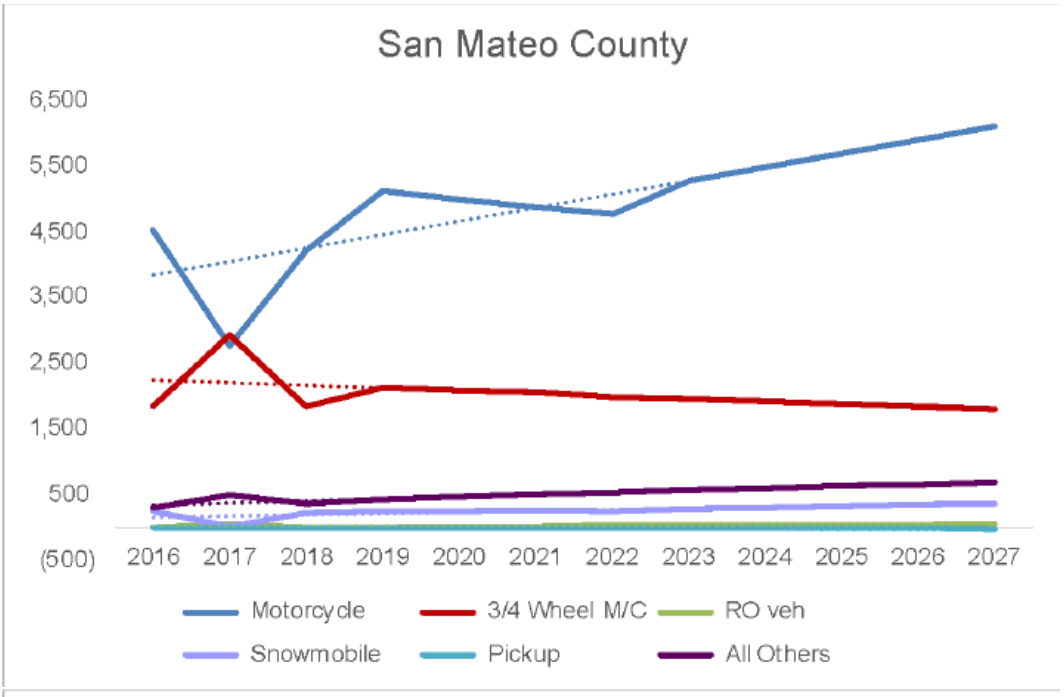

San Bernandino County
35,000
30,000
25,000
20,000
15,000
10,000
5,000
-
(5,000)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

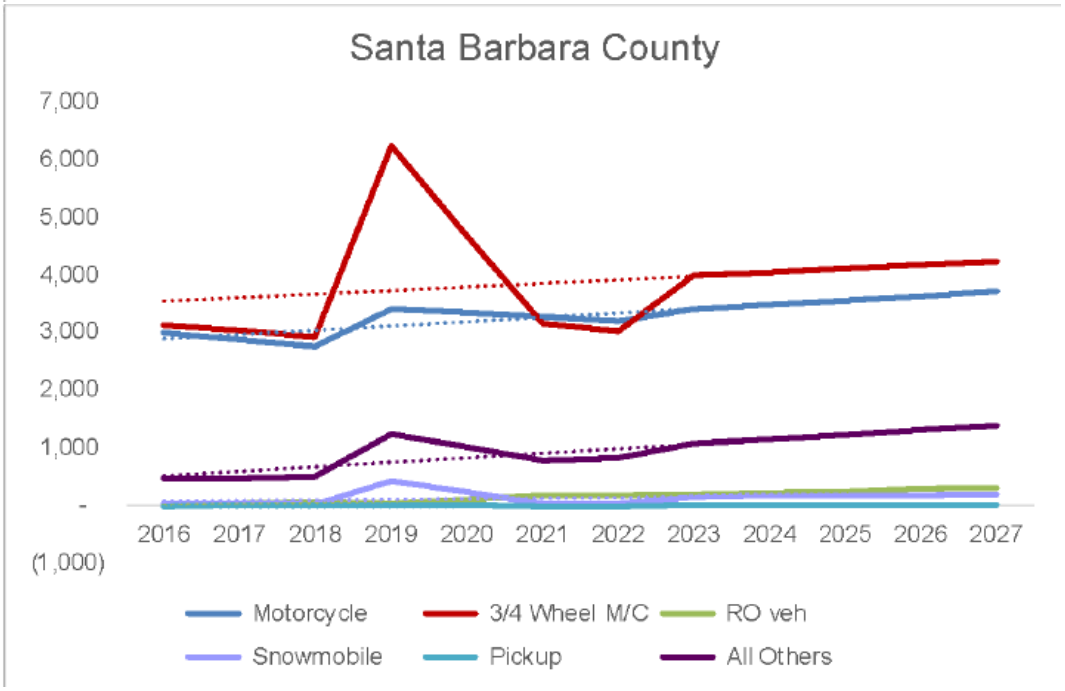

San Diego County
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
-
(5,000)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

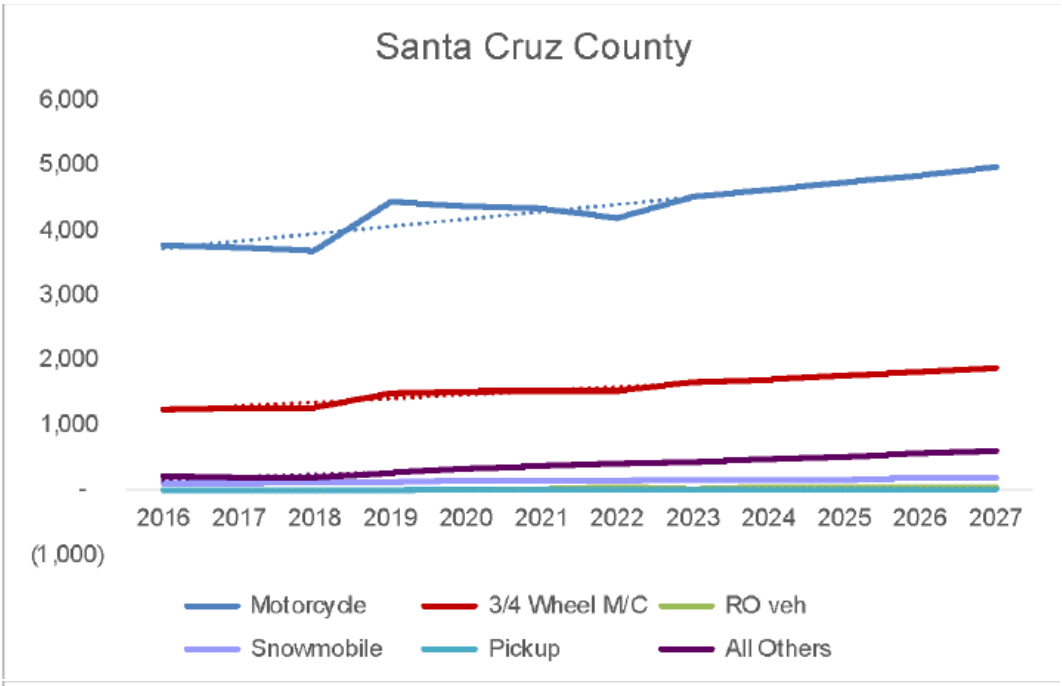

San Francisco County
1,500
1,300
1,100
900
700
500
300
100
(100)
(300)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others


San Joaquin County
10,000
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
-
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others


San Luis Obispo County
6,000
5,000
4,000
3,000
2,000
1,000
-
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others


San Mateo County
6,500
5,500
4,500
3,500
2,500
1,500
500
(500)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others


