

# Technical Report

BROWARD COUNTY  
DEPARTMENT OF  
NATURAL RESOURCE  
PROTECTION

TECHNICAL REPORT  
97-03

BROWARD COUNTY  
BEACHES:  
AN ECONOMIC STUDY

1995-96

**Broward County Beaches:**

**An Economic Study**

**1995-96**

**Prepared for:**

**Broward County  
Department of Natural Resource Protection  
Biological Resources Division**

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## INTRODUCTION: THE ECONOMIC BENEFITS OF BROWARD COUNTY'S BEACHES

This report provides estimates of the economic importance of the beaches of Broward

County to the economies of both the county and the

State of Florida. Beaches make three types of

contribution to the local economy: they add value to

properties; they create sales, incomes and jobs as a

result of increased resident and non-resident

spending; and they increase the local and state tax

base. This report estimates that Broward's beaches

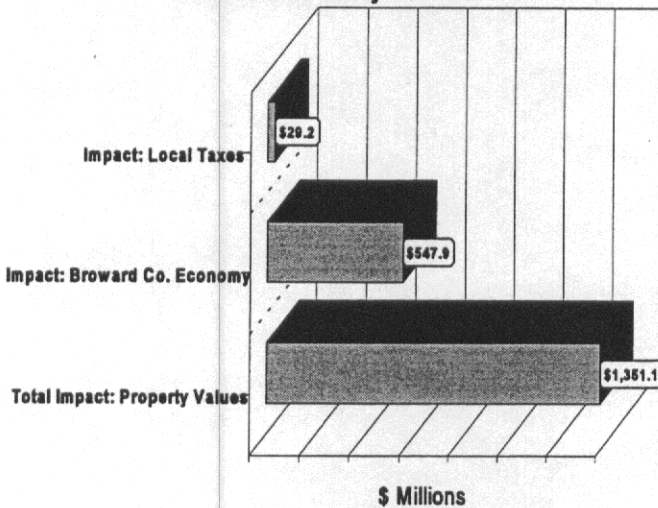
add \$1.351 billion to local property values; that local

economic production is higher by \$0.547.9 billion

because of the beaches; and that the beaches cause

the revenues of local governments to be higher by \$29.2 million.

**Economic Impact of Broward County Beaches  
On Broward County - 1995-96**



### Beaches and Property Values

Conventional studies of the economic benefits of beaches identify certain benefits of beaches and provide estimates of each benefit. These studies focus on the benefits of property protection and recreational beach use<sup>1</sup>, and procedures for the measurement of these benefits have been developed over many years.

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<sup>1</sup>This is standard in the economic analysis provided for U.S. Army Corps of Engineers projects. This analysis is used to project benefits from a project not yet constructed. For this Broward study, the benefits need to be determined for a beach system that is already in existence.

**TABLE A**  
**Economic Benefits of Broward County Beaches**  
**Impact on Broward County**  
**1995-96**  
**Millions of Dollars**

| Benefit                                                             | Amount      |
|---------------------------------------------------------------------|-------------|
| <b>Impact on Property Values:</b>                                   |             |
| Barrier Island Property Values <sup>1</sup>                         | \$ 1,048.7  |
| Of Which: Recreational Value <sup>2</sup>                           | 60.6        |
| Storm Protection & Other                                            | 988.1       |
| Off Island Property Values                                          | 302.4       |
| Of Which: Recreational Value <sup>3</sup>                           | 302.4       |
| Total Impact on Property Values                                     | \$ 1,351.1  |
| <b>Impact on Broward County Economy:</b>                            |             |
| Direct Spending by Barrier Island Residents <sup>4</sup>            | \$ 117.7    |
| Direct Spending by Other Broward Residents <sup>5</sup>             | 19.2        |
| Total Direct Spending by Broward Residents                          | \$ 136.9    |
| Direct Spending by Non-Residents of Broward in Broward <sup>6</sup> | \$ 285.3    |
| Total Direct Spending in Broward                                    | \$ 422.2    |
| Indirect Spending in Broward <sup>6</sup>                           | 125.7       |
| Total Impact on Broward Economy                                     | \$ 547.9    |
| Jobs Created in Broward <sup>7</sup>                                | 17,710 jobs |
| <b>Impact on Local Taxes Annually</b>                               |             |
| Property Taxes <sup>8</sup>                                         | \$ 29.9     |
| Of Which: Barrier Island Properties                                 | \$ 28.2     |
| Of Which: Nine Municipalities + Unincorporated County               | \$ 26.5     |
| Broward County                                                      | 5.7         |
| Broward School District                                             | 8.0         |
| Broward Hospital Districts                                          | 9.9         |
| South Florida Water Management District                             | 2.3         |
| Mainland Properties                                                 | 0.6         |
| State Revenue Sharing (e.g gas taxes returned to county)            | \$ 1.7      |
|                                                                     | \$ 1.7      |

Note: Impact on certain local taxing authorities such as Hillsboro Inlet taxing district are less than \$100,000 annually. <sup>1</sup>TABLE 1.9 <sup>2</sup>TABLE 1.8 <sup>3</sup>TABLE 1.9 <sup>4</sup>TABLE 2.4 <sup>5</sup>TABLE 2.4 <sup>6</sup>TABLE 2.4 <sup>7</sup>TABLE 2.4 <sup>8</sup>TABLE 1.10

This study approaches the problem of determining the benefits of beaches by means of an analysis of private property values because the direct benefits from beaches will result in increased private property values.

For example, if a home on the beach is vulnerable to storm damage, its value will be discounted by the expected property losses that it will incur. If the beach in front of the home is widened, there will be a reduction in the expected property losses and, therefore, a reduction in the discount buyers will demand to compensate for expected storm damage.

The protection accorded to public infrastructure by beaches will also show up in increased private property values. Suppose a section of public road used to access a coastal property suffers from periodic storm damage. This will make the coastal property less attractive in the market and result in a discount in its value. If the beach adjacent to the road is widened, the extent of periodic damage to the road will be reduced and, once again, the discount applied to adjacent private properties will be reduced.

Beaches also provide recreational opportunities but these will also show up in increased property values. Golf course communities are a familiar sight in Florida, and nobody doubts that homes which are adjacent to golf courses (other things equal) are more valuable than those which are not beside the golf courses. Similarly, homes that are adjacent to beaches (other things equal) are more valuable than those which are not.

Beaches may also enhance private properties in ways that are not allowed for in the conventional analysis. Beaches provide attractive views, opportunities to appreciate nature, and a generally attractive environment for residents and tourists. The value of these benefits will show up in property values.

Beaches may even create "disbenefits" which reduce property values. For example, some beaches may increase traffic congestion or attract people who litter or commit crimes. The real estate market will assess the extent to which there are disbenefits and incorporate discounts into property values to allow for these disbenefits.

The point is that property values will reflect the direct economic benefits of beaches as well as the disbenefits. The total net benefit of the beaches can be found directly in property values, obviating the need to estimate the size of the itemized benefits and disbenefits themselves.

Most of the impact of beaches on property values will be found in their immediate neighborhood. For this study, the immediate neighborhood of beaches is defined to encompass the "barrier" islands along the coastline of Broward County. These islands are situated between the Intracoastal Waterway and the Atlantic Ocean. A study of real estate values on the islands compared to corresponding values immediately west of the Intracoastal Waterway was used as a basis to determine the contribution of the beaches to property values. The real estate study and the resulting estimates of the contribution of the beaches is provided in the first chapter of this report.

Although the bulk of the impact of beaches on property values occurs on the barrier islands, a relatively small impact on mainland property values will also occur. This is because the beaches provide recreational values to people residing or staying in mainland properties, as well as to people residing or staying in barrier island properties. The impact of recreational benefits on mainland property values is estimated for this report by means of a survey of



recreational beach use<sup>2</sup>. Estimates of the impact of recreational benefits on property values are also provided in the first chapter of the report.

*The beaches in Broward County contribute \$1.4 billion in property values in the county. This amounts to about 2.2 percent of the property value in the county. About \$1 billion of the contribution of beaches to property values occurs on the barrier islands, and \$302.4 million occurs on the mainland.*

### **Spending and Employment Resulting from the Beaches**

Beaches make additional contributions to the economy beyond the direct benefits that show up in property values. They contribute to the economy as a result of the spending of residents occupying beachfront properties and as a result of the spending of non-residents in connection with the recreational use of the beaches. Spending by either group, of course, results in increased sales by local businesses and, therefore, the creation of jobs and incomes for Broward County residents.

#### **Spending by Broward Residents**

One of the most obvious characteristics of homeowners is that high income homeowners usually live in expensive homes, and low income homeowners usually live in less expensive homes.

In the absence of the beaches, beach area residential properties would lose value, and the

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<sup>2</sup>The methodology used for the survey of recreational beach use follows the conventional studies of the economic benefits of beaches as used by the U.S. Army Corps of Engineers.

occupants of the property would gradually be replaced by people of lower incomes. People with lower incomes spend less and so they have a lesser impact on the economy.

As a result, the loss of property values that would occur if Broward's beaches eroded away would be accompanied by a reduction in the amount of spending in the county.

Additionally, expenditures by beach users in connection with their beach visits would also be lost. The second chapter of this report contains estimates of the economic impact of the beaches on Broward County.

*This study estimates that loss of Broward's beaches would result in a reduction in the amount of \$136.9 million annually in resident expenditures in the county.*

### **Non-Resident Spending**

Additionally, if the beaches were to erode completely, non-residents who are attracted to the county because of the beaches would not make expenditures in the county and this would result in a further negative impact on the county economy.

It can be argued that the loss of spending in the beach area of Broward County does not necessarily mean that it will all be lost to the county, since some beach area residents may locate to another part of the county or tourists may choose an alternative recreational experience in the county (such as golf). Similarly, not all beach-generated expenditure will be lost to Florida, since some beach area residents and tourists will move to the beach area of another county.

Indeed, from a national perspective, movement to other states will contain much of the lost expenditure. But even from that perspective there will be some loss, for example, as many of the Canadians may choose alternative locations in the Caribbean for their winter vacations.

In this report, adjustments have been made to allow for the incomplete loss of beach area spending in the absence of Broward's beaches.

*This study estimates that Broward's beaches attract \$285.3 million annually in non-resident expenditures to the county.*

Taking the increased expenditures of residents and non-residents into account, *total sales in the county are directly increased by \$422.2 million on an annual basis directly as a result of the beaches.*

### **Indirect Spending**

The economic impact of beaches spreads beyond the immediate beach community. Spending in the beach community results in supplies being purchased by beach area businesses from businesses that are located away from the beach -- some on the mainland off the barrier island, some from neighboring counties in Florida, some from other states and, even, some from other countries around the world. Additionally, employees of beach area businesses (and their suppliers away from the area) spend their wages elsewhere in the county and in the region and this leads to further impacts (sometimes called "ripple" effects).

The spending on supplies, wages and the purchases of employees that is stimulated as a result of direct spending is called "indirect" spending. Some of this indirect spending occurs in Broward (an estimated 33 percent for this study) and most of the remaining indirect spending occurs in the rest of the Southeast Florida economic region.

*This study estimates that the indirect spending in Broward resulting from the beaches was \$125.7 million in 1995-96. Adding direct spending and indirect spending gives an estimate*

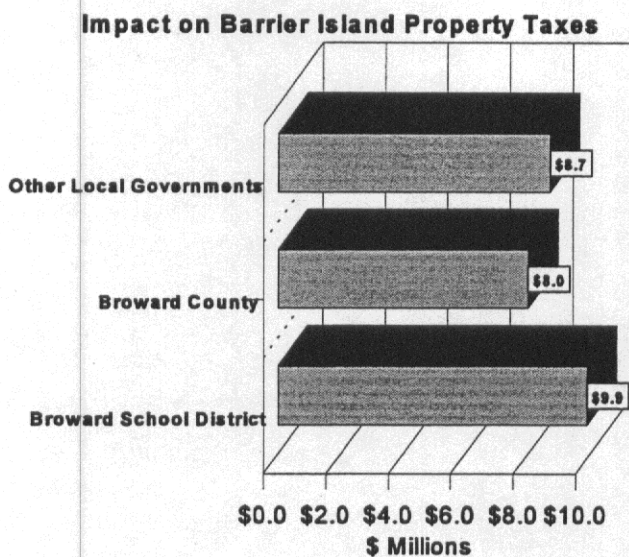
of the total impact on the Broward County economy of \$547.9 million. The spending made as a result of the beaches creates 17,710 jobs in the county.

### The Contribution of the Beaches to the Local Tax Base

Beaches also make a contribution to the tax bases of various taxing authorities. The protection of property values makes an obvious contribution to the revenues of those taxing authorities that levy ad valorem property taxes. These include municipalities, the school district, special taxing districts and the county government.

The population in the beach communities will place some demand on the services of the local governments, but this is usually much less than their contribution to tax revenues. This is because ocean front property is very valuable and does not generate its proportionate share of school children or its proportionate share of the demand for other social services.

*This study estimates that property tax collections are increased in Broward County by*



*\$28.2 million annually, as a result of the beaches. The local taxing authority which receives the largest increase in revenues resulting from the beaches is the School Board, followed by the County Government. Most of the remaining revenues were received by the municipalities with jurisdiction on the barrier islands.*

### Impact of Broward Beaches on Southeast Florida

As noted previously, about two-thirds of the indirect spending due to Broward's beaches occurs elsewhere in the Southeast Florida region<sup>3</sup>. Estimates of this expenditure and its economic impact are given in TABLE B.

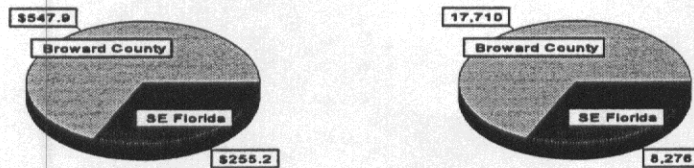
**TABLE B**  
**Economic Impact of Broward Beaches**  
**On the Southeast Florida Region**  
**Millions of Dollars**  
**1995-96**

| <b>Benefit</b>                                     | <b>Amount</b> |
|----------------------------------------------------|---------------|
| Total Impact on Broward County <sup>1</sup>        | \$ 547.9      |
| Jobs Created in Broward County <sup>1</sup>        | 17,710 jobs   |
| Indirect Spending Elsewhere in Region <sup>2</sup> | \$ 255.2      |
| Jobs Created <sup>2</sup>                          | 8,276 jobs    |
| Total Impact on Southeast Florida                  | \$ 803.1      |
| Total Jobs Created in Southeast Florida            | 25,986 jobs   |

<sup>1</sup>TABLE 2.4 <sup>2</sup>TABLE 2.5

<sup>3</sup>Some of the indirect spending may spill out of the region to other parts of Florida, but given the large size of the Southeast Florida economy, these losses are likely to be negligible.

**Impact of Broward County Beaches on SE Florida**  
**Sales                      \$ Millions                      Jobs**



*In 1995-96, Broward's beaches resulted in indirect expenditures of \$255.2 million elsewhere in the region, resulting in a total impact in the Southeast Florida region from*

*Broward's beaches of \$803.1 million. The spending elsewhere in the region resulted in the creation of 8,276 jobs so that the total number of jobs created in Southeast Florida by Broward's beaches was 25,986.*

**Impact of Broward Beaches on the State Economy and State Revenues**

Broward's beaches benefit the State of Florida by attracting out of state visitors to the state. The spending of these visitors creates sales and jobs in the state. Additionally, these visitors contribute to state tax revenues. Details on the statewide impact of Broward's beaches are given in the third chapter of this report and main results are given in TABLE C.

**Impact of Broward County Beaches on Florida**  
**Sales                      \$ Millions                      Jobs**



*This study estimates that out of state visitors to Broward's beaches spent a total of \$314.4 million in the state in 1995-96. Of this,*

**TABLE C**  
**Economic Benefits of Broward County Beaches**  
**Impact on State of Florida**  
**1995-96**  
**Millions of dollars**

| <b>Benefit</b>                                                           | <b>Amount</b> |
|--------------------------------------------------------------------------|---------------|
| <b>Impact on State Economy:</b>                                          |               |
| Direct Spending by Out of State Residents in Broward County <sup>1</sup> | \$ 268.9      |
| Direct Spending by Out of State Residents in Other Counties <sup>1</sup> | 45.5          |
| Total Direct Spending by Out of State Residents in the State             | 314.4         |
| Indirect Spending in Broward <sup>1</sup>                                | \$ 80.0       |
| Indirect Spending in Other Counties <sup>1</sup>                         | 203.6         |
| Total Indirect Spending in Florida                                       | \$ 283.6      |
| Total Impact on Broward Economy                                          | \$ 348.9      |
| Total Impact on Other Counties                                           | 249.1         |
| Total Impact on State Economy                                            | \$ 598.0      |
| Jobs Created in Broward                                                  | 11,342 jobs   |
| Jobs Created in Other Counties                                           | 8,053         |
| Total Jobs Created in Florida                                            | 19,395        |
| <b>Impact on State Taxes Annually</b>                                    |               |
| Sales Taxes                                                              | \$ 18.5       |
| Car Rental Taxes                                                         | 15.8          |
| Other State Revenues                                                     | 2.1           |
|                                                                          | 0.6           |

<sup>1</sup>TABLE 3.3

*\$268.9 was spent in Broward, and \$45.5 million was spent elsewhere in the region<sup>4</sup>. These expenditures stimulated indirect expenditures of \$283.6 million, of which \$80.0 million was expended in Broward and \$203.6 million was expended elsewhere in Florida.*

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<sup>4</sup> The estimates above allow for the fact that not all out of state beach visitors are attracted to the state by Broward's beaches.

