

August 2010

Business Survey: Off-Road Vehicle Management, Cape Hatteras National Seashore

Final Report

Prepared for

National Park Service
Environmental Protection Specialist
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Acknowledgments

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Executive Summary

In order to bring Cape Hatteras National Seashore (the Seashore) into compliance with Executive Orders 11644 and 11989 respecting off-road vehicle (ORV) use, and with NPS laws, regulations (36 CFR 4.10), and policies to minimize impacts of ORV use to Seashore resources and values, the National Park Service (NPS) must develop an ORV management plan and special regulation. NPS is under a court order to complete the plan by December 31, 2010, and to complete the promulgation of a final rule by April 1, 2011. If the new rule changes ORV management, visitors, businesses and the communities on the Outer Banks will be affected.

NPS contracted with RTI International to conduct surveys of local businesses to provide additional information for the planning process. The surveys gathered information for use in park planning and for reports that must be prepared to support the new rule (the Seashore's Off-Road Vehicle Management Plan Environmental Impact Statement [EIS] and a benefit-cost analysis for the rulemaking). The survey included questions about the characteristics and size of local businesses to assess the possible impacts of the action alternatives on revenue relative to the no-action alternatives.

The data from the survey will supplement the information available for the required analyses. The EIS and the benefit-cost analysis both require a general description of the socioeconomic environment, including the business community, the economy of the area in general, the visitor population, and the population characteristics of the local communities. In addition, data are needed to analyze the economic impacts of the action alternatives relative to the no-action alternatives.

The socioeconomic analysis includes a regional economic impact assessment. For the EIS, IMPLAN will be used to

estimate the regional economic impacts. Economic impacts for the benefit-cost analysis are measured by changes in producer surplus and consumer surplus. Estimating both the regional economic impacts and the change in producer surplus requires assumptions about the impact that the action alternatives will have on revenue and business activity relative to the no-action alternatives.

All the different businesses on the Outer Banks are interdependent and in some way affected by the flow of visitors to the area. Revenue from visitors supports the whole local economy including other local businesses that do not cater primarily to tourists. The business survey focused on businesses that cater directly to tourists. The regional impact analysis described in the EIS captures the ripple effects of changes in visitor spending on the rest of the economy.

For the purposes of the survey, NPS divided businesses into two groups based on geographic location. The first group includes businesses in the villages that directly border the Seashore, which we call the Seashore villages (Rodanthe, Waves, Salvo, Avon, Buxton, Frisco, Hatteras, and Ocracoke). These businesses depend heavily on tourists visiting the beaches on the Seashore. The second group includes businesses located north of the park boundary in the villages of Nags Head, Kill Devil Hills, and Kitty Hawk. These businesses serve tourists that visit the Seashore, but their customer base also includes visitors who use the beaches outside the Seashore on the Outer Banks.

To simplify the data collection process and use survey resources effectively, we selected four primary industry categories for interviewing: recreational supplies, rental homes, lodging excluding rental homes, and commercial fishermen. In Section 2, Table 2-1 contains the North American Industry Classification System (NAICS) codes and definitions for each of the business categories. In addition to these four industry categories, several other industry categories serve tourists directly. In the socioeconomic analysis for the EIS and in the benefit-cost analysis, the data collected for these four industry categories will be used to estimate impacts on the other business categories that also cater directly to tourists.

These surveys all followed the same format, with appropriately worded questions for the specific industries, and were

administered by telephone. Up to 10 calls were made to each business if the number was busy or no one answered. To maximize response rates among businesses, interviewers assured respondents that their answers will be kept on RTI's secure network in a password-protected folder that only project staff can access.

Businesses were first asked to provide general information describing their business, including services and products offered and seasons of operation. The second set of questions collected information on revenue and number of employees, including seasonal variation, to classify the size of businesses and characterize the business community in general. Next, businesses were asked to provide the change in revenue between 2007 and 2008. The two no-action alternatives for the EIS are management under the Interim Species Management Plan (which was in place in 2007) and management under the Consent Decree (which went into effect in April 2008). Finally, the survey requested the respondent's estimations of how the different alternative management scenarios will affect their revenue.

RTI conducted the surveys between June 1 and August 31, 2009. The timing of the surveys was dictated primarily by the schedule needed to meet the court-ordered deadline for finalizing the new rule and by the Paperwork Reduction Act, which requires Office of Management and Budget approval for information collection and public comment. Conducting the surveys over the summer ensured that seasonal businesses were available to participate; however, because business owners are busiest during the summer, the timing of the surveys made it difficult for some businesses to participate.

The overall response rate to the survey was 42%, although response rates varied depending on the business category and whether the business was located in one of the Seashore villages or in the villages just north of the Seashore.

Businesses that responded to the survey were generally worried about the future impacts of the action alternatives. Many said they were already feeling the impacts, although they acknowledged that economic conditions and fuel prices in 2008 made it difficult to identify the impact of beach closures. Overall, the business survey provided the following general conclusions:

- All but eight of the businesses interviewed were categorized as small businesses based on Small Business Administration (SBA) definitions.
- Businesses north of the Seashore in Nags Head, Kill Devil Hills, and Kitty Hawk overall expected smaller impacts from any change in ORV management relative to the Seashore villages. The response rate from these businesses was lower, in part because the issue was not expected to have a big impact. However, some of the businesses that responded to the survey predicted significant drops in revenue from the two proposed alternatives described in the survey.
- Businesses that rented vacation homes fared better between 2007 and 2008 than recreational supply and lodging businesses.
- In all business categories, the majority of businesses reported that revenue fell between 2007 and 2008, but the majority also reported hiring the same number of full and part-time employees in 2007 and 2008.
- The majority of businesses thought that all three alternatives described in the survey would result in decreased revenue compared to 2008. A smaller number expected no change or an increase.
- The first alternative, under which all the spits and points were closed year-round, was expected to result in the biggest decrease in revenue.
- Fewer businesses felt comfortable providing a quantitative forecast of the expected impact of the alternatives on revenue given the uncertainties surrounding the cause of changes in revenue between 2007 and 2008, the impact of the alternatives on visitation, and the year-to-year variation in weather and nesting patterns.
- From the businesses providing quantitative forecasts: Businesses forecast median decreases of 0% to 25% in annual revenue compared to 2008 for the first alternative described (which closed the most miles of beach to ORVs year-round). For the second alternative (which involved no year-round closures), the median change in revenue compared to 2008 ranged from a decrease of 12% to no change. Closing the soundside ramps generated median estimates of revenue loss ranging from no change to -4%.

1

Introduction and Survey Goals

The National Park Service (NPS) must develop rules to manage the use of off-road vehicles (ORVs) on the beaches in Cape Hatteras National Seashore (the Seashore). Under the National Environmental Policy Act, NPS must complete an Environmental Impact Statement (EIS) comparing conditions under the no-action alternatives (the baseline) and a set of action alternatives (proposed management alternatives). The EIS describes the alternatives and the impacts of each proposed action alternative relative to the no-action alternatives. In addition, federal statutes, including Executive Order (E.O.) 12866—as amended by E.O. 13258 of February 26, 2002, and E.O. 13422 of January 18, 2007—require that NPS conduct a benefit-cost analysis of the proposed regulation and an analysis of the impact of the regulation on small businesses under the Regulatory Flexibility Act (RFA) of 1980.

To support the required analyses and to collect information relevant to park management, NPS conducted a survey of businesses on the Outer Banks in the area around the Seashore. The business survey asks operators of local businesses about the characteristics and size of their businesses and the likely impacts of the action alternatives on their revenue. Data from the survey will be used to prepare the socioeconomic analysis for the EIS, the benefit-cost analysis, and the RFA analysis (if any small businesses are found to be directly, rather than indirectly, affected by the proposed regulations as defined in the RFA). Information from businesses serves several important functions. First, information about the existing business community provides a description of baseline conditions and characterizes an important dimension of the human context in which the eventual management strategy will

be implemented. Although publically available data provide some details about the number, size, and location of local businesses, the description of existing conditions can be improved with more detailed and up-to-date information, as well as information about the customers and experiences of the businesses.

Second, the survey of businesses provides a geographically detailed characterization of the business community. Often, economic impact analysis is conducted and reported at an aggregate level, for example, at the level of a county or region because much of the publically available data are reported for larger geographic areas. However, some businesses around the Seashore rely on traffic to specific parts of the beach. The telephone survey provides an opportunity to better understand how businesses in different villages are affected.

Third, the responses collected from the surveys provide one of several sources of information that will be used to create high-, medium-, and low-impact scenarios for each action alternative relative to the no-action alternatives. There are two no-action alternatives. Conditions in 2007 under the Interim Protected Species Management Strategy (the Interim Strategy, NPS 2006) define one of the no-action alternatives and conditions under the Consent Decree (see a summary of the Consent Decree at <http://www.nps.gov/caha/planyourvisit/consentdecree.htm>), which went into place in the spring of 2008, define the other no-action alternative. The actual impacts of the alternatives are inherently uncertain, and the business owners were asked to provide their best estimate of these impacts. The range of scenarios constructed for each action alternative captures some of this uncertainty. As discussed in Section 5, many businesses interviewed were hesitant to provide quantitative forecasts of change in revenue. The interviews provide qualitative information on expected impacts and a picture of the reasoning behind the responses that will supplement the quantitative estimates.

The survey was conducted by RTI International from June through September 2009. To conduct the survey, NPS received an emergency clearance on May 21, 2009, for the Information Collection Request from the Office of Management and Budget (OMB). The OMB clearance number is OMB #1024-0258 with expiration date November 30, 2009.

The rest of the report is organized as follows: Section 2 describes the sample selection process and outcomes, Section 3 describes the survey instrument design, and Section 4 presents the approach to data collection. Section 5 presents the results of the survey and discussion of the results.

2

Sample Design

All the different businesses on the Outer Banks are interdependent and in some way affected by the flow of visitors to the area. Revenue from visitors supports the whole local economy, including other local businesses that do not cater directly to tourists. The business survey focused on businesses that cater directly to tourists. The regional impact analysis described in the EIS captures the ripple effects of changes in visitor spending in the rest of the economy.

For the purposes of the survey, NPS divided businesses into two groups based on geographic location. The first group includes businesses in the villages that directly border the Seashore, which we call the Seashore villages (Rodanthe, Waves, Salvo, Avon, Buxton, Frisco, Hatteras, and Ocracoke). These businesses depend heavily on tourists visiting the beaches in the Seashore. The second group includes businesses located north of the park boundary in the villages of Nags Head, Kill Devil Hills, and Kitty Hawk. These businesses serve tourists that visit the Seashore, but their customer base also includes visitors who use the beaches outside the Seashore on the Outer Banks.

To simplify the data collection process and use survey resources effectively, we selected four primary industry categories for interviewing: recreational supplies, rental homes, lodging excluding rental homes, and commercial fishermen. Table 2-1 contains the North American Industry Classification System (NAICS) codes and definitions for each of the business categories. In addition to these four industry categories, several other industry categories directly serve tourists.

Table 2-1. Business Categories by Three-Digit NAICS

Business Category	NAICS	NAICS Definition
Recreational supply	451	Sporting goods, hobby, book and music stores
Recreational supply	487	Scenic and sightseeing transportation
Recreational supply	713	Amusement, gambling, and recreation industries
Rental agencies	531	Real estate
Lodging other than rental homes	721	Accommodation

In the socioeconomic analysis for the EIS and in the benefit-cost analysis, the data collected for these four industry categories will be used to estimate impacts on the other business categories that also cater directly to tourists such as restaurants.

To create the sampling frame (the list of businesses from which the sample will be drawn), NPS used a variety of resources. Lists of all businesses in the selected categories were compiled using the yellow pages, Web sites such as outerbanks.org, InfoUSA (a geocoded database of businesses, InfoUSA 2008), input from Seashore staff, input from members of the Regulatory Negotiation Committee, and public input. The lists were then manually filtered to determine whether each business fit the business category definition and if the business was still active. Duplicates and additional locations were excluded to ensure one entry per entity. Column 3 in Tables 2-2 and 2-3 shows the total number of businesses in each category from the two locations.

Table 2-2. Businesses Located in Rodanthe, Waves, Salvo, Avon, Buxton, Frisco, Hatteras, and Ocracoke

Business Category	Type of Sample	Total Number of Businesses
Recreational supply	Census	57
Rental agencies	Census	13
Lodging other than rental homes	Random sample	64
Commercial fishermen	Census	55
Total		189

Table 2-3. Businesses Located North of the Park Boundary

Business Category	Type of Sample	Total Number of Businesses
Recreational supply	Random sample	62
Rental agencies	Random sample	43
Lodging other than rental homes	Random sample	76
Total		181

The sample of commercial fishermen comes from a list of fishermen with a license to fish in the Seashore as of June 2, 2009, supplied by the Seashore. Only fishermen designated as captains were included in the sample.

The sample of businesses to be interviewed was selected from the complete list of businesses. All the businesses from the business categories of recreation supply, rental agencies, and commercial fishermen in the Seashore villages were included in the sample (we conducted a census of the businesses). We drew simple random samples of the remaining business categories in the Seashore villages and north of the park. Column 2 in Tables 2-2 and 2-3 provides information on the type of sample drawn for each industry category in each location. As discussed in Section 4, each business in the sample received a letter about the survey and up to 10 telephone calls leaving a message if no one answered to schedule an interview.

The sampling strategy for the business category was based on a combination of factors, including the number and diversity of businesses within an industry category, the extent to which the business targets visitors who will be directly affected by the action alternatives, as well as resource constraints on the number of calls that could be made.

The actual impacts of the proposed alternatives are inherently uncertain and will vary from business to business. As described in more detail in the next section, the business owners were asked to provide their best estimate of these impacts relative to baseline. The responses collected from the surveys provided one source of information used to create high-, medium-, and low-impact scenarios for each action alternative in the EIS and benefit-cost analysis. The range of scenarios for each action alternative captures some of the uncertainty in the actual

outcomes. Capturing the range of outcomes is more important for the analysis than getting a precise estimate of statistics such as the mean.

