

# **The Fiscal Impact of Beaches in California**

*A Report  
Commissioned by  
The California  
Department of Boating  
and Waterways*

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# The Fiscal Impact of Beaches in California

## Executive Summary

- In 1998, California's beaches generated \$14 billion dollars of direct revenue. When the indirect and induced benefits of this spending are added, California's beaches total contribution to the national economy is \$73 billion.
- The federal tax revenues generated by this beach activity are substantial. The direct federal tax revenues generated are \$2.6 billion; however, the total federal tax revenues generated are much higher: \$14 billion.
- California's beaches generated 883,000 jobs across the U.S.
- California receives less than one tenth as much in federal appropriations as New York and New Jersey, which have much smaller coastlines and fewer miles of beaches.
- California ranks eighth in terms of federal appropriations for shoreline protection, just ahead of Delaware. It receives just under \$12,000 per mile of coastline, compared with well over \$800,000 per mile for New York and New Jersey.
- While California receives twice as much in federal shoreline protection appropriations as Delaware (the ninth largest recipient of federal funds) its beaches generate twenty times more economic activity for the national economy and roughly twenty times more tax revenues than Delaware's beaches. In other words, California generates ten times more federal tax dollars, per dollar of shoreline appropriation, than Delaware.
- Our study of Huntington Beach indicates that much of the federal and state tax revenues generated by local beach communities do not go back to local communities. In our survey in Huntington Beach, one-half of all spending on beach activities occurred outside the city. Furthermore, many of the tax dollars generated within the city go to state and federal authorities. Overall, Huntington Beach's beaches generated \$135 million in federal tax revenues and \$25 million in state sales tax revenues compared to only \$4.8 million in local revenues from sales taxes and parking fees.

# The Fiscal Impact of Beaches in California

## Introduction

Beaches are an important destination for tourists in California. They generate very large revenues for local, state and federal governments. The purpose of this report is to estimate these revenues. In particular, this study will provide data on the total economic impact that beach visits have on the national economy and the total federal revenues that are generated by this activity. The study also seeks to compare the amount of economic activity generated in California relative to another state which ranks just behind California in overall federal spending for shoreline preservation: Delaware.

The study also seeks to examine the economic impact at the local level by studying one particular beach city: Huntington Beach. One often-made claim is that local beach communities benefit substantially from beach tourism, so that little assistance from state or federal authorities is required. The case study examines federal tax revenues as well as state sales tax revenues generated in Huntington Beach. We find in fact that the revenues generated from these tax sources are substantial.

This study was commissioned by the California Department of Boating and Waterways (DBW) to examine the economic and tax impact of California's beaches. The study is an outgrowth of a previous study performed for DBW in 1995. This study is divided into three sections: **Chapter 1** updates the data from the 1995 study. **Chapter 2** compares the fiscal impact of California's beaches to another state: Delaware. Finally, **Chapter 3** provides a case study of a one-beach community, Huntington Beach, and examines the fiscal impact of the state and city beaches.

# The Fiscal Impact of Beaches in California

## 1. The Economic Impact of California's Beaches: 1998

During the fall of 1995, the Public Research Institute (PRI) at San Francisco State University conducted a telephone survey under a contract with the California Department of Boating and Waterways. Over 600 residents throughout the state were randomly selected and asked a series of questions regarding their beach-going activities during the previous year. The results of this survey were published and they have been widely disseminated throughout the state and on the World Wide Web. Results from the survey were used to calculate the total economic impact of California's beaches on the state and national economies.<sup>1</sup>

Although the study is still relatively recent, the tremendous growth in California's economy in the late nineties coupled with a substantial increase in the growth of population of the state and moderate inflation mean that the 1995 statistics now significantly underestimate the economic impact of California's beaches. In addition, the figures provided in this study develop the analysis of the impact California's beaches have on federal tax revenues. As in the 1995 study, the impact has been analyzed using IMPLAN software; we have used the latest available data to ensure the accuracy of the results. IMPLAN uses data provided by federal, state and local governments and uses the same methodology (input-output matrices) used by the U.S. Bureau of Economic Analysis. IMPLAN's software has become the standard methodology for conducting this type of analysis. It is used by academics and applied economists all over the United States.<sup>2</sup>

Since conducting an entirely new survey would be prohibitively expensive and it is very unlikely that peoples' basic preferences for beaches has changed significantly, the data here has been updated from the 1995 data. The 1995 survey determined average household spending for one-day trips and for overnight trips by state residents. Tables 1.1 to 1.4 update the old study in several ways. First while inflation has been low, it has not been nonexistent and three years of inflation compounded has a significant effect on the overall impact. Using monthly Consumer Price Index (CPI) data for Western consumers from the Bureau of Labor Statistics (BLS), the total cumulative change in prices is 9.4%.

In addition, California's population has grown significantly. The number of households in California has increased from 10.8 million to an (estimated) 11.45 million (data from California Statistical Abstract). In the previous report, all spending was computed at the household level and then multiplied by the number of households. Since the number of households has now increased, the corresponding state numbers should increase proportionately. As in the previous report, spending was broken down into day-trip spending by Californians, overnight spending by Californians, and spending by tourists from out of state including foreign visitors. Except for the changes mentioned above, the methodology employed is the same as in the 1995 study.

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<sup>1</sup> King, Philip and Michael Potepan, *The Economic Value of California's Beaches*, Public Research Institute Report Commission by the California Department of Boating and Waterways, May 1997.

<sup>2</sup> For more information on IMPLAN software see [www.implan.com](http://www.implan.com).

