
TRANSIENT SURVEY

Introduction

The City of Key West Planning Department is working on the first major update to the City's Comprehensive Plan since 1993. An important component of the Plan update is the review of hurricane evacuation modeling, particularly as it pertains to transient development and redevelopment. Because establishment of new residential units, including transient units, is in part limited by hurricane evacuation modeling results, it is imperative that the Department have recent data to inform and support strategies for modeling planned over the coming years. The Department is also reviewing ordinances related transient transfer and redevelopment to ensure consistency with information on hurricane evacuation issues as new data and analysis is provided.

The purpose of this survey effort is to ensure that data is available to determine hurricane evacuation impacts generating from transient units in the City. Unlike other areas in Monroe County, the City has a high density community fabric which supports visitors who do not arrive by car. The City also has a passenger ferry service and airport. Therefore it is possible that visitors arriving in Key West arrive by modes other than vehicular transport. As a result, overnight visitors in the City of Key West may have different hurricane evacuation patterns than other areas included in the overall hurricane evacuation modeling. Therefore, the survey seeks to determine the arrival mode of transient guests as well as party size by unit. The survey also seeks to correlate this information with the number of bedrooms in each unit. This survey does not attempt to address whether transient visitors engage in early evacuation.

This survey and methodology were crafted with significant input and guidance from knowledgeable experts. Mr. David Oatway, a community volunteer and expert on survey implementation lead the effort. Jessica Bennett, Director of Market Research, Monroe County Tourism Development Council provided important information on visitor trends and sampling sizes. Ian Whitney, President of the Innkeepers Association, and Jodi Wienhofer, President of the Lodging Association, both provided input on operation of transient units in Key West and survey implementation.

Methodology

All surveying will take place during hurricane season, which is between June 1 through December 1, 2009. During Hurricane Season last year, Key West had an estimated 500,000 visitors. A projection of results to all overnight visitors during hurricane season at a 95% confidence level would require the following sample size:

- Confidence Intervals: $\pm 5 = 384$ surveys; $\pm 4 = 600$ surveys; $\pm 3 = 1,065$ surveys

During August and September of 2008, Key West had an estimated 135,000 visitors. A projection of results just to overnight visitors during these months at a 95% confidence level would have the following sample size requirements:

- Confidence Intervals: $\pm 5 = 383$ surveys $\pm 4 = 598$ surveys; $\pm 3 = 1,059$

The confidence levels for both periods are virtually the same. This is because once the population reaches a certain size there is little value in collecting additional surveys. For the purposes of this effort, we expect to address the entire visitor population during hurricane season at ± 5 at a 95% confidence level. Therefore, 384 completed surveys are needed.

According to City records, 872 licensed transient businesses with a total of 6,066 units are in the City (see Table 1, Transient Units Sampling Plan). Although the City's Licensing Division uses a variety of different categories to differentiate between transient unit types, they basically fall into three major categories:

- Motels and Hotels (including timeshare units);
- Guesthouses and Bed & Breakfasts (some of which include owner's or manager's residential units); and,
- Residential Short Term (which include single family homes, duplexes and condominium units which due to their licensing can be rented for periods less than 30-days).

The majority of units (85%) in the City are in the motel/hotel/timeshare and guesthouse/bed and breakfast categories where multiple units are managed by professional entities. Remaining units are residential structures with transient licenses which are typically individually owned, and because they may not fall under a common management umbrella, are more difficult to survey. Therefore,

survey efforts focused on the classifications with the most units which are also more typical and easier to access with survey instruments.