We sampled all the recreational supply stores from the complete list in the Seashore villages because the recreational supply industry category includes a variety of businesses that may be affected differently. In addition, customers of the recreational supply businesses in the Seashore villages are likely to experience the most direct impacts of the proposed alternatives.

We also sampled all the rental housing businesses from the complete list in the Seashore villages. There are a limited number of these businesses, and a large number of visitors rent houses. We contacted a sample of lodging businesses rather than attempt a census because of the number of these businesses. Compared to rental housing agencies, there are many more motels, hotels, campgrounds, and bed and breakfast inns.

Commercial fishermen who fish from inside the Seashore are an important part of the culture of the area. Because these fishermen work directly in the park, rather than serving visitors to the park, the impacts on this sector will differ from other sectors. However, the sector makes a smaller contribution to the overall economy of the area than businesses serving tourists. Because many of the commercial fishermen had unlisted phone numbers and were, therefore, difficult to survey, we attempted to contact all commercial fishermen.

The beaches to the north of the Seashore are not regulated by the action alternatives. Although many visitors staying north of the Seashore spend time in the park, these visitors also have access to the beaches north of the park. Therefore, businesses located north of the Seashore (in Nags Head, Kill Devil Hills, and Kitty Hawk) were expected to experience smaller impacts from the proposed management changes. These businesses were sampled at a lower rate than businesses around the Seashore.

3

Survey Design

The primary goals of the business survey were to (1) collect information about the business community about conditions under the no-action alternatives, (2) collect information about the size of the businesses as defined by number of employees and revenue, and (3) collect input from businesses about the possible impacts of action alternatives. Questions included revenue and number of employees in 2007 and 2008, opinions about why revenue changed or did not change between 2007 and 2008, and questions about how the business thought different aspects of the action alternatives might affect their business in the future. Conditions in 2007 under the Interim Strategy (NPS, 2006) define one of the no-action alternatives, and conditions under the Consent Decree (see a summary of the Consent Decree at <http://www.nps.gov/caha/planyourvisit/consentdecree.htm>), which went into place in the spring of 2008, define the other no-action alternative.

At the time the survey was written, NPS was preparing draft versions of some of the action alternatives. To keep the survey a reasonable length, the survey did not include a question about each alternative. Instead we selected the two action alternatives that represented opposite ends of the management spectrum for the alternatives under consideration at the time to serve as the basis for questions about the possible impact of the alternatives on revenue in the future relative to revenue in 2008. The descriptions of the alternatives captured the major features of the alternatives expected to have the biggest impact on visitation. The responses will provide information for analysis of the other alternatives. The alternatives were not discussed in detail to keep the interview to a reasonable amount of time and reduce the burden on respondents. In general, the respondents were very familiar with the Seashore

and the various actions that might be included in the proposed alternatives.

A different survey instrument was created for each of the four business categories. The survey instruments for the different categories, included in Appendix A, are (1) recreation supply businesses (survey #A1), (2) real estate and rental home businesses (survey #A2), (3) lodging businesses excluding rental homes (survey #A3), and (4) commercial fishermen (survey #A4). These surveys all follow the same format, with appropriately worded questions for the specific industries.

Justification for the specific questions is as follows:

- *First set of questions:* General information describing the businesses, including services and products offered and seasons of operation. This information was used to characterize the businesses community in general in the EIS and rulemaking.
- *Second set of questions:* Collect information on revenue and number of employees to classify the size of businesses for the EIS and rulemaking analyses.
- *Third set of questions:* Collect information on any changes in revenue between 2007 and 2008. The two no-action alternatives for the EIS are management under the Interim Species Management Plan (which was in place in 2007) and management under the Consent Decree (which went into effect in April 2008).
- *Fourth set of questions:* Collect information on operators' opinions of how alternative management scenarios will affect their customers and their revenues to inform the regional economic impact analysis included in the EIS and the benefit-cost analysis for the rulemaking. The questions are designed to provide information that will be considered along with other information to determine the range of impacts to producer surplus that might occur under the action alternatives relative to the no-action alternatives.

The original design of the survey instruments was based on similar surveys conducted at other National Park system units to support similar economic analyses for socioeconomic impact analyses and benefit-cost analyses. Although the issues at each park differ, the previous experience interviewing businesses provided guidance on the wording of the questions, the respondents' ability to answer such questions during a telephone interview, and the likely length of the interviews.

Before the survey was finalized, an overview of the business survey's goals and a general description of the survey questions were presented to the Economic Subcommittee of the Regulatory Negotiating Committee. The general outline of the survey was also discussed with the full Regulatory Negotiating Committee. The initial drafts of the survey were reviewed by survey researchers at RTI and staff from the NPS Social Science Program with responsibility for fielding other NPS surveys. Additional comments were received from OMB on the wording of the survey instrument and data collection.

4

Data Collection Methods

At the start of the data collection, all the businesses in the sample were sent a letter describing the survey and giving the business the opportunity to call RTI and schedule their survey. The business surveys were administered by telephone. Up to 10 calls were made to each business if the number was busy or no one answered. If the owner or other individual familiar with the finances of the business was not able to take the survey when we called, we scheduled a later time for the interview. If the survey was not conducted at the rescheduled time, we attempted to reschedule the interview as many times as necessary until the owner indicated they did not want to respond to the survey or we made up to 10 calls that went unanswered. Calls were made on weekdays between 8:00 a.m. and 6:00 p.m. Call-backs for numbers at which there was no answer or a busy signal were made at different times of the day from the original call.

To maximize response rates, the instrument was based on input from a number of parties with survey research experience and from members of the business community around the Seashore. Interviewers provided assurance to respondents that their answers will be kept on RTI's secure network in a password-protected folder for use only by project staff. In addition, they were told that the results would be reported in aggregate form, so that no individual business can be identified.

5 Results

This section describes the results from the survey. Section 5.1 discusses the response rate for each business category and a comparison of businesses that responded and those that did not. The results for each of the four business categories are presented in Sections 5.2 through 5.5. Section 5.6 presents a summary of the survey responses and comments received from businesses.

5.1 RESPONSE RATE

Table 5-1 provides the sample size and the response rate for each business category by location and combined. The overall response rate was 42%, yielding a total of 72 interviews. As seen in Table 5-1, the response rate varied by business sector and location. Businesses in the Seashore villages were more likely to respond than businesses located north of the Seashore. Commercial fishermen had the lowest response rate in large part because 28 of the 55 fishermen with licenses to fish in the Seashore had unlisted numbers and did not respond to a letter asking them to contact RTI.

For each business, the type of business and its location are known. For most businesses, public information on revenue and number of employees is also available. To assess potential for nonresponse bias (the possibility that businesses that did not respond are systematically different than the businesses that did respond) the businesses that did not participate were compared with those that did in terms of industry category, location, and size (based on publicly available data from InfoUSA (InfoUSA, 2008)).

Table 5-1. Sample Size and Response Rate by Business Category

	Initial Sample Size	Unlisted or Number Disconnected	Final Sample Size	Respondents	Response Rate
Seashore Villages^a					
Recreational supply	52	5	47	22	47%
Realty	11	1	10	6	60%
Lodging	41	2	39	22	56%
Commercial fishermen	55	35 ^b	20	6	30% ^c
North of the Seashore					
Recreational supply	20	2	18	6	33%
Realty	18	1	17	4	24%
Lodging	22	1	21	6	29%
All Businesses					
Recreational supply	72	7	65	28	43%
Realty	29	2	27	10	37%
Lodging	63	3	60	28	47%
Commercial fishermen	55	35 ^b	20	6	30% ^c
Total	219	47	172	72	42%

^a The Seashore Villages include Rodanthe, Waves, Salvo, Avon, Buxton, Frisco, Hatteras, and Ocracoke.

^b Phone numbers were located for 27 commercial fishermen. An additional 28 commercial fishermen with licenses to fish in the Seashore in 2009 had unlisted telephone numbers. They were mailed a letter about the survey with contact information, but no responses were received.

^c The response rate for commercial fishermen is 13% if the unlisted numbers are included as part of the final sample size.

Table 5-2 shows a breakdown of the response categories to the survey by business category combining the Seashore villages and the businesses located north of the Seashore. The last two rows compare the Seashore villages to the businesses north of the Seashore. Of the four business categories, commercial fishermen had the lowest response rate, while lodging had the highest. The column titled "Percentage Refusal" shows the percentage of respondents who were contacted but declined to participate in the survey. The lodging category had a higher refusal rate than the other categories, and compared to the Seashore villages, a larger percentage of the businesses located north of the Seashore declined to participate in the survey.

Data on revenue and employees were available for 137 of the 191 businesses, excluding the commercial fishermen in the sample from InfoUSA. Tables 5-3 and 5-4 compare the response type by revenue category and by number of employees, respectively. In general, businesses with lower

Table 5-2. Distribution of Response Types by Business Category and by Location

	Total	Percentage Completed	Percentage No Response	Percentage Refusal	Percentage Disconnected
Recreational supply	72	39%	43%	8%	10%
Realty	29	34%	55%	3%	7%
Lodging	63	44%	32%	19%	5%
Commercial fishermen	27	22%	48%	4%	26%
Seashore villages	131	43%	39%	7%	11%
North of the Seashore	60	27%	48%	18%	7%

Table 5-3. Distribution of Response Types by 2008 Revenue Category

Annual Revenue ^a	Total	Percentage Completed	Percentage No Response	Percentage Refusal	Percentage Disconnected
<\$100,000	11	45%	27%	27%	0%
\$100,000–\$499,000	61	38%	39%	11%	11%
\$500,000–\$999,999	35	43%	40%	9%	9%
\$1,000,000–\$1,999,999	15	73%	20%	7%	0%
>\$2,000,000	15	20%	53%	13%	13%

^a Data on revenue categories for each business were based on InfoUSA (2008) data for both firms that responded and those that did not.

Table 5-4. Distribution of Response Types by 2008 Employment Category

Number of Employees ^a	Total	Percentage Completed	Percentage No Response	Percentage Refusal	Percentage Disconnected
1–4	76	42%	36%	13%	9%
5–9	33	39%	42%	9%	9%
10–19	13	62%	15%	8%	15%
20–49	14	29%	57%	14%	0%
50–99	1	0%	100%	0%	0%

^a Data on number of employees for each business based on InfoUSA (2008) data for both firms that responded and those that did not.

revenue had a lower percentage completion rate. Businesses with under \$500,000 in revenue had a lower average completion rate than those with \$500,000 or more in revenue. Businesses with revenue under \$500,000 also had a higher rate of refusals and disconnected lines than businesses with

\$500,000 or more in annual revenue. However, none of these differences were statistically significant at the 10% level.

Looking at Table 5-4, businesses with fewer than 10 employees have a different pattern of response types than those with 10 or more. The percentage completed is almost equal for the two groups. The difference comes in the number of refusals and disconnected numbers. Not unexpectedly, given the time involved in responding to the survey, businesses with fewer employees are more likely to decline to answer the survey. Again, the differences were not significant at the 10% level.

Finally, we looked at the response rate to several key questions. Table 5-5 shows the response rate to a number of key questions to the survey based on the data supplied by the 72 respondents. Over 90% of the businesses provided information on the number of employees and the revenue range their business fell into during 2007 and 2008 (rows 1 through 3). However, response rates to questions asking for a quantitative estimate of the change in revenue from 2007 to 2008 (row 5) were lower, as were response rates to questions about the reasons for the change (rows 6 and 7).

Respondents had an easier time responding to questions about the first alternative described, under which all the spits and points would be closed to ORVs year-round. Fewer businesses responded to questions about the second alternative, which is closer to current management under the Consent Decree. Looking at the response rates to the question about the alternatives, more businesses responded to the qualitative questions about future changes in revenue (rows 8 and 9 and 11 and 12), and fewer respondents felt comfortable giving quantitative forecasts (rows 10 and 13).

From the final row, 56% of the respondents had additional comments they wanted to make to the interviewers about their business and ORV management in the Seashore. The large percentage of respondents who wanted to make additional comments reflects the high level of interest, concern, and frustration surrounding ORV use in the Seashore.

Table 5-5. Response Rates to Key Questions

Question	Don't Know	Responses	Item Response Rate
Questions about conditions in 2007 and 2008			
1. Number of full-time employees in 2008	3	59	98%
2. Revenue range for 2008	1	70	97%
3. Revenue range for 2007	1	70	97%
4. Did your revenue increase, decrease, or stay the same between 2007 and 2008? [asked if business did not change revenue category between 2007 and 2008]	2	68	94%
5. By how much [did your revenue change]? You can give me a range or an approximate change if you don't know the exact amount.	5	52	72%
6. What factors do you think contributed to the decline/increase in revenue between 2007 and 2008?	0	56	78%
7. Of the factors you just named, which do you think are the most important?	1	32	44%
Questions about alternatives			
8. [Alternative 1]a Compared to the situation in 2008, do you think this action would affect a significant number of your customers?	2	68	94%
9. [Alternative 1] Compared to 2008, do you think it would increase your business, decrease your business, or not have much effect on your business if the spits and points were completely closed all year?	1	67	93%
10. [Alternative 1] Can you provide an estimate or range of estimates of the increase/decrease you might expect?	9	48	67%
11. [Alternative 2]b Compared to the situation in 2008, do you think this action would affect a significant number of your customers?	4	63	88%
12. [Alternative 2] Compared to 2008, do you think it would increase your business, decrease your business, or not have much effect on your business?	9	55	76%
13. [Alternative 2] Can you provide an estimate or range of estimates of the increase/decrease you might expect?	9	36	50%
14. Is there anything that you would like to add related to the economic impacts on your business of managing ORVs?	0	40	56%

^a *Alternative 1:* In 2008 and again this year, parts of the park, like the points and spits (including Bodie Island Spit, Cape Point, Hatteras Islet, North Ocracoke Spit, and South Point Ocracoke) and a few other areas, were closed around March 14 and then opened and closed throughout the summer based on the bird and turtle activity. One of the management alternatives under consideration would just completely close the points and spits and a few miles of beach between Ramp 27 (south of Salvo) and Buxton all year. That would leave 28 miles of beach open year-round for ORV use and 40 miles closed.