# The Fiscal Impact of Beaches in California

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**Table 1.1 Average Number of and Average Expenditure on Beach Trips by California Households: A Summary of Survey Responses**

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Based on 9.47% inflation from 1995 to 1998

Total Number of Households Responding to Survey	641 Households	
<b>A. Households Taking Day Trips</b>		
Total Number of Households Taking Day Trips	409 Households (63.8%)	
Mean Number of Day Trips per Year	15.24 Day Trips	
Mean Number of Persons on Typical Day Trip	4.0 Persons	
Mean Expenditures Per Household on		
Typical Day Trip	<u>1995 Dollars</u>	<u>1998 Dollars</u>
Gas & Auto	\$11.05	\$12.10
Parking & Entrance Fees	\$3.15	\$3.45
Food & Drinks from stores	\$15.04	\$16.46
Restaurants	\$15.78	\$17.27
Equipment Rental	\$2.53	\$2.77
Beach Sporting Goods	\$2.35	\$2.57
<u>Incidentals</u>	<u>\$4.97</u>	<u>\$5.44</u>
All Items	\$54.87	\$60.07
<b>B. Households Taking Overnight Trips</b>		
Total Number of Households Taking Overnight Trips	234 Households (36.5%)	
Mean Number of Overnight Trips per Year	4.6 Overnight Trips	
Mean Number of Days of Typical Overnight Trip	2.65 Days	
Mean Number of Persons on Typical Overnight Trip	4.34 Persons	
Mean Expenditures Per Household on		
Typical Overnight Trip	<u>1995 Dollars</u>	<u>1998 Dollars</u>
Gas & Auto	\$35.28	\$38.62
Beach Related Lodging	\$90.47	\$99.04
Parking & Entrance Fees	\$4.63	\$5.07
Food & Drinks from stores	\$39.45	\$43.19
Restaurants	\$53.39	\$58.45
Equipment Rental	\$9.11	\$9.97
Beach Sporting Goods	\$2.34	\$2.56
<u>Incidentals</u>	<u>\$11.11</u>	<u>\$12.16</u>
All Items	\$246.83	\$269.06

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# The Fiscal Impact of Beaches in California

**Table 1.2 Estimates of Beach Attendance and Spending  
for California Households on Day Trips to the Beach**

	1995		1998	
	Sub-Sample of 409 Taking Day Trips	Full Sample of 641 Total Households Surveyed	Sub-Sample of 409 Taking Day Trips	Full Sample of 641 Total Households Surveyed
<b>A. Attendance Days from Survey</b>				
Mean Number of Day Trips	15.24	10.13		
Mean Number of Persons Per Day Trip	4	2.66		
Mean Annual Person Attendance Days	48.14	32.02		
<b>B. Spending From Survey</b>				
Mean Household Spending Per Trip	\$54.87	\$36.49	\$60.07	\$39.95
Mean Per Person Spending Per Trip	\$16.45	\$10.94	\$18.01	\$11.98
Mean Annual Household Spending	\$518.40	\$344.75	\$567.51	\$377.41
Mean Annual Per Person Spending	\$171.57	\$114.10	\$187.82	\$124.91
<b>C. Statewide Attendance Projections</b>				
Mean Annual Person Attendance Days per Household		32.02		32.02
Total California Households (millions)		10.8		11.45
Total Person Attendance Days (millions)		345.78		366.63
<b>D. Total Direct Statewide Spending on Day Trips</b>				
Mean Annual Spending Per Household		344.75		382.84
Total CA Households (millions)		10.8		11.45
Total Statewide Spending (millions)		\$3,723.34		\$4,383.52

## The Fiscal Impact of Beaches in California

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**Table 1.3 Estimates of Beach Attendance and Spending  
for California Households on Overnight Trips to the Beach**

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	1995		1998	
	Sub-Sample of 409 Taking Day Trips	Full Sample of 641 Total Households Surveyed	Sub-Sample of 409 Taking Day Trips	Full Sample of 641 Total Households Surveyed
<b>A. Attendance Days from Survey</b>				
Mean Number of Overnight Trips	4.6	1.75		
Mean Number of Days per Trip	2.65	1.01		
Mean Number of Persons Per Trip	4.34	1.65		
Mean Annual Person Attendance Days	33.1	12.59		
<b>B. Spending From Survey</b>				
Mean Household Spending Per Trip	\$246.83	\$93.92	\$270.21	\$102.82
Mean Per Person Spending Per Trip	\$82.09	\$31.24	\$89.87	\$34.20
Mean Annual Household Spending	\$907.79	\$345.40	\$993.79	\$378.12
Mean Annual Per Person Spending	\$345.24	\$131.36	\$377.95	\$143.80
<b>C. Statewide Attendance Projections</b>				
Mean Annual Person Attendance Days per Household		12.59		12.59
Total California Households (millions)		10.8		11.45
Total Person Attendance Days (millions)		135.97		144.16
<b>D. Total Direct Statewide Spending on Overnight Trips</b>				
Mean Annual Spending Per Household		345.4		383.57
Total CA Households (millions)		10.8		11.45
Total Spending (millions)		\$3,730.32		\$4,391.88

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## The Fiscal Impact of Beaches in California

**Table 1.4 Estimates of Beach Attendance and Spending for Out-of-State Tourists Taking Trips to California's Beaches**

<b>A. Statewide Attendance Estimates</b>		
Total Attendance Days (Tourists 15% of Total)	566.76	
California Residents' Total Attendance Person Days	481.75	
Out-of-State Tourist Person Attendance Days (millions)	85.01	
<b>B. Converting Attendance Days to Out-of-State Tourist Trips</b>		
Out-of-State Tourist Attendance Days	85.01	
Mean Trip Length for Out-of-State Tourists (days)	2.65	
Out-of-State Tourists Visiting State's Beaches (millions)	32.08	
Total Out-of-State Tourist Trips to the Beach (millions)	12.83	
<b>C. Statewide Spending Projections</b>		
	1995	1998
Household Spending Per Trip (3)	\$246.83	\$270.21
Out of State Tourist Trips (millions)	12.83	12.83
Total Statewide Spending (millions)	\$3,166.87	\$3,466.84

Tables 1.5 to 1.8 provide the “Economic Impact” numbers using the data provided in Tables 1.1–1.4. As one can see, total direct statewide spending on California’s beaches is just over \$12 billion dollars, a significant increase from 1995, when it was just over \$10 billion. However, one must also take into account the indirect and induced effects of state spending on beaches since this spending provides jobs and income for California and non-California residents, who in turn spend their added income. Since the numbers provided here are national figures, this indirect and induced effect is much larger than the effects formerly calculated for the state. This is because more of the spillover effect of adding new jobs is captured at the national level. As a result, the employment generated by California’s beaches has a substantial impact on the national economy, generating \$63 billion in revenue when all effects are taken into account.

