

Linking the Economy and Environment of Florida Keys/Florida Bay

Executive Summary - Resident Survey

The Monroe County Tourist Development Council (TDC), The Nature Conservancy, Florida Keys Initiative (TNC), and the National Oceanic and Atmospheric Administration (NOAA) have jointly funded a study to establish the recreational use of the Florida Keys/Key West by residents of Monroe County, resident's ratings on the importance and satisfaction with 25 selected natural resource attributes, facilities, and services, and the economic contribution that resident recreation activity makes to Monroe County. This information complements similar work completed and reported elsewhere for visitors to the area.

In 1996, Florida State University's, Policy Sciences Program, Survey Research Center conducted a survey of Monroe County residents. The survey used a combination telephone and mail back set of samples. Over 2,900 Monroe County households completed the telephone survey and over 600 completed the mail back portion of the survey. The telephone sample was used to collect information on the demographic characteristics of Monroe County households, whether anyone in the household participated in outdoor recreation activities in the Florida Keys/Key West, and questions related to ratings of the quality of life in Monroe County and the primary reason for locating in Monroe County. The mail back survey collected information from those households that participated in outdoor recreation activities in the Florida Keys/Key West. Information included participation in 66 recreation activities in four regions of the area (e.g. Upper Keys, Middle Keys, Lower Keys, and Key West), intensity of recreation activity (measured in person-days of activity) for 37 activities in the four regions, importance and satisfaction ratings for 25 natural resource attributes, facilities, and services, and detailed information on spending associated with outdoor recreation in Monroe County. In addition, information was obtained using the responses to 16 questions to construct the environmental concern index.

Participation in Outdoor Recreation and Socioeconomic Factors

Detailed information was obtained from a sample of all households in Monroe County on various socioeconomic factors to test the relationship between participation in outdoor recreation activities and socioeconomic factors. Socioeconomic factors included sex, age, race/ethnicity, education, household income, household size, employment status, whether work inside or outside Monroe County, years lived in Monroe County, access to waterfront property from place of residence, and whether the household owned a boat.

- Overall, 77.0 percent of the 79,830 Monroe County residents living in households participated in outdoor recreation activities in the Florida Keys/Key West during the June 1995 - May 1996 year.
- Males had higher participation rates than females (82 versus 72 percent).
- Residents age 25-44 had the highest participation rate (88 percent), while residents age 65 and over had the lowest participation rate (46 percent).
- American Indians and Whites not Hispanic had the highest participation rates (90 and 81 percent), while Blacks not Hispanic had the lowest participation rate (45 percent).
- Participation rates increased with both higher levels of education and household income.
- Participation rates declined with the number of years living in Monroe County
- Residents employed full-time or self employed had the highest participation rates (86 and 83 percent), while retired residents had the lowest participation rate (57 percent)
- Residents of Key West had the lowest participation rate (70 percent) by region of residence, all other areas were above the overall participation rate of 77 percent.
- Residents that work outside Monroe County had a higher participation rate than those that do not work outside the county (89 versus 76 percent).
- Residents with residences with waterfront access had higher participation rates than those without access (80 versus 73 percent).
- Those that own a boat had a higher participation rate than those without a boat (92 versus 65 percent).

Quality of Life and Most Important Reason for Living in Monroe County

Monroe County households contacted by telephone were asked to rate the quality of life in Monroe County as either “excellent”, “good”, “fair” or “poor” and were also asked to give the most important reason for living in Monroe County.

- About 32 percent rated the quality of life in Monroe County as “excellent”, about 47 percent rated it “good”, about 16 percent rated it “fair”, and about 5 percent rated it “poor”.
- Residents that participated in outdoor recreation activities generally rated the quality of life higher than nonparticipants.
- Climate was the most important reason for living in Monroe County (23 percent), followed by job/business (17 percent), born here (13.5 percent), water activities (13 percent), environment (9.6 percent), family/friends (7.5 percent), low crime rate (5 percent), access to natural resources (3 percent) and retirement (3 percent).
- Residents that participated in outdoor recreation activities rated water activities, environment, and access to natural resources much higher than nonparticipants.

Recreation Activities

This was the most detailed part of the survey. Information was gathered on participation in 66 recreation activities in each of four regions in the Florida Keys/Key West. The report summarizes these 66 activities into 41 aggregated activities, eliminating double-counting across activities. Intensity of use was also measured for 37 activities. Intensity of use was measured by the number of person-days the activity was done during the year in each of the four regions.

- For the entire Keys, fishing was the activity with the highest participation rate (47.66 percent) followed by snorkeling (45.3 percent), beach activities (38 percent), and viewing wildlife-nature study(36 percent). 16.65 percent participated in scuba diving, about 32 percent participated in cultural events (fairs, concerts, plays) and almost 29 percent visited a museum or historic area.
- In terms of the number of participants, fishing was the top rated activity in the Upper and Middle Keys, while snorkeling was the top rated activity in the Lower Keys and visiting museums or historic areas was the top rated activity in Key West.
- About 70 percent participated in water-based activities, while almost 89 percent participated in land-based activities.
- In terms of the number of person days of activity, fishing was the top rated activity for the entire Keys and within every region of the Keys, except Key West where beach activities were the top rated activity.