^b *Alternative 2:* Another proposal would provide more access for ORVs and pedestrians to areas that are open but would have been inaccessible under the 2008 management, by creating ORV and/or pedestrian corridors or allowing water taxis to some popular spots like Bodie Island Spit, about a mile of the Cape Point area, and the South Point area of Ocracoke. As in 2008, access could change week to week depending on where nesting areas are, but the proposal calls for more ORV and/or pedestrian access trails where possible. The proposal would leave about 12 miles closed all year, 26 miles open, and another 30 miles subject to restrictions during the spring and summer season.

The response patterns suggest that the businesses that responded to the survey may differ from the businesses that did not respond based on publically available data, including type of business, location, revenue, and employment, however the differences were not significant. Based on comments to the interviewers, many of the businesses north of the Seashore that declined to participate mentioned that they expected smaller impacts from the proposed ORV management alternatives.

5.2 RESULTS

The data from the survey will be used as one source of information for the economic analysis. As discussed earlier, for each action alternative a range of scenarios will be developed to help capture the uncertainty inherent in forecasting the impacts of future management actions. In this case, the uncertainty is compounded by the yearly fluctuations in animal nesting behavior and severe weather events. In addition, the current national economic recession and the spike in gasoline prices in the spring and summer of 2008 complicate efforts to isolate the impacts of ORV management on business and visitation.

This section reviews the responses to the key questions from the survey. Appendix B contains summary statistics for responses to all the questions. Below we discuss each of the four businesses categories separately. The first question we highlight is the change in revenue from 2007 to 2008. During 2007, the Interim Strategy was in effect. In April 2008, the Consent Decree revised the Interim Strategy to include night driving restrictions from April through October. In addition, the sizes of required buffer zones around nesting areas were expanded.

The comparison between 2007 and 2008 provides one data point on the difference between the two no-action alternatives. Table 5-6 summarizes the quantitative responses to the question about revenue change from 2007 to 2008 for each business category by location. Both recreational supply businesses and lodging establishments reported declines in revenue on average, although some firms reported revenue increases.

Table 5-6. Quantitative Estimates for Change in Revenue from 2007 to 2008

	Recreational Supplies		Real Estate		Lodging	
	Seashore Villages	North of Seashore	Seashore Villages	North of Seashore	Seashore Villages	North of Seashore
Mean	-13%	-18%	23%	8%	-9%	-4%
Median	-11%	-10%	5%	5%	-1%	-6%
Count	16	6	5	3	15	5

Recreational supply businesses reported the largest average decline in revenue between 2007 and 2008. The real estate companies on average reported an increase in revenue in 2008, although some firms reported a decrease. However, the differences in economic conditions and gas prices between the 2 years make it difficult to attribute changes in revenue to changes in ORV management. When asked to list reasons for any change in revenue between 2007 and 2008, businesses cited the following reasons for the increases or decreases in revenue between 2007 and 2008:

- the overall economy
- fuel prices
- beach closures and uncertainty surrounding beach closures
- change in the ferry schedule
- business management changes and increases in prices
- misinformation about the beach closures (creating the impression that all the beaches were closed)
- increase in business from people who would normally take more expensive vacations but could not because of the recession

Table 5-7 summarizes the qualitative responses to the survey questions about the impact of different management alternatives on revenue compared to 2008. As discussed in Section 3, the alternatives described in the survey were simplified versions of two draft action alternatives developed before the final action alternatives in the Draft Environmental Impact Statement (DEIS) were finalized.

Table 5-7. Qualitative Forecast of Revenue Change from Alternative Management Proposals

		Alternative 1	Alternative 2	Soundside Ramps Closed
Recreational Supplies				
Seashore villages	Decrease	20	10	6
	Increase	0	0	1
	Not much effect	2	5	7
North of Seashore villages	Decrease	4	4	1
	Increase	0	0	0
	Not much effect	1	1	3
Real Estate				
Seashore villages	Decrease	5	1	4
	Increase	0	3	0
	Not much effect	1	2	2
North of Seashore villages	Decrease	1	D ^a	D
	Increase	0	D	D
	Not much effect	2	D	D
Lodging				
Seashore villages	Decrease	16	10	8
	Increase	0	2	1
	Not much effect	3	4	5
North of Seashore villages	Decrease	6	4	1
	Increase	0	0	0
	Not much effect	0	2	2
Commercial Fishermen				
	Decrease	5	3	4
	Increase	0	0	0
	Not much effect	1	2	2

^a Too few responses to disclose.

- Alternative 1:** In 2008 and again this year, parts of the park, like the points and spits (including Bodie Island Spit, Cape Point, Hatteras Islet, North Ocracoke Spit, and South Point Ocracoke) and a few other areas, were closed around March 14 and then opened and closed throughout the summer based on the bird and turtle activity. One of the management alternatives under consideration would just completely close the points and

spits and a few miles of beach between Ramp 27 (south of Salvo) and Buxton all year. That would leave 28 miles of beach open year round for ORV use and 40 miles closed.

- **Alternative 2:** Another proposal would provide more access for ORVs and pedestrians to areas that are open but would have been inaccessible under the 2008 management, by creating ORV and/or pedestrian corridors or allowing water taxis to some popular spots like Bodie Island Spit, about a mile of the Cape Point area, and the South Point area of Ocracoke. As in 2008, access could change week to week depending on where nesting areas are, but the proposal calls for more ORV and/or pedestrian access trails where possible. The proposal would leave about 12 miles closed all year, 26 miles open, and another 30 miles subject to restrictions during the spring and summer season.
- **Soundside Ramps Closed:** If the soundside ramps were closed to ORV's, but open to pedestrians, compared to the situation in 2008, do you think this action would affect a significant number of your customers?

5.2.1 Recreational Supplies

Twenty-two recreational supply businesses from the Seashore villages completed surveys, yielding a response rate of 47%. These businesses provide a range of services, such as souvenir and clothing sales, recreational equipment rentals, surfing lessons, bait and tackle, fishing permits, and guided fishing trips. All but one business surveyed were small businesses with revenue under \$7 million, and 59% of businesses reported annual revenue under \$500,000.

Only 36% of recreational businesses were open year-round. Those businesses not open year-round generally reported opening in March or April and closing around November. The majority of revenue comes in during the summer, with the median summer income as a percentage of annual income reported at 55%. Spring, fall, and winter followed with 25%, 20%, and 0%, respectively.

Eighty percent of the recreational supply businesses in the Seashore villages reported that their revenue decreased between 2007 and 2008, with a median 11% decrease in revenue from 2007 to 2008. Presented with the first beach driving management plan, 95% respondents predicted a decrease in revenue relative to 2008, while 5% stated that

their business would not be affected. Thirteen respondents offered a quantitative forecast of change in revenue, yielding a median decrease of 20%. In response to the second management plan, 60% of businesses reported that their business would decrease, while 40% predicted little effect. Nine businesses offered quantitative forecasts of the decrease they expected, for a median value of a 0% change. When asked how they would be affected by the closure of the soundside ramps, 43% of businesses expected a decrease, 50% thought they would be unaffected, and 7% expected an increase. The median forecast for change in revenue, based on ten responses, was a 0% change in revenue.

Some business owners reported that they do not believe the recent decrease in revenue was caused by an economic downturn, because they normally do quite well during a recession by attracting beachgoers who would normally elect for a more expensive vacation. Others said that beach driving restrictions have resulted in a loss of business mainly by driving away daytrippers. Some Ocracoke businesses noted that the current compromise on Ocracoke Island is necessary for wildlife protection and acceptable for maintaining their business, but that any additional closures would cause problems.

Six recreational supply businesses north of the Seashore, or 33% of businesses sampled, completed surveys. All were small businesses and reported revenue of less than \$999,999 per year. Four businesses believed that their revenue would decrease in response to both alternatives. One expected a decrease in response to the closure of the sound side ramps, and the others predicted no change.

5.2.2 Real Estate

Eleven real estate agencies in the Seashore villages were contacted, and six completed the survey. Of the six, two were small businesses (with revenues less than \$2 million). Sixty-seven percent reported that their income had increased between 2007 and 2008.

Eighty-three percent of businesses predicted a decrease in revenue from the first alternative; the median expected change was a 16% decrease. For the second alternative, only one agency predicted a decrease, two thought there would be no change, while three forecast an increase in revenue. The

median expected change in revenue was a change of 0%. Four agencies expected a decrease in revenue from the closure of the soundside ramps, while two expected no change. The median expected change was a decrease of 4%. All realtors were open year-round, and some commented that changes in the management of ORVs could have a bigger effect on them than on seasonal businesses with higher profit margins.

Four out of 17 real estate agencies sampled from north of the Seashore completed surveys. Only one was a small business in 2008. One business reported that they expected a decrease in revenue from the first alternative. Responses for the second alternative and closing the soundside ramps were similar, but too few respondents responded to the questions to report the outcomes. Some realtors noted even rental homes north of the Seashore would be affected because renters want to drive down to Hatteras to use the beaches.

5.2.3 Lodging

Lodging businesses sampled for the survey included inns, hotels, campgrounds, cabins, and other lodging facilities but excluded rental homes. Fifty-six percent, or 22 businesses, elected to complete the survey. All were small businesses with revenue less than \$4 million. Half were open year-round. The median percentage of income from each season was 60% for the summer, 17% for the spring, 20% for the fall, and 3% for the winter. Asked about changes in revenue between 2007 and 2008, 62% reported a decrease in revenue.

Eighty-four percent of businesses expected a decrease in revenue if the first alternative was implemented, while 16% expected no change. Sixteen provided a quantitative forecast and the median change in revenue was a decrease of 20%. For the second alternative, 63% of businesses predicted a decrease, 13% predicted an increase, and 25% thought there would be no change. The median change in revenue expected was a decrease of 12%. Forty percent believed that closing the soundside ramps would lead to a decrease in revenue, 5% predicted an increase, and 55% thought there would be no change. The median expected change in revenue was a 0% change.

Six lodging businesses north of the Seashore completed surveys. All were small businesses with revenue under \$2

million. Seventy-five percent were open year-round. These businesses forecast a median decrease in revenue for the first alternative, the second alternative, and the closure of the soundside ramps of 25%, 8%, and 0%, respectively.

Lodging owners emphasized that uncertainty was very difficult to deal with. Customers are unwilling to make reservations when beach driving restrictions are changing daily.

5.2.4 Commercial Fishermen

Six commercial fishermen out of the 20 reached by telephone agreed to complete the survey, for a response rate of 30%. All reported annual revenue under \$500,000. The commercial fishermen said they spent between 10% and 100% of their time fishing inside the Seashore. Between 15% and 85% of their income came from fish caught within the Seashore. Eighty-three percent reported a decrease in revenue between 2007 and 2008.

Eighty-three percent forecast a decrease in revenue from the first alternative, while 60% said that their revenue would decrease with the second alternative. Sixty-seven percent reported that their revenue would decrease in response to the closure of the soundside ramps. Median expected change in revenue was a decrease of 25% for the first alternative. Too few responses were offered for the impact of the second alternative and closing the soundside ramps to report summary statistics.

5.3 SUMMARY

Businesses that responded to the survey were generally worried about the future impacts of the action alternatives. Overall, the business survey provided the following general conclusions, although the sample size is small:

- All but eight of the businesses interviewed were categorized as small businesses based on Small Business Administration definitions. Seven of the eight businesses not categorized as small are in the real estate industry.
- Businesses north of the Seashore in Nags Head, Kill Devil Hills, and Kitty Hawk overall expected smaller impacts from any change in ORV management relative to the Seashore villages. The response rate from these businesses was lower, in part because the issue was not

expected to have a big impact. However, some of the businesses that responded to the survey predicted significant drops in revenue from the two proposed alternatives described in the survey.

- Businesses that rented vacation homes fared better between 2007 and 2008 than recreational supply and lodging businesses.
- In all business categories, the majority of businesses reported that revenue fell between 2007 and 2008, but the majority also reported hiring the same number of full and part-time employees in 2007 and 2008.
- The majority of businesses thought that all three alternatives described in the survey would result in decreased revenue compared to 2008. A smaller number expected no change or an increase.
- The first alternative, under which all the spits and points were closed to ORV use year-round, was expected to have the biggest negative increase.
- Fewer businesses felt comfortable providing a quantitative forecast of the expected impact of the alternatives on revenue given the uncertainties surrounding the cause of changes in revenue between 2007 and 2008, the impact of the alternative on visitation, and the year-to-year variation in weather and nesting patterns.
- From the businesses providing quantitative forecasts: Businesses forecast median decreases of 0% to 25% in annual revenue compared to 2008 for the first alternative described (which closed the most miles of beach to ORVs year-round). For the second alternative (which involved no year-round closures), the median change in revenue compared to 2008 ranged from a decrease of 12% to no change. Closing the soundside ramps generated median estimates of revenue loss ranging from no change to -4%.

Businesses that saw flat or increased revenue in 2008 even with the Consent Decree worried that revenue would decrease in the future for reasons such as visitors did not know about the closures when they came in 2008, visitors had made down payments for 2008 so they came despite the closures, the business increased prices, and the business changed its inventory.

Although the survey questions asked respondents to forecast the possible impacts of the two alternatives relative to 2008,

many businesses also discussed 2009. In some cases, businesses said that visitors came in 2008 not knowing about the beach closures and did not return in 2009. However, some businesses reported that although business in the spring of 2009 was down, they were seeing increased bookings for the fall or expected business in the fall to increase. Some visitors may reschedule trips from the spring to the fall to visit areas likely to be closed in the spring and early summer. Because the business survey was conducted during the summer, businesses did not have information about revenue in the fall and winter of 2009.