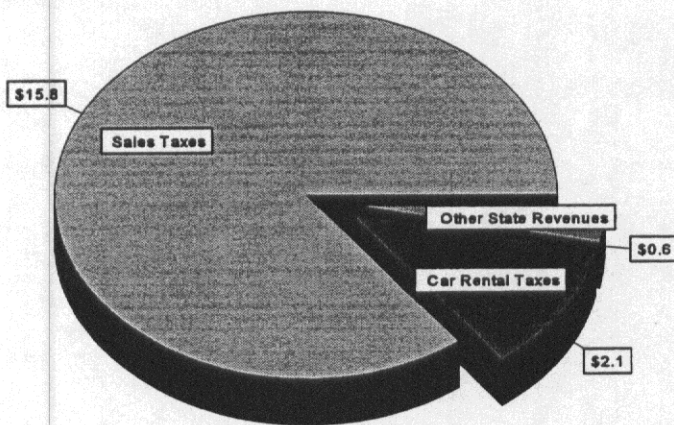
*As a result, the total impact on the state economy of out of state visitors to Broward County was \$598 million. Of this impact, \$348.9 million occurred in Broward, and \$249.1 million occurred in other parts of Florida.*

*Out of state Broward beach visitors created 19,395 jobs in Florida-- 11,342 in Broward and 8,053 in other parts of the state.*

State Government also receives tax revenues resulting from Broward's beaches. Chief among these are sales taxes. There are other revenue sources, however, including car rental

surcharges which are substantially affected by the attraction of Broward's beaches for tourism.

**Annual Impact of Taxes on the State of Florida**  
**\$ Millions**



*This study estimates the contribution of Broward's beaches to state revenues at \$18.5 million annually. Most of this is accounted for by sales taxes (\$15.8 million) and car rental surcharges (2.1 million).*

### **Recreational Use of Broward's Beaches**

A major part of the Economic Study of Broward's Beaches, whose findings are contained in this report, consisted of a personal interview survey of 4,556 beach users conducted between



**TABLE D**  
**Recreational Use of Broward's Beaches**  
**1995-96**

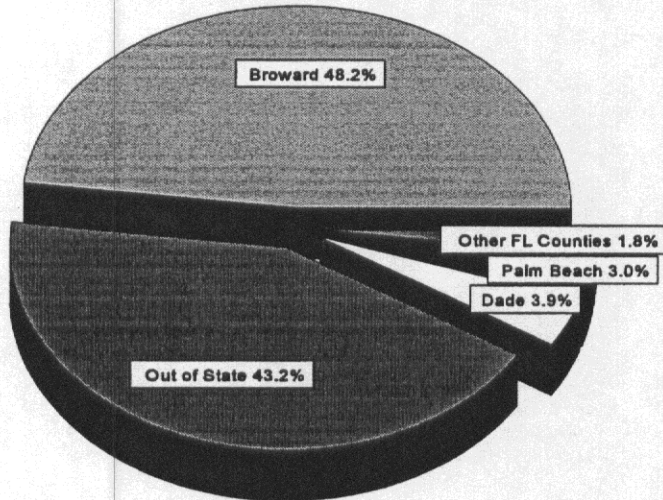
|                                                                               |           |
|-------------------------------------------------------------------------------|-----------|
| Annual Visits <sup>1</sup>                                                    | 7,169,446 |
| Annual Visitors                                                               | 1,661,233 |
| Visits Per Visitor                                                            | 4.3       |
| Summer Visits (Percent) <sup>1</sup>                                          | 43.4      |
| Winter Visits (Percent)                                                       | 56.6      |
| Visits by Broward Residents (Percent) <sup>2</sup>                            | 48.2      |
| Visits by Non-Residents of Broward (Percent)                                  | 51.8      |
| Broward Resident Visits in Summer (Percent) <sup>3</sup>                      | 56.2      |
| Broward Resident Visits in the Winter (Percent)                               | 42.1      |
| Median Age of Adult Beach Visitor in Summer (Years) <sup>4</sup>              | 37.6      |
| Median Age of Adult Beach Visitor in Winter (Years)                           | 40.5      |
| Retired Adult Beach Visitors in Summer (Percent of All Visitors) <sup>4</sup> | 9.6       |
| Retired Adult Beach Visitors in Winter (Percent of All Visitors)              | 19.3      |
| Median Income of Adult Beach Visitor in Summer (Dollars) <sup>5</sup>         | \$44,900  |
| Median Income of Adult Beach Visitor in Winter (Dollars)                      | \$42,700  |
| <u>Visits to Broward's Beaches by Beach Segment:<sup>6</sup></u>              |           |
| Deerfield/Hillsboro                                                           | 761,698   |
| Pompano/Sea Ranch Lakes                                                       | 1,091,445 |
| Lauderdale-by-the-Sea/Galt Ocean Mile                                         | 692,024   |
| Fort Lauderdale                                                               | 2,002,059 |
| John U. Lloyd/Dania                                                           | 636,202   |
| Hollywood                                                                     | 1,420,774 |
| Hallandale                                                                    | 565,245   |

<sup>1</sup>TABLE 4.1 <sup>2</sup>TABLE 4.2 <sup>3</sup>TABLE 4.3 <sup>4</sup>TABLE 4.7 <sup>5</sup>TABLE 4.8 <sup>6</sup>TABLE 4.13

May 1995 and April 1996. Chapter IV of this report presents detailed results from that survey.

A number of highlights from Chapter IV are presented in TABLE D.

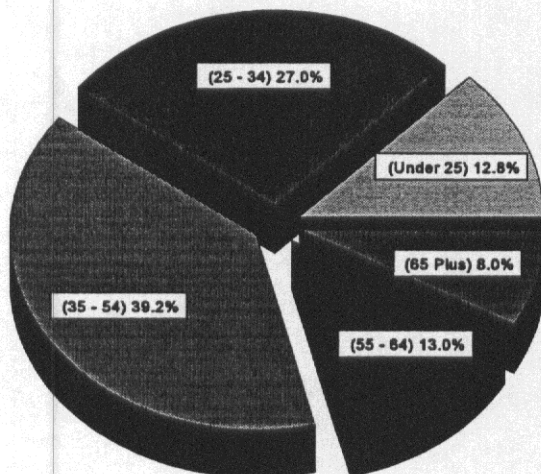
**Broward County Recreational Beach Use  
Percent of Beach Visits 1995-96**



the summer season by residents of the county, who account for the majority of summer visits (56.2 percent).

A total of 1,661,233 persons made 7,169,446 visits to visited Broward's beaches during 1995-96. Beach use in Broward is relatively constant year-round, with 56.6 percent of the visits in the winter season (November through April) and 43.4 percent of the visits in the summer (May through October). Non-residents of the county, who account for the majority of winter visits (57.9 percent) , are replaced in

**Age of Broward's Adult Beach Users  
1995-96**

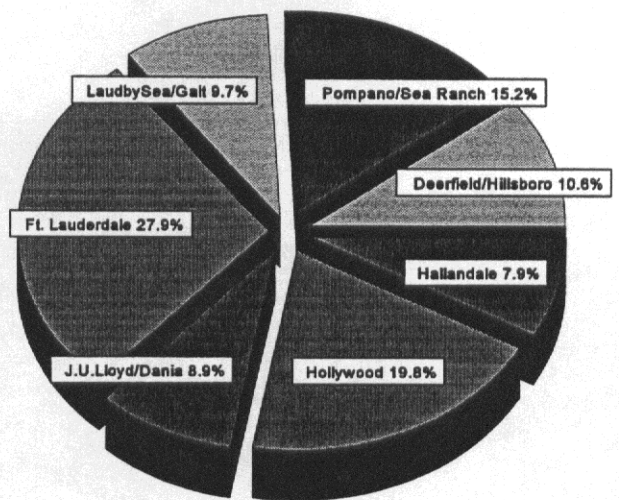


Broward's beaches appeal to a wide variety of people: the old, the middle aged and the young; students, employed people and the retired; people of modest income, middle incomes and high income. Summer visitors are younger than winter visitors, and winter visitors are more likely to be retired than summer beach users.

The heaviest use of Broward's beaches is in the Fort Lauderdale Beach

area (about 2 million visits annually). There is also heavy use in the Hollywood and Pompano Beach areas. The beach segments with the lightest use are in Hillsboro Beach and John U. Lloyd State Park.

**Visits to Broward County Beaches  
1995-96**

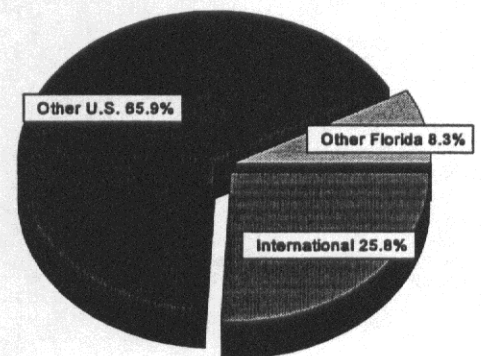


**Characteristics of Beach Tourists**

The personal interview survey of beach users enabled data to be collected on overnight tourists who used Broward's beaches in 1995-96 and detailed information on beach tourism is presented in Chapter V of this report.

A total of 725,521 overnight tourists visited the beaches of Broward County during 1995-96, with 30.3 percent visiting during the summer and 69.7 percent visiting in the winter season. Almost two-thirds of the tourists were from other states and one in four were international visitors. About one in six tourists was visiting friends or relatives and one in three were on their first visit to the county.

**Broward Beach Overnight Tourists  
by Geographic Origin 1995-96**

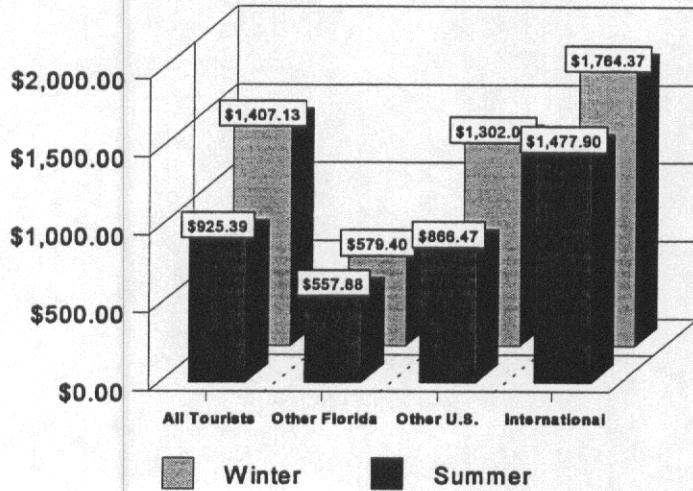


**TABLE E**  
**Characteristics of Beach Tourists**  
**Broward County**  
**1995-96**

|                                                                                              |                         |
|----------------------------------------------------------------------------------------------|-------------------------|
| Number of Tourist Users of Broward's Beaches <sup>1</sup>                                    | 725,521 Persons         |
| Summer Tourists (Percent)                                                                    | 30.3 %                  |
| Winter Tourists (Percent)                                                                    | 69.7 %                  |
| Tourists from Elsewhere in Florida (Percent) <sup>1</sup>                                    | 8.3 %                   |
| Tourists from other States and Territories (Percent)                                         | 65.9 %                  |
| International Tourists (Percent)                                                             | 25.8 %                  |
| Percent Visiting Friends or Relatives <sup>2</sup>                                           | 16.9 %                  |
| Percent on First Visit <sup>2</sup>                                                          | 32.2 %                  |
| Average Party Size in Summer (Persons) <sup>1</sup>                                          | 3.1 Persons             |
| Average Party Size in Winter (Persons)                                                       | 2.9 Persons             |
| Average Length of Stay in Summer (Nights) <sup>1</sup>                                       | 6.7 Nights              |
| Average Length of Stay in Winter (Nights)                                                    | 9.2 Nights              |
| Person Nights in County in Summer <sup>1</sup>                                               | 1,467,801 Person Nights |
| Person Nights in the Winter                                                                  | 4,666,998 Person Nights |
| Tourist Parties Paying for Lodging in Summer (Percent) <sup>3</sup>                          | 59.8 %                  |
| Tourist Parties Paying for Lodging in Winter (Percent)                                       | 53.2 %                  |
| Lodging Expenditures <sup>3</sup>                                                            | \$86,951,737            |
| Spending Per Summer Party <sup>4</sup>                                                       | \$ 925.39               |
| Spending Per Winter Party                                                                    | \$ 1,407.13             |
| Spending Per Summer Person-Day <sup>5</sup>                                                  | \$ 44.26                |
| Spending Per Winter Person-Day                                                               | \$ 52.72                |
| Percent of Tourists Who Would Not Come to Broward in the Absence of the Beaches <sup>6</sup> | 60.8 %                  |

<sup>1</sup>TABLE 5.1 Summer and Winter combined. <sup>2</sup>TABLE 5.3 <sup>3</sup>TABLE 5.2 <sup>4</sup>TABLE 5.4  
<sup>5</sup>TABLE 5.6 <sup>6</sup>TABLE 5.7

**Spending Per Tourist Party by Broward Beach Users  
Spending by Geographic Origin 1995-96**

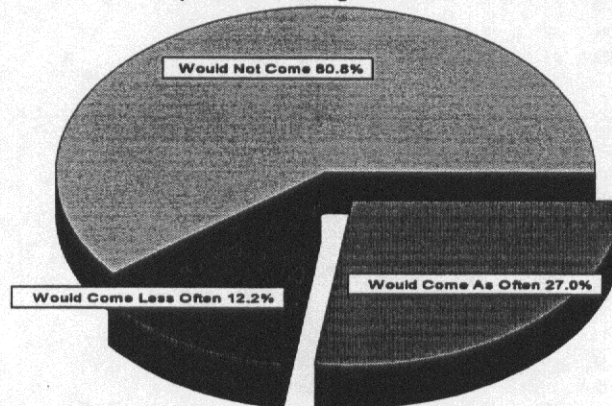


The average size of a tourist party was about three persons. The average tourist party stayed about one week in the summer season and about ten days in the winter season. More than 50 percent of the tourists paid for their lodging in the county, spending \$87 million on lodging during 1995-96. Spending per party averaged \$925.39 in the summer and \$1,407.13 in

the winter. Much of the difference between these two figures is explained the longer stay in the winter. Spending per person-day was \$44.26 in the summer and \$52.72 in the winter.

Broward beach overnight tourists were asked whether they would come to Broward County if there were no beaches. About 60 percent of the tourists said they would not come and a further 12 percent said they would come less frequently, if there were no beaches in the county.

**"Would You Come to Broward County if There Were No Beaches?  
Response of Overnight Tourists 1995-96**



## I. BEACHES, PROPERTY VALUES AND LOCAL TAXES

As indicated in the Introduction to this report, the economic impacts of Broward County's beaches will occur in three ways: an impact on county property values, an impact on sales and employment in the county and the state, and an impact on the tax bases both of local governments and the State of Florida.

Property values will be improved by beaches to the extent that they receive storm protection or that property owners are saved the cost of alternative property protection measures (such as construction and maintenance of sea walls). Additionally, property values will reflect the storm protection provided to adjacent public infrastructure, since expected damage to a nearby access road will result in discounts being applied to the values of private properties. Finally, property values will be enhanced by the availability of beach recreation and, indeed, the general ambience and environmental beauty of recreational beaches.

This chapter of the report estimates the impact of Broward's beaches on property values. Broward county's beaches lie on three barrier islands which separate the county mainland from the Atlantic Ocean. The first section of this chapter provides a description of the properties on Broward's barrier islands developed from a detailed analysis of the Property Appraiser's files. This is followed by estimates of the contribution of the beaches to barrier island property values. The chapter concludes with estimates of the impact of recreational benefits on local property values.

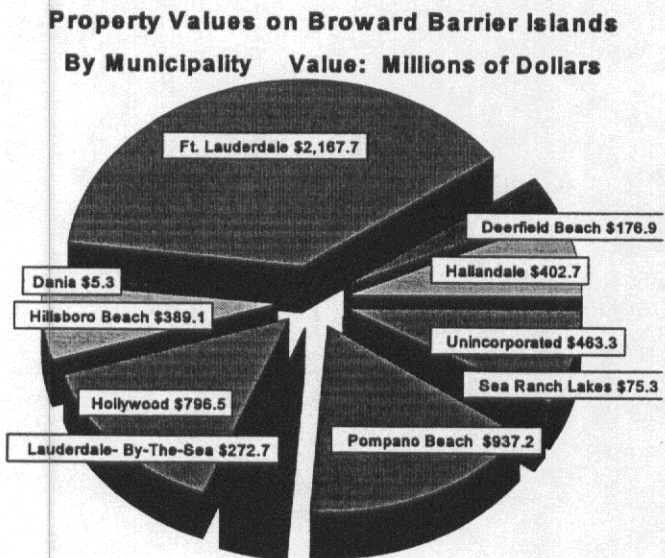
### The Value of Broward's Barrier Islands

Three barrier islands span the coastline of Broward county: the northern island which runs from the Boca Raton Inlet in Palm Beach County to the Hillsboro Inlet in Broward, and includes the Broward municipalities of Deerfield Beach (in part) and Hillsboro Beach; the central island which runs from the Hillsboro Inlet to the Port Everglades Inlet, including part of Pompano Beach, Sea Ranch Lakes, Lauderdale By The Sea, part of Fort Lauderdale and an unincorporated section located south of Pompano Beach; and a southern barrier island, extending from Port Everglades to Miami Beach in Dade County, including parts of the municipalities of Dania, Hollywood and Hallandale.

