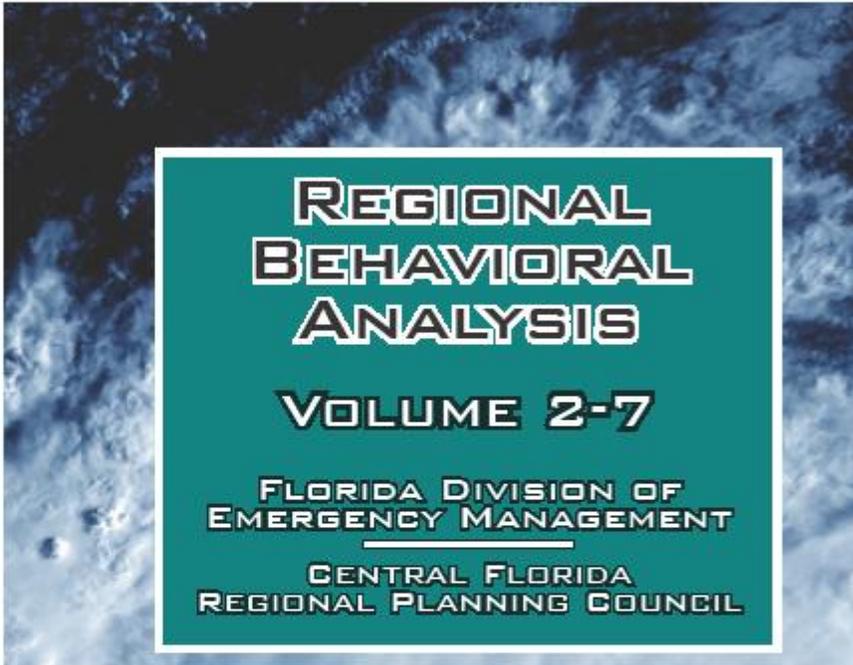




# FLORIDA STATEWIDE REGIONAL EVACUATION STUDY PROGRAM



## REGIONAL BEHAVIORAL ANALYSIS VOLUME 2-7

FLORIDA DIVISION OF  
EMERGENCY MANAGEMENT  
CENTRAL FLORIDA  
REGIONAL PLANNING COUNCIL



### CENTRAL FLORIDA REGION

INCLUDES HURRICANE EVACUATION STUDY



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**Volume 2**

**Statewide Regional  
Evacuation Study**

**Behavioral Analysis**

**Central Florida Region**



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# TABLE OF CONTENTS

Introduction ..... 2

Methods ..... 3

    Data Collection and Sample Sizes ..... 2

    Questionnaire ..... 3

    Use of Survey Findings ..... 4

Planning Assumptions for Residents ..... 7

    Organization of Tables ..... 7

    Working Data Tables ..... 7

    Evacuation Rates..... 8

    Out-of-County Trips..... 9

    Type of Refuge ..... 9

    Percent of Available Vehicles .....10

    Evacuation Timing.....10

Planning Assumptions for Vacationers.....14

Appendix A Planning Assumptions .....16

    Appendix A-1 Planning Assumptions for DeSoto County .....18

    Appendix A-2 Planning Assumptions for Hardee County .....21

    Appendix A-3 Planning Assumptions for Highlands County .....24

    Appendix A-4 Planning Assumptions for Okeechobee County.....27

    Appendix A-5 Planning Assumptions for Polk County .....30

    Appendix B Regional Working Data Tables.....33

# Statewide Regional Evacuation Study Behavioral Analysis

## Central Florida Region

### I. Introduction

A study was conducted to provide guidance in selecting behavioral assumptions to be used in evacuation transportation modeling and shelter planning. For residents the process included telephone interviews with residents of the region and analysis of that and other data to derive indications of how the population would respond in the event of certain threats, most notably hurricanes. The SRES survey data was used in conjunction with data from previous evacuation surveys to derive probable behaviors to be used as planning assumptions. For tourists planning assumptions were based on generalizations about tourist behavior in hurricane evacuations derived from previous studies. SRES transportation and shelter analyses might employ behavioral assumptions that differ from those found in this document.

Planning assumptions were developed for five evacuation behaviors:

- **Evacuation rate** – the percentage of people who will leave their home (residents) or accommodation (vacationers) to go someplace safer in response to a hurricane threat
- **Out-of-county trips** – Percent of evacuating households (residents) or parties (vacationers) who will travel to destinations out of their county of residence (residents) or accommodation (vacationers)
- **Type of refuge** – Percent of evacuating households (residents) or parties (vacationers) who will seek refuge in public shelters, the homes of friends and relatives, hotels and motels, and other locations such as churches and workplaces. For vacationers their own residence constituted an additional type of refuge.
- **Percent of available vehicles** – Vehicles that will be used by evacuating households (residents) or parties (vacationers) as a percentage of the total number of vehicles available in the household that could be used
- **Evacuation timing** – Percent of total evacuating households (residents) or parties (vacationers) who will leave their homes (residents) or accommodations (vacationers) at various times, with respect to when an evacuation notice is issued by public officials.

## II. Methods

### A. Data Collection and Sample Sizes

To support the behavioral analysis for residents, telephone interviews were conducted by Kerr & Downs Research with 750 residents of the Central Florida region – 150 in each county. Sample sizes, also broken down according to whether the respondent lived in a site-built home or a mobile home (including manufactured homes), are shown in **Table 1**. The total in **Table 1** excludes respondents whose residence could not be identified as site-built or mobile home.

**Table 1**  
**Sample sizes in Central Florida counties**

	Site-built Homes	Mobile Homes	SB + MH
DeSoto (Non-coastal)	90	57	147
Hardee (Non-coastal)	110	34	144
Highlands (Non-coastal)	109	40	149
Okeechobee (Non-coastal)	82	65	147
Polk (Non-coastal)	114	36	150
<b>TOTAL</b>	506	232	738

Some questions in the survey were asked of only a portion of the sample. For example, only respondents who were living in the region in 2004 were asked about their response in Charley, Frances, and Jeanne. Only those who left their homes to go someplace safer in Charley, Frances, and Jeanne were asked where they went when they left their homes. Therefore, for certain questions, sample sizes were smaller than the figures shown in **Table 1**.

Other surveys with the public have been conducted, at least with respect to hurricane evacuation. At least some of the Central Florida counties were included in earlier surveys conducted following Charley, Frances, and Jeanne, but the 2007 SRES survey included questions about those storms with a larger sample.

### B. Questionnaire

Questions used in the telephone interviews were developed for use statewide as part of the Statewide Regional Evacuation Study. They were supplemented by questions submitted by the Regional Planning Council on behalf of counties in the region. Most questions in the survey dealt with hurricane evacuation:

- Information sources
- Perceived vulnerability
- Evacuation intentions
- Obstacles to evacuation
- Evacuation behavior in past hurricane threats
- Demographics

In addition to the hurricane questions, a portion of respondents in each county were asked questions about evacuation in freshwater flooding, hazardous material accidents, wildfires, and nuclear power plant accidents.

Responses to all questions in the survey are reported in the *Statewide Regional Evacuation Study Program: Central Florida Region Behavioral Survey Report*, prepared by Kerr & Downs Research, including a copy of the questionnaire.