The primary purpose of this investigation is to examine the impact of California’s beaches on federal tax revenues. Tables 1.6 and 1.7 provide this information. If one just looks at the direct expenditures, California’s beaches provide \$2.3 billion in tax revenues for the federal government. If one includes indirect and induced effects, the number rises to \$12 billion. Finally, Table 1.8 estimates the number of jobs created by California’s beaches in 1998. The direct effect is 273,000 jobs; the total effect is 883,000 jobs.

## The Fiscal Impact of Beaches in California

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**Table 1.5 Total National Economic Impact of Beach Spending in California in 1998: Expenditures Updated for Inflation and Population**

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A.	Spending by California Households on Day Trips	\$4,321,537,219
	Spending by California Households on Overnight Trips	\$4,311,359,394
	Spending by Out-of-State Tourists	\$3,452,096,522
	<b>Total Direct Statewide Spending</b>	<b>\$12,084,993,135</b>
B.	Indirect Spending	\$6,582,000,000
	Induced Spending	\$44,698,000,000
<b>C. Combined National Economic Impact of Beach Spending</b>		<b>\$63,364,993,135</b>

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**Table 1.6 Impact of California Beach Direct Expenditure on Federal Tax Receipts, Updated Updated for Inflation and Population**

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Ratios of Tax Receipts to GDP are average values from 1995-1997

	Estimated 1998 California Beach Direct Expenditure: Updated using Inflation	\$ 12,084,993,135
A.	Ratio of Income Tax Receipts to GDP	0.0861
	Estimated 1998 Federal Income Tax Revenue Generated By Direct California Beach Spending	\$ 1,041,065,831
B.	Ratio of Corporate Tax Receipts to GDP	0.0222
	Estimated 1998 Federal Corporate Tax Revenue Generated By Direct California Beach Spending	\$ 268,541,360
C.	Ratio of Excise Tax Receipts to GDP	0.0073
	Estimated 1998 Federal Corporate Tax Revenue Generated By Direct California Beach Spending	\$ 88,734,893
D.	Ratio of Total Tax Receipts to GDP	0.1906
<b>Estimated 1998 Federal Tax Revenue Generated By Direct California Beach Spending</b>		<b>\$ 2,303,116,875</b>

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## The Fiscal Impact of Beaches in California

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**Table 1.7 Total Impact of California Beach Spending on Federal Tax Receipts: Expenditures Updated for Inflation and Population**

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Ratios of Tax Receipts to GDP are average values from 1995-1997

	Estimated 1998 National Economic Impact of California Beach Spending : Updated using Inflation	\$ 63,364,993,135
A.	Ratio of Income Tax Receipts to GDP	0.0861
	Estimated 1998 Federal Income Tax Revenue Generated By California Beach Spending	\$ 5,458,598,815
B.	Ratio of Corporate Tax Receipts to GDP	0.0222
	Estimated 1998 Federal Corporate Tax Revenue Generated By California Beach Spending	\$ 1,408,037,328
C.	Ratio of Excise Tax Receipts to GDP	0.0073
	Estimated 1998 Federal Corporate Tax Revenue Generated By California Beach Spending	\$ 465,261,821
D.	Ratio of Tax Receipts from Other Sources* to GDP	0.0749
	Estimated 1998 Federal Tax Revenue From Other Sources Generated by California Beach Spending	\$ 4,743,986,842
E.	Ratio of Total Tax Receipts to GDP	0.1906
	Estimated 1998 Federal Tax Revenue Generated By California Beach Spending	\$ 12,075,884,806

\*Comprised primarily of social insurance and retirement receipts.

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**Table 1.8 Total National Employment Impact of 1998 California Beach Spending: Expenditures Updated for Inflation and Population**

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A.	Total Direct National Employment	278,180
B.	Indirect and Induced National Employment	
	Indirect Employment	68,296
	Induced Employment	537,067
	Total Induced and Indirect Spending	605,363
C.	The Combined National Employment Impact	883,543

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## The Fiscal Impact of Beaches in California

In addition to changes in the overall price level and population, California has also experienced significant growth in income per capita, particularly given the recent boom in technology spending. *The numbers calculated in tables 1.1 to 1.8 do not take the increase in household income into account.* Further, economists also have found that spending on beaches and other recreational activities is highly sensitive to changes in income. In economic parlance, a 5% increase in income will not necessarily reflect a 5% increase in spending. To correct for the change in income properly, one must use data on the income elasticity of demand.<sup>3</sup> Tables 1.9 to 1.13 are analogous to tables 1.5 to 1.8 except that they take into account the effect of an increase in Californian's income. As one can see, when this effect is taken into account, **total direct spending at California's beaches increases to \$14 billion and direct federal tax revenues increase to \$2.6 billion. The combined national impact is \$73 billion and the total federal tax impact is just over \$14 billion.**

**Table 1.9 Total 1998 California Beach Spending by Expenditure  
Category Updated for Income**

Category	Estimated 1998 Total CA Day Trip Spending (adjusted for pop growth (\$mil)	Estimated 1998 Total CA Overnight Trip Spending (adjusted for pop growth (\$mil)	Estimated 1998 Out-of-State Beach Spending (\$mil)	Total 1998 CA Direct Beach Spending (\$mil)
Gas & Auto	\$944.11	\$671.36	\$655.19	\$2,270.66
Beach Related Lodging	\$0.00	\$1,583.05	\$1,558.93	\$3,141.97
Parking & Entrance Fees	\$253.65	\$83.04	\$81.55	\$418.23
Food & Drinks from Stores	\$1,271.61	\$742.88	\$725.78	\$2,740.27
Restaurants	\$1,391.15	\$1,048.32	\$1,019.81	\$3,459.28
Equip Rental	\$279.71	\$224.32	\$213.78	\$717.81
Beach Sporting Goods	\$259.81	\$57.62	\$54.91	\$372.34
Incidentals	\$466.58	\$232.30	\$224.60	\$923.48
<b>TOTALS</b>	<b>\$4,866.63</b>	<b>\$4,642.88</b>	<b>\$4,534.54</b>	<b>\$14,044.05</b>

<sup>3</sup>The data used here was obtained from Falvey, Rodney and Gemmell, Norman "Are Services Income-Elastic? Some New Evidence", *Review of Income and Wealth*, 42, No 3, 1996.