#### Value by Municipality

Properties on the barrier islands were officially valued at about \$5.7 billion in 1994,

accounting for about 10 percent of the property value in Broward County (see TABLE 1.1). Fort Lauderdale had the greatest amount of property on the barrier islands (\$2.2 billion or 38.1 percent of the total on the islands), followed by Pompano Beach (\$0.9 billion, or 16.5 percent) and Hollywood (\$0.8 billion or 14.0 percent of the total).



**TABLE 1.1**  
**Property Values on Broward Barrier Islands**  
**By Municipality**  
**Millions of Dollars**  
**1994**

| <b>Municipality</b>            | <b>Property Values</b> | <b>Percent</b> |
|--------------------------------|------------------------|----------------|
| Dania                          | \$ 5.3                 | 0.1            |
| Deerfield Beach                | \$ 176.9               | 3.1            |
| Fort Lauderdale                | \$ 2,167.7             | 38.1           |
| Hallandale                     | \$ 402.7               | 7.1            |
| Hillsboro Beach                | \$ 389.1               | 6.8            |
| Hollywood                      | \$ 796.5               | 14.0           |
| Lauderdale By The Sea          | \$ 272.7               | 4.8            |
| Pompano Beach                  | \$ 937.2               | 16.5           |
| Sea Ranch Lakes                | \$ 75.3                | 1.3            |
| Unincorporated (South Pompano) | \$ 463.3               | 8.1            |
| <b>Total</b>                   | <b>\$ 5,686.7</b>      | <b>100.0</b>   |
| <b>Broward County Total</b>    | <b>\$60,000.0</b>      | <b>Na</b>      |

Source: Tabulations of the 1994 NAL File obtained from the Broward County Property Appraiser. Na= not applicable

**Value by Land Use**

Broward's barrier islands are virtually completely developed, containing only 665 undeveloped parcels out of a total 45,041 parcels on the County Property Appraiser's 1994 property rolls (1.5 percent); the undeveloped parcels account for \$126 million out of a total property value of \$5.7 billion (2.2 percent, as shown in TABLE 1.2).



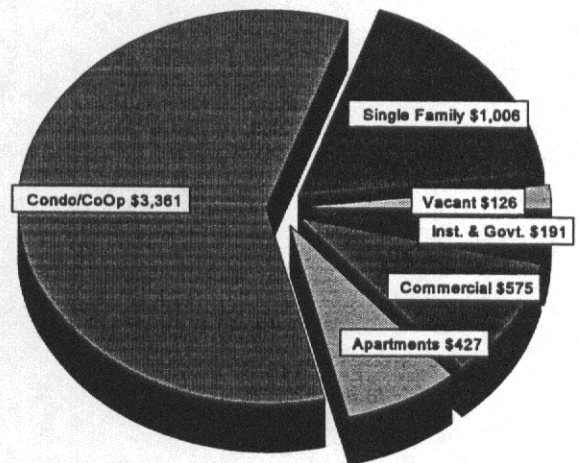
**TABLE 1.2**  
**Property Values on Broward Barrier Islands**  
**By Type of Land Use**  
**Millions of Dollars**  
**1994**

| Type of Land use           | Value      | Percent |
|----------------------------|------------|---------|
| Vacant                     | \$ 126.2   | 2.2     |
| Single Family              | \$ 1,006.0 | 17.7    |
| Condo/Coop                 | \$ 3,360.7 | 59.1    |
| Apartments                 | \$ 427.0   | 7.5     |
| Sub-Total Residential      | \$ 4,793.7 | 84.3    |
| Commercial                 | \$ 575.4   | 10.1    |
| Institutional & Government | \$ 191.4   | 3.4     |
| Total                      | \$ 5,686.7 | 100.0   |

Source: Tabulations of the 1994 NAL File obtained from the Broward County Property Appraiser.

The barrier islands in Broward County are primarily residential, with total residential value of \$4.7 billion accounting for more than 84 percent of total 1994 value. The overwhelming bulk of the residential value is accounted for by multi-family housing units (79 percent). Commercial value amounts to \$575.4 million, about 10 percent of the total. Most of the commercial value is accounted for by hotels which had a total value of \$419.9 million.

**Property Values on Broward's Barrier Islands**  
**by Type of Land Use \$ Millions**



There are 3,359 single family homes, 32,818 condominium apartments, 5,892 cooperative apartments, and an estimated 7,323 rental apartments<sup>1</sup> on the barrier islands.<sup>2</sup>

**Historical Development**

Most of the development of Broward County's barrier islands occurred between 1955 and 1975, and the approach of build out is evident from the relatively low rate of development<sup>3</sup> in the last twenty years (TABLE 1.3).

**TABLE 1.3  
Historical Development of Broward Barrier Islands**

| <b>Decade</b> | <b>Percent of 1994 Value Developed</b> |
|---------------|----------------------------------------|
| 1925-34       | 0.2                                    |
| 1935-44       | 1.4                                    |
| 1945-54       | 9.7                                    |
| 1955-64       | 29.8                                   |
| 1965-74       | 32.9                                   |
| 1975-84       | 12.2                                   |
| 1985-94       | 13.9                                   |

Source: Tabulations of the NAL File obtained from the Broward County Property Appraiser.

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<sup>1</sup>The Property Appraiser's NAL file does not contain the number of units in rental apartment complexes. The total value of rental apartment complexes was divided by the average value of a cooperative apartment to estimate the number of rental units.

<sup>2</sup>If the average number of persons per housing unit is close to 2.0, the peak seasonal population (excluding hotel tourists) is in the range of 100,000 persons. To this would be added the tourists staying at one of the 144 hotels on the islands, and the large numbers of day visitors attracted to the islands because of their beautiful beaches.

<sup>3</sup>Older properties, other things equal, will typically have lower property taxes. This reinforces the conclusion in the text that the bulk of the development occurred in the 1950's and 1960's. It is possible that the amount of development was actually greater in the 1950's than in the 1960's.

### Contribution of Beaches to Barrier Island Value

A significant part of the value of Broward County's barrier islands is due to their beaches.

With exceptions of gaps due to the county's two inlets (Hillsboro and Port Everglades), the county has attractive recreational beaches along the entire length of its 25 mile coastline.

Although the beaches are the most striking natural feature of the islands, the islands would not be abandoned if the beaches eroded away. The islands would still provide boat access to the ocean and the Intracoastal Waterway, and they would also continue to function as residential communities for workers and retirees living in the county.

**TABLE 1.4**  
**Average Value Per Square Foot**  
**Broward Barrier Islands and Federal-Intracoastal Area**  
**Dollars**  
**1994**

| Type of Property              | Barrier Islands | Federal-Intracoastal | Barrier Island Premium |
|-------------------------------|-----------------|----------------------|------------------------|
| Single Family                 | \$ 100.17       | \$ 78.76             | \$ 21.41               |
| Apartments                    | \$ 61.53        | \$ 59.54             | \$ 1.99                |
| Cooperatives and Condominiums | \$ 77.29        | \$ 65.81             | \$ 11.48               |
| Commercial                    | \$ 69.09        | \$ 65.25             | \$ 3.84                |

Source: Tabulations of the 1994 NAL File obtained from the Broward County Property Appraiser.

In order to determine the portion of the value of Broward's barrier islands directly attributable to the beaches, a study of real estate values was undertaken, comparing values per square foot by type of property on the islands with the values per square foot for the equivalent properties in the area between Federal Highway (US 1) and the Intracoastal Waterway. A *barrier island premium*, assumed to be due to the beaches, was calculated as the excess of property

values per square foot on the islands compared to the mainland comparison area. The resulting premiums are given in TABLE 1.4.

This TABLE shows that single family properties on the barrier islands are valued at \$21.41 more per square foot of living area than are similar single family properties located in the area between the Intracoastal Waterway and Federal Highway (U.S. 1). The premium for condominiums and cooperatives is about one-half the single family rate, and the premium for commercial properties is relatively small at \$3.84 per square foot.

**TABLE 1.5**  
**Average and Total Square Footage and Total Barrier Island Premium**  
**Broward Barrier Islands**  
**1994**

| Type of Property      | Average Square Footage | Number of Properties | Total Square Footage | Total Barrier Islands Premium \$ millions |
|-----------------------|------------------------|----------------------|----------------------|-------------------------------------------|
| Single Family         | 2,590.4                | 3,360                | 8,703,778            | \$ 186.3                                  |
| Apartments            | 6,888.7                | 1,408                | 9,699,290            | \$ 19.3                                   |
| Coops. & Condominiums | 1,680.0                | 38,710               | 65,032,413           | \$ 746.6                                  |
| Commercial            | 21,046.4               | 576                  | 12,122,732           | \$ 46.6                                   |
| Total                 | NA                     | 44,054               | 95,558,213           | \$ 998.8                                  |

Source: Tabulations of the 1994 NAL File obtained from the Broward County Property Appraiser. Square footage was available for 5,322 parcels on the barrier islands. Average barrier island premiums from TABLE 1.4. Multiplication of average square footage by the number of properties differs slightly from the published figures due to rounding errors.

Estimates of the total square footage of improved properties of residential and commercial properties on the barrier islands are given in TABLE 1.5. Multiplication of these estimates by the barrier island premiums gives estimates of the contribution of the beaches to the

value of barrier island properties.

TABLE 1.5 shows that residential and commercial structures on the barrier islands are worth \$998.8 million more than they would be if they were located in the Federal-Intracoastal area. This is the value conferred on those properties by the beaches.

**TABLE 1.6**  
**Impact of Beaches on Property Values**  
**Broward Barrier Islands**  
**By Type of Property**  
**Millions of Dollars and Percent**  
**1994**

| Type of Property | Beach Impact          | Total Value | Percent |
|------------------|-----------------------|-------------|---------|
| Residential      | \$ 952.2              | \$ 4,793.7  | 19.9    |
| Commercial       | \$ 46.6               | \$ 575.4    | 8.1     |
| Total            | \$ 998.8 <sup>1</sup> | \$ 5,369.1  | 18.6    |

Source: TABLES 1.2 and 1.5 <sup>1</sup>In 1995-96 dollars, this value becomes \$1,048.7 million.

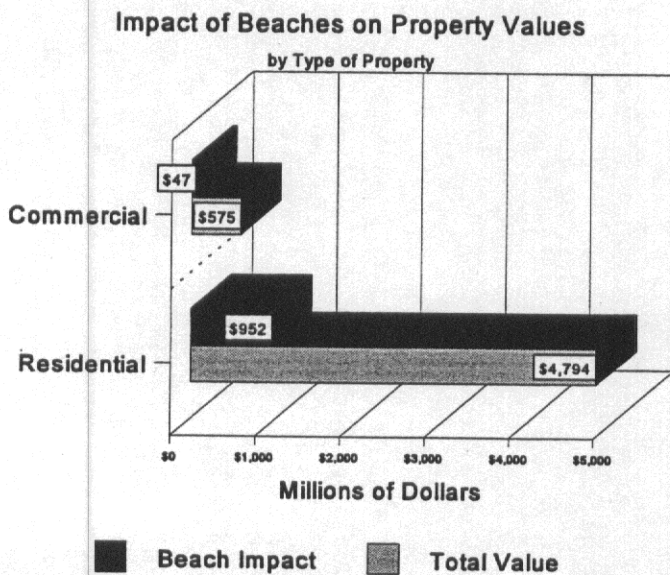


TABLE 1.6 summarizes the impact of the beaches on barrier island property values. Residential properties are higher, on average, by 19.9 percent and commercial properties are higher by 8.1 percent as a result of proximity to the beaches. The lower impact on commercial properties reflects the relatively good location for such

properties in the Federal-Intracoastal area where they can service customers from the barrier islands to the east and additional customers from the west.

The value figures in TABLE 1.6 were increased by 5 percent in TABLE A of the introduction to this report to allow for inflation between 1994, the year for which the real estate study was undertaken, and 1995-96, the year of the beach surveys which formed the basis of the economic impact estimates.

After making the adjustment for inflation, it can be concluded that *Broward's beaches contributed an estimated \$1,048.7 million to barrier islands property values in 1995-96.*

### **Recreational Benefits and Property Values**

Although the bulk of the impact of beaches on property values occurs on the barrier islands, a relatively small impact on mainland values will also occur. This is because the beaches provide recreational benefits to people residing or staying in mainland residential properties as well as to those in barrier island properties. The recreational benefits to barrier island properties are already included in the beach impact estimates on property values in TABLE 1.6; separate estimates of the impact on mainland properties are developed in this section of the report.

The impact of recreational benefits on mainland properties is estimated from a personal interview survey of 4,556 beach users conducted between May 1995 and April 1996. The results are presented in TABLE 1.7. Detailed results of the survey are presented in Chapter IV below.

Beach visitors were asked to value their beach experience that day by indicating how many dollars they would be willing to pay for their visit. It was, of course, explained that there is no plan to charge beach fees; rather, dollar values need to be placed on the recreational

experience of beach visits so that they can be balanced against costs in order to determine whether the costs of various beach improvements can be justified in terms of the benefits received.

**TABLE 1.7**  
**Recreational Value of Beach Visits**  
**Broken Down by Geographic Origin**

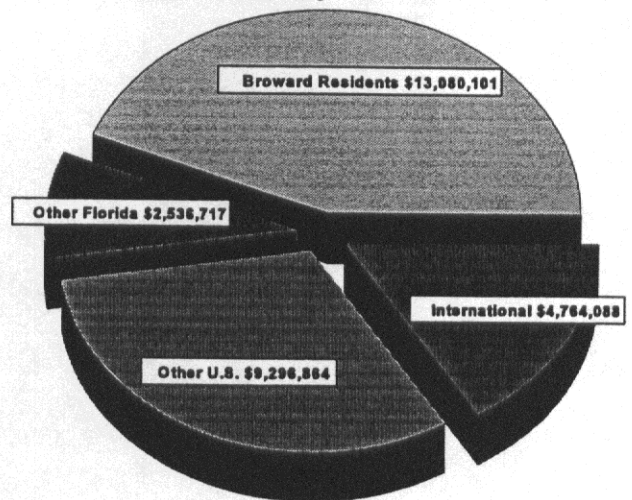
| Origin            | Value Per Visit | Total Number of Visits | Total Recreational Value |
|-------------------|-----------------|------------------------|--------------------------|
| Broward Residents | \$ 3.78         | 3,457,371              | \$ 13,080,101            |
| Other Florida     | \$ 4.10         | 618,139                | 2,536,717                |
| Other U. S.       | \$ 4.34         | 2,140,824              | 9,296,864                |
| International     | \$ 5.00         | 953,112                | 4,764,088                |
| <b>Total</b>      | <b>\$ 4.14</b>  | <b>7,169,446</b>       | <b>\$ 29,677,770</b>     |

Note: multiplication of value per visit by number of visits does not give the reported totals because of rounding errors.

TABLE 1.7 shows that the average visitor to Broward's beaches during 1995-96 valued the beach visit at \$4.14. Residents from other countries placed the highest value on their beach visits, followed by other out-of-state visitors. Multiplying the average value per visit by the total number of visits gives an estimate of the recreational value of Broward's beaches.

*The recreational value of Broward's beaches amounted to \$29.7 million in 1995-96.*

**Recreational Value in \$ Millions**  
**Of Broward County Beaches in 1995-96**



**TABLE 1.8**  
**Recreational Beach Benefits and Property Values**  
**Millions of Dollars**

| <b>Impact</b>                                | <b>Amount</b> |
|----------------------------------------------|---------------|
| Total Recreational Impact on Property Values | \$ 363.0      |
| Of Which: Barrier Island Properties          | \$ 60.6       |
| Mainland Properties                          | \$ 302.4      |

The annual recreational value of \$29.7 million must be capitalized in order to estimate its impact on property values<sup>4</sup>. The results are presented in TABLE 1.8. Recreational benefits resulted in an increase of \$60.6 million in barrier island properties and \$302.4 million in mainland property values.

**TABLE 1.9**  
**Impact of Broward's Beaches on County Property Values**  
**1995-96**  
**Millions of Dollars**

| <b>Impact</b>                  | <b>Amount</b> |
|--------------------------------|---------------|
| Barrier Island Property Values | \$ 1,048.7    |
| Of Which: Recreational Value   | 60.6          |
| Storm Protection and Other     | 988.1         |
| Mainland Property Values       | \$ 302.4      |
| Of Which: Recreational Value   | \$ 302.4      |

<sup>4</sup>The annual recreational value was assumed to yield benefits over a 50 year period and the benefits were discounted to present value using an interest rate of 8 percent. The survey provided a basis for disaggregating the recreational value between barrier island properties and mainland properties using questions related to parking.



### Beaches and Local Property Taxes

Finally, an estimate of the importance of the beaches for the property tax revenues of the local governments can be made by assuming that 18.6 percent of their taxable value is due to the beach. The 18.6 percent is the share of total residential and commercial value on the islands that is attributable to the beach (TABLE 1.6 above). The percentage is an average across all the island municipalities and some variation by municipality is likely, depending upon the mix of commercial and residential property and full-time versus part-time residents.

