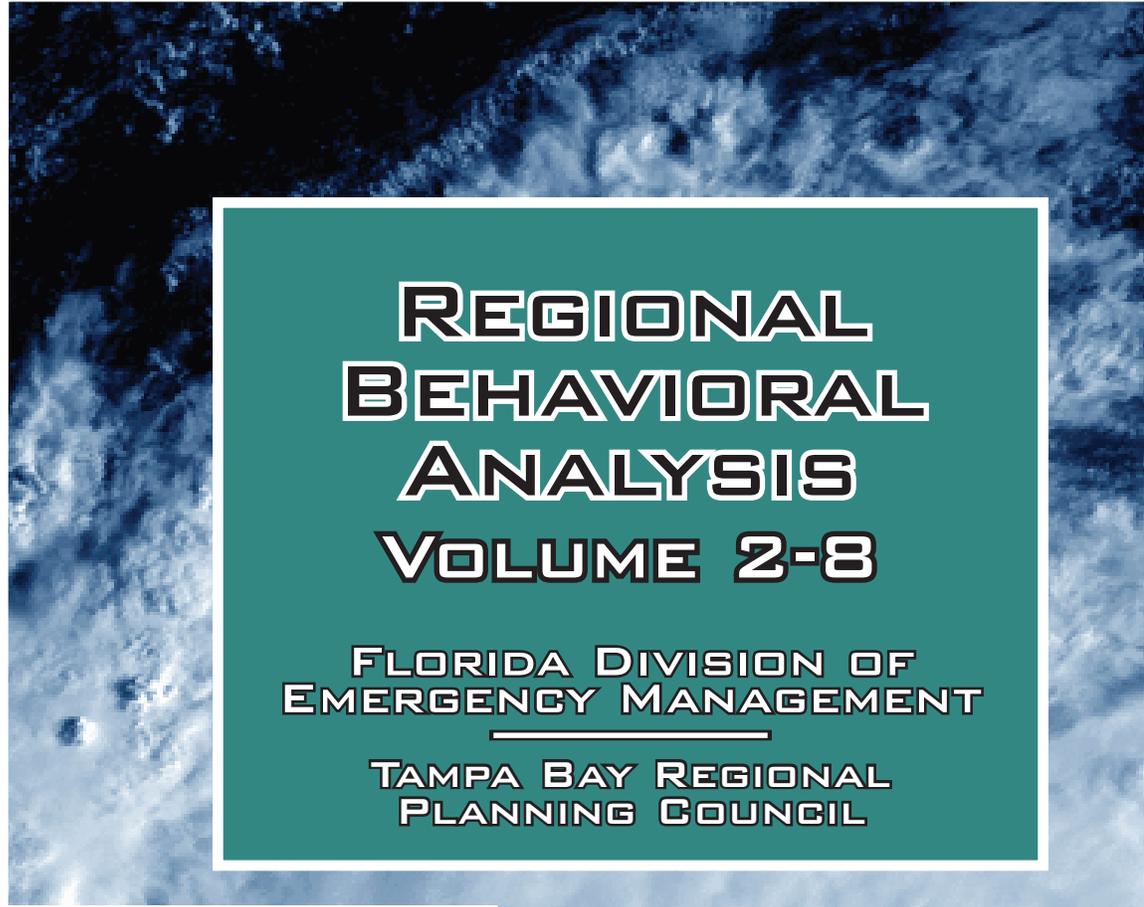




FLORIDA STATEWIDE REGIONAL EVACUATION STUDY PROGRAM



REGIONAL BEHAVIORAL ANALYSIS VOLUME 2-8

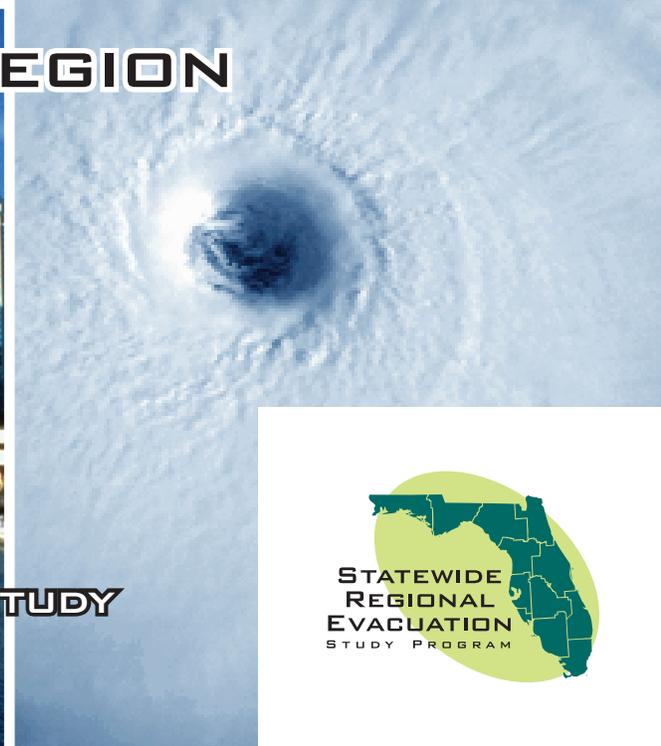
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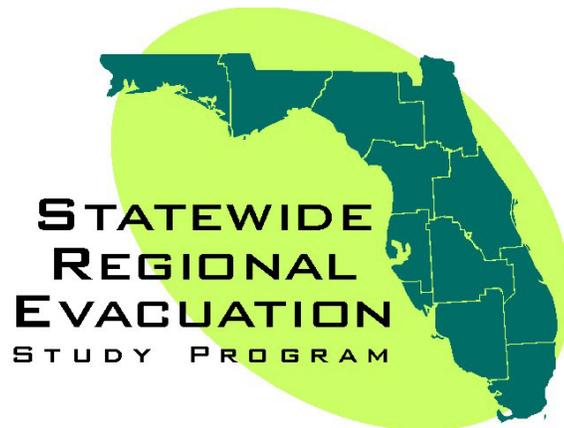


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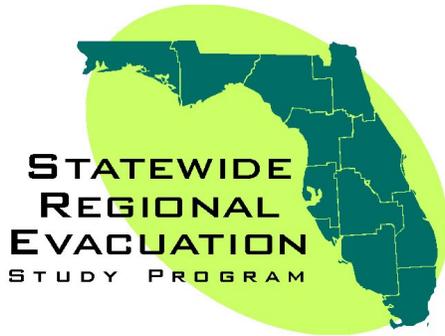
Regional Behavioral Analysis

Tampa Bay Region

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Statewide Regional Evacuation Study Behavioral Analysis

Tampa Bay 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 (in households with vehicles)
- **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 1600 residents of the Tampa Bay region – 400 in each county. The 400 interviews were allocated among evacuation zones after consultation with county emergency management officials 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 Tampa Bay counties

	Site-built Homes	Mobile Homes	Total Homes
Hillsborough Cat 1	91	8	99
Hillsborough Cat 2-3	93	7	100
Hillsborough Cat 4-5	90	6	99
Hillsborough Non-surge	93	6	99
Manatee Cat 1	86	17	100
Manatee Cat 2-3	83	17	100
Manatee Cat 4	86	14	100
Manatee Non-surge	82	18	98
Pasco Cat 1	88	10	98
Pasco Cat 2-3	86	13	99
Pasco Cat 4-5	94	6	100
Pasco Non-surge	64	36	100
Pinellas Cat 1	92	8	100
Pinellas Cat 2-3	83	16	99
Pinellas Cat 4-5	85	12	97
Pinellas Non-surge	91	8	99
TOTAL	1387	201	1588

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 in the region with respect to hurricane evacuation. Some of the surveys have been a part of earlier regional hurricane evacuation studies, the most recent in 2005, and have included questions about response in Elena and Georges. At least some of the Tampa Bay counties were included in surveys conducted following Charley, Frances, and Jeanne, but the 2007 survey included questions about those storms with a larger overall sample, especially for site-built homes. Data from the earlier surveys was used to supplement the 2007 SRES survey.

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: Tampa Bay 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. Tampa Bay survey participants were asked about their evacuation behavior in Hurricanes Charley, Frances, and Jeanne. Earlier surveys in the region had provided actual response data about Elena and Georges. Responses in past threats can be good predictors of future response, but only if the past threats are similar to future threats. In the Tampa Bay Region past threats from Hurricanes Georges, Charley, Frances, and Jeanne did not result in evacuation responses as great as threats that could be posed by future storms. Therefore, the evacuation participation rates observed in those storms are not necessarily 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 Tampa Bay 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 Tampa Bay 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 Pasco County residents was interviewed for the purpose of estimating how the larger population of Pasco 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 by evacuation zone within a county and then 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 14 tables:

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

In each table for county there are planning assumptions for six evacuation zones:

1. Areas needing to evacuate due to storm surge flooding from category 1 hurricanes
2. Areas needing to evacuate due to storm surge flooding from category 2 hurricanes
3. Areas needing to evacuate due to storm surge flooding from category 3 hurricanes

4. Areas needing to evacuate due to storm surge flooding from category 4 hurricanes
5. Areas needing to evacuate due to storm surge flooding from category 5 hurricanes
6. Areas not needing to evacuate due to storm surge flooding from hurricanes

Zones were defined relative to zones currently used by each county. In instances where counties currently aggregate zones the planning assumptions were interpolated for intermediate zones. For example, if a county used zones 1-2, 3, and 4-5, trends across those zones were used to specify assumptions for zones 1, 2, 3, 4, and 5.

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. There is an appendix for each county and an appendix for the region.

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.

Working data tables display mobile home data from the Tampa Bay 2005 behavioral survey because it targeted a larger number of mobile home respondents than the 2007 SRES survey.

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 (often 30% in category 1 evacuation zones) 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 makes landfall in the county.

These conditions aren't met very often, and recent threats in the Tampa Bay region have not generated evacuation rates as high as those in some of the planning assumptions. In fact in the 12 storms asked about in one county or another as part of the SRES the highest evacuation rates observed for site-built homes in the category 1 evacuation zone in any county was 80% (Santa Rosa in Ivan and Nassau in Floyd). But evacuation rates over 90% have been documented in other threats (e.g., Escambia in Frederic, parts of Pinellas in Elena, most of coastal Georgia and southern South Carolina in Floyd, and Galveston, Texas in Rita).