Santa Barbara County
7,000
6,000
5,000
4,000
3,000
2,000
1,000
-
(1,000)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others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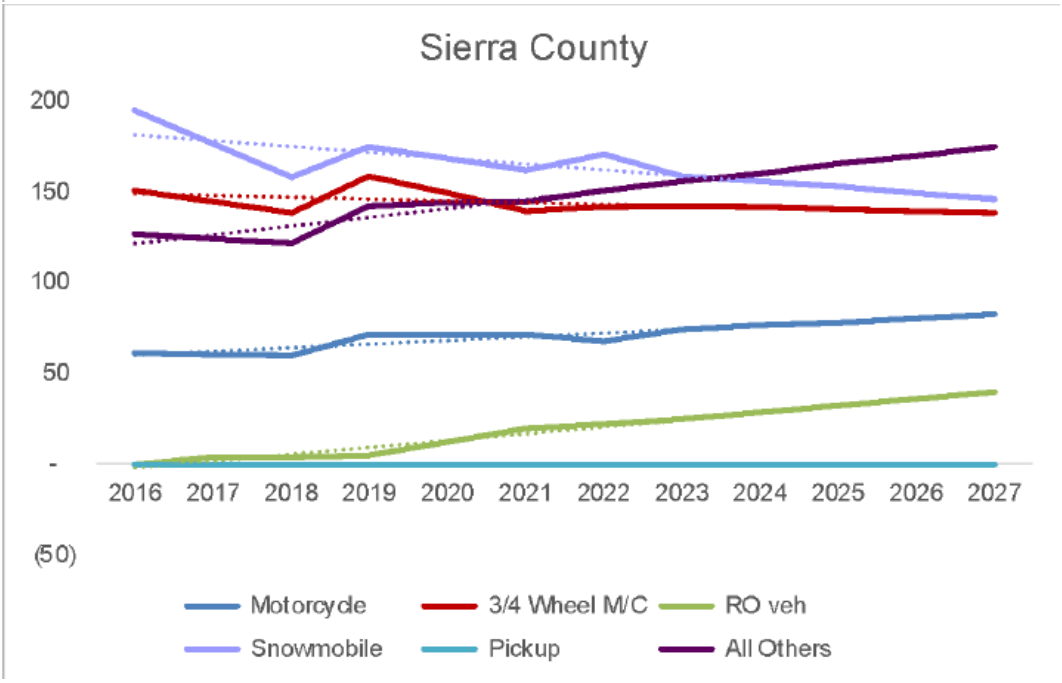
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others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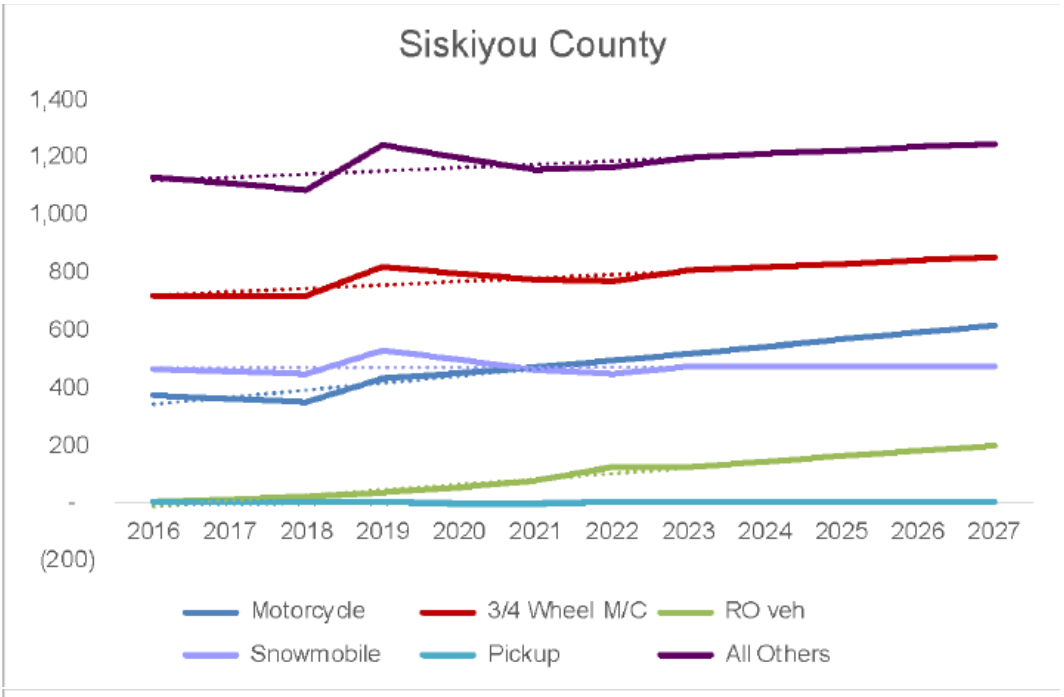
Snowmobile
Pickup
All Others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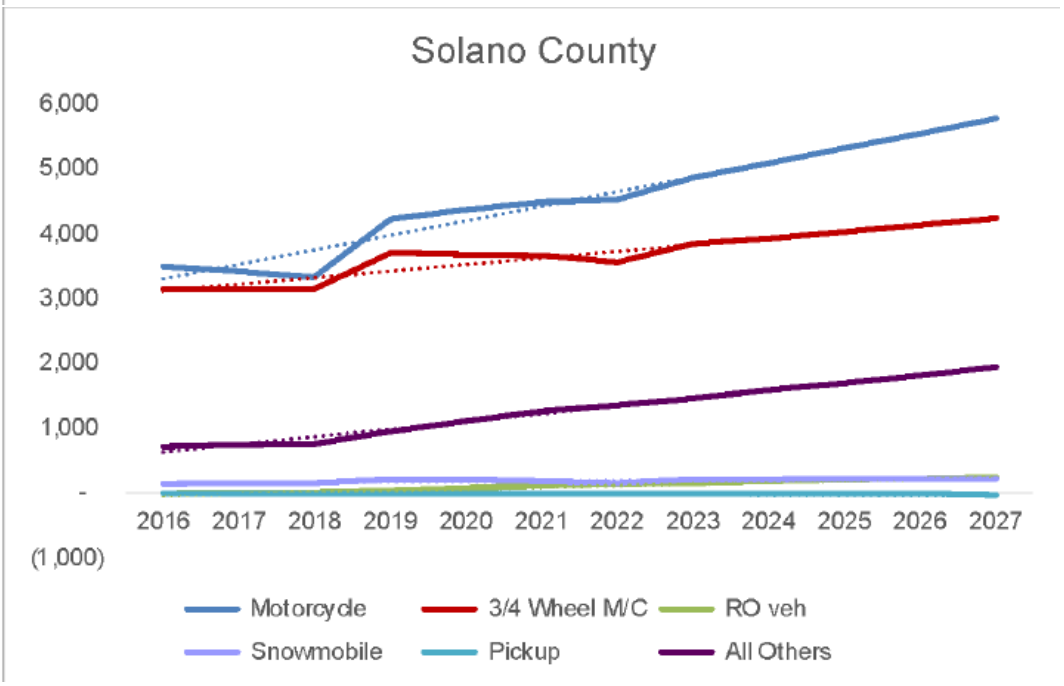
RO veh
Snowmobile
Pickup
All Others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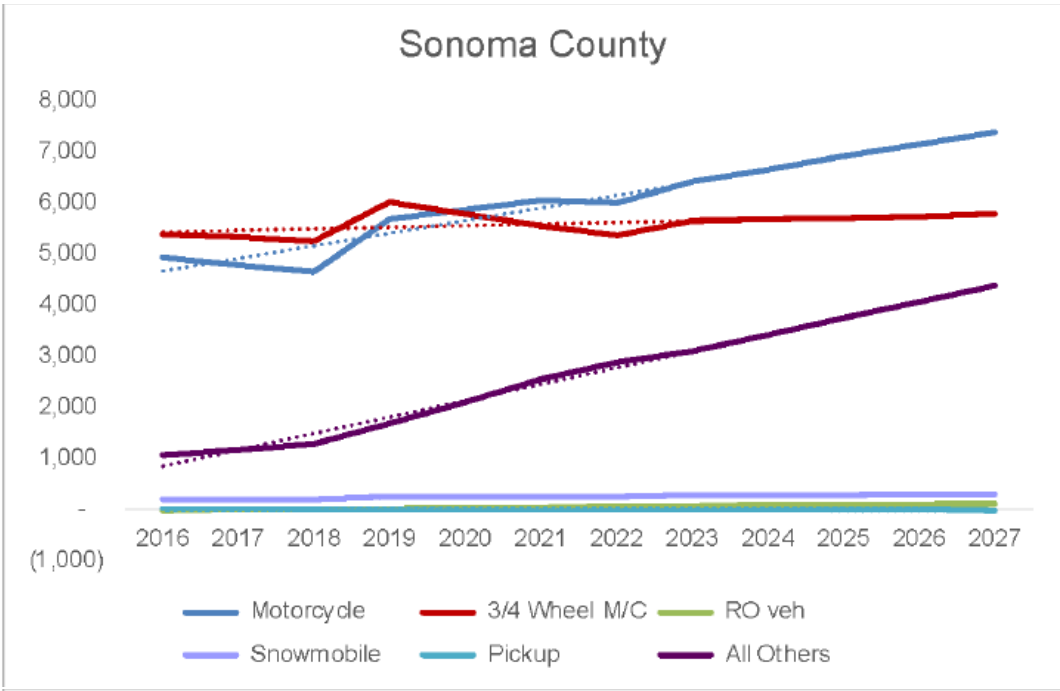
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others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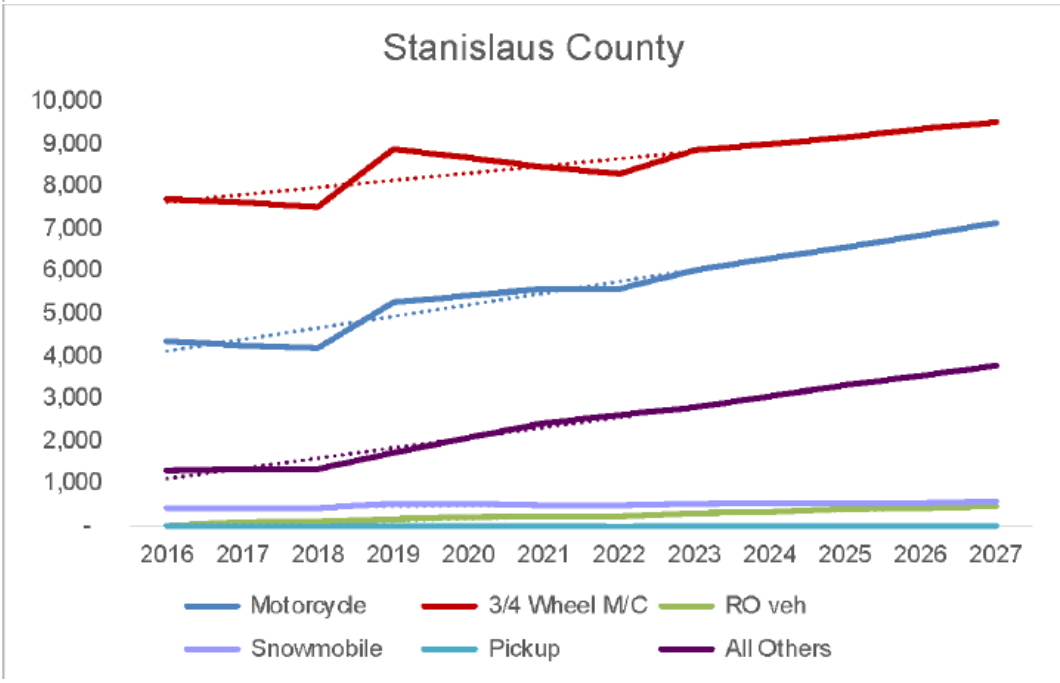
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others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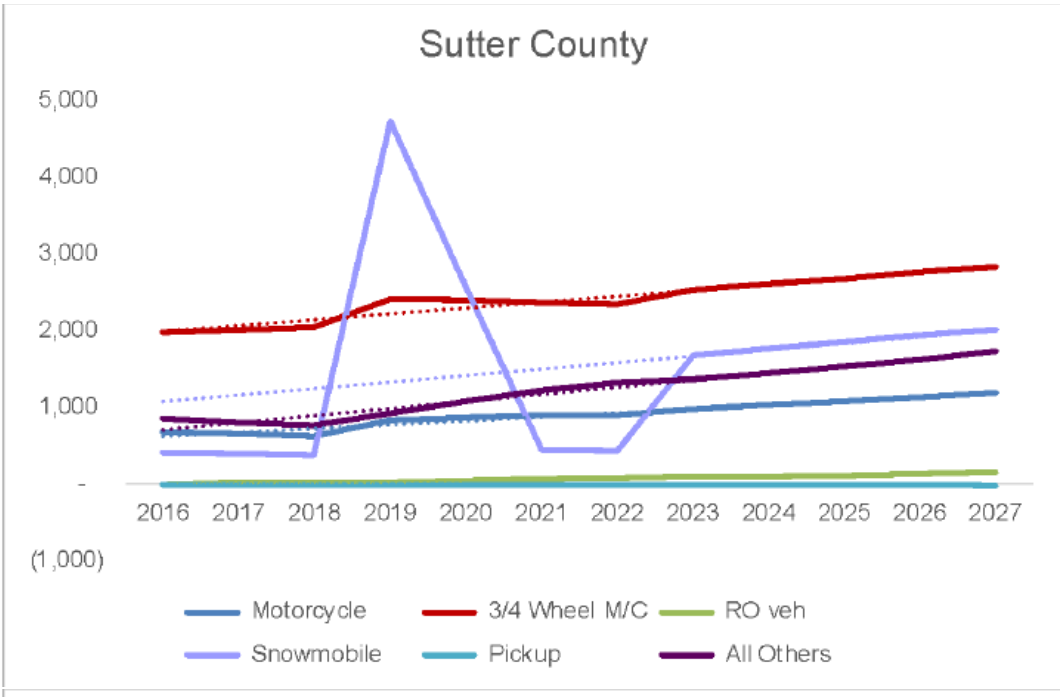
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others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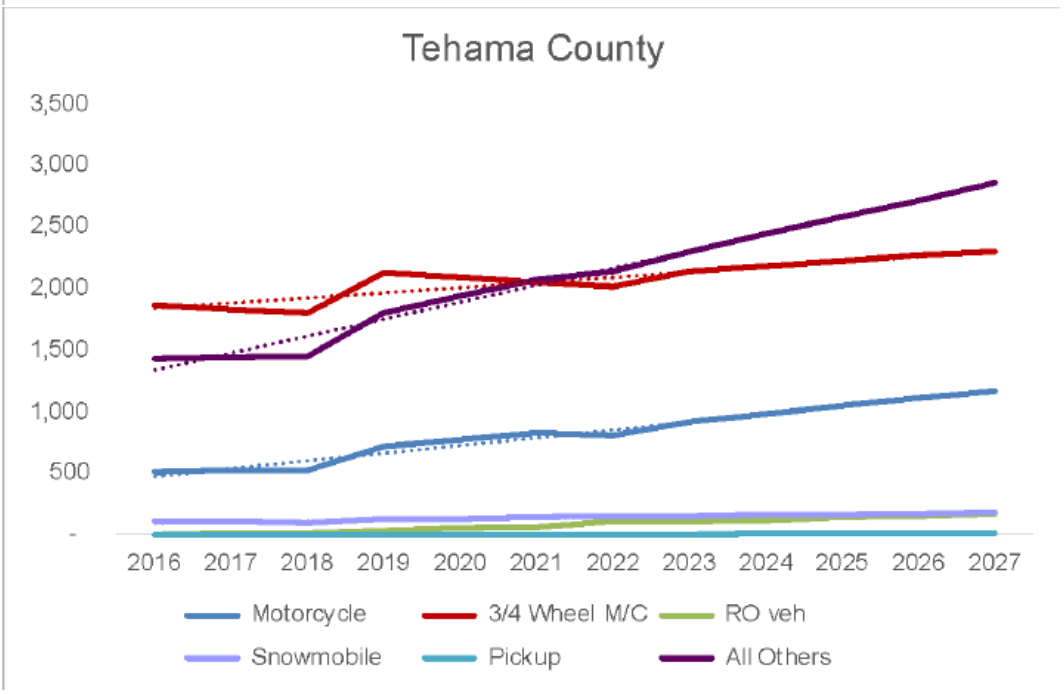