**TABLE 1.10**  
**Beach Impact on Property Tax Revenues**  
**Broward County Local Governments**  
**Millions of Dollars**  
**1995-96**

| <b>Taxing Authority</b>                 | <b>Amount Paid</b> |
|-----------------------------------------|--------------------|
| Nine Municipalities + Unincorporated    | \$ 5.7             |
| Broward County                          | \$ 8.0             |
| Broward School District                 | \$ 9.9             |
| Broward Hospital Districts              | \$ 2.3             |
| Hillsboro Inlet District                | \$ 0.0             |
| South Florida Water Management District | \$ 0.6             |
| Florida Inland Navigation District      | \$ 0.0             |
| <b>Total -- Barrier Island Taxes</b>    | <b>\$ 26.5</b>     |
| <b>Total -- Mainland Taxes</b>          | <b>\$ 1.7</b>      |
| <b>Total -- Property Taxes</b>          | <b>\$ 28.2</b>     |

Source: See text. Mainland taxes calculated by applying same millage rate as implicit in barrier island calculations.

TABLE 1.10 shows that the impact of the beaches on the property tax revenues of local governments in Broward County was \$28.2 million in 1995-96. The bulk of these revenues were

collected from barrier island properties. The largest beneficiary of beach generated property tax revenues is the Broward School District, collecting \$9.9 million on the barrier islands, followed by Broward County Government, which received \$8.0 million.

## II. ECONOMIC IMPACT OF BROWARD BEACHES ON THE COUNTY AND SOUTHEAST FLORIDA

Beaches make additional contributions to the economy beyond the direct benefits that show up in property values. These additional contributions include the impact on the economy of the spending generated as a result of the beaches; additionally, local government revenues are increased as a result of the beaches.

This chapter of the report presents estimates of the economic impact of the beach-related spending by residents and non-residents on the Broward County economy. A final section of the chapter presents estimates of the spillover impacts into the rest of the Southeast Florida economy.

### Spending by Barrier Island Residents

It was previously noted in this report, that one of the most obvious characteristics of homeowners is that high income homeowners usually live in expensive homes, and low income homeowners usually live in less expensive homes. Moreover, it was noted that in the absence of the beaches, beach area residential properties would lose value. Hence, over time, the occupants of beach area residential properties would be replaced by people with lower incomes. People with lower incomes spend less and so they have a lesser impact on the economy.

As a result, the loss of property values that would occur if Broward's beaches eroded away would be accompanied by a reduction in the amount of spending in the county. This section of the report provides an estimate of this effect.

**TABLE 2.1**  
**Derivation of Estimated Expenditures Due To Beaches**  
**By Residents of Broward County Barrier Islands**  
**1995-96**  
**Millions of Dollars**

|                                                              | Amount                |
|--------------------------------------------------------------|-----------------------|
| Residential Barrier Island Property Value Created by Beaches | \$ 999.8 <sup>1</sup> |
| Spending Due to Increased Property Values                    | \$ 293.6              |
| Amount of Spending by Island Residents                       | \$ 117.7              |

<sup>1</sup>This is the figure for residential property impact reported in TABLE 1.6, updated to 1995-96 dollars.

TABLE 1.6 above showed that the contribution of the beaches to barrier island residential property values amounted to \$952.2 million in 1994. Adjusted to 1995-96 dollars, the estimate becomes \$999.8 million as reported in TABLE 2.1.

A total of \$293.6 million in spending is generated by \$999.8 million in property values<sup>1</sup>. However, this presumes that all occupants of barrier island residential properties are residents of the county. An adjustment to allow for non-residential occupancy of barrier island residential properties was applied to the total expenditures generated by the residential properties<sup>2</sup>, and *the resulting estimate of spending by barrier island residents due to the beach is given in TABLE 2.1 as \$117.7 million.*

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<sup>1</sup>Estimated using the ratio of median housing value to median household income from the US 1990 Census of Housing, the ratio of personal income to personal disposable income for Florida from the Survey of Current Business, and the ratio of national personal consumption expenditure to national personal disposable income from the same source.

<sup>2</sup>The adjustment was based on the ratio of beach use by non-residents staying on the islands (as obtained from the parking questions on the beach surveys) to non-residents staying elsewhere, and the corresponding ratio for residents, as well as the ratio of hotel values to residential values on the islands.

### Spending by Mainland Residents

Although TABLE 1.9 showed that there is some impact on mainland property values due to the beaches, this was not used as a basis for estimating the beach-related spending by mainland residents. This was because the beach impact is slight compared to overall values and alternative property enhancing alternatives that might be developed if the beaches were to erode.

Spending by mainland residents was estimated from the interview survey of beach users. The results are shown in TABLE 2.2. The estimates presented in the TABLE are an average of minimum and maximum values. The maximum value is equal to the total residential spending calculated from the interview survey. The minimum value is equal to the spending of frequent residential beach users, that is residents who visit the beach at least once a week in the summer or the winter<sup>3</sup>.

**TABLE 2.2**  
**Spending on Recreational Beach Use**  
**Broward County Residents 1995-1996**  
**Dollars**

| <b>Source of Impact</b>                                              | <b>Amount</b>        |
|----------------------------------------------------------------------|----------------------|
| <b>Total Residential Spending on Recreational Beach Use</b>          | <b>\$ 23,102,343</b> |
| At or On Way to Beach                                                | \$ 12,250,987        |
| On Beach Equipment & Accessories                                     | \$ 10,851,356        |
| Less Recreational Beach Related Spending by Barrier Island Residents | \$ 3,902,427         |
| <b>Spending on Recreational Beach Use by Mainland Residents</b>      | <b>\$ 19,200,416</b> |

Note: the survey methodology leads to some over-estimation of annual spending on equipment.

<sup>3</sup>Between May 1995 and April 1996, 83,346 frequent beach users accounted for 18.0 percent of total resident beach users; but they accounted for 75.6 percent of all beach visits by residents.

The spending of frequent beach users on beach related visits and equipment or supplies is likely to be lost in the absence of the beaches, whereas the spending of occasional beach users is most likely to be replaced by spending on alternative recreation and equipment.

*TABLE 2.2 indicates that mainland residents spend an estimated \$19.2 million in connection with their beach visits in 1995-96.*

### **Spending By Non-Residents**

Spending by non-residents was also estimated as an average between minimum and maximum values. The maximum value is the total of expenditures in Broward County by non-residents who visited the beaches in 1995-96. These expenditures include beach-related expenditures and "tourist" expenditures (e.g., expenditures on lodging, food, other entertainment, local transportation, etc.).

**TABLE 2.3  
Spending by Non-Residents  
Broward County 1995-1996  
Dollars**

| <b>Source of Impact</b>                  | <b>Amount</b>        |
|------------------------------------------|----------------------|
| <b>Non-Resident Tourist Expenditures</b> | <b>\$285,253,992</b> |

The minimum economic impact of the loss of Broward's beaches includes only the tourist expenditures of those who said they would not have come to Broward if there were no beaches<sup>4</sup>

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<sup>4</sup>A majority of non-resident beach visitors said they would not have come to Broward if there were no beaches (55.4 percent). Additionally, 13.6 percent said they would not come to the county as often if there were no beaches.

TABLE 2.3 shows that *non-residents of Broward spent \$285.3 million as a result of the beaches in 1995-96.*

### **Economic Impact of Beaches on Broward County**

The total direct impact of Broward's beaches was \$422.2 million in 1995-96 (TABLE 2.4). This consisted of the beach related spending of barrier island residents of \$117.7 million, the spending by mainland residents of \$19.2 million, and the tourist expenditures of non-residents who visited the beaches, which amounted to \$285.3 million.

The direct expenditures of beach users creates *ripple effects* throughout the economy as the recipients of the dollars from the beach users in turn spend those dollars elsewhere in the economy. For example, a restaurant adjacent to the beach where beach users eat lunch will pass along the dollars from the beach users to its suppliers and its employees. Suppliers to the restaurant will in turn spend those dollars on their supplies and their employees and all employees will spend much of their earnings on their housing, their own food and so on.

The US Department of Commerce provides "multipliers" for estimating indirect economic impacts ("ripple effects") that suggest that every dollar of direct expenditures creates an additional 90 cents of additional ("ripple effect") spending in the region. This was further disaggregated into the amount spent in Broward using Broward's share of personal income in the region<sup>5</sup>.

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<sup>5</sup>Broward had 33 percent of the personal income on a place of residence basis in Broward, Dade, and Palm Beach counties (Florida Statistical Abstract 1994 TABLE 5.09).

**TABLE 2.4**  
**Economic Impact of Beaches on Broward County**  
**1995-96**  
**Millions of Dollars**

| <b>Impact</b>                                  | <b>Amount</b>      |
|------------------------------------------------|--------------------|
| <b>Direct Expenditures</b>                     | <b>\$ 422.2</b>    |
| Of Which: Spending by Barrier Island Residents | \$ 117.7           |
| Spending by Mainland Residents                 | \$ 19.2            |
| Spending by Non-Residents                      | \$ 285.3           |
| <b>Indirect Expenditures</b>                   | <b>\$ 125.7</b>    |
| <b>Total Impact on Sales in the County</b>     | <b>\$ 547.9</b>    |
| <b>Jobs Created</b>                            | <b>17,710 jobs</b> |

Although most of the direct impact of Broward's beaches occur in Broward, most of the indirect impact occurs outside the county, elsewhere in the region, because Broward County accounts for 33 percent of the Southeast Florida regional economy. *Broward's beaches created a total impact in the county of \$547.9 million and created 17,710 jobs<sup>6</sup>.*

**Economic Impact of Broward Beaches on Southeast Florida**

As noted previously, about two-thirds of the indirect spending due to Broward's beaches occurs elsewhere in the Southeast Florida region<sup>7</sup>. Estimates of this expenditure and its

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<sup>6</sup>About one-fourth of the economic impact of the beaches occurs in the summer and three fourths occurs in the winter.

<sup>7</sup>Some of the indirect spending may spill out of the region to other parts of Florida, but given the large size of the Southeast Florida economy, these losses are likely to be negligible.

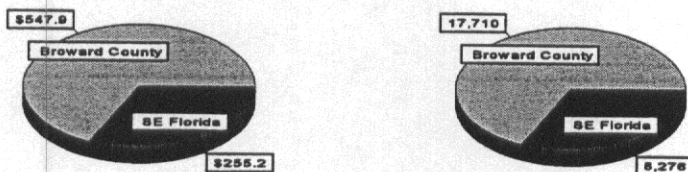


economic impact are given in TABLE 2.5.

**TABLE 2.5**  
**Economic Impact of Broward Beaches**  
**On the Southeast Florida Region**  
**Millions of Dollars**  
**1995-96**

| Benefit                                 | Amount      |
|-----------------------------------------|-------------|
| Total Impact on Broward County          | \$ 547.9    |
| Jobs Created in Broward County          | 17,710 jobs |
| Indirect Spending Elsewhere in Region   | \$ 255.2    |
| Jobs Created                            | 8,276 jobs  |
| Total Impact on Southeast Florida       | \$ 803.1    |
| Total Jobs Created in Southeast Florida | 25,986 jobs |

**Impact of Broward County Beaches on SE Florida**  
**Sales                      \$ Millions                      Jobs**



*In 1995-96,*

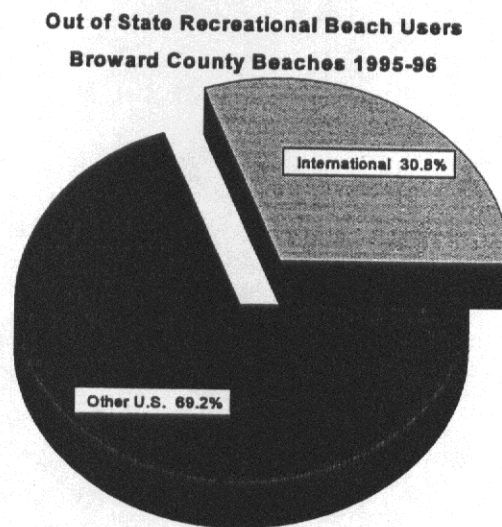
*Broward's beaches resulted in indirect expenditures of \$255.2 million elsewhere in the region, resulting in a total impact in the Southeast Florida region from*

*Broward's beaches of \$803.1 million. The spending elsewhere in the region resulted in the creation of 8,276 jobs so that the total number of jobs created in Southeast Florida by Broward's beaches was 25,986.*

### III. ECONOMIC IMPACT OF BROWARD BEACHES ON THE STATE ECONOMY

This chapter of the report provides estimates of the economic impact of Broward's beaches during 1995-96 on the economy of the State of Florida. This economic impact results from the expenditures of Broward's out of state beach users not only in Broward County but also in the other Florida counties that were visited by Broward's out of state beach tourists. The chapter also provides estimates of the impact of these expenditures on the tax revenues of the state government.

During 1995-96, out of state residents made 3,093,936 visits to Broward County's beaches. As presented in detail below (TABLE 3.3), these out of state residents directly spent \$314.4 million during their stay in Florida creating a total economic impact of \$598 million and 19,395 full-time equivalent jobs. About 15 percent of the direct spending of out of state Broward beach visitors took place outside Broward County (\$45.5 million).



### Geographic Origin of Out of State Beach Visitors

About 70 percent of the out of state beach visitors were from other states in the U.S., primarily the northeastern states, and about 27 percent of the out of state visitors were from other countries, primarily Canada and Europe (TABLE 3.1). International visitors tended to make more beach visits during their stay than did visitors from other states, which reflected their longer length of stay in the county.

**TABLE 3.1**  
**Recreational Beach Use of Broward Beaches**  
**by Out of State Visitors**  
**1995-96**

| <b>Residential Location of Beach User</b> | <b>Visitors</b> | <b>Percent</b> | <b>Visits</b>    | <b>Percent</b> |
|-------------------------------------------|-----------------|----------------|------------------|----------------|
| <b>Total Other U.S.</b>                   | <b>556,413</b>  | <b>72.4</b>    | <b>2,140,824</b> | <b>69.2</b>    |
| Northeast                                 | 273,662         | 35.6           | 1,267,677        | 41.0           |
| Midwest                                   | 122,872         | 16.0           | 405,367          | 13.1           |
| South                                     | 123,772         | 16.1           | 365,061          | 11.8           |
| West                                      | 36,107          | 4.7            | 102,719          | 3.3            |
| <b>Total International</b>                | <b>211,946</b>  | <b>27.6</b>    | <b>953,112</b>   | <b>30.8</b>    |
| Canada                                    | 135,802         | 17.7           | 668,826          | 21.6           |
| Europe                                    | 63,392          | 8.3            | 225,695          | 7.3            |
| Latin America                             | 9,318           | 1.2            | 47,435           | 1.5            |
| Other International                       | 3,434           | 0.4            | 11,156           | 0.4            |
| <b>Total</b>                              | <b>768,359</b>  | <b>100.0</b>   | <b>3,093,936</b> | <b>100.0</b>   |

Note: Latin America includes the Caribbean.

### Economic Impact on the State Economy

In order to determine the impact of the spending of these out of state visitors on the state economy, minimum and maximum estimates were prepared. Maximum estimates assumed that

all of the spending of Broward's out of state beach visitors would have been lost to Florida in the absence of Broward's beaches. Minimum estimates were developed based on two considerations, namely, the extent to which the visitors said they would not have come to Broward in the absence of the beaches, and the extent to which the visitors were "main destination" visitors to Broward County. Main destination visitors are visitors to Florida who spend the majority of their time in Broward County.

**TABLE 3.2**  
**Out of State Beach Visitors**  
**Responses to Question:**  
**"Would You Come to Broward if There Were No Beaches?"**  
**Broken Down by Whether Visitors Were Main Destination Visitors or Not**

| Response        | Main Destination Visitors |              | Not Main Destination Visitors |              |
|-----------------|---------------------------|--------------|-------------------------------|--------------|
|                 | Visitors                  | Percent      | Total                         | Percent      |
| Not Come        | 398,372                   | 61.4         | 66,968                        | 55.8         |
| Come Less Often | 72,549                    | 11.2         | 33,320                        | 27.8         |
| Come as Often   | 177,418                   | 27.4         | 19,731                        | 16.4         |
| <b>Total</b>    | <b>648,339</b>            | <b>100.0</b> | <b>120,019</b>                | <b>100.0</b> |

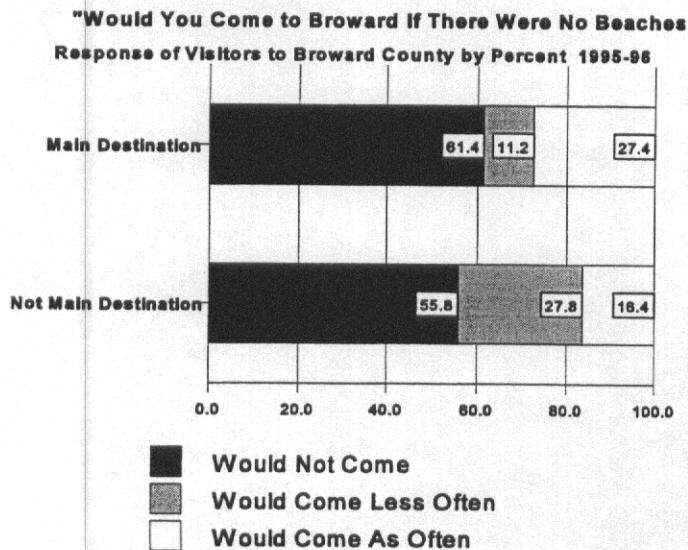


TABLE 3.2 shows the responses by out of state visitors to the question "Would you come to Broward if there were no beaches?" broken down by whether the visitors were main destination visitors or not. In 1995-96, most out of state visitors that enjoyed Broward's beaches were main destination

visitors to the county (648,339) compared to 120,019 visitors for whom Broward was not their main destination. Of these main destination visitors, 398,372 or 61.4 percent said they would not have come to Broward if the county's beaches had eroded away.