## **C. Use of Survey Findings**

Responses to individual survey questions alone are not usually good indicators of how residents will respond in actual threats. A mix of the following indicators was used in deriving behavioral assumptions to use in planning:

- Intended responses
- Responses in past threats
- Responses in past threats in other locations
- Factors usually correlated with actual response

### **1. Intended Responses**

Some of the survey questions asked respondents what they would do in certain situations – whether they would evacuate, where they would go, and so forth. Answers to those questions constitute intended responses and they provide a very straightforward indicator of behavior. Unfortunately, intended responses often do not match actual responses. That is, people often don't do what they said they would do. In some cases there are statistical adjustments to intended responses that result in much closer matches to actual behavior. For example, in most locations actual use of public shelters is only about half the level indicated by intended response surveys.

### **2. Actual Responses**

A number of survey questions asked interviewees how they responded in past hurricane threats. Central Florida survey participants were asked about their evacuation behavior in Hurricanes Charley, Frances, and Jeanne. Responses in past threats can be good predictors of future response, but only if the past threats are similar to future threats. In at least some of the Central Florida Region threats from Hurricanes Charley, Frances, and Jeanne were not as serious as threats that could be posed by future storms. Therefore, the evacuation participation rates observed in those storms are not good indicators of what it is reasonable to plan for in future threats. For other behaviors such as type of refuge and destination, past responses can be compared for consistency from one evacuation to another and can be used as a comparison with intended responses.

### **3. Past Response in Other Locations**

Although all places are different, responses and patterns observed in one set of locations are often good indicators of what can occur elsewhere, when conditions are similar. This is particularly useful when planning for threats for which there is no reliable response data for similar threats for the region. As part of the SRES, twelve different hurricane threats were asked about in one county or another. In addition, public response has been documented in many other hurricane threats both in and out of Florida, some of which are relevant to planning in the Central Florida region. For example, in the great majority of evacuations fewer than 15% of evacuees leave on their own, prior to an evacuation notice being issued by public officials. Due to the consistency of that finding, it is reasonable to apply it to the Central Florida counties.

### **4. Statistical Predictors**

Data from other hurricane evacuation surveys like those described above have been analyzed statistically to identify factors that have been correlated with evacuation behavior. Certain variables have been found to predict actual response better than others. For example, perceived vulnerability, actual vulnerability (e.g., evacuation zone), housing type, and hearing evacuation orders are all good predictors of whether residents will evacuate. The SRES survey measured perceived vulnerability, evacuation zone, housing type, and expectation of being told to evacuate, and those factors were combined to provide an indication of whether interviewees would evacuate in certain storm threats, from certain locations, and from certain types of housing. Other variables were used to provide an indication of other evacuation behaviors.

### **5. Combining Information**

There is no simple one-rule-fits-all technique for using the above information in deriving behavioral assumptions for planning. The best solution is to employ the best available mix of indicators, relying most heavily on the best information available for each behavior and scenario in question, for a particular county and storm threat. When good, reliable actual response information was available for a certain storm threat scenario, it was relied on more than other types of information. When actual response information was lacking, a combination of intended response, trends from other locations, and application of predictor variables was used.

## **D. Sample Size Considerations**

SRES survey statistics were derived from the sample described previously (section I.A. above). The sample provides an estimate of values for the population of people from which the sample was drawn. For example, a sample of Highlands County residents was interviewed for the purpose of estimating how the larger population of Highlands County residents would respond to the same questions.

The sampling plan used in the SRES survey was designed to provide statistically useful county-level data, given budgetary constraints. However, sample estimates become less reliable statistically when the responses are disaggregated, as they were in the analyses conducted as part of the SRES. When responses are broken down within a county by housing type, population-level differences among zones and between housing types are not always as large as they might appear in the sample. This is because sampling error increases when sample size decreases. Therefore, differences in the sample might not be large enough to support a conclusion that similar differences exist in the population from which the sample was selected, due to sampling error.

Aggregating results across counties helps overcome zonal and housing disaggregation problems. However, county variations – if they exist – are masked when results are aggregated at the regional level. The analysis looked at survey results at both the county and regional levels, relying on county-level data to the extent that sample sizes justified that level of analysis, but relying more on regional data when county-level sample sizes were too small.

This is especially true for actual response data. Many SRES respondents were not living in their current county when past storm threats occurred, so they were not asked about their response in those storms. If a resident was living in the area at the time but didn't evacuate, that person couldn't be asked where he or she went (e.g., public shelter, out-of-county). Therefore, for certain actual response questions, regional statistics were more meaningful than county statistics.

### III. Planning Assumptions for Residents

#### A. Organization of Tables

Planning assumptions for residents are shown in Appendix A. Appearing below each table there is a brief description of the content of the table. At the beginning of the appendices there is an explanation of how to read the tables.

For each county there are seven tables. The tables are:

1. Evacuation rate for site-built homes and mobile or manufactured homes
2. Out-of-county trip rates for site-built homes and mobile or manufactured homes
3. Percent of available vehicles to be used by site-built homes and mobile or manufactured homes
4. Public shelter use rates for site-built homes and mobile or manufactured homes
5. Friend and relative use rates for site-built homes and mobile or manufactured homes
6. Hotel and motel use rates for site-built homes and mobile or manufactured homes
7. Other refuge use rates for site-built homes and mobile or manufactured homes

Within each table planning assumptions are provided for category 1, 2, 3, 4, and 5 hurricanes.

#### B. Working Data Tables

Responses for all survey questions are included in the Survey Data Report prepared by Kerr & Downs Research. In deriving planning assumptions, responses to certain questions are more important than others, and they are used more effectively if organized differently than as they appear in the Survey Data Report. The most salient variables from the survey were put into working data tables for use in supporting the derivation of planning assumptions, and the tabulations appear as Appendix B.

The tabulations include responses to questions about perceived vulnerability, intended response, and actual response in past hurricane threats. The tables are arrayed to facilitate inspection of responses most relevant to derivation of specific planning assumptions (evacuation rate, destinations, refuge, vehicles). If there were too few responses to a question for the data to be statistically useful, cells in tables were left blank (with a hyphen in the cell). The tables in the working data table appendices are not intended to be replacements for the more complete description of the survey data included in the Survey Data Report. Readers should refer to the Survey Data Report for a more thorough understanding of the questions used to generate the background data tables.

The regional aggregation of background data is more reliable statistically due to the larger sample size, particularly for actual response data and when looking at responses separately by zone or housing type. County data was used to differentiate planning assumptions among counties when differences were large enough to warrant differentiation.