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others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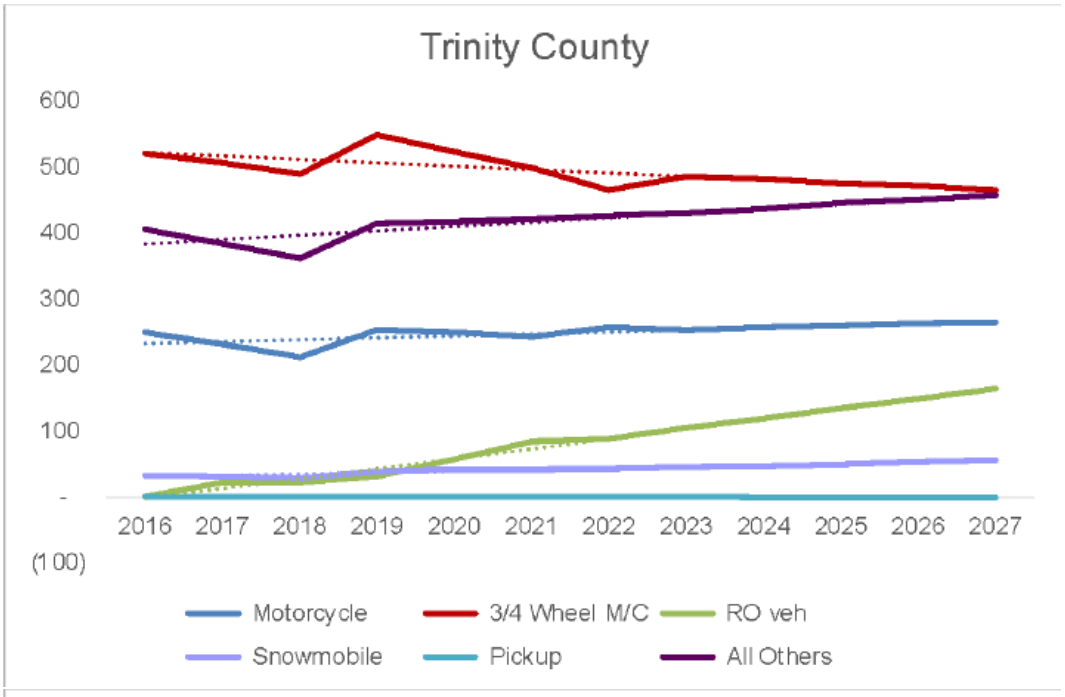
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others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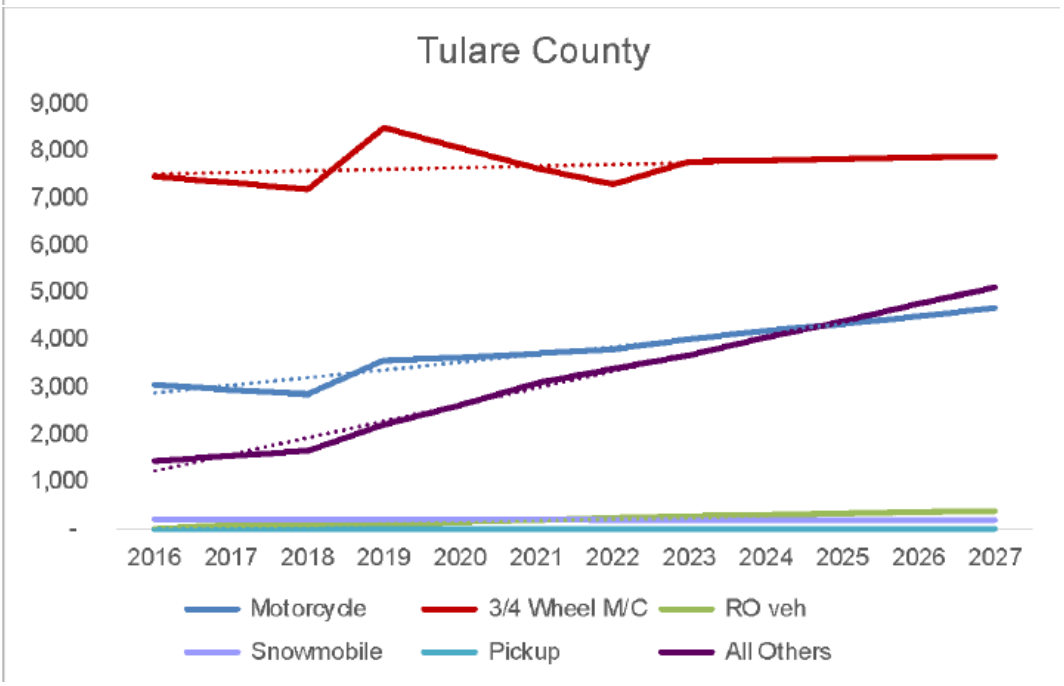
RO veh
Snowmobile
Pickup
All Others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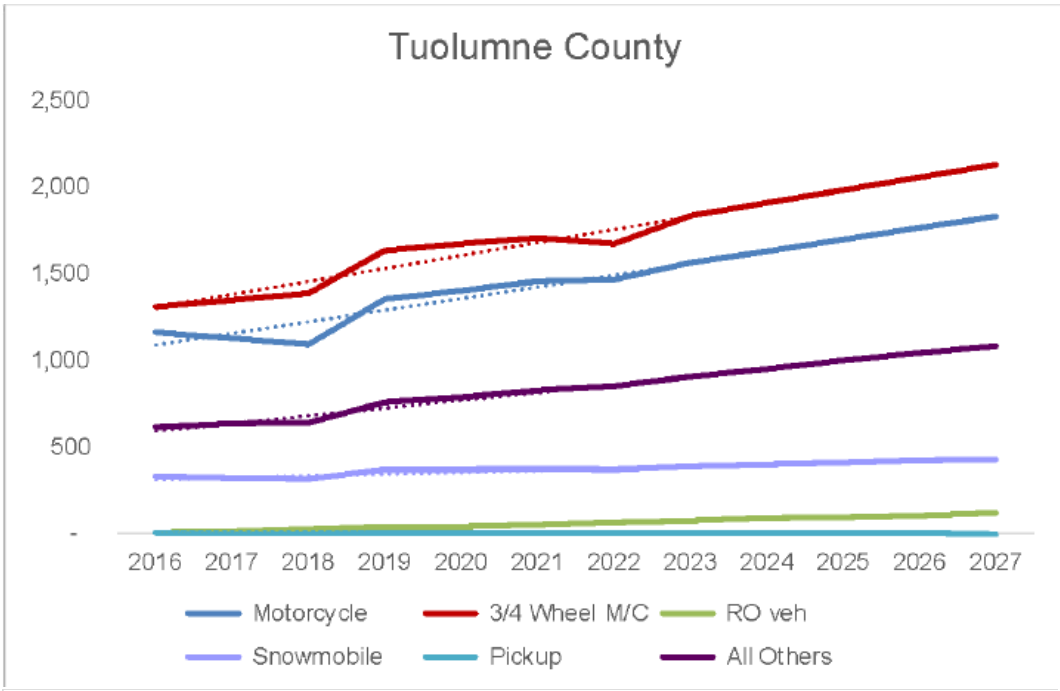
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others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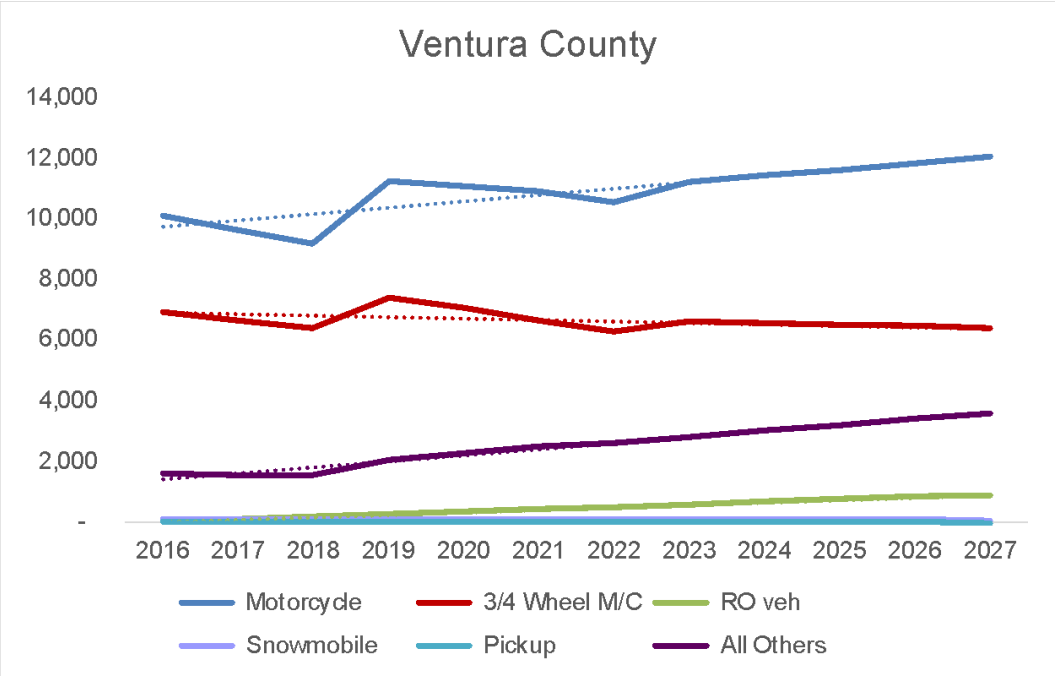
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others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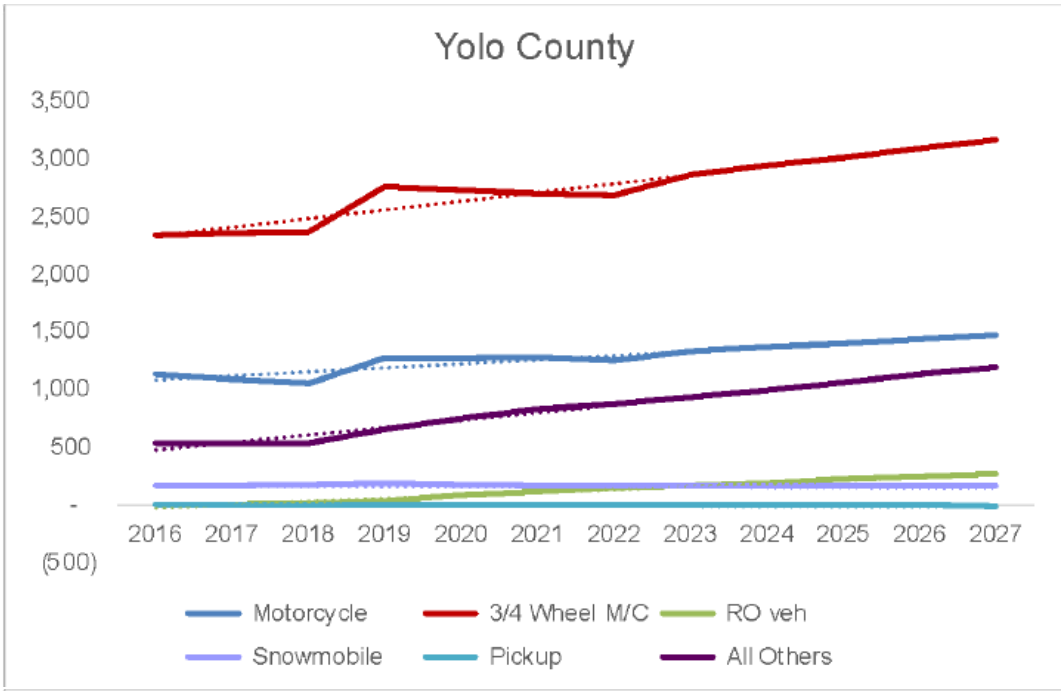
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others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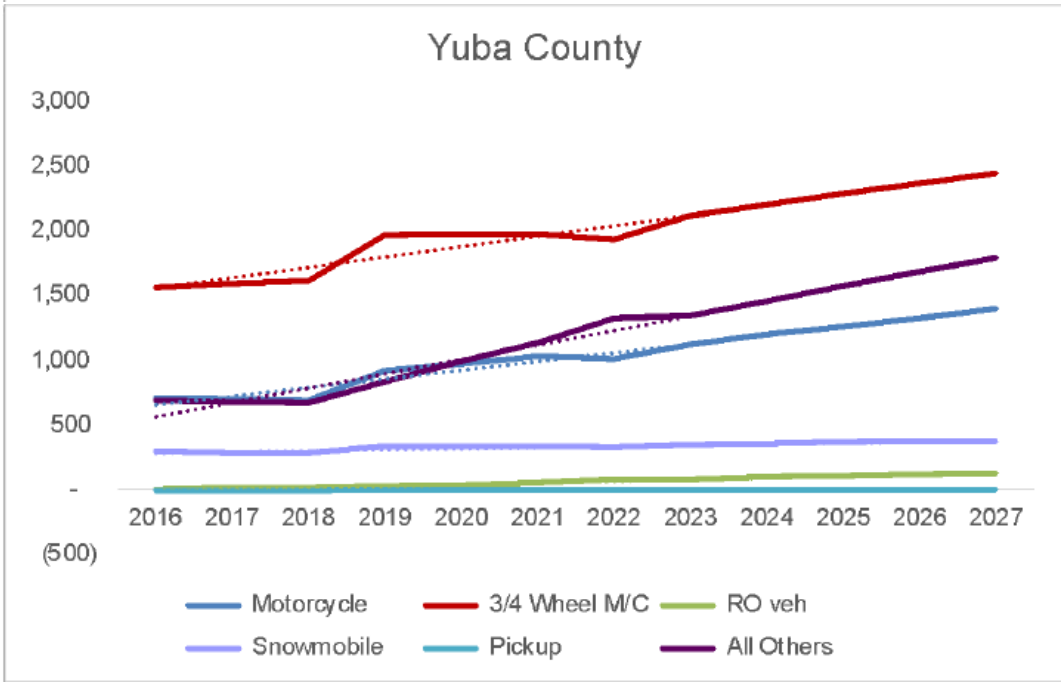
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others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2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Motorcycle
3/4 Wheel M/C
RO veh
Snowmobile
Pickup
All Others