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 surge-related evacuation zones for hurricanes of corresponding intensities (e.g., everyone in the category 1 evacuation zone is ordered to evacuate in a category 1 hurricane). It also assumes that all mobile homes and residents of manufactured housing are ordered to evacuate for hurricanes of all intensities.

The planning assumptions include shadow evacuation – people leaving from areas and structures not 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 landfall in 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. Because evacuation rates were low in recent storms, out-of-county trip rates are based on the minority of residents who evacuated and might not be the same if evacuation rates had been greater.

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 Tampa Bay region there have been too few evacuees in recent hurricane threats included in the survey to provide highly-reliable estimates at the county level for future planning. (Elena, more than 25 years ago, was an exception, but the hasty, late evacuation was not a typical threat.) 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

Many 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, in households with at least one vehicle available. The Survey Data Report includes the number of vehicles available to evacuating households and the number they said 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 the anticipated onset of hurricane conditions.

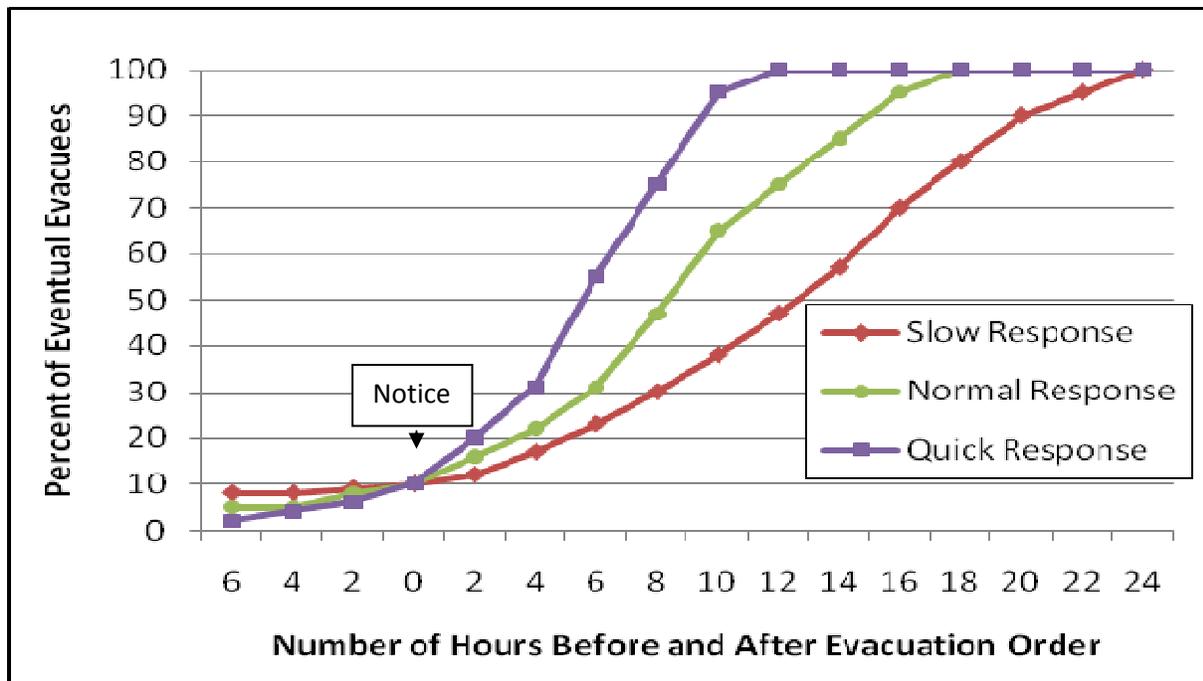


Figure 1. Evacuation timing curves for planning

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.

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. Evacuation departures in Katrina in Mississippi and Louisiana and in Rita in Texas in 2005 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 evacuation zones based on anticipated storm surge inundation: i.e., areas for which officials would issue evacuation notices due to the threat of storm surge and waves generated by category 1, 2, 3, 4, and 5 hurricanes. The sixth row in tables represents areas inland of the reach of storm surge inundation. Evacuation notices in inland areas (sixth rows of tables) would apply only to mobile homes and manufactured housing.

Cells

Cells in tables represent the evacuation behavior of residents living in the respective evacuation zone when faced with each of the five hurricane threats, e.g., response in a category 3 hurricane by residents living in a category 1 surge evacuation zone. All figures are percentages -- either percent of residents in the zone, percent of evacuees from the zone, or percent of available vehicles.

Appendix A-1
Planning Assumptions for Hillsborough County

Table 1. Hillsborough County evacuation rates for residents living in site-built homes

Hillsborough Evacuation Rates (%)	Storm Threat Scenario				
Site-built Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	50	60	70	85	95
Cat 2 Surge Evacuation Zone	35	55	75	85	95
Cat 3 Surge Evacuation Zone	25	30	75	85	90
Cat 4 Surge Evacuation Zone	15	20	30	75	90
Cat 5 Surge Evacuation Zone	10	10	15	55	90
Inland of Surge Evacuation Zones	5	5	5	10	20

Evacuation rate indicates the percent of residents who will leave their homes to go someplace safer from each zone in each storm threat scenario. Figures are based on the assumption that officials order evacuation for surge evacuation zones corresponding to storm category, plus all mobile homes and manufactured homes. Figures also assume that the actual storm track passes very close to the area being evacuated. Shaded cells indicate shadow evacuation – evacuation from areas not included in evacuation notices.

Table 2. Hillsborough County out-of-county trip rates for residents living in site-built homes

Hillsborough Out-of-county Trips (%)	Storm Threat Scenario				
Site-built Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	50	50	55	55	55
Cat 2 Surge Evacuation Zone	45	45	45	50	50
Cat 3 Surge Evacuation Zone	45	45	45	50	50
Cat 4 Surge Evacuation Zone	45	45	45	50	50
Cat 5 Surge Evacuation Zone	45	45	45	50	50
Inland of Surge Evacuation Zones	50	50	50	50	50

Out-of-county trip rate indicates the percent of evacuees from each zone who will seek refuge outside their own county of residence in each storm threat scenario.

Table 3. Hillsborough County vehicle use rates for residents living in site-built homes

Hillsborough Vehicle Use Rate (%)	Storm Threat Scenario				
Site-built Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	75	75	75	75	75
Cat 2 Surge Evacuation Zone	75	75	75	75	75
Cat 3 Surge Evacuation Zone	75	75	75	75	75
Cat 4 Surge Evacuation Zone	75	75	75	75	75
Cat 5 Surge Evacuation Zone	75	75	75	75	75
Inland of Surge Evacuation Zones	75	75	75	75	75

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

Table 4. Hillsborough County public shelter use rates for residents living in site-built homes

Hillsborough Public Shelter Use (%)	Storm Threat Scenario				
Site-built Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	5	5	5	5	5
Cat 2 Surge Evacuation Zone	5	5	5	5	5
Cat 3 Surge Evacuation Zone	5	5	5	5	5
Cat 4 Surge Evacuation Zone	10	10	10	10	10
Cat 5 Surge Evacuation Zone	10	10	10	10	10
Inland of Surge Evacuation Zones	10	10	10	15	15

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

Table 5. Hillsborough County friend/relative refuge use rates for residents living in site-built homes

Hillsborough Friend/Relative Refuge Rates (%)	Storm Threat Scenario				
Site-built Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	65	65	65	65	65
Cat 2 Surge Evacuation Zone	65	65	65	65	65
Cat 3 Surge Evacuation Zone	65	65	65	65	65
Cat 4 Surge Evacuation Zone	65	65	65	65	65
Cat 5 Surge Evacuation Zone	65	65	65	65	65
Inland of Surge Evacuation Zones	55	55	55	55	55

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

Table 6. Hillsborough County hotel/motel refuge use rates for residents living in site-built homes

Hillsborough Hotel/Motel Rates (%)	Storm Threat Scenario				
Site-built Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	20	20	20	20	20
Cat 2 Surge Evacuation Zone	20	20	20	20	20
Cat 3 Surge Evacuation Zone	20	20	20	20	20
Cat 4 Surge Evacuation Zone	15	15	15	15	15
Cat 5 Surge Evacuation Zone	15	15	15	15	15
Inland of Surge Evacuation Zones	20	20	20	20	20

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

Table 7. Hillsborough County other refuge use rates for residents living in site-built homes

Hillsborough Other Refuge Rates (%)	Storm Threat Scenario				
Site-built Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	10	10	10	10	10
Cat 2 Surge Evacuation Zone	10	10	10	10	10
Cat 3 Surge Evacuation Zone	10	10	10	10	10
Cat 4 Surge Evacuation Zone	10	10	10	10	10
Cat 5 Surge Evacuation Zone	10	10	10	10	10
Inland of Surge Evacuation Zones	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.

Table 8. Hillsborough County evacuation rates for residents living in mobile and manufactured homes

Hillsborough Evacuation Rates (%)	Storm Threat Scenario				
Mobile and Manufactured Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	80	80	85	95	100
Cat 2 Surge Evacuation Zone	65	70	80	90	95
Cat 3 Surge Evacuation Zone	60	65	80	90	95
Cat 4 Surge Evacuation Zone	60	65	75	80	85
Cat 5 Surge Evacuation Zone	60	65	75	80	85
Inland of Surge Evacuation Zones	50	60	65	75	80

Evacuation rate indicates the percent of residents who will leave their homes to go someplace safer from each zone in each storm threat scenario. Figures are based on the assumption that officials order evacuation for surge evacuation zones corresponding to storm category, plus all mobile homes and manufactured homes. Figures also assume that the actual storm track passes very close to the area being evacuated.