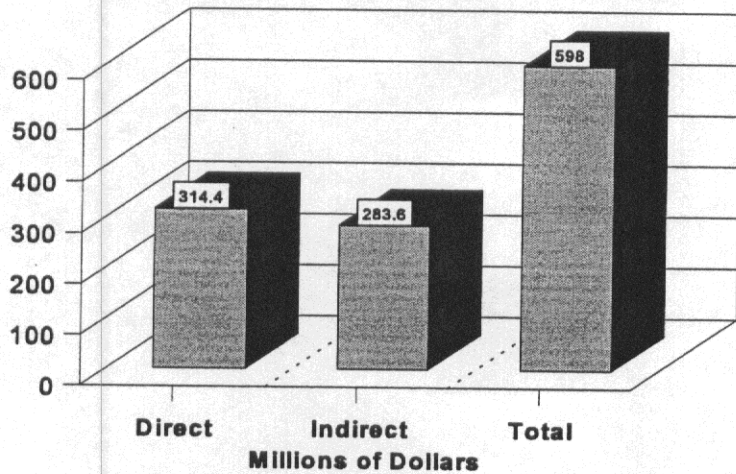
The economic impact of the spending of out of state visitors to Broward County's beaches is composed of the impact of their spending on Broward's economy plus the impact of their spending elsewhere in the State on the other parts of Florida which they visited.

**TABLE 3.3**  
**Economic Impact of Out of State Beach Visitor Spending**  
**on the State of Florida**  
**1995-96**

|                                               | <b>Amount</b>         |
|-----------------------------------------------|-----------------------|
| Direct Expenditures in Broward                | \$ 268,888,055        |
| Direct Expenditures in Other Counties         | \$ 45,500,744         |
| <b>Total Direct Expenditures in the State</b> | <b>\$ 314,388,799</b> |
| <b>Indirect Expenditures</b>                  | <b>\$ 283,578,697</b> |
| Of Which: Broward County                      | \$ 80,037,218         |
| Other Counties                                | \$ 203,541,479        |
| <b>Total Economic Impact</b>                  | <b>\$ 597,967,496</b> |
| Of Which: Broward County                      | \$ 348,925,273        |
| Other Counties                                | \$ 249,042,223        |
| <b>Number of Jobs Created</b>                 | <b>19,395</b>         |
| Of Which: Broward County                      | 11,342                |
| Other Counties                                | 8,053                 |

TABLE 3.3 shows the midpoint estimate of the impact of the spending of out of state beach visitors on the economy of Florida. The total direct expenditures of out of state Broward beach visitors were \$314.4 million, of which \$268.9 million was spent in Broward and \$45.5

**Out of State Visitors to Broward's Beaches  
Economic Impact on the State of Florida**



million was spent in other counties of Florida. When indirect (“ripple”) effects are taken into account, the *total economic impact on the state economy was \$598.0 million. The expenditures of out of state beach visitors created about 20,000 full-time equivalent jobs, with about 8,000 of these jobs created outside of Broward County and elsewhere in the State.*

**Fiscal Impact of Out of State Broward Beach Visitors on the State of Florida**

The spending of out of state visitors to Broward generates taxes for the State of Florida. Chief among these taxes are the 6 percent sales tax, levied on lodging, dining, entertainment and most shopping. There is also substantial sales tax revenue collected when cars are rented by out of state visitors.

TABLE 3.4 shows that out of state visitors to Broward County beaches paid \$18.5 million in state taxes during their stay in Florida. The largest component of state taxes was the sales tax (\$15.8 million), followed by the tax on car rentals (\$2.1 million).

**TABLE 3.4**  
**Impact of Out of State Broward Beach Visitors on**  
**State Revenues**  
**1995-96**

| <b>Tax Source</b>  | <b>Amount</b>        |
|--------------------|----------------------|
| Sales Taxes        | \$ 15,804,900        |
| Car Rental Taxes   | \$ 2,083,592         |
| Other Taxes        | \$ 566,379           |
| <b>Total Taxes</b> | <b>\$ 18,454,871</b> |

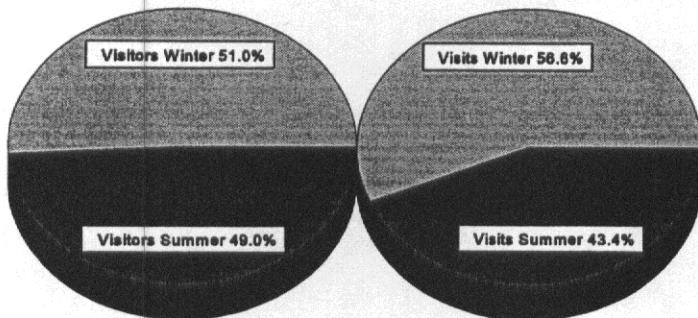
Note: Other taxes include gasoline and cigarette taxes.

#### IV. RECREATIONAL USE OF BROWARD'S BEACHES 1995-1996

This chapter of the report provides information on the users of Broward County's beaches during 1995-96. Included are data on geographic origin, length of stay in the county, age, occupation and income of beach users and the recreational value users placed on their visit to the beach. Data on beach users by broad beach segments are presented in the last part of the chapter.

##### Use of Broward Beaches

**Broward County Beach Visitors and Visits  
1995-96**



During the year of 1995-1996<sup>1</sup>, a total of 1,661,233 persons made 7,169,446 visits to Broward county's beaches<sup>2</sup>. The number of visitors remained relatively constant between the winter and summer seasons, rising from 814,509 in the summer to 846,724 in the winter. The number of visits to the beaches increased from 3.1 million in the summer to 4 million in the

winter, almost a thirty percent increase, because users of Broward's beaches in the winter on

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<sup>1</sup> The "year" is defined as May 1995 through April 1996.

<sup>2</sup> In a number of parts of Broward County, especially the Hollywood area, there are sidewalks (e.g. the "Broadwalk" in Hollywood) adjacent to the beach which are heavily used by walkers and skaters. These individuals are not included in the totals for Broward beach visitors in this study.



average visit more frequently than do summer beach users (4.8 visits for the average winter user versus 3.8 visits for the average summer user ).

**TABLE 4.1**  
**Recreational Beach Use**  
**Broward County Beaches**  
**1995-96**

|                | Summer Season |         | Winter Season |         | Total Year |         |
|----------------|---------------|---------|---------------|---------|------------|---------|
|                | Number        | Percent | Number        | Percent | Number     | Percent |
| Visits         | 3,115,091     | 43.4    | 4,054,355     | 56.6    | 7,169,446  | 100.0   |
| Visitors       | 814,509       | 49.8    | 846,724       | 50.2    | 1,661,233  | 100.0   |
| Average Visits | 3.8           | NA      | 4.8           | NA      | 4.3        | NA      |

The relatively intensive use of Broward County's beaches over the course of the year reflects the semi-tropical climate and the urban nature of the beach. All beaches in the southern half of Florida have a climate that encourages their recreational use throughout the year. But many beaches in the southern half of the state experience a sharp fall-off in recreational use in the summer season because of the decline in use by non-residents and because they are adjacent to relatively small year-round populations<sup>3</sup>. The urban character of Broward County makes its system of beaches an intensively used year-round recreational facility.

#### **Beach Users By Residential Location**

More than half of the visits to Broward's beaches over the course of the year are made by non-residents of the county. In 1995-96, as shown in TABLE 4.2, non-residents accounted for

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<sup>3</sup>An example is the beach on Captiva Island on Florida's west coast which experiences an increase in beach visits of about 50 percent during the winter season, compared to about 30 percent for Broward County (Regional Research Associates 1993 and 1994).

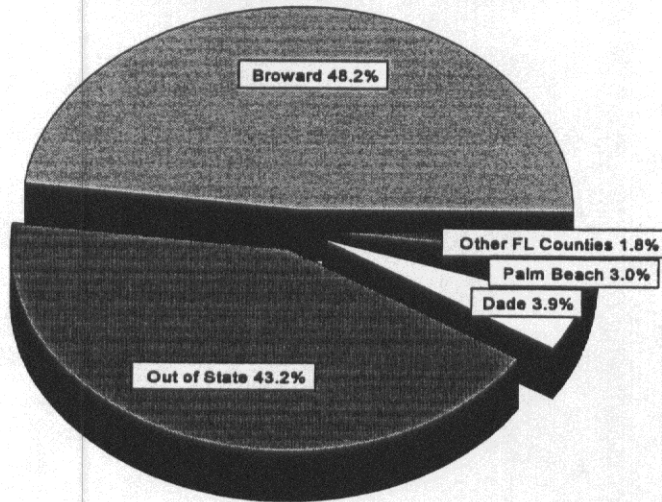
**TABLE 4.2**  
**Beach Use By Geographic Origin**  
**1995-96**

| <b>Residential Location</b> | <b>Number of Visits</b> | <b>Percent</b> |
|-----------------------------|-------------------------|----------------|
| Broward County              | 3,457,371               | 48.2           |
| Other Florida               | 618,139                 | 8.6            |
| Out of State                | 3,093,936               | 43.2           |
| <b>Total</b>                | <b>7,169,446</b>        | <b>100.0</b>   |

51.8 percent of the visits to Broward's beaches (3.7 million out of a total of 7.2 million). The bulk of the non-resident visits were made by out of state visitors, with visits by non-Broward

Floridians accounting for less than 10 percent of the total.

**Broward County Recreational Beach Use**  
**Percent of Beach Visits 1995-96**



Fewer than 400,000 Broward County residents visited the county's beaches during 1995-96. Given a Broward county resident population of approximately 1.4 million, this implies that fewer than 30 percent of the county's population visit the county's beaches

over the course of a year. Hence, although most Broward residents live within ten miles of the beach, about seventy percent do not actually visit the beaches even once a year. In many cases, newcomers to Broward make heavy use of the beach in their first years as county residents, but the longer they remain in the county, the less frequently they use the beaches.

**TABLE 4.3**  
**Geographic Origin of Beach Users**  
**By Season**  
**Percent of Visits**

| <b>Residential Location</b> | <b>Summer</b> | <b>Winter</b> |
|-----------------------------|---------------|---------------|
| Broward County              | 56.2          | 42.1          |
| Other Florida               | 10.7          | 7.1           |
| Out of State                | 33.1          | 50.8          |
| <b>Total</b>                | <b>100.0</b>  | <b>100.0</b>  |

As indicated previously, the mix of beach users varies significantly between the summer and winter seasons. As shown in TABLE 4.3, a majority of the summer beach visits are made by Broward County residents (56.2 percent); during the winter season, a majority of the beach visits are made by out of state residents (50.8 percent).

Over the course of a year, 8.6 percent of the visits made to Broward's beaches are made by residents of other parts of Florida (TABLE 4.2). The bulk of these visits were made by residents of the adjacent counties of Dade and Palm Beach. More than 43 percent of the visits were made by out of state visitors, with about 41 percent of these visits made by residents of northeastern states and 31 percent made by international visitors, primarily Canadians.

#### **Beach Use By Length of Stay**

It is useful to divide non-resident beach visitors into three groups because of their different economic impacts. The division is based on the length of stay in the county. The groups consist of: seasonal residents (who spend between 90 nights and 180 nights in the county each year); overnight tourists who spend at least one night and fewer than 90 nights; and day

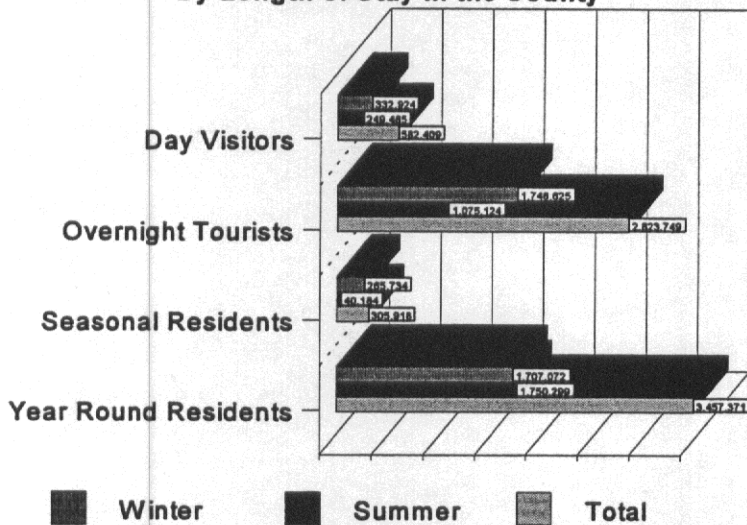
**TABLE 4.4**  
**Recreational Beach Visits**  
**By Length of Stay in the County**

| Length of Stay in County | Summer    | Winter    | Total     | Percent |
|--------------------------|-----------|-----------|-----------|---------|
| Year Round Residents     | 1,750,299 | 1,707,072 | 3,457,371 | 48.2    |
| Seasonal Residents       | 40,184    | 265,734   | 305,918   | 4.3     |
| Overnight Tourists       | 1,075,124 | 1,748,625 | 2,823,749 | 39.4    |
| Day Visitors             | 249,485   | 332,924   | 582,409   | 8.1     |
| Total                    | 3,115,091 | 4,054,355 | 7,169,446 | 100.0   |

Note: Broward visitors who visited the beaches in both the summer and winter are double counted in the figure for total annual visits.

visitors who visit the county for one day returning to their residence outside the county in the evening.

**Recreational Beach Visits**  
**By Length of Stay in the County**



A breakdown of beach visits by length of stay in Broward of the visitor is provided in TABLE 4.4. Seasonal residents of Broward County during the year of 1995-96 accounted for 305,918 of the beach visits (4.3 percent of the total beach visits). Most non-resident beach visits were made by overnight tourists (2.8 million visits or 39.4 percent

of the total). Day visitors account for 582,409 beach visits (8.1 percent).

**Characteristics of the Beach Visit**

**Purpose of Beach Visit  
Broward County Beaches 1995-96**

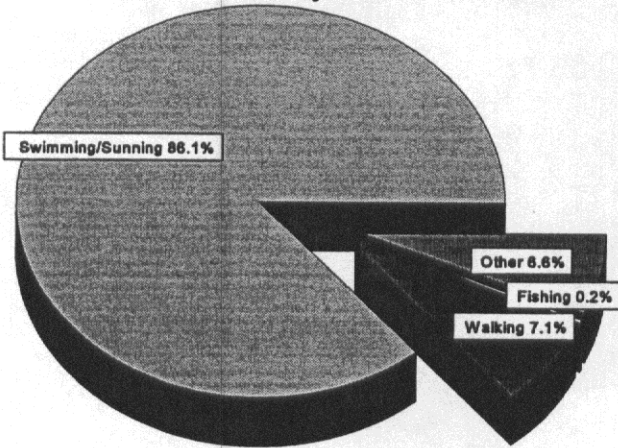


TABLE 4.5 shows that about 86 percent of these visitors went to the beach in order to swim and or enjoy the sun. Differences in the TABLE reflect the cooler weather during the winter season. For example, more people are found walking on the beach during the winter than during the summer, although swimming and sunning remains the main reason for visiting the beach during both seasons.

**TABLE 4.5  
Purpose of the Beach Visit  
Broward County Beaches  
1995-96  
Percent of Respondents**

| Visit Purpose    | Summer % | Winter % | Total % |
|------------------|----------|----------|---------|
| Swimming/Sunning | 90.9     | 82.8     | 86.1    |
| Walking/Shelling | 2.6      | 10.2     | 7.1     |
| Fishing          | 0.1      | 0.3      | 0.2     |
| Other            | 6.4      | 6.7      | 6.6     |
| Total            | 100.0    | 100.0    | 100.0   |

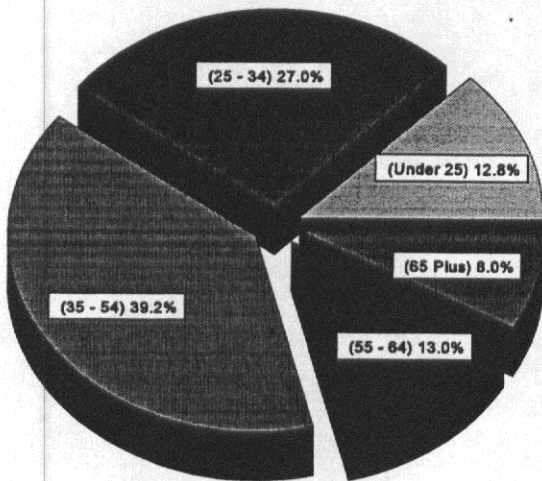
Beach users came to the beach in parties which averaged 2.8 persons, and they spent an average of 3.3 hours on the beach (TABLE 4.6). The average party size is a little smaller in the winter reflecting the diminished use of the beach by resident families and more use by tourists.

**TABLE 4.6**  
**Other Characteristics of the Beach Visit**  
**Broward County Beaches**  
**1995-96**

| Other Characteristics                  | Summer   | Winter   | Total    |
|----------------------------------------|----------|----------|----------|
| Average Party Size (Number of persons) | 2.9      | 2.7      | 2.8      |
| Average Number of Hours Spent at Beach | 3.4      | 3.3      | 3.3      |
| Average Spending At or on Way to Beach | \$ 20.22 | \$ 15.74 | \$ 17.58 |

**Demographic Characteristics of Beach Users**

**Age of Broward's Adult Beach Users**  
**1995-96**



The wide appeal of Broward's beaches is evident from the data presented in TABLE 4.7. The data refer to those interviewed on the beaches and reflect the adult users of the beaches, since children were not interviewed.