APPENDIX L - VEHICLE TRENDS/PREDICTIONS, CALIFORNIA (COUNTY) 2016-2027

Alameda County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	7,635	3,863	-	322	4	714	12,538
2017	7,379	3,867	3	329	4	713	12,295
2018	7,127	3,826	10	299	3	738	12,003
2019	8,750	4,581	10	351	4	956	14,660
2020	8,654	4,552	27	336	5	1,058	14,631
2021	8,558	4,523	43	320	6	1,160	14,610
2022	8,171	4,291	63	308	5	1,259	14,097
2023	8,824	4,689	63	320	6	1,350	15,253
2024	9,020	4,808	73	319	6	1,451	15,679
2025	9,216	4,927	83	318	6	1,553	16,105
2026	9,412	5,045	94	318	7	1,655	16,531
2027	9,609	5,164	104	317	7	1,757	16,958

Alpine County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	14	25	-	118	1	34	192
2017	13	23	-	83	-	31	150
2018	8	24	-	62	-	33	127
2019	9	29	-	68	-	41	147
2020	13	28	2	69	-	41	152
2021	16	27	3	70	-	40	156
2022	22	22	4	70	-	35	153
2023	18	26	4	54	(0)	40	142
2024	20	26	5	48	(0)	41	139
2025	21	26	5	42	(1)	42	137
2026	22	26	6	36	(1)	43	134
2027	23	26	7	31	(1)	45	131

Amador County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	806	1,594	4	161	2	569	3,136
2017	811	1,581	19	163	1	560	3,135
2018	814	1,626	25	145	2	585	3,197
2019	1,009	1,864	39	191	3	703	3,809
2020	1,057	1,850	61	179	3	745	3,894
2021	1,104	1,836	82	167	3	786	3,978
2022	1,095	1,812	107	161	3	836	4,014
2023	1,199	1,936	115	173	4	885	4,311
2024	1,259	1,985	132	174	4	936	4,490
2025	1,320	2,035	149	176	4	986	4,670
2026	1,380	2,085	166	177	4	1,036	4,849
2027	1,441	2,134	183	179	5	1,087	5,028