Resident Spending and Economic Contribution

The mail back survey gathered detailed spending information on residents last trip or outing to do recreation activity in Monroe County. Information was obtained on 47 detailed spending categories and was gathered for a recreation group. Information as also obtained on group size and length of trips or outings in order to estimate expenditures on a per person per day basis. For purposes of estimating the economic contribution to Monroe County by resident spending, residents were classified into two groups; the export sector and the other sector. The export sector includes the retirement community and those residents that work outside Monroe County because they both derive their incomes from outside the county. This was done to avoid double-counting the economic contribution from resident spending from other export industries in the county such as the tourist industry, the commercial fishing industry, and the military. Residents that receive their incomes directly or indirectly (i.e. through the multiplier process) from other export industries would be counted in separate analyses for these industries.

- Average spending **per person per day** by residents in the “export sector” was \$73.51 versus \$98.79 for all residents.
- For the “export sector”, average expenditures per person day were \$4.31 for lodging, \$24.10 for food & beverages, \$4.46 for transportation, \$16.30 for boating, \$8.86 for fishing, \$0.12 for snorkeling/scuba, \$2.77 for sightseeing, \$2.59 for other activities, \$8.43 for miscellaneous items, and \$1.57 for services.

- **Total spending** by all residents for outdoor recreation in Monroe County was over \$404 million. About \$94 million or 23 percent was spent by the “export sector”.
- The \$94 million in spending by the “export sector” generated a total of about \$106 million in total output/sales, about \$31 million in income, and about 2,414 full and part time jobs in Monroe County. The export sector of resident recreational spending accounted for about 5 percent of the total output/sales in Monroe County and about 3 percent of all income and about 5 percent of all employment

Importance and Satisfaction Ratings

Residents that participated in outdoor recreation activities in Monroe County were asked to rate both the importance of and satisfaction with, 25 selected facilities, services, and natural resource attributes. For 10 of the items, residents that had either lived or visited the Florida Keys/Key West within the past five years, were asked to rate the items as to their satisfaction with these items five years ago. Statistical tests were conducted to highlight significant differences.

- Six items received relatively high importance ratings but relatively low satisfaction ratings. They were Amount of living coral on the reef, quality of the beaches, condition of the bike paths and sidewalks, cleanliness of the streets and sidewalks, uncrowded conditions, and value for the price.
- Six items received both relatively high importance ratings and relatively high satisfaction ratings. They were Clear water (high visibility), many different kinds of fish and sea life to view, parks and specially protected areas, mooring buoys near coral reefs, historic preservation (historic landmarks, houses, etc.), and service and friendliness of people.
- Eight of the ten items rated over time showed significant declines in satisfaction ratings. They were clear water (high visibility), amount of living coral on the reef, opportunity to view large wildlife, uncrowded conditions, shoreline access, quality of beaches, service and friendliness of people, and parks and specially protected areas.

Environmental Concern Index

Residents that participated in outdoor recreation activities were asked to respond to 16 questions on the mail back survey that were used to construct an environmental concern index. The index ranges from a low score of 16 to a maximum score of 80. Index scores are in parentheses below.

- 37.6 percent of residents place a very high priority on the protection of the environment (65+).
- 53.9 percent of residents are concerned about protection of the environment (49-64).
- 1.8 percent of residents are neutral or undecided about environmental issues (48).
- 5.9 percent of residents have little concern about protection of the environment (32-47).
- 0.8 percent of residents place a very low priority on the protection of the environment (16-31).
- Overall then, 91.5 percent of residents are concerned to very concerned about the protection of the environment.

The results summarized here and much greater detail can be found in the following two reports:

A Socioeconomic Analysis of the Recreation Activities of Monroe County Residents In the Florida Keys/Key West (49 pages)

Technical Appendix: Sampling Methodologies and Estimation Methods Applied to the Survey of Residents of Monroe County

The following reports are also available on the visitor portion of the study:

Linking the Economy and Environment of Florida Keys/Florida Bay: Executive Summary - Visitors Survey (5 pages)

Visitor Profiles: Florida Keys/Key West (159 pages)

Economic Contribution of Recreating Visitors to the Florida Keys/Key West (22 pages)

Importance and Satisfaction Ratings By Recreating Visitors to the Florida Keys/Key West (23 pages)

Technical Appendix: Sampling Methodologies and Estimation Methods Applied to the Florida Keys/Key West Visitor Surveys (170 pages)

All the reports listed above are available on the World Wide Web at

<http://www-orca.nos.noaa.gov/projects/econkeys/econkeys.html>

All reports are in PDF file format and can be read and/or downloaded using Adobe Acrobat Reader at the Web site.

Printed copies can be ordered from the Web site or by contacting the following:

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