

CALIFORNIA STATE PARKS: ECONOMIC IMPACT OF VISITOR  
EXPENDITURES

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CALIFORNIA STATE PARKS: ECONOMIC IMPACT OF VISITOR  
EXPENDITURES

A Thesis

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Abstract  
of  
CALIFORNIA STATE PARKS: ECONOMIC IMPACT OF VISITOR  
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Katherine Litzky

The California state parks system provides exceptional outdoor recreational opportunities and unique educational experiences while preserving California's diverse natural environment and cultural heritage. In light of the current discussion of uncertain funding allocation, increases in user fees and a reduction of services, a comprehensive overview of visitor spending patterns will inform public policy discussions and decisions for short and long term planning of the state park system. This study describes in detail state park visitors' expenditures and the factors that influence park-related expenditures. The data comes from the *2007-2009 Visitor Survey Report* commissioned by the California Department of Parks and Recreation. Starting in December 2007 and ending in February 2009, over 9,600 park users from 26 park sites were interviewed. The findings show that state parks generate a considerable amount of economic activity. Visitors spend on average \$80.85 per visit, including \$31.32 within a 25 mile radius of the park and \$49.53 outside the 25 miles radius. Extrapolating from the 26 studied parks to the entire 279 park units statewide, state park visitors annually spend an estimated \$6.9 billion.

\_\_\_\_\_, Committee Chair  
William D. Leach, Ph.D.

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Date

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## Chapter 1

### INTRODUCTION

The California state parks system provides exceptional outdoor recreational opportunities and unique educational experiences, and preserves California's diverse natural environment and cultural heritage. The park system includes 1.5 million acres in 279 park units, ranging from deserts, coastal Redwood forests or the historic site where gold was discovered in California in 1848. Due to the state's financial strife, however, funding for state parks is in jeopardy.

As a result of the recent financial crisis, California's state government has been forced to debate and grapple with an ongoing historical and staggering deficit. The sky starting falling in January 2008, when Governor Arnold Schwarzenegger introduced his fiscal year 2008-09 budget against the backdrop of a \$14.5 billion deficit. By May 2008 the budget deficit swelled to \$24.3 billion (Department of Finance, 2008). Things continued to go from bad to worse - for fiscal year 2009-10 a \$41.2 billion (Department of Finance, 2009) deficit was identified and required legislative resolution. This bleak financial outlook remains constant in late 2009. The Legislative Analyst's Office recently released an updated forecast of a \$20.7 billion deficit for the 2010-11 fiscal year in their publication (California Fiscal Outlook, 2009).

Due to ongoing budget shortfalls, most state departments and agencies have been subject to budget reductions in order to help close the chronic deficit. In 2009, state employees were mandated to take three furlough days a month, and many departments

have endured permanent hiring freezes and reduced staffing levels. During budget negotiations in the summer of 2009, the idea of closing some state parks was debated, but ultimately didn't have the support of legislators or the Governor, and instead the state parks system sustained other funding reductions.

As part of the ongoing discussions of funding for state parks, numerous questions have developed around the economic stimulus generated by California state parks, with a lack of clarity and certainty resulting.

### Funding Sources

The California Department and Parks and Recreation (DPR) oversees California's state park system with the mission to provide for the health, inspiration, and education of the people of California by helping to preserve the state's extraordinary biological diversity, and cultural resources, and to create opportunities for high-quality outdoor recreation (Department of Parks and Recreation [DPR], 2009).

DPR's budget is funded from three primary sources; general fund allocation, special funds and voter-passed bonds. The general fund refers to allocation from state coffers. Special funds include concessionaire contracts and non profit donations from cooperating associations, but are largely from the State Parks and Recreation Fund, which consist mainly of user fees for day-use admission, parking, overnight camping, etc. From 2000-2006, voters approved Proposition 12, Proposition 40, and Proposition 84, which contributed \$1.15 billion to the state park system (Legislative Analyst's Office [LAO], 2007).

### Funding Constraints

Visitation to California's state parks has steadily increased throughout the last two decades. In fiscal year 1990-91 day use visitation reached a little over 54.3 million and overnight camping was over 5.37 million. Compared to fiscal year 2007-08, approximately 72 million visitors attended state parks for day use purposes and overnight camping reached over 7.7 million. This represents an almost 25% increase in day-use visitation and over 30% increase in overnight visitation. State parks continue to be relevant in the near future and continuously utilized for outdoor recreational opportunities.

As visitation increases, so does a growing backlog of deferred maintenance stemming from a lack of funding for ongoing maintenance that has resulted from previous budget shortfalls. From an internal facility management program, DPR estimates the cost to maintain the system at its current capacity is approximately \$117 million per year. However, DPR's maintenance budget (funded primarily by the General Fund and park fee revenues) is approximately \$67 million per year, yielding a maintenance shortfall of \$50 million per year. Thus, over many years, the discrepancy between ongoing maintenance needs and available funds has created a backlog of deferred maintenance projects (LAO, 2008). For example, instead of replacing roof gutters as needed, the deferral of maintenance results in the requirement to replace the entire roof because of years of deterioration. In 2007, DPR estimated the deferred maintenance backlog at over \$900 million, and about \$1.2 billion in 2009.

## Funding Conditions

Over the last two years California has faced an unprecedented budget deficit. Consequently, in an effort to balance the state budget, in January of 2008 Governor Schwarzenegger unveiled his budget for the 2008-09 fiscal year, which proposed the closure of 48 state parks and reduction of lifeguards at 16 state beaches for a cost savings of \$13 million from the general fund. Governor Schwarzenegger's 2008 May revision budget reversed the general fund savings, and all state parks remained open.

Among worsening budget woes, in May 2009 Governor Schwarzenegger proposed the elimination of general fund allocation for DPR. In real terms, this translates to, in fiscal year 2009-10, the removal of \$70 million of general fund allocation. State parks not revenue neutral, meaning it did not raise enough revenue from user fees to offset operating costs were identified for closure, resulting in the closure of 220 state parks.

To balance the fiscal year 2009-10 budget, both the California State Assembly and Senate adopted bill language to eliminate \$70 million in general fund support to DPR, but transferred \$62 million one-time funds to DPR to backfill most of the loss. The \$8 million shortfall was expected to close 30-50 state parks. Governor Schwarzenegger used his blue-pencil veto authority and eliminated an additional \$6.2 million general fund appropriations, bringing the total general fund reduction to \$14.2 million.

In addition to the general fund reduction, DPR will sustain a loss of revenue from \$12 million from furloughs, \$2.4 million from the Public Resource Account (cigarette tax) and an estimated \$10 million in lost fee revenue from closing parks. The combined

reduction DPR sustained is \$38.6 million. Governor Schwarzenegger's fiscal year 2009-10 budget reports the loss of revenue would lead to the closure of more than 100 state parks, but a list of those parks was not provided in the budget documents.

DPR was charged with implementing the reduction of revenue. To reduce the number of parks on the closure list, DPR increased fees for day-use, camping and an array of other activities. To prevent the full closure of any state park, the Department of Finance and DPR jointly developed a plan that would close the \$14.2 million gap. The cost savings strategy includes the deferral of \$12.1 million in ongoing maintenance and equipment. In addition, for a cost savings of \$2.1 million, DPR implemented a reduction of hours and/or days of operation at most state park units, cut seasonal staff, and reduced staffing and operations at DPR Headquarters (Press Release, 2009). Full closure of any state park was avoided, with most state parks experiencing a reduction in hours of operation and services.

What was not accounted for in the Governor's budgets in 2008 or 2009 is the concept that state parks provide direct and indirect economic benefits through tourism, which in turn benefits local communities and the state as a whole because of the those tourism dollars cycling through the economy. There are also other immeasurable benefits that state parks provide, including environmental benefits, positive impacts on quality of life, and aesthetic value. Park supporters believe that reducing park services, maintenance, and park hours, or in the worst-case scenario - closing parks - would have a detrimental financial impact on local communities and the state.

The prior two years of proposed and enacted funding shortfalls for DPR highlighted the need for reliable statistical data on the economic impact and recreational benefits of state parks. However, even if all of the benefits of state parks could be calculated, public policy decisions are subject to real world politics. Complex and simple policy problems are typically not resolved in best-case scenarios. Real world policy problems are not neat and tidy; they're messy and complicated. Often decisions must be made- whether or not research or information is available because public policy problems are subject to political and time constraints. It is not always feasible to wait for data or evidence to be obtained, especially in the current political climate. The current financial crisis has battered local and state budgets, resulting in increased pressure on elected officials to make difficult budget decisions.

In light of the current discussion of uncertain funding allocation, increases in user fees, and a reduction of services, a comprehensive overview of state parks' economic influences would enable public policy discussions and decisions, for short and long term planning of the state park system.

Presently, there is a lack of available analysis of economic impacts of state parks. This study quantifies state park visitor expenditures and factors that influence spending. The goal is to provide a starting point of analysis to shape future public policy decisions.

## Chapter 2

### LITERATURE REVIEW

Numerous studies have examined the economic impacts of visitor expenditures from recreation at local, regional, state and national parks, specific recreational activities, events and tourist attractions. The majority of studies suggest that recreational spending may stimulate a considerable amount of economic activity (Bergstrom, Cordell, Ashley, & Watson, 1990), but the extent of the economic impact varies depending on the study and analysis technique. Overall, the literature identifies numerous factors that contribute to the economic influence of visitor spending.

The first section of this chapter explains different approaches to analyzing visitor expenditures, focusing on aspects that affect the results and lastly an explanation of research of California attractions, specifically focusing on visitor expenditure studies from outdoor recreation areas and state parks.

#### Factors That Influence Results

Published studies and articles have reported varying results of market activity is generated from visitor expenditures. The results of economic impact analyses depend critically on the formal structure of the applied model or models as well as the assumptions that underpin model results (Johnston & Tyrrell, 2006). In addition to survey methods and analysis model, numerous other factors affect visitor expenditures results.

### *Survey Methods*

Differences in reported results can be attributed to diverse data collection methods. Surveying actual visitors is the most straightforward method to obtain visitor-spending data. However, due to time and financial constraints direct surveys of visitors are not always feasible. Other survey methods include randomly sampling households by phone or mail interviews. A primary problem raised is residents visiting the tourist attraction might not be included in the sample population and consequently excluded.

Any survey instrument though is subject to recall bias. The time lapse between travel activity and its reporting affects recall of the trip. Respondents may not be able recall expenditures accurately after the fact, which could result in misreporting of visitor spending (Frechtling, 2006). One reason to explain recall bias is the myriad of items a traveler may purchase on the trip and pay by numerous mechanisms, including cash, personal checks, traveler's checks, vouchers, or credit card (Frechtling, 1994). Consequently, the survey selection can greatly impact the findings.

### *Analysis Method*

Analysis of visitor's expenditure relies on various approaches. For instances, a careful examination of outliers should precede any analysis of spending data (Stynes & White, 2006). An outlier is any extreme expenditure amount that could have resulting from inaccurate reporting or recording of the data. Outliers that result from measurement errors can threaten the validity of the analysis. Small datasets are particularly sensitive to outliers because one or two outliers may skew the results, by distorting the mean.



Outliers can be resolved by various methods, such as deleting the observation or substituting the mean value for outliers above a particular range. For example, Wilton and Nickerson (2006) conducted a survey to analyze visitation to Montana and noted the sensitivity of the analysis to outliers. They chose to remove outliers above two standard deviations from the mean.

#### *Opportunities in Surrounding Region*

Other factors affecting differences of visitor spending are the local economies near the parks. DeRuiter, Donnelly, Loomis, and Vaske (1998) focused on park facilities and the level of county economic diversification as a predictor of increased visitor spending from four Colorado state parks. Using visitation rates, extent of parks facility development and level of county diversification. The authors finding suggest parks with varying visitation rates and levels of park facilities development differ in terms of the direct economic impact from visitor expenditures. Counties with a diversity of industries have higher multipliers than parks situated in remote area having only one industry. Therefore, the level of local diversification affects visitor expenditures.

#### *Day-Use or Overnight Visitors*

It has also been found that day-use and overnight explain spending variations. Downward and Lumsdon (2000) conclude that while market attractors are important in encouraging visitation, the level of spending at the destination is very closely related to duration of the trip. For instance, parks attracting a higher percentage of overnight

visitors staying in motels, for example, will have a much higher per visitor spending than parks attracting mostly local visitors or visitors on day trips (Stynes & Ya-Yen, 2003).

Another example is found in an analysis of the National Park System (NPS). In April 2003, NPS examined the economic impact of visitor spending in local communities from 2001 by applying the Money Generated Model 2 (MGM2) application. This study found that the NPS hosted 280 million recreation visits across 348 separate national park units reporting visits. For a typical park, direct spending varied \$53 per party for day trips from outside the local area, to \$70 per party per night for campers and \$175 per night for visitors staying in motels, cabins or lodges.

#### *Local or Non-Local*

Closely related to day-use or overnight visits is whether the visitor is a non-local resident or lives close to the park. Research suggests local visitors and day-use visitors will spend less than out of town and overnight tourists. This is relevant because when non-resident visitors travel to areas to participate in outdoor recreation, the local region essentially “exports” recreational services. These “exports” bring in to the region outside dollars, which stimulate economic activity (Bergstrom et al., 1990). For example, Arizona State found for fiscal year 2006-07 direct spending by Arizona State Park visitors for 27 state parks totaled \$162.8 million, with per person spending at \$70.84 (Arizona Hospitality Research & Resource Center, 2009). The total was calculated from information collected in two studies of visitor totals and expenditures and excluded

expenditures from zip codes located within 50 miles of state parks because Arizona State assumed local visitors do not add new money to the local community.

Or in 2000, total direct visitors expenditures from Washington's 152 state parks amounted to \$1.16 billion. The total was contributed to a combination of expenses occurred for park fees and equipment, with day use visitors that traveled further than 50 miles to visit the park spend \$15.70 per day and local day use visitors spent \$9.80 per day (Washington State Parks, 2002).