Table 9. Hillsborough County out-of-county trip rates for residents living in mobile and manufactured homes

Hillsborough Out-of-county Trips (%)	Storm Threat Scenario				
Mobile and Manufactured Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	30	30	35	35	40
Cat 2 Surge Evacuation Zone	30	30	35	35	40
Cat 3 Surge Evacuation Zone	30	30	35	35	40
Cat 4 Surge Evacuation Zone	30	30	35	35	40
Cat 5 Surge Evacuation Zone	30	30	35	35	40
Inland of Surge Evacuation Zones	30	35	40	40	45

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

Table 10. Hillsborough County vehicle use rates for residents living in mobile and manufactured homes

Hillsborough Vehicle Use Rate (%)	Storm Threat Scenario				
Mobile and Manufactured Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	85	85	85	85	85
Cat 2 Surge Evacuation Zone	85	85	85	85	85
Cat 3 Surge Evacuation Zone	85	85	85	85	85
Cat 4 Surge Evacuation Zone	85	85	85	85	85
Cat 5 Surge Evacuation Zone	85	85	85	85	85
Inland of Surge Evacuation Zones	85	85	85	85	85

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

Table 11. Hillsborough County public shelter use rates for residents living in mobile and manufactured homes

Hillsborough Public Shelter Use (%)	Storm Threat Scenario				
	Mobile and Manufactured Homes	Cat 1	Cat 2	Cat 3	Cat 4
Cat 1 Surge Evacuation Zone	10	10	10	10	10
Cat 2 Surge Evacuation Zone	10	10	10	10	10
Cat 3 Surge Evacuation Zone	10	10	10	10	10
Cat 4 Surge Evacuation Zone	15	15	15	15	15
Cat 5 Surge Evacuation Zone	15	15	15	15	15
Inland of Surge Evacuation Zones	5	5	5	5	5

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

Table 12. Hillsborough County friend/relative refuge use rates for residents living in mobile and manufactured homes

Hillsborough Friend/Relative Refuge Rates (%)	Storm Threat Scenario				
	Mobile and Manufactured Homes	Cat 1	Cat 2	Cat 3	Cat 4
Cat 1 Surge Evacuation Zone	65	65	65	65	65
Cat 2 Surge Evacuation Zone	65	65	65	65	65
Cat 3 Surge Evacuation Zone	65	65	65	65	65
Cat 4 Surge Evacuation Zone	65	65	65	65	65
Cat 5 Surge Evacuation Zone	65	65	65	65	65
Inland of Surge Evacuation Zones	65	65	65	65	65

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

Table 13. Hillsborough County hotel/motel refuge use rates for residents living in mobile and manufactured homes

Hillsborough Hotel/Motel Rates (%)	Storm Threat Scenario				
	Mobile and Manufactured Homes	Cat 1	Cat 2	Cat 3	Cat 4
Cat 1 Surge Evacuation Zone	15	15	15	15	15
Cat 2 Surge Evacuation Zone	15	15	15	15	15
Cat 3 Surge Evacuation Zone	15	15	15	15	15
Cat 4 Surge Evacuation Zone	10	10	10	10	10
Cat 5 Surge Evacuation Zone	10	10	10	10	10
Inland of Surge Evacuation Zones	20	20	20	20	20

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

Table 14. Hillsborough County other refuge use rates for residents living in mobile and manufactured homes

Hillsborough Other Refuge Rates (%)	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Mobile and Manufactured Homes					
Cat 1 Surge Evacuation Zone	10	10	10	10	10
Cat 2 Surge Evacuation Zone	10	10	10	10	10
Cat 3 Surge Evacuation Zone	10	10	10	10	10
Cat 4 Surge Evacuation Zone	10	10	10	10	10
Cat 5 Surge Evacuation Zone	10	10	10	10	10
Inland of Surge Evacuation Zones	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 Manatee County

Table 1. Manatee County evacuation rates for residents living in site-built homes

Manatee Evacuation Rates (%)	Storm Threat Scenario				
Site-built Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	50	55	75	85	95
Cat 2 Surge Evacuation Zone	35	60	70	80	95
Cat 3 Surge Evacuation Zone	25	25	70	80	90
Cat 4 Surge Evacuation Zone	10	15	30	75	85
Cat 5 Surge Evacuation Zone	5	10	15	50	85
Inland of Surge Evacuation Zones	5	10	15	15	20

Evacuation rate indicates the percent of residents who will leave their homes to go someplace safer from each zone in each storm threat scenario. Figures are based on the assumption that officials order evacuation for surge evacuation zones corresponding to storm category, plus all mobile homes and manufactured homes. Figures also assume that the actual storm track passes very close to the area being evacuated. Shaded cells indicate shadow evacuation – evacuation from areas not included in evacuation notices.

Table 2. Manatee County out-of-county trip rates for residents living in site-built homes

Manatee Out-of-county Trips (%)	Storm Threat Scenario				
Site-built Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	50	50	55	55	60
Cat 2 Surge Evacuation Zone	45	45	50	55	60
Cat 3 Surge Evacuation Zone	45	45	50	55	60
Cat 4 Surge Evacuation Zone	40	40	45	50	55
Cat 5 Surge Evacuation Zone	40	40	45	50	55
Inland of Surge Evacuation Zones	40	40	45	50	50

Out-of-county trip rate indicates the percent of evacuees from each zone who will seek refuge outside their own county of residence in each storm threat scenario.

Table 3. Manatee County vehicle use rates for residents living in site-built homes

Manatee Vehicle Use Rate (%)	Storm Threat Scenario				
Site-built Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	70	70	70	70	70
Cat 2 Surge Evacuation Zone	70	70	70	70	70
Cat 3 Surge Evacuation Zone	70	70	70	70	70
Cat 4 Surge Evacuation Zone	70	70	70	70	70
Cat 5 Surge Evacuation Zone	70	70	70	70	70
Inland of Surge Evacuation Zones	70	70	70	70	70

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

Table 4. Manatee County public shelter use rates for residents living in site-built homes

Manatee Public Shelter Use (%)	Storm Threat Scenario				
Site-built Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	5	5	5	5	5
Cat 2 Surge Evacuation Zone	8	8	8	8	8
Cat 3 Surge Evacuation Zone	8	8	8	8	8
Cat 4 Surge Evacuation Zone	10	10	10	10	10
Cat 5 Surge Evacuation Zone	10	10	10	10	10
Inland of Surge Evacuation Zones	15	15	15	15	15

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

Table 5. Manatee County friend/relative refuge use rates for residents living in site-built homes

Manatee Friend/Relative Refuge Rates (%)	Storm Threat Scenario				
Site-built Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	60	60	60	60	60
Cat 2 Surge Evacuation Zone	60	60	60	60	60
Cat 3 Surge Evacuation Zone	60	60	60	60	60
Cat 4 Surge Evacuation Zone	60	60	60	60	60
Cat 5 Surge Evacuation Zone	60	60	60	60	60
Inland of Surge Evacuation Zones	55	55	55	55	55

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

Table 6. Manatee County hotel/motel refuge use rates for residents living in site-built homes

Manatee Hotel/Motel Rates (%)	Storm Threat Scenario				
Site-built Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	20	20	20	20	20
Cat 2 Surge Evacuation Zone	15	15	15	15	15
Cat 3 Surge Evacuation Zone	15	15	15	15	15
Cat 4 Surge Evacuation Zone	15	15	15	15	15
Cat 5 Surge Evacuation Zone	15	15	15	15	15
Inland of Surge Evacuation Zones	10	10	10	10	10

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

Table 7. Manatee County other refuge use rates for residents living in site-built homes

Manatee Other Refuge Rates (%)	Storm Threat Scenario				
Site-built Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	15	15	15	15	15
Cat 2 Surge Evacuation Zone	17	17	17	17	17
Cat 3 Surge Evacuation Zone	17	17	17	17	17
Cat 4 Surge Evacuation Zone	15	15	15	15	15
Cat 5 Surge Evacuation Zone	15	15	15	15	15
Inland of Surge Evacuation Zones	20	20	20	20	20

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.

Table 8. Manatee County evacuation rates for residents living in mobile and manufactured homes

Manatee Evacuation Rates (%)	Storm Threat Scenario				
Mobile and Manufactured Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	80	85	90	95	95
Cat 2 Surge Evacuation Zone	70	75	85	90	95
Cat 3 Surge Evacuation Zone	70	75	85	90	95
Cat 4 Surge Evacuation Zone	70	75	80	85	90
Cat 5 Surge Evacuation Zone	70	75	80	85	90
Inland of Surge Evacuation Zones	60	65	75	80	85

Evacuation rate indicates the percent of residents who will leave their homes to go someplace safer from each zone in each storm threat scenario. Figures are based on the assumption that officials order evacuation for surge evacuation zones corresponding to storm category, plus all mobile homes and manufactured homes. Figures also assume that the actual storm track passes very close to the area being evacuated.

Table 9. Manatee County out-of-county trip rates for residents living in mobile and manufactured homes

Manatee Out-of-county Trips (%)	Storm Threat Scenario				
Mobile and Manufactured Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	30	30	35	35	40
Cat 2 Surge Evacuation Zone	25	25	30	35	40
Cat 3 Surge Evacuation Zone	25	25	30	35	40
Cat 4 Surge Evacuation Zone	25	25	30	30	30
Cat 5 Surge Evacuation Zone	25	25	30	30	30
Inland of Surge Evacuation Zones	25	25	30	30	30

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

Table 10. Manatee County vehicle use rates for residents living in mobile and manufactured homes

Manatee Vehicle Use Rate (%)	Storm Threat Scenario				
Mobile and Manufactured Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	90	90	90	90	90
Cat 2 Surge Evacuation Zone	90	90	90	90	90
Cat 3 Surge Evacuation Zone	90	90	90	90	90
Cat 4 Surge Evacuation Zone	90	90	90	90	90
Cat 5 Surge Evacuation Zone	90	90	90	90	90
Inland of Surge Evacuation Zones	90	90	90	90	90

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

Table 11. Manatee County public shelter use rates for residents living in mobile and manufactured homes

Manatee Public Shelter Use (%)	Storm Threat Scenario				
Mobile and Manufactured Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	10	10	10	10	10
Cat 2 Surge Evacuation Zone	12	12	12	15	15
Cat 3 Surge Evacuation Zone	12	12	12	15	15
Cat 4 Surge Evacuation Zone	10	10	10	10	10
Cat 5 Surge Evacuation Zone	10	10	10	10	10
Inland of Surge Evacuation Zones	10	10	10	10	10

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

Table 12. Manatee County friend/relative refuge use rates for residents living in mobile and manufactured homes