Forecasting future revenue in response to management changes is necessarily uncertain. Some businesses worried that 2008 would not be typical of future years for reasons discussed above. Visitation in 2008 is also confounded by the economic recession and gas prices. Businesses that want to influence the debate over the alternatives have an incentive to exaggerate the expected impacts of more restrictive alternatives on their revenue. This possibility was recognized, and the survey included questions to probe for the reasoning behind answers to some questions. In addition, the economic analysis will use other data sources in addition to the business survey to create a range of possible future outcomes.

Some respondents were hesitant to give specific numbers on possible changes in revenue that could be attributed to ORV management actions because of the many other factors affecting the economy in the last few years, uncertainty about shorebird and turtle nesting patterns, and uncertainty about the long-term reactions of visitors to changes in visitor access to the Seashore. The ranges of possible impacts, which are large in some cases, reflect the uncertainty expressed by businesses and variation present in the survey data.

Many of the businesses interviewed provided additional comments. Comments included:

- Dissatisfaction with the way the Park Service has implemented and enforced the beach restrictions, in particular for pedestrians. Several felt that the level of punishment associated with violating beach restrictions was not commensurate with the uncertainty associated with how to navigate around closed beaches.

- The spring and fall seasons are significantly affected, which hurts business.
- Revenue declines of 10% are large for small businesses.
- Policies that leave beach access uncertain will eventually hurt business because people would be gambling every time they came down whether the beach would be open, which would eventually hurt everyone's business.
- People like Ocracoke because it is quiet and people can spread out. It is not that way with the closures. Farther North it is like Coney Island.

References

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National Park Service (NPS). January 18, 2006. Cape Hatteras
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Management Strategy/Environmental Assessment.

Appendix A: Surveys

- A.1 Recreational Supply Survey**
- A.2 Rental Home Agencies Survey**
- A.3 Lodging Except Rental Homes Survey**
- A.4 Commercial Fishermen Survey**

Fishing Supplies; Recreation Rentals and Lessons/Piers/Marinas/Fishing Charters

Hi, my name is [name]. I work for Research Triangle Institute, a nonprofit research consulting firm located in Raleigh, North Carolina. We have been hired by the National Park Service to conduct an economic analysis of the proposed alternatives for managing beach driving and ORV's in the Cape Hatteras National Seashore.

A. We are contacting a random sample of businesses on the Outer Banks to gather information for the economic analysis. Your business was selected for survey. Can I please speak to (*insert contact name*)?

(*if no contact name*) We need to speak with the owner of the business or someone who is very familiar with the financial side of the business.

B. (*if no one available*) Do you know if there is a good time to call them? Can I have their name and telephone number or an email address? My name is (*insert name*) and my number is (*insert phone number*). Can you please tell them I called?

The survey should only take about 30 minutes to complete. Also, I need to make you aware that the Paperwork Reduction Act requires approval of all federal government surveys by the Office of Management and Budget. This survey has been approved under this Act. The Office of Management and Budget control number and expiration date is available at your request. Additional information about this survey and its approval is available at your request.

[if cannot take the survey, arrange a time to call back]

Some of the questions we ask are about current business operations. We need this information to understand the number and type of businesses currently located near the National Seashore. We will also ask some questions about your business forecast under different management proposals.

Your responses to these questions are voluntary, but we hope you will participate in the survey. This survey is the best way to get accurate information about the impacts of ORV management plans on businesses. All of your answers will be kept on a secure computer at RTI. RTI will only keep identifying information about your company until a new rule for ORV management is completed in 2011. We will not report any information about individual businesses to anyone, including other businesses or the National Park Service, unless compelled by law. For instance, we will not share information that could be used to link your answers to your own business, if you assert, and the National Park Service agrees, that its release would cause harm to your competitive position.

Do you request that RTI keep your information confidential because releasing the information would cause a significant competitive disadvantage?

___ Does ___ Does not request that identifying information be protected.

If there are things that you think are important for us to know or understand related to economic impacts that we don't ask about, there is time at the end of the survey for you to provide more comments.

C. Has the business been under the same ownership since 2007?

Yes → Okay, let's begin.

No → The survey contains some questions about 2007. If you do not have information about 2007, just tell me and we can skip those questions.

Don't know → The survey contains some questions about 2007. If you do not have information about 2007, just tell me and we can skip those questions.

1. What are the main types of services you provide? [do not read list, check all that apply]
[prompt – what else do you sell or rent?]

- Sell fishing supplies
- Sell recreational supplies, other
- Sell guns
- Rent recreational supplies
- Rent household supplies (linens, high chairs, etc.)
- Sell food
- Sell gas
- Sell household items, souvenirs and other items
- Lessons, guided trips
- Sell North Carolina fishing permits
- Pier
- Fishing charter
- Other (specify) _____

1a. What percent of your revenue comes from sales of equipment or supplies for beachgoers?

2. Are there particular parts of the beach or specific beach or sound access ramps that you or your customers use?

Yes → which parts or ramps? _____

No

Don't know

3. What year did the business first open?

_____ (enter year)

4. Is the business open year round?

Yes

No → What months do you operate? _____ to _____

Now we have some questions about the number of employees and revenue. If you are not sure about an answer, please tell me and give me your best estimate. If you have your records handy, feel free to check your records while we are on the phone. If you want to check your records later, we can arrange a time for me to call back to confirm your responses to these questions.

5. Typically, what percent of revenue comes during each season? [interviewer: check to see that percents add to 100%]

_____ Winter

_____ Spring

_____ Summer

_____ Fall

_____ Don't know/Refuse

6. How many full-time employees did this business employ in 2008?
 _____ (enter #) OR _____ Don't know/Refuse
 [if 0 full-time employees, skip to #9]
- 6a. Did the number of full-time employees vary by season?
 _____ Yes
 _____ No (skip to #8)
 _____ Don't know/Refuse (skip to #8)
7. If it varied by season, can you tell us how many full-time employees this business employed each season?
 _____ Winter
 _____ Spring
 _____ Summer
 _____ Fall
 _____ Don't know/Refuse
8. Compared to 2007, did this business employ the same number of full-time employees, more full-time employees, or fewer full-time employees in 2008?
 _____ More in 2008
 _____ Same number in 2008
 _____ Fewer in 2008
 _____ Don't know/Refuse
9. How many part-time employees did this business employ in 2008?
 _____ (enter #) OR _____ Don't know/Refuse
 [if 0 part-time employees, skip to #12]
10. Did the number of part-time employees vary by season?
 _____ Yes
 _____ No (skip to #12)
 _____ Don't know/Refuse (skip to #12)
11. If it varied by season, can you tell us how many part-time employees this business employed each season?
 _____ Winter
 _____ Spring
 _____ Summer
 _____ Fall
 _____ Don't know/Refuse
12. Compared to 2007, did you have the same number of part-time employees, more part-time employees, or fewer part-time employees in 2008?
 _____ More in 2008
 _____ Same number in 2008
 _____ Fewer in 2008
 _____ Don't know/Refuse

13. For the economic analysis, we need information about the size of different businesses based on annual gross revenue. I am going to read some revenue ranges. Please tell me which range the business fit into in 2008?

- Less than \$500,000 a year
- \$500,000 to \$999,999 a year
- \$1 million to \$1.99 million a year
- \$2 million to \$3.99 million a year
- \$4 million - \$6.99 million a year
- \$7 million - \$9.99 million a year
- Over \$10 million a year
- Don't know/Refuse

13a. (If refuse to answer revenue question) The threshold for being considered a small business is \$7 million. Can you tell me if your business's revenue was under \$7 million?

- Yes, it was under \$7 million
- No, it was greater than \$7 million
- Refused
- Don't know

14. Which range did the business fit into in 2007?

- Less than \$500,000 a year
- \$500,000 to \$999,999 a year
- \$1 million to \$1.99 million a year
- \$2 million to \$3.99 million a year
- \$4 million - \$6.99 million a year
- \$7 million - \$9.99 million a year
- Over \$10 million a year
- Don't know/Refuse

15. (if revenue declined from 2007 to 2008) What factors do you think contributed to the decline in revenue between 2007 and 2008?

_____ (enter responses)
 Don't know/Refuse (skip to #20 intro.)

a. Of the factors you just named, which do you think are the most important?

_____ (enter responses)
 Don't know/Refuse (skip to #20 intro.)

16. (if revenue increased) What factors contributed to the increase in revenue between 2007 and 2008?

_____ (enter responses)
 Don't know/Refuse (skip to #20 intro.)

17. Of the factors you just named, which do you think are the most important?

_____ (enter responses)
 Don't know/Refuse (skip to #20 intro.)

18. (if still in the same revenue category) Did your revenue increase, decrease, or stay the same between 2007 and 2008?

- Increased
- Decreased
- Stayed the same (skip to #20 intro.)
- Don't know/Refuse (skip to #20 intro.)

19. (if increased or decreased) By how much? You can give me a range or an approximate change if you don't know the exact amount.

_____ (enter responses)
 Don't know/Refuse

19a. What factors do you think contributed to the decline/increase in revenue between 2007 and 2008?

_____ (enter responses)
 Don't know/Refuse (skip to #20 intro.)

a. Of the factors you just named, which do you think are the most important?

_____ (enter responses)
 Don't know/Refuse (skip to #20 intro.)

Now I would like to ask you a few questions about the management of ORV's and beach driving at Cape Hatteras National Seashore. During the spring, summer, and fall of 2008, the National Park Service opened and closed areas of the beach to ORV's and pedestrians based on the location of bird and sea turtle nests.

As you are probably aware, the Park Service is considering a number of management alternatives for driving on the beach. I am interested in how you think the options will affect your business's revenue in the future. I realize that lots of factors affect your business, and it is hard to predict the future, especially given current economic conditions. I also understand that this is a controversial subject on the island, and that people have strong feelings about the park.

In this survey, we are interested in how different management options might affect your **business** only, not your own use of the beach or other businesses. Accurate information about your business will improve our analysis of the impacts. If you don't have any idea, just tell me you don't know.

20. In 2008 and again this year, parts of the park like the points and spits (including Bodie Island Spit, Cape Point, Hatteras Islet, North Ocracoke Spit, and South Point Ocracoke) and a few other areas were closed around March 14 and then opened and closed throughout the summer based on the bird and turtle activity. One of the management alternatives under consideration would just completely close the points and spits and a few miles of beach between Ramp 27 (south of Salvo) and Buxton all year. That would leave 28 miles of beach open year round for ORV use and 40 miles closed.

a. Compared to the situation in 2008, do you think this action would affect a significant number of your customers?

- Yes
- Maybe
- No (skip to #22)
- Don't know/Refuse (skip to #22)

- b. Compared to 2008, do you think it would increase your business, decrease your business, or not have much effect on your business if the spits and points were completely closed all year?

Increase
 Decrease
 Not much effect (skip to #22)
 Don't know/Refuse (skip to #22)

- c. *(if increase or decrease)* Can you provide an estimate or range of estimates of the increase/decrease you might expect?

_____ (enter response)
 Don't know/Refuse

21. Since different businesses will be affected differently, to help me understand your answers can you provide a brief explanation of how you came up with your answer -- for example, past experience, the type of local residents and visitors you serve, spending in different seasons, and other issues.

_____ (enter response and read back to respondent)

22. Another proposal would provide more access for ORV's and pedestrians to areas that are open, but would have been inaccessible under the 2008 management, by creating ORV and/or pedestrian corridors or allowing water taxis to some popular spots like Bodie Island Spit, about a mile of the Cape Point area, and the South Point area of Ocracoke. As in 2008, access could change week to week depending on where nesting areas are, but the proposal calls for more ORV and/or pedestrian access trails where possible. The proposal would leave about 12 miles closed all year, 26 miles open, and another 30 miles subject to restrictions during the spring and summer season.

- a. Compared to the situation in 2008, do you think this action would affect a significant number of your customers?

Yes
 Maybe
 No (skip to #23)
 Don't know/Refuse (skip to #23)

- b. Compared to 2008, do you think it would increase your business, decrease your business, or not have much effect on your business under this alternative?

Increase
 Decrease
 Not much effect (skip to #23)
 Don't know/Refuse (skip to #23)

- c. *(if increase or decrease)* Can you provide an estimate or range of estimates of the increase/decrease you might expect?

_____ (enter response)
 Don't know/Refuse

23. *[ask of businesses that rent recreational supplies, provide lessons or guided tours]* Do you use the ORV access ramps on the soundside of Cape Hatteras as part of your business?

- Yes
- No (skip to #24)
- Don't know/Refuse (skip to #24)

a. If the soundside ramps were closed to ORV's, but open to pedestrians, compared to the situation in 2008, do you think this action would affect a significant number of your customers?

- Yes
- Maybe
- No (skip to #24)
- Don't know/Refuse (skip to #24)

b. Compared to 2008, do you think it would increase your business, decrease your business, or not have much effect on your business?

- Increase
- Decrease
- Not much effect (skip to #24)
- Don't know/Refuse (skip to #24)

c. *(if increase or decrease)* Can you provide an estimate or range of estimates of the increase/decrease you might expect?

- (enter response)
- Don't know/Refuse

24. If the park decided to run water taxis to transport visitors out to some areas that are open, but inaccessible to ORVs and pedestrians, would your business be interested in operating a water taxi?

- Yes
- Maybe
- No
- Don't know/Refuse

25. *(if ownership has changed since 2007)* You said that the business was under different management in 2007. Do you have the name and contact information for the previous owner?

- Yes (specify) _____
- No

26. Do you know why the business changed ownership? _____

27. I don't have any more questions. Is there anything that you would like to add related to the economic impacts on your business of managing ORVs?

_____ (enter response)

Thank you very much for your time. We appreciate your willingness to talk with us.
[Arrange follow-up call if necessary.]

Real Estate and Rental Homes

Hi, my name is [name]. I work for Research Triangle Institute, a nonprofit research consulting firm located in Raleigh, North Carolina. We have been hired by the National Park Service to conduct an economic analysis of the proposed alternatives for managing beach driving or ORV's in the Cape Hatteras National Seashore.