## The Fiscal Impact of Beaches in California

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**Table 1.10 Impact of California Beach Direct Expenditure on  
Federal Tax Receipts, Updated for Income**

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Ratios of Tax Receipts to GDP are average values from 1995-1997

Estimated 1998 California Beach Direct Expenditure: Updated using Elasticities	\$	14,044,049,092
A. Ratio of Income Tax Receipts to GDP		0.0861
Estimated 1998 Federal Income Tax Revenue Generated By Direct California Beach Spending	\$	1,209,829,370
B. Ratio of Corporate Tax Receipts to GDP		0.0222
Estimated 1998 Federal Corporate Tax Revenue Generated By Direct California Beach Spending	\$	312,073,661
C. Ratio of Excise Tax Receipts to GDP		0.0073
Estimated 1998 Federal Corporate Tax Revenue Generated By Direct California Beach Spending	\$	103,119,396
D. Ratio of Total Tax Receipts to GDP		0.1906
<b>Estimated 1998 Federal Tax Revenue Generated By Direct California Beach Spending</b>	<b>\$</b>	<b>2,676,467,094</b>

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**Table 1.11 Total National Economic Impact of Beach Spending  
in California in 1998: Updated for Income**

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A. Spending by California Households on Day Trips	\$	4,866,630,047
Spending by California Households on Overnight Trips	\$	4,642,877,898
Spending by Out-of-State Tourists	\$	4,534,541,147
Total Direct Statewide Spending	\$	14,044,049,092
B. Indirect Spending	\$	7,718,000,000
Induced Spending	\$	51,786,000,000
C. Combined National Economic Impact of Beach Spending	\$	73,548,000,000

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## The Fiscal Impact of Beaches in California

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**Table 1.12 Total Impact of California Beach Spending on Federal Tax Receipts: Updated for Income**

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Ratios of Tax Receipts to GDP are average values from 1995-1997

Estimated 1998 National Economic Impact of California Beach Spending : Updated using Income Elasticities	\$	73,548,000,000
<b>A.</b> Ratio of Income Tax Receipts to GDP		0.0861
Estimated 1998 Federal Income Tax Revenue Generated By California Beach Spending	\$	6,335,817,394
<b>B.</b> Ratio of Corporate Tax Receipts to GDP		0.0222
Estimated 1998 Federal Corporate Tax Revenue Generated By California Beach Spending	\$	1,634,314,537
<b>C.</b> Ratio of Excise Tax Receipts to GDP		0.0073
Estimated 1998 Federal Corporate Tax Revenue Generated By California Beach Spending	\$	540,031,249
<b>D.</b> Ratio of Tax Receipts From Other Sources* to GDP		0.0749
Estimated 1998 Federal Tax Revenue From Other Sources Generated By California Beach Spending	\$	5,506,364,430
<b>E.</b> Ratio of Total Tax Receipts to GDP		0.1906
<b>Estimated 1998 Federal Tax Revenue Generated By California Beach Spending</b>	<b>\$</b>	<b>14,016,527,609</b>

\* Comprised primarily of social insurance and retirement receipts.

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**Table 1.13 Total National Employment Impact of 1998 California Beach Spending; Updated for Income**

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<b>A.</b>	Total Direct National Employment	321,647 jobs
<b>B.</b>	Indirect and Induced National Employment	
	Indirect Employment	79,793
	Induced Employment	622,264
	Total Induced and Indirect Spending	702,057
<b>C.</b>	The Combined National Employment Impact	1,023,704 jobs

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# The Fiscal Impact of Beaches in California

## 2. How does Delaware compare to California?

As shown in Table 2.1, although California has the longest coastline of the twelve states receiving funds and the second longest shoreline (after Florida), it ranks eight overall in federal appropriations for shoreline protection. In terms of overall spending per mile of shoreline, California again ranks second to last. If one includes only coastline, the comparison is even starker. California receives just under \$12,000 per mile of coastline compared to over \$800,000 for New York and New Jersey. In other words, New York and New Jersey receive over 75 times more federal dollars per mile of coastline than California.

Given the substantial revenues generated by California's beaches, a useful point of comparison might be another state that receives substantial assistance from the federal government. To make an accurate comparison, we chose a state that has performed a similar study to the one completed in Section 1. The most comprehensive study has been performed by the state of Delaware, prepared by Jack Faucett Associates.<sup>4</sup> Although at first glance Delaware, a small state, might seem to be a strange comparison with California, in terms of federal funding, the two states rank eighth and ninth, as one can see from Table 2.1. The two states also rank tenth and eleventh in terms of federal appropriations per mile of shoreline.

**Table 2.1 Federal Appropriations for Shoreline Protection by State**

State	Total Federal Appropriations FY 95-99 (millions of \$)		Coastline*	Shoreline*	Appropriations per mile of Coastline	Appropriations per mile of Shoreline
New Jersey	111	130	1792	\$ 853,846.15	\$ 61,941.96	
New York	104	127	1850	\$ 818,897.64	\$ 56,216.22	
Florida	90	770	5095	\$ 116,883.12	\$ 17,664.38	
South Carolina	46	187	2876	\$ 245,989.30	\$ 15,994.44	
Virginia	45	112	3315	\$ 401,785.71	\$ 13,574.66	
Illinois	30	0		N.A.	N.A.	
North Carolina	18	301	3375	\$ 59,800.66	\$ 5,333.33	
California	10	840	3427	\$ 11,904.76	\$ 2,918.00	
Delaware	5	28	381	\$ 178,571.43	\$ 13,123.36	
Pennsylvania	2	0	89	N.A.	\$ 22,471.91	
Maryland	2	31	3190	\$ 64,516.13	\$ 626.96	

\* Source: National oceanographic and Atmospheric Administration; U.S. Department of Commerce

<sup>4</sup>Jack Faucett Associates, "The Economic Effects of a Five Year Nourishment Program for the Ocean Beaches of Delaware", Final report, March 1998.

