**TITLE OF INFORMATION COLLECTION:** Coastal Bend Hurricane Evacuation Study – Behavioral Survey

**TITLE AND OMB CONTROL NUMBER OF APPROVED GENERIC COLLECTION:** Hurricane Evacuation Behavioral Survey, 0710-0016

**PURPOSE:** The Texas A&M Transportation Institute (TTI) and Texas A&M Hazard Reduction & Recovery Center (HRRC), Federal Emergency Management Agency (FEMA), and U.S. Army Corps of Engineers (USACE) are updating the data gathered in the 2001 Texas Coastal survey and extend the research to reported behaviors from residents' decisions and experiences associated with Hurricane Harvey. The University of Washington is participating in the survey with grant funding from the National Science Foundation. Most immediately, the data will be used by the Coastal Bend HES Study Team (The Texas A&M University contractors, FEMA, Corps and local stakeholders) in the vulnerability analysis and transportation analysis tasks of the CBHES. Actual observed behavioral responses regarding evacuation messaging and communication will lead to improved vulnerability assessment as compared to assessment without such survey data. With regard to the transportation analysis, the survey data will be used in the development of evacuation scenario assumptions so that scenarios reflect actual observed evacuation behavior. In this way, the results of the transportation analysis will have increased usefulness and credibility for the Study Team as compared to results based on non-observed behavior. In addition to their immediate application for this study, the data will be used to update information about hurricane evacuation behavior on the Central Texas coast that is nearly two decades old and are part of a limited number of studies on reported population behaviors for actual, not hypothetical, storm events. Thus, the data and reported results can thus be used by evacuation planners, emergency managers, and other emergency and disaster practitioner researchers beyond the immediate application of this study. The survey is being funded by FEMA through the Hurricane Evacuation Studies Floodplain Management Services National Program in the Baltimore District. The Corps and FEMA partner in the HES program. The delegation of duties in this partnership is largely based on capabilities with USACE having superior contracting capabilities. As a result, a decision was made between the Corps and FEMA that the evacuation surveys would best be handled by the Corps.

The information that is to be gathered includes:

- 1) Household members' perceptions of cues from the media and weather conditions about the hurricane threat;
- 2) Household decisions about whether to evacuate, and the timing of evacuation decisions and preparation tasks;
- 3) Evacuation logistics, including groups, vehicles, routes, locations, and household impacts associated with the evacuation; and
- 4) Household residence types, locations; and demographic information

**DESCRIPTION OF RESPONDENTS**: The survey covers eight counties in the Coastal Bend area of Texas, and the unit of analysis is households. There is a total of 222,826 households in

the eight-county area, using 2012-2016 American Community Survey data. The sampling strategy is to survey a random sample of the residents from the Coastal Bend area of the State of Texas. The response universe includes a total of 2,000 responses:

- a) 425 responses for Nueces County
- b) 225 responses each for Aransas, Calhoun, Jackson, Matagorda, Refugio, San Patricio, and Victoria Counties

### HOW INFORMATION WILL BE COLLECTED:

<u>Administration.</u> Marketing Systems Group maintains listings of residence locations and contact information for Texas households including for the study area. From this population, Marketing Systems Group will sample randomly according to selected geographic and other characteristic criteria. In this study's case, the only criterion used is the County in which the household is located. The survey will be distributed by mail and collected by mail and online using an adaptation of Dillman's Tailored Design Method. In some locations where there are higher percentages of Spanish speakers, the mailouts (including the invitation and study information letter, survey forms, and reminder postcards) will include versions in both English and Spanish, and respondents can elect to use either version. Respondents will also have the option to complete the survey online, rather than on paper form, via Qualitrics (https://www.qualtrics.com/government/), a survey platform that is compliant with the Federal

Information Security Management Act (FISMA).

<u>Expected response rate and level of confidence.</u> The sampling plan is designed to result in a response of 425 returned household surveys in Nueces County yielding an estimated 4.0% sample error at 95% confidence Countywide, and a response of 225 returned household surveys each for Aransas, Calhoun, Jackson, Matagorda, Refugio, San Patricio, and Victoria Counties yielding an estimated 5.5% sample error at 95% confidence Countywide. To the degree that counties may be combined due to similarities in populations, their behaviors and utilization of the same major roadway networks for evacuation, the sampling error may be reduced for some locations

<u>Non-response bias.</u> The team will review collected data to evaluate whether and how biases may exist for respondents/non-respondents for key population parameters. This will allow project team to account for potential non-response bias in the application of behavioral factors that may influence the transportation analyses.

<u>Reporting.</u> Data will be presented in a technical report using text, tables, and charts. Data may be presented through presentations using slides depicting similar content. Data will be aggregated according to appropriate groupings (e.g., by geographic or demographic groupings) and no survey data will be reported for individual household responses.

## **CERTIFICATION:**

A generic information collection covers collections that are voluntary, low-burdened (based on a consideration of total burden, total respondents, or burden per respondent), and uncontroversial. If this information collection falls outside the scope of the approved umbrella collection or is otherwise inconsistent with the terms of the approved umbrella collection, your proposed information collection will be returned for additional information or require that the full process be followed, including the 60-Day and 30-Day public notices and comment.

By entering your name below, you agree to the following.

# I CERTIFY TO THE FOLLOWING:

- 1. The collection is voluntary.
- 2. The collection is low-burden for respondents and low-cost for the Federal Government.
- 3. The collection is non-controversial and does <u>not</u> raise issues of concern to other federal agencies.
- 4. Information gathered will not be used for the purpose of <u>substantially</u> informing <u>influential</u> policy decisions.
- 5. The collection is targeted to the solicitation of opinions from respondents who have experience with the program or may have experience with the program in the future.

Name: Edwin Mason Date: 07/24/2018

#### **BURDEN HOURS**

Category of Respondent:	No. of	Participation Time	Burden
	Respondents:	(minutes)	(hours)
Individuals or Households	2,000	30	1,000
Total	2,000	Average = 30	1,000

**FEDERAL COST:** The estimated cost to the Federal government is \$30,000.

## **ADDITIONAL INFORMATION:**

### **Publication of Results:**

Will the results be published? No

### **Personally Identifiable Information:**

- 1. Is personally identifiable information (PII) collected? [ ] Yes [ X ] No
- 2. If PII is collected, is the information that will be collected included in records that are subject to the Privacy Act of 1974? N/A
- 3. If Applicable, has a System or Records Notice been published? N/A

### **Gifts or Payments:**

Is an incentive (e.g., money or reimbursement of expenses, token of appreciation) provided to participants? [] Yes [X] No

### **Instructions:**

1. Have all applicable instruments, instructions and scripts been submitted with this request? [X]Yes[]No