Butte County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	2,601	5,196	2	959	5	2,455	11,218
2017	2,493	5,234	11	951	3	2,376	11,068
2018	2,438	5,337	26	960	1	2,315	11,077
2019	2,922	5,988	39	1,094	8	2,678	12,729
2020	2,909	5,820	123	1,047	9	2,837	12,744
2021	2,895	5,651	207	1,000	10	2,995	12,758
2022	2,911	5,515	333	969	8	3,076	12,812
2023	3,053	5,859	318	1,028	11	3,193	13,462
2024	3,132	5,940	371	1,036	12	3,323	13,813
2025	3,211	6,022	423	1,043	13	3,452	14,164
2026	3,289	6,103	476	1,051	14	3,582	14,515
2027	3,368	6,184	529	1,059	15	3,711	14,866

Calaveras County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	1,055	1,634	2	262	2	483	3,438
2017	1,094	1,622	14	305	4	517	3,556
2018	1,123	1,726	28	317	5	552	3,751
2019	1,447	2,031	33	391	5	666	4,573
2020	1,504	2,055	54	390	4	735	4,742
2021	1,561	2,079	75	389	3	803	4,910
2022	1,605	2,069	105	364	3	858	5,004
2023	1,765	2,252	110	424	4	928	5,481
2024	1,871	2,343	126	443	4	995	5,781
2025	1,977	2,434	142	463	4	1,062	6,081
2026	2,083	2,525	159	482	4	1,129	6,381
2027	2,188	2,616	175	502	4	1,196	6,681

Colusa County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	324	972	-	276	-	433	2,005
2017	308	1,000	5	274	-	435	2,022
2018	284	960	5	252	-	393	1,894
2019	351	1,099	9	294	-	457	2,210
2020	352	1,103	15	289	-	504	2,262
2021	352	1,107	21	283	-	551	2,314
2022	355	1,138	41	266	-	588	2,388
2023	368	1,176	37	280	-	596	2,457
2024	377	1,207	43	281	-	624	2,532
2025	385	1,237	49	281	-	653	2,607
2026	394	1,268	55	282	-	682	2,682
2027	403	1,298	61	283	-	711	2,757

Contra Costa County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	9,837	4,706	1	440	5	999	15,988
2017	9,672	4,735	7	426	4	1,024	15,868
2018	9,318	4,668	9	394	8	1,064	15,461
2019	11,415	5,577	14	491	8	1,380	18,885
2020	11,505	5,551	38	478	6	1,628	19,205
2021	11,594	5,524	62	464	4	1,876	19,524
2022	11,342	5,351	90	430	4	1,988	19,205
2023	12,175	5,787	90	465	5	2,171	20,692
2024	12,552	5,944	104	469	5	2,358	21,431
2025	12,929	6,101	119	474	4	2,544	22,171
2026	13,305	6,258	133	478	4	2,731	22,910
2027	13,682	6,415	148	483	4	2,918	23,650

Del Norte County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	60	293	-	2	-	73	428
2017	75	270	2	2	-	75	424
2018	61	268	2	-	-	79	410
2019	83	315	3	2	-	102	505
2020	87	297	7	1	-	107	497
2021	90	278	10	-	-	111	489
2022	107	286	11	-	-	134	538
2023	108	290	13	(0)	-	138	548
2024	115	291	14	(1)	-	148	568
2025	122	292	16	(1)	-	158	587
2026	129	293	18	(1)	-	168	607
2027	137	293	20	(2)	-	178	626

El Dorado County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	4,291	4,388	6	1,059	41	1,926	11,711
2017	4,175	4,387	37	1,043	36	1,951	11,629
2018	4,069	4,508	68	1,009	35	1,965	11,654
2019	5,071	5,254	93	1,224	42	2,336	14,020
2020	5,202	5,303	156	1,171	39	2,505	14,375
2021	5,332	5,351	219	1,118	36	2,673	14,729
2022	5,289	5,240	269	1,087	37	2,809	14,731
2023	5,696	5,673	298	1,158	37	2,971	15,833
2024	5,926	5,861	343	1,172	37	3,136	16,475
2025	6,156	6,050	387	1,186	36	3,302	17,117
2026	6,386	6,238	431	1,201	36	3,467	17,759
2027	6,616	6,427	476	1,215	36	3,633	18,401

Fresno County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	4,008	10,065	4	546	13	2,421	17,057
2017	3,921	10,018	14	521	10	2,629	17,113
2018	3,662	9,663	35	503	17	2,766	16,646
2019	4,662	11,469	49	599	22	3,662	20,463
2020	5,062	11,023	72	569	20	4,322	21,067
2021	5,461	10,577	95	539	17	4,981	21,670
2022	5,695	10,094	121	521	16	5,337	21,784
2023	6,002	10,782	134	546	20	5,875	23,359
2024	6,342	10,874	154	547	21	6,411	24,349
2025	6,683	10,965	174	548	22	6,947	25,339
2026	7,024	11,057	193	549	23	7,483	26,329
2027	7,365	11,148	213	550	24	8,019	27,319

Glenn County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	326	1,400	-	191	-	478	2,395
2017	329	1,471	4	186	-	458	2,448
2018	316	1,499	8	208	-	479	2,510
2019	391	1,686	12	240	-	575	2,904
2020	415	1,661	31	232	-	641	2,979
2021	438	1,635	50	224	-	706	3,053
2022	471	1,587	78	227	-	750	3,113
2023	491	1,713	76	245	-	794	3,319
2024	518	1,750	88	253	-	847	3,456
2025	545	1,788	101	260	-	900	3,593
2026	572	1,825	113	267	-	952	3,730
2027	598	1,863	126	275	-	1,005	3,867

Humboldt County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	1,475	4,230	-	68	1	906	6,680
2017	1,434	4,088	91	58	-	915	6,586
2018	1,349	3,806	122	51	1	862	6,191
2019	1,724	4,302	161	68	2	1,071	7,328
2020	1,717	4,015	247	63	2	1,124	7,167
2021	1,710	3,727	332	58	1	1,177	7,005
2022	1,663	3,569	399	47	1	1,235	6,914
2023	1,794	3,606	451	52	1	1,295	7,198
2024	1,847	3,517	515	50	2	1,358	7,288
2025	1,900	3,427	580	48	2	1,421	7,378
2026	1,953	3,338	644	46	2	1,485	7,468
2027	2,006	3,249	708	44	2	1,548	7,557

Imperial County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	962	4,682	1	1	14	1,343	7,003
2017	1,012	4,683	25	1	11	1,332	7,064
2018	955	4,361	213	1	9	1,296	6,835
2019	1,288	5,415	422	1	11	1,742	8,879
2020	1,327	5,181	745	2	12	1,800	9,066
2021	1,365	4,947	1,067	3	12	1,858	9,252
2022	1,354	4,771	1,331	2	10	1,976	9,444
2023	1,502	5,094	1,487	3	10	2,115	10,210
2024	1,583	5,151	1,723	3	10	2,238	10,708
2025	1,663	5,209	1,959	3	10	2,361	11,205
2026	1,744	5,267	2,195	4	9	2,485	11,703
2027	1,824	5,324	2,431	4	9	2,608	12,200

Inyo County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	515	962	1	79	-	223	1,780
2017	503	874	5	87	1	240	1,710
2018	487	908	11	64	1	269	1,740
2019	592	1,002	16	91	1	334	2,036
2020	588	949	21	88	1	373	2,018
2021	583	895	25	84	1	411	1,999
2022	558	857	39	88	1	434	1,977
2023	602	888	40	89	1	480	2,101
2024	616	879	46	91	1	519	2,153
2025	630	871	52	92	2	557	2,204
2026	644	863	58	94	2	596	2,256
2027	658	855	64	96	2	634	2,308

Kern County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	7,028	12,936	8	273	11	3,634	23,890
2017	6,698	12,616	44	257	6	3,560	23,181
2018	6,410	12,245	75	250	4	3,564	22,548
2019	8,159	14,241	118	296	7	5,038	27,859
2020	8,246	13,472	218	285	7	5,676	27,903
2021	8,333	12,703	318	273	7	6,313	27,947
2022	8,247	12,030	398	257	8	6,653	27,593
2023	8,841	12,704	434	273	7	7,302	29,560
2024	9,154	12,657	501	273	6	7,897	30,488
2025	9,467	12,610	567	274	6	8,493	31,416
2026	9,779	12,563	634	275	6	9,088	32,345
2027	10,092	12,516	700	275	6	9,684	33,273

Kings County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	721	2,481	-	59	4	684	3,949
2017	687	2,453	6	63	4	727	3,940
2018	617	2,381	16	59	6	721	3,800
2019	800	2,832	21	66	7	963	4,689
2020	848	2,676	30	63	7	1,041	4,663
2021	896	2,519	39	59	6	1,118	4,637
2022	910	2,382	45	60	5	1,188	4,590
2023	956	2,550	53	61	7	1,294	4,921
2024	1,000	2,555	61	61	7	1,387	5,070
2025	1,043	2,560	68	61	7	1,480	5,220
2026	1,087	2,564	76	61	7	1,574	5,369
2027	1,130	2,569	84	61	8	1,667	5,518

Lake County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	1,166	1,524	1	13	3	431	3,138
2017	1,158	1,563	-	16	2	476	3,215
2018	1,126	1,484	-	16	3	503	3,132
2019	1,406	1,737	3	17	3	659	3,825
2020	1,460	1,736	12	16	5	773	4,001
2021	1,514	1,734	21	14	6	887	4,176
2022	1,532	1,709	27	18	6	981	4,273
2023	1,644	1,805	28	17	7	1,065	4,565
2024	1,720	1,846	33	18	7	1,163	4,786
2025	1,797	1,887	37	18	8	1,260	5,008
2026	1,873	1,928	42	18	9	1,358	5,229
2027	1,950	1,969	47	19	9	1,456	5,450