**TABLE 1
TRANSIENT UNITS
SAMPLING PLAN**

Classification	Licenses	Units	Percent of Total Units	Distribution Number of Establishments (Number of Surveys)
Motel/Hotel/ Timeshare	62	3,943	65%	28 (510)
Guesthouse/Bed & Breakfast ¹	139	1,226	20%	61 (610)
Residential Short Term ²	671	897	15%	6 (60)
Totals	872	6,066	100%	1180

Source: Classification, Licenses, Units: City of Key West Building Department, Licensing Division, March 9, 2009

¹ *Includes licensing categories "guesthouse, bed and breakfast and residential combination (guesthouse with manager unit)"*

² *Includes licensing categories "residential and 50% short term rental (Truman Annex units)"; these are typically individually owned units and include houses and condominiums*

Surveys of this nature typically generate a return rate of 20% if distributed to the respondents directly. The methodology we plan to use will distribute the surveys to the businesses, so if one client declines to complete the questionnaire, the next one may. There is no reason to expect systematic bias in the willingness of guests to complete the survey so more complex random selection is not required. The initial distribution of 50% more questionnaires than needed to fulfill the sampling frame can be followed by a second effort if returns do not meet minimum requirements. The methodology allows collection of additional questionnaires if the initial effort does not reach the required response rate.

A copy of the transient survey is included as **Attachment A, Visitor Survey**. Transient surveys will be distributed and collected personally by staff and department volunteers. Surveys will cover a specific one week period. The effort will rely upon front desk personnel for survey distribution and collection.

The surveys will be anonymous by respondent. The business types will be identifiable to allow analysis of the sampling results and to allow population projections from the sampled unit types.

Other Relevant Information

According to data distributed by the Key West Chamber of Commerce, the City of Key West had 1,112,978 overnight visitors in 2008. Preliminary results from a 2008 NOAA (National Oceanic and Atmospheric Administration) study on Tourism in the Florida Keys found approximately 75% of deplanements at Key West airport are overnight visitors. This study replicated a 1995-1996 study conducted by NOAA. During the '95-96 study, it was also found that approximately 75% of deplanements at Key West airport were overnight visitors. This would suggest the proportion of seats occupied by visitors versus residents on airplanes arriving in Key West remains fairly constant over time. Therefore, reductions or increases in flight capacity into Key West should proportionally affect the number of overnight visitors utilizing this method of arrival to the island. With 2009 year-to-date lodging occupancy in Key West nearly flat from last year (-0.2% YTD Jan-May), and deplanements down at Key West airport during the same time period (-5% through May), one would expect increased arrival via other methods, by overnight visitors this year, as they substitute other transportation options. Therefore, in projecting long term transportation patterns deplanements are an important factor.

Conduct of Survey

A letter from the City of Key West, along with cover letters supporting the survey efforts from both the Lodging Association and the Innkeepers Association were transmitted to prospective survey recipients on November 5, 2009 (**see Attachment B, Survey Transmittal Letters**). A total of 1,180 surveys were distributed between November 13 and November 19, 2009, to transient lodgings. Distribution was conducted according to the sampling plan identified in Table 1. In several cases surveys were undeliverable due to changes in the targeted business establishments. In each case surveys were then sent to a similarly classified establishment to maintain distribution sampling goals. A total of 686 surveys were returned for an overall rate of return of 58%; this rate is well in excess of the necessary amount to maintain a ninety five percent confidence level. Table 2 shows the survey response and weighting factors by overall transient units (the "population") in Key West.

TABLE 2
TRANSIENT SURVEY
RESPONSE AND POPULATION WEIGHTING FACTORS

Classification	Units	Percent of Total Units	Surveys Distributed	Number Returned	Percent Returned	Response Weight ¹
Motel/Hotel/ Timeshare	3,943	65%	510	239	47 %	16
Guesthouse/Bed & Breakfast ¹	1,226	20%	610	417	68 %	3
Residential Short Term ²	897	15%	60	30	50 %	30
Totals	6,066	100%	1180	686	58 %	N/A

Source: City of Key West, 2010

¹ Response weight calculated by number of units divided by the number of returned surveys

Processing of Survey Results

Surveys were data entered. Twenty four cases entered more than one response in the Mode of Arrival in Key West for the party. Nineteen cases had arrivals by both air and car, three parties arrived by car and ferry, one party arrived by air and motorcycle, and one party arrived by air, car and ferry. When more than one mode of arrive was indicated, the other data points were distributed evenly among the modes of arrival. For example, if the survey indicated persons in the party arrived by air and car, and there were four people in the party, the original case was changed to indicate two people arrived by air, and a new case was created showing two people arriving by car. The number of bedrooms was likewise distributed between the modes of arrival.