A. We are contacting a random sample of businesses on the Outer Banks to gather information for the economic analysis. Your business was selected for survey. Can I please speak to (insert contact name). (*if no contact name*) We need to speak with the owner of the business or someone who is very familiar with the financial side of the business.

B. (*if no one available*) Do you know if there is a good time to call them? Can you give me their name and telephone number? My name is (insert name) and my number is (insert phone number). Can you please tell them I called?

The survey should only take about 30 minutes to complete. Also, I need to make you aware that the Paperwork Reduction Act requires approval of all federal government surveys by the Office of Management and Budget. This survey has been approved under this Act. The Office of Management and Budget control number and expiration date is available at your request. Additional information about this survey and its approval is available at your request.*

[if cannot take the survey, arrange a time to call back]

Some of the questions we ask are about current business operations. We need this information to understand the number and type of businesses currently on Cape Hatteras. We will also ask some questions about your business forecast under different management proposals.

Your responses to these questions are voluntary, but we hope you will participate in the survey. This survey is the best way to get accurate information about the impacts of ORV management plans on businesses. All of your answers will be kept on a secure computer at RTI. RTI will only keep identifying information about your company until a new rule for ORV management is completed in 2011. We will not report any information about individual businesses to anyone, including other businesses or the National Park Service, unless compelled by law. For instance, we will not share information that could be used to link your answers to your own business, if you assert, and the National Park Service agrees, that its release would cause harm to your competitive position.

Do you request that RTI keep your information confidential because releasing the information would cause a significant competitive disadvantage?

___ Does ___ Does not request that identifying information be protected.

If there are things that you think are important for us to know or understand related to economic impacts that we don't ask about, there is time at the end of the survey for you to provide more comments.

C. Has the business been under the same ownership since 2007?

Yes → Okay, let's begin.

No → The survey contains some questions about 2007. If you do not have information about 2007, just tell me and we can skip those questions.

Don't know → The survey contains some questions about 2007. If you do not have information about 2007, just tell me and we can skip those questions.

1. What year did this business first open?

_____ (enter year)

1a. Do you sell or rent anything beyond rental houses? [do not read list, check all that apply]
[prompt – what else do you sell or rent?]

Sell fishing supplies

Sell recreational supplies, other

Sell guns

Rent recreational supplies

Rent household supplies (linens, high chairs, etc.)

Sell food

Sell gas

Sell household items, souvenirs and other items

Lessons, guided trips

Sell North Carolina fishing permits

Pier

Fishing charter

Other (specify) _____

1b. What percent of your revenue comes from housing rentals?

2. Is the business open year round? If no, when do you operate?

Yes

No → What months do you operate? _____ to _____

Now we have some questions about the number of employees and revenue. If you are not sure about an answer, please tell me and give me your best estimate. If you have your records handy, feel free to check your records while we are on the phone. If you want to check your records later, we can arrange a time for me to call back to confirm your responses to these questions.

3. Typically, what percent of revenue comes during each season? [interviewer: check to see that percents add to 100%]
 _____ Winter
 _____ Spring
 _____ Summer
 _____ Fall
 _____ Don't know/Refuse
4. How many full-time employees did this business employ in 2008?
 _____ (enter #) OR _____ Don't know/Refuse
 [if 0 full-time employees, skip to #7]
5. Did the number of full-time employees vary by season?
 _____ Yes
 _____ No (skip to #7)
 _____ Don't know/Refuse (skip to #7)
6. If it varied by season, can you tell us how many full-time employees this business employed each season?
 _____ Winter
 _____ Spring
 _____ Summer
 _____ Fall
 _____ Don't know/Refuse
7. Compared to 2007, did this business employ the same number of full-time employees, more full-time employees, or fewer full-time employees in 2008?
 _____ More in 2008
 _____ Same number in 2008
 _____ Fewer in 2008
 _____ Don't know/Refuse
8. How many part-time employees did this business employ have in 2008?
 _____ (enter #) OR _____ Don't know/Refuse
 [if 0 part-time employees, skip to #11]
9. Did the number of part-time employees vary by season?
 _____ Yes
 _____ No (skip to #11)
 _____ Don't know/Refuse (skip to #11)

10. If it varied by season, can you tell us how many part-time employees this business employed each season?

- Winter
- Spring
- Summer
- Fall
- Don't know/Refuse

11. Compared to 2007, did you have the same number of part-time employees, more part-time employees, or fewer part-time employees in 2008?

- More in 2008
- Same number in 2008
- Fewer in 2008
- Don't know/Refuse

12. For the economic analysis, we need information about the size of different businesses based on annual gross revenue. I am going to read revenue ranges. Which range did the business fit into in 2008?

- Less than \$500,000 a year
- \$500,000 to \$999,999 a year
- \$1 million to \$1.99 million a year
- \$2 million to \$3.99 million a year
- \$4 million - \$6.99 million a year
- \$7 million - \$9.99 million a year
- Over \$10 million a year
- Don't know/Refuse

12a. *(If refuse to answer revenue question).* The threshold for being considered a small business is \$2 million in annual revenue. Can you tell me if your business's revenue was under \$2 million?

- Yes, it was under \$2 million
- No, it was greater than \$2 million
- Refused

13. Which range did the business fit into in 2007?

- Less than \$500,000 a year
- \$500,000 to \$999,999 a year
- \$1 million to \$1.99 million a year
- \$2 million to \$3.99 million a year
- \$4 million - \$6.99 million a year
- \$7 million - \$9.99 million a year
- Over \$10 million a year
- Don't know/Refuse

14. (if revenue declined from 2007 to 2008) What factors do you think contributed to the decline in revenue between 2007 and 2008?

_____ (enter responses)
 _____ Don't know/Refuse (skip to #19 intro.)

a. Of the factors you just named, which do you think are the most important?

_____ (enter responses)
 _____ Don't know/Refuse (skip to #19 intro.)

15. (if revenue increased) What factors contributed to the increase in revenue between 2007 and 2008?

_____ (enter responses)
 _____ Don't know/Refuse (skip to #19 intro.)

16. Of the factors you just named, which do you think are the most important?

_____ (enter responses)
 _____ Don't know/Refuse (skip to #19 intro.)

17. (if still in the same revenue category) Did your revenue increase, decrease, or stay the same between 2007 and 2008?

_____ Increased
 _____ Decreased
 _____ Stayed the same (skip to #19 intro.)
 _____ Don't know/Refuse (skip to #19 intro.)

18. (if increase or decrease) By how much? You can give me a range or an approximate change if you don't know the exact amount.

_____ (enter responses)
 _____ Don't know/Refuse

18a. What factors do you think contributed to the decline/increase in revenue between 2007 and 2008?

_____ (enter responses)
 _____ Don't know/Refuse (skip to #20 intro.)

a. Of the factors you just named, which do you think are the most important?

_____ (enter responses)
 _____ Don't know/Refuse (skip to #20 intro.)

Now I would like to ask you a few questions about the management of ORV's and beach driving at Cape Hatteras National Seashore. During the spring, summer and fall of 2008, the National Park Service opened and closed areas of the beach to ORV's and pedestrians based on the location of bird and sea turtle nests.

As you are probably aware, the Park Service is considering a number of management alternatives for driving on the beach. I am interested in how you think the options will affect your business's

revenue in the future. I realize that lots of factors affect your business, and it is hard to predict the future, especially given current economic conditions. I also understand that this is a controversial subject on the island, and that people have strong feelings about the park.

In this survey, we are interested in how different management options might affect your **business** only, not your own use of the beach or other businesses. Accurate information about your business will improve our analysis of the impacts. If you don't have any idea, just tell me you don't know.

19. In 2008 and again this year, parts of the park, like the points and spits (including Bodie Island Spit, Cape Point, Hatteras Islet, North Ocracoke Spit, and South Point Ocracoke) and a few other areas were closed around March 14 and then opened and closed throughout the summer based on the bird and turtle activity. One of the management alternatives under consideration would just completely close the points and spits and a few miles of beach between Ramp 27 (south of Salvo) and Buxton all year. That would leave 28 miles of beach open year round for ORV use and 40 miles closed.

a. Compared to the situation in 2008, do you think this action would affect a significant number of your customers?

- Yes
- Maybe
- No (skip to #21)
- Don't know/Refuse (skip to #21)

b. Compared to 2008, do you think it would increase your business, decrease your business, or not have much affect on your business if the spits and points were completely closed all year?

- Increase
- Decrease
- Not much effect (skip to #21)
- Don't know/Refuse (skip to #21)

c. *(if increase or decrease)* Can you provide an estimate or range of estimates of the increase/decrease you might expect?

_____ (enter response)
 Don't know/Refuse

20. Since different businesses will be affected differently, to help me understand your answers can you provide a brief explanation of how you came up with your answer -- for example, past experience, the type of local residents and visitors you serve, spending in different seasons, and other issues.

_____ (enter response and read back to respondent)

21. Another proposal would provide more access for ORV's and pedestrians to areas that are open, but would have been inaccessible under the 2008 management, by creating ORV and/or pedestrian corridors or allowing water taxis to some popular spots like

Bodie Island Spit, about a mile of the Cape Point area, and the South Point area of Ocracoke. As in 2008, access could change week to week depending on where nesting areas are, but the proposal calls for more ORV and/or pedestrian access trails where possible. The proposal would leave about 12 miles closed all year, 26 miles open, and another 30 miles subject to restrictions during the spring and summer season.

- a. Compared to the situation in 2008, do you think this action would affect a significant number of your customers?
 - Yes
 - Maybe
 - No (skip to #22)
 - Don't know/Refuse (skip to #22)

- b. Compared to 2008, do you think it would increase your business, decrease your business, or not have much effect on your business under this alternative?
 - Increase
 - Decrease
 - Not much effect (skip to #22)
 - Don't know/Refuse (skip to #22)

- c. *(if increase or decrease)* Can you provide an estimate or range of estimates of the increase/decrease you might expect?

_____ (enter response)

 - Don't know/Refuse

22. If the soundside ramps were closed to ORV's but open to pedestrians, compared to the situation in 2008, do you think this action would affect a significant number of your customers?

- Yes
 - Maybe
 - No (skip to #23)
 - Don't know/Refuse (skip to #23)
- a. Compared to 2008, do you think it would increase your business, decrease your business, or not have much effect on your business?
 - Increase
 - Decrease
 - Not much effect (skip to #23)
 - Don't know/Refuse (skip to #23)

 - b. *(if increase or decrease)* Can you provide an estimate or range of estimates of the increase/decrease you might expect?

_____ (enter response)

 - Don't know/Refuse

23. If the park decided to run water taxis to transport visitors out to some areas that are open but inaccessible to ORVs and pedestrians, would your business be interested in operating a water taxi??

- Yes
- Maybe
- No
- Don't know/Refuse

24. (if "no" to C in the introduction) You said that the business was under different management in 2007. Do you have the name and contact information for the previous owner?

- Yes (specify)

- No

25. (if ownership has changed since 2007) You said that the business was under different management in 2007. Do you have the name and contact information for the previous owner?

- Yes (specify)

- No

24. Do you know why the business changed ownership? _____

Thank you very much for your time. We appreciate your willingness to talk with us.
[Arrange follow-up call if necessary.]

Lodging except Rental Homes

Business survey: Lodging except rental homes

Hi, my name is [name]. I work for Research Triangle Institute, a nonprofit research consulting firm located in Raleigh, North Carolina. We have been hired by the National Park Service to conduct an economic analysis of the proposed alternatives for managing beach driving or ORV's in the Cape Hatteras National Seashore.

A. We are contacting a random sample of businesses on the Outer Banks to gather information for the economic analysis. Your business was selected for survey. Can I please speak to (insert contact name). (*if no contact name*) We need to speak with the owner of the business or someone who is very familiar with the financial side of the business.

B. (*if no one available*) Do you know if there is a good time to call them? Can you give me their name and telephone number? My name is (insert name) and my number is (insert phone number). Can you please tell them I called?

The survey should only take about 30 minutes to complete. Also, I need to make you aware that the Paperwork Reduction Act requires approval of all federal government surveys by the Office of Management and Budget. This survey has been approved under this Act. The Office of Management and Budget control number and expiration date is available at your request. Additional information about this survey and its approval is available at your request.*

[if cannot take the survey, arrange a time to call back]

Some of the questions we ask are about current business operations. We need this information to understand the number and type of businesses currently on Cape Hatteras. We will also ask some questions about your business forecast under different management proposals.

Your responses to these questions are voluntary, but we hope you will participate in the survey. This survey is the best way to get accurate information about the impacts of ORV management plans on businesses. All of your answers will be kept on a secure computer at RTI. RTI will only keep identifying information about your company until a new rule for ORV management is completed in 2011. We will not report any information about individual businesses to anyone, including other businesses or the National Park Service, unless compelled by law. For instance, we will not share information that could be used to link your answers to your own business, if you assert, and the National Park Service agrees, that its release would cause harm to your competitive position.

Do you request that RTI keep your information confidential because releasing the information would cause a significant competitive disadvantage?

___ Does ___ Does not request that identifying information be protected.

If there are things that you think are important for us to know or understand related to economic impacts that we don't ask about, there is time at the end of the survey for you to provide more comments.

C. Has the business been under the same ownership since 2007?

Yes → Okay, let's begin.

No → The survey contains some questions about 2007. If you do not have information about 2007, just tell me and we can skip those questions.

Don't know → The survey contains some questions about 2007. If you do not have information about 2007, just tell me and we can skip those questions.

1. What year did this [hotel/motel/B&B/cottages/campground] first open?

_____ (enter year)

2. Are there particular parts of the beach or specific beach or sound access ramps that you or your customers use?

Yes → which parts or ramps? _____

No

Don't know

3. Is the business open year round? If no, when do you operate?

Yes

No → What months do you operate? _____ to _____

Now we have some questions about the number of employees and revenue. If you are not sure about an answer, please tell me and give me your best estimate. If you have your records handy, feel free to check your records while we are on the phone. If you want to check your records later, we can arrange a time for me to call back a confirm your responses to these questions.