Lassen County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	405	757	-	268	1	1,217	2,648
2017	404	767	26	257	1	1,159	2,614
2018	402	742	50	231	1	1,163	2,589
2019	491	866	72	292	1	1,324	3,046
2020	494	853	91	292	1	1,343	3,073
2021	496	840	110	291	1	1,361	3,099
2022	468	816	132	290	1	1,347	3,054
2023	518	868	155	302	1	1,412	3,256
2024	534	883	177	309	1	1,447	3,352
2025	551	899	198	316	1	1,482	3,447
2026	567	914	220	323	1	1,517	3,543
2027	584	930	242	330	1	1,552	3,638

Los Angeles County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	38,225	44,991	21	363	64	10,786	94,450
2017	36,754	43,644	304	350	63	11,072	92,187
2018	34,706	41,768	633	329	54	11,616	89,106
2019	43,419	49,929	1,030	369	70	15,154	109,971
2020	42,662	47,675	1,601	345	67	16,719	109,068
2021	41,904	45,421	2,172	321	63	18,283	108,164
2022	40,226	43,183	2,589	298	61	19,347	105,704
2023	43,165	45,807	2,965	305	64	21,169	113,475
2024	44,031	45,951	3,409	297	64	22,784	116,535
2025	44,898	46,095	3,852	289	64	24,398	119,595
2026	45,764	46,239	4,295	280	64	26,013	122,655
2027	46,630	46,384	4,738	272	64	27,627	125,715

Madera County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	1,199	3,349	4	206	5	695	5,458
2017	1,172	3,299	22	203	8	802	5,506
2018	1,295	3,580	32	215	7	1,005	6,133
2019	1,417	3,861	41	227	6	1,207	6,759
2020	1,496	3,713	50	222	7	1,417	6,904
2021	1,575	3,564	59	217	7	1,627	7,049
2022	1,657	3,501	70	214	7	1,775	7,224
2023	1,742	3,712	81	223	7	1,976	7,741
2024	1,827	3,752	92	225	7	2,165	8,068
2025	1,912	3,792	102	228	7	2,354	8,395
2026	1,997	3,832	112	230	8	2,544	8,722
2027	2,082	3,872	123	232	8	2,733	9,049

Marin County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	1,377	617	-	97	3	153	2,247
2017	1,316	622	-	82	2	157	2,179
2018	1,459	675	3	92	3	193	2,422
2019	1,601	727	3	102	3	228	2,664
2020	1,568	713	5	101	3	255	2,644
2021	1,534	699	6	100	3	281	2,623
2022	1,534	641	8	105	3	312	2,603
2023	1,629	708	9	107	3	338	2,794
2024	1,665	718	10	109	3	366	2,872
2025	1,702	727	12	112	3	394	2,950
2026	1,738	737	13	114	3	422	3,028
2027	1,774	746	14	117	4	450	3,105

Mariposa County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	320	808	4	24	-	177	1,333
2017	312	818	11	27	2	211	1,381
2018	338	894	16	26	2	243	1,518
2019	363	970	20	25	2	275	1,655
2020	382	946	22	26	2	319	1,695
2021	401	921	24	26	1	362	1,735
2022	415	904	23	26	1	403	1,772
2023	434	972	30	26	1	435	1,899
2024	452	992	33	26	1	473	1,977
2025	470	1,011	36	26	1	510	2,056
2026	488	1,031	39	27	1	548	2,135
2027	507	1,050	43	27	2	586	2,213

Mendocino County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	1,349	2,751	-	19	3	736	4,858
2017	1,322	2,726	1	26	5	816	4,896
2018	1,234	2,569	7	18	3	807	4,638
2019	1,557	2,940	11	27	3	1,077	5,615
2020	1,657	2,831	21	27	2	1,277	5,814
2021	1,757	2,721	31	27	1	1,476	6,013
2022	1,791	2,603	40	34	1	1,594	6,063
2023	1,898	2,707	44	33	0	1,735	6,417
2024	1,992	2,700	51	35	(0)	1,891	6,668
2025	2,085	2,693	57	37	(1)	2,047	6,919
2026	2,179	2,686	64	39	(1)	2,203	7,170
2027	2,272	2,679	71	41	(2)	2,359	7,421

Merced County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	1,446	3,880	5	81	1	707	6,120
2017	1,408	3,883	28	91	1	840	6,251
2018	1,348	3,875	38	85	1	884	6,231
2019	1,715	4,650	43	88	2	1,137	7,635
2020	1,838	4,598	51	86	2	1,358	7,933
2021	1,961	4,546	59	83	2	1,579	8,230
2022	2,064	4,529	58	75	1	1,735	8,462
2023	2,176	4,851	74	79	2	1,897	9,078
2024	2,299	4,994	82	78	2	2,076	9,531
2025	2,422	5,136	90	77	2	2,256	9,984
2026	2,545	5,279	99	76	2	2,436	10,437
2027	2,669	5,422	107	75	2	2,616	10,890

Modoc County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	64	203	-	31	-	499	797
2017	64	247	13	44	-	474	842
2018	60	246	8	45	-	455	814
2019	79	279	26	55	-	519	958
2020	84	275	31	52	-	509	950
2021	88	271	36	48	-	499	942
2022	68	266	41	49	-	508	932
2023	84	293	50	56	-	513	997
2024	87	303	56	58	-	518	1,023
2025	90	312	63	61	-	523	1,049
2026	93	322	70	63	-	527	1,076
2027	96	331	77	66	-	532	1,102

Mono County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	344	366	1	680	1	103	1,495
2017	302	339	3	682	1	115	1,442
2018	282	337	5	616	-	125	1,365
2019	329	375	5	742	1	148	1,600
2020	332	374	10	742	1	172	1,629
2021	335	372	14	741	1	195	1,658
2022	326	352	16	724	1	215	1,634
2023	330	368	18	757	1	231	1,705
2024	333	370	20	771	1	250	1,745
2025	335	372	23	784	1	269	1,785
2026	337	374	26	798	1	289	1,824
2027	339	377	28	811	1	308	1,864

Monterey County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	2,644	3,227	-	49	6	509	6,435
2017	2,625	3,219	5	50	4	526	6,429
2018	2,500	3,267	20	47	6	510	6,350
2019	3,270	4,037	25	59	10	699	8,100
2020	3,319	4,047	36	56	9	893	8,360
2021	3,368	4,057	46	53	8	1,087	8,619
2022	3,313	4,014	64	41	7	1,207	8,646
2023	3,622	4,384	69	49	9	1,290	9,423
2024	3,776	4,556	80	49	10	1,419	9,888
2025	3,930	4,728	90	49	10	1,547	10,353
2026	4,084	4,900	100	48	11	1,676	10,818
2027	4,238	5,072	111	48	11	1,804	11,283

Napa County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	1,371	1,990	-	94	6	367	3,828
2017	1,382	1,955	5	89	3	419	3,853
2018	1,299	2,003	9	82	5	450	3,848
2019	1,590	2,270	10	90	5	564	4,529
2020	1,603	2,214	13	93	4	636	4,563
2021	1,616	2,158	16	96	3	707	4,596
2022	1,593	2,091	27	82	3	705	4,501
2023	1,699	2,229	27	88	3	803	4,848
2024	1,750	2,262	31	87	2	867	4,999
2025	1,802	2,294	34	87	2	930	5,150
2026	1,853	2,327	38	87	2	994	5,300
2027	1,904	2,360	42	86	1	1,057	5,451

Nevada County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	2,155	2,252	7	1,014	4	1,146	6,578
2017	2,140	2,262	21	997	3	1,145	6,568
2018	2,064	2,256	40	961	8	1,118	6,447
2019	2,559	2,671	57	1,152	9	1,311	7,759
2020	2,674	2,706	88	1,145	11	4,260	10,884
2021	2,789	2,741	118	1,138	13	7,209	14,008
2022	2,759	2,707	153	1,131	11	1,529	8,290
2023	2,980	2,910	166	1,194	15	4,877	12,141
2024	3,113	3,009	190	1,223	16	5,463	13,014
2025	3,246	3,108	215	1,252	18	6,050	13,887
2026	3,379	3,207	239	1,281	19	6,636	14,761
2027	3,511	3,306	263	1,310	21	7,222	15,634

Orange County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	18,487	17,693	14	160	25	5,585	41,964
2017	17,652	16,730	240	162	20	5,441	40,245
2018	16,554	15,796	502	150	17	5,276	38,295
2019	20,581	18,359	766	166	19	6,683	46,574
2020	20,069	17,286	1,103	158	18	6,946	45,580
2021	19,557	16,213	1,440	150	16	7,209	44,585
2022	18,375	15,082	1,713	146	16	7,256	42,588
2023	19,752	15,683	1,982	148	14	7,802	45,381
2024	20,002	15,420	2,272	146	12	8,167	46,018
2025	20,251	15,156	2,561	144	11	8,532	46,655
2026	20,501	14,893	2,850	142	10	8,897	47,292
2027	20,750	14,629	3,139	139	9	9,262	47,929

Placer County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	6,152	5,615	13	1,085	22	1,736	14,623
2017	6,054	5,663	72	1,177	18	1,773	14,757
2018	5,963	5,799	133	1,164	23	1,711	14,793
2019	7,418	6,793	192	1,462	27	2,078	17,970
2020	7,607	6,758	297	1,449	32	2,303	18,445
2021	7,795	6,723	402	1,436	37	2,527	18,920
2022	7,711	6,598	481	1,414	37	2,702	18,943
2023	8,357	7,140	545	1,568	41	2,832	20,484
2024	8,708	7,355	625	1,632	44	3,011	21,375
2025	9,058	7,570	705	1,696	48	3,189	22,265
2026	9,408	7,785	784	1,760	51	3,368	23,156
2027	9,758	8,001	864	1,824	54	3,546	24,047

Plumas County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	401	666	-	873	1	836	2,777
2017	390	657	6	879	1	859	2,792
2018	384	641	15	774	1	847	2,662
2019	529	737	81	862	1	1,114	3,323
2020	534	733	85	854	1	1,123	3,330
2021	540	730	89	847	1	1,131	3,335
2022	550	722	96	831	1	1,148	3,347
2023	603	756	128	830	1	1,259	3,576
2024	635	770	146	826	1	1,322	3,699
2025	667	785	165	822	1	1,384	3,823
2026	699	799	184	818	1	1,447	3,947
2027	731	814	202	814	1	1,510	4,071