### *Recreational Activity*

Expenditure trends and patterns may also be related to the activity of park visitors. Different outdoor recreational opportunities require different equipment. For example, state vehicle recreation areas require ATV's or other related sports gear, compared to campers that require overnight equipment such as tents, sleeping bags, etc. Wilton and Nickerson (2006) found in their study examined visitor spending in Montana observed fishing, open space, national parks, mountains and hunting are the primary features for nonresidents visitors, which then lead to the largest share of non-residents spending as well.

### California Trends

California's parks and tourist attractions have been analyzed by numerous publications. In 1989, Loomis, with data collected from Department of Parks Recreation (DPR) in 1984 and 1987, analyzed by input output modeling with multipliers developed by U.S. Department of Commerce. The study found total impacts of spending for visitors

to parks and outdoor recreation areas translated into nearly \$4.5 billion of personal income to employees and business owners, and supported 238,500 jobs in California.

DPR has further explored the market activities generated by state park visitors by commissioning several studies. *Economic Impacts on Local Economies by Visitors to California State Parks* surveyed eight parks from 1990-93 over the course of one year. The survey was systematically distributed to an assigned person, vehicle or group entering the parks unit (DPR, 2001). To analyze the visitor impact, the report applied multipliers designed for DPR developed by George Goldman at the Department of Agricultural Economics of the University of California, Berkeley through input output modeling. The *Economic Impacts on Local Economies by Visitors to California State Parks* (1995) reported day use visitors spend on average of \$25.70 per-person per-day and overnight visitors spent on average of \$14.44 per-person per-day. Overall, direct and secondary visitor expenditures contributed to slightly more than \$1.6 billion, \$4 billion in new sales or \$2 billion total income, or fiscal support for 62,000 full time-equivalent jobs.

DPR updated the report in 2001 by adjusting for inflation from the U.S Department of Labor Consumer Price Index. The updated analysis reported total visitor spending in June 2002 would reach \$2.8 billion. Total new sales in local communities resulting from visitor expenditures were expected to exceed \$7.2 billion by the end of 2001-2002. The study reports the large increase is attributed to a reduction in fees for day-use visitation and overnight camping implemented in July 2000.

Additionally, DPR examined the role of its operating budget as an economic engine for local regions. The *Economic Impact Analysis of State Park District Spending in Local Communities during Fiscal Year 1990-91* conducted by DPR collected data from park districts while focused on the expenditures by DPR to determine how that impacts the surrounding communities. The study examined each district's annual budget, broken down into expenditures for wages and salaries, and operation and maintenance. The analysis determined what percentage of the expenditures for salaries and wages, and operations and maintenance occurred in the surrounding communities, then applied multipliers. The results varied per district, primarily on the size of the operation park district budget. Larger budgets produced larger economic gains for local areas. The majority of wages and salaries remained in the local community, typically a little over 75%. For operations and maintenance, mostly 80% or more remained in the local region. However, some districts estimated as low as 60% stayed in the local region.

DPR also reported that for every \$1 spent by the general fund returns \$2.34 in tax revenue. In 2002, DPR calculated this from the results from the aforementioned reports. The figure represents both direct and secondary effects, from the sales and personal tax generated from visitor expenditures (Impact on Local Economies, 1994) and DPR's operations and personal budgets (DPR, 1994b). The total figure of tax generated was then divided by the allocation of general fund contribution.

Other studies have examined the relationship between visitor spending and local communities in California. Also, using MGM2, the National Park Conservation

Association (2001) reported California's 23 national parks visitor spending generated \$1.18 billion. The authors of the MGM2 in 2003 individually analyzed California national parks and the results of 10 well-known California national parks. For instances, Golden Gate National Recreation Area generated \$226.81 million, while Point Reyes National Seashore total visitor spending was \$86.72 million.

Specifically for Yosemite National Park, a well-known national park located in portions of Tuolumne, Mariposa and Madera counties, Stynes (2009) examined visitor expenditures from 2007 and reported the average visitor group consisted of 3.1 people and spent \$384 within 50 miles of the park. Visitors reported expenditures of their group inside the park and in the surrounding communities within 50 miles of the park. The average spending in 2007 was \$78 for non-local day trips, \$260 for campers staying inside the park, \$366 for campers staying outside the park, \$687 for visitors in motels and lodges outside the park and \$893 for visitors staying in park lodges or cabins. Campers spent \$109 per night if staying outside the park and \$92 if staying inside. Total visitor spending in 2007 within 50 miles of the park was \$282 million including \$115 million spent inside the park. Three out of four visitors indicated the park visit was the primary reason for the trip to the area.

Some studies have also focused on specific recreational activities in California state parks. A study of visitor spending at Trestles Beach located in San Onofre State Beach examined generated market activity by conducting an internet-based user survey. The study reported the average surfing related expenditure per-person visit for surfing

related visits to Trestles was \$40.07 (in 2006 dollars), with over 83% of visitors originating from outside the local town (Nelson, Pendleton, & Vaughn, 2007).

A broad range of studies has been conducted in California as well as other state's parks and national parks attempting to recognize the financial impact of visitor expenditures on local regions. These studies concluded that visitor spending provides an economic stimulus for local communities and the state as a whole. However, the actual fiscal and economic benefit depends on numerous variables, including the variety of analysis methodology, park amenities and attributes of the local community.

## Chapter 3

### DATA AND METHODOLOGY

Economic analyses of tourism are common, but the validity of economic impact results depends on a variety of methodological issues (Johnston & Tyrrell, 2001). Appropriate survey instruments and analysis produce reliable results. This chapter contains two sections: a comprehensive description on the survey dataset and a description of the methods used to analyze the data.

#### Dataset

The *2007-2009 Visitor Survey Report* (Rolloff, Erickson, Kivel, Niles, & Saul, in press) commissioned by DPR, reports the findings from a survey conducted and overseen by Sacramento State Professor David Rolloff. From December 2007 to February 2009, over 9,600 park users from 26 park sites were interviewed. The survey questionnaire, developed by Rolloff with the assistance of DPR Planning Division, asked a series of questions pertaining to recreational activity, visitor expenditures, socioeconomic data, and other qualities that could enhance the visitor's experience (see Appendix).

The 26 surveyed parks were chosen to be representative of the entire state park system. Parks were chosen to include a range of park types including coastal, historic, recreational, camping, natural areas, day use sites, urban sites, and off-high motorized vehicle areas (Visitor Survey Report, in press). Table 1 displays the specific park site characteristics, and Table 2 provides relevant park visitation statistics retrieved from the *California State Park System Statistical Report: 2007/08 Fiscal Year* (DPR, 2008).



Researchers conducted the survey through in-person interviews, and recorded visitors' responses using small hand-held devices. Interviewers received training to ensure that all researchers were collecting information in a consistent manner (Visitor Survey Report, in press). Within each park, the sampling approach was systematic, with stratification by season and weekday/weekend. Sample size targets were established using levels calculated to represent population sizes for the numbers of visitors at sites such as the park units in the study (Visitor Survey Report, in press). Further details about the survey methods will be available in the Visitor Survey Report scheduled for public release in January 2010.

Table 1

*State Park Site Characteristics*

Park Unit	Park Category	County	CA SP Owned Acreage	Other Acreage	Total Acreage	Individual Campsites	Group Campsites	Individual Picnic Sites	Group Picnic Sites
Anza Borrego Desert SP	Natural	Imperial/ Riverside/San Diego	584170.46	1.93	584172.39	153	15	3	N/A
Auburn SRA	Day Use	Placer / El Dorado	377.33	42000.00	42377.33	39	N/A	N/A	N/A
Calaveras Big Trees SP	Camping	Calaveras / Tuolumne	6498.06		6498.06	135	2	50	1
Candlestick Point SRA	Urban	San Francisco	204.88		204.88	N/A	N/A	48	4
Carlsbad SB	Coastal	San Diego	34.13	10.00	44.13	N/A	N/A	4	N/A

Table 1 continued

Park Unit	Park Category	County	CA SP Owned Acreage	Other Acreage	Total Acreage	Individual Campsites	Group Campsites	Individual Picnic Sites	Group Picnic Sites
Carpinteria SB	Coastal	Ventura / Santa Barbara	62.29		62.29	227	7	20	2
Caswell Memorial SP	Day Use	San Joaquin	258.13		258.13	N/A	1	30	1
Chino Hills SP	Urban	Riverside/ Orange/San Bernardino County	14173.40	0.01	14173.41	20	5	5	1
D.L. Bliss SP	Camping	El Dorado	888.93	1260.00	2148.93	154	1	10	N/A
Hollister Hills SVRA	Off-Highway Motorized Vehicle	San Benito	6361.49	262.26	6623.75	N/A	6	30	N/A

Table 1 continued

Park Unit	Park Category	County	CA SP Owned Acreage	Other Acreage	Total Acreage	Individual Campsites	Group Campsites	Individual Picnic Sites	Group Picnic Sites
Huntington SB	Recreational	Orange	121.13		121.13	N/A	N/A	6	N/A
Lake Perris SRA	Recreational	Riverside	1429.95	5245.18	6675.13	434	15	1600	3
MacKerricher SP	Coastal	Mendocino	1936.52	582.65	2519.17	154	2	3	
Marshall Gold	Historic	El Dorado	574.87	0.88	575.75	N/A	N/A	158	3
Discovery SHP									
Millerton Lake SRA	Recreational	Madera / Fremont	304.02	6553.46	6857.48	228	6	211	3
Mount Tamalpais SP	Day Use	Marin	6212.00	31.00	6243.00	8	3	10	2

Table 1 continued

Park Unit	Park Category	County	CA SP Owned Acreage	Other Acreage	Total Acreage	Individual Campsites	Group Campsites	Individual Picnic Sites	Group Picnic Sites
Oceano Dunes SVRA	Off-Highway Motorized Vehicle	San Luis Obispo	2409.59	275.55	2685.14	1000	N/A	N/A	N/A
Pfeiffer Big Sur SP	Natural	Monterey	2142.16	1620.00	3762.16	2	N/A	7	N/A
Prairie Creek Redwoods SP	Natural	Del Norte / Humboldt	14061.02	126.34	14187.36	107	N/A	26	N/A
Salton Sea SRA	Recreational	Imperial / Riverside	3304.07	13596.85	16900.92	830	1	25	2
San Juan Bautista SHP	Historic	San Benito	6.12		6.12	N/A	N/A	4	N/A
Seacliff SB	Day Use	Santa Cruz	86.69		86.69	26	N/A	131	1

Table 1 continued

Park Unit	Park Category	County	CA SP Owned Acreage	Other Acreage	Total Acreage	Individual Campsites	Group Campsites	Individual Picnic Sites	Group Picnic Sites
Silverwood Lake SRA	Camping	San Bernardino	2201.00		2201.00	142	7	603	N/A
Sugar Pine Point SP	Camping	El Dorado	2324.46		2324.46	121	10	32	1
Sutter's Fort SHP	Historic	Sacramento	5.80		5.80	N/A	N/A	N/A	N/A
Wills Rogers SHP	Historic	Los Angeles	189.12		189.12	N/A	N/A	12	3

Table 2

*Visitation Statistics*

Park Unit	Paid Day		Total Day-	
	Use	Free Day Use	Use	Overnight
Anza Borrego Desert SP	36,952	453,791	490,743	119361
Auburn SRA	154,959	418,472	573,431	13440
Calaveras Big Trees SP	131,894	17,276	149,170	43368
Candlestick Point SRA	15,200	200,283	215,483	N/A
Carlsbad SB	0	1,733,834	1,733,834	N/A
Carpinteria SB	84,763	373,082	457,845	421965
Caswell Memorial SP	17,880	46,794	64,674	18836
Chino Hills SP	7,501	89,984	97,485	3483
D.L. Bliss SP/ Sugar Pine Point SP	46,133	6,231	52,364	42101
Hollister Hills SVRA	127,102	25,880	152,982	70783
Huntington SB	1,778,361	2,886,635	4,664,996	N/A
Lake Perris SRA	422,429	70,550	492,979	108414
MacKerricher SP	0	859,902	859,902	87539
Marshall Gold Discovery SHP	112,512	130,397	242,909	N/A
Millerton Lake SRA	237,880	3,616	241,496	51311

Table 2 continued

Park Unit	Paid Day		Total Day-	
	Use	Free Day Use	Use	Overnight
Mount Tamalpais SP	88,122	455,721	543,843	18924
Oceano Dunes SVRA	795121	719217	1,514,338	442,110
Pfeiffer Big Sur SP	54,510	20,196	74,706	1917
Prairie Creek Redwoods SP	35,613	147,713	183,326	47897
Salton Sea SRA	5,642	193,778	199,420	14050
San Juan Bautista SHP	30,831	84,168	114,999	N/A
Seacliff SB	1,100,702	1,381,737	2,482,439	63344
Silverwood Lake SRA	331,405	8,367	339,772	70037
Sugar Pine Point SP	13,098	3,561	16,659	33429
Sutter's Fort SHP	64,962	43,097	108,059	N/A
Wills Rogers SHP	146,357	58,247	204,604	N/A

For Table 2, day use/overnight visitation is calculated differently at each state park. Historical parks that charge by per person will count visitation as per person. Other parks that charge by per car will count visitation in estimations from numerous methods. The Statistical Report (DPR, 2008) notes though estimation techniques may range in quality from one unit to the next and they may be changed at any unit at any time. While the accuracy of these figures has substantial limitations, it is believed that in the



aggregate, over time, orders-of- magnitude, and broad trends in visitor use can be determined with some validity.