Manatee Friend/Relative Refuge Rates (%)	Storm Threat Scenario				
Mobile and Manufactured Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	65	65	65	65	65
Cat 2 Surge Evacuation Zone	65	65	65	65	65
Cat 3 Surge Evacuation Zone	65	65	65	65	65
Cat 4 Surge Evacuation Zone	65	65	65	65	65
Cat 5 Surge Evacuation Zone	65	65	65	65	65
Inland of Surge Evacuation Zones	65	65	65	65	65

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

Table 13. Manatee County hotel/motel refuge use rates for residents living in mobile and manufactured homes

Manatee Hotel/Motel Rates (%)	Storm Threat Scenario				
Mobile and Manufactured Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	15	15	15	15	15
Cat 2 Surge Evacuation Zone	15	15	15	15	15
Cat 3 Surge Evacuation Zone	15	15	15	15	15
Cat 4 Surge Evacuation Zone	15	15	15	15	15
Cat 5 Surge Evacuation Zone	15	15	15	15	15
Inland of Surge Evacuation Zones	15	15	15	15	15

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

Table 14. Manatee County other refuge use rates for residents living in mobile and manufactured homes

Manatee Other Refuge Rates (%)	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Mobile and Manufactured Homes					
Cat 1 Surge Evacuation Zone	10	10	10	10	10
Cat 2 Surge Evacuation Zone	8	8	8	8	8
Cat 3 Surge Evacuation Zone	8	8	8	8	8
Cat 4 Surge Evacuation Zone	10	10	10	10	10
Cat 5 Surge Evacuation Zone	10	10	10	10	10
Inland of Surge Evacuation Zones	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 Pasco County

Table 1. Pasco County evacuation rates for residents living in site-built homes

Pasco Evacuation Rates (%)	Storm Threat Scenario				
Site-built Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	50	65	75	85	95
Cat 2 Surge Evacuation Zone	30	50	70	80	95
Cat 3 Surge Evacuation Zone	20	20	70	80	90
Cat 4 Surge Evacuation Zone	10	10	30	75	85
Cat 5 Surge Evacuation Zone	5	5	15	50	80
Inland of Surge Evacuation Zones	5	5	10	10	15

Evacuation rate indicates the percent of residents who will leave their homes to go someplace safer from each zone in each storm threat scenario. Figures are based on the assumption that officials order evacuation for surge evacuation zones corresponding to storm category, plus all mobile homes and manufactured homes. Figures also assume that the actual storm track passes very close to the area being evacuated. Shaded cells indicate shadow evacuation – evacuation from areas not included in evacuation notices.

Table 2. Pasco County out-of-county trip rates for residents living in site-built homes

Pasco Out-of-county Trips (%)	Storm Threat Scenario				
Site-built Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	40	45	45	45	50
Cat 2 Surge Evacuation Zone	40	40	45	45	50
Cat 3 Surge Evacuation Zone	40	40	45	45	50
Cat 4 Surge Evacuation Zone	40	40	45	45	50
Cat 5 Surge Evacuation Zone	40	40	45	45	50
Inland of Surge Evacuation Zones	40	40	45	45	50

Out-of-county trip rate indicates the percent of evacuees from each zone who will seek refuge outside their own county of residence in each storm threat scenario.

Table 3. Pasco County vehicle use rates for residents living in site-built homes

Pasco Vehicle Use Rate (%)	Storm Threat Scenario				
Site-built Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	80	80	80	80	80
Cat 2 Surge Evacuation Zone	80	80	80	80	80
Cat 3 Surge Evacuation Zone	80	80	80	80	80
Cat 4 Surge Evacuation Zone	75	75	75	75	75
Cat 5 Surge Evacuation Zone	75	75	75	75	75
Inland of Surge Evacuation Zones	70	70	70	70	70

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

Table 4. Pasco County public shelter use rates for residents living in site-built homes

Pasco Public Shelter Use (%)	Storm Threat Scenario				
Site-built Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	5	5	5	5	5
Cat 2 Surge Evacuation Zone	5	5	5	5	5
Cat 3 Surge Evacuation Zone	10	10	10	10	10
Cat 4 Surge Evacuation Zone	10	10	10	10	10
Cat 5 Surge Evacuation Zone	10	10	10	10	10
Inland of Surge Evacuation Zones	10	10	10	10	10

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

Table 5. Pasco County friend/relative refuge use rates for residents living in site-built homes

Pasco Friend/Relative Refuge Rates (%)	Storm Threat Scenario				
Site-built Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	40	45	45	45	50
Cat 2 Surge Evacuation Zone	40	40	45	45	50
Cat 3 Surge Evacuation Zone	40	40	45	45	50
Cat 4 Surge Evacuation Zone	40	40	45	45	50
Cat 5 Surge Evacuation Zone	40	40	45	45	50
Inland of Surge Evacuation Zones	40	40	45	45	50

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

Table 6. Pasco County hotel/motel refuge use rates for residents living in site-built homes

Pasco Hotel/Motel Rates (%)	Storm Threat Scenario				
Site-built Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	25	25	25	25	25
Cat 2 Surge Evacuation Zone	20	20	20	20	20
Cat 3 Surge Evacuation Zone	20	20	20	20	20
Cat 4 Surge Evacuation Zone	20	20	20	20	20
Cat 5 Surge Evacuation Zone	20	20	20	20	20
Inland of Surge Evacuation Zones	20	20	20	20	20

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

Table 7. Pasco County other refuge use rates for residents living in site-built homes

Pasco Other Refuge Rates (%)	Storm Threat Scenario				
Site-built Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	5	5	5	5	5
Cat 2 Surge Evacuation Zone	15	15	15	15	15
Cat 3 Surge Evacuation Zone	10	10	10	10	10
Cat 4 Surge Evacuation Zone	15	15	15	15	15
Cat 5 Surge Evacuation Zone	15	15	15	15	15
Inland of Surge Evacuation Zones	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.

Table 8. Pasco County evacuation rates for residents living in mobile and manufactured homes

Pasco Evacuation Rates (%)	Storm Threat Scenario				
	Mobile and Manufactured Homes	Cat 1	Cat 2	Cat 3	Cat 4
Cat 1 Surge Evacuation Zone	80	85	90	95	100
Cat 2 Surge Evacuation Zone	70	80	85	95	95
Cat 3 Surge Evacuation Zone	70	75	85	90	90
Cat 4 Surge Evacuation Zone	70	75	85	85	90
Cat 5 Surge Evacuation Zone	70	75	80	85	90
Inland of Surge Evacuation Zones	60	70	80	80	90

Evacuation rate indicates the percent of residents who will leave their homes to go someplace safer from each zone in each storm threat scenario. Figures are based on the assumption that officials order evacuation for surge evacuation zones corresponding to storm category, plus all mobile homes and manufactured homes. Figures also assume that the actual storm track passes very close to the area being evacuated.

Table 9. Pasco County out-of-county trip rates for residents living in mobile and manufactured homes

Pasco Out-of-county Trips (%)	Storm Threat Scenario				
	Mobile and Manufactured Homes	Cat 1	Cat 2	Cat 3	Cat 4
Cat 1 Surge Evacuation Zone	30	30	35	35	40
Cat 2 Surge Evacuation Zone	25	25	30	30	40
Cat 3 Surge Evacuation Zone	25	25	30	30	40
Cat 4 Surge Evacuation Zone	25	25	30	30	35
Cat 5 Surge Evacuation Zone	25	25	30	30	35
Inland of Surge Evacuation Zones	25	25	30	30	35

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

Table 10. Pasco County vehicle use rates for residents living in mobile and manufactured homes

Pasco Vehicle Use Rate (%)	Storm Threat Scenario				
	Mobile and Manufactured Homes	Cat 1	Cat 2	Cat 3	Cat 4
Cat 1 Surge Evacuation Zone	90	90	90	90	90
Cat 2 Surge Evacuation Zone	90	90	90	90	90
Cat 3 Surge Evacuation Zone	90	90	90	90	90
Cat 4 Surge Evacuation Zone	90	90	90	90	90
Cat 5 Surge Evacuation Zone	90	90	90	90	90
Inland of Surge Evacuation Zones	80	80	80	80	80

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

Table 11. Pasco County public shelter use rates for residents living in mobile and manufactured homes

Pasco Public Shelter Use (%)	Storm Threat Scenario				
Mobile and Manufactured Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	15	15	15	15	15
Cat 2 Surge Evacuation Zone	10	10	10	10	10
Cat 3 Surge Evacuation Zone	10	10	10	10	10
Cat 4 Surge Evacuation Zone	15	15	15	15	15
Cat 5 Surge Evacuation Zone	15	15	15	15	15
Inland of Surge Evacuation Zones	15	15	15	15	15

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

Table 12. Pasco County friend/relative refuge use rates for residents living in mobile and manufactured homes

Pasco Friend/Relative Refuge Rates (%)	Storm Threat Scenario				
Mobile and Manufactured Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	50	50	50	50	50
Cat 2 Surge Evacuation Zone	55	55	55	55	55
Cat 3 Surge Evacuation Zone	55	55	55	55	55
Cat 4 Surge Evacuation Zone	50	50	50	50	50
Cat 5 Surge Evacuation Zone	50	50	50	50	50
Inland of Surge Evacuation Zones	50	50	50	50	50

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

Table 13. Pasco County hotel/motel refuge use rates for residents living in mobile and manufactured homes

Pasco Hotel/Motel Rates (%)	Storm Threat Scenario				
Mobile and Manufactured Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	15	15	15	15	15
Cat 2 Surge Evacuation Zone	15	15	15	15	15
Cat 3 Surge Evacuation Zone	15	15	15	15	15
Cat 4 Surge Evacuation Zone	15	15	15	15	15
Cat 5 Surge Evacuation Zone	15	15	15	15	15
Inland of Surge Evacuation Zones	15	15	15	15	15

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

Table 14. Pasco County other refuge use rates for residents living in mobile and manufactured homes

Pasco Other Refuge Rates (%)	Storm Threat Scenario				
Mobile and Manufactured Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	20	20	20	20	20
Cat 2 Surge Evacuation Zone	20	20	20	20	20
Cat 3 Surge Evacuation Zone	20	20	20	20	20
Cat 4 Surge Evacuation Zone	20	20	20	20	20
Cat 5 Surge Evacuation Zone	20	20	20	20	20
Inland of Surge Evacuation Zones	20	20	20	20	20

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 Pinellas County

Table 1. Pinellas County evacuation rates for residents living in site-built homes

Pinellas Evacuation Rates (%)	Storm Threat Scenario				
Site-built Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	55	65	75	85	95
Cat 2 Surge Evacuation Zone	30	50	70	80	95
Cat 3 Surge Evacuation Zone	20	25	70	80	90
Cat 4 Surge Evacuation Zone	10	15	30	75	85
Cat 5 Surge Evacuation Zone	5	10	15	50	85
Inland of Surge Evacuation Zones	5	5	10	10	20

Evacuation rate indicates the percent of residents who will leave their homes to go someplace safer from each zone in each storm threat scenario. Figures are based on the assumption that officials order evacuation for surge evacuation zones corresponding to storm category, plus all mobile homes and manufactured homes. Figures also assume that the actual storm track passes very close to the area being evacuated. Shaded cells indicate shadow evacuation – evacuation from areas not included in evacuation notices.