### **C. Evacuation Rates**

Evacuation rates refer to the percentage of people who will leave their homes to go someplace safer during a hurricane threat. This is a critical variable for planning because it drives the number of vehicles on the roadways during an evacuation. Responses will vary even for hurricanes of the same intensity, depending on how great the threat appears to be to one's specific location as well as other factors. Evacuation rates on the periphery of warning areas tend to be lower than in areas closest to the projected path of a threatening storm. A strong category 4 hurricane which has maintained its intensity for a day or more prior to landfall will elicit greater response than one which intensifies from a 2 to a 4 just six hours prior to landfall or one which weakens from a 4 to a 2 twelve hours prior to landfall. Both media attention and actions by public officials will vary from one strong category 4 hurricane to another due to similar considerations. A large category 4 storm will receive greater attention from media and officials than a small category 4 storm (e.g., Floyd, "Andrew's Big Brother"). Actions by public officials have a great impact on evacuation rate. People are much more likely to evacuate, especially in strong storms, when they believe they have been ordered to evacuate than when they believe they have received a recommendation to evacuate or haven't been told at all whether they should evacuate. A problem is that many people fail to hear, comprehend, or believe that evacuation orders apply to them. The methods and aggressiveness used to disseminate evacuation notices affect evacuation rates.

The planning assumptions for evacuation rates are the *maximum probable rates*. They assume that a threatening storm of a given category poses its greatest threat to each county. That is,

1. The storm's forecast track is over the county early and throughout at least a full day of the threat.
2. The storm has been at the specified intensity for at least a day of the threat and remains at that intensity until landfall.
3. The storm track passes over the county.

These conditions aren't met very often, and recent threats in the Central Florida region have not generated evacuation rates as high as those in the planning assumptions.

Applying the county planning assumptions to the entire region overstates evacuation rate for the region, because not every county in the region will meet the conditions. However, one doesn't know in advance the county to which they will apply, if any.

The planning assumptions assume that officials issue mandatory evacuation orders for all mobile homes and residents of manufactured housing in hurricanes of all intensities. They also assume that residents of site-built homes are not ordered to evacuate and only residents in poorly constructed homes or homes located in flood-prone areas are advised to evacuate.

The planning assumptions include shadow evacuation – people leaving from site-built homes not recommended or ordered by officials to evacuate. These assumptions can add substantially to the total number of people evacuating and generating shelter demand, but the phenomenon exists, particularly when conditions such as those enumerated above apply (storm is forecast for an extended period to strike the county, maintains its intensity, and makes strikes the county). One reason that shadow evacuation occurs is that many people have misconceptions about their vulnerability (see Appendix B).

#### **D. Out-of-County Trips**

Many evacuees go farther than necessary to reach safety, and the planning assumptions indicate the percentage of evacuees who will go to destinations outside their own county. The Survey Data Report lists the actual destination (i.e., city) where intended evacuees said they would go and where actual evacuees have gone in the past, if they said they would go or went beyond their own neighborhoods. Going out-of-county can increase evacuation clearance times but has occurred in the past and will in the future until officials are more successful at dissuading evacuees from doing so. Very few out-of-county evacuees seek refuge in public shelters. The great majority go to the homes of friends and relatives or to hotels and motels.

#### **E. Type of Refuge**

There are separate tables for the percentage of evacuees who will go to public shelters, the homes of friends and relatives, hotels and motels, and other types of refuge (such as churches, workplaces, and second homes). Survey respondents tend to overstate their likelihood of using public shelters and understate their likelihood of going to the homes of friends and relatives. Actual refuge use is the best indicator, but in the Central Florida region there have been too few evacuees in past hurricane threats included in the survey to provide statistically reliable estimates for future planning. Planning assumptions for the counties reflect a reduced value of the intended public shelter use figures unless actual response values were consistent with the intended behavior. The ability of evacuees to actually go to their intended refuge or to the places they have gone in the past will depend of the availability of those refuges in future threats.

#### **F. Percent of Available Vehicles**

Most evacuating households tend to take only a portion of the vehicles available to them, mainly to avoid separating the family more than necessary. The

planning assumptions indicate the percentage of vehicles available to households that will be used in an evacuation. The Survey Data Report includes the number of vehicles available to evacuating households and the number they would take. The percent-of-available figures are derived from those data. Although planners could use the number of vehicles per household from the SRES survey and reported in the Survey Data Report, census data should provide better statistical estimates of the number of vehicles available to households, to which the percent-of-available multipliers can be applied. The SRES survey asked only about intended vehicle use, but a large number of post-storm surveys have asked about actual vehicle use, and the intended use figures tend to match the actual use figures well.

## **G. Evacuation Timing**

Not all evacuees leave at the same time. Some leave before public officials issue evacuation notices, some leave very soon following issuance of evacuation notices, and some wait until shortly before they expect the threatening storm to arrive.

### **1. Evidence from Past Evacuations**

Many surveys documenting response following hurricane evacuations have asked evacuees to indicate the time and date when they departed their homes. The responses have been graphed to depict cumulative evacuation curves. The curves show how the evacuation (on the y-axis) grew over time (on the x-axis), typically with a few people leaving early and then increasing to the point at which 100% of the evacuees had eventually departed. The curves indicate when vehicles enter the evacuation network as evacuating vehicles, not when they reached their destinations or when they made other trips in the network prior to evacuating.

In general a graph of when evacuees depart often looks like the letter "S." In some evacuations the "S" is compressed laterally (i.e., over time) to appear thin and upright. Those curves occur when all departures occur in a relatively short period of time. They usually happen when evacuation notices were not issued early enough due to an unexpected change in a storm's track, forward speed, or intensity. By the time evacuation notices are issued, little time remains before anticipated landfall, so evacuees leave with a sense of urgency corresponding to the threat. This would be referred to as a relatively "fast" or "quick" response.

In other evacuations the "S" is stretched laterally and covers more of the length of the line on which it appears, with departures being distributed over a longer length of time. It looks "flatter." In those cases evacuation notices were issued well in advance of anticipated landfall of the storm, and residents were aware that they had the luxury of waiting longer before departing if they choose to do so. Some evacuees do wait longer

before leaving, but not all do. Departures are distributed over a longer period of time than in the first example. This might be referred to as a "slow" response.

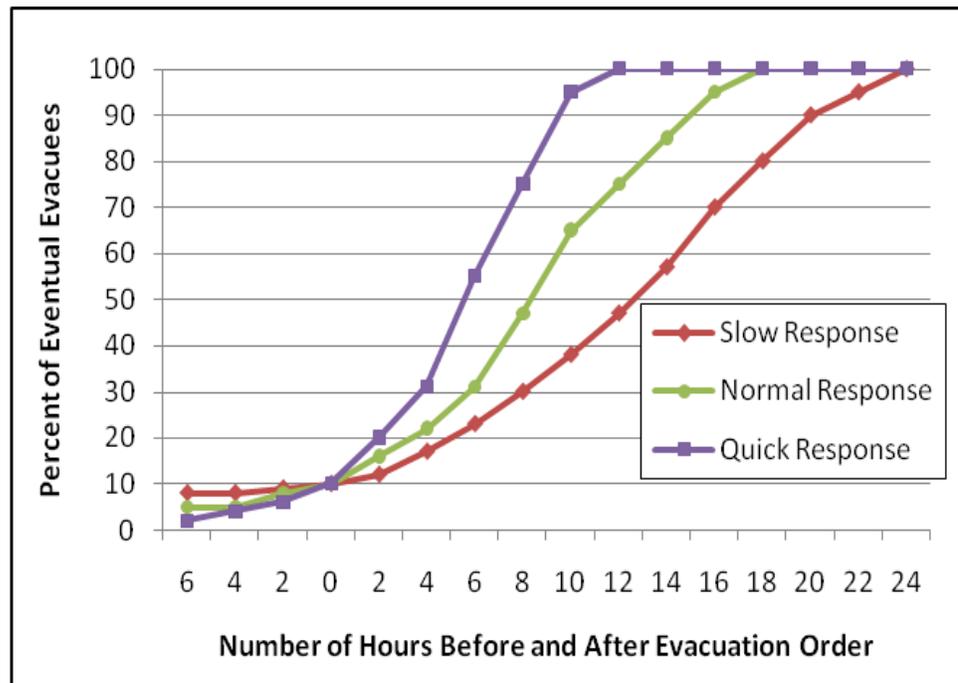
There are also evacuation timing curves that fall between those two, resulting in an "S" that is less compressed than the first, but less stretched than the second. This sort of evacuation results when evacuation notices are issued earlier than in the first example, but not as early as in the second case.