Riverside County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	18,663	29,862	103	61	35	10,587	59,311
2017	18,326	29,296	805	59	40	10,605	59,131
2018	17,250	28,094	1,618	73	35	10,678	57,748
2019	22,820	34,202	2,666	87	45	14,062	73,882
2020	23,454	33,132	4,061	85	41	15,217	75,989
2021	24,087	32,062	5,456	83	36	16,371	78,095
2022	23,430	30,973	6,599	87	37	17,268	78,394
2023	25,722	33,075	7,506	96	39	18,700	85,138
2024	26,866	33,571	8,621	101	39	19,990	89,189
2025	28,010	34,068	9,737	106	39	21,280	93,239
2026	29,154	34,564	10,852	111	39	22,569	97,290
2027	30,298	35,061	11,968	116	39	23,859	101,341

Sacramento County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	8,422	8,762	10	697	26	2,133	20,050
2017	8,207	8,640	42	690	18	2,130	19,727
2018	7,956	8,711	82	663	23	2,143	19,578
2019	9,877	10,253	135	811	30	2,673	23,779
2020	9,991	10,120	225	791	26	3,015	24,168
2021	10,104	9,987	315	771	22	3,357	24,556
2022	9,937	9,587	392	738	23	3,660	24,337
2023	10,695	10,377	434	796	24	3,860	26,186
2024	11,066	10,612	499	811	24	4,142	27,154
2025	11,436	10,847	565	826	24	4,425	28,122
2026	11,807	11,082	630	841	25	4,707	29,091
2027	12,177	11,317	696	855	25	4,989	30,059

San Benito County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	1,438	1,080	-	23	8	165	2,714
2017	1,462	1,162	3	23	4	166	2,820
2018	1,417	1,187	4	23	4	174	2,809
2019	1,860	1,442	8	32	6	242	3,590
2020	1,925	1,439	13	30	6	282	3,694
2021	1,990	1,436	17	27	5	322	3,797
2022	2,021	1,432	23	21	4	355	3,856
2023	2,204	1,576	25	27	4	385	4,221
2024	2,322	1,643	28	27	4	421	4,444
2025	2,440	1,709	32	27	3	456	4,668
2026	2,559	1,775	36	28	3	491	4,892
2027	2,677	1,841	40	28	3	527	5,116

San Bernardino County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	15,166	30,563	17	91	54	8,415	54,306
2017	14,697	29,360	355	78	47	8,708	53,245
2018	13,919	28,111	858	77	42	8,894	51,901
2019	18,208	33,401	1,412	115	54	11,834	65,024
2020	18,434	31,915	2,325	111	53	13,207	66,044
2021	18,660	30,429	3,237	107	52	14,579	67,064
2022	18,168	29,378	4,040	89	54	15,499	67,228
2023	19,814	30,792	4,506	108	54	16,920	72,194
2024	20,580	30,877	5,195	111	55	18,253	75,071
2025	21,346	30,963	5,885	114	55	19,585	77,947
2026	22,112	31,048	6,574	117	56	20,917	80,824
2027	22,878	31,133	7,263	120	57	22,250	83,701

San Diego County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	21,117	31,088	30	92	74	9,497	61,898
2017	20,630	30,391	317	98	60	9,787	61,283
2018	19,899	29,594	642	93	65	9,825	60,118
2019	25,660	35,673	1,124	118	77	12,710	75,362
2020	25,853	34,281	1,721	118	70	13,422	75,464
2021	26,045	32,888	2,318	118	62	14,134	75,565
2022	25,386	31,542	2,688	111	64	15,092	74,883
2023	27,740	33,786	3,128	124	64	16,220	81,062
2024	28,797	34,180	3,594	129	64	17,259	84,022
2025	29,854	34,574	4,060	133	63	18,297	86,981
2026	30,910	34,969	4,527	137	62	19,336	89,941
2027	31,967	35,363	4,993	142	61	20,374	92,900

San Francisco County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	924	432	-	42	-	110	1,508
2017	940	444	5	46	-	126	1,561
2018	919	426	6	46	-	120	1,517
2019	1,140	471	9	64	-	140	1,824
2020	1,151	429	88	68	-	182	1,917
2021	1,161	387	167	72	-	223	2,010
2022	1,136	351	165	64	-	250	1,966
2023	1,240	369	192	77	-	261	2,139
2024	1,287	357	224	82	-	285	2,235
2025	1,334	344	256	87	-	309	2,330
2026	1,380	332	288	92	-	333	2,426
2027	1,427	319	320	97	-	357	2,521

San Joaquin County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	5,816	7,656	4	369	2	1,323	15,170
2017	5,845	7,628	31	355	2	1,311	15,172
2018	5,694	7,645	63	319	9	1,316	15,046
2019	7,213	8,867	86	399	10	1,726	18,301
2020	7,412	8,783	140	399	9	2,054	18,795
2021	7,611	8,698	193	399	7	2,381	19,289
2022	7,545	8,526	243	390	6	2,574	19,284
2023	8,225	9,099	268	409	9	2,759	20,769
2024	8,597	9,309	308	417	10	2,996	21,638
2025	8,970	9,519	348	425	11	3,233	22,506
2026	9,343	9,729	388	433	12	3,470	23,375
2027	9,716	9,940	428	442	13	3,707	24,244

San Luis Obispo County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	3,618	4,269	3	47	20	1,413	9,370
2017	3,433	4,247	23	49	15	1,420	9,187
2018	3,288	4,301	103	46	14	1,357	9,109
2019	4,181	4,981	139	54	16	1,707	11,078
2020	4,112	4,730	145	62	17	1,882	10,947
2021	4,042	4,479	151	70	17	2,057	10,816
2022	3,944	4,258	163	57	15	2,132	10,569
2023	4,234	4,589	215	68	15	2,275	11,396
2024	4,342	4,620	243	71	15	2,416	11,706
2025	4,450	4,651	271	74	14	2,557	12,017
2026	4,557	4,681	298	77	14	2,699	12,327
2027	4,665	4,712	326	80	14	2,840	12,637

San Mateo County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	4,525	1,854	1	253	4	318	6,955
2017	2,759	2,936	67	20	2	489	6,273
2018	4,223	1,844	6	225	3	365	6,666
2019	5,113	2,124	11	253	3	441	7,945
2020	4,992	2,093	23	259	3	483	7,853
2021	4,871	2,062	35	264	3	525	7,760
2022	4,764	1,984	52	259	2	535	7,596
2023	5,280	1,970	43	296	2	571	8,162
2024	5,484	1,930	47	315	2	601	8,379
2025	5,687	1,891	51	335	2	631	8,596
2026	5,891	1,851	54	354	2	661	8,813
2027	6,095	1,811	58	373	2	691	9,031

Santa Barbara County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	2,989	3,133	10	34	1	480	6,647
2017	2,874	3,035	39	27	2	485	6,460
2018	2,759	2,936	67	20	2	489	6,273
2019	3,418	6,256	28	432	20	1,257	11,411
2020	3,353	4,707	95	236	11	1,020	9,421
2021	3,288	3,157	161	40	1	783	7,430
2022	3,199	3,032	181	39	1	833	7,285
2023	3,419	3,995	195	155	6	1,076	8,847
2024	3,492	4,057	223	164	7	1,154	9,097
2025	3,565	4,118	251	173	7	1,232	9,347
2026	3,639	4,179	279	183	7	1,311	9,597
2027	3,712	4,240	307	192	7	1,389	9,847

Santa Clara County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	10,683	5,100	-	381	14	934	17,112
2017	10,303	5,197	14	387	14	969	16,882
2018	9,922	5,293	14	393	13	1,003	16,638
2019	11,901	1,502	6	131	10	270	13,820
2020	11,620	3,631	30	268	12	905	16,465
2021	11,339	5,760	53	404	14	1,539	19,109
2022	10,802	5,524	75	387	14	1,628	18,430
2023	11,528	4,678	73	325	13	1,482	18,099
2024	11,676	4,704	84	323	13	1,593	18,393
2025	11,823	4,730	96	320	13	1,705	18,687
2026	11,971	4,757	107	317	13	1,816	18,981
2027	12,118	4,783	118	315	13	1,928	19,275

Santa Cruz County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	3,771	1,254	-	109	6	201	5,341
2017	3,729	1,264	4	112	7	197	5,312
2018	3,687	1,273	4	114	8	192	5,278
2019	4,429	1,502	6	131	10	270	6,348
2020	4,380	1,520	11	142	13	327	6,391
2021	4,330	1,538	15	153	15	383	6,434
2022	4,187	1,540	32	139	12	410	6,320
2023	4,522	1,649	28	157	16	445	6,817
2024	4,634	1,708	32	164	17	485	7,042
2025	4,747	1,767	37	172	18	526	7,267
2026	4,859	1,826	41	179	20	566	7,491
2027	4,971	1,886	46	186	21	607	7,716

Shasta County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	2,507	4,265	1	393	2	4,047	11,215
2017	2,463	4,149	78	366	2	3,938	10,994
2018	2,418	4,033	154	338	2	3,828	10,773
2019	3,047	4,563	250	394	2	4,458	12,714
2020	3,197	4,513	413	387	2	4,558	13,070
2021	3,347	4,463	576	380	1	4,658	13,425
2022	3,420	4,343	759	401	-	4,771	13,694
2023	3,669	4,524	823	394	0	4,943	14,354
2024	3,858	4,572	949	398	(0)	5,098	14,876
2025	4,047	4,620	1,075	402	(0)	5,253	15,397
2026	4,236	4,668	1,201	405	(1)	5,408	15,918
2027	4,425	4,716	1,327	409	(1)	5,563	16,439

Sierra County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	61	151	-	195	-	127	534
2017	61	145	4	177	-	125	511
2018	60	139	4	158	-	122	483
2019	72	159	5	175	-	143	554
2020	72	150	13	169	-	144	547
2021	72	140	20	162	-	145	539
2022	68	142	22	171	-	151	554
2023	75	143	25	159	-	156	557
2024	77	142	29	156	-	161	564
2025	79	141	32	153	-	166	570
2026	81	140	36	150	-	170	577
2027	83	139	40	146	-	175	583