Table 2. Pinellas County out-of-county trip rates for residents living in site-built homes

Pinellas Out-of-county Trips (%)	Storm Threat Scenario				
Site-built Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	55	55	55	60	60
Cat 2 Surge Evacuation Zone	50	50	50	55	55
Cat 3 Surge Evacuation Zone	50	50	50	55	55
Cat 4 Surge Evacuation Zone	50	50	50	55	55
Cat 5 Surge Evacuation Zone	50	50	50	55	55
Inland of Surge Evacuation Zones	50	50	50	55	55

Out-of-county trip rate indicates the percent of evacuees from each zone who will seek refuge outside their own county of residence in each threat scenario.

Table 3. Pinellas County vehicle use rates for residents living in site-built homes

Pinellas Vehicle Use Rate (%)	Storm Threat Scenario				
Site-built Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	80	80	80	80	80
Cat 2 Surge Evacuation Zone	75	75	75	75	75
Cat 3 Surge Evacuation Zone	75	75	75	75	75
Cat 4 Surge Evacuation Zone	75	75	75	75	75
Cat 5 Surge Evacuation Zone	75	75	75	75	75
Inland of Surge Evacuation Zones	75	75	75	75	75

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

Table 4. Pinellas County public shelter use rates for residents living in site-built homes

Pinellas Public Shelter Use (%)	Storm Threat Scenario				
Site-built Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	5	5	5	5	5
Cat 2 Surge Evacuation Zone	5	5	5	5	5
Cat 3 Surge Evacuation Zone	5	5	5	5	5
Cat 4 Surge Evacuation Zone	8	8	8	8	8
Cat 5 Surge Evacuation Zone	8	8	8	8	8
Inland of Surge Evacuation Zones	10	10	10	10	10

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

Table 5. Pinellas County friend/relative refuge use rates for residents living in site-built homes

Pinellas Friend/Relative Refuge Rates (%)	Storm Threat Scenario				
Site-built Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	70	70	70	70	70
Cat 2 Surge Evacuation Zone	65	65	65	65	65
Cat 3 Surge Evacuation Zone	65	65	65	65	65
Cat 4 Surge Evacuation Zone	65	65	65	65	65
Cat 5 Surge Evacuation Zone	65	65	65	65	65
Inland of Surge Evacuation Zones	55	55	55	55	55

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

Table 6. Pinellas County hotel/motel refuge use rates for residents living in site-built homes

Pinellas Hotel/Motel Rates (%)	Storm Threat Scenario				
Site-built Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	15	15	15	15	15
Cat 2 Surge Evacuation Zone	20	20	20	20	20
Cat 3 Surge Evacuation Zone	20	20	20	20	20
Cat 4 Surge Evacuation Zone	15	15	15	15	15
Cat 5 Surge Evacuation Zone	15	15	15	15	15
Inland of Surge Evacuation Zones	20	20	20	20	20

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

Table 7. Pinellas County other refuge use rates for residents living in site-built homes

Pinellas Other Refuge Rates (%)	Storm Threat Scenario				
Site-built Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	10	10	10	10	10
Cat 2 Surge Evacuation Zone	10	10	10	10	10
Cat 3 Surge Evacuation Zone	10	10	10	10	10
Cat 4 Surge Evacuation Zone	12	12	12	12	12
Cat 5 Surge Evacuation Zone	12	12	12	12	12
Inland of Surge Evacuation Zones	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.

Table 8. Pinellas County evacuation rates for residents living in mobile and manufactured homes

Pinellas Evacuation Rates (%)	Storm Threat Scenario				
Mobile and Manufactured Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	80	80	90	100	100
Cat 2 Surge Evacuation Zone	70	80	85	95	95
Cat 3 Surge Evacuation Zone	70	75	85	90	95
Cat 4 Surge Evacuation Zone	70	75	85	90	95
Cat 5 Surge Evacuation Zone	70	75	80	90	95
Inland of Surge Evacuation Zones	65	70	80	85	90

Evacuation rate indicates the percent of residents who will leave their homes to go someplace safer from each zone in each storm threat scenario. Figures are based on the assumption that officials order evacuation for surge evacuation zones corresponding to storm category, plus all mobile homes and manufactured homes. Figures also assume that the actual storm track passes very close to the area being evacuated.

Table 9. Pinellas County out-of-county trip rates for residents living in mobile and manufactured homes

Pinellas Out-of-county Trips (%)	Storm Threat Scenario				
Mobile and Manufactured Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	25	25	30	35	40
Cat 2 Surge Evacuation Zone	25	25	30	30	35
Cat 3 Surge Evacuation Zone	25	25	30	30	35
Cat 4 Surge Evacuation Zone	25	25	30	30	35
Cat 5 Surge Evacuation Zone	25	25	30	30	35
Inland of Surge Evacuation Zones	25	25	30	30	35

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

Table 10. Pinellas County vehicle use rates for residents living in mobile and manufactured homes

Pinellas Vehicle Use Rate (%)	Storm Threat Scenario				
Mobile and Manufactured Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	85	85	85	85	85
Cat 2 Surge Evacuation Zone	85	85	85	85	85
Cat 3 Surge Evacuation Zone	85	85	85	85	85
Cat 4 Surge Evacuation Zone	85	85	85	85	85
Cat 5 Surge Evacuation Zone	85	85	85	85	85
Inland of Surge Evacuation Zones	85	85	85	85	85

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

Table 11. Pinellas County public shelter use rates for residents living in mobile and manufactured homes

Pinellas Public Shelter Use (%)	Storm Threat Scenario				
Mobile and Manufactured Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	10	10	10	10	10
Cat 2 Surge Evacuation Zone	10	10	10	10	10
Cat 3 Surge Evacuation Zone	10	10	10	10	10
Cat 4 Surge Evacuation Zone	10	10	10	10	10
Cat 5 Surge Evacuation Zone	10	10	10	10	10
Inland of Surge Evacuation Zones	10	10	10	10	10

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

Table 12. Pinellas County friend/relative refuge use rates for residents living in mobile and manufactured homes

Pinellas Friend/Relative Refuge Rates (%)	Storm Threat Scenario				
Mobile and Manufactured Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	60	60	60	60	60
Cat 2 Surge Evacuation Zone	60	60	60	60	60
Cat 3 Surge Evacuation Zone	60	60	60	60	60
Cat 4 Surge Evacuation Zone	60	60	60	60	60
Cat 5 Surge Evacuation Zone	60	60	60	60	60
Inland of Surge Evacuation Zones	60	60	60	60	60

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

Table 13. Pinellas County hotel/motel refuge use rates for residents living in mobile and manufactured homes

Pinellas Hotel/Motel Rates (%)	Storm Threat Scenario				
Mobile and Manufactured Homes	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Cat 1 Surge Evacuation Zone	20	20	20	20	20
Cat 2 Surge Evacuation Zone	20	20	20	20	20
Cat 3 Surge Evacuation Zone	20	20	20	20	20
Cat 4 Surge Evacuation Zone	20	20	20	20	20
Cat 5 Surge Evacuation Zone	20	20	20	20	20
Inland of Surge Evacuation Zones	20	20	20	20	20

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

Table 14. Pinellas County other refuge use rates for residents living in mobile and manufactured homes

Pinellas Other Refuge Rates (%)	Storm Threat Scenario				
	Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
Mobile and Manufactured Homes					
Cat 1 Surge Evacuation Zone	10	10	10	10	10
Cat 2 Surge Evacuation Zone	10	10	10	10	10
Cat 3 Surge Evacuation Zone	10	10	10	10	10
Cat 4 Surge Evacuation Zone	10	10	10	10	10
Cat 5 Surge Evacuation Zone	10	10	10	10	10
Inland of Surge Evacuation Zones	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 B
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 sample size was between 10 and 20, the sample size is shown in parentheses (e.g., n=15). 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. In Tables 10 and 12 responses for the variable "Could Stay w/ Friend/Rel" are reported for the county as a whole because there were generally too few respondents to the question within a particular evacuation zone at the county level. 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.