The Statistical Report (DPR, 2008) also notes the attendance figures are underrepresented. For example, remote state parks that do not collect visitor attendance data. Only estimates are typically available for these parks, or camping is purchased per site, thus, it is difficult to fully count all individual users. The wide range of available methods for collection of visitation statistics makes it difficult to produce exact numbers.

Also in Table 2 is day use visitation broken into two categories; free and paid. Both free and paid day-use is the number of park entries by any means, whether by motor vehicle of any type, on foot, on bicycle, by boat, or on horseback, with a single visit is counted regardless of the length of stay or variety of activities undertaken. Also, the Statistical Report (DPR, 2008) counts visits, not visitors. Using this approach, an individual visiting three units in a day are recorded in the attendance data three times rather than one.

#### Analysis Framework

The *2007-2009 Visitor Survey Report* asks visitors to summarize their spending for the entire group for purchases within the park or within 25 miles surrounding the park and for expenditures outside the 25 miles radius. Under the categories of inside and within surrounding region or outside the area by 25 miles, specific purchase categories were selected. The category breakdown allows for tracking of market transactions and Table 3 shows the specific spending categories.

Table 3

*Visitor Expenditure Categories*

Category	Description
Lodging	Overnight lodging at motels, resorts, and private campgrounds
Food	Food and beverages at restaurants and snack stands
Equipment Supplies	Supplies such as groceries, film, bait, gifts and souvenirs, etc.
Transportation	Gasoline, vehicle repairs, parking, toll fees and public transportation
Recreation purchases	Equipment rentals and tours

To determine what visitors spend per person, the expenditure amounts require modification. The survey questionnaire asked one member of each group of visitors to estimate expenditures for the entire group. The survey also recorded how many people were in the party. To calculate per person spending, the expenditure of each group was divided by the group size.

*Outliers*

The analysis resolves the problem of outliers by recognizing the dataset contains 9637 interviews, conducted on hand held devices has a potential for unintended recording

errors and under or over estimations by the survey respondents. Solutions include removing outliers above a specific amount or percentage, calculating the mean (removing outliers) and substitute the mean value back in for the large expenditures, cutting off outliers as some reasonable expenditure amount. Another option is to "impute" the "missing" data for the outliers by creating a regression model that regresses various visitor characteristics on expenditures, and then use the coefficients for the estimated model to calculate individual imputed values for each of the outlying respondent. For the sake of simplicity, imputation was not pursued in this analysis.

This study explores the effect of outliers by employing a sensitivity analysis. Three approaches were compared: 1) leave all outliers as is; 2) replace the top .02% of outliers with a substitute mean; and 3) delete the highest value of outliers .02%. The top .02% (16 out of 9636 observations) were selected because it is reasonable to assume recording errors occurred, resulting in outliers. A higher percentage was not chosen because it is reasonable to believe visitors could spend a wide variety of amounts and thus not all high expenditures should not be removed or modified.

#### *Distance Traveled*

The analysis of visitor expenditures of locals and non-locals is examined by developing groupings of distanced traveled. Five categories were developed that measure the Euclidean distance between the state park visited and the home zip code of the observation. The Euclidean distance refers the direct miles between two points, not the routed distance. The Euclidean distance was selected because roadways and highway

systems are diverse, thus could greatly impact the distanced traveled by the visitors. Additionally, due to the broad nature of distanced traveled categories selected, it is reasonable the differences between distance measurements would not greatly impact the findings. The combination of the categories assists with the discussion of explaining expenditure patterns for locals and non-locals.

## Chapter 4

### RESULTS

Analysis of visitor expenditures requires several different perspectives in order to fully understand the relationship between state park visitors and generated market activity. This study examines how expenditures vary depending on whether the visit involved day-use vs. overnight visitation, whether the state park was the primary destination of the trip, and how far the visitors traveled to reach the state park unit. The analysis also describes the proportion of expenditures that occur in close proximity to the park, defined in the survey as inside and within 25 miles of the state park (hereafter “inside”) versus expenditures outside the 25 miles radius (hereafter “outside”). The analysis in this section proceeds by first explaining the treatment of the outliers, then explores the expenditure patterns outlined above, and lastly extrapolates from the survey data to estimate the total value of all direct expenditures attributable to state park visitation statewide.

#### Outliers

Due to the nature of economic analysis, a sensitivity analysis was employed to examine the effect of outliers. Table 4 illustrates findings from three methods utilized for inside and outside expenditures. The sensitivity analysis reveals that when outliers are deleted or substituted with the mean observation a small difference develops in the calculated averages. For inside expenditures, mean substitution has the largest impact on the “recreation” category of spending, for which the average expenditure falls from \$1.87

to \$1.16. This occurs because an outlier of \$26,000 was removed, with the next highest removed outlier of \$4,000. The \$26,000 expenditure appears to be either a recording error (e.g. extra zeros) or an equipment purchase, such as a boat, that would have multiple uses. In either case, it should be removed from the dataset if it is not a true reflection of purchases for the specific park visit. For expenditures outside the park, mean substitution has the largest impact on the “transportation” category of spending, for which the average expenditure falls from \$21.47 to \$20.34. In this case \$10,000 and \$12,000 expenditures were removed. It is unknown why the expenditures were so large, but these were removed anyway.

Overall, the sensitivity analysis revealed altering the outliers decreases visitor expenditure averages. For the combined total of all inside and outside expenditures, mean substitution reduces the average expenditure by \$3.76 to \$0.85. Modifying the dataset by correcting suspicious outliers in this fashion produces a more conservative of economic impacts. Thus, the remainder of the analysis employs the mean substitution for outliers.

Table 4

*Average Visitor Expenditures by Spending Category, Showing Three Alternative Ways to Handle Outliers*

		<i>Inside/Within 25 Miles</i>						<i>Outside of 25 Mile Radius</i>						
		Lodg- ing	Food	Supplies	Trans- portation	Recrea- tion	Inside Sum	Lodg- ing	Food	Supplies	Trans- portation	Recrea- tion	Outside Sum	<i>Total Sum</i>
Substitute	Mean	10.09	7.42	6.48	6.17	1.16	31.32	9.17	6.51	10.92	20.34	2.60	49.53	<i>80.85</i>
Mean for Outliers	Median	0	0	0	0	0	0	0	0	0	0	6.67	0	20
	N	9636	9636	9636	9636	9635	9636	9636	9636	9636	9636	9636	9636	9636
Deleted Outliers	Mean	10.09	7.39	6.41	6.17	1.16	31.22	9.12	6.5	10.81	20.34	2.54	49.29	<i>80.52</i>
	Median	0	0	0	0	0	6.67	0	0	0	0	0	0	20
	N	9620	9620	9620	9620	9619	9620	9620	9620	9620	9620	9620	9620	9620
No Modification	Mean	10.3	7.52	6.5	6.2	1.87	32.39	9.61	6.76	11.38	21.47	3	52.23	<i>84.61</i>
	Median	0	0	0	0	0	6.67	0	0	0	0	0	0	20
	N	9636	9636	9636	9636	9635	9636	9636	9636	9636	9636	9636	9636	9636

Patterns by Type of Park, Type of Visit,  
Visitor Demographics and Distance Traveled

State parks attract a wide variety of visitors, so the survey asked numerous questions exploring the characteristics of state park users, including the type of state park visited, socioeconomic characteristics, day-use vs. overnight users, and where the park user originated. These groupings provide a framework for factors influencing visitor's expenditures.

*Type of Park*

The survey was administered at 26 state park sites, selected to be representative of the entire state parks system. Table 5 displays the average of visitors' expenditure inside and outside of each park, broken down by expenditure category. Purchases for transportation and lodging outside the park were the larger expenditures and state parks located in urban areas reported the lowest spending, while parks in rural locations represented the highest expenditure for the total sum of spending. This analysis raises additional questions about factors that may influence the expenditures, which is the focus of the next analyses.



Table 5

*Mean Expenditure per Visitor per Park*

Park Name		<i>Inside</i>					Inside Sum	<i>Outside</i>					Outside Sum	Total Sum
		Lodg- ing	Food	Supplies	Trans- portation	Recrea- tion		Lodg- ing	Food	Supplies	Trans- portation	Recrea- tion		
Anza Borrego Desert SP	Mean	21.98	19.77	13.28	11.95	1.20	68.18	17.73	17.93	35.09	87.70	7.77	166.23	234.41
	Median	0.00	8.33	0.00	0.00	0.00	22.00	0.00	0.00	5.00	20.00	0.00	40.00	69.17
	N	329	329	329	329	329	329	329	329	329	329	329	329	329
Auburn SRA	Mean	2.82	2.62	2.21	4.14	1.03	12.82	2.61	3.30	2.15	5.23	2.10	15.38	28.20
	Median	0.00	0.00	0.00	0.00	0.00	2.50	0.00	0.00	0.00	0.00	0.00	0.00	6.94
	N	434	434	434	434	434	434	434	434	434	434	434	434	434
Calaveras Big Trees SP	Mean	7.92	5.95	5.66	4.85	1.15	25.53	5.04	3.63	8.64	13.37	1.08	31.77	57.30
	Median	0.00	0.00	0.00	0.00	0.00	7.50	0.00	0.00	0.00	7.50	0.00	12.50	28.57
	N	455	455	455	455	455	455	455	455	455	455	455	455	455
Candlestick Point SRA	Mean	1.92	1.88	4.55	2.16	0.19	10.70	0.00	0.00	0.08	0.49	0.00	0.57	11.27
	Median	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.00	0.00	0.00	4.00
	N	263	263	263	263	263	263	263	263	263	263	263	263	263
Carlsbad SB	Mean	14.34	8.80	5.89	4.71	0.65	34.39	3.88	4.75	4.11	10.70	2.47	25.92	60.31
	Median	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	482	482	482	482	482	482	482	482	482	482	482	482	482
Carpinteria SB	Mean	24.04	7.22	7.98	4.64	0.83	44.72	0.32	1.44	15.22	13.02	1.36	31.35	76.07
	Median	11.36	0.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00	0.00	0.00	15.00	55.00
	N	493	493	493	493	493	493	493	493	493	493	493	493	493

Table 5 continued

Park Name		<i>Inside</i>					Inside Sum	<i>Outside</i>					Outside Sum	Total Sum
		Lodg- ing	Food	Supplies	Trans- portation	Recrea- tion		Lodg- ing	Food	Supplies	Trans- portation	Recrea- tion		
Caswell Memorial SP	Mean	3.08	1.20	9.11	3.59	0.19	17.17	0.99	0.46	11.27	9.30	1.29	23.31	40.48
	Median	0.00	0.00	0.00	0.00	0.00	6.67	0.00	0.00	0.00	0.00	0.00	2.50	21.00
	N	279	279	279	279	279	279	279	279	279	279	279	279	279
Chino Hills SP	Mean	0.21	0.34	2.27	1.26	1.37	5.45	0.00	0.09	0.25	1.46	8.55	10.34	15.79
	Median	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	285	285	285	285	285	285	285	285	285	285	285	285	285
D.L. Bliss SP / Sugar Pine Point SP	Mean	26.39	15.78	10.54	8.54	2.48	63.73	8.90	8.14	18.88	24.35	5.45	65.72	129.45
	Median	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	10.00	0.00	25.00	53.59
	N	488	488	488	488	488	488	488	488	488	488	488	488	488
Hollister Hills SVRA	Mean	1.75	3.35	6.19	10.95	2.79	25.04	0.08	2.02	11.75	20.20	4.67	38.73	63.77
	Median	0.00	0.00	0.00	5.00	0.00	12.50	0.00	0.00	1.43	13.33	0.00	25.00	43.33
	N	401	401	401	401	401	401	401	401	401	401	401	401	401
Huntington SB	Mean	6.36	2.84	2.32	2.49	0.28	14.29	1.87	1.23	0.53	2.29	0.09	6.01	20.30
	Median	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	512	512	512	512	512	512	512	512	512	512	512	512	512
Lake Perris SRA	Mean	0.64	1.95	8.36	4.60	2.81	18.36	5.47	3.70	8.57	9.85	1.54	29.12	47.48
	Median	0.00	0.00	0.00	0.00	0.00	4.08	0.00	0.00	0.00	0.00	0.00	0.00	16.67
	N	414	414	414	414	414	414	414	414	414	414	414	414	414

Table 5 continued

Park Name		<i>Inside</i>					Inside Sum	<i>Outside</i>					Outside Sum	Total Sum
		Lodg- ing	Food	Supplies	Trans- portation	Recrea- tion		Lodg- ing	Food	Supplies	Trans- portation	Recrea- tion		
MacKerricher SP	Mean	32.42	27.86	13.72	12.94	2.37	89.31	27.25	15.34	22.78	33.41	1.57	100.34	189.65
	Median	8.33	7.50	0.00	0.00	0.00	44.50	0.00	0.00	0.00	15.00	0.00	30.00	107.75
	N	404	404	404	404	404	404	404	404	404	404	404	404	404
Marshall Gold Discovery SHP	Mean	3.74	4.91	2.85	3.81	0.84	16.15	12.77	11.81	4.65	15.42	0.32	44.97	61.12
	Median	0.00	0.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00	0.00	0.00	1.25	15.00
	N	366	366	366	366	366	366	366	366	366	366	366	366	366
Millerton Lake SRA	Mean	3.81	1.15	6.65	11.71	0.54	23.86	2.87	1.81	16.31	47.27	1.48	69.75	93.60
	Median	0.00	0.00	0.00	2.50	0.00	12.50	0.00	0.00	0.00	0.00	0.00	0.00	25.86
	N	335	335	335	335	335	335	335	335	335	335	335	335	335
Mount Tamalpais SP	Mean	9.53	6.93	4.80	4.39	0.85	26.48	1.16	1.20	3.21	6.18	0.17	11.92	38.40
	Median	0.00	0.00	0.00	1.25	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	13.33
	N	423	423	423	423	423	423	423	423	423	423	423	423	423
Oceano Dunes SVRA	Mean	11.60	14.14	17.58	19.74	3.34	66.39	4.93	2.50	13.98	22.10	3.70	47.22	113.61
	Median	0.55	2.00	2.78	7.69	0.00	35.71	0.00	0.00	0.00	7.50	0.00	20.00	72.00
	N	369	369	369	369	369	369	369	369	369	369	369	369	369
Pfeiffer Big Sur SP	Mean	27.33	11.05	4.53	3.40	0.18	46.48	23.17	10.64	20.81	24.12	6.99	85.72	132.20
	Median	0.00	0.00	0.00	0.00	0.00	11.21	0.00	0.00	0.17	15.78	0.00	40.00	64.22
	N	324	324	324	324	324	324	324	324	324	324	324	324	324