In all three scenarios evacuees collectively take as much time as they believe is available to them. Perceptions about the urgency of the evacuation account for variations in whether the evacuation is "quick," "slow," or in between ("normal").

**2. Curves for Planning**

The three evacuation timing scenarios described above are depicted graphically in **Figure 1**, reflecting the three versions of the letter "S." The slowest of the three curves assumes that evacuation notices were issued at least 24 hours before landfall. The fastest of the three assumes that evacuation notices were issued just 12 hours prior to anticipated onset of hurricane conditions.

**Figure 1**  
**Evacuation timing curves for planning**



### **3. Variations in the Curves**

The haste in which evacuees depart is mainly a function of the perceived urgency of leaving sooner rather than later. Variations from storm to storm are usually a function of forecasts. If a forecast changes to indicate that landfall will occur sooner than previously anticipated, more people will start leaving. If intensity of a storm increases, indicating that additional areas of a community need to evacuate, departures from those areas will increase. These changes influence public response primarily through evacuation notices and instructions provided by local officials. Officials can significantly affect the distribution of departures by when they issue evacuation notices and how they word the notices and related announcements.

In each threat scenario occupants of less vulnerable areas (e.g., inland) will tend to wait longer to evacuate than those living in more hazardous locations (e.g., beaches). Variation in the curves is a function of variation in the perceived urgency of evacuating promptly, not demographics. In that respect residents of non-coastal counties will tend to evacuate somewhat more slowly overall than those in coastal counties.

People prefer not to evacuate at night but will do so if necessary. Examples are Eloise, Elena, and Opal. Relatively few people leave prior to the issuance of evacuation notices by officials. People are willing to leave before watches and warnings are posted by the National Hurricane Center if asked to do so by local officials.

### **4. Examples of Actual Response Curves**

Respondents to the SRES survey were not asked when they departed in past evacuations because too much time had passed between the evacuations and the interviews to trust the accuracy of recollections. The questions would also have made the interviews unacceptably lengthy. There are ample actual response curves that have been documented in other surveys.

#### **Two-day Evacuations**

If officials issue evacuation notices more than 24 hours prior to anticipated landfall, evacuation departures will be distributed over a period longer than 24 hours. Some evacuees will leave shortly after the evacuation notice during daylight hours, then departures will essentially stop on the evening of the first day, and then resume on the morning of the second day.

Most of the recent evacuations in Florida and elsewhere have taken place over a period of more than 24 hours. This has been the result of evacuation notices having been issued more than 24 hours prior to arrival

of the storms. Curves were constructed for 11 different coastal regions in Floyd, for example, including four regions in Florida, and all 11 curves were distributed over more than a 24-hour period. All four of the 2004 major hurricanes in Florida (Charley, Frances, Ivan, and Jeanne) had evacuations that covered more than 24 hours, including in non-coastal counties. Evacuation departures in Katrina in Mississippi and Louisiana and in Rita in Texas in 2005 generated occurred over a period of two days or more. The same was true of Bertha and Fran in South Carolina in 1996, Georges in Florida in 1998, Lili in Texas and Louisiana in 2002, and Isabel in Virginia and Maryland in 2003.

### **One-day Evacuations**

The prevalence of two-evacuations stems from good forecasts and a precautionary approach by public safety officials, particularly in stronger storms. If the National Hurricane Center goes forward with plans to extend the lead times for Hurricane Watches and Warnings by 12 hours, early issuance of evacuation notices will probably continue.

However, good early forecasts won't always be the case, or for other reasons evacuations notices won't be issued early enough to afford the luxury of having two days in which to evacuate. In those instances evacuations in certain areas will need to be rushed to completion following issuance of evacuation notices, and the duration of evacuations will be less than two days. If the goal of clearance time calculations is to estimate the minimum amount of time necessary to complete an evacuation safely, response curves of shorter duration than two days should be assumed.

The quickest of the one-day curves assumes that all evacuees depart within 12 hours of an evacuation notice being issued, with just 10% having left prior to the evacuation notice. Examples of approximately 12-hour response curves are Broward and Miami-Dade Counties in Andrew in 1992, Pinellas County in Elena in 1985, and Escambia County in Frederic in 1979. Storms in which evacuation departures were distributed over a 12 to 18 hour period include David in Miami-Dade in 1979 and Opal in northwest Florida in 1995. Eloise in northwest Florida in 1975 is a rare example of evacuation departures occurring over a period of just six hours, but in some locations as little as 45% of the public evacuated.

## **IV. Planning Assumptions for Vacationers**

Compared to residents, there is relatively little data documenting how vacationers respond to hurricane threats, and no SRES survey was conducted with vacationers to ascertain their intentions. Recommendations for behavioral assumptions for tourists are derived from intended-response survey findings with visitors to other locations and from existing data on how vacationers have responded in other locations, including the Carolinas.

### **A. Evacuation Rates**

There is no evidence that vacationers are reluctant to evacuate when a hurricane interrupts their visit to a coastal community. Based on observations of vacationer behavior in other locations and surveys in other locations concerning intended responses, it is reasonable to assume that 90% to 95% of vacationers will evacuate their accommodations *if evacuation orders are issued*.

### **B. Type of Refuge**

Officials sometimes report a large number of vacationers in public shelters, but they represent a very small percentage of the total visitor population. Fewer than 5% of the evacuating vacationers will go to public shelters. Between 25% and 50% will seek inland hotels and motels. The remainder will return home or stay with friends and relatives in Florida, although the number returning home will depend on the distances traveled by tourists from home. Those most likely to return home live within a one-day drive of where they vacation.

### **C. Destinations**

Up to 5% of tourist evacuees will stay within the county where their vacation accommodations were located or go to a nearby county to use a public shelter. At least half will go elsewhere in Florida to continue their vacation or wait out the storm. Up to half will return home, if they live within a one-day drive.

### **D. Vehicle Use**

The great majority of tourists have a vehicle available to them when on vacation, often their own. Virtually all of the vehicles will be used in evacuating, either to other tourist destinations, home, or airports.

### **E. Evacuation Timing**

Tourists leave at least as early as residents. The same curves used for residents should be used for tourists, unless officials order vacationers to evacuate earlier.

**Appendix A**  
**Planning Assumptions**

## **Reading the Planning Assumption Tables**

### **Columns**

Columns in tables represent threats posed by category 1, 2, 3, 4, and 5 hurricanes.