Appendix B-1
Hillsborough County Working Data Tables

Hillsborough County

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

Site Built Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Flood in Cat 2	43	23	22	11
Unsafe in Cat 2	40	27	31	15
Expect Evac Notice in Cat 2	70	44	50	30
Would Evac in Cat 2*	-	63	64	38
Would Comply in Cat 2	84	76	80	69

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

Site Built Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Flood in Cat 3	56	46	29	19
Unsafe in Cat 3	65	58	51	42
Expect Evac Notice in Cat 3	86	75	64	47
Would Evac in Cat 3*	-	70	82	52
Would Comply in Cat 3	90	89	91	86

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

Site Built Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Flood in Cat 4-5	71	66	48	32
Unsafe in Cat 4-5	85	82	78	67
Expect Evac Notice in Cat 4-5	93	90	94	73
Would Evac in Cat 4-5*	-	96	93	79
Would Comply in Cat 4-5	95	91	97	93

Table 4. Evacuation in Charley, Frances, and Jeanne and Type of Evacuation Notice Heard, if any

Site Built Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Evacuated in Charley	44	26	14	3
Heard Must	23	4	3	3
Heard Should	28	28	14	4
Heard Neither	49	68	83	93
Evacuated in Frances	15	10	6	2
Heard Must	7	1	0	4
Heard Should	12	6	12	2
Heard Neither	81	93	88	94
Evacuated in Jeanne	12	12	3	2
Heard Must	9	0	0	3
Heard Should	12	8	6	0
Heard Neither	79	93	94	97

Hillsborough County

Table 5. Perceived Vulnerability, Expectation of Receiving an Evacuation Notice from Officials, and Evacuation Intentions in a 100 MPH Category 2 Hurricane **(2005-2006 Survey Responses)**

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Inland of C
Flood in Cat 2	29	15	2
Unsafe in Cat 2	68	63	38
Expect Evac Notice in Cat 2	79	75	49
Would Evac in Cat 2	81	78	67
Would Comply in Cat 2	-	-	-

Table 6. Perceived Vulnerability, Expectation of Receiving an Evacuation Notice from Officials, and Evacuation Intentions in a 125 MPH Category 3 Hurricane **(2005-2006 Survey Responses)**

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Inland of C
Flood in Cat 3	51	38	10
Unsafe in Cat 3	91	83	62
Expect Evac Notice in Cat 3	91	85	66
Would Evac in Cat 3	91	90	80
Would Comply in Cat 3	-	-	-

Table 7. Perceived Vulnerability, Expectation of Receiving an Evacuation Notice from Officials, and Evacuation Intentions in a 155 MPH Category 4 (nearly 5) Hurricane **(2005-2006 Survey Responses)**

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Inland of C
Flood in Cat 4-5	68	58	26
Unsafe in Cat 4-5	91	88	79
Expect Evac Notice in Cat 4-5	97	95	84
Would Evac in Cat 4-5	95	93	88
Would Comply in Cat 4-5	-	-	-

Table 8. Evacuation in Charley, Frances, and Jeanne and Type of Evacuation Notice Heard, if any **(2005-2006 Survey Responses)**

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Inland of C
Evacuated in Charley	70	62	33
Heard Must	43	25	15
Heard Should	21	25	10
Heard Neither	36	50	76
Evacuated in Frances	45	29	28
Heard Must	24	13	12
Heard Should	8	10	7
Heard Neither	68	78	81
Evacuated in Jeanne	41	21	28
Heard Must	21	15	8
Heard Should	10	5	6
Heard Neither	70	80	86

Hillsborough County

Table 9. Evacuation in Charley, Frances, and Jeanne, Depending on Type of Evacuation Notice Heard

	Site-Built Homes	Mobile Homes (2005-06)
Evacuated in Charley IF		
Heard Must	70	95
Heard Should	52	41
Heard Neither	9	31
Evacuated in Frances IF		
Heard Must	56	75
Heard Should	19	56
Heard Neither	5	19
Evacuated in Jeanne IF		
Heard Must	63	81
Heard Should	47	36
Heard Neither	3	20

Hillsborough County

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

Site Built Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Public Shelter in Cat 2	5	6	17	15
Public Shelter in Cat 3	5	10	17	16
Public Shelter in Cat 4-5	10	10	14	22
Could Stay w/ Friend/Rel	67	70	69	41
Public Shelter in Charley				
Public Shelter in Frances				
Public Shelter in Jeanne				

Table 11. Type of Refuge Used in Charley, Frances, and Jeanne

	Site-Built Homes	Mobile Homes (2005-06)
Public Shelters		
Charley	2	13
Frances	0	0
Jeanne	5	18
Friends/Relatives		
Charley	69	56
Frances	64	69
Jeanne	58	73
Hotels/Motels		
Charley	23	31
Frances	23	23
Jeanne	26	9
Other		
Charley	7	0
Frances	14	8
Jeanne	11	0

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 (2005-06)

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Inland of C
Public Shelter in Cat 2	14	19	8
Public Shelter in Cat 3	13	15	10
Public Shelter in Cat 4-5	14	23	10
Could Stay w/ Friend/Rel	56	50	86
Public Shelter in Charley	-	-	-
Public Shelter in Frances	-	-	-
Public Shelter in Jeanne	-	-	-

Hillsborough County

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	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Out of County in Cat 2	57	62	59	71
Out of County in Cat 3	66	61	59	69
Out of County in Cat 4-5	71	68	66	71
Out of County in Charley	-	-	-	-
Out of County in Frances	-	-	-	-
Out of County in Jeanne	-	-	-	-

Table 14. Percent of Evacuees in Charley, Frances, and Jeanne Evacuating Out-of-County

Region Total	Site-Built Homes	Mobile Homes
Out of County		
Charley	46	32 (2005-06)
Frances	50	15 (2008)
Jeanne	53	27 (2008)

Table 15. Intention to Evacuate to Out-of-County Destination, Percent of Evacuees in Charley, Frances, and Jeanne Evacuating Out-of-County (2005-06)

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Inland of C
Out of County In Cat 2	38	37	49
Out of County in Cat 3	42	42	51
Out of County in Cat 4-5	47	43	56
Out of County in Charley	-	-	-
Out of County in Frances	-	-	-
Out of County in Jeanne	-	-	-

Table 16. Percent of Vehicles Available to Household Evacuees Intend to Use in Evacuation

Vehicle Use	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge	Avg.
Site Built Homes	69	71	79	78	74
Mobile Homes	83	-	-	-	92

Appendix B-2
Manatee County Working Data Tables

Manatee County

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

Site Built Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Flood in Cat 2	29	16	12	7
Unsafe in Cat 2	40	27	21	20
Expect Evac Notice in Cat 2	65	45	37	40
Would Evac in Cat 2*	-	64	57	58
Would Comply in Cat 2	80	66	80	73

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

Site Built Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Flood in Cat 3	55	34	24	13
Unsafe in Cat 3	66	47	45	49
Expect Evac Notice in Cat 3	80	71	58	61
Would Evac in Cat 3*	-	82	74	63
Would Comply in Cat 3	94	86	84	81

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

Site Built Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Flood in Cat 4-5	72	53	49	28
Unsafe in Cat 4-5	87	78	71	67
Expect Evac Notice in Cat 4-5	95	88	79	83
Would Evac in Cat 4-5*	-	96	83	79
Would Comply in Cat 4-5	95	93	91	88

Table 4. Evacuation in Charley, Frances, and Jeanne and Type of Evacuation Notice Heard, if any

Site Built Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Evacuated in Charley	36	18	14	14
Heard Must	23	4	3	3
Heard Should	28	28	14	4
Heard Neither	49	68	83	93
Evacuated in Frances	12	6	3	7
Heard Must	4	2	3	4
Heard Should	12	6	6	8
Heard Neither	84	92	91	88
Evacuated in Jeanne	7	6	7	7
Heard Must	4	3	1	2
Heard Should	11	6	3	2
Heard Neither	85	91	94	96

Manatee County

Table 5. Perceived Vulnerability, Expectation of Receiving an Evacuation Notice from Officials, and Evacuation Intentions in a 100 MPH Category 2 Hurricane **(2005-2006 Survey Responses)**

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Inland of C
Flood in Cat 2	25	7	10
Unsafe in Cat 2	79	63	59
Expect Evac Notice in Cat 2	94	85	73
Would Evac in Cat 2	96	95	83
Would Comply in Cat 2	-	-	-

Table 6. Perceived Vulnerability, Expectation of Receiving an Evacuation Notice from Officials, and Evacuation Intentions in a 125 MPH Category 3 Hurricane **(2005-2006 Survey Responses)**

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Inland of C
Flood in Cat 3	42	12	30
Unsafe in Cat 3	85	91	72
Expect Evac Notice in Cat 3	96	93	88
Would Evac in Cat 3	94	96	91
Would Comply in Cat 3	-	-	-

Table 7. Perceived Vulnerability, Expectation of Receiving an Evacuation Notice from Officials, and Evacuation Intentions in a 155 MPH Category 4 (nearly 5) Hurricane **(2005-2006 Survey Responses)**

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Inland of C
Flood in Cat 4-5	55	33	36
Unsafe in Cat 4-5	89	86	74
Expect Evac Notice in Cat 4-5	96	94	91
Would Evac in Cat 4-5	98	98	98
Would Comply in Cat 4-5	-	-	-

Table 8. Evacuation in Charley, Frances, and Jeanne and Type of Evacuation Notice Heard, if any **(2005-2006 Survey Responses)**

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Inland of C
Evacuated in Charley	89	82	74
Heard Must	54	54	46
Heard Should	14	15	16
Heard Neither	31	31	38
Evacuated in Frances	47	48	52
Heard Must	11	20	15
Heard Should	19	16	22
Heard Neither	70	64	63
Evacuated in Jeanne	34	40	53
Heard Must	15	17	30
Heard Should	6	11	7
Heard Neither	79	73	63

Manatee County

Table 9. Evacuation in Charley, Frances, and Jeanne, Depending on Type of Evacuation Notice Heard

	Site-Built Homes	Mobile Homes
Evacuated in Charley IF		
Heard Must	67	97
Heard Should	58	61
Heard Neither	9	63
Evacuated in Frances IF		
Heard Must	40	81
Heard Should	25	80
Heard Neither	5	26
Evacuated in Jeanne IF		
Heard Must	50	84
Heard Should	29	75
Heard Neither	5	21

Manatee County

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

Site Built Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Public Shelter in Cat 2	9	16	18	28
Public Shelter in Cat 3	8	22	18	28
Public Shelter in Cat 4-5	5	18	16	28
Could Stay w/ Friend/Rel	50	50	57	30
Public Shelter in Charley	-	-	-	-
Public Shelter in Frances	-	-	-	-
Public Shelter in Jeanne	-	-	-	-

Table 11. Type of Refuge Used in Charley, Frances, and Jeanne

	Site-Built Homes	Mobile Homes (2005-06)
Public Shelters		
Charley	10	11
Frances	13	19
Jeanne	19	18
Friends/Relatives		
Charley	53	57
Frances	53	63
Jeanne	38	63
Hotels/Motels		
Charley	22	22
Frances	7	12
Jeanne	13	9
Other		
Charley	14	10
Frances	27	8
Jeanne	31	10

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 (2005-06)

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Inland of C
Public Shelter in Cat 2	17	26	12
Public Shelter in Cat 3	20	25	12
Public Shelter in Cat 4-5	21	30	12
Public Shelter in Charley	-	-	-
Public Shelter in Frances	-	-	-
Public Shelter in Jeanne	-	-	-