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The survey data contained in the Delaware study was remarkably similar in scope and methodology to the one conducted through PRI. Consequently, it was relatively straightforward to update the data. As in Section 1, the data was updated for changes in the price level, in incomes and in population. The national impact figures were calculated using IMPLAN software and the same methodology used as in Section 1. In short, the comparison of the economic impacts in the two states should be quite appropriate given that the same methodologies were applied. Tables 2.2 to 2.5 provide information on spending in Delaware comparable to the tables in Section 1. In all cases, we have updated for inflation, for population increases and for increases in income as we did in Section 1. Table 2.6 provides a breakdown of out-of-state spending at Delaware's beaches.

As one can see, the differences are quite dramatic, reflecting the differences in the size of the state. While California receives only twice as much in shoreline protection as Delaware, the total direct spending by beach visitors in Delaware is \$652 million, compared to \$14 billion in California. If one accounts for indirect and induced effects, Delaware's beaches contribute \$3.7 billion to the national economy, but California's total impact is over \$73 billion. The revenue impact tells the same story: Delaware's total economic impact from beach tourism contributed \$715 million in federal tax revenues, while California contributed \$14 billion.

In sum, California's beaches contribute roughly twenty times more to the national economy and to federal tax revenues than Delaware Beaches, while receiving only twice as much from the federal government in shore protection appropriations. Another way of thinking about this difference is: California's beaches generate approximately 10 times the federal tax benefit per dollar spent by the federal government in shore protection.

**Table 2.2 Delaware Overnight Trip Beach Expenditures by Category  
Updated for Income and Population Growth**

Category	1996 Expenditure per Overnight Trip by Category	Total 1996 Expenditure on Overnight Trips	Income Elasticities	Estimated 1998 Expenditures on Overnight Trips
Lodging	\$179.37	\$167,616,555.35	0.7115	\$183,805,410.58
Restaurants	\$106.20	\$99,236,114.47	1.6126	\$117,872,448.27
Entertainment	\$59.00	\$55,131,174.70	2.1498	\$68,482,665.62
Food Shopping	\$45.30	\$42,326,514.77	1.2735	\$48,822,448.95
Non Food Shopping	\$68.18	\$63,712,075.28	3.7162	\$89,243,926.39
Transportation	\$17.65	\$16,494,891.79	1.3572	\$19,166,151.16
<b>Totals</b>	<b>\$475.69</b>	<b>\$444,517,326.36</b>		<b>\$527,393,050.98</b>



## The Fiscal Impact of Beaches in California

**Table 2.3 Delaware Day Trip Beach Expenditures by Category  
Updated for Income and Population Growth**

Category	1996 Expenditure per Day Trip by Category	Total 1996 Expenditure on Day Trips	Income Elasticities	Estimated 1998 Expenditures on Overnight Trips
Lodging	\$0.00	\$0.00	0.7115	\$0.00
Restaurants	\$19.95	\$ 36,621,044.43	1.6126	\$ 43,498,399.63
Entertainment	\$9.28	\$ 17,036,634.86	2.1498	\$ 21,162,512.40
Food Shopping	\$11.74	\$ 21,553,144.56	1.2735	\$ 24,860,948.40
Non Food Shopping	\$22.69	\$ 41,652,256.08	3.7162	\$ 58,343,898.85
Transportation	\$6.44	\$ 11,825,277.52	1.3572	\$ 13,740,317.88
<b>Totals</b>	<b>\$70.11</b>	<b>\$128,688,357.45</b>		<b>\$161,606,077.17</b>

**Table 2.4 National Impact of 1998 Delaware  
Beach Spending**

**A. National Spending Impacts**

Direct Spending	\$ 652,030,302.00
Indirect Spending	\$ 381,424,442.00
Induced Spending	\$ 2,722,655,693.00

<b>Total Impact</b>	<b>\$ 3,756,110,438.00</b>
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**B. National Employment Impacts**

Direct Employment	17,060
Indirect Employment	4,046
Induced Employment	32,716

<b>Total Employment</b>	<b>53,821</b>
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## The Fiscal Impact of Beaches in California

**Table 2.5 Total Impact of Delaware Beach Spending  
on Federal Tax Receipts**

Ratios of Tax Receipts to GDP are average values from 1995-1997

Estimated 1998 National Economic Impact of Delaware Beach Spending : Updated using Inflation	\$3,756,110,438
A. Ratio of Income Tax Receipts to GDP	0.0861
Estimated 1998 Federal Income Tax Revenue Generated By Delaware Beach Spending	323,571,407
B. Ratio of Corporate Tax Receipts to GDP	0.0222
Estimated 1998 Federal Corporate Tax Revenue Generated By Delaware Beach Spending	83,464,756
C. Ratio of Excise Tax Receipts to GDP	0.0073
Estimated 1998 Federal Corporate Tax Revenue Generated By Delaware Beach Spending	27,579,499
D. Ratio of Total Tax Receipts to GDP	0.1906
<b>Estimated 1998 Federal Tax Revenue Generated By Delaware Beach Spending</b>	<b>\$715,826,748</b>

**Table 2.6 Estimated 1998 Expenditures on Overnight  
Trips to Delaware Beaches by State of Residence of  
Beach Visitors**

State of Residence	Percent of All Visitors	Estimated 1998 Number of Overnight Trips by State of Origin	Estimated 1998 Overnight Trip Direct Expenditure by State of Origin
Maryland	22.6	2,930,994	\$ 119,190,830
Pennsylvania	19.59	2,540,627	\$ 103,316,299
New Jersey	19.28	2,500,423	\$ 101,681,380
New York	9.71	1,259,290	\$ 51,209,865
Virginia	8.3	1,076,427	\$ 43,773,623
Delaware	8.24	1,068,646	\$ 43,457,187
Connecticut	1.93	250,302	\$ 10,178,686
Massachusetts	1.53	198,426	\$ 8,069,114
Florida	1.05	136,175	\$ 5,537,627
West Virginia	1.04	134,878	\$ 5,484,888
Other	6.73	872,814	\$ 35,493,552
		12,969,000	\$ <b>527,393,051</b>

# The Fiscal Impact of Beaches in California

## 3. A Case Study of Huntington Beach

In many ways, Huntington Beach is a typical beach community in Southern California. Huntington Beach is a small to medium sized city (population about 190,000) city just 35 miles southeast of Los Angeles. One issue of concern to many policy makers is the extent to which tax revenues generated by local governments benefit the locality itself, as opposed to the state or the federal government. This case study examines the revenues generated by federal taxes, by state sales taxes and by parking revenues (some go to the state and some go to the city). The purpose is to estimate the tax revenue impact of beach spending from one specific community. Although Huntington Beach represents only one community, it is quite likely that spending patterns in other Southern California beach communities will be similar, so that the relative ratios between state, local and federal tax dollars generated will likely be similar.