TABLE 4.7 shows the average adult on Broward's beaches is about 40 years of age. Winter adult beach visitors are older than summer beach visitors.

Indeed, more than one in ten beach adults is over 64 years of age in the winter season, whereas the proportion of beach adults in this age group is only 4.5 percent during the summer. The data on the occupation of beach adults (also presented in TABLE 4.7) is consistent with the age data,

with 19.3 percent of winter beach users being retired, compared to 9.6 percent in the summer.

**TABLE 4.7**  
**Age and Occupation Broward's Adult Beach Users**  
**1995-96**

|                 | Summer | Winter | Total |                    | Summer | Winter | Total |
|-----------------|--------|--------|-------|--------------------|--------|--------|-------|
| <b>Age:</b>     |        |        |       | <b>Occupation:</b> |        |        |       |
| Under 25        | 13.0%  | 12.7%  | 12.8% | Student            | 8.8%   | 10.2%  | 9.6%  |
| 25 - 34         | 29.5   | 25.2   | 27.0  | Employed           | 74.5   | 61.6   | 66.9  |
| 35 - 54         | 42.0   | 37.3   | 39.2  | Retired            | 9.6    | 19.3   | 15.3  |
| 55 - 64         | 11.0   | 14.3   | 13.0  | Homemaker          | 4.0    | 5.5    | 4.9   |
| 65 Plus         | 4.5    | 10.5   | 8.0   | Unemployed         | 1.6    | 1.2    | 1.4   |
|                 |        |        |       | Other              | 1.5    | 2.2    | 1.9   |
| Median in years | 37.6   | 40.5   | 39.2  | Total              | 100.0  | 100.0  | 100.0 |

TABLE 4.8 shows the household income of Broward's adult beach users. The median household income of adult beach users was \$43,600. The median income was a little higher in the summer (\$44,900) than in the winter (\$42,700).

**TABLE 4.8**  
**Household Income of Broward's Adult Beach Users**  
**1995-96**

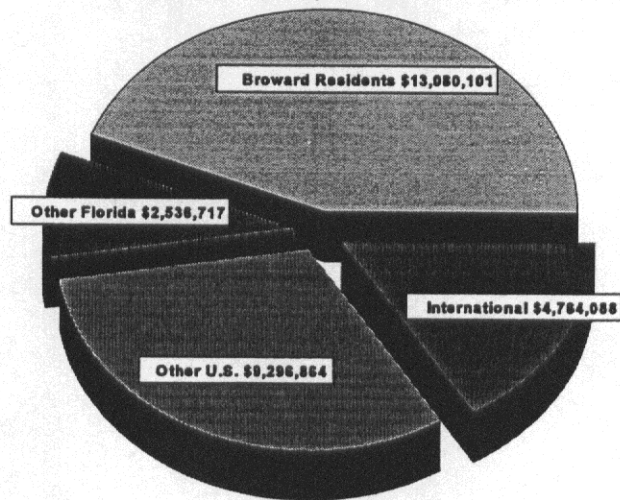
|                          | Summer          | Winter          | Total           |
|--------------------------|-----------------|-----------------|-----------------|
| <b>Household Income:</b> |                 |                 |                 |
| Less than \$25,000       | 13.7%           | 15.0%           | 14.5            |
| \$25,000 to \$34,999     | 17.5            | 17.0            | 17.2            |
| \$35,000 to \$44,999     | 17.7            | 19.5            | 18.8            |
| \$45,000 to \$64,999     | 25.7            | 23.7            | 24.5            |
| \$65,000 to \$100,000    | 15.9            | 16.5            | 16.2            |
| Greater than \$100,000   | 9.5             | 8.3             | 8.8             |
| <b>Median</b>            | <b>\$44,900</b> | <b>\$42,700</b> | <b>\$43,600</b> |

This difference in median incomes may reflect the different age distributions noted above, as well as the larger proportion of winter beach users who are retired. Once again, the income data show the wide appeal of Broward's beaches with significant numbers of beach users coming from households earning less than \$25,000 and more than \$100,000 and at all income levels in between.

### Recreational Value of Beach Visits

TABLE 4.9 shows that the average visitor to Broward's beaches during 1995-96 valued their beach visit at \$4.14. Residents from other countries placed the highest value on their beach visit, followed by other out-of-state visitors. The flight to a warm climate during the winter season is accompanied by enjoyment of Broward's beaches for many visitors. Average recreational values tend to be higher in the summer for Florida residents, but they are higher in the winter than in the summer for out of state residents. This causes the total amount of recreational value to remain fairly constant year round, since summer Broward visitors with high values are replaced by winter out of state residents who also place a high value on their beach visits.

**Recreational Value in \$ Millions  
Of Broward County Beaches In 1995-96**





**TABLE 4.9**  
**Recreational Value**  
**of Summer and Winter Beach Visits**  
**Broken Down by Geographic Origin**

| Origin            | Average Recreational Values |                |                | Total Recreational Values |                     |                      |
|-------------------|-----------------------------|----------------|----------------|---------------------------|---------------------|----------------------|
|                   | Summer                      | Winter         | Total          | Summer                    | Winter              | Total                |
| Broward Residents | \$ 4.04                     | \$ 3.52        | \$ 3.78        | \$ 7,071,208              | \$ 6,008,893        | \$ 13,080,101        |
| Other Florida     | \$ 5.32                     | \$ 2.69        | \$ 4.10        | 1,767,783                 | 768,934             | 2,536,717            |
| Other U. S.       | \$ 4.33                     | \$ 4.35        | \$ 4.34        | 3,403,475                 | 5,893,389           | 9,296,864            |
| International     | \$ 4.65                     | \$ 5.12        | \$ 5.00        | 1,146,132                 | 3,617,956           | 4,764,088            |
| <b>Total</b>      | <b>\$ 4.30</b>              | <b>\$ 4.02</b> | <b>\$ 4.14</b> | <b>\$ 13,388,598</b>      | <b>\$16,289,172</b> | <b>\$ 29,677,770</b> |

The average recreational value for a Broward County beach visit (\$4.14) is in the range of values for other maintained south Florida beaches (TABLE 4.10)<sup>4</sup>.

**TABLE 4.10**  
**Comparison of Value of A Broward County**  
**Beach Visit with Beach Visits to**  
**Other South Florida Barrier Island Locations**

| Barrier Island             | Average Recreational Value |
|----------------------------|----------------------------|
| Broward County - 1995-96   | \$ 4.14                    |
| Delray Beach - 1995-96     | \$ 4.75                    |
| Anna Maria Island -1995-96 | \$ 3.96                    |
| Captiva Island - 1993-94   | \$ 6.36                    |

Sources: Reports produced by Regional Research Associates.

<sup>4</sup>The reader should not place too much emphasis on differences in average recreational values in TABLE 4.10, since the twenty-four mile long Broward beach system far exceeds the length of the other beaches whose values are reported in the TABLE above. The other beaches average fewer than 5 miles in length. The Broward beaches contain the diversity of both remote private beaches, (like Captiva) in Hillsboro Beach and northern section of Port Everglades, and commercially developed beaches, (like much of Delray) in Deerfield and Fort Lauderdale, and a variety of other types of beaches in between.

**TABLE 4.11**  
**Recreational Value of Beach Visits**  
**Broken Down by Age**

| <b>Age</b>      | <b>Average Recreational Value</b> | <b>Total Recreational Value</b> | <b>Percent</b> |
|-----------------|-----------------------------------|---------------------------------|----------------|
| Under 25        | \$ 3.99                           | \$ 3,821,692                    | 12.9           |
| 25 - 34         | \$ 4.05                           | 7,886,047                       | 26.6           |
| 35 - 54         | \$ 4.41                           | 12,973,444                      | 43.7           |
| 55 - 64         | \$ 4.23                           | 3,493,441                       | 11.8           |
| 65 Plus         | \$ 3.06                           | 1,503,146                       | 5.1            |
| <b>All Ages</b> | <b>\$ 4.14</b>                    | <b>\$ 29,677,770</b>            | <b>100.0</b>   |

Average recreational values first rise with age, but decline after the peak in the 35-54 age group until the lowest value is obtained for the 65+ years group (TABLE 4.11).

Average values also generally rise with income, with one exception, namely, the \$35,000-\$44,999 income group (TABLE 4.12).

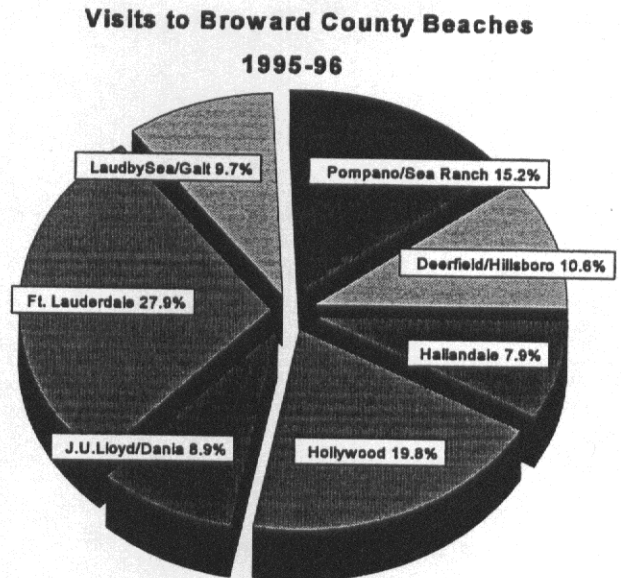
**TABLE 4.12**  
**Recreational Value of Beach Visits**  
**Broken Down by Household Income**

| <b>Household Income</b> | <b>Average Recreational Value</b> | <b>Total Recreational Value</b> | <b>Percent</b> |
|-------------------------|-----------------------------------|---------------------------------|----------------|
| Under \$25,000          | \$ 3.55                           | \$ 3,579,501                    | 12.1           |
| \$25,000-\$34,999       | \$ 4.11                           | 4,497,514                       | 15.2           |
| \$35,000-\$44,999       | \$ 3.31                           | 4,392,192                       | 14.8           |
| \$45,000-\$64,999       | \$ 4.42                           | 7,931,910                       | 26.7           |
| \$65,000-\$99,999       | \$ 4.64                           | 5,753,989                       | 19.4           |
| \$100,000 Plus          | \$ 5.02                           | 3,522,664                       | 11.9           |
| <b>All Incomes</b>      | <b>\$ 4.14</b>                    | <b>\$ 29,677,770</b>            | <b>100.0</b>   |

### Beach Use By Beach Segment

Information on beach use by beach segment is given in TABLE 4.13. The beach segments only approximately correspond to municipal boundaries (especially with the inclusion of the Galt Ocean Mile with Lauderdale by the Sea, and the inclusion of John U. Lloyd State Recreational Area with Dania's relatively small public beach).

The largest beach segment consists of the Fort Lauderdale beaches (excluding the Galt Ocean Mile) which had about 2,002,059 visits in 1995-96. Both the Hollywood beaches and the beaches in Pompano received more than 1 million beach visits. The remaining beaches were all in the 565,000 - 762,000 beach visits range.



**TABLE 4.13  
Visits to Broward County Beaches  
By Beach Segment  
1995-96**

| Beach                                 | Number of Beach Visits | Percent of Total |
|---------------------------------------|------------------------|------------------|
| Deerfield/Hillsboro                   | 761,698                | 10.6 %           |
| Pompano/Sea Ranch Lakes               | 1,091,445              | 15.2             |
| Lauderdale-by-the-Sea/Galt Ocean Mile | 692,024                | 9.7              |
| Fort Lauderdale                       | 2,002,059              | 27.9             |
| John U. Lloyd/Dania                   | 636,202                | 8.9              |
| Hollywood                             | 1,420,774              | 19.8             |
| Hallandale                            | 565,245                | 7.9              |
| <b>Total Visits</b>                   | <b>7,169,447</b>       | <b>100.0 %</b>   |

**TABLE 4.14**  
**Beach Use by Geographic Origin**  
**1995-96**

| <b>Beach</b>                          | <b>Broward<br/>Resident</b> | <b>Other<br/>Florida</b> | <b>Other<br/>U.S.</b> | <b>International</b> |
|---------------------------------------|-----------------------------|--------------------------|-----------------------|----------------------|
| Deerfield/Hillsboro                   | 52.0 %                      | 17.9 %                   | 24.6 %                | 5.5 %                |
| Pompano/Sea Ranch Lakes               | 59.1                        | 4.3                      | 28.6                  | 7.9                  |
| Lauderdale-by-the-Sea/Galt Ocean Mile | 50.6                        | 4.4                      | 32.3                  | 12.7                 |
| Fort Lauderdale                       | 58.9                        | 5.5                      | 24.5                  | 11.2                 |
| John U. Lloyd-Dania                   | 54.3                        | 2.8                      | 24.5                  | 18.5                 |
| Hollywood                             | 34.6                        | 7.3                      | 33.6                  | 24.6                 |
| Hallandale                            | 33.5                        | 9.9                      | 33.7                  | 22.9                 |
| All Interviewees                      | 49.9 %                      | 7.1 %                    | 28.4 %                | 14.6 %               |

The beaches with the largest proportion of Broward resident beach users were in Fort Lauderdale and Pompano Beach (TABLE 4.14). High proportions of beach users from other Florida counties are found in Deerfield/Hillsboro and Hallandale, reflecting day visitors from the two adjacent counties (Dade and Palm Beach). The Lauderdale by the Sea/Galt Ocean Mile beaches have a high proportion of visitors from other states, perhaps reflecting the large population of seasonal residents and their visitors during the winter months. Hollywood and Hallandale have a high proportion of out of state visitors, including international (mainly Canadian) visitors.

A number of characteristics of the beach visit are given in TABLE 4.15 for the various beach segments. The average beach party size was 2.8 persons, and this was similar in all the beach segments with the exception of Hallandale which had a relatively smaller party size. As will be seen below, beach parties interviewed at Hallandale contained relatively many people over 64 years of age.

**TABLE 4.15**  
**Characteristics of Beach Visits by Beach - 1995-96**  
**Reported Averages**

| <b>Beach</b>                          | <b>Party Size</b> | <b>Hours at Beach</b> | <b>Spending on Way to Beach</b> | <b>Beach Visits Per Visitor</b> |
|---------------------------------------|-------------------|-----------------------|---------------------------------|---------------------------------|
| Deerfield/Hillsboro                   | 2.8               | 3.3                   | \$ 9.30                         | 2.9                             |
| Pompano/Sea Ranch Lakes               | 2.9               | 3.2                   | 7.57                            | 4.3                             |
| Lauderdale-by-the-Sea/Galt Ocean Mile | 3.0               | 3.7                   | 15.00                           | 6.0                             |
| Fort Lauderdale                       | 2.7               | 3.3                   | 14.83                           | 5.0                             |
| John U. Lloyd/Dania                   | 2.9               | 3.3                   | 12.17                           | 4.8                             |
| Hollywood                             | 2.8               | 3.5                   | 17.67                           | 4.1                             |
| Hallandale                            | 2.5               | 3.0                   | 15.45                           | 4.0                             |
| <b>Total</b>                          | <b>2.8</b>        | <b>3.3</b>            | <b>\$ 13.73</b>                 | <b>4.3</b>                      |

The average length of time spent at the beach was 3.3 hours, a little shorter at Hallandale and a little longer at the Lauderdale-By-The-Sea/Galt Ocean Mile segment. The average spending on the beach trip was \$13.73, although the amounts spent were lower in Deerfield and

**TABLE 4.16**  
**Age of Adult Interviewed on Beach**  
**1995-96**

| <b>Beach</b>                          | <b>Under 25</b> | <b>25 - 34</b> | <b>35- 54</b> | <b>55 - 64</b> | <b>65 Plus</b> | <b>Median</b>   |
|---------------------------------------|-----------------|----------------|---------------|----------------|----------------|-----------------|
| Deerfield/Hillsboro                   | 12.1 %          | 29.9 %         | 34.0 %        | 14.1 %         | 10.0 %         | 38.7 yrs        |
| Pompano/Sea Ranch Lakes               | 18.0            | 28.5           | 34.3          | 11.1           | 8.1            | 36.0            |
| Lauderdale-by-the-Sea/Galt Ocean Mile | 10.4            | 23.9           | 42.8          | 16.2           | 6.7            | 41.4            |
| Fort Lauderdale                       | 15.7            | 31.2           | 36.7          | 10.5           | 5.9            | 35.7            |
| John U. Lloyd-Dania                   | 7.5             | 22.4           | 45.6          | 16.2           | 8.3            | 42.8            |
| Hollywood                             | 11.8            | 23.5           | 40.9          | 14.6           | 9.2            | 41.2            |
| Hallandale                            | 7.5             | 21.9           | 47.5          | 12.5           | 10.7           | 42.7            |
| <b>All Interviewees</b>               | <b>12.9 %</b>   | <b>26.9 %</b>  | <b>39.2 %</b> | <b>13.0%</b>   | <b>8.0 %</b>   | <b>39.2 yrs</b> |

Pompano Beach. Average number of beach visits per visitor was 4.3, although the numbers were lower in Deerfield and Hallandale because they had relatively large numbers of day trippers from the adjacent counties.