4. How many [rooms, campsites] do you have?

_____ enter number

Don't know/Refuse

4a. Do you provide other types of services such as a restaurant, rentals, or souvenirs? [do not read list, check all that apply]

[prompt – what else do you sell or rent?]

Sell fishing supplies

Sell recreational supplies, other

Sell guns

Rent recreational supplies

Rent household supplies (linens, high chairs, etc.)

Sell food

Sell gas

Sell household items, souvenirs and other items

Lessons, guided trips

Sell North Carolina fishing permits

Pier

Fishing charter

Other (specify) _____

4b. What percent of your revenue comes from lodging?

5. Typically, what percent of revenue comes during each season? [interviewer: check to see that percents add to 100%]

- _____ Winter
- _____ Spring
- _____ Summer
- _____ Fall
- _____ Don't know/Refuse

6. How many full-time employees did this business employ in 2008?

_____ (enter #) OR _____ Don't know/refuse
 [if 0 full-time employees, skip to #8]

7. Did the number of full-time employees vary by season?

- _____ Yes
- _____ No (skip to #8)
- _____ Don't know/refuse (skip to #8)

8. If it varied by season, can you tell us how many full-time employees this business employed each season?

- _____ Winter
- _____ Spring
- _____ Summer
- _____ Fall
- _____ Don't know/Refuse

9. Compared to 2007, did this business employ the same number of full-time employees, more full-time employees, or fewer full-time employees in 2008?

- _____ More in 2008
- _____ Same number in 2008
- _____ Fewer in 2008
- _____ Don't know/Refuse

10. How many part-time employees did this business employ in 2008?

_____ (enter #) OR _____ Don't know/refuse
 [if 0, skip to #12]

11. Did the number of part-time employees vary by season?

- _____ Yes
- _____ No (skip to #12)
- _____ Don't know/Refuse (skip to #12)

12. If it varied by season, can you tell us how many part-time employees this business employed each season?

- Winter
- Spring
- Summer
- Fall
- Don't know/Refuse

13. Compared to 2007, did you have the same number of part-time employees, more part-time employees, or fewer part-time employees in 2008?

- More in 2008
- Same number in 2008
- Fewer in 2008
- Don't know/Refuse

14. For the economic analysis, we need information about the size of different businesses based on annual gross revenue. I am going to read revenue ranges. Which range did the business fit into in 2008?

- Less than \$500,000 a year
- \$500,000 to \$999,999 a year
- \$1 million to \$1.99 million a year
- \$2 million to \$3.99 million a year
- \$4 million - \$6.99 million a year
- \$7 million - \$9.99 million a year
- Over \$10 million a year
- Don't know/Refuse

14a. (If refuse to answer revenue question). The threshold for being considered a small business is \$7 million. Can you tell me if your business's revenue was under \$7 million?

- Yes, it was under \$7 million
- No, it was greater than \$7 million
- Refused
- Don't know

15. Which range did the business fit into in 2007?

- Less than \$500,000 a year
- \$500,000 to \$999,999 a year
- \$1 million to \$1.99 million a year
- \$2 million to \$3.99 million a year
- \$4 million - \$6.99 million a year
- \$7 million - \$9.99 million a year
- Over \$10 million a year
- Don't know/Refuse

16. (if revenue declined from 2007 to 2008) What factors do you think contributed to the decline in revenue between 2007 and 2008?

_____ (enter responses)

_____ Don't know/Refuse (skip to #21 intro.)

a. Of the factors you just named, which do you think are the most important?

_____ (enter responses)

_____ Don't know/Refuse (skip to #21 intro.)

17. (if revenue increased) What factors contributed to the increase in revenue between 2007 and 2008?

_____ (enter responses)

_____ Don't know/Refuse (skip to #21 intro.)

18. Of the factors you just named, which do you think are the most important?

_____ (enter responses)

_____ Don't know/Refuse (skip to #21 intro.)

19. (if still in the same revenue category) Did your revenue increase, decrease, or stay the same between 2007 and 2008?

_____ Increased

_____ Decreased

_____ Stayed the same (skip to #21 intro.)

_____ Don't know/Refuse (skip to #21 intro.)

20. (if increased or decreased) By how much? You can give me a range or an approximate change if you don't know the exact amount.

_____ (enter responses)

_____ Don't know/Refuse

20a. What factors do you think contributed to the decline/increase in revenue between 2007 and 2008?

_____ (enter responses)

_____ Don't know/Refuse (skip to #21 intro.)

a. Of the factors you just named, which do you think are the most important?

_____ (enter responses)

_____ Don't know/Refuse (skip to #21 intro.)

Now I would like to ask you a few questions about the management of ORV's and beach driving at Cape Hatteras National Seashore. During the spring, summer and fall of 2008, the National Park Service opened and closed areas of the beach to ORV's and pedestrians based on the location of bird and sea turtle nests.

As you are probably aware, the Park Service is considering a number of management alternatives for driving on the beach. I am interested in how you think the options will affect your business's revenue in the future. I realize that lots of factors affect your business, and it is hard to predict the future, especially given current economic conditions. I also understand that this is a controversial subject on the island, and that people have strong feelings about the park.

In this survey, we are interested in how different management options might affect your **business** only, not your own use of the beach or other businesses. Accurate information about your business will improve our analysis of the impacts. If you don't have any idea, just tell me you don't know.

21. In 2008 and again this year, parts of the park, like the points and spits (including Bodie Island Spit, Cape Point, Hatteras Islet, North Ocracoke Spit, and South Point Ocracoke) and a few other areas were closed around March 14 and then opened and closed throughout the summer based on the bird and turtle activity. One of the management alternatives under consideration would just completely close the points and spits and a few miles of beach between Ramp 27 (south of Salvo) and Buxton all year. That would leave 28 miles of beach open year round for ORV use and 40 miles closed.

- a. Compared to the situation in 2008, do you think this action would affect a significant number of your customers?
 Yes
 Maybe
 No (skip to #23)
 Don't know/Refuse (skip to #23)

- b. Compared to 2008, do you think it would increase your business, decrease your business, or not have much effect on your business if the spits and points were completely closed all year?
 Increase
 Decrease
 Not much effect (skip to #23)
 Don't know/Refuse (skip to #23)

- c. *(if increase or decrease)* Can you provide an estimate or range of estimates of the increase/decrease you might expect?
 (enter response)
 Don't know/Refuse

22. Since different businesses will be affected differently, to help me understand your answers can you provide a brief explanation of how you came up with your answer -- for example past experience, the type of local residents and visitors you serve, spending in different seasons, and other issues.

_____ (enter response and read back to respondent)

23. Another proposal would provide more access for ORV's and pedestrians to areas that are open, but would have been inaccessible under the 2008 management by creating ORV and/or pedestrian corridors or allowing water taxis to some popular spots like Bodie Island Spit, about a mile of the Cape Point area, and the South Point area of Ocracoke. As in 2008, access could change week to week depending on where nesting areas are, but the proposal calls for more ORV and/or pedestrian access trails where possible. The proposal would leave about 12 miles closed all year, 26 miles open, and another 30 miles subject to restrictions during the spring and summer season.

- a. Compared to the situation in 2008, do you think this action would affect a significant number of your customers?

_____ Yes
 _____ Maybe
 _____ No (skip to #24)
 _____ Don't know/Refuse (skip to #24)

- b. Compared to 2008, do you think it would increase your business, decrease your business or not have much effect on your business under this alternative?

_____ Increase
 _____ Decrease
 _____ Not much effect (skip to #24)
 _____ Don't know/Refuse (skip to #24)

- c. (*if increase or decrease*) Can you provide an estimate or range of estimates of the increase/decrease you might expect?

_____ (enter response)
 _____ Don't know/Refuse

24. If the soundside ramps were closed to ORV's but open to pedestrians, compared to the situation in 2008, do you think this action would affect a significant number of your customers?

_____ Yes
 _____ Maybe
 _____ No (skip to #25)
 _____ Don't know/Refuse (skip to #25)

- a. Compared to 2008, do you think it would increase your business, decrease your business or not have much effect on your business?
- Increase
 Decrease
 Not much effect (skip to #25)
 Don't know/Refuse (skip to #25)
- b. *(if increase or decrease)* Can you provide an estimate or range of estimates of the increase/decrease you might expect?
_____ (enter response)
 Don't know/Refuse

25. If the park decided to run water taxis to transport visitors out to some areas that are open but inaccessible to ORVs and pedestrians, would your business be interested in operating a water taxi?
- Yes
 Maybe
 No
 Don't know/Refuse

-
26. *(if ownership has changed since 2007)* You said that the business was under different management in 2007. Do you have the name and contact information for the previous owner?

Yes (specify) _____
 No

27. Do you know why the business changed ownership? _____

-
28. I don't have any more questions. Is there anything that you would like to add related to the economic impacts on your business of managing ORVs?
_____ (enter response)

Thank you very much for your time. We appreciate your willingness to talk with us.
[Arrange follow-up call if necessary.]

Commercial Fishermen

Business survey: Commercial fishermen

Hi, my name is [name]. I work for Research Triangle Institute, a nonprofit research consulting firm located in Raleigh, North Carolina. We have been hired by the National Park Service to conduct an economic analysis of the proposed alternatives for managing beach driving or ORV's in the Cape Hatteras National Seashore.

We are calling a random sample of businesses on the Outer Banks to gather information for the economic analysis. Commercial fishermen are included in the sample. [Insert name of fisherman] has been selected for survey. Can I please speak to (insert contact name).

(if not available) Can we set up a time when I can call back? My name is (insert name) and my number is (insert phone number). Can you please tell them I called?

The survey should only take about 30 minutes to complete. Also, I need to make you aware that the Paperwork Reduction Act requires approval of all federal government surveys by the Office of Management and Budget. This survey has been approved under this Act. The Office of Management and Budget control number and expiration date is available at your request. Additional information about this survey and its approval is available at your request.*

[if cannot take the survey, arrange a time to call back]

Some of the questions we ask are about current conditions. We will also ask some questions about your business forecast under different park management proposals.

Your responses to these questions are voluntary, but we hope you will participate in the survey. This survey is the best way to get accurate information about the impacts of ORV management plans on businesses. All of your answers will be kept on a secure computer at RTI. RTI will only keep identifying information about your company until a new rule for ORV management is completed in 2011. We will not report any information about individual businesses to anyone, including other businesses or the National Park Service, unless compelled by law. For instance, we will not share information that could be used to link your answers to your own business, if you assert, and the National Park Service agrees, that its release would cause harm to your competitive position.

Do you request that RTI keep your information confidential because releasing the information would cause a significant competitive disadvantage?

___ Does ___ Does not request that identifying information be protected.

If there are things that you think are important for us to know or understand related to economic impacts that we don't ask about, there is time at the end of the survey for you to provide more comments.

Okay, let's begin.

1. How long have you been a commercial fisherman?
_____ (enter response)

2. Have you fished or do you plan to fish for commercial purposes in Cape Hatteras National Seashore in 2009?
_____ Yes, I have
_____ Yes, I plan to, but I haven't yet
_____ No
_____ Don't know/Refuse

3. Did you fish for commercial purposes in Cape Hatteras National Seashore in 2008?
_____ Yes
_____ No

4. [if no to #2 and #3] Do you plan to fish for commercial purposes in Cape Hatteras National Seashore in the future?
_____ Yes
_____ Maybe
_____ No → skip to #24 (terminate interview)

5. How many years have you been fishing commercially in Cape Hatteras National Seashore?
_____ (enter response)

6. Where in the National Seashore do you fish? [check all that apply]
___ Area north of Oregon Islet and ramp 4
___ Oregon Islet point (south of ramp 4)
___ Between Rodanthe and Buxton
___ Bay side of Cape Hatteras north of Cape Hatteras Lighthouse
___ Bay side of Cape Hatteras south of Cape Hatteras Lighthouse
___ Cape Point area
___ South Beach to ramp 55
___ Hatteras Islet
___ North Ocracoke Islet
___ Ocracoke between ramp 59 south and ramp 72
___ Ramp 72 to South Point

Now we have some questions about the fishing effort and your revenue. If you are not sure about an answer, please tell me and give me your best estimate. If you have your records handy, feel free to check your records while we are on the phone. If you want to check your records later, we can arrange a time for me to call back a confirm your responses to these questions.

7. What fraction of your fishing time is spent in the National Seashore versus outside the Seashore?

_____ (enter response for inside the National Seashore)
 _____ Don't know/Refuse

8. What fraction of your yearly total household income from all sources comes from fish caught in the National Seashore?

_____ (enter response for inside the National Seashore)
 _____ Don't know/Refuse

9. Do you fish from a boat, or from the shore, or both? (check only one)

_____ Boat _____ Shore _____ Both boat and shore

10. Where do you sell your catch?

_____ (enter response)

11. How does recreational fishing on Cape Hatteras National Seashore beaches impact your fishing?

_____ (enter response) OR _____ No impact

12. For the economic analysis, we need information about the size of different businesses based on annual gross revenue. I am going to read revenue ranges. Which range did you fit in for 2008?

- _____ Less than \$500,000 a year
- _____ \$500,000 to \$999,999 a year
- _____ \$1 million to \$1.99 million a year
- _____ \$2 million to \$3.99 million a year
- _____ \$4 million - \$6.99 million a year
- _____ \$7 million - \$9.99 million a year
- _____ Over \$10 million a year
- _____ Don't know/Refuse

12a. (If refuse to answer revenue question). The threshold for being considered a small business is \$4 million. Can you tell me if your business's revenue was under \$4 million?

- _____ Yes, it was under \$4 million.
- _____ No, it was greater than \$4 million
- _____ Refused
- _____ Don't know

13. Which range did fit into in 2007?

- Less than \$500,000 a year
- \$500,000 to \$999,999 a year
- \$1 million to \$1.99 million a year
- \$2 million to \$3.99 million a year
- \$4 million - \$6.99 million a year
- \$7 million - \$9.99 million a year
- Over \$10 million a year
- Don't know/Refuse

14. (if revenue declined from 2007 to 2008) What factors contributed to the decline in revenue in 2008?