The data used for this study was obtained from several sources. Information on total beach attendance was obtained from the City of Huntington Beach, which maintains monthly and yearly statistics on beach attendance at its state and city beaches. In addition a survey of beach visitors was undertaken by Kim Sterret and Philip King on July 9, 1999. Care was taken to get a full, representative sample throughout all portions of both the city and state beaches. A Friday was chosen as the most representative day since it on the cusp between a weekday and a weekend day. Respondents were given a brief survey about their spending habits, in particular how much they spent and *where* the money was spent. As one can see in the tables below, a substantial amount of the beach spending occurred in inland communities—not at Huntington Beach. In addition, visitors were asked how far away from Huntington Beach they lived (including out-of-state and foreign visitors). Overall, the spending percentages conformed closely to those in our survey from 1995, and the relative spending percentages from this study were used with one exception; parking was a significantly larger proportion of overall expenses for day-trippers in our July 9th survey than in the 1995 telephone survey. This result is not surprising since Huntington Beach requires visitors to pay for parking and some other beaches do not.

The results of the survey are presented in Table 3.1. The overall breakdown of visitors is also consistent with the percentage breakdown provided by the City of Huntington Beach from their records of people needing medical attention at the beach. For a more detailed breakdown of survey results, the reader may consult the appendix.

## The Fiscal Impact of Beaches in California

**Table 3.1 Results of the Huntington Beach Survey**

Category	Number of Parties	Number of People	Percent of Total Number of People	Avg. Daily Expenditure per Party	Avg. Daily Expenditure per Person	Avg. Percent of Expenditure in Huntington Beach
Local	18	53	12%	\$ 11.93	\$ 4.05	68.33%
Less Than 60 Miles	54	274	60%	\$ 54.46	\$ 10.73	42.43%
In-State, > 60 Miles	10	39	8%	\$ 102.30	\$ 26.23	48.30%
Out of State	23	86	19%	\$ 109.61	\$ 29.31	61.39%
Out of Country	4	8	2%	\$ 70.75	\$ 35.38	62.00%
<b>Totals</b>	<b>109</b>	<b>460</b>	<b>100%</b>	<b>\$ 64.06</b>	<b>\$ 15.18</b>	<b>49.80%*</b>

\*Average, weighted by number of people in each category.

*Please note that only about half (49.80%) of all spending that results from trips to Huntington Beach actually occurs in Huntington Beach. Most of the other spending occurs within a 60-mile radius of Huntington Beach. For example, note that by far the largest category of beach attendees come from Orange county and neighboring counties, but do not reside in Huntington Beach. A substantial portion of their spending occurs outside of the city. In addition, many people visiting Southern California (e.g., Disneyland) plan to attend Huntington Beach for a day, but the majority of their expenditures for that day lie outside city limits.*

Given the information from Table 3.1, it is possible to estimate the total impact of beach spending generated at Huntington Beach. This is presented in Table 3.2. The total direct yearly expenditure by all visitors is estimated to be \$139 million.

**Table 3.2 Estimated 1998 Direct Beach Expenditure Generated by Huntington Beach Tourists**

Category	Percent	1998 Estimated Attendance	Avg. Daily Expenditure per Person	Total 1998 Direct Exp.
Local	11.5	1,055,109	\$4.05	\$4,276,176
Less Than 60 Miles	59.6	5,454,713	\$10.73	\$58,548,578
In-State, > 60 Miles	8.5	776,401	\$26.23	\$20,365,588
Out of State	18.7	1,712,063	\$29.31	\$50,187,339
Out of Country	1.7	159,262	\$35.38	\$5,633,882
<b>Totals</b>	<b>100</b>	<b>9,157,547</b>		<b>\$139,011,563</b>

## The Fiscal Impact of Beaches in California

Tables 3.3 and 3.4 estimate the national impact of these expenditures using the same methodology applied in Sections 1 and 2. As before, the indirect and induced effect implies that the total national impact is substantially greater than the direct impact. In this case, the total national impact is \$711 million. The total amount of federal taxes generated by this activity is \$135 million.

<b>Table 3.3 National Impact of 1998 Huntington Beach Expenditures</b>		
Direct Expenditure	\$	130,391,325
Indirect Expenditure	\$	73,785,749
<u>Induced Expenditure</u>	<u>\$</u>	<u>507,158,111</u>
<b>Total</b>	<b>\$</b>	<b>711,335,183</b>

<b>Table 3.4 Impact of 1998 Huntington Beach Direct, Indirect and Induced Expenditure on Federal Tax Receipts</b>		
Ratios of Tax Receipts to GDP are average values from 1995-1997		
Estimated 1998 Huntington Beach Total Expenditure	\$	711,335,183
A. Ratio of Income Tax Receipts to GDP		0.0861
Estimated 1998 Federal Income Tax Revenue Generated By Total Huntington Beach Spending	\$	61,278,210
B. Ratio of Corporate Tax Receipts to GDP		0.0222
Estimated 1998 Federal Corporate Tax Revenue Generated By Total Huntington Beach Spending	\$	15,806,622
C. Ratio of Excise Tax Receipts to GDP		0.0073
Estimated 1998 Federal Corporate Tax Revenue Generated By Total Huntington Beach Spending	\$	5,223,028
D. Ratio of Total Tax Receipts to GDP		0.1906
<b>Estimated 1998 Federal Tax Revenue Generated By Total Huntington Beach Spending</b>	<b>\$</b>	<b>135,563,839</b>

## The Fiscal Impact of Beaches in California

Since the state economy is smaller than the national economy, the total effect of Huntington Beach spending is smaller. Nevertheless, the total impact on California's economy of Huntington Beach tourism is \$329 million as shown in Table 3.5.