Table 5 continued

Park Name		<i>Inside</i>					Inside Sum	<i>Outside</i>					Outside Sum	Total Sum
		Lodging	Food	Supplies	Transportation	Recreation		Lodging	Food	Supplies	Transportation	Recreation		
Prairie Creek	Mean	10.12	5.51	2.86	5.23	0.54	24.26	81.74	53.40	30.62	88.12	8.39	262.26	286.53
Redwoods SP	Median	0.00	0.00	0.00	0.00	0.00	4.50	0.00	0.00	10.00	25.00	0.00	67.50	90.00
	N	363	363	363	363	363	363	363	363	363	363	363	363	363
Salton Sea	Mean	6.05	3.05	7.18	6.47	1.38	24.13	15.16	14.08	36.10	67.03	1.59	133.98	158.10
SRA	Median	0.00	0.00	0.00	0.00	0.00	3.50	0.00	0.00	0.00	10.00	0.00	20.00	26.00
	N	216	216	216	216	216	216	216	216	216	216	216	216	216
San Juan	Mean	1.09	6.96	4.17	3.97	0.24	16.43	5.18	4.02	6.94	10.49	1.08	27.71	44.14
Bautista SHP	Median	0.00	2.78	0.00	0.00	0.00	8.33	0.00	0.00	0.00	2.00	0.00	7.50	20.00
	N	296	296	296	296	296	296	296	296	296	296	296	296	296
Seacliff SB	Mean	8.31	12.78	9.96	8.53	0.16	39.74	1.50	0.99	6.14	19.98	0.12	28.72	68.47
	Median	0.00	0.00	0.00	0.00	0.00	8.48	0.00	0.00	0.00	0.00	0.00	0.00	15.00
	N	486	486	486	486	485	486	486	486	486	486	486	486	486
Silverwood	Mean	3.58	1.65	4.75	3.40	1.33	14.72	0.29	0.31	8.01	4.64	1.86	15.11	29.82
Lake SRA	Median	0.00	0.00	0.00	0.00	0.00	1.45	0.00	0.00	0.00	0.00	0.00	0.00	13.71
	N	458	458	458	458	458	458	458	458	458	458	458	458	458
Sutter's Fort	Mean	6.31	6.72	1.63	3.47	0.69	18.82	3.79	3.63	1.03	6.57	1.47	16.49	35.31
SHP	Median	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.00	0.00	0.00	7.42
	N	374	374	374	374	374	374	374	374	374	374	374	374	374

Table 5 continued

Park Name		<i>Inside</i>					Inside Sum	<i>Outside</i>					Outside Sum	Total Sum
		Lodg- ing	Food	Supplies	Trans- portation	Recrea- tion		Lodg- ing	Food	Supplies	Trans- portation	Recrea- tion		
Will Rogers	Mean	4.26	4.47	2.19	2.79	0.93	14.65	15.37	5.27	1.90	3.57	2.74	28.85	43.50
SHP	Median	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.33
	N	387	387	387	387	387	387	387	387	387	387	387	387	387
Total	Mean	10.09	7.42	6.48	6.17	1.16	31.32	9.17	6.51	10.92	20.34	2.60	49.53	80.85
	Median	0.00	0.00	0.00	0.00	0.00	6.67	0.00	0.00	0.00	0.00	0.00	0.00	20.00
	N	9636	9636	9636	9636	9635	9636	9636	9636	9636	9636	9636	9636	9636

*Type of Visit*

Table 6 examines spending by day-use versus overnight use (camping) and by whether the park was the primary destination or secondary destination. Table 6 reveals overnight visitors spend more on average. Day-use visitors spent per person as little as \$11.27 to \$286.64 on average depending on the park, while overnight visitors' average total expenditure ranged from \$22.00 to \$1124.94.

Overnight visitors generate considerably more economic expenditures than day-use visitors. However, the number of day-use visitors is larger than overnight visitors. Thus, even though day-use visitors spend less, they frequent the park more often. While overnight visitors use the park less, they consistently spend more.

Another finding shown in Table 6 is the amount visitors spend depends on whether the state park was the primary purpose of the trip or one of many stops on a longer vacation. For the average total expenditures, 23 state park units reported increased spending if the visit was one of many stops. This type of trip is less common, however. Conversely, respondents who indicated the park was the primary purpose of the trip spent less on average but visited more often.

Table 6

*Average Expenditure per Visitor by Park and Type of Use*

Park Name		Day Use			Overnight			Primary Destination			Multiple Stops		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
Anza Borrego	Mean	69.87	58.01	127.89	67.08	236.92	304.00	64.53	114.14	178.67	79.00	320.61	399.61
Desert SP	Median	15.00	17.08	40.00	25.00	50.00	90.00	18.63	40.09	62.79	30.50	37.50	90.00
	N	130	130	130	199	199	199	246	246	246	83	83	83
Auburn SRA	Mean	12.21	13.75	25.97	55.82	131.48	187.30	10.95	13.46	24.41	23.02	25.93	48.95
	Median	2.50	0.00	6.67	50.83	89.00	138.03	2.50	0.00	6.75	2.50	0.00	7.50
	N	428	428	428	6	6	6	367	367	367	67	67	67
Calaveras Big Trees SP	Mean	23.60	27.26	50.87	32.20	47.37	79.58	24.03	27.32	51.35	28.90	41.78	70.69
	Median	5.40	10.00	22.50	11.38	36.33	70.00	7.50	12.50	27.50	7.92	15.83	37.50
	N	353	353	353	102	102	102	315	315	315	140	140	140
Candlestick Point SRA	Mean	10.70	0.57	11.27	N/A	N/A	N/A	9.79	0.44	10.24	14.29	1.06	15.35
	Median	3.33	0.00	4.00	N/A	N/A	N/A	4.14	0.00	5.00	1.00	0.00	1.33
	N	263	263	263	N/A	N/A	N/A	210	210	210	53	53	53

Table 6 continued

Park Name		Day Use			Overnight			Primary Destination			Multiple Stops		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
Carlsbad SB	Mean	27.48	9.42	36.90	69.61	110.07	179.69	30.12	11.31	41.42	73.02	158.02	231.04
	Median	0.00	0.00	0.00	50.00	30.00	90.00	0.00	0.00	0.00	18.33	0.00	33.33
	N	403	403	403	79	79	79	434	434	434	48	48	48
Carpinteria SB	Mean	12.14	5.88	18.03	51.60	36.74	88.34	45.00	31.02	76.02	42.97	33.43	76.40
	Median	0.08	0.00	1.55	37.50	25.00	67.50	31.25	17.14	60.00	15.00	0.00	25.00
	N	86	86	86	407	407	407	425	425	425	68	68	68
Caswell	Mean	8.45	5.99	14.44	26.08	41.01	67.09	17.07	17.41	34.49	18.07	76.18	94.25
Memorial SP	Median	5.00	0.00	9.00	13.45	22.68	50.00	7.50	0.50	20.71	2.00	11.00	30.50
	N	141	141	141	138	138	138	251	251	251	28	28	28
Chino Hills SP	Mean	2.58	10.56	13.15	119.07	1.43	120.50	5.59	10.93	16.51	4.00	4.20	8.20
	Median	0.00	0.00	0.00	25.00	0.00	25.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	278	278	278	7	7	7	260	260	260	25	25	25
D.L. Bliss SP /	Mean	71.76	31.69	103.45	44.74	146.23	190.97	44.62	44.64	89.25	87.80	92.28	180.08
Sugar Pine	Median	15.83	11.67	40.00	25.56	78.00	110.00	15.00	25.00	47.72	25.00	25.00	77.88
Point SP	N	343	343	343	145	145	145	272	272	272	216	216	216



Table 6 continued

Park Name		Day Use			Overnight			Primary Destination			Multiple Stops		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
Hollister Hills	Mean	17.76	23.28	41.04	35.57	61.05	96.62	25.43	38.97	64.40	17.88	35.49	53.38
SVRA	Median	10.00	12.50	28.33	18.10	50.00	83.33	12.50	25.00	44.00	16.25	32.50	35.00
	N	237	237	237	164	164	164	383	383	383	17	17	17
Huntington SB	Mean	14.23	6.06	20.29	22.00	0.00	22.00	12.71	3.10	15.82	23.49	22.92	46.41
	Median	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	508	508	508	4	4	4	437	437	437	75	75	75
Lake Perris	Mean	11.00	6.56	17.57	29.57	63.52	93.09	15.90	16.87	32.77	55.08	212.04	267.12
SRA	Median	4.00	0.00	9.55	5.92	15.00	47.92	4.00	0.00	16.00	12.50	0.00	24.17
	N	250	250	250	164	164	164	388	388	388	26	26	26
MacKerricher	Mean	86.84	71.82	158.66	94.45	159.80	254.25	75.43	43.69	119.12	105.26	165.44	270.69
SP	Median	33.00	15.00	86.17	56.00	57.50	137.20	40.83	16.67	86.25	50.00	49.50	165.00
	N	273	273	273	131	131	131	216	216	216	188	188	188
Marshall Gold	Mean	13.96	29.44	43.39	147.86	977.08	1124.94	13.45	6.43	19.89	21.82	125.97	147.79
Discovery SHP	Median	5.00	1.00	15.00	67.75	31.25	91.25	7.50	0.00	12.97	2.75	7.50	17.50
	N	360	360	360	6	6	6	248	248	248	118	118	118

Table 6 continued

Park Name		Day Use			Overnight			Primary Destination			Multiple Stops		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
Millerton Lake	Mean	18.13	12.12	30.25	33.72	169.07	202.79	19.76	29.15	48.91	50.24	331.37	381.62
SRA	Median	10.00	0.00	17.75	18.80	35.00	60.00	10.00	0.00	25.00	22.22	0.00	35.00
	N	212	212	212	123	123	123	290	290	290	45	45	45
Mount	Mean	19.39	5.37	24.76	66.28	48.65	114.92	24.48	6.10	30.58	32.12	28.26	60.38
Tamalpais SP	Median	6.67	0.00	10.00	38.00	1.67	48.88	8.54	0.00	12.50	10.00	0.00	16.25
	N	359	359	359	64	64	64	312	312	312	111	111	111
Oceano Dunes	Mean	57.20	34.24	91.44	70.40	52.87	123.27	66.34	35.98	102.32	66.72	114.25	180.97
SVRA	Median	8.67	0.00	20.75	49.00	33.33	95.00	37.70	20.65	72.88	21.25	6.67	65.00
	N	112	112	112	257	257	257	316	316	316	53	53	53
Pfeiffer Big	Mean	65.75	101.09	166.84	36.71	77.92	114.63	44.83	56.04	100.87	48.71	125.71	174.42
Sur SP	Median	8.00	18.00	40.00	12.50	50.00	70.00	8.88	41.34	62.50	14.25	39.00	80.50
	N	109	109	109	215	215	215	186	186	186	138	138	138
Prairie Creek	Mean	22.44	264.21	286.64	35.97	249.81	285.78	21.96	65.52	87.48	25.55	372.03	397.58
Redwoods SP	Median	0.00	62.68	83.75	20.50	87.50	115.00	0.00	20.00	25.00	10.00	136.67	158.33
	N	314	314	314	49	49	49	130	130	130	233	233	233

Table 6 continued

Park Name		Day Use			Overnight			Primary Destination			Multiple Stops		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
Salton Sea	Mean	4.90	47.52	52.42	50.04	250.51	300.55	30.91	69.96	100.86	18.80	184.24	203.04
SRA	Median	0.00	5.63	13.00	21.00	77.50	111.00	3.50	17.50	23.00	3.50	22.50	35.00
	N	124	124	124	92	92	92	95	95	95	121	121	121
San Juan	Mean	16.48	27.50	43.98	3.00	87.50	90.50	12.12	10.84	22.96	21.79	48.66	70.45
Bautista SHP	Median	8.33	7.50	20.00	3.00	87.50	90.50	10.00	5.00	17.75	7.13	12.50	24.83
	N	295	295	295	1	1	1	164	164	164	132	132	132
Seacliff SB	Mean	24.09	9.45	33.53	89.12	89.51	178.64	44.82	28.45	73.27	27.20	29.40	56.60
	Median	4.00	0.00	7.50	55.00	40.00	113.00	10.00	0.00	15.00	7.50	0.00	14.83
	N	369	369	369	117	117	117	346	346	346	140	140	140
Silverwood	Mean	12.62	7.71	20.33	18.99	30.13	49.12	11.01	15.26	26.27	152.57	9.44	162.01
Lake SRA	Median	1.33	0.00	8.75	2.50	20.00	40.00	1.33	0.00	13.33	10.00	0.00	22.50
	N	307	307	307	151	151	151	446	446	446	12	12	12
Sutter's Fort	Mean	18.82	16.49	35.31	N/A	N/A	N/A	9.85	5.71	15.56	21.96	20.27	42.23
SHP	Median	3.33	0.00	7.42	N/A	N/A	N/A	2.22	0.00	6.25	4.00	0.00	8.00
	N	374	374	374	N/A	N/A	N/A	97	97	97	277	277	277

Table 6 continued

Park Name		Day Use			Overnight			Primary Destination			Multiple Stops		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
Will Rogers	Mean	14.65	28.85	43.50	N/A	N/A	N/A	6.05	1.36	7.41	89.18	267.37	356.55
SHP	Median	0.00	0.00	2.33	N/A	N/A	N/A	0.00	0.00	1.50	11.75	0.00	18.00
	N	387	387	387	N/A	N/A	N/A	347	347	347	40	40	40
Total	Mean	24.15	31.66	55.81	50.54	97.35	147.89	27.10	25.04	52.14	43.70	121.22	164.92
	Median	3.33	0.00	10.00	26.67	37.50	75.00	5.71	0.00	17.60	9.67	10.00	32.00
	N	7015	7015	7015	2621	2621	2621	7181	7181	7181	2454	2454	2454

Visitors attend state parks to participate in a wide range of outdoor recreational opportunities. The next analysis focuses park activities. One survey questionnaire asked visitors what their primary activity was while on their visit to the state park where they were contacted. Table 7 illustrates the top 15 primary activities identified by park visitors, sorted by lowest to higher. The results follow the overall trend already outlined in this chapter. However, what stands out - is the wide variety of activities listed, - all with reasonably high expenditure totals. Activities that require little to no equipment, such as walking for pleasure or relaxing outdoors, had high response rates and equally high spending averages. The average total expenditure is \$101.30 for relaxing outdoors and \$75.93 for walking.