Adult beach users interviewed on the John U. Lloyd/Dania and Hallandale segments had the highest median ages on Broward's beaches. Those interviewed on the Fort Lauderdale and Pompano/Sea Ranch Lakes beaches were the youngest (TABLE 4.16).<sup>5</sup> The relatively high proportion of older beach users on the Dania/John U. Lloyd and Hallandale beaches results in a relatively high proportion of beach users who are retired (TABLE 4.17).

**TABLE 4.17**  
**Occupation of Those Interviewed on the Beach**  
**1995-96**

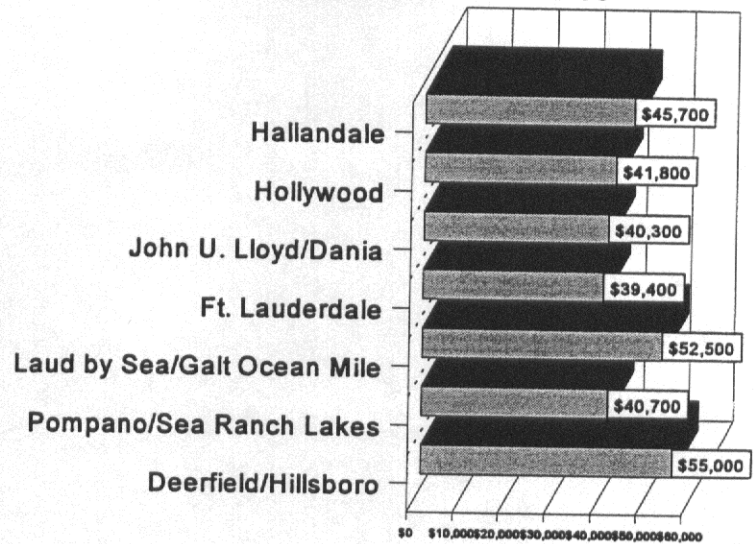
| Beach                                 | Student | Employ-<br>ed | Retired | Home-<br>maker | Unem-<br>ployed | Other |
|---------------------------------------|---------|---------------|---------|----------------|-----------------|-------|
| Deerfield/Hillsboro                   | 7.3 %   | 67.5 %        | 18.4 %  | 4.5 %          | 1.3 %           | 1.1 % |
| Pompano/Sea Ranch Lakes               | 14.3    | 64.4          | 14.8    | 3.9            | 1.8             | 0.8   |
| Lauderdale-by-the-Sea/Galt Ocean Mile | 8.3     | 68.6          | 16.9    | 3.5            | 1.7             | 0.9   |
| Fort Lauderdale                       | 12.1    | 68.7          | 11.6    | 5.1            | 1.5             | 1.1   |
| John U. Lloyd-Dania                   | 5.4     | 66.9          | 18.6    | 4.6            | 1.4             | 3.0   |
| Hollywood                             | 8.4     | 65.4          | 16.7    | 4.7            | 1.0             | 3.7   |
| Hallandale                            | 5.1     | 65.2          | 17.1    | 7.9            | 1.3             | 3.4   |
| All Interviewees                      | 9.6 %   | 66.8 %        | 15.3 %  | 4.9 %          | 1.4 %           | 1.9 % |

The highest median incomes of those interviewed were in the Deerfield/Hillsboro, Lauderdale-By-The-Sea/Galt Ocean Mile areas and Hallandale beaches (TABLE 4.18). The

<sup>5</sup> TABLE 4.16 is not a complete portrayal of the age distribution of beach users because children were not interviewed for the economic study.

median household income of those interviewed on the Deerfield/Hallandale beach segment was \$55,000, while the Lauderdale-By-The-Sea/Galt Ocean Mile median income was also over \$50,000. The Hallandale median income was \$45,700 and the incomes on the other beaches clustered around the overall median of \$41,500.

**Household Income of Adults Interviewed  
On Broward Beaches 1995-96**



**TABLE 4.18  
Household Income of Those Interviewed on the Beach  
1995-96**

| Beach                                 | Under<br>\$25,000 | \$25,000-<br>\$34,999 | \$35,000-<br>\$44,999 | \$45,000-<br>\$64,999 | \$65,000-<br>\$100,000 | \$100,000<br>Plus | Median   |
|---------------------------------------|-------------------|-----------------------|-----------------------|-----------------------|------------------------|-------------------|----------|
| Deerfield/Hillsboro                   | 11.6%             | 11.1%                 | 13.2%                 | 25.7%                 | 23.4%                  | 15.0%             | \$55,000 |
| Pompano/Sea Ranch Lakes               | 16.4              | 17.5                  | 18.9                  | 24.0                  | 16.6                   | 6.6               | \$40,700 |
| Lauderdale-by-the-Sea/Galt Ocean Mile | 10.7              | 11.9                  | 17.1                  | 24.4                  | 21.6                   | 14.3              | \$52,500 |
| Fort Lauderdale                       | 17.0              | 19.3                  | 20.0                  | 25.4                  | 12.8                   | 5.4               | \$39,400 |
| John U. Lloyd-Dania                   | 12.4              | 21.5                  | 22.5                  | 25.3                  | 13.0                   | 5.3               | \$40,300 |
| Hollywood                             | 14.5              | 17.7                  | 19.2                  | 22.8                  | 15.6                   | 10.2              | \$41,800 |
| Hallandale                            | 11.4              | 17.9                  | 18.6                  | 24.1                  | 17.6                   | 10.5              | \$45,700 |
| All Interviewees                      | 14.4%             | 17.3%                 | 18.8%                 | 24.5%                 | 16.2%                  | 8.8%              | \$41,500 |

## V. CHARACTERISTICS OF BEACH TOURISTS

This chapter provides information on beach users who are tourists, that is, they stayed at least one night in Broward County. Included in this chapter is a breakdown of beach tourists by geographic origin, the lodging expenditures by tourists who paid for their lodging, and the characteristics of all overnight tourists. Due to the sharp differences in the tourism markets between the summer and winter seasons, most information is given by season.

### Geographic Origin

Tourists travel in "tourist parties" to Broward County and other destinations. In 1995-96 a total of 245,074 tourist parties visited Broward County's beaches. About 70 percent of these parties came during the winter season, and the remaining 30 percent came in the summer.

The characteristics of these tourist parties are given in TABLE 5.1, depicted by geographic origin. Most of the tourist parties were from out of state, especially in the winter season. There were more international tourist parties that visited the beaches, than tourist parties from elsewhere in Florida in each season.

Party size tends to be larger in the summer than in the winter (3.1 persons in the summer compared to 2.9 persons in the winter). Tourist parties from elsewhere in Florida are larger than out of state parties. Florida tourists are most likely to travel by car and can take advantage of economies in transportation costs. Additionally, out of state tourists are often retired and travel in a party size of two.



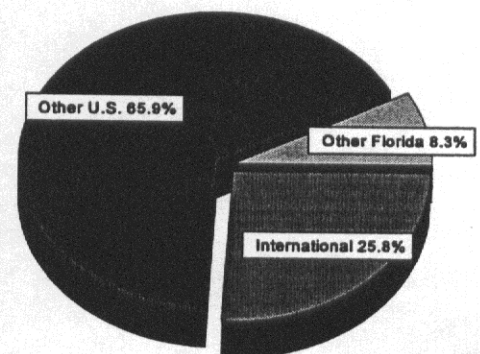
**TABLE 5.1  
Broward Beach Overnight Tourists  
by Geographic Origin  
1995-96**

| Season      | Characteristic                  | All Overnight Tourists | Other Florida | Other U.S. | International |
|-------------|---------------------------------|------------------------|---------------|------------|---------------|
| Summer 1995 | Number of Tourist Parties       | 71,104                 | 10,627        | 48,262     | 12,215        |
| Summer 1995 | Percent of Tourist Parties      | 100.0                  | 14.9          | 67.9       | 17.2          |
| Winter 1996 | Number of Tourist Parties       | 173,970                | 5,998         | 119,049    | 48,923        |
| Winter 1996 | Percent of Tourist Parties      | 100.0                  | 3.4           | 68.4       | 28.1          |
| Summer 1995 | Party Size (Persons)            | 3.1                    | 3.7           | 3.0        | 2.9           |
| Winter 1996 | Party Size (Persons)            | 2.9                    | 3.5           | 2.8        | 3.1           |
| Summer 1995 | Number of Tourists              | 219,529                | 39,320        | 144,786    | 35,424        |
| Summer 1995 | Percent of Tourists             | 100.0                  | 17.9          | 66.0       | 16.1          |
| Winter 1996 | Number of Tourists              | 505,992                | 20,993        | 333,337    | 151,661       |
| Winter 1996 | Percent of Tourists             | 100.0                  | 4.1           | 65.9       | 30.0          |
| Summer 1995 | Average Nights Stayed in County | 6.7                    | 4.1           | 6.7        | 9.5           |
| Winter 1996 | Average Nights Stayed in County | 9.2                    | 4.4           | 7.9        | 12.8          |
| Summer 1995 | Person Nights in County         | 1,467,801              | 161,212       | 970,066    | 336,523       |
| Summer 1995 | Percent of Person-Nights        | 100.0                  | 11.0          | 66.1       | 22.9          |
| Winter 1996 | Person Nights in County         | 4,666,998              | 92,369        | 2,633,364  | 1,941,265     |
| Winter 1996 | Percent of Person-Nights        | 100.0                  | 2.0           | 56.4       | 41.6          |

Floridians account for about one in six beach tourists in Broward during the summer, but they account for only one in twenty-five during the winter.

One of the few generalizations that holds widely in tourism is the tendency of those who travel a longer distance to a tourist destination to stay a longer time at the destination. This is very evident for Broward beach tourism, with Floridians having the shortest stay in both seasons (around 4 nights); international

**Broward Beach Overnight Tourists  
by Geographic Origin 1995-96**



visitors having the longest stay (about 10-12 nights), and visitors from the rest of the U.S. having a stay intermediate between Floridians and international visitors (about one week). Due to these differences in stay, Floridians account for a relatively small share of person-nights (11.0 percent in the summer and 2.0 percent in the winter). International visitors account for 22.9 percent of person-nights in the summer and 41.6 percent of person-nights in the winter. Hence, Broward's beaches are a major international attraction.

### **Lodging Expenditures**

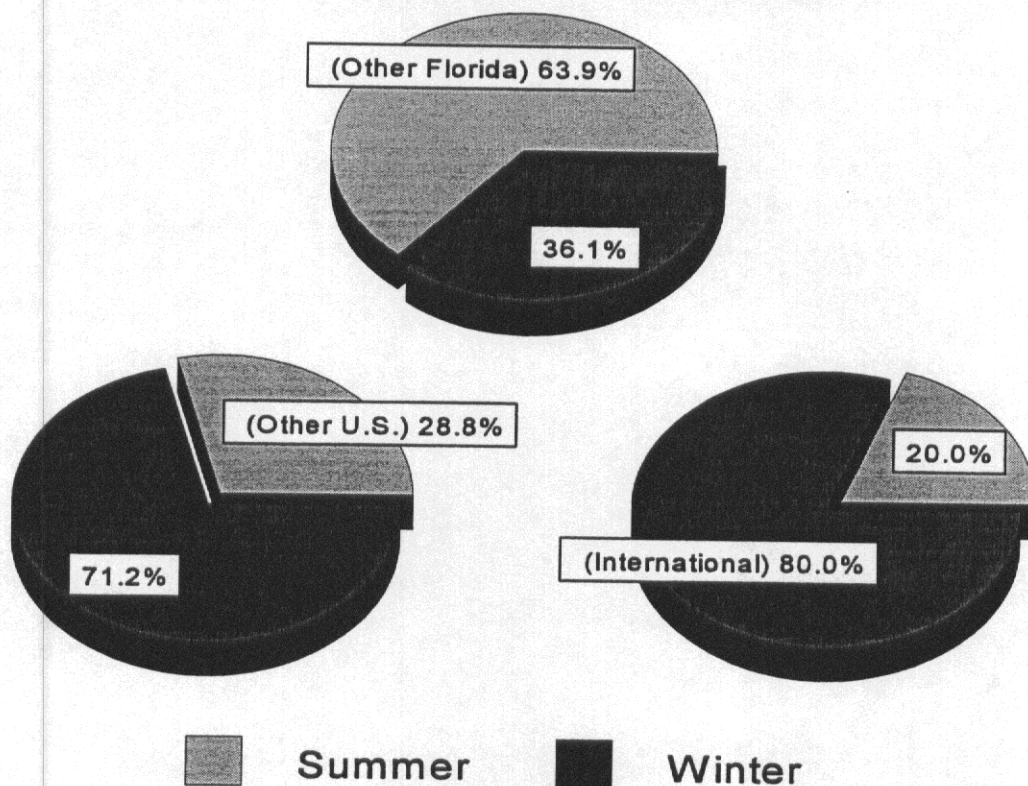
The economic impact of tourists tends to be closely related to whether they pay for their lodging. Not all tourists who visit Broward County pay for their lodging, especially if the purpose of their trip is to visit friends and relatives. Others who own their own condominiums or interval units do not report lodging expenditures during their stay in the county. A little over 50 percent of tourist person-nights are in paid lodging during the summer and closer to 60 percent of tourist person-nights are in paid lodging during the winter (TABLE 5.2, lines 15 and 18 of the main part of the TABLE). In the summer, a majority of the person nights of beach tourists from other states were not in paid lodging (53.6 percent), and in the winter, a majority of the person nights of beach tourists from other counties in Florida were not in paid lodging (58.9 percent)

The 135,032 tourist parties who paid for their lodging contained 420,664 persons and accounted for 2.7 million person nights. About one-fourth of these person nights are sold by the lodging industry in the summer, and three fourths are sold in the winter season. If there is an average of two persons per room, beach tourists would account for about 1.3 million room nights in Broward County on an annual basis.

**TABLE 5.2**  
**Broward Beach Overnight Tourists**  
**Who Paid for their Lodging**  
**by Geographic Origin**  
**1995-96**

| Season      |                               | All<br>Overnight<br>Tourists | Other<br>Florida | Other U.S.    | International |
|-------------|-------------------------------|------------------------------|------------------|---------------|---------------|
| Summer 1995 | Number of Parties             | 71,104                       | 10,627           | 48,262        | 12,215        |
| Summer 1995 | Paying for Lodging            | 42,503                       | 7,460            | 26,785        | 8,257         |
| Summer 1995 | Percent Paying                | 59.8                         | 70.2             | 55.5          | 67.6          |
| Winter 1996 | Number of Parties             | 173,970                      | 5,998            | 119,049       | 48,923        |
| Winter 1996 | Paying for Lodging            | 92,529                       | 2,423            | 54,882        | 35,225        |
| Winter 1996 | Percent Paying                | 53.2                         | 40.4             | 46.1          | 72.0          |
| Summer 1995 | Number of Persons             | 219,529                      | 39,320           | 144,786       | 35,424        |
| Summer 1995 | Paying for Lodging            | 125,604                      | 28,631           | 75,041        | 21,932        |
| Summer 1995 | Percent Paying                | 57.2                         | 72.8             | 51.8          | 61.9          |
| Winter 1996 | Number of Persons             | 505,992                      | 20,993           | 333,337       | 151,661       |
| Winter 1996 | Paying for Lodging            | 295,060                      | 9,643            | 170,562       | 114,855       |
| Winter 1996 | Percent Paying                | 58.3                         | 45.9             | 51.2          | 75.7          |
| Summer 1995 | Person Nights                 | 1,467,801                    | 161,212          | 970,066       | 336,523       |
| Summer 1995 | Paying for Lodging            | 760,935                      | 99,922           | 450,246       | 210,767       |
| Summer 1995 | Percent Paying                | 51.8                         | 62.0             | 46.4          | 62.6          |
| Winter 1996 | Person Nights                 | 4,666,998                    | 92,369           | 2,633,364     | 1,941,265     |
| Winter 1996 | Paying for Lodging            | 2,722,730                    | 37,993           | 1,366,202     | 1,318,535     |
| Winter 1996 | Percent Paying                | 58.3                         | 41.1             | 51.9          | 67.9          |
| Summer 1995 | Lodging Expenditures          | \$ 19,881,375                | \$ 2,323,614     | \$ 11,877,454 | \$ 5,680,307  |
| Summer 1995 | Percent of Total              | 100.0                        | 11.7             | 59.7          | 28.6          |
| Winter 1996 | Lodging Expenditures          | \$ 67,070,362                | \$ 925,441       | \$ 37,398,510 | \$ 28,746,411 |
| Winter 1996 | Percent of Total              | 100.0                        | 1.4              | 55.8          | 42.9          |
| Summer 1995 | Average Per Paying Party      | \$ 467.77                    | \$ 311.47        | \$ 443.43     | \$ 687.91     |
| Summer 1995 | Average Per Paying Person     | \$ 158.29                    | \$ 81.16         | \$ 158.28     | \$ 259.00     |
| Summer 1995 | Average Per Paid Person Night | \$ 26.13                     | \$ 23.25         | \$ 26.38      | \$ 26.95      |
| Winter 1996 | Average Per Paying Party      | \$ 724.86                    | \$ 381.91        | \$ 681.44     | \$ 816.09     |
| Winter 1996 | Average Per Paying Person     | \$ 227.31                    | \$ 95.97         | \$ 219.27     | \$ 250.28     |
| Winter 1996 | Average Per Paid Person Night | \$ 24.63                     | \$ 24.36         | \$ 27.37      | \$ 21.80      |

## Broward Beach Overnight Tourist Parties By Geographic Origin 1995-96



Beach tourists spent \$ 87 million on lodging in Broward County during 1995-96, with \$19.9 million in the summer of 1995 and \$67.1 million in the winter of 1996 (TABLE 5.2). Between 55 and 60 percent of these expenditures were by tourists from other states. Other Floridians accounted for about 12 percent in the summer, but only for 1.4 percent in the winter season. International visitors accounted for almost 30 percent in the summer, and for more than 40 percent in the winter season.