<b>Table 3.5 Impact of 1998 Beach Expenditures at Huntington Beach on the CA Economy</b>	
Direct Expenditure	\$ 139,939,222
Indirect Expenditure	\$ 38,956,845
Induced Expenditure	\$ 160,895,602
<b>Total</b>	<b>\$ 329,791,669</b>

Tables 3.6 and 3.7 estimate the total sales tax impact from the direct spending (\$10 million) as well as the total sales tax effect (\$25.5 million).

<b>Table 3.6 CA Sales Taxes Generated by Total Huntington Beach Spending</b>		
Jurisdiction	Rate	Revenue Generated
State (General Fund)	5.00%	\$ 16,489,583.45
State (Local Revenue Fund)	0.50%	\$ 1,648,958.35
State (Local Public Safety Fund)	0.50%	\$ 1,648,958.35
Local (City and County Operations)	1.00%	\$ 3,297,916.69
Local (County Transportation Funds)	0.25%	\$ 824,479.17
Orange County (Transportation)	0.50%	\$ 1,648,958.35
<b>Total</b>	<b>7.75%</b>	<b>\$ 25,558,854.35</b>

<b>Table 3.7 CA Sales Taxes Generated by Direct Huntington Beach Expenditure</b>		
Jurisdiction	Rate	Revenue Generated
State (General Fund)	5.00%	\$ 6,698,488.58
State (Local Revenue Fund)	0.50%	\$ 669,848.86
State (Local Public Safety Fund)	0.50%	\$ 669,848.86
Local (City and County Operations)	1.00%	\$ 1,339,697.72
Local (County Transportation Funds)	0.25%	\$ 334,924.43
Orange County (Transportation)	0.50%	\$ 669,848.86
<b>Total</b>	<b>7.75%</b>	<b>\$ 10,382,657.29</b>

## The Fiscal Impact of Beaches in California

As one can see in Table 3.7 the total sales tax revenue generated from direct spending is \$7.7 million.<sup>5</sup> However, most of the revenue goes to the State of California, not to local authorities. Table 3.8 gives a detailed breakdown of where the money is allocated by the State of California's Board of Equalization (BOE). In fact, according to the BOE, only just over \$1 million goes directly to Huntington Beach. Another \$1.7 million is distributed to Orange County; some of this is distributed to Huntington Beach. *In all, we estimate that only \$1.1 million in sales tax revenues generated from beach activity goes back to the City of Huntington Beach.*

**Table 3.8 California Sales Tax Revenue From Direct Expenditure**

Jurisdiction	Rate	Revenue Generated*
1. State (General Fund)	5%	\$ 5,014,142
2. State (Local Revenue Fund, Disbursed to county)	0.50%	\$ 501,414
3. State (Local Public Safety Fund, Disbursed to county)	0.50%	\$ 501,414
4. Orange County (Transportation)	0.50%	\$ 501,414
5. Local (County Transportation Funds)	0.25%	\$ 250,707
6. Local (City and County Operations, Disbursed to incorporated city)	1%	\$ 1,002,828
<b>Total</b>	<b>7.75%</b>	<b>\$ 7,771,921</b>

\*Revenues are calculated by multiplying direct expenditures subject to sales taxes by the various tax rates. Revenue from Items 2 and 3 are earmarked for indigent healthcare and general public safety, and are disbursed at the county level. Item 4 is a special district tax imposed and allocated to Orange County. Items 5 and 6 form the Bradley-Burns Uniform Local Sales and Use Tax. Revenues from Item 6 are distributed to the location of sale if the transaction took place in an incorporated city, or, otherwise, to the county level.

<sup>5</sup> Not all of the direct expenditures are subject to sales tax; for example, some food items are exempt. Our survey results were used to estimate the total expenditures subject to sales tax.

## The Fiscal Impact of Beaches in California

Finally, tables 3.9 and 3.10 show the estimated local tax benefits from Huntington Beach tourism. As one can see, the numbers are quite modest compared to the state and national totals, and parking fees (on valuable property) generate most of the local revenues. This result occurs for two main reasons: (1) half of all spending on beach activities occurs outside of the city, (2) as shown in table 3.9, most of the sales tax revenues go to the state, not to local governments. Including parking fees, the city receives \$3.2 million in revenues. If indirect and induced effects are added, the number increases to \$4.8 million.

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**Table 3.9 Local Revenues From Direct Expenditures**

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Direct Sales Tax Revenue to Orange County	\$	1,754,950
Huntington Beach Population as a Percentage of Orange County		<u>x 0.07</u>
Estimated Sales Tax Revenue to Huntington Beach disbursed by the county	\$	122,846
Direct Sales Tax Revenue to Huntington Beach	\$	1,002,828
Revenue from Parking and Entrance Fees	\$	2,076,679
<b>Total Local Revenue from Direct Expenditures</b>	<b>\$</b>	<b>3,202,354</b>

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**Table 3.10 Local Revenues From Total (Direct and Indirect) Expenditures**

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Total CA Sales Tax Revenue from Direct and Indirect Expenditures	\$	18,702,111
Percent of Sales Tax Revenue to County Level		<u>x 0.226</u>
Total Sales Tax Revenue to Orange County	\$	4,223,057
Huntington Beach Population as a Percentage of Orange County		<u>x 0.07</u>
Estimated Sales Tax Revenue to Huntington Beach Disbursed from County Level	\$	295,614
Proportion of Sales Tax Revenue Allocated to City		<u>x 0.129</u>
Huntington Beach Sales Tax Revenue	\$	2,413,176
Revenue from Parking and Entrance Fees	\$	2,076,679
<b>Total Local Revenue from Direct and Indirect Expenditures</b>	<b>\$</b>	<b>4,785,469</b>

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# The Fiscal Impact of Beaches in California

## 4. Conclusion

Our study indicates that the impact that California's beaches has on the state and national economy, which was substantial in 1995, has grown significantly. California's beaches contribute \$73 billion to the national economy and generate \$14 billion in tax revenues for the federal government. In comparison, California only received \$10 million in shore protection appropriations from fiscal year 1995-1999. In terms of overall federal spending for shoreline preservation, California ranks eighth out of eleven states receiving funds. When compared with Delaware, a state ranking just behind California in overall federal funding, California generates twenty times more economic activity per federal dollar appropriated than Delaware. When compared to New York or New Jersey, the largest recipients of federal shoreline funding, California receives roughly 75 times *fewer* dollars per mile of coastline than New York or New Jersey.