Table 7

*Top 15 Activities by Expenditure Category*

Activity		Total			Day-Use Visitor			Overnight Visitor		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
Photography	Mean	41.07	140.46	181.53	29.20	118.82	148.01	147.93	335.21	483.14
	Median	10.00	30.00	63.75	6.00	23.75	48.00	100.83	72.50	193.75
	N	120	120	120	108	108	108	12	12	12
Boating	Mean	19.90	18.46	38.37	15.66	6.24	21.90	40.91	79.04	119.94
	Median	10.00	0.00	18.26	8.75	0.00	13.33	22.50	35.87	65.50
	N	131	131	131	109	109	109	22	22	22
Nature walks	Mean	37.27	106.62	143.90	34.09	107.43	141.52	65.04	99.59	164.63
	Median	7.92	15.50	39.17	5.00	13.33	30.00	45.00	42.50	130.00
	N	146	146	146	131	131	131	15	15	15
Surfing	Mean	7.07	3.14	10.21	2.94	3.29	6.23	94.93	0.00	94.93
	Median	0.00	0.00	0.00	0.00	0.00	0.00	56.67	0.00	56.67
	N	156	156	156	149	149	149	7	7	7

Table 7 continued

Activity		Total			Day-Use Visitor			Overnight Visitor		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
Jogging/Running	Mean	8.71	15.30	24.01	8.71	15.30	24.01	N/A	N/A	N/A
	Median	0.00	0.00	0.00	0.00	0.00	0.00	N/A	N/A	N/A
	N	157	157	157	157	157	157	N/A	N/A	N/A
Swimming	Mean	15.08	17.25	32.33	11.34	8.60	19.94	23.15	35.91	59.06
	Median	7.00	0.00	15.00	5.79	0.00	8.33	18.13	24.00	48.57
	N	161	161	161	110	110	110	51	51	51
Road Biking	Mean	28.30	15.79	44.09	28.17	4.65	32.82	29.36	103.73	133.09
	Median	0.00	0.00	0.00	0.00	0.00	0.00	10.00	48.78	81.25
	N	169	169	169	150	150	150	19	19	19
ATV	Mean	61.54	42.55	104.09	33.81	18.04	51.85	69.88	49.92	119.80
	Median	32.00	33.00	76.92	10.00	13.17	30.00	46.67	40.00	99.55
	N	173	173	173	40	40	40	133	133	133
Mountain Biking	Mean	15.18	7.51	22.69	13.18	6.42	19.59	161.25	86.88	248.13
	Median	0.00	0.00	5.00	0.00	0.00	4.29	77.50	85.00	197.50
	N	295	295	295	291	291	291	4	4	4

Table 7 continued

Activity		Total			Day-Use Visitor			Overnight Visitor		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
Picnicking	Mean	20.29	25.96	46.25	20.09	26.10	46.19	29.86	19.25	49.11
	Median	3.75	0.00	11.00	3.50	0.00	10.91	30.83	13.75	38.50
	N	297	297	297	291	291	291	6	6	6
Beach Play	Mean	35.62	43.08	78.70	31.59	39.86	71.46	48.66	53.49	102.15
	Median	10.00	7.14	30.00	5.00	0.00	16.00	36.86	28.07	68.00
	N	305	305	305	233	233	233	72	72	72
Self guided trail/tour	Mean	23.37	21.01	44.38	23.37	21.01	44.38	N/A	N/A	N/A
	Median	3.33	0.00	8.00	3.33	0.00	8.00	N/A	N/A	N/A
	N	313	313	313	313	313	313	N/A	N/A	N/A
Historical Sightseeing/tour	Mean	26.05	53.83	79.88	25.23	53.61	78.84	94.63	72.50	167.13
	Median	10.00	6.00	20.00	10.00	6.00	20.00	41.25	20.00	170.00
	N	339	339	339	335	335	335	4	4	4
Other Recreation	Mean	28.19	23.21	51.40	21.19	18.75	39.94	79.91	56.24	136.15
	Median	2.93	0.00	7.00	1.33	0.00	4.42	37.88	29.17	74.25
	N	386	386	386	340	340	340	46	46	46



Table 7 continued

Activity		Total			Day-Use Visitor			Overnight Visitor		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
Dirt Bike Riding	Mean	27.93	38.83	66.76	19.89	23.85	43.74	39.56	60.47	100.03
	Median	12.50	24.00	43.40	10.00	11.00	27.50	19.00	47.17	83.33
	N	401	401	401	237	237	237	164	164	164
Fishing	Mean	19.09	12.34	31.43	15.25	9.59	24.85	53.12	36.70	89.81
	Median	7.00	0.00	16.00	6.00	0.00	14.00	26.51	22.68	52.50
	N	513	513	513	461	461	461	52	52	52
Walking for pleasure	Mean	42.51	33.42	75.93	37.96	24.71	62.67	110.25	163.13	273.38
	Median	3.00	0.00	10.00	2.50	0.00	7.25	67.50	37.50	119.58
	N	858	858	858	804	804	804	54	54	54
Camping	Mean	42.05	98.91	140.96	84.31	115.94	200.25	41.27	98.60	139.87
	Median	25.00	36.52	70.00	25.00	12.50	50.00	25.00	37.50	70.00
	N	1160	1160	1160	21	21	21	1139	1139	1139
Relaxing in the outdoors	Mean	35.84	65.47	101.30	23.75	29.98	53.73	55.60	123.51	179.11
	Median	10.00	6.67	30.39	3.75	0.00	10.00	30.00	40.00	80.00
	N	1236	1236	1236	767	767	767	469	469	469

Table 7 continued

Activity		Total			Day-Use Visitor			Overnight Visitor		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
Hiking	Mean	31.70	58.39	90.10	25.85	47.29	73.14	59.58	111.28	170.85
	Median	3.33	2.67	16.67	2.50	0.00	10.00	16.08	43.89	67.33
	N	1279	1279	1279	1057	1057	1057	222	222	222

Table 7 continued

Activity		Total			Primary Destination			Multiple Stops		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
Photography	Mean	41.07	140.46	181.53	66.34	31.06	97.40	28.90	193.13	222.03
	Median	10.00	30.00	63.75	12.50	12.50	30.00	7.50	50.00	75.00
	N	120	120	120	39	39	39	81	81	81
Boating	Mean	19.90	18.46	38.37	18.00	18.21	36.21	53.65	22.92	76.57
	Median	10.00	0.00	18.26	9.84	0.00	16.30	22.22	0.00	25.00
	N	131	131	131	124	124	124	7	7	7
Nature walks	Mean	37.27	106.62	143.90	19.60	45.31	64.91	53.55	163.10	216.65
	Median	7.92	15.50	39.17	1.83	5.46	18.75	15.25	30.00	105.00
	N	146	146	146	70	70	70	76	76	76
Surfing	Mean	7.07	3.14	10.21	6.99	2.08	9.06	7.50	8.46	15.96
	Median	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	156	156	156	130	130	130	26	26	26
Jogging/Running	Mean	8.71	15.30	24.01	6.30	16.63	22.93	17.78	10.30	28.08
	Median	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	157	157	157	124	124	124	33	33	33

Table 7 continued

Activity		Total			Primary Destination			Multiple Stops		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
Swimming	Mean	15.08	17.25	32.33	14.97	13.12	28.10	15.65	38.68	54.33
	Median	7.00	0.00	15.00	7.50	0.00	15.00	6.46	5.00	18.13
	N	161	161	161	135	135	135	26	26	26
Road Biking	Mean	28.30	15.79	44.09	28.18	7.00	35.18	28.66	41.54	70.20
	Median	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	3.54
	N	169	169	169	126	126	126	43	43	43
ATV	Mean	61.54	42.55	104.09	63.16	42.51	105.67	23.06	43.52	66.58
	Median	32.00	33.00	76.92	35.08	33.17	78.46	16.00	20.59	20.59
	N	173	173	173	166	166	166	7	7	7
Mountain Biking	Mean	15.18	7.51	22.69	8.48	4.82	13.29	48.86	21.01	69.88
	Median	0.00	0.00	5.00	0.00	0.00	3.50	0.00	0.00	10.00
	N	295	295	295	246	246	246	49	49	49
Picnicking	Mean	20.29	25.96	46.25	11.07	6.51	17.58	54.54	98.20	152.74
	Median	3.75	0.00	11.00	3.65	0.00	10.00	3.75	12.50	31.00
	N	297	297	297	234	234	234	63	63	63

Table 7 continued

Activity		Total			Primary Destination			Multiple Stops		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
Beach Play	Mean	35.62	43.08	78.70	29.31	19.35	48.66	56.43	121.28	177.71
	Median	10.00	7.14	30.00	7.50	4.27	20.00	26.25	25.00	91.67
	N	305	305	305	234	234	234	71	71	71
Self guided trail/tour	Mean	23.37	21.01	44.38	26.96	15.71	42.68	21.79	23.35	45.14
	Median	3.33	0.00	8.00	4.00	0.21	10.00	3.33	0.00	7.00
	N	313	313	313	96	96	96	217	217	217
Historical Sightseeing/tour	Mean	26.05	53.83	79.88	13.34	11.01	24.34	39.45	99.00	138.45
	Median	10.00	6.00	20.00	10.00	3.33	18.17	8.33	10.00	26.67
	N	339	339	339	174	174	174	165	165	165
Other Recreation	Mean	28.19	23.21	51.40	27.05	8.41	35.46	32.76	82.61	115.37
	Median	2.93	0.00	7.00	3.00	0.00	5.00	2.50	0.00	17.50
	N	386	386	386	309	309	309	77	77	77

Table 7 continued

Activity		Total			Primary Destination			Multiple Stops		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
Dirt Bike Riding	Mean	27.93	38.83	66.76	28.24	38.50	66.74	17.14	50.41	67.55
	Median	12.50	24.00	43.40	12.50	23.33	43.17	16.25	45.00	70.00
	N	401	401	401	390	390	390	11	11	11
Fishing	Mean	19.09	12.34	31.43	17.65	11.20	28.85	34.09	24.26	58.35
	Median	7.00	0.00	16.00	7.00	0.00	15.00	10.00	0.00	20.00
	N	513	513	513	468	468	468	45	45	45
Walking for pleasure	Mean	42.51	33.42	75.93	41.29	16.91	58.21	44.70	63.19	107.89
	Median	3.00	0.00	10.00	2.50	0.00	5.00	5.00	0.00	20.00
	N	858	858	858	552	552	552	306	306	306
Camping	Mean	42.05	98.91	140.96	38.51	54.94	93.46	59.24	312.54	371.77
	Median	25.00	36.52	70.00	23.25	32.50	62.50	35.00	83.67	121.25
	N	1160	1160	1160	962	962	962	198	198	198

Table 7 continued

Activity		Total			Primary Destination			Multiple Stops		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
Relaxing in the outdoors	Mean	35.84	65.47	101.30	29.22	27.67	56.89	55.94	180.35	236.29
	Median	10.00	6.67	30.39	8.28	0.00	24.25	18.00	32.38	70.00
	N	1236	1236	1236	930	930	930	306	306	306
Hiking	Mean	31.70	58.39	90.10	23.80	22.94	46.74	51.87	148.90	200.77
	Median	3.33	2.67	16.67	2.00	0.00	10.00	10.00	21.17	48.15
	N	1279	1279	1279	919	919	919	360	360	360

### *Visitor Demographics*

Other reasons for differences in expenditures may be related to socioeconomic characteristics. Table 8 compares visitor socioeconomic characteristics by expenditure category. The table reflects previous findings that overnight visitors and multiple destinations have higher expenditures. However, the majority of respondents reported higher usage if the state parks unit was for day-use and the primary purpose of the trip. The results also show spending differences between males and females were not significant, but as income and age increase, spending increases as well. With the exception of American Indians, minorities indicated spending less than Caucasians. However, the sample for American Indian contains only 76 observations, which may be too few to draw definitive generalizations.