A population weighting factor was created for each type of lodging by dividing the number of units in each lodging type by the number of surveys returned from that lodging type. The response weight inflation factor was then applied to all values of cases by lodging type. One case of a party in a hotel, motel or time share represented 18 parties using that accommodation type. Each guest house, inn or bed and breakfast case represented two guest parties, and each short term rental case represented seven rental parties. This multiplied the numbers to represent the population so useful comparison could be made. This approach effectively stratified the sample to allow examination of each type of lodging.

Survey Results

The survey results found that most (69%) guests for all classifications of transient units arrived by car, 18% arrived by air, 8% arrived by ferry, 3% arrived by other (typically motorcycles), and .24% by bus. Table 3 shows mode of transportation by classification type. Information from the Tourism Development Council the 2008 hurricane season indicates that 81% of all visitors to the Florida Keys arrived by car (for all classification types), with visitors staying at hotels and motels more likely to arrive by car (84%) than visitors staying at bed and breakfasts (71%). The City of Key West survey results are consistent with TDC figures in that more hotel/motel visitor arrive by car than visitors at guesthouses, but overall car related arrivals are lower than TDC figures for 2008. Importantly, TDC information is not statistically significant, so the result differences could be attributed to the much greater sampling size included in the City survey.

**TABLE 3
TRANSIENT SURVEY
ARRIVAL MODE BY CLASSIFICATION TYPE**

Classification	Percent Arrived by Air	Percent Arrived by Bus	Percent Arrived by Car	Percent Arrived by Ferry	Percent Arrived by Other Means
Motel/Hotel/ Timeshare	25%	1%	66%	5%	3%
Guesthouse/Bed & Breakfast	.28%	.5%	60%	10%	2%
Residential Short Term	16%	0%	81%	3%	0%
Total by All Classification Types	18%	.24%	69%	8%	3%

Source: City of Key West, 2010

There were two parties with 10 people; however, the party size per unit by classification type was fairly consistent, with parties having a mean of 2.3 people and median of 3.0. TDC party size information for the 2008 hurricane season ranged between 2.79 (hotels) and 2.71 (bed and breakfast) in size. The City's information shows mean of 2.4 for hotel guests, and 2.15 for Bed and Breakfasts. Table 4 shows number of people per party by classification type. Table 4 also shows average cars per travel party by unit classification type.

**TABLE 4
TRANSIENT SURVEY
NUMBER OF CARS PER TRAVEL PARTY/UNIT**

Classification	Average Travel Party Size	Average number of cars per Travel Party
Motel/Hotel/ Timeshare	2.396	.98
Guesthouse/Bed & Breakfast	2.15	.77
Residential Short Term	3.65	1.34
Total by All Classification Types	2.31	.87

Source: City of Key West, 2010

26% of units surveyed had more than one bedroom. Of these, 8% had three or more bedrooms. Table 5 shows bedroom distribution by classification type as well as the number of people per bedroom.

**TABLE 5
TRANSIENT SURVEY
NUMBER OF BEDROOMS AND PEOPLE PER BEDROOM**

Classification	Average Number of Bedrooms	Average Number of People per Bedroom	Average Number of People per Unit
Motel/Hotel/ Timeshare	1.33	1.79	2.4
Guesthouse/Bed & Breakfast	1.28	1.68	2.15
Residential Short Term	1.91	1.91	3.66
Total by All Classification Types	1.32	1.74	2.31

Source: City of Key West, 2010

The number of cars per unit by classification type, as well as the average number of cars per unit, is summarized in Table 6.

**TABLE 6
TRANSIENT SURVEY
CARS PER UNIT**

Classification	Average Number of Cars per Unit	Average number of cars per bedroom
Motel/Hotel/ Timeshare	.98	.79
Guesthouse/Bed & Breakfast	.77	.68
Residential Short Term	1.34	.80
Total by All Classification Types	.87	.72

Source: City of Key West, 2010

The findings of the survey suggest that the differences between cars per unit vs. cars per bedroom is quite small, most likely because most units are under two bedrooms.