_____ (enter responses)
_____ Don't know/Refuse (skip to #19 intro.)

a. Of the factors you just named, which do you think are the most important?

_____ (enter responses)
_____ Don't know/Refuse (skip to #19 intro.)

15. (if revenue increased) What factors contributed to the increase in revenue between 2007 and 2008?

_____ (enter responses)
_____ Don't know/Refuse (skip to #19 intro.)

16. Of the factors you just named, which do you think are the most important?

_____ (enter responses)
_____ Don't know/Refuse (skip to #19 intro.)

17. (if still in the same revenue category) Did your revenue increase, decrease, or stay the same between 2007 and 2008?

- Increased
- Decreased
- Stayed the same (skip to #19 intro.)
- Don't know/Refuse (skip to #19 intro.)

18. (if increased or decreased) By how much? You can give me a range or an approximate change if you don't know the exact amount.

_____ (enter responses)
_____ Don't know/Refuse

18a. What factors do you think contributed to the decline/increase in revenue between 2007 and 2008?

_____ (enter responses)
 _____ Don't know/Refuse (skip to #20 intro.)

a. Of the factors you just named, which do you think are the most important?

_____ (enter responses)
 _____ Don't know/Refuse (skip to #20 intro.)

Now I would like to ask you a few questions about the management of ORV's and beach driving at Cape Hatteras National Seashore. During the spring, summer, and fall of 2008, the National Park Service opened and closed areas of the beach to ORV's and pedestrians based on the location of bird and sea turtle nests.

As you are probably aware, the Park Service is considering a number of management alternatives for driving on the beach. I am interested in how you think the options will affect your business's revenue in the future. I realize that lots of factors affect your business, and it is hard to predict the future, especially given current economic conditions. I also understand that this is a controversial subject on the island, and that people have strong feelings about the park.

In this survey, we are interested in how different management options might affect your **business** only, not your own use of the beach or other businesses. Accurate information about your business will improve our analysis of the impacts. If you don't have any idea, just tell me you don't know.

19. In 2008 and again this year, parts of the park like the points and spits (including Bodie Island Spit, Cape Point, Hatteras Islet, North Ocracoke Spit, and South Point Ocracoke) and a few other areas were closed around March 14 and then opened and closed throughout the summer based on the bird and turtle activity. One of the management alternatives under consideration would just completely close the points and spits and a few miles of beach between Ramp 27 (south of Salvo) and Buxton all year. That would leave 28 miles of beach open year round for ORV use and 40 miles closed.

a. Compared to the situation in 2008, do you think this action would affect your commercial fishing activity?

_____ Yes
 _____ Maybe
 _____ No (skip to #21)
 _____ Don't know/Refuse (skip to #21)

- b. Compared to 2008, do you think it would increase your business, decrease your business, or not have much effect on your business if the spits and points were completely closed all year?

Increase
 Decrease
 Not much effect (skip to #21)
 Don't know/Refuse (skip to #21)

- c. *(if increase or decrease)* Can you provide an estimate or range of estimates of the increase/decrease you might expect?

_____ (enter response)
 Don't know/Refuse

20. Since different businesses will be affected differently, to help me understand your answers can you provide a brief explanation of how you came up with your answer -- for example, past experience and other issues.

_____ (enter response and read back to respondent)

21. Another proposal would provide more access for ORV's and pedestrians to areas that are open, but would have been inaccessible under the 2008 management by creating ORV and/or pedestrian corridors or allowing water taxis to some popular spots like Bodie Island Spit, about a mile of the Cape Point area, and the South Point area of Ocracoke. As in 2008, access could change week to week depending on where nesting areas are, but the proposal calls for more ORV and/or pedestrian access trails where possible. The proposal would leave about 12 miles closed all year, 26 miles open, and another 30 miles subject to restrictions during the spring and summer season.

- a. Compared to the situation in 2008, do you think this action would affect your commercial fishing activity?

Yes
 Maybe
 No (skip to #22)
 Don't know/Refuse (skip to #22)

- b. Compared to 2008, do you think it would increase your business, decrease your business or not have much effect on your business under this alternative?

Increase
 Decrease
 Not much effect (skip to #22)
 Don't know/Refuse (skip to #22)

- c. (if increase or decrease) Can you provide an estimate or range of estimates of the increase/decrease you might expect?
 _____ (enter responses)
 _____ Don't know/Refuse
22. If the soundside ramps were closed to ORV's but open to pedestrians, compared to the situation in 2008, do you think this action would affect your commercial fishing activity?
 _____ Yes
 _____ Maybe
 _____ No (skip to #23)
 _____ Don't know/Refuse (skip to #23)
- a. Compared to 2008, do you think it would increase your business, decrease your business, or not have much effect on your business?
 _____ Increase
 _____ Decrease
 _____ Not much effect (skip to #24)
 _____ Don't know/Refuse (skip to #24)
- b. (if increase or decrease) Can you provide an estimate or range of estimates of the increase/decrease you might expect?
 _____ (enter response)
 _____ Don't know/Refuse
23. If the park decided to run water taxis to transport visitors out to some areas that are open but inaccessible to ORVs and pedestrians, would you be interested in operating a water taxi?
 _____ Yes
 _____ Maybe
 _____ No
 _____ Don't know/Refuse
24. I don't have any more questions. Is there anything that you would like to add related to the economic impacts on your business of managing ORVs?
 _____ (enter response)

Thank you very much for your time. We appreciate your willingness to talk with us.
 [Arrange follow-up call if necessary.]

Appendix B: Summary Statistics

Table B1. Survey Responses from Recreational Supply Businesses

Background Questions	Seashore Villages			Villages North of the Seashore		
	Less than \$500,000 a Year	\$500,000 to \$999,999 a Year	More than \$1 Million a Year	Less than \$500,000 a Year	\$500,000 to \$999,999 a Year	More than \$1 Million a Year
Number of businesses in revenue range for 2008	13	4	5	4	2	0
Number of businesses in revenue range for 2007	12	5	5	3	3	0
	Yes	No	Number of Responses	Yes	No	Number of Responses
Is the business open year round?	36%	64%	22	50%	50%	6
Did the number of full-time employees vary by season?	41%	59%	22	60%	40%	5
Did the number of part-time employees vary by season?	82%	18%	16	67%	33%	6
Are there particular parts of the beach or sound access ramps that you or your customers use?	91%	9%	22	83%	17%	6

(continued)

Table B1. Survey Responses from Recreational Supply Businesses (continued)

Background Questions	Seashore Villages				Villages North of the Seashore			
	Increase	Decrease	Stay the Same	Number of Responses	Increase	Decrease	Stay the Same	Number of Responses
Did your revenue increase, decrease, or stay the same between 2007 and 2008?	15%	80%	5%	20	17%	67%	17%	6
Compared to 2007, did you have the same number of full-time employees, more full-time employees, or fewer full-time employees in 2008?	5%	27%	68%	22	0%	33%	67%	6
Compared to 2007, did you have the same number of part-time employees, more part-time employees, or fewer part-time employees in 2008?	5%	36%	59%	22	0%	20%	80%	5

(continued)

Table B1. Survey Responses from Recreational Supply Businesses (continued)

Background Questions	Seashore Villages			Villages North of the Seashore		
	Mean	Median	Number of Responses	Mean	Median	Number of Responses
By how much [did your revenue change]? You can give me a range or an approximate change if you don't know the exact amount.	-13%	-11%	16	-18%	-10%	6
What percent of your revenue comes from sales of equipment or supplies for beachgoers?	61%	75%	21	38%	40%	5
How many full-time employees did this business employ in 2008?	17	4	22	7	5	6
If it varied by season, can you tell us how many full-time employees this business employed each season?						
Winter	12	3	8	1	0	4
Spring	20	4	9	6	6	4
Summer	35	8	9	8	5	4
Fall	20	5	9	4	4	4
How many part-time employees did this business employ in 2008?	3	2	22	4	4	6
If it varied by season, can you tell us how many part-time employees this business employed each season?						
Winter	1	0	7	2	0	4
Spring	2	1	11	1	0	4
Summer	5	3	12	4	4	4
Fall	3	1	13	2	1	4

(continued)

Table B1. Survey Responses from Recreational Supply Businesses (continued)

Background Questions	Seashore Villages			Villages North of the Seashore		
	Mean	Median	Number of Responses	Mean	Median	Number of Responses
Typically, what percent of revenue comes during each season?						
Winter	5%	0%	21	18%	10%	5
Spring	23%	25%	21	12%	10%	5
Summer	52%	55%	22	51%	50%	5
Fall	21%	20%	21	20%	20%	5

(continued)

Table B1. Survey Responses from Recreational Supply Businesses (continued)

Questions about Alternatives	Seashore Villages				Villages North of the Seashore			
	Yes	No	Maybe	Number of Responses	Yes	No	Maybe	Number of Responses
[Alternative 1] ^a Compared to the situation in 2008, do you think this action would affect a significant number of your customers?	95%	0%	5%	22	80%	20%	0%	5
[Alternative 2] ^b Compared to the situation in 2008, do you think this action would affect a significant number of your customers?	53%	11%	37%	19	80%	20%	0%	5
[Soundside Ramps] ^c If the soundside ramps were closed to ORV's but open to pedestrians, compared to the situation in 2008, do you think this action would affect a significant number of your customers?	36%	50%	14%	14	20%	40%	40%	5

(continued)

Table B1. Survey Responses from Recreational Supply Businesses (continued)

Questions about Alternatives	Seashore Villages				Villages North of the Seashore			
	Increase	Decrease	Not Much Effect	Number of Responses	Increase	Decrease	Not Much Effect	Number of Responses
[Alternative 1] Compared to 2008, do you think it would increase your business, decrease your business, or not have much effect on your business if the spits and points were completely closed all year?	0%	91%	9%	22	0%	80%	20%	5
[Alternative 2] Compared to 2008, do you think it would increase your business, decrease your business, or not have much effect on your business?	0%	60%	40%	15	0%	80%	20%	5
[Soundside Ramps] Compared to 2008, do you think it would increase your business, decrease your business, or not have much effect on your business?	7%	43%	50%	14	0%	25%	75%	4

(continued)

Table B1. Survey Responses from Recreational Supply Businesses (continued)

Questions about Alternatives	Seashore Villages			Villages North of the Seashore		
	Mean	Median	Number of Responses	Mean	Median	Number of Responses
[Alternative 1] Can you provide an estimate or range of estimates of the increase/decrease you might expect?	-19%	-20%	13	-16%	-15%	4
[Alternative 2] Can you provide an estimate or range of estimates of the increase/decrease you might expect?	-7%	0%	9	D ^d	D	D
[Soundside Ramps] Can you provide an estimate or range of estimates of the increase/decrease you might expect?	-4.5%	0%	10	-3%	0%	4

^a *Alternative 1*: In 2008 and again this year, parts of the park, like the points and spits (including Bodie Island Spit, Cape Point, Hatteras Islet, North Ocracoke Spit, and South Point Ocracoke) and a few other areas, were closed around March 14 and then opened and closed throughout the summer based on the bird and turtle activity. One of the management alternatives under consideration would just completely close the points and spits and a few miles of beach between Ramp 27 (south of Salvo) and Buxton all year. That would leave 28 miles of beach open year round for ORV use and 40 miles closed.

^b *Alternative 2*: Another proposal would provide more access for ORVs and pedestrians to areas that are open but would have been inaccessible under the 2008 management, by creating ORV and/or pedestrian corridors or allowing water taxis to some popular spots like Bodie Island Spit, about a mile of the Cape Point area, and the South Point area of Ocracoke. As in 2008, access could change week to week depending on where nesting areas are, but the proposal calls for more ORV and/or pedestrian access trails where possible. The proposal would leave about 12 miles closed all year, 26 miles open, and another 30 miles subject to restrictions during the spring and summer season.

^c If the soundside ramps were closed to ORV's, but open to pedestrians, compared to the situation in 2008, do you think this action would affect a significant number of your customers?

^d Too few responses to disclose.