Table 8

*Visitor Socio Economic Characteristics by Expenditure Category*

		Total			Day-Use Visitor			Overnight Visitor		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
Male	Mean	30.30	50.75	81.04	22.98	32.66	55.65	49.19	97.47	146.66
	Median	6.67	1.67	22.50	3.57	0.00	12.00	25.00	38.33	75.00
	N	5286	5286	5286	3811	3811	3811	1475	1475	1475
Female	Mean	33.82	50.30	84.13	26.94	30.31	57.25	52.71	105.16	157.86
	Median	5.97	1.00	19.83	3.00	0.00	10.00	26.67	37.50	75.00
	N	3526	3526	3526	2584	2584	2584	942	942	942
Total	Mean	31.32	49.53	80.85	24.15	31.66	55.81	50.54	97.35	147.89
	Median	6.67	0.00	20.00	3.33	0.00	10.00	26.67	37.50	75.00
	N	9636	9636	9636	7015	7015	7015	2621	2621	2621
18 to 24	Mean	17.94	33.81	51.76	13.06	25.90	38.96	31.97	56.51	88.48
	Median	4.00	5.00	20.00	2.50	0.00	10.00	15.00	35.00	55.00
	N	894	894	894	663	663	663	231	231	231

Table 8 continued

		Total			Day-Use Visitor			Overnight Visitor		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
25 to 34	Mean	27.12	43.97	71.09	22.62	32.83	55.45	41.02	78.39	119.41
	Median	5.50	0.00	20.00	3.75	0.00	11.50	22.50	37.50	66.67
	N	1623	1623	1623	1226	1226	1226	397	397	397
35 to 44	Mean	30.67	36.74	67.40	25.00	26.07	51.07	44.61	62.98	107.58
	Median	7.50	0.00	20.17	3.64	0.00	10.71	24.20	32.50	64.00
	N	2086	2086	2086	1483	1483	1483	603	603	603
45 to 54	Mean	32.21	44.16	76.37	24.86	29.38	54.24	50.07	80.07	130.14
	Median	7.50	2.50	25.00	3.57	0.00	12.50	28.00	35.00	74.00
	N	2048	2048	2048	1451	1451	1451	597	597	597
55 to 59	Mean	39.14	56.24	95.38	30.55	27.58	58.13	63.10	136.24	199.34
	Median	8.50	0.79	25.00	5.14	0.00	13.62	40.00	50.00	109.17
	N	872	872	872	642	642	642	230	230	230
60 to 64	Mean	40.11	69.90	110.02	27.79	41.72	69.51	70.74	139.94	210.69
	Median	8.29	0.40	21.25	3.00	0.00	10.00	55.00	53.13	114.67
	N	690	690	690	492	492	492	198	198	198

Table 8 continued

		Total			Day-Use Visitor			Overnight Visitor		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
65 to 74	Mean	49.96	131.48	181.44	38.39	62.27	100.66	79.49	308.16	387.65
	Median	7.20	0.00	20.00	2.00	0.00	8.66	43.75	55.00	118.33
	N	604	604	604	434	434	434	170	170	170
75 and Over	Mean	31.10	36.96	68.06	16.05	15.26	31.31	91.83	124.50	216.33
	Median	2.50	0.00	10.00	1.00	0.00	3.75	35.00	26.00	72.50
	N	146	146	146	117	117	117	29	29	29
Total	Mean	31.34	49.56	80.90	24.16	31.68	55.85	50.54	97.35	147.89
	Median	6.67	0.00	20.00	3.33	0.00	10.00	26.67	37.50	75.00
	N	9630	9630	9630	7009	7009	7009	2621	2621	2621
Hispanic or Latino	Mean	19.62	19.47	39.09	14.98	11.80	26.78	32.68	41.05	73.73
	Median	6.67	2.50	17.69	5.00	0.00	12.40	16.00	26.36	51.50
	N	1072	1072	1072	791	791	791	281	281	281
Asian	Mean	18.90	25.13	44.04	16.66	20.74	37.41	27.87	42.69	70.56
	Median	5.37	0.17	16.46	4.00	0.00	12.50	10.56	25.75	52.50
	N	320	320	320	256	256	256	64	64	64

Table 8 continued

		Total			Day-Use Visitor			Overnight Visitor		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
Black or African American	Mean	16.81	19.22	36.03	14.20	10.06	24.26	30.40	66.99	97.39
	Median	4.29	0.00	14.00	2.00	0.00	8.50	25.00	33.00	66.00
	N	205	205	205	172	172	172	33	33	33
Caucasian	Mean	36.08	59.02	95.10	28.28	38.41	66.69	56.04	111.75	167.78
	Median	6.67	1.58	22.50	3.00	0.00	10.00	30.00	40.00	82.50
	N	6298	6298	6298	4528	4528	4528	1770	1770	1770
American Indian	Mean	26.44	90.12	116.56	21.53	55.61	77.13	44.87	219.54	264.41
	Median	7.50	3.83	22.50	5.75	0.00	14.50	45.00	27.50	66.86
	N	76	76	76	60	60	60	16	16	16
Native Hawaiian	Mean	22.33	21.43	43.76	14.38	13.20	27.58	50.86	50.94	101.80
	Median	5.00	0.95	18.75	3.33	0.00	10.00	50.00	42.86	78.14
	N	78	78	78	61	61	61	17	17	17
Other/Multi-racial	Mean	29.39	43.52	72.91	21.26	17.06	38.32	47.74	103.24	150.98
	Median	8.33	5.00	25.00	5.00	0.00	12.50	24.10	40.83	66.63
	N	697	697	697	483	483	483	214	214	214

Table 8 continued

		Total			Day-Use Visitor			Overnight Visitor		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
Total	Mean	31.32	49.53	80.85	24.15	31.66	55.81	50.54	97.35	147.89
	Median	6.67	0.00	20.00	3.33	0.00	10.00	26.67	37.50	75.00
	N	9636	9636	9636	7015	7015	7015	2621	2621	2621
Less than \$14,999	Mean	23.38	37.67	61.05	12.75	16.79	29.53	51.81	93.51	145.32
	Median	3.50	0.00	15.63	1.00	0.00	7.83	15.00	45.00	72.00
	N	327	327	327	238	238	238	89	89	89
\$15,000 to \$24,999	Mean	23.08	42.76	65.85	14.98	23.93	38.91	54.54	115.89	170.43
	Median	1.50	0.00	15.00	0.00	0.00	9.50	25.00	30.00	68.75
	N	293	293	293	233	233	233	60	60	60
\$25,000 to \$34,999	Mean	27.31	37.42	64.72	19.75	18.20	37.95	51.84	99.84	151.68
	Median	5.00	0.00	15.00	3.00	0.00	10.00	21.67	38.33	65.00
	N	429	429	429	328	328	328	101	101	101
\$35,000 to \$49,999	Mean	27.81	46.00	73.81	19.25	27.74	46.99	54.37	102.59	156.96
	Median	5.00	0.00	16.15	3.00	0.00	10.00	29.00	37.50	84.00
	N	779	779	779	589	589	589	190	190	190

Table 8 continued

		Total			Day-Use Visitor			Overnight Visitor		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
\$50,000 to \$74,999	Mean	25.78	47.36	73.14	18.42	28.64	47.06	45.32	97.07	142.39
	Median	6.88	2.50	20.00	3.93	0.00	12.00	25.00	37.50	66.67
	N	1389	1389	1389	1009	1009	1009	380	380	380
\$75,000 to \$99,999	Mean	33.00	60.55	93.55	23.80	36.93	60.74	53.77	113.93	167.70
	Median	8.75	2.50	26.10	3.75	0.00	12.50	30.00	38.00	83.00
	N	1516	1516	1516	1051	1051	1051	465	465	465
\$100,000 to \$149,000	Mean	36.23	56.51	92.74	28.71	33.35	62.06	51.98	105.04	157.02
	Median	10.00	3.75	26.25	4.83	0.00	13.00	30.00	37.50	75.00
	N	1600	1600	1600	1083	1083	1083	517	517	517
\$150,000 and Over	Mean	52.95	65.52	118.47	49.94	50.53	100.47	61.50	108.21	169.71
	Median	10.00	4.00	30.00	5.83	0.00	14.50	37.32	43.10	89.88
	N	1185	1185	1185	877	877	877	308	308	308
Total	Mean	31.32	49.53	80.85	24.15	31.66	55.81	50.54	97.35	147.89
	Median	6.67	0.00	20.00	3.33	0.00	10.00	26.67	37.50	75.00
	N	9636	9636	9636	7015	7015	7015	2621	2621	2621

Table 8 continued

		Total			Primary Destination			Multiple Stops		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
Male	Mean	30.30	50.75	81.04	25.70	25.35	51.06	43.56	124.13	167.69
	Median	6.67	1.67	22.50	6.00	0.00	20.00	10.00	10.00	32.50
	N	5286	5286	5286	3927	3927	3927	1359	1359	1359
Female	Mean	33.82	50.30	84.13	29.45	25.89	55.34	46.81	122.73	169.54
	Median	5.97	1.00	19.83	5.00	0.00	15.00	10.00	12.50	35.00
	N	3526	3526	3526	2637	2637	2637	889	889	889
Total	Mean	31.32	49.53	80.85	27.10	25.04	52.14	43.70	121.22	164.92
	Median	6.67	0.00	20.00	5.71	0.00	17.60	9.67	10.00	32.00
	N	9636	9636	9636	7181	7181	7181	2454	2454	2454
18 to 24	Mean	17.94	33.81	51.76	16.03	19.09	35.12	25.88	94.71	120.59
	Median	4.00	5.00	20.00	3.33	0.00	16.83	10.00	20.38	34.17
	N	894	894	894	720	720	720	174	174	174
25 to 34	Mean	27.12	43.97	71.09	23.15	19.05	42.20	40.26	126.34	166.60
	Median	5.50	0.00	20.00	5.00	0.00	16.00	10.00	15.00	35.00
	N	1623	1623	1623	1246	1246	1246	377	377	377

Table 8 continued

		Total			Primary Destination			Multiple Stops		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
35 to 44	Mean	30.67	36.74	67.40	26.82	23.81	50.63	43.84	80.93	124.77
	Median	7.50	0.00	20.17	6.90	0.00	18.75	8.13	12.92	32.50
	N	2086	2086	2086	1614	1614	1614	472	472	472
45 to 54	Mean	32.21	44.16	76.37	28.62	28.21	56.83	43.70	95.29	138.99
	Median	7.50	2.50	25.00	7.14	0.00	22.50	9.00	10.00	31.00
	N	2048	2048	2048	1561	1561	1561	487	487	487
55 to 59	Mean	39.14	56.24	95.38	31.23	27.83	59.06	57.35	121.66	179.01
	Median	8.50	0.79	25.00	7.50	0.00	20.24	11.63	7.75	37.50
	N	872	872	872	608	608	608	264	264	264
60 to 64	Mean	40.11	69.90	110.02	38.99	35.70	74.70	42.21	133.62	175.83
	Median	8.29	0.40	21.25	7.50	0.00	17.50	10.00	7.50	31.25
	N	690	690	690	449	449	449	241	241	241
65 to 74	Mean	49.96	131.48	181.44	44.95	41.09	86.04	58.58	287.00	345.59
	Median	7.20	0.00	20.00	4.75	0.00	13.50	14.75	15.00	60.00
	N	604	604	604	382	382	382	222	222	222



Table 8 continued

		Total			Primary Destination			Multiple Stops		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
75 and Over	Mean	31.10	36.96	68.06	25.81	23.44	49.25	40.97	62.14	103.10
	Median	2.50	0.00	10.00	2.00	0.00	7.50	3.00	1.50	17.50
	N	146	146	146	95	95	95	51	51	51
Total	Mean	31.34	49.56	80.90	27.11	25.05	52.16	43.73	121.31	165.05
	Median	6.67	0.00	20.00	5.71	0.00	17.69	10.00	10.00	32.00
	N	9630	9630	9630	7177	7177	7177	2452	2452	2452
Hispanic or Latino	Mean	19.62	19.47	39.09	18.49	17.84	36.33	25.27	27.65	52.93
	Median	6.67	2.50	17.69	6.13	0.00	16.67	8.88	10.00	23.00
	N	1072	1072	1072	894	894	894	178	178	178
Asian	Mean	18.90	25.13	44.04	18.38	14.63	33.01	20.51	57.73	78.25
	Median	5.37	0.17	16.46	5.37	0.00	14.00	5.83	10.00	25.25
	N	320	320	320	242	242	242	78	78	78
Black or African American	Mean	16.81	19.22	36.03	15.89	15.86	31.75	21.27	35.56	56.83
	Median	4.29	0.00	14.00	5.00	0.00	15.00	2.00	0.00	5.00
	N	205	205	205	170	170	170	35	35	35

Table 8 continued

		Total			Primary Destination			Multiple Stops		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
Caucasian	Mean	36.08	59.02	95.10	30.89	27.59	58.48	49.70	141.41	191.11
	Median	6.67	1.58	22.50	5.00	0.00	18.67	10.00	15.00	40.00
	N	6298	6298	6298	4559	4559	4559	1739	1739	1739
American Indian	Mean	26.44	90.12	116.56	24.22	24.52	48.74	31.25	232.26	263.51
	Median	7.50	3.83	22.50	11.67	0.00	20.00	0.67	13.75	52.50
	N	76	76	76	52	52	52	24	24	24
Native Hawaiian	Mean	22.33	21.43	43.76	24.03	24.88	48.91	15.75	8.06	23.81
	Median	5.00	0.95	18.75	4.33	5.00	20.00	9.17	0.00	13.33
	N	78	78	78	62	62	62	16	16	16
Other/Multi-racial	Mean	29.39	43.52	72.91	25.44	29.18	54.62	43.08	93.25	136.34
	Median	8.33	5.00	25.00	7.50	3.33	24.00	10.00	8.17	28.75
	N	697	697	697	541	541	541	156	156	156
Total	Mean	31.32	49.53	80.85	27.10	25.04	52.14	43.70	121.22	164.92
	Median	6.67	0.00	20.00	5.71	0.00	17.60	9.67	10.00	32.00
	N	9636	9636	9636	7181	7181	7181	2454	2454	2454

