

REGISTERING FOR RECOVERY:

Exploring the Relationship between Household Demographics and the Decision to Apply for FEMA Individual Assistance

May 2019



Historical Challenges

1

FEMA does **not** collect demographic information at the time of Registration.

2

FEMA has **minimal visibility on non-FEMA Registrants**, nor insight into their motives behind choosing not to Register.



US Census Partnership

Partnering with the US Census helps to minimize that gap by providing **insight** into demographic information for FEMA Registrants and Non-Registrants alike.



Why is understanding FEMA Registration important?



Registration is the
1st experience
a survivor has with FEMA

So, who is registering?

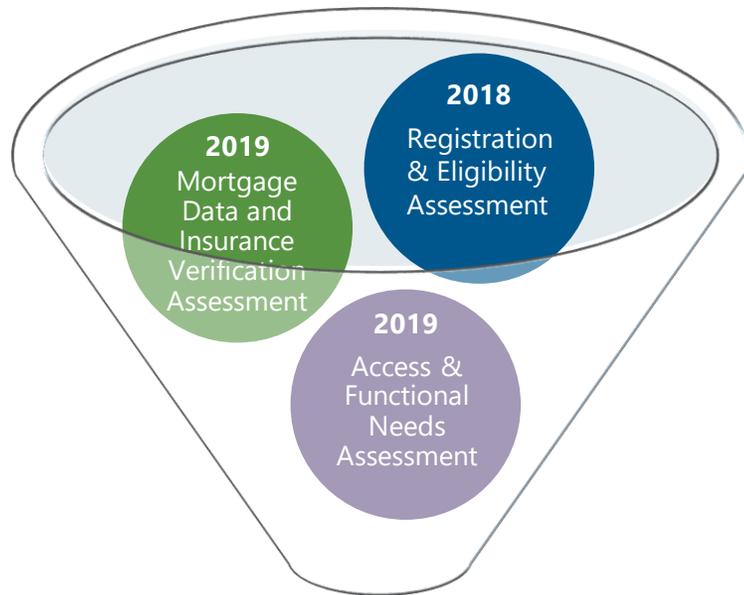


RESEARCH GOALS

Through a better understanding of the ever changing demographics we serve and insight into *who* has been impacted by disaster, FEMA can begin to (re)assess current projections, assistance programs, policies, and outreach messaging.



ANALYSIS



**Topics of Research
identified to assist in
increasing Recovery
operations**

The Census Design Committee was formed by RAD leadership and selected based on knowledge, skills, and analytical capabilities.

A list of hypotheses was created to guide the first analysis, the **Registration and Eligibility Assessment.**

Focused on the relationship between household demographics and the decision to apply for FEMA Individual Assistance by assessing FEMA Registrants vs Non-Registrants per geographical area.

IMPACTED AREA

KEY