Table B2. Survey Responses from Real Estate Rental Businesses

Background Questions	Seashore Villages			Villages North of the Seashore		
	Less than \$500,000 a Year	\$1 Million to \$1.99 Million a Year	Over \$2 Million a Year	Less than \$500,000 a Year	\$1 Million to \$1.99 Million a Year	Over \$2 Million a Year
Number of businesses in revenue range for 2008	1	1	4	1	0	3
Number of businesses in revenue range for 2007	1	1	4	1	0	3
	Yes	No	Number of Responses	Yes	No	Number of Responses
Is the business open year round?	100%	0%	6	100%	0%	4
Did the number of full-time employees vary by season?	17%	83%	6	25%	75%	4
Did the number of part-time employees vary by season?	20%	80%	5	75%	25%	4
Do you sell or rent anything beyond rental houses?	100%	0%	6	25%	75%	4

(continued)

Table B2. Survey Responses from Real Estate Rental Businesses (continued)

Background Questions	Seashore Villages				Villages North of the Seashore			
	Increase	Decrease	Stay the Same	Number of Responses	Increase	Decrease	Stay the Same	Number of Responses
Did your revenue increase, decrease, or stay the same between 2007 and 2008?	67%	33%	0%	6	75%	25%	0%	4
Compared to 2007, did you have the same number of full-time employees, more full-time employees, or fewer full-time employees in 2008?	0%	0%	100%	6	75%	0%	25%	4
Compared to 2007, did you have the same number of part-time employees, more part-time employees, or fewer part-time employees in 2008?	17%	17%	67%	6	0%	50%	50%	4

(continued)

Table B2. Survey Responses from Real Estate Rental Businesses (continued)

Background Questions	Seashore Villages			Villages North of the Seashore		
	Mean	Median	Number of Responses	Mean	Median	Number of Responses
By how much [did your revenue change]? You can give me a range or an approximate change if you don't know the exact amount.	23%	5%	5	8%	5%	3
How many full-time employees did this business employ in 2008?	49	48	6	23	26	4
How many part-time employees did this business employ in 2008?	157	65	5	107	52	4
If it varied by season, can you tell us how many full-time employees this business employed each season?						
Winter	D ^d	D	D	D	D	D
Spring	D	D	D	D	D	D
Summer	D	D	D	D	D	D
Fall	D	D	D	D	D	D
If it varied by season, can you tell us how many part-time employees this business employed each season?						
Winter	5	3	4	3	1	3
Spring	23	13	4	75	50	3
Summer	190	133	4	141	100	3
Fall	23	13	4	75	50	3
What percent of your revenue comes from housing rentals?	87%	92%	6	95%	95%	4
Typically, what percent of revenue comes during each season?						
Winter	5%	1%	6	5%	0%	4
Spring	14%	15%	6	20%	23%	4
Summer	65%	65%	6	50%	55%	4
Fall	17%	16%	6	25%	25%	4

(continued)

Table B2. Survey Responses from Real Estate Rental Businesses (continued)

Questions about Alternatives	Seashore Villages				Villages North of the Seashore			
	Yes	No	Maybe	Number of Responses	Yes	No	Maybe	Number of Responses
[Alternative 1] ^a Compared to the situation in 2008, do you think this action would affect a significant number of your customers?	83%	17%	0%	6	0%	50%	50%	4
[Alternative 2] ^b Compared to the situation in 2008, do you think this action would affect a significant number of your customers?	67%	33%	0%	6	0%	67%	33%	3
[Soundside Ramps] ^c If the soundside ramps were closed to ORV's but open to pedestrians, compared to the situation in 2008, do you think this action would affect a significant number of your customers?	67%	33%	0%	6	0%	67%	33%	3
	Increase	Decrease	Not Much Effect	Number of Responses	Increase	Decrease	Not Much Effect	Number of Responses
[Alternative 1] Compared to 2008, do you think it would increase your business, decrease your business, or not have much effect on your business if the spits and points were completely closed all year?	0%	83%	17%	6	0%	33%	67%	3
[Alternative 2] Compared to 2008, do you think it would increase your business, decrease your business, or not have much effect on your business?	50%	17%	33%	6	D ^d	D	D	D
[Soundside Ramps] Compared to 2008, do you think it would increase your business, decrease your business, or not have much effect on your business?	0%	67%	33%	6	D	D	D	D

(continued)

Table B2. Survey Responses from Real Estate Rental Businesses (continued)

Questions about Alternatives	Seashore Villages			Villages North of the Seashore		
	Mean	Median	Number of Responses	Mean	Median	Number of Responses
[Alternative 1] Can you provide an estimate or range of estimates of the increase/decrease you might expect?	-15%	-16%	6	-3%	0	3
[Alternative 2] Can you provide an estimate or range of estimates of the increase/decrease you might expect?	0%	0%	5	D	D	D
[Soundside Ramps] Can you provide an estimate or range of estimates of the increase/decrease you might expect?	-4%	-4%	6	D	D	D

^a *Alternative 1:* In 2008 and again this year, parts of the park, like the points and spits (including Bodie Island Spit, Cape Point, Hatteras Islet, North Ocracoke Spit, and South Point Ocracoke) and a few other areas, were closed around March 14 and then opened and closed throughout the summer based on the bird and turtle activity. One of the management alternatives under consideration would just completely close the points and spits and a few miles of beach between Ramp 27 (south of Salvo) and Buxton all year. That would leave 28 miles of beach open year round for ORV use and 40 miles closed.

^b *Alternative 2:* Another proposal would provide more access for ORVs and pedestrians to areas that are open but would have been inaccessible under the 2008 management, by creating ORV and/or pedestrian corridors or allowing water taxis to some popular spots like Bodie Island Spit, about a mile of the Cape Point area, and the South Point area of Ocracoke. As in 2008, access could change week to week depending on where nesting areas are, but the proposal calls for more ORV and/or pedestrian access trails where possible. The proposal would leave about 12 miles closed all year, 26 miles open, and another 30 miles subject to restrictions during the spring and summer season.

^c If the soundside ramps were closed to ORV's, but open to pedestrians, compared to the situation in 2008, do you think this action would affect a significant number of your customers?

^d Too few responses to disclose.

Table B3. Survey Responses from Lodging Businesses

Background Questions	Seashore Villages			Villages North of the Seashore		
	Less than \$500,000 a Year	\$500,000 to \$999,999 a year	\$1 Million to \$3.99 Million a Year	Less than \$500,000 a Year	\$500,000 to \$999,999 a Year	\$1 Million to \$3.99 Million a Year
Number of businesses in revenue range for 2008	15	4	2	3	0	2
Number of businesses in revenue range for 2007	13	5	3	3	0	2
	Yes	No	Number of Responses	Yes	No	Number of Responses
Is the business open year round?	50%	50%	22	75%	25%	4
Did the number of full-time employees vary by season?	33%	67%	18	D ^d	D	D
Did the number of part-time employees vary by season?	47%	53%	15	D	D	D
Are there particular parts of the beach or specific beach or sound access ramps that you or your customers use?	82%	18%	22	40%	60%	5

(continued)

Table B3. Survey Responses from Lodging Businesses (continued)

Background Questions	Seashore Villages				Villages North of the Seashore			
	Increase	Decrease	Stay the Same	Number of Responses	Increase	Decrease	Stay the Same	Number of Responses
Did your revenue increase, decrease, or stay the same between 2007 and 2008?	19%	62%	19%	21	17%	67%	17%	6
Compared to 2007, did you have the same number of full-time employees, more full-time employees, or fewer full-time employees in 2008?	6%	11%	83%	18	D	D	D	D
Compared to 2007, did you have the same number of part-time employees, more part-time employees, or fewer part-time employees in 2008?	6%	17%	78%	18	D	D	D	D

(continued)

Table B3. Survey Responses from Lodging Businesses (continued)

Background Questions	Seashore Villages			Villages North of the Seashore		
	Mean	Median	Number of Responses	Mean	Median	Number of Responses
By how much [did your revenue change]? You can give me a range or an approximate change if you don't know the exact amount.	-9%	-1%	15	-4%	-6%	5
Typically, what percent of revenue comes during each season?						
Winter	4%	3%	20	D	D	D
Spring	19%	17%	19	D	D	D
Summer	57%	60%	20	D	D	D
Fall	19%	20%	19	D	D	D
How many [rooms, campsites] do you have?	37	26	22	D	D	D
How many full-time employees did this business employ in 2008?	6	3	19	D	D	D
If it varied by season, can you tell us how many full-time employees this business employed each season?						
Winter	6	7	5	D	D	D
Spring	11	12	5	D	D	D
Summer	14	14	5	D	D	D
Fall	11	12	5	D	D	D
How many part-time employees did this business employ in 2008?	2	1	19	D	D	D
If it varied by season, can you tell us how many part-time employees this business employed each season?						
Winter	0	0	6	D	D	D
Spring	2	2	7	D	D	D
Summer	4	4	7	D	D	D
Fall	2	2	76	D	D	D
What percent of your revenue comes from lodging?	85%	100%	20	94%	100%	5

(continued)

Table B3. Survey Responses from Lodging Businesses (continued)

Questions about Alternatives	Seashore Villages				Villages North of the Seashore			
	Yes	No	Maybe	Number of Responses	Yes	No	Maybe	Number of Responses
[Alternative 1] ^a Compared to the situation in 2008, do you think this action would affect a significant number of your customers?	84%	16%	0%	19	100%	0%	0%	6
[Alternative 2] ^b Compared to the situation in 2008, do you think this action would affect a significant number of your customers?	78%	6%	17%	18	100%	0%	0%	6
[Soundside Ramps] ^c If the soundside ramps were closed to ORV's but open to pedestrians, compared to the situation in 2008, do you think this action would affect a significant number of your customers?	37%	42%	21%	19	33%	50%	17%	6

(continued)

Table B3. Survey Responses from Lodging Businesses (continued)

Questions about Alternatives	Seashore Villages				Villages North of the Seashore			
	Increase	Decrease	Not Much Effect	Number of Responses	Increase	Decrease	Not Much Effect	Number of Responses
[Alternative 1] Compared to 2008, do you think it would increase your business, decrease your business, or not have much effect on your business if the spits and points were completely closed all year?	0%	84%	16%	19	0%	100%	0%	6
[Alternative 2] Compared to 2008, do you think it would increase your business, decrease your business, or not have much effect on your business?	13%	63%	25%	16	0%	67%	33%	6
[Soundside Ramps] Compared to 2008, do you think it would increase your business, decrease your business, or not have much effect on your business?	5%	40%	55%	20	0%	17%	83%	6

(continued)

Table B3. Survey Responses from Lodging Businesses (continued)

Questions about Alternatives	Seashore Villages			Villages North of the Seashore		
	Mean	Median	Number of Responses	Mean	Median	Number of Responses
[Alternative 1] Can you provide an estimate or range of estimates of the increase/decrease you might expect?	-29%	-20%	16	-24%	-25%	3
[Alternative 2] Can you provide an estimate or range of estimates of the increase/decrease you might expect?	-12%	-12%	12	-10%	-8%	4
[Soundside Ramps] Can you provide an estimate or range of estimates of the increase/decrease you might expect?	-4%	0%	14	-2%	0%	5

^a *Alternative 1:* In 2008 and again this year, parts of the park, like the points and spits (including Bodie Island Spit, Cape Point, Hatteras Islet, North Ocracoke Spit, and South Point Ocracoke) and a few other areas, were closed around March 14 and then opened and closed throughout the summer based on the bird and turtle activity. One of the management alternatives under consideration would just completely close the points and spits and a few miles of beach between Ramp 27 (south of Salvo) and Buxton all year. That would leave 28 miles of beach open year round for ORV use and 40 miles closed.

^b *Alternative 2:* Another proposal would provide more access for ORVs and pedestrians to areas that are open but would have been inaccessible under the 2008 management, by creating ORV and/or pedestrian corridors or allowing water taxis to some popular spots like Bodie Island Spit, about a mile of the Cape Point area, and the South Point area of Ocracoke. As in 2008, access could change week to week depending on where nesting areas are, but the proposal calls for more ORV and/or pedestrian access trails where possible. The proposal would leave about 12 miles closed all year, 26 miles open, and another 30 miles subject to restrictions during the spring and summer season.

^c If the soundside ramps were closed to ORV's, but open to pedestrians, compared to the situation in 2008, do you think this action would affect a significant number of your customers?

^d Too few responses to disclose.

Table B4. Survey Responses from Commercial Fishermen

Background Questions	Less than \$500,000 a Year			
	Increase	Decrease	Stay the Same	Number of Responses
Number of businesses in revenue range for 2008	6			
Number of businesses in revenue range for 2007	6			
Did your revenue increase, decrease, or stay the same between 2007 and 2008? [asked if business did not change revenue category between 2007 and 2008]	17%	83%	0%	6
	Mean	Median	Number of Responses	
By how much [did your revenue change]? You can give me a range or an approximate change if you don't know the exact amount.	D ^d	D	D	
What fraction of your fishing time is spent in the National Seashore versus outside the Seashore?	80%	100%	5	
What fraction of your yearly total household income from all sources comes from fish caught in the National Seashore?	38%	27%	4	

(continued)

Table B4. Survey Responses from Commercial Fishermen (continued)

Questions about Alternatives	Yes	No	Maybe	Number of Responses
[Alternative 1] ^a Compared to the situation in 2008, do you think this action would affect your commercial fishing activity?	83%	17%	0%	6
[Alternative 2] ^b Compared to the situation in 2008, do you think this action would affect your commercial fishing activity?	67%	17%	17%	6
[Soundside Ramps] ^c If the soundside ramps were closed to ORV's but open to pedestrians, compared to the situation in 2008, do you think this action would affect your commercial fishing activity?	50%	33%	17%	6
	Increase	Decrease	Not Much Effect	Number of Responses
[Alternative 1] Compared to 2008, do you think it would increase your business, decrease your business, or not have much effect on your business if the spits and points were completely closed all year?	0%	83%	17%	6
[Alternative 2] Compared to 2008, do you think it would increase your business, decrease your business, or not have much effect on your business?	0%	60%	40%	5
[Soundside Ramps] Compared to 2008, do you think it would increase your business, decrease your business or not have much effect on your business?	0%	67%	33%	6

(continued)

Table B4. Survey Responses from Commercial Fishermen (continued)

Questions about Alternatives	Mean	Median	Number of Responses
[Alternative 1] Can you provide an estimate or range of estimates of the increase/decrease you might expect?	-25%	-25%	3
[Alternative 2] Can you provide an estimate or range of estimates of the increase/decrease you might expect?	D	D	D
[Soundside Ramps] Can you provide an estimate or range of estimates of the increase/decrease you might expect?	D	D	D

^a *Alternative 1:* In 2008 and again this year, parts of the park, like the points and spits (including Bodie Island Spit, Cape Point, Hatteras Islet, North Ocracoke Spit, and South Point Ocracoke) and a few other areas, were closed around March 14 and then opened and closed throughout the summer based on the bird and turtle activity. One of the management alternatives under consideration would just completely close the points and spits and a few miles of beach between Ramp 27 (south of Salvo) and Buxton all year. That would leave 28 miles of beach open year round for ORV use and 40 miles closed.

^b *Alternative 2:* Another proposal would provide more access for ORVs and pedestrians to areas that are open but would have been inaccessible under the 2008 management, by creating ORV and/or pedestrian corridors or allowing water taxis to some popular spots like Bodie Island Spit, about a mile of the Cape Point area, and the South Point area of Ocracoke. As in 2008, access could change week to week depending on where nesting areas are, but the proposal calls for more ORV and/or pedestrian access trails where possible. The proposal would leave about 12 miles closed all year, 26 miles open, and another 30 miles subject to restrictions during the spring and summer season.

^c If the soundside ramps were closed to ORV's, but open to pedestrians, compared to the situation in 2008, do you think this action would affect a significant number of your customers?

^d Too few responses to disclose.