Table 8 continued

		Total			Primary Destination			Multiple Stops		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
Less than \$14,999	Mean	23.38	37.67	61.05	14.56	16.47	31.03	47.32	95.25	142.57
	Median	3.50	0.00	15.63	1.25	0.00	10.00	10.00	18.33	38.17
	N	327	327	327	239	239	239	88	88	88
\$15,000 to \$24,999	Mean	23.08	42.76	65.85	18.57	20.27	38.84	37.72	115.78	153.50
	Median	1.50	0.00	15.00	1.00	0.00	12.50	5.00	0.00	25.00
	N	293	293	293	224	224	224	69	69	69
\$25,000 to \$34,999	Mean	27.31	37.42	64.72	22.02	14.16	36.19	44.91	114.94	159.85
	Median	5.00	0.00	15.00	4.56	0.00	12.25	10.00	13.33	37.50
	N	429	429	429	330	330	330	99	99	99
\$35,000 to \$49,999	Mean	27.81	46.00	73.81	22.34	20.32	42.66	44.78	125.61	170.39
	Median	5.00	0.00	16.15	5.00	0.00	12.50	10.00	17.50	32.75
	N	779	779	779	589	589	589	190	190	190
\$50,000 to \$74,999	Mean	25.78	47.36	73.14	22.90	25.27	48.17	34.80	116.59	151.39
	Median	6.88	2.50	20.00	6.67	0.00	18.57	9.67	12.50	34.17
	N	1389	1389	1389	1053	1053	1053	336	336	336

Table 8 continued

		Total			Primary Destination			Multiple Stops		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
\$75,000 to \$99,999	Mean	33.00	60.55	93.55	28.10	27.96	56.06	47.22	155.30	202.52
	Median	8.75	2.50	26.10	7.50	0.00	23.42	12.50	15.00	45.00
	N	1516	1516	1516	1128	1128	1128	388	388	388
\$100,000 to \$149,000	Mean	36.23	56.51	92.74	31.74	33.09	64.84	49.57	126.07	175.64
	Median	10.00	3.75	26.25	8.70	1.00	25.00	11.67	10.00	35.00
	N	1600	1600	1600	1197	1197	1197	403	403	403
\$150,000 and Over	Mean	52.95	65.52	118.47	47.84	34.33	82.17	66.94	150.92	217.86
	Median	10.00	4.00	30.00	9.00	0.00	25.00	13.33	16.67	50.00
	N	1185	1185	1185	868	868	868	317	317	317
Total	Mean	31.32	49.53	80.85	27.10	25.04	52.14	43.70	121.22	164.92
	Median	6.67	0.00	20.00	5.71	0.00	17.60	9.67	10.00	32.00
	N	9636	9636	9636	7181	7181	7181	2454	2454	2454

*Distance Traveled*

The literature revealed expenditures differ for local and non-local visitors. To examine this relationship Table 9 shows the distanced traveled by five subgroups: local visitors (0-25 miles), regional visitors (26-75 miles), extra regional (76-to out of state), out of state residents, and non-United State citizens.

Table 9 finds as distance from the park increases, the number of visitors decreases, but the average expenditure increases. Specifically, 38% of park visitors reside in the local community, defined as 25 or fewer miles from the park. Local visitors spent \$16.27 compared to \$242.36 for out-of-state residents and \$432.51 for non United States citizens. Assuming the survey respondents are generally representative of visitors to all 279 park units, this suggests that the majority of visitor expenditures that parks generate come from non-local visitors.

Table 9

*Average Expenditure by Distanced Traveled*

		Total			Day-Use Visitor			Overnight Visitor		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
Local visitors (0-25 miles from the park)	Mean	11.31	4.95	16.27	8.41	3.52	11.93	40.67	19.49	60.16
	Median	2	0	4.52	1.33	0	3.33	26	0	41.67
	N	3678	3678	3678	3347	3347	3347	331	331	331
Regional Visitors (26-75 miles from the park)	Mean	21.56	24.74	46.3	13.71	14.07	27.79	34.76	42.69	77.46
	Median	7.5	10	25.77	3.75	6	16	20	30	60
	N	2254	2254	2254	1414	1414	1414	840	840	840
Extra-Regional Visitors (76 miles or more or out-of-state)	Mean	56.08	66.62	122.7	58.34	52.36	110.7	53.61	82.26	135.86
	Median	20	30	70	12	16.67	42	30	50	95
	N	2147	2147	2147	1123	1123	1123	1024	1024	1024
Other State Resident	Mean	67.37	174.99	242.36	59.58	129.24	188.82	90.12	308.61	398.73
	Median	15	20	65	8.54	7.5	39.64	37.92	95.5	142.22
	N	792	792	792	590	590	590	202	202	202

Table 9 continued

		Total			Day-Use Visitor			Overnight Visitor		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
Non US Citizen	Mean	68.3	364.22	432.51	66.45	268.77	335.22	71.66	537.95	609.61
	Median	20	35	85	12.5	13.75	52.5	35	100	165
	N	251	251	251	162	162	162	89	89	89
Total	Mean	31.32	49.53	80.85	24.15	31.66	55.81	50.54	97.35	147.89
	Median	6.67	0	20	3.33	0	10	26.67	37.5	75
	N	9636	9636	9636	7015	7015	7015	2621	2621	2621

Table 9 continued

		Total			Primary Destination			Multiple Stops		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
0-25	Mean	11.31	4.95	16.27	11.71	5.19	16.9	8.96	3.53	12.49
	Median	2	0	4.52	2	0	4.83	2	0	4.17
	N	3678	3678	3678	3153	3153	3153	525	525	525
26-75	Mean	21.56	24.74	46.3	20.97	23.84	44.81	24.72	29.59	54.31
	Median	7.5	10	25.77	7.5	10	26.67	6.67	8.33	21.67
	N	2254	2254	2254	1896	1896	1896	357	357	357
76-Out of State	Mean	56.08	66.62	122.7	54.54	50.67	105.21	59.13	98.3	157.43
	Median	20	30	70	21.94	30	67.5	16.67	30	74.75
	N	2147	2147	2147	1428	1428	1428	719	719	719
Other State Resident	Mean	67.37	174.99	242.36	77.49	85.29	162.78	61.68	225.41	287.09
	Median	15	20	65	17.4	5	43.5	14	35	85
	N	792	792	792	285	285	285	507	507	507
Non US Citizen	Mean	68.3	364.22	432.51	90.41	187.17	277.57	61.65	417.43	479.08
	Median	20	35	85	19.13	0	52.92	20	50	100
	N	251	251	251	58	58	58	193	193	193



Table 9 continued

		Total			Primary Destination			Multiple Stops		
		Inside	Outside	Total	Inside	Outside	Total	Inside	Outside	Total
Total	Mean	31.32	49.53	80.85	27.1	25.04	52.14	43.7	121.22	164.92
	Median	6.67	0	20	5.71	0	17.6	9.67	10	32
	N	9636	9636	9636	7181	7181	7181	2454	2454	2454

### Extrapolating to Develop Statewide Estimates

The last analysis includes the statewide economic impacts of expenditures from state parks visitors. Given the range of factors that influences expenditures, calculating statewide totals is thus analyzed by three different approaches. In all three cases, expenditure data from the 26 parks studied in the *State Parks Visitor Survey* are extrapolated to develop statewide expenditure estimates using statewide visitation estimates gleaned from *The California State Park System Statistical Report: 2007/08 fiscal year*.

The first method simply involves multiplying the average visitor expenditure (from the *State Parks Visitor Survey*) by the total number of parks visits per year (from the *2007/08 Statistical Report*). The results reported in Table 10 suggest state parks generate almost \$6.5 billion annually.

Table 10

#### *Statewide Extrapolation Using Gross Average Expenditure*

AVERAGE EXPENDITURE	USERS/YR (MILLIONS)	TOTAL EXPENDITURE (MILLIONS)
\$80.85	79.967	\$6,466

The second method accounts for the likelihood that the survey oversampled overnight users. To compensate for this, the average expenditure for day-use visitors is multiplied the estimated statewide number of day-use visitors statewide. Similarly,

statewide expenditures for overnight users are estimated by multiplying their average expenditure by the annual number of overnight users system-wide. The results in Table 11 show day-use visitors frequent parks more often, but spend less. Overnight visitors spend more, but attend less. The findings suggest that even though day-use visitors spend less, they actually contribute more because of higher attendance rates. Adjusting the extrapolation in this manner results in a total statewide estimate of \$5.2 billion in annual state park related expenditures.

Table 11

*Statewide Extrapolation Weighted by Overnight vs. Day-Use Visitors*

	AVERAGE EXPENDITURE	USERS/YR (MILLIONS)	TOTAL EXPENDITURE (MILLIONS)
DAY	55.81	72.189	4,028
OVERNIGHT	147.89	7.777	1,150
TOTAL		79.967	5,178

The third method again adjusts for differences between day-use and overnight visitors, and further fine-tunes the extrapolation by accounting for the possibility that the survey oversampled some types of park classifications, while undersampling others. Accordingly, this extrapolation breaks down the average expenditure for various park classifications (e.g. state beach, state historic park, etc.) and multiplies by the estimated annual number of visits for each park classification.

State parks have eleven different classifications and the *State Parks Visitor Survey* surveyed the five classifications found in Table 12. The results indicate spending varied across the different classifications. For the classification of state historic park, spending for overnight visitors was much larger than expected. One reason for the large expenditure is the sample size was only 7, which may have skewed the results. The remainder of the analysis in Table 12 shows day-visitors frequent parks more often than overnight visitors, but spend less. The total impact ranged from one park classification to the next. Using this extrapolation method, the estimated annual expenditure related to state park visitation statewide is \$6.9 billion.

Table 12

*Statewide Extrapolation Weighted by Park Category*

	AVERAGE	USERS/YR	TOTAL
	EXPENDITURE	(MILLIONS)	EXPENDITURE
			(\$ MILLIONS)
State Park - Day Use	102.67	25.21	2,588.87
State Park - Overnight	176.87	11.54	2,041.33
State Beach - Day Use	28.62	13.67	391.40
State Beach - Overnight	117.19	6.09	713.22
State Recreational Area	23.75	6.89	163.59
- Day Use			
State Recreational Area	142.54	2.33	332.44
- Overnight			
State Historical Park -	41.41	5.62	232.92
Day Use			
State Historical Park -	977.17	.028	27.62
Overnight			
State Vehicle Recreation	57.22	2.26	129.42
Area - Day Use			
State Vehicle Recreation	112.89	2.7	308.35
Area - Overnight			
Total		76.38	6,929.13

The analysis in this chapter has revealed patterns and trends emerge when examining the different categories of users. What this means in terms of the policy dialogue on state parks funding is explored in the next chapter.

## Chapter 5

## CONCLUSION

This analysis revealed numerous patterns related to visitor spending at state parks, but most importantly, these different analyses provide valuable insight into the market transaction trends and patterns of visitors to the state park system. Table 13 is a summary of analysis totals.

Table 13

*Average Expenditure for Various Types of Visitors*

	Mean	Median
ALL VISITORS	80.85	20.00
DAY USE	55.81	10.00
OVERNIGHT	147.89	75.00
LOCAL	16.27	4.52
REGIONAL	46.30	25.77
EXTENDED REGIONAL	122.70	70.00

The results from Table 13 reveal spending is influenced from a number of different factors. This section provide a discussion on exactly what the findings mean in relation to the current policy dialogue by reviewing the broad categories that emerged from the analysis and providing recommendations for further research.

### Type of Park

While it could be argued the money not spent on state park visits could be invested in other areas of the market, but the only substitution for state parks is other parkland. Other recreational opportunities such as going to the movies, Disneyland, are not the same experience as going to state parks. This is true especially, because study results (see Table 7) indicate visitors go to state parks for relaxation. Additionally, urban parks tend to be smaller in terms of acreage in comparison to state park in rural areas. For example, Candlestick SRA total average total expenditure was \$11.27, did not offer overnight camping and is also only 204.88 acres. Compared to Anza Borrego Desert state park that is 584,172.39, offers one hundred fifty three camping site, with visitors on average spending \$234.41. This is significant for future land-use decisions in California and strategic planning by DPR because if the amount of economic stimulus state parks provide is somewhat dependent on amenities offered, it is then important to continue to maintain and expand the state park system.

### Type of Visit

The state parks system should continue to provide a diverse selection of outdoor recreational opportunities. Table 7 identified state park users participate in wide variety of activities, with ranging from each activity to the next.

Also, while it could be argued the money not spent from the state park would be invested in other areas of the market. However, the only substitution for state parks is other parkland. Other recreational opportunities such as going to the movies, Disneyland,



are not the same experience as going to state parks. Especially, since the results in Table 7 indicate visitors go to state parks for relaxation. Additionally, visitors vote with their spending and place different values of enjoyment on different recreational opportunities. If a visitor does not spend attend the state park, it does automatically imply the money would be invested in California's tourist economy or in California at all. Furthermore, it is entirely unknown how the money not spent would be redistributed back into the economy. This suggests that if state parks declined in availability, California and local communities could lose a valuable economic stimulus, especially during the current dark economic climate.

#### Distance Traveled

The distanced traveled by the visitor explains how state parks serve as economic engines. As the distance traveled increased, spending followed. Out-of-state residents and non United States citizens- visit state parks less, but spend considerably more than local residents. This is likely because the farther distanced travel requires additional transportation costs, such as fuel or requires lodging as part of an overnight visit. Either way, the expenditures are imported into California's economy. Also, even for local or regional visitors, the results revealed the state parks were more often the primary destination for the visit. State parks are tourist attractions generating new money in local communities and for the state as a whole. This is an important point when considering closure and reduction of services. New money enters into the California economy that would otherwise would not if the state park system continues to decline in availability.

Additionally, local economies that heavily rely on tourist's spending would be substantially impacted if parks closed.

Even though local visitors do not spend large sums, they do attend state parks regularly. This study does capture what local visitors spend every time they visit the state park. The survey only asked what was spent on that specific trip. Therefore, local residents may not generate considerable market transactions on every visit, but overtime could contribute substantially. An additional study could explore overtime what local visitors spend annually to determine the exact impact.