Our study of Huntington Beach indicates that much of the federal and state tax revenues generated by local beach communities does not go back to local communities. In our survey in Huntington Beach, one-half of all spending on beach activities occurred outside the city. Further, many of the tax dollars generated within the city go to state and federal authorities. Overall, Huntington Beach's beaches generated \$135 million in federal tax revenues and \$25 million in sales tax revenues compared to only \$4.8 million in local revenues from sales taxes and parking fees.

# The Fiscal Impact of Beaches in California

## Appendix 1: Detailed Results from the Huntington Beach Survey

Table A.1 Huntington Beach Pier

Category	Number of Parties	Number of People	Percent of Total	Avg. Daily Expenditure per Party	Avg. Daily Expenditure per Person	Avg. Percent of Expenditure in Huntington Beach
Local	5	10	20%	\$5.20	\$2.60	80%
Less Than 60 Miles	4	15	31%	\$16.25	\$4.33	95%
In-State, > 60 Miles	3	9	18%	\$36.00	\$12.00	77%
Out of State	7	14	29%	\$68.29	\$34.15	100%
Out of Country	1	1	2%	\$18.00	\$18.00	80%
Totals	20	49	100%	\$34.75	\$14.18	89.76%*

Table A.2 City Beach

Category	Number of Parties	Number of People	Percent of Total	Avg. Daily Expenditure per Party	Avg. Daily Expenditure per Person	Avg. Percent of Expenditure in Huntington Beach
Local	5	12	11%	\$22.50	\$9.38	57.50%
Less Than 60 Miles	12	50	48%	\$56.33	\$13.52	64.58%
In-State, > 60 Miles	3	12	11%	\$198.33	\$49.58	68.33%
Out of State	8	27	26%	\$103.13	\$30.56	48.75%
Out of Country	2	4	4%	\$125.00	\$62.50	34.00%
Totals	30	105	100%	\$81.95	\$23.41	58.97%*

Table A.3 North of Pier

Category	Number of Parties	Number of People	Percent of Total	Avg. Daily Expenditure per Party	Avg. Daily Expenditure per Person	Avg. Percent of Expenditure in Huntington Beach
Local	3	6	11%	\$10.00	\$5.00	33.33%
Less Than 60 Miles	10	30	53%	\$15.60	\$5.20	34.50%
In-State, > 60 Miles	2	13	23%	\$55.00	\$8.46	20.00%
Out of State	3	5	9%	\$56.67	\$34.00	36.00%
Out of Country	1	3	5%	\$15.00	\$5.00	100.00%
Totals	19	57	100%	\$25.32	\$8.44	34.65%*

## The Fiscal Impact of Beaches in California

Table A.4 Huntington State Beach

Category	Number of Parties	Number of People	Percent of Total	Avg. Daily Expenditure per Party	Avg. Daily Expenditure per Person	Avg. Percent of Expenditure in Huntington Beach
Local	1	2	1%	\$20.00	\$10.00	100.00%
Less Than 60 Miles	14	105	73%	\$49.00	\$6.53	10.43%
In-State, > 60 Miles	2	5	3%	\$105.00	\$42.00	4.00%
Out of State	3	31	22%	\$326.00	\$31.55	36.67%
Out of Country	0	0	0%	\$ -	\$ -	0.00%
<b>Totals</b>	<b>20</b>	<b>143</b>	<b>100%</b>	<b>\$94.70</b>	<b>\$13.24</b>	<b>17.14%*</b>

Table A.5 City Beach, South End

Category	Number of Parties	Number of People	Percent of Total People	Avg. Daily Expenditure per Party	Avg. Daily Expenditure per Person	Avg. Percent of Expenditure in Huntington Beach
Local	4	23	22%	\$12.20	\$2.12	100.00%
Less Than 60 Miles	14	74	70%	\$35.23	\$6.67	46.07%
In-State, > 60 Miles	0	0	0%	\$ -	\$ -	0.00%
Out of State	2	9	8%	\$35.00	\$7.78	52.00%
Out of Country	0	0	0%	\$ -	\$ -	0.00%
<b>Totals</b>	<b>20</b>	<b>106</b>	<b>100%</b>	<b>\$30.60</b>	<b>\$5.77</b>	<b>58.28%*</b>

## The Fiscal Impact of Beaches in California

### Appendix 2 : Distribution of Funds Generated by Sales and Use Taxes in Orange County

The sales tax rate in Orange County is 7.75%, which can be broken down into its components of the standard statewide sales tax rate of 7.25%, and the Orange County special district transactions and use tax of 0.5%.

The standard statewide tax can be further decomposed into the sales and use tax portion (6%), and the Bradley-Burns Uniform Local Sales and Use Tax (1.25%). The destination of the funds generated by these components are given in the table below.

<b>Orange County Sales and Use Tax Revenue Distribution</b>		
Sales and Use Tax	5%	General Fund
	0.5%	Local Revenue Fund
	0.5%	Local Public Safety Fund
Bradley-Burns	1%	County and Incorporated City General Fund
	0.25%	County Transportation Funds
District Transactions and Use Tax	0.5%	Orange County Local Transportation Authority
<b>Total</b>	<b>7.75%</b>	
Sources: California State Board of Equalization Annual Report 1998, Appendix Table 2. CA Board of Equalization, California City and County Sales and Use Tax Rates, April 1999.		

# The Fiscal Impact of Beaches in California

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