Manatee County

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	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Out of County in Cat 2	64	61	57	56
Out of County in Cat 3	70	60	61	59
Out of County in Cat 4-5	77	68	64	61
Out of County in Charley	-	-	-	-
Out of County in Frances	-	-	-	-
Out of County in Jeanne	-	-	-	-

Table 14. Percent of Evacuees in Charley, Frances, and Jeanne Evacuating Out-of-County

Region Total	Site-Built Homes	Mobile Homes
Out of County		
Charley	56	36 (2006)
Frances	53	36 (2008)
Jeanne	50	47 (2008)

Table 15. Intention to Evacuate to Out-of-County Destination, Percent of Evacuees in Charley, Frances, and Jeanne Evacuating Out-of-County (2005-06)

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Inland of C
Out of County In Cat 2	35	31	25
Out of County in Cat 3	37	34	27
Out of County in Cat 4-5	46	42	31
Out of County in Charley	-	-	-
Out of County in Frances	-	-	-
Out of County in Jeanne	-	-	-

Table 16. Percent of Vehicles Available to Household Evacuees Intend to Use in Evacuation

Vehicle Use	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge	Avg.
Site Built Homes	71	63	76	73	70
Mobile Homes	94	87	75	-	89

Appendix B-3
Pasco County Working Data Tables

Pasco County Working Data from Behavioral Survey

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

Site Built Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Flood in Cat 2	38	13	9	2
Unsafe in Cat 2	38	20	17	5
Expect Evac Notice in Cat 2	65	45	31	33
Would Evac in Cat 2*	-	77	30	57
Would Comply in Cat 2	69	78	72	69

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

Site Built Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Flood in Cat 3	52	31	20	3
Unsafe in Cat 3	69	56	38	25
Expect Evac Notice in Cat 3	86	85	56	48
Would Evac in Cat 3*	-	77	50	71
Would Comply in Cat 3	80	86	83	77

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

Site Built Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Flood in Cat 4-5	73	52	35	17
Unsafe in Cat 4-5	84	73	68	55
Expect Evac Notice in Cat 4-5	92	92	83	81
Would Evac in Cat 4-5*	-	96	87	91
Would Comply in Cat 4-5	92	94	94	84

Table 4. Evacuation in Charley, Frances, and Jeanne and Type of Evacuation Notice Heard, if any

Site Built Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Evacuated in Charley	41	15	7	4
Heard Must	23	6	1	0
Heard Should	27	12	11	6
Heard Neither	50	82	88	94
Evacuated in Frances	12	7	3	4
Heard Must	4	3	0	2
Heard Should	8	10	5	8
Heard Neither	88	87	95	90
Evacuated in Jeanne	9	2	0	2
Heard Must	5	0	0	0
Heard Should	5	7	5	4
Heard Neither	89	93	95	96

Pasco County

Table 5. Perceived Vulnerability, Expectation of Receiving an Evacuation Notice from Officials, and Evacuation Intentions in a 100 MPH Category 2 Hurricane **(2005-2006 Survey Responses)**

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Inland of C
Flood in Cat 2	23	0	5
Unsafe in Cat 2	60	83	60
Expect Evac Notice in Cat 2	81	92	74
Would Evac in Cat 2	87	83	92
Would Comply in Cat 2	-	-	-

Table 6. Perceived Vulnerability, Expectation of Receiving an Evacuation Notice from Officials, and Evacuation Intentions in a 125 MPH Category 3 Hurricane **(2005-2006 Survey Responses)**

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Inland of C
Flood in Cat 3	36	0	6
Unsafe in Cat 3	79	92	83
Expect Evac Notice in Cat 3	89	75	89
Would Evac in Cat 3	96	83	92
Would Comply in Cat 3	-	-	-

Table 7. Perceived Vulnerability, Expectation of Receiving an Evacuation Notice from Officials, and Evacuation Intentions in a 155 MPH Category 4 (nearly 5) Hurricane **(2005-2006 Survey Responses)**

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Inland of C
Flood in Cat 4-5	49	8	12
Unsafe in Cat 4-5	81	92	87
Expect Evac Notice in Cat 4-5	96	92	93
Would Evac in Cat 4-5	96	83	97
Would Comply in Cat 4-5	-	-	-

Table 8. Evacuation in Charley, Frances, and Jeanne and Type of Evacuation Notice Heard, if any **(2005-2006 Survey Responses)**

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Inland of C
Evacuated in Charley	88	67	50
Heard Must	51	33	23
Heard Should	13	22	17
Heard Neither	36	44	60
Evacuated in Frances	62	40	43
Heard Must	28	25	14
Heard Should	21	17	15
Heard Neither	51	58	71
Evacuated in Jeanne	53	43	39
Heard Must	28	8	15
Heard Should	15	25	14
Heard Neither	57	67	72

Pasco County

Table 9. Evacuation in Charley, Frances, and Jeanne, Depending on Type of Evacuation Notice Heard

	Site-Built Homes	Mobile Homes (2005-06)
Evacuated in Charley IF		
Heard Must	87	81
Heard Should	30	54
Heard Neither	7	46
Evacuated in Frances IF		
Heard Must	67	83
Heard Should	35	52
Heard Neither	3	32
Evacuated in Jeanne IF		
Heard Must	100	74
Heard Should	7	57
Heard Neither	2	25

Pasco County

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

Site Built Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Public Shelter in Cat 2	6	17	16	19
Public Shelter in Cat 3	6	18	19	18
Public Shelter in Cat 4-5	8	19	16	18
Could Stay w/ Friend/Rel	29	38	47	46
Public Shelter in Charley	-	-	-	-
Public Shelter in Frances	-	-	-	-
Public Shelter in Jeanne	-	-	-	-

Table 11. Type of Refuge Used in Charley, Frances, and Jeanne

	Site-Built Homes	Mobile Homes (2005-06)
Public Shelters		
Charley	6	9
Frances	6	14
Jeanne	0	19
Friends/Relatives		
Charley	62	47
Frances	65	38
Jeanne	78	46
Hotels/Motels		
Charley	19	17
Frances	12	16
Jeanne	0	15
Other		
Charley	13	27
Frances	18	33
Jeanne	22	20

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 (2005-06)

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Inland of C
Public Shelter in Cat 2	20	0	30
Public Shelter in Cat 3	16	0	30
Public Shelter in Cat 4-5	19	0	29
Could Stay w/ Friend/Rel	11	-	38
Public Shelter in Charley	-	-	-
Public Shelter in Frances	-	-	-
Public Shelter in Jeanne	-	-	-

Pasco County

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	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Out of County in Cat 2	54	58	75	77
Out of County in Cat 3	53	60	74	80
Out of County in Cat 4-5	58	62	77	79
Out of County in Charley	-	-	-	-
Out of County in Frances	-	-	-	-
Out of County in Jeanne	-	-	-	-

Table 14. Percent of Evacuees in Charley, Frances, and Jeanne Evacuating Out-of-County

Region Total	Site-Built Homes	Mobile Homes
Out of County		
Charley	64	39 (2006)
Frances	59	33 (2008)
Jeanne	78	33 (2008)

Table 15. Intention to Evacuate to Out-of-County Destination, Percent of Evacuees in Charley, Frances, and Jeanne Evacuating Out-of-County(2005-06)

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Inland of C
Out of County In Cat 2	41	33	26
Out of County in Cat 3	47	33	30
Out of County in Cat 4-5	45	38	33
Out of County in Charley	-	-	-
Out of County in Frances	-	-	-
Out of County in Jeanne	-	-	-

Table 16. Percent of Vehicles Available to Household Evacuees Intend to Use in Evacuation

Vehicle Use	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge	Avg.
Site Built Homes	80	83	77	67	77
Mobile Homes	94	-	-	79	91

Appendix B-4
Pinellas County Working Data Tables

Pinellas County

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

Site Built Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Flood in Cat 2	38	16	14	7
Unsafe in Cat 2	45	16	18	14
Expect Evac Notice in Cat 2	71	51	33	36
Would Evac in Cat 2*	-	57	28	36
Would Comply in Cat 2	86	83	77	67

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

Site Built Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Flood in Cat 3	66	36	32	21
Unsafe in Cat 3	71	49	45	34
Expect Evac Notice in Cat 3	85	72	59	57
Would Evac in Cat 3*	-	71	48	46
Would Comply in Cat 3	95	86	81	77

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

Site Built Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Flood in Cat 4-5	74	61	49	37
Unsafe in Cat 4-5	83	71	64	62
Expect Evac Notice in Cat 4-5	92	88	81	74
Would Evac in Cat 4-5*	-	89	88	57
Would Comply in Cat 4-5	96	93	91	86

Table 4. Evacuation in Charley, Frances, and Jeanne and Type of Evacuation Notice Heard, if any

Site Built Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Evacuated in Charley	53	25	14	7
Heard Must	26	10	3	0
Heard Should	25	11	7	8
Heard Neither	49	78	90	92
Evacuated in Frances	19	8	6	6
Heard Must	7	2	0	0
Heard Should	19	5	6	1
Heard Neither	74	94	94	99
Evacuated in Jeanne	10	7	3	4
Heard Must	1	2	0	0
Heard Should	14	4	6	4
Heard Neither	84	94	94	96

Pinellas County

Table 5. Perceived Vulnerability, Expectation of Receiving an Evacuation Notice from Officials, and Evacuation Intentions in a 100 MPH Category 2 Hurricane (2005-2006 Survey Responses)

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Inland of C
Flood in Cat 2	25	12	5
Unsafe in Cat 2	63	78	69
Expect Evac Notice in Cat 2	88	85	93
Would Evac in Cat 2	87	83	86
Would Comply in Cat 2	-	-	-

Table 6. Perceived Vulnerability, Expectation of Receiving an Evacuation Notice from Officials, and Evacuation Intentions in a 125 MPH Category 3 Hurricane (2005-2006 Survey Responses)

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Inland of C
Flood in Cat 3	43	25	21
Unsafe in Cat 3	83	92	93
Expect Evac Notice in Cat 3	98	96	97
Would Evac in Cat 3	88	97	97
Would Comply in Cat 3	-	-	-