Siskiyou County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	374	720	3	468	2	1,132	2,699
2017	362	719	13	458	2	1,110	2,663
2018	350	717	23	447	2	1,087	2,626
2019	433	821	37	534	2	1,240	3,067
2020	453	797	58	499	2	1,200	3,007
2021	472	773	78	463	1	1,160	2,947
2022	496	770	124	449	3	1,167	3,009
2023	518	808	123	475	2	1,202	3,128
2024	543	820	142	475	2	1,213	3,195
2025	567	832	161	475	2	1,225	3,263
2026	592	844	180	475	2	1,236	3,330
2027	617	856	199	475	2	1,248	3,397

Solano County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	3,496	3,144	-	142	5	722	7,509
2017	3,421	3,146	21	157	5	744	7,493
2018	3,346	3,147	21	171	5	766	7,456
2019	4,232	3,714	43	212	5	962	9,168
2020	4,366	3,693	81	202	5	1,113	9,459
2021	4,500	3,672	119	191	4	1,263	9,749
2022	4,534	3,563	140	173	3	1,376	9,789
2023	4,884	3,848	157	206	3	1,470	10,568
2024	5,109	3,950	181	213	3	1,590	11,045
2025	5,333	4,052	206	219	3	1,709	11,522
2026	5,558	4,154	230	226	2	1,829	11,999
2027	5,783	4,256	254	233	2	1,948	12,476

Sonoma County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	4,918	5,383	2	205	23	1,073	11,604
2017	4,775	5,319	9	207	22	1,170	11,500
2018	4,631	5,254	15	208	21	1,266	11,395
2019	5,674	5,998	21	254	22	1,668	13,637
2020	5,848	5,767	38	253	19	2,099	14,023
2021	6,022	5,536	54	251	16	2,529	14,408
2022	5,987	5,352	66	253	14	2,888	14,560
2023	6,396	5,638	73	272	14	3,098	15,491
2024	6,643	5,668	84	282	12	3,420	16,110
2025	6,890	5,699	95	292	11	3,741	16,728
2026	7,138	5,729	106	302	9	4,062	17,346
2027	7,385	5,760	116	312	8	4,384	17,964

Stanislaus County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	4,360	7,708	6	435	8	1,318	13,835
2017	4,268	7,606	58	434	8	1,332	13,704
2018	4,176	7,504	109	432	7	1,345	13,573
2019	5,275	8,878	151	517	10	1,723	16,554
2020	5,435	8,680	185	501	9	2,077	16,885
2021	5,594	8,481	218	484	8	2,431	17,216
2022	5,586	8,303	240	492	7	2,614	17,242
2023	6,040	8,839	295	519	8	2,808	18,509
2024	6,311	9,007	334	531	8	3,052	19,244
2025	6,582	9,175	373	544	8	3,295	19,978
2026	6,853	9,343	413	556	8	3,539	20,712
2027	7,124	9,512	452	568	8	3,783	21,446

Sutter County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	684	1,971	-	417	2	843	3,917
2017	652	2,003	20	396	2	806	3,878
2018	620	2,035	20	375	1	768	3,819
2019	828	2,416	37	4,721	1	930	8,933
2020	868	2,387	52	2,584	1	1,072	6,962
2021	907	2,357	66	446	-	1,214	4,990
2022	903	2,341	82	436	-	1,320	5,082
2023	982	2,526	92	1,677	(0)	1,358	6,635
2024	1,033	2,603	105	1,762	(1)	1,449	6,951
2025	1,083	2,681	119	1,846	(1)	1,540	7,268
2026	1,134	2,758	132	1,931	(2)	1,631	7,584
2027	1,184	2,836	145	2,015	(2)	1,722	7,901

Tehama County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	511	1,865	1	108	1	1,428	3,914
2017	519	1,835	7	104	1	1,440	3,905
2018	526	1,804	13	99	1	1,452	3,895
2019	718	2,131	27	124	2	1,798	4,800
2020	771	2,090	47	130	2	1,936	4,975
2021	824	2,048	67	135	2	2,074	5,150
2022	810	2,019	101	147	2	2,135	5,214
2023	919	2,138	102	151	2	2,305	5,618
2024	981	2,180	119	158	3	2,443	5,884
2025	1,044	2,222	135	166	3	2,582	6,151
2026	1,107	2,264	151	173	3	2,720	6,418
2027	1,169	2,306	167	181	3	2,858	6,685

Trinity County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	250	522	-	33	1	407	1,213
2017	232	507	23	32	1	385	1,179
2018	213	491	23	30	-	363	1,120
2019	255	550	31	40	-	416	1,292
2020	249	525	58	41	-	419	1,291
2021	243	499	85	42	-	421	1,290
2022	258	467	88	43	-	427	1,283
2023	255	488	104	46	(0)	432	1,324
2024	258	482	120	48	(1)	439	1,346
2025	261	477	135	50	(1)	446	1,368
2026	264	472	150	53	(1)	452	1,389
2027	267	467	165	55	(1)	459	1,411

Tulare County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	3,050	7,491	-	205	3	1,445	12,194
2017	2,948	7,342	78	202	3	1,553	12,125
2018	2,845	7,192	78	198	3	1,661	11,977
2019	3,571	8,493	100	215	5	2,202	14,586
2020	3,644	8,073	141	206	6	2,640	14,708
2021	3,716	7,652	182	197	6	3,077	14,830
2022	3,808	7,303	227	183	7	3,408	14,936
2023	4,027	7,783	251	191	8	3,700	15,961
2024	4,192	7,817	285	189	8	4,054	16,545
2025	4,356	7,850	319	186	9	4,408	17,130
2026	4,521	7,884	353	184	10	4,763	17,714
2027	4,686	7,917	387	182	11	5,117	18,299

Tuolumne County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	1,162	1,314	2	328	5	617	3,428
2017	1,130	1,354	14	319	5	630	3,451
2018	1,097	1,394	25	310	4	643	3,473
2019	1,358	1,642	38	367	5	760	4,170
2020	1,410	1,677	45	371	5	794	4,299
2021	1,461	1,711	51	374	4	827	4,428
2022	1,465	1,682	66	369	4	852	4,438
2023	1,567	1,839	75	390	4	910	4,785
2024	1,634	1,914	85	401	4	955	4,993
2025	1,701	1,989	96	411	4	1,000	5,200
2026	1,769	2,064	106	422	4	1,044	5,408
2027	1,836	2,139	116	432	3	1,089	5,616

Ventura County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	10,133	6,949	25	99	10	1,594	18,810
2017	9,657	6,676	101	94	9	1,577	18,113
2018	9,180	6,403	177	88	8	1,560	17,416
2019	11,284	7,429	277	94	9	2,036	21,129
2020	11,099	7,059	358	91	8	2,261	20,876
2021	10,914	6,688	439	88	7	2,486	20,622
2022	10,591	6,297	494	93	4	2,627	20,106
2023	11,238	6,603	591	89	5	2,823	21,348
2024	11,445	6,558	672	88	4	3,023	21,790
2025	11,653	6,512	752	87	3	3,224	22,231
2026	11,860	6,467	833	86	2	3,425	22,673
2027	12,068	6,421	914	85	2	3,625	23,115

Yolo County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	1,135	2,342	2	166	2	540	4,187
2017	1,095	2,358	10	171	2	541	4,176
2018	1,055	2,374	17	176	1	542	4,165
2019	1,276	2,763	43	187	1	664	4,934
2020	1,283	2,736	82	177	1	748	5,027
2021	1,290	2,708	121	167	1	832	5,119
2022	1,259	2,694	157	168	1	883	5,162
2023	1,340	2,870	169	173	1	938	5,492
2024	1,376	2,946	196	173	1	1,003	5,694
2025	1,411	3,022	223	173	0	1,068	5,897
2026	1,447	3,097	250	173	0	1,133	6,099
2027	1,482	3,173	277	173	0	1,198	6,302

Yuba County

Year	Motorcycle	3/4 Wheel M/C	RO veh	Snowmobile	Pickup	All Others	Subtotal
2016	706	1,561	-	294	3	689	3,253
2017	698	1,587	11	288	3	680	3,266
2018	689	1,613	11	281	3	671	3,268
2019	920	1,970	23	333	4	839	4,089
2020	975	1,972	39	336	5	988	4,315
2021	1,029	1,974	55	339	6	1,137	4,540
2022	1,010	1,934	78	323	5	1,317	4,667
2023	1,127	2,123	81	348	6	1,348	5,033
2024	1,193	2,204	94	357	7	1,459	5,313
2025	1,260	2,284	106	366	7	1,571	5,593
2026	1,326	2,365	119	375	8	1,682	5,873
2027	1,392	2,445	131	383	8	1,793	6,153

Appendix M-Unregistered OHV/OSV By County

Unregistered (Per DMV) OHV/OSV By County

COUNTY	NUMBER
Alameda	9067
Alpine	38
Amador	992
Butte	4000
Calaveras	1385
Colusa	512
Contra Costa	8504
Del Norte	224
El Dorado	4133
Fresno	7743
Glenn	678
Humboldt	3222
Imperial	3153
Inyo	519
Kern	10476
Kings	1683
Lake	1432
Lassen	696
Los Angeles	58977
Madera	1988
Marin	1674
Mariposa	488
Mendocino	2318
Merced	2331
Modoc	212
Mono	400
Monterey	3666
Napa	1615
Nevada	2649
Orange	22390
Out Of State	11180
Placer	5861
Plumas	593
Riverside	29582
Sacramento	19989
San Benito	1170
San Bernardino	24549
San Diego	34926
San Francisco	3486
San Joaquin	6210
San Luis Obispo	4366
San Mateo	4288
Santa Barbara	3586
Santa Clara	10730
Santa Cruz	2748
Shasta	3801
Sierra	145
Siskiyou	847
Solano	4087
Sonoma	5387
Stanislaus	4972
Sutter	1269
Tehama	1289
Trinity	389
Tulare	4592
Tuolumne	1114
Ventura	8194
Yolo	2291
Yuba	1334
TOTAL	360,140