## Tourist Characteristics and Expenditures

Additional characteristics of Broward beach tourists are given in TABLE 5.3.

**TABLE 5.3**  
**Characteristics of**  
**Broward Beach Overnight Tourists**  
**by Geographic Origin 1995-96**

| Characteristic                        | All Tourists |          | Other Florida |          | Other U.S. |          | International |          |
|---------------------------------------|--------------|----------|---------------|----------|------------|----------|---------------|----------|
|                                       | Summer       | Winter   | Summer        | Winter   | Summer     | Winter   | Summer        | Winter   |
| Number of Tourist Parties             | 71,104       | 173,970  | 10,627        | 5,998    | 48,262     | 119,049  | 12,215        | 48,923   |
| Percent Visiting Friends Or Relatives | 12.4%        | 18.8%    | 7.7%          | 38.8%    | 13.7%      | 23.3%    | 11.3%         | 5.5 %    |
| Percent on First Visit                | 40.5%        | 28.8%    | 31.8%         | 30.1%    | 40.0%      | 28.6%    | 49.9%         | 29.2%    |
| Age of Adult Interviewed (Percent):   |              |          |               |          |            |          |               |          |
| Under 25 years                        | 11.5%        | 8.8%     | 12.1%         | 15.6%    | 11.7%      | 10.6%    | 10.1%         | 3.6%     |
| 25-34 Years Old                       | 33.9         | 23.9     | 26.4          | 35.1     | 34.3       | 23.5     | 39.1          | 23.3     |
| 35-54 Years Old                       | 45.2         | 46.4     | 57.7          | 40.4     | 45.1       | 45.4     | 34.9          | 49.7     |
| 55-64 Years Old                       | 8.0          | 12.7     | 2.3           | 7.9      | 7.7        | 14.1     | 13.9          | 9.9      |
| 65+ Years Old                         | 1.0          | 8.3      | 1.4           | 1.0      | 1.2        | 6.5      | 2.0           | 13.5     |
| Median Age in Years                   | 36.0         | 41.5     | 38.0          | 33.7     | 35.8       | 41.0     | 34.5          | 43.3     |
| Household Income (Percent):           |              |          |               |          |            |          |               |          |
| Under \$25,000                        | 9.8%         | 10.8%    | 9.6%          | 18.1%    | 9.0%       | 10.5%    | 13.3%         | 10.6%    |
| \$25,000-\$34,999                     | 18.0         | 13.9     | 21.8          | 13.2     | 17.1       | 15.2     | 18.3          | 10.9     |
| \$35,000-\$44,999                     | 18.5         | 20.1     | 18.2          | 34.0     | 18.7       | 19.1     | 17.6          | 20.8     |
| \$45,000-\$64,999                     | 30.4         | 21.2     | 34.9          | 11.0     | 30.8       | 23.2     | 24.9          | 17.5     |
| \$65,000-\$99,999                     | 13.9         | 22.6     | 3.5           | 12.1     | 15.2       | 20.4     | 17.9          | 29.4     |
| \$100,000+                            | 9.4          | 11.3     | 12.2          | 11.6     | 9.1        | 11.6     | 7.9           | 10.8     |
| Median Income in Dollars              | \$46,400     | \$48,900 | \$44,200      | \$39,500 | \$47,400   | \$48,500 | \$44,600      | \$52,800 |

A relatively small proportion of tourist parties were visiting friends or relatives (about one in eight in the summer and fewer than one in five during the winter season. A relatively high proportion of winter tourists from elsewhere in Florida were visiting friends and relatives (38.8 percent), but this is a small market for Broward tourism.

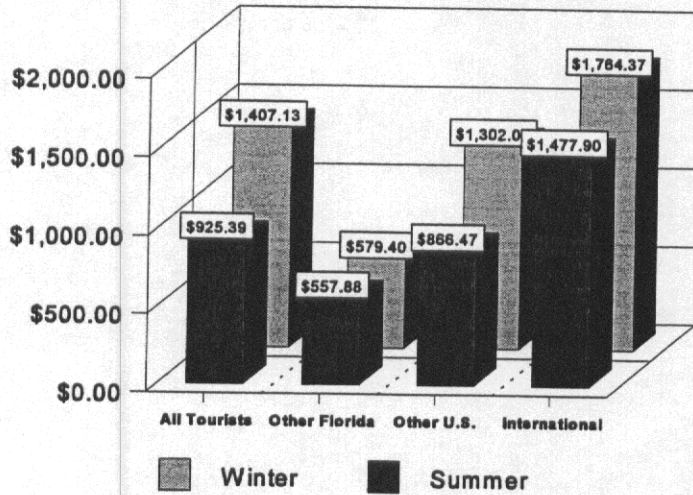
Almost one in three tourist parties found on the beach were on their first visit to the county. The median age of the adult tourists interviewed on the beaches was 36 years in the summer and 41.5 years in the winter. The median household income of Broward's beach tourists was \$46,400 in the summer and \$48,900 in the winter. Tourists from elsewhere in Florida had the lowest median incomes, and the median income of international tourists was the highest among the groups surveyed.

**TABLE 5.4**  
**Broward Beach Tourism**  
**Spending Per Tourist Party**  
**By Type of Spending**  
**By Geographic Origin**  
**1995-96**

| Type of Spending         | All Tourists |            | Other Florida |           | Other U.S. |             | International |             |
|--------------------------|--------------|------------|---------------|-----------|------------|-------------|---------------|-------------|
|                          | Summer       | Winter     | Summer        | Winter    | Summer     | Winter      | Summer        | Winter      |
| Lodging                  | \$ 253.46    | \$ 385.28  | \$ 177.95     | \$ 140.03 | \$ 228.24  | \$ 303.43   | \$ 418.78     | \$ 614.52   |
| Dining                   | \$ 236.65    | \$ 311.76  | \$ 159.57     | \$ 185.77 | \$ 227.05  | \$ 303.27   | \$ 341.62     | \$ 347.87   |
| Food/Groceries           | \$ 77.89     | \$ 91.47   | \$ 59.21      | \$ 35.28  | \$ 68.55   | \$ 83.56    | \$ 131.02     | \$ 117.61   |
| Recreation/Entertainment | \$ 105.36    | \$ 270.50  | \$ 67.32      | \$ 55.13  | \$ 113.39  | \$ 335.57   | \$ 106.71     | \$ 138.58   |
| Shopping                 | \$ 181.82    | \$ 238.29  | \$ 63.74      | \$ 80.72  | \$ 158.92  | \$ 193.76   | \$ 375.04     | \$ 365.97   |
| Car/Gas                  | \$ 65.43     | \$ 90.86   | \$ 29.05      | \$ 76.41  | \$ 65.44   | \$ 73.38    | \$ 97.06      | \$ 135.18   |
| Other                    | \$ 4.79      | \$ 18.96   | \$ 1.04       | \$ 6.06   | \$ 4.88    | \$ 9.06     | \$ 7.67       | \$ 44.64    |
| Total                    | \$ 925.39    | \$1,407.13 | \$ 557.88     | \$ 579.40 | \$ 866.47  | \$ 1,302.03 | \$ 1,477.90   | \$ 1,764.37 |
| Number of Parties        | 71,104       | 173,970    | 10,627        | 5,998     | 48,262     | 119,049     | 12,215        | 48,923      |

The average tourist party visiting Broward spent \$925.39 during the summer season and \$1,407.13 during the winter season (TABLE 5.4). International tourist parties had the highest level

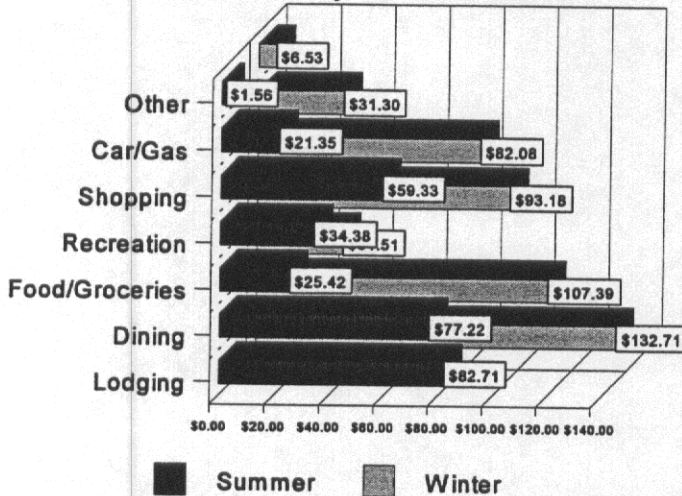
**Spending Per Tourist Party by Broward Beach Users  
Spending by Geographic Origin 1995-96**



of expenditure in both seasons (\$1,477.90 in the summer and \$1,764.37 in the winter). The tourist parties from elsewhere in Florida had the lowest level of expenditures (\$557.88 in the summer and \$579.40 in the winter), which was about one-third of the level of spending by international tourists. Tourist parties from other parts of the United States had a level of expenditures

intermediate between the spending of other Florida and international visitors.

**Type of Spending for All Tourists  
Broward County Beaches 1995-96**



Spending per party is about 50 percent higher in the winter than in the summer for all tourist parties, although spending for parties from elsewhere in Florida is similar in both seasons. About 30 percent of the expenditures made by tourist parties visiting Broward was spent on dining out and on groceries, and a similar percentage was spent on lodging. Tourist

parties from elsewhere in Florida spent relatively more on dining out, while out of state tourist parties spent relatively more on recreation and entertainment.

**TABLE 5.5**  
**Broward Beach Tourism**  
**Spending Per Tourist**  
**By Type of Spending**  
**By Geographic Origin**  
**1995-96**

| Type of Spending         | All Tourists |           | Other Florida |           | Other U.S. |           | International |           |
|--------------------------|--------------|-----------|---------------|-----------|------------|-----------|---------------|-----------|
|                          | Summer       | Winter    | Summer        | Winter    | Summer     | Winter    | Summer        | Winter    |
| Lodging                  | \$ 82.71     | \$ 132.71 | \$ 48.62      | \$ 40.47  | \$ 76.85   | \$ 108.76 | \$ 143.42     | \$ 197.59 |
| Dining                   | \$ 77.22     | \$ 107.39 | \$ 43.60      | \$ 53.69  | \$ 76.45   | \$ 108.70 | \$ 116.99     | \$ 111.86 |
| Food/Groceries           | \$ 25.42     | \$ 31.51  | \$ 16.18      | \$ 10.20  | \$ 23.08   | \$ 29.95  | \$ 44.87      | \$ 37.82  |
| Recreation/Entertainment | \$ 34.38     | \$ 93.18  | \$ 18.39      | \$ 15.93  | \$ 38.18   | \$ 120.28 | \$ 36.54      | \$ 44.56  |
| Shopping                 | \$ 59.33     | \$ 82.08  | \$ 17.42      | \$ 23.33  | \$ 53.51   | \$ 69.45  | \$ 128.44     | \$ 117.68 |
| Car/Gas                  | \$ 21.35     | \$ 31.30  | \$ 7.94       | \$ 22.08  | \$ 22.03   | \$ 26.30  | \$ 33.24      | \$ 43.47  |
| Other                    | \$ 1.56      | \$ 6.53   | \$ 0.28       | \$ 1.75   | \$ 1.64    | \$ 3.25   | \$ 2.63       | \$ 14.35  |
| Total                    | \$ 301.97    | \$ 484.70 | \$ 152.43     | \$ 167.46 | \$ 291.74  | \$ 466.68 | \$ 506.13     | \$ 567.32 |
| Number of Tourists       | 219,529      | 505,992   | 39,320        | 20,993    | 144,786    | 333,337   | 35,424        | 151,661   |

Because overall tourist party size is higher in the summer than in the winter, spending per tourist remains over 50 percent higher in the winter than in the summer (TABLE 5.5). The exception consists of international tourists who have per capita rates of expenditures that are relatively similar in both seasons (\$506.13 in the summer and \$567.32 in the winter).

The primary reason why tourist spending tends to be higher in the winter than in the summer is evident from TABLE 5.6 which shows spending per tourist-day in the summer at \$44.26 and at \$52.72 in the winter. Winter spending is about 20 percent higher on a per tourist-day basis, compared to over 50 percent on a per party or per capita basis. Tourists tend to stay longer when visiting in the winter season and this increases their spending



**TABLE 5.6**  
**Broward Beach Tourism**  
**Spending Per Tourist-Day**  
**By Type of Spending**  
**By Geographic Origin**  
**1995-96**

| Type of Spending         | All Tourists |           | Other Florida |          | Other U.S. |           | International |           |
|--------------------------|--------------|-----------|---------------|----------|------------|-----------|---------------|-----------|
|                          | Summer       | Winter    | Summer        | Winter   | Summer     | Winter    | Summer        | Winter    |
| Lodging                  | \$ 12.12     | \$ 14.43  | \$ 11.80      | \$ 9.14  | \$ 11.42   | \$ 13.70  | \$ 15.03      | \$ 15.40  |
| Dining                   | \$ 11.32     | \$ 11.68  | \$ 10.58      | \$ 12.12 | \$ 11.36   | \$ 13.69  | \$ 12.26      | \$ 8.72   |
| Food/Groceries           | \$ 3.73      | \$ 3.43   | \$ 3.93       | \$ 2.30  | \$ 3.43    | \$ 3.77   | \$ 4.70       | \$ 2.95   |
| Recreation/Entertainment | \$ 5.04      | \$ 10.13  | \$ 4.46       | \$ 3.60  | \$ 5.67    | \$ 15.15  | \$ 3.83       | \$ 3.47   |
| Shopping                 | \$ 8.70      | \$ 8.93   | \$ 4.23       | \$ 5.27  | \$ 7.95    | \$ 8.75   | \$ 13.46      | \$ 9.17   |
| Car/Gas                  | \$ 3.13      | \$ 3.40   | \$ 1.93       | \$ 4.99  | \$ 3.27    | \$ 3.31   | \$ 3.48       | \$ 3.39   |
| Other                    | \$ 0.23      | \$ 0.71   | \$ 0.07       | \$ 0.40  | \$ 0.24    | \$ 0.41   | \$ 0.28       | \$ 1.12   |
| Total                    | \$ 44.26     | \$ 52.72  | \$ 37.00      | \$ 37.80 | \$ 43.35   | \$ 58.78  | \$ 53.05      | \$ 44.22  |
| Number of Tourist-Days   | 1,467,801    | 4,666,998 | 161,212       | 92,369   | 970,066    | 2,633,364 | 336,523       | 1,941,265 |

The remaining increase in spending between the summer and winter seasons is due to an increase in lodging expenditures per person-day and an increase in recreation/entertainment spending. Although it would seem obvious that lodging expenditures per tourist-night would increase between the seasons, it should be remembered that the figures are very sensitive to the proportion of tourists who are visiting friends and relatives and have, therefore, no lodging expenditures. An increase in the proportion of tourists visiting friends or relatives, for example, explains why lodging expenditures per tourist-day falls in the winter relative to the summer for tourists from other parts of Florida.

### Tourists and Beaches

Broward beach tourists were asked whether they would come to Broward if there were no beaches (TABLE 5.7). About 60 percent of the tourists said they would not come and a further 12 percent said they would come less frequently, if there were no beaches in the county. Indeed, more

**TABLE 5.7**  
**Response to Question:**  
**“Would You Come to Broward County If There Were No Beaches?”**  
**Broward Beach Overnight Tourists**  
**1995-96**

| Characteristic                       | All Overnight<br>Tourists | Would Not<br>Come | Would Come<br>Less Often | Would Come<br>As Often |
|--------------------------------------|---------------------------|-------------------|--------------------------|------------------------|
| Number of Tourist Parties            | 245,074                   | 150,760           | 30,902                   | 63,412                 |
| Percent of Tourist Parties           | 100.0                     | 61.5              | 12.6                     | 25.9                   |
| Number of Persons                    | 723,798                   | 440,144           | 88,464                   | 195,190                |
| Percent of Persons                   | 100.0                     | 60.8              | 12.2                     | 27.0                   |
| Number of Person Nights              | 6,106,373                 | 3,982,063         | 702,720                  | 1,421,589              |
| Percent Person Nights                | 100.0                     | 65.2              | 11.5                     | 23.3                   |
| Persons Paying for Lodging in County | 427,042                   | 303,750           | 35,030                   | 88,262                 |
| Percent of Paying Persons            | 100.0                     | 71.1              | 8.2                      | 20.7                   |
| Paid Lodging Person Nights in County | 3,922,485                 | 2,840,777         | 277,914                  | 803,794                |
| Percent Paid Person Nights           | 100.0                     | 72.4              | 7.1                      | 20.5                   |
| Total Lodging Expenditures           | \$ 90,609,230             | \$70,078,354      | \$ 6,353,519             | \$14,177,357           |

than 65 percent of Broward beach tourism would not occur (as measured by tourist nights) in the absence of Broward's beaches. This would result in a loss of about \$70 million dollars in lodging expenditures in the county.

**"Would You Come to Broward County if There Were No Beaches?"  
Response of Overnight Tourists 1995-96**