Attachment A
Visitor Survey



CITY OF KEY WEST Visitor Survey

The City of Key West is striving to understand how our guests arrive to the City and their transportation needs while here. Please help our long range planning by filling out this simple, confidential, and anonymous questionnaire.

1. How did you and the other members of your travel party who are staying with you, arrive in Key West? Please select all that apply. *Include only those people who are staying with you in the same lodging unit; i.e. your same hotel/motel/B&B room/suite or your same vacation rental condo/townhouse/home. If you flew into another city and then drove to Key West, Please enter "Car." We are looking for the final transportation method that brought you into the City only.*

Airplane: Car: Ferry: Bus: Other:

2. If you answered "car" above, how many cars in total did you and the people staying in your unit with you drive into Key West??

1: 2: 3+: Did not arrive via car(s):

3. How many total people, including yourself, are staying in your lodging unit? *Please include both children and adults that are staying in the same unit with you. If someone you are traveling with is staying in another unit or other hotel, you do not need to include them below.*

1: 2: 3: 4: 5:
6: 7: 8: 9: 10+:

4. How many total bedrooms are in the lodging unit you are staying in? *For a traditional hotel room, select "0-1" bedrooms.*

0 -1: 2: 3+:

For additional information contact Amy Kimball-Murley, Planning Director, 305 809-3728 _____

Attachment B Survey
Transmittal Letters



THE CITY OF KEY WEST

Post Office Box 1409 Key West, FL 33041-1409 (305) 809-3700

November 5, 2009

VIA ELECTRONIC MAIL

The Lodging Association of the Florida Keys and Key West
3152 Northside Drive, Suite 101
Key West, Florida 33040

Key West Innkeepers Association
316 A Simonton Street
Key West, Florida 33040

Monroe County Tourist Development Council
1201 White Street, Suite 102
Key West, FL 33040

**RE: City of Key West Planning Department
Visitor Survey**

Dear Lodging Professionals:

The City of Key West is in the process of updating its long range plan, known as the Comprehensive Plan, for the first time since 1993. As part of this work, the City expects to take a strong role in shaping hurricane evacuation modeling for Key West, particularly as it relates to growth management constraints in our Building Permit Allocation System (also known as "Rate of Growth Ordinance" or ROGO). We believe that the Florida Department of Community Affairs does not have accurate information about Key West's growth characteristics, and we need your help to obtain data to explain and verify our unique conditions.

We believe it is especially important to obtain data specific to Key West lodging uses in order to inform and shape future hurricane evacuation modeling. In order to obtain needed information, the city has prepared a simple, four question survey for distribution to hotel guests. This survey seeks to determine how overnight guests arrive in Key West, how many cars (if any) are associated with each party occupying a unit, and unit bedroom number. This information will be used to shape assumptions used in modeling, update our Comprehensive Plan, and ensure that transient redevelopment is accurately addressed in our ordinances. The information we are trying to collect will provide statistical data that will allow your Planning Department to advocate on your behalf if the data shows that the current models are not accurate.

The survey methodology is simple. We hope to distribute copies of this survey to each transient business in Key West during the week of November 13 to November 19, 2009. We hope that front desk personnel at your establishment will distribute a survey to each visiting party at check-in. We will provide envelopes or boxes for collection of surveys once they are filled out by guests. We will collect the surveys at the end of the week. In addition, trained volunteers will visit five representative establishments to conduct one-on-one surveying. We will contact each of the five establishments in advance to obtain your permission and

November 5, 2209
Page 2

shape our work to minimize impacts on guests. We will provide a small free gift for each guest who fills out our survey.

We know how busy each of you is, especially during these difficult economic times, and understand that this survey will add to your responsibilities during this week. But we cannot obtain this information without your help.

A copy of the proposed survey is attached.

Please feel free to contact me at (305) 809-3728 with any questions or comments.

Sincerely,

A handwritten signature in black ink, appearing to read 'Amy Kimball-Murley', written in a cursive style.

Amy Kimball-Murley, AICP
Planning Director

Attachment: City of Key West Visitor Survey

Xc: Jim Scholl, City Manager
Mark Finigan, Assistant City Manager

K:\Hurricane Evacuation Modeling\Transient Survey\akm-lodging letter.DOC