### **Rows**

Rows in tables represent type of housing – site built or mobile homes (including manufactured homes).

### **Cells**

Cells in tables represent the evacuation behavior of residents living in each type of housing when faced with each of the five hurricane threats, e.g., response in a category 3 hurricane by residents living in mobile homes.

**Appendix A-1**  
**Planning Assumptions for Desoto County**

**Table 1**  
**DeSoto County evacuation rates for residents living in site-built homes and mobile or manufactured homes**

DeSoto Evacuation Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	5	10	15	20	25
Mobile and Manufactured Homes	40	60	70	80	90

*Evacuation rate indicates the percent of residents who will leave their homes to go someplace safer in each storm threat scenario. Figures assume that evacuation will be recommended for mobile and manufactured homes. Figures also assume that the actual storm track passes very close to the area being evacuated.*

**Table 2**  
**DeSoto County out-of-county trip rates for residents living in site-built homes and mobile or manufactured homes**

DeSoto Out-of-County Trip Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	40	40	40	45	45
Mobile and Manufactured Homes	25	25	25	25	30

*Out-of-county trip rate indicates the percent of evacuees who will seek refuge outside their own county of residence.*

**Table 3**  
**DeSoto County vehicle use rates for residents living in site-built homes and mobile or manufactured homes**

DeSoto Vehicle Use Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	70	70	70	75	75
Mobile and Manufactured Homes	80	80	80	90	90

*Vehicle use rate indicates of percentage of vehicles available to the evacuating household that will be used in evacuation in each storm threat scenario.*

**Table 4**  
**DeSoto County public shelter use rates for residents living in site-built homes and mobile or manufactured homes**

DeSoto Public Shelter Use Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	20	20	20	20	20
Mobile and Manufactured Homes	30	30	30	30	30

*Public shelter use rate indicates the percent of evacuees who will seek refuge in public shelters, in each storm threat scenario.*

**Table 5**  
**DeSoto County friend/relative refuge use rates for residents living in site-built homes and mobile or manufactured homes**

DeSoto Friend/Family Use Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	60	60	60	60	60
Mobile and Manufactured Homes	50	50	50	50	50

*Friend/relative use rate indicates the percent of evacuees who will seek refuge at the homes of friends and relatives, in each storm threat scenario.*

**Table 6**  
**DeSoto County hotel/motel refuge use rates for residents living in site-built homes and mobile or manufactured homes**

DeSoto Hotel/Motel Use Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	5	5	5	5	5
Mobile and Manufactured Homes	10	10	10	10	10

*Hotel/motel use rate indicates the percent of evacuees who will seek refuge in hotels and motels, in each storm threat scenario.*

**Table 7**  
**DeSoto County other refuge use rates for residents living in site-built homes and mobile or manufactured homes**

DeSoto Other Refuge Use Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	15	15	15	15	15
Mobile and Manufactured Homes	10	10	10	10	10

*Other refuge rate indicates the percent of evacuees from each zone who will seek refuge in locations such as churches, second homes, and workplaces, in each storm threat scenario.*

**Appendix A-2**

**Planning Assumptions for Hardee County**

**Table 1**  
**Hardee County evacuation rates for residents living in site-built homes and mobile or manufactured homes**

Hardee Evacuation Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	10	10	15	20	25
Mobile and Manufactured Homes	40	60	70	80	90

*Evacuation rate indicates the percent of residents who will leave their homes to go someplace safer in each storm threat scenario. Figures assume that evacuation will be recommended for mobile and manufactured homes. Figures also assume that the actual storm track passes very close to the area being evacuated.*

**Table 2**  
**Hardee County out-of-county trip rates for residents living in site-built homes and mobile or manufactured homes**

Hardee Out-of-County Trip Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	35	35	35	40	40
Mobile and Manufactured Homes	30	30	30	30	30

*Out-of-county trip rate indicates the percent of evacuees who will seek refuge outside their own county of residence.*

**Table 3**  
**Hardee County vehicle use rates for residents living in site-built homes and mobile or manufactured homes**

Hardee Vehicle Use Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	70	70	70	75	75
Mobile and Manufactured Homes	75	75	75	75	80

*Vehicle use rate indicates of percentage of vehicles available to the evacuating household that will be used in evacuation in each storm threat scenario.*

**Table 4**  
**Hardee County public shelter use rates for residents living in site-built homes and mobile or manufactured homes**

Hardee Public Shelter Use Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	25	25	25	25	25
Mobile and Manufactured Homes	30	30	30	30	30

*Public shelter use rate indicates the percent of evacuees who will seek refuge in public shelters, in each storm threat scenario.*

**Table 5**  
**Hardee County friend/relative refuge use rates for residents living in site-built homes and mobile or manufactured homes**

<b>Hardee Public Friend/Family Use Rates</b>	<b>Storm Threat Scenario</b>				
	<b>Cat 1</b>	<b>Cat 2</b>	<b>Cat 3</b>	<b>Cat 4</b>	<b>Cat 5</b>
Site Built Homes	60	60	60	60	60
Mobile and Manufactured Homes	50	50	50	50	50

*Friend/relative use rate indicates the percent of evacuees who will seek refuge at the homes of friends and relatives, in each storm threat scenario.*

**Table 6**  
**Hardee County hotel/motel refuge use rates for residents living in site-built homes and mobile or manufactured homes**

<b>Hardee Hotel/Motel Use Rates</b>	<b>Storm Threat Scenario</b>				
	<b>Cat 1</b>	<b>Cat 2</b>	<b>Cat 3</b>	<b>Cat 4</b>	<b>Cat 5</b>
Site Built Homes	5	5	5	5	5
Mobile and Manufactured Homes	10	10	10	10	10

*Hotel/motel use rate indicates the percent of evacuees who will seek refuge in hotels and motels, in each storm threat scenario.*

**Table 7**  
**Hardee County other refuge use rates for residents living in site-built homes and mobile or manufactured homes**

<b>Hardee Other Use Rates</b>	<b>Storm Threat Scenario</b>				
	<b>Cat 1</b>	<b>Cat 2</b>	<b>Cat 3</b>	<b>Cat 4</b>	<b>Cat 5</b>
Site Built Homes	10	10	10	10	10
Mobile and Manufactured Homes	10	10	10	10	10

*Other refuge rate indicates the percent of evacuees from each zone who will seek refuge in locations such as churches, second homes, and workplaces, in each storm threat scenario.*

**Appendix A-3**

**Planning Assumptions for Highlands County**

**Table 1**  
**Highlands County evacuation rates for residents living in site-built homes and mobile or manufactured homes**

Highlands Evacuation Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	5	5	10	20	25
Mobile and Manufactured Homes	40	60	70	80	90

*Evacuation rate indicates the percent of residents who will leave their homes to go someplace safer in each storm threat scenario. Figures assume that evacuation will be recommended for mobile and manufactured homes. Figures also assume that the actual storm track passes very close to the area being evacuated.*

**Table 2**  
**Highlands County out-of-county trip rates for residents living in site-built homes and mobile or manufactured homes**

Highlands Out-of-County Trip Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	40	40	40	50	50
Mobile and Manufactured Homes	15	15	15	20	20