Table 7. Perceived Vulnerability, Expectation of Receiving an Evacuation Notice from Officials, and Evacuation Intentions in a 155 MPH Category 4 (nearly 5) Hurricane (2005-2006 Survey Responses)

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Inland of C
Flood in Cat 4-5	60	40	39
Unsafe in Cat 4-5	93	93	93
Expect Evac Notice in Cat 4-5	95	97	99
Would Evac in Cat 4-5	93	98	99
Would Comply in Cat 4-5	-	-	-

Table 8. Evacuation in Charley, Frances, and Jeanne and Type of Evacuation Notice Heard, if any (2005-2006 Survey Responses)

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Inland of C
Evacuated in Charley	78	71	62
Heard Must	61	45	28
Heard Should	18	8	15
Heard Neither	21	48	57
Evacuated in Frances	57	58	44
Heard Must	54	33	8
Heard Should	15	11	25
Heard Neither	32	56	67
Evacuated in Jeanne	59	48	44
Heard Must	55	30	15
Heard Should	12	10	14
Heard Neither	33	60	72

Pinellas County

Table 9. Evacuation in Charley, Frances, and Jeanne, Depending on Type of Evacuation Notice Heard

	Site-Built Homes	Mobile Homes (2005-06)
Evacuated in Charley IF		
Heard Must	86	81
Heard Should	49	70
Heard Neither	13	48
Evacuated in Frances IF		
Heard Must	67	83
Heard Should	46	52
Heard Neither	5	32
Evacuated in Jeanne IF		
Heard Must	50	74
Heard Should	30	57
Heard Neither	4	25

Pinellas County

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

Site Built Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Public Shelter in Cat 2	9	11	14	20
Public Shelter in Cat 3	10	11	13	21
Public Shelter in Cat 4-5	9	13	15	19
Could Stay w/ Friend/Rel	78	33	60	36
Public Shelter in Charley	-	-	-	-
Public Shelter in Frances	-	-	-	-
Public Shelter in Jeanne	-	-	-	-

Table 11. Type of Refuge Used in Charley, Frances, and Jeanne

	Site-Built Homes	Mobile Homes (2005-06)
Public Shelters		
Charley	4	9
Frances	0	9
Jeanne	-	10
Friends/Relatives		
Charley	68	62
Frances	74	66
Jeanne	-	65
Hotels/Motels		
Charley	18	20
Frances	7	11
Jeanne	-	12
Other		
Charley	10	9
Frances	19	14
Jeanne	-	14

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 (2005-06)

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Inland of C
Public Shelter in Cat 2	14	14	13
Public Shelter in Cat 3	13	12	11
Public Shelter in Cat 4-5	14	8	13
Could Stay w/ Friend/Rel	17	36	13
Public Shelter in Charley	-	-	-
Public Shelter in Frances	-	-	-
Public Shelter in Jeanne	-	-	-

Pinellas County

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	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Out of County in Cat 2	58	53	68	68
Out of County in Cat 3	58	56	69	68
Out of County in Cat 4-5	63	60	72	72
Out of County in Charley	-	-	-	-
Out of County in Frances	-	-	-	-
Out of County in Jeanne	-	-	-	-

Table 14. Percent of Evacuees in Charley, Frances, and Jeanne Evacuating Out-of-County

Region Total	Site-Built Homes	Mobile Homes
Out of County		
Charley	61	33 (2006)
Frances	52	32 (2008)
Jeanne	65	33 (2008)

Table 15. Intention to Evacuate to Out-of-County Destination, Percent of Evacuees in Charley, Frances, and Jeanne Evacuating Out-of-County (2005-06)

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Inland of C
Out of County In Cat 2	34	26	33
Out of County in Cat 3	39	35	38
Out of County in Cat 4-5	47	42	46
Out of County in Charley	-	-	-
Out of County in Frances	-	-	-
Out of County in Jeanne	-	-	-

Table 16. Percent of Vehicles Available to Household Evacuees Intend to Use in Evacuation

Vehicle Use	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge	Avg.
Site Built Homes	81	75	77	78	78
Mobile Homes	-	78	92	-	91

Appendix B-5
Tampa Bay Regional Working Data Tables

Tampa Bay Region

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

Site Built Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Flood in Cat 2	37	17	14	7
Unsafe in Cat 2	40	22	22	14
Expect Evac Notice in Cat 2	68	46	38	35
Would Evac in Cat 2*	-	65	44	46
Would Comply in Cat 2	80	76	77	69

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

Site Built Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Flood in Cat 3	57	37	26	15
Unsafe in Cat 3	68	54	45	38
Expect Evac Notice in Cat 3	84	76	59	54
Would Evac in Cat 3*	-	75	63	57
Would Comply in Cat 3	90	87	85	80

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

Site Built Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Flood in Cat 4-5	73	58	45	30
Unsafe in Cat 4-5	85	76	70	63
Expect Evac Notice in Cat 4-5	93	90	85	77
Would Evac in Cat 4-5*	-	94	88	76
Would Comply in Cat 4-5	94	93	93	88

Table 4. Evacuation in Charley, Frances, and Jeanne and Type of Evacuation Notice Heard, if any

Site Built Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Evacuated in Charley	44	21	12	7
Heard Must	24	8	4	1
Heard Should	25	14	10	1
Heard Neither	51	78	86	93
Evacuated in Frances	15	8	4	5
Heard Must	6	2	1	2
Heard Should	13	7	7	3
Heard Neither	82	92	92	95
Evacuated in Jeanne	10	7	3	4
Heard Must	5	1	1	1
Heard Should	11	6	6	3
Heard Neither	85	93	94	96

Tampa Bay Region

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

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Flood in Cat 2	51	21	7	13
Unsafe in Cat 2	80	63	51	57
Expect Evac Notice in Cat 2	85	81	78	81
Would Evac in Cat 2*	-	65	44	46
Would Comply in Cat 2	95	81	83	85

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

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Flood in Cat 3	69	47	32	29
Unsafe in Cat 3	90	74	81	75
Expect Evac Notice in Cat 3	87	93	93	94
Would Evac in Cat 3*	-	94	100	89
Would Comply in Cat 3	97	89	90	87

Table 7. Perceived Vulnerability, Expectation of Receiving an Evacuation Notice from Officials, and Evacuation Intentions in a 155 MPH Category 4 (nearly 5) Hurricane

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Flood in Cat 4-5	74	68	37	47
Unsafe in Cat 4-5	85	87	88	84
Expect Evac Notice in Cat 4-5	95	98	98	96
Would Evac in Cat 4-5*	-	100	100	94
Would Comply in Cat 4-5	97	98	95	94

Table 8. Evacuation in Charley, Frances, and Jeanne and Type of Evacuation Notice Heard, if any

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Evacuated in Charley	74	65	69	58
Heard Must	35	40	31	34
Heard Should	35	25	28	23
Heard Neither	30	35	41	43
Evacuated in Frances	50	47	46	51
Heard Must	27	36	23	36
Heard Should	23	17	31	13
Heard Neither	50	47	46	51
Evacuated in Jeanne	33	46	39	45
Heard Must	24	34	19	34
Heard Should	24	14	19	15
Heard Neither	52	51	62	51

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Table 9. Evacuation in Charley, Frances, and Jeanne, Depending on Type of Evacuation Notice Heard

	Site-Built Homes					Mobile Homes
	A	BC	DE	NS	All	
Evacuated in Charley IF						
Heard Must	82	67	70	67	77	88
Heard Should	60	44	35	13	46	78
Heard Neither	18	12	7	5	10	34
Evacuated in Frances IF						
Heard Must			58			90
Heard Should			32			60
Heard Neither			4			18
Evacuated in Jeanne IF						
Heard Must			65			87
Heard Should			29			41
Heard Neither			3			17

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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

Site Built Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Public Shelter in Cat 2	6	10	13	16
Public Shelter in Cat 3	6	13	13	16
Public Shelter in Cat 4-5	6	13	12	17
Could Stay w/ Friend/Rel	58	47	58	37
Public Shelter in Charley	3	4	11	19
Public Shelter in Frances	3	0	17	0
Public Shelter in Jeanne	4	11	11	0

Table 11. Type of Refuge Used in Charley, Frances, and Jeanne

	Site-Built Homes	Mobile Homes
Public Shelters		
Charley	5	11
Frances	4	10
Jeanne	7	17
Friends/Relatives		
Charley	64	54
Frances	65	66
Jeanne	59	63
Hotels/Motels		
Charley	21	21
Frances	12	11
Jeanne	15	7
Other		
Charley	11	13
Frances	19	13
Jeanne	20	13

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	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Public Shelter in Cat 2	15	15	20	16
Public Shelter in Cat 3	15	15	22	16
Public Shelter in Cat 4-5	18	17	24	16
Could Stay w/ Friend/Rel	43	30	20	42
Public Shelter in Charley	12	8	10	15
Public Shelter in Frances	9	6	8	13
Public Shelter in Jeanne	29	13	20	14

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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	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Out of County in Cat 2	56	58	65	68
Out of County in Cat 3	61	59	66	69
Out of County in Cat 4-5	67	65	70	70
Out of County in Charley	50	63	66	60
Out of County in Frances	46	70	50	50
Out of County in Jeanne	58	67	44	63

Table 14. Percent of Evacuees in Charley, Frances, and Jeanne Evacuating Out-of-County

Region Total	Site-Built Homes	Mobile Homes
Out of County		
Charley	56	37
Frances	53	32
Jeanne	59	35

Table 15. Intention to Evacuate to Out-of-County Destination, Percent of Evacuees in Charley, Frances, and Jeanne Evacuating Out-of-County

Mobile Homes	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Out of County In Cat 2	23	39	36	37
Out of County in Cat 3	23	38	36	38
Out of County in Cat 4-5	28	37	47	41
Out of County in Charley	29	46	45	26
Out of County in Frances	18	59	8	30
Out of County in Jeanne	29	50	30	29

Table 16. Percent of Vehicles Available to Household Evacuees Intend to Use in Evacuation

Vehicle Use	Cat 1 (A)	Cat 2-3 (B/C)	Cat 4-5 (D/E)	Non-surge
Site Built Homes	76	77	77	75
Mobile Homes	85	86	95	86