Also, local visitors and regional visitors may spend less, but this study does not capture the benefits associated with having lost cost recreational opportunities available within a short driving distance. Increased enjoyment may be derived from local and affordable recreational opportunities. This is evident in newly coined term "staycation," which refers to taking a vacation closer to home.

Travel patterns associated with so-called staycations may greatly influence what extra-regional visitors spend. If more and more Californians are taking vacations closer to home, state parks are tourist's attractions for Californians and provide a benefit for living within the state. This is evident in Table 9, extra-regional visitors spending \$105.21 per person on average if the state park was the primary destination or \$157.43 if the park one of many stops. Thus, Californians invest their money into the state's economy.

### Visitor Demographics

Socioeconomic characteristics proved some influence on visitor expenditure. When income and age increases, spending does as well. Gender was not significant, while Caucasians generally spent on average more than other ethnic groups. This analysis however is incomplete because the survey respondents are not a reflection of California's population. For instance, minorities groups were underrepresented. While the survey may be a reflection of park visitors, that was not the focus of this study. To make further conclusions on the role of socioeconomic categories influencing visitor expenditures, additional research is required and at this point no current data or research is available. Other questions to examine include: How much do visitors spend in relation to their income? Do cultural norms influence participation and thus spending habits?

### Statewide Totals

The annual contributions from visitor spending are shown in Tables 10, 11, and 12. The results indicate that state park visitors contribute significantly to local economies. Annually, day-use visitors spend over \$4 billion and overnight visitors spend a little over \$1.15 billion, for a combined contribution of \$5.2 billion according to the second extrapolation method. Accounting for differences between park classifications, the total expenditure related to the state park system is over \$6.9 billion.

Remarkably, \$5 to \$7 billion annually is a conservative estimation. DPR reports visitation statistics are likely underreported because each park collects the data differently. Additionally, the research suggests that when visitors estimate expenditure,

they likely report an under representation because of the likelihood that visitors are unable to remember all purchases. Thus, the statewide totals may represent a low estimation of the real impacts.

To put this into perspective, DPR's entire operating budget for 2007-08 was a little over \$479 million. If reduced funding to DPR results in closed parks, it could mean a reduction in expenditure, which may be substantial for rural communities that rely heavily economic stimulus from tourists.

Since the state park system contributes to the tourist economy and the reduction of general fund allocation has resulted in partial closures, coupled with increases in user fees and growing deferred maintenance backlog, one must ask the question: is this good public policy? Is it wise to continue to neglect state assets and a public good for short-term budget savings? Despite the current fiscal climate, it is important to maintain the state park system because of the economic contributions to local communities and the state as a whole. But in respect to the financial crisis, state parks are assisting with maintaining a revenue-funding source, which could contribute to helping reviving and maintaining California's economy.

Excluding the economic benefits of maintaining a state park system, other innumerable benefits are derived that may not easily be quantified. The state park system provides low cost outdoor recreation opportunities, but it is difficult to put a number value on the opportunity for low cost outdoor recreation experiences and opportunities. Or state parks are stewards for California's cultural, historical and natural resources. No

price can measure clean water, air or environmental protection for numerous wildlife and plant species or preservation of California's history. California's ecological diversity and cultural history are unique treasures that have no readily available market price.

#### Additional Research and Conclusion

This study has revealed state park visitors provide an economic engine for local communities and the state as a whole. The analysis focused on the impact of direct visitor expenditure, but how the spending moves and flows through the local economy is important piece of the larger picture.

A complete economic impact analysis includes an examination of the direct economic activity of visitor expenditures and through input-output modeling analysis assesses secondary, indirect, and induced affects of the initial expenditures (Johnston & Tyrrell, 2006). Direct impacts refer to visitor's first expenditure transaction. The secondary economic benefits of travel activity are the indirect and induced benefits. The indirect benefit occurs as the travel-related business operator purchases goods to serve the visitors (Frechtling, 1994). The induced benefit is economic activity in the region resulting from household spending of income earned through a direct and indirect effect of visitor spending (Stynes, Prompts, Chang, & Ya-Yen, 2000). For example, visitors dining at local restaurants are the direct effects. The indirect impacts measure the increase of supplies (food and equipment) purchased by the restaurant owner to run a business. The induced benefits are the restaurant employees spending their earned income.

Multipliers applied to spending figures capture the size of the secondary effects in a given region and are expressed as ratios of sales and income, employment, or as ratio of total income or employment changes relative to direct sales (Stynes et al., 2000). In summary, visitor spending impact analysis methods track and aggregate monetary payments as they move through a regional economy-measuring the transfer of payment from one group or sector to others (Johnston & Tyrrell, 2006).

Visitor economic impact analysis is often confused with benefit cost analyses, but the two are methodologically and conceptually distinct. The former measures economic activity or income, whereas the latter estimates net economic benefits (Johnston & Tyrrell, 2006). To evaluate the recreational-use economic value of state parks a travel cost method is an economic evaluation technique in a cost benefit analysis and an applicable analysis method. The travel cost method attempts to put an economic value on items that have no readily observable market price because no market exists for the item. Economists define the economic value of an item as the consumer's willingness-to-pay for the item. The travel costs method can provide an estimate of willingness-to-pay for access to state parks. This estimate is constructed by observing how much time and money park visitors actually spend on travel necessary for their state park visit.

The final component of the economic impact of state parks would include an analysis of expenditures by DPR, which contribute to spending in local communities and thus economic stimulus. The analysis would be similar to the visitor expenditure analysis previously mentioned.

Despite all the economic analysis that could be completed, there is an absence of dependable research on the economic impacts of state parks or recreational benefits during the deliberation of closures, reduction of services, and increases to user fees, which hinders responsible public policy and decisions. The economic impacts of state parks analysis assist elected officials with making informed decisions on how to adequately fund state parks and assists in long term strategic planning for public and private stakeholders.

This study uncovered state parks visitors direct expenditures are a positive economic gain. The extent of the contribution is dependent on the visitor's characteristics, distanced traveled, participated in activities, day-use vs. overnight visitors and if the state park was the primary purpose of the trip.

Even though policy decisions are may be made without all the available information, the pursuit of more research should continue because state parks are economic engines and produce numerous other benefits by promoting healthy lifestyles, serving as cultural and environmental stewards and providing affordable outdoor recreation experiences that enrich the lives of Californians.

APPENDIX



## Interview Questions

Unit:
Location:
Researcher:
Date:

1. What's your zip code? \_\_\_\_\_
  - If not from the U.S., what country are you from? \_\_\_\_\_
2. How many are in your group, including yourself on this trip? \_\_\_\_\_  
(If alone, go to question #4)
3. Are you here with: (check  **all** that apply)
 

Friends	Part of a commercial tour
Family	A club/organization field trip
School/study group	Other: _____
4. Have you been to this State Park before this visit?    Yes    No    Don't remember/maybe
5. How did you learn about this park? (check  all that apply)
 

Grew up nearby/live nearby	Newspaper	Magazine or publication
Recommended by family or friends	Travel agency	By chance (drove by, etc.)
Tour book/map (e.g., CSAA guide)	TV/radio	Don't remember
Internet/State Parks web site	Road sign	Other: _____
6. Is this State Park your primary destination or is this one of several stops along an extended trip?
 

primary destination	one of several stops
---------------------	----------------------
7. Are you camping here or on a day trip to the park?
 

Day: how many hours do you expect to be here? \_\_\_\_\_ (skip to Q9)

Camping: If camping, how many nights will you be here? \_\_\_\_\_
8. **If camping**, during this visit will you/did you use any of these items? (check  **all** that apply)
  - Tent
  - Car top Camper /camper shell
  - Tent trailer
  - Trailer / 5<sup>th</sup> wheel
  - Motor home
  - Hookups –sewer, water, elec., etc.)
  - Generator
  - Other \_\_\_\_\_

9. What activities did you do **or** do you expect to do at this State Park? (check  **all** that apply)

Water Activities	Recreation Activities	Educational/Interpretive Activities
01-Beach play	25-Backpacking	46-Campfire program
02-Boating (power)	26-Biking – mountain bike	47-Historical sightseeing/tour
03-Body surfing/wakeboarding	27-Biking – on paved surfaces	48-Junior Ranger
04-Canoeing/kayaking	28-Camping	49-Junior Lifeguard
05-Jet skiing (personal water craft)	29-Fishing	50-Living history program
06-Sailboating	30-Hiking	51-School program or activity
07-SCUBA/snorkeling	31-Horseback riding	52-Self-guided trail / tour
08-Sunbathing	32-Horseshoes	53-Visitor center/museum
09-Surfing	33-Jogging/running	54-Native American history program
10-Swimming	34-Kite flying	55-Other:
11-Tubing	35-Motorcycle riding	_____
12-Water play/wading	36-Picnicking	Off-Highway Activities
13-Water-skiing	37-Rollerblading	56-Four Wheel Drive
14-Windsurfing	38-Scooters	57-ATV
15-Other:	39-Skiing	58-SUV
_____	40-Sledding	59-Dirt bike riding
Nature Oriented Activities	41-Snow play	60-Dune buggy
16-Bird watching	42-Throwing a Frisbee/Frisbee Golf	61-Go-kart
17-Nature walks/interpretive trails	43-Volleyball/badminton	62-Other:
18-Photography	44-Walking for pleasure	_____
19-Relaxing in the outdoors	45-Other:	Electronics
20-Tide pool exploration	_____	63-Geocaching
21-Wildlife viewing		64-Wi-Fi
22-Stargazing		65-GPS
23-Wildflowers		66-Other:
24-Other:		_____
_____		

Which of these is the primary activity of your group as a whole? \_\_\_\_\_

10. If we offered additional accommodations to stay in at this State Park, such as a tent or canvas cabin, would you use something like this? We'd also like to know if you would also be interested in using a rustic wooden cabin, a yurt (which is a circular framed canvas tent), a small group/multi-family campsite or [researcher – only ask where possible] a floating campsite.

- Tent or canvas framed cabin
- Rustic wooden cabin
- Yurt (a circular canvas tent)
- Floating camp site (decking with camping amenities such as a barbecue and picnic table)
- Multi-family/small group campsite
- Other: \_\_\_\_\_

11. Now I have some questions about activities and programs. Based on what you've experienced at this park so far, are there programs you might like here at this park but that aren't currently available. If so, what activities and programs would you suggest? \_\_\_\_\_

12. Provide a rough estimate of your purchases (yourself and your immediate party) while in this park and then in the nearby communities (*nearby communities is defined as anywhere within 25 miles of this park*).

	In this park and nearby communities	Outside of this park/nearby communities while on this trip
12.1 Overnight lodging at motels, resorts, and private campgrounds	\$	\$
12.2 Food and beverages at restaurants and snack stands	\$	\$
12.3 Supplies such as groceries, film, bait, gifts and souvenirs, etc	\$	\$
12.4 Gasoline, vehicle repairs, parking, toll fees and public transportation	\$	\$
12.5 Recreation purchases; e.g., equipment rentals and tours	\$	\$

13. The next question is about a number of recreation aspects of your visit to this State Park, and I'd like to know two things about each one: how satisfied you are with each one, and how important that aspect of the park is to you.

	Very Satisfied	Somewhat Satisfied	Neither satisfied or unsatisfied	Somewhat Unsatisfied	Very unsatisfied	DK / Not Applicable	Very Important	Somewhat Important	Neither important or unimportant	Somewhat Unimportant	Very unimportant	DK / Not Applicable
13.1 Efforts to preserve the natural or historic resources here												
13.2 Overall condition of facilities												
13.3 Quality of recreational opportunities available here												
13.4 Feeling of safety and security during your visit												
13.5 Opportunities to help you learn about the area's history and natural environment												
13.6 Courtesy and helpfulness of park staff												
13.7 Availability of staff to assist you												
13.8 Fees you paid compared to the value of your park experience*												
13.9 Quality of concession services at this park												

*[\*researcher 13.8 clarification: In other words, do visitors feel they're getting what they paid for or not? For the importance part, what we're interested in finding out is if park fees are an important or unimportant part of their decision to visit a specific State Parks unit]*

14. Are there any additional amenities you would like to have in this State Park beyond what are currently offered? If so, what amenities do you suggest? \_\_\_\_\_

The remaining survey items are designed to give us a better idea of the characteristics of State Park visitors. Please note that your responses are anonymous and you are not identified in any way with this information.

1. What is your gender? Male Female

2. Your age?

\_\_\_ 18-24 years \_\_\_ 55-59 years  
 \_\_\_ 25-34 years \_\_\_ 60-64 years  
 \_\_\_ 35-44 years \_\_\_ 65-74 years  
 \_\_\_ 45-54 years \_\_\_ 75 years and over

3. What is the age range for each other member of the party you came with today? How many in your party are:

\_\_\_ 1 - 9 years \_\_\_ 45-54 years  
 \_\_\_ 10-14 years \_\_\_ 55-59 years  
 \_\_\_ 15-24 years \_\_\_ 60-64 years  
 \_\_\_ 25-34 years \_\_\_ 65-74 years  
 \_\_\_ 35-44 years \_\_\_ 75 years and older

4. In terms of your racial/ethnic identity, which group do you belong to? (choose one)

Hispanic or Latino White / Caucasian Other /  
 Multi-racial  
 Asian American Indian and/or Alaska Native  
 Black or African American Native Hawaiian and other Pacific Islander

5. What is your combined household income?

Less than \$14,999	\$35,000 to \$49,999	\$100,000 to \$149,000
\$15,000 to \$24,999	\$50,000 to \$74,999	\$150,000+
\$25,000 to \$34,999	\$75,000 to \$99,999	

Is there anything else that you would like State Parks to know about this park?

How about the state park system as a whole? If so, what?

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