*Out-of-county trip rate indicates the percent of evacuees who will seek refuge outside their own county of residence.*

**Table 3**  
**Highlands County vehicle use rates for residents living in site-built homes and mobile or manufactured homes**

Highlands Vehicle Use Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	70	70	70	75	75
Mobile and Manufactured Homes	80	80	80	90	90

*Vehicle use rate indicates of percentage of vehicles available to the evacuating household that will be used in evacuation in each storm threat scenario.*

**Table 4**  
**Highlands County public shelter use rates for residents living in site-built homes and mobile or manufactured homes**

Highlands Public Shelter Use Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	20	20	20	20	20
Mobile and Manufactured Homes	40	40	40	40	40

*Public shelter use rate indicates the percent of evacuees who will seek refuge in public shelters, in each storm threat scenario.*

**Table 5**  
**Highlands County friend/relative refuge use rates for residents living in site-built homes and mobile or manufactured homes**

Highlands Friend/Relative Use Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	55	55	55	55	55
Mobile and Manufactured Homes	50	50	50	50	50

*Friend/relative use rate indicates the percent of evacuees who will seek refuge at the homes of friends and relatives, in each storm threat scenario.*

**Table 6**  
**Highlands County hotel/motel refuge use rates for residents living in site-built homes and mobile or manufactured homes**

Highlands Hotel/Motel Use Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	10	10	10	10	10
Mobile and Manufactured Homes	10	10	10	10	10

*Hotel/motel use rate indicates the percent of evacuees who will seek refuge in hotels and motels, in each storm threat scenario.*

**Table 7**  
**Highlands County other refuge use rates for residents living in site-built homes and mobile or manufactured homes**

Highlands Other Refuge Use Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	15	15	15	15	15
Mobile and Manufactured Homes	10	10	10	10	10

*Other refuge rate indicates the percent of evacuees from each zone who will seek refuge in locations such as churches, second homes, and workplaces, in each storm threat scenario.*

**Appendix A-4**

**Planning Assumptions for Okeechobee County**

**Table 1**  
**Okeechobee County evacuation rates for residents living in site-built homes and mobile or manufactured homes**

Okeechobee Evacuation Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	10	15	20	25	30
Mobile and Manufactured Homes	45	65	75	85	90

*Evacuation rate indicates the percent of residents who will leave their homes to go someplace safer in each storm threat scenario. Figures assume that evacuation will be recommended for mobile and manufactured homes. Figures also assume that the actual storm track passes very close to the area being evacuated.*

**Table 2**  
**Okeechobee County out-of-county trip rates for residents living in site-built homes and mobile or manufactured homes**

Okeechobee Out-of-County Trip Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	40	40	40	40	40
Mobile and Manufactured Homes	20	25	30	30	35

*Out-of-county trip rate indicates the percent of evacuees who will seek refuge outside their own county of residence.*

**Table 3**  
**Okeechobee County vehicle use rates for residents living in site-built homes and mobile or manufactured homes**

Okeechobee Vehicle Use Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	70	70	70	70	75
Mobile and Manufactured Homes	80	80	80	85	85

*Vehicle use rate indicates of percentage of vehicles available to the evacuating household that will be used in evacuation in each storm threat scenario.*

**Table 4**  
**Okeechobee County public shelter use rates for residents living in site-built homes and mobile or manufactured homes**

Okeechobee Public Shelter Use Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	25	25	25	25	25
Mobile and Manufactured Homes	20	20	20	20	20

*Public shelter use rate indicates the percent of evacuees who will seek refuge in public shelters, in each storm threat scenario.*

**Table 5**  
**Okeechobee County friend/relative refuge use rates for residents living in site-built homes and mobile or manufactured homes**

Okeechobee Friend/Relative Use Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	60	60	60	60	60
Mobile and Manufactured Homes	55	55	55	55	55

*Friend/relative use rate indicates the percent of evacuees who will seek refuge at the homes of friends and relatives, in each storm threat scenario.*

**Table 6**  
**Okeechobee County hotel/motel refuge use rates for residents living in site-built homes and mobile or manufactured homes**

Okeechobee Hotel/Motel Use Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	5	5	5	5	5
Mobile and Manufactured Homes	10	10	10	10	10

*Hotel/motel use rate indicates the percent of evacuees who will seek refuge in hotels and motels, in each storm threat scenario.*

**Table 7**  
**Okeechobee County other refuge use rates for residents living in site-built homes and mobile or manufactured homes**

Okeechobee Other Refuge Use Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	10	10	10	10	10
Mobile and Manufactured Homes	15	15	15	15	15

*Other refuge rate indicates the percent of evacuees from each zone who will seek refuge in locations such as churches, second homes, and workplaces, in each storm threat scenario.*

**Appendix A-5**  
**Planning Assumptions for Polk County**

**Table 1**  
**Polk County evacuation rates for residents living in site-built homes and mobile or manufactured homes**

Polk Evacuation Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	5	10	15	20	25
Mobile and Manufactured Homes	40	60	70	80	90

*Evacuation rate indicates the percent of residents who will leave their homes to go someplace safer in each storm threat scenario. Figures assume that evacuation will be recommended for mobile and manufactured homes. Figures also assume that the actual storm track passes very close to the area being evacuated.*

**Table 2**  
**Polk County out-of-county trip rates for residents living in site-built homes and mobile or manufactured homes**

Polk Out-of-County Trip Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	40	40	40	40	40
Mobile and Manufactured Homes	30	30	30	30	35

*Out-of-county trip rate indicates the percent of evacuees who will seek refuge outside their own county of residence.*

**Table 3**  
**Polk County vehicle use rates for residents living in site-built homes and mobile or manufactured homes**

Polk Vehicle Use Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	65	65	65	65	70
Mobile and Manufactured Homes	80	80	80	90	90

*Vehicle use rate indicates of percentage of vehicles available to the evacuating household that will be used in evacuation in each storm threat scenario.*

**Table 4**  
**Polk County public shelter use rates for residents living in site-built homes and mobile or manufactured homes**

Polk Public Shelter Use Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	15	15	15	15	15
Mobile and Manufactured Homes	20	20	20	20	20

*Public shelter use rate indicates the percent of evacuees who will seek refuge in public shelters, in each storm threat scenario.*

**Table 5**  
**Polk County friend/relative refuge use rates for residents living in site-built homes and mobile or manufactured homes**

Polk Friend/Relative Use Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	60	60	60	60	60
Mobile and Manufactured Homes	55	55	55	55	55

*Friend/relative use rate indicates the percent of evacuees who will seek refuge at the homes of friends and relatives, in each storm threat scenario.*

**Table 6**  
**Polk County hotel/motel refuge use rates for residents living in site-built homes and mobile or manufactured homes**

Polk Hotel/Motel Use Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	10	10	10	10	10
Mobile and Manufactured Homes	10	10	10	10	10

*Hotel/motel use rate indicates the percent of evacuees who will seek refuge in hotels and motels, in each storm threat scenario.*

**Table 7**  
**Polk County other refuge use rates for residents living in site-built homes and mobile or manufactured homes**

Polk Other Refuge Use Rates	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Site Built Homes	15	15	15	15	15
Mobile and Manufactured Homes	15	15	15	15	15

*Other refuge rate indicates the percent of evacuees from each zone who will seek refuge in locations such as churches, second homes, and workplaces, in each storm threat scenario.*

**Appendix B  
Central Florida  
Working Data Tables**

### Role of the Working Data Tables

Working data tables display data from the SRES Survey Data Report in a condensed, abbreviated format. **They are not intended to replace the Survey Data Report, which contains more complete descriptions of question wording and sample size information, and should not be used without being familiar with the information in the Survey Data Report.** The working data tables were prepared to facilitate in the use of the SRES survey data in deriving behavioral assumptions for planning. This was accomplished by organizing the survey data most relevant to particular behaviors together and placing as much of it as feasible on the same page to permit at-a-glance perusal of the most relevant information. As a consequence, variable names have been shortened to compress the space needed to display all of the pertinent data, and certain conventions have been applied to serve as reminders about caveats applicable in some instances.

One such caveat involves sample size constraints. If the number of respondents to a question was lower than 10, a dash appears in the respective cell, indicating that the sample size was too small to make useful inferences. If the number of observations was between 10 and 20, the sample size is shown in parentheses (e.g., n=12). In Tables 1, 2, 3, 5, 6, and 7 the variable "Would Evac in Cat 4-5" has an asterisk and data entries are italicized to indicate that the sample size for that variable is smaller than for others in the same table. The SRES Survey Data Report contains information about actual numbers of responses.

Tables 1, 2, 3, and 4 as applied to site-built homes, Tables 5, 6, 7, and 8 as applied to mobile homes, and Table 9 contain information relevant to whether respondents will evacuate (i.e., leave their homes to go someplace safer). Tables 10, 11, and 12 summarize data used in projecting the type of refuge evacuees will employ. Tables 13, 14, and 15 pertain to whether evacuees will leave their own county. Table 16 is relevant for predicting the percentage of available vehicles that will be used by evacuating households.

## Central Florida Region

**Working Data Table 1**  
**Perceived Vulnerability, Expectation of Receiving an Evacuation Notice from Officials, and Evacuation Intentions in a 100 MPH Category 2 Hurricane**

<b>Site Built Homes</b>	<b>DeSoto</b>	<b>Hardee</b>	<b>Highlands</b>	<b>Okeechobee</b>	<b>Polk</b>
Flood in Cat 2	13	8	5	21	7
Unsafe in Cat 2	12	16	11	16	10
Expect Evac Notice in Cat 2	44	33	28	33	23
Would Evac in Cat 2*	<i>33</i>	<i>32</i>	<i>27</i>	<i>33</i>	<i>29</i>
Would Comply in Cat 2	51	51	65	63	59

**Working Data Table 2**  
**Perceived Vulnerability, Expectation of Receiving an Evacuation Notice from Officials, and Evacuation Intentions in a 125 MPH Category 3 Hurricane**

<b>Site Built Homes</b>	<b>DeSoto</b>	<b>Hardee</b>	<b>Highlands</b>	<b>Okeechobee</b>	<b>Polk</b>
Flood in Cat 3	11	12	14	29	11
Unsafe in Cat 3	20	25	25	27	33
Expect Evac Notice in Cat 3	57	41	51	52	51
Would Evac in Cat 3*	<i>38</i>	<i>46</i>	<i>54</i>	<i>50</i>	<i>43</i>
Would Comply in Cat 3	62	68	73	62	75

**Working Data Table 3**  
**Perceived Vulnerability, Expectation of Receiving an Evacuation Notice from Officials, and Evacuation Intentions in a 155 MPH Category 4 (nearly 5) Hurricane**

<b>Site Built Homes</b>	<b>DeSoto</b>	<b>Hardee</b>	<b>Highlands</b>	<b>Okeechobee</b>	<b>Polk</b>
Flood in Cat 4-5	21	16	24	43	18
Unsafe in Cat 4-5	47	43	50	48	53
Expect Evac Notice in Cat 4-5	72	83	69	85	73
Would Evac in Cat 4-5*	<i>57</i>	<i>73</i>	<i>62</i>	<i>72</i>	<i>71</i>
Would Comply in Cat 4-5	74	84	79	83	89

## Central Florida Region

**Working Data Table 4**  
**Evacuation in Charley, Frances, and Jeanne and Type of Evacuation Notice Heard, if any**

<b>Site Built Homes</b>	<b>DeSoto</b>	<b>Hardee</b>	<b>Highlands</b>	<b>Okeechobee</b>	<b>Polk</b>
Evacuated in Charley	<b>9</b>	<b>15</b>	<b>7</b>	<b>12</b>	<b>5</b>
Heard Must	0	5	2	1	1
Heard Should	24	14	9	9	7
Heard Neither	76	81	88	90	92
Evacuated in Frances	<b>6</b>	<b>12</b>	<b>13</b>	<b>9</b>	<b>6</b>
Heard Must	2	4	5	4	1
Heard Should	12	8	8	7	5
Heard Neither	87	88	87	89	94
Evacuated in Jeanne	<b>3</b>	<b>8</b>	<b>7</b>	<b>10</b>	<b>7</b>
Heard Must	0	1	1	1	0
Heard Should	12	11	12	15	7
Heard Neither	88	88	87	84	93

**Working Data Table 5**  
**Perceived Vulnerability, Expectation of Receiving an Evacuation Notice from Officials, and Evacuation Intentions in a 100 MPH Category 2 Hurricane**

<b>Mobile Homes</b>	<b>DeSoto</b>	<b>Hardee</b>	<b>Highlands</b>	<b>Okeechobee</b>	<b>Polk</b>
Flood in Cat 2	23	21	10	28	3
Unsafe in Cat 2	60	59	60	46	47
Expect Evac Notice in Cat 2	65	47	55	74	61
Would Evac in Cat 2*	<i>89</i>	<i>100</i>	<i>75</i>	<i>60</i>	<i>67</i>
Would Comply in Cat 2	86	82	75	85	86

**Working Data Table 6**  
**Perceived Vulnerability, Expectation of Receiving an Evacuation Notice from Officials, and Evacuation Intentions in a 125 MPH Category 3 Hurricane**

<b>Mobile Homes</b>	<b>DeSoto</b>	<b>Hardee</b>	<b>Highlands</b>	<b>Okeechobee</b>	<b>Polk</b>
Flood in Cat 3	21	29	15	46	14
Unsafe in Cat 3	70	74	70	59	58
Expect Evac Notice in Cat 3	93	77	78	80	75
Would Evac in Cat 3*	<i>89</i>	<i>100</i>	<i>75</i>	<i>90</i>	<i>89</i>
Would Comply in Cat 3	95	88	88	89	86

## Central Florida Region

### Working Data Table 7

#### Perceived Vulnerability, Expectation of Receiving an Evacuation Notice from Officials, and Evacuation Intentions in a 155 MPH Category 4 (nearly 5) Hurricane

<b>Mobile Homes</b>	<b>DeSoto</b>	<b>Hardee</b>	<b>Highlands</b>	<b>Okeechobee</b>	<b>Polk</b>
Flood in Cat 4-5	28	35	33	51	14
Unsafe in Cat 4-5	86	94	80	66	86
Expect Evac Notice in Cat 4-5	97	97	93	92	92
Would Evac in Cat 4-5*	<i>78</i>	<i>100</i>	<i>100</i>	<i>90</i>	<i>78</i>
Would Comply in Cat 4-5	97	97	93	94	94

### Working Data Table 8

#### Evacuation in Charley, Frances, and Jeanne and Type of Evacuation Notice Heard, if any

<b>Mobile Homes</b>	<b>DeSoto</b>	<b>Hardee</b>	<b>Highlands</b>	<b>Okeechobee</b>	<b>Polk</b>
<b>Evacuated in Charley</b>	<b>68</b>	<b>65</b>	<b>56</b>	<b>44</b>	<b>52</b>
Heard Must	37	30	32	10	4
Heard Should	27	35	16	29	44
Heard Neither	37	35	52	61	52
<b>Evacuated in Frances</b>	<b>41</b>	<b>24</b>	<b>70</b>	<b>64</b>	<b>38</b>
Heard Must	7	5	22	13	10
Heard Should	28	24	30	34	38
Heard Neither	66	71	48	53	52
<b>Evacuated in Jeanne</b>	<b>20</b>	<b>39</b>	<b>59</b>	<b>54</b>	<b>52</b>
Heard Must	0	6	32	13	14
Heard Should	17	28	27	39	33
Heard Neither	83	67	41	48	52

## Central Florida Region

**Working Data Table 9**  
**Evacuation in Charley, Frances, and Jeanne, Depending on Type of Evacuation Notice Heard**

	<b>Site Built Homes</b>	<b>Mobile Homes</b>
<b>Evacuated in Charley IF</b>		
Heard Must	33	88
Heard Should	17	68
Heard Neither	8	35
<b>Evacuated in Frances IF</b>		
Heard Must	46	81
Heard Should	22	71
Heard Neither	7	33
<b>Evacuated in Jeanne IF</b>		
Heard Must	67	88
Heard Should	13	59
Heard Neither	6	29

**Working Data Table 10**  
**Intended Use of Public Shelters, Having Friends with Whom Respondent Intending to Go to Public Shelter Could Stay, and Actual Public Shelter Use in Charley, Frances, and Jeanne**

<b>Site Built Homes</b>	<b>DeSoto</b>	<b>Hardee</b>	<b>Highlands</b>	<b>Okeechobee</b>	<b>Polk</b>
Public Shelter in Cat 2	22	34	26	32	15
Public Shelter in Cat 3	24	30	27	33	15
Public Shelter in Cat 4-5	24	30	25	29	17
Could Stay w/ Friend/Rel	81	60	64	65	53
Public Shelter in Charley	<i>14 (n=7)</i>	<i>29 (n=14)</i>	<i>17 (n=6)</i>	<i>25 (n=8)</i>	<i>0 (n=5)</i>
Public Shelter in Frances	<i>0 (n=4)</i>	<i>27 (n=11)</i>	<i>10 (n=10)</i>	<i>17 (n=6)</i>	<i>33 (n=6)</i>
Public Shelter in Jeanne	<i>0 (n=2)</i>	<i>43 (n=7)</i>	<i>0 (n=6)</i>	<i>14 (n=7)</i>	<i>17 (n=6)</i>

## Central Florida Region

**Working Data Table 11**  
**Type of Refuge Used in Charley, Frances, and Jeanne for the Region**

	Site Built Homes	Mobile Homes
Public Shelters		
Charley	20 (n=40)	34 (n=82)
Frances	23 (n=37)	24 (n=70)
Jeanne	18 (n=28)	26 (n=61)
Friends/Relatives		
Charley	73	43
Frances	59	50
Jeanne	71	46
Hotels/Motels		
Charley	3	9
Frances	5	13
Jeanne	0	11
Friends/Relatives		
Charley	5	15
Frances	16	13
Jeanne	11	16

**Working Data Table 12**  
**Intended Use of Public Shelter, Having Friends with Whom Respondent Intending to Go to Public Shelter Could Stay, and Actual Public Shelter Use in Charley, Frances, and Jeanne**

Mobile Homes	DeSoto	Hardee	Highlands	Okeechobee	Polk
Public Shelter in Cat 2	35	36	44	17	19
Public Shelter in Cat 3	35	35	46	18	16
Public Shelter in Cat 4-5	34	37	44	20	24
Could Stay w/Friend/Rel	50	60	47	30	25
Public Shelter in Charley	<i>35 (n=20)</i>	<i>33 (n=15)</i>	<i>50 (n=14)</i>	<i>24 (n=21)</i>	<i>33 (n=12)</i>
Public Shelter in Frances	<i>17 (n=12)</i>	<i>0 (n=5)</i>	<i>44 (n=16)</i>	<i>21 (n=29)</i>	<i>25 (n=8)</i>
Public Shelter in Jeanne	<i>0 (n=6)</i>	<i>29 (n=7)</i>	<i>46 (n=13)</i>	<i>17 (n=24)</i>	<i>36 (n=11)</i>

## Central Florida Region

Working Data Table 13

**Intention to Evacuate to Out-of-County Destination, Percent of Evacuees in Charley, Frances, and Jeanne Evacuating Out-of-County**

Site Built Homes	DeSoto	Hardee	Highlands	Okeechobee	Polk
Out of County in Cat 2	53	38	58	54	55
Out of County in Cat 3	59	42	57	53	54
Out of County in Cat 4-5	60	47	63	59	57
Out of County in Charley	14 (n=7)	7 (n=14)	67 (n=6)	38 (n=8)	20 (n=5)
Out of County in Frances	25 (n=4)	36 (n=11)	50 (n=10)	33 (n=6)	50 (n=6)
Out of County in Jeanne	50 (n=2)	14 (n=7)	83 (n=6)	43 (n=7)	50 (n=6)

Working Data Table 14

**Percent of Evacuees in Charley, Frances, and Jeanne Evacuating Out-of-County, for the Region**

Region Total	Site Built Homes	Mobile Homes
Out of County		
Charley	25 (n=40)	17 (n=82)
Frances	41 (n=37)	26 (n=70)
Jeanne	46 (n=28)	20 (n=61)

Working Data Table 15

**Intention to Evacuate to Out-of-County Destination, Percent of Evacuees in Charley, Frances, and Jeanne Evacuating Out-of-County**

Mobile Homes	DeSoto	Hardee	Highlands	Okeechobee	Polk
Out of County In Cat 2	27	38	16	27	40
Out of County in Cat 3	27	36	16	34	37
Out of County in Cat 4-5	34	38	18	42	39
Out of County in Charley	20 (n=20)	20 (n=15)	0 (n=14)	19 (n=21)	25 (n=12)
Out of County in Frances	25 (n=12)	40 (n=5)	13 (n=16)	28 (n=29)	38 (n=8)
Out of County in Jeanne	17 (n=6)	29 (n=7)	8 (n=13)	29 (n=24)	9 (n=11)

Working Data Table 16

**Percent of Vehicles Available to Household Evacuees Intend to Use in Evacuation**

Vehicle Use	DeSoto	Hardee	Highlands	Okeechobee	Polk
Site Built Homes	74	73	74	71	64
Mobile Homes	88	77	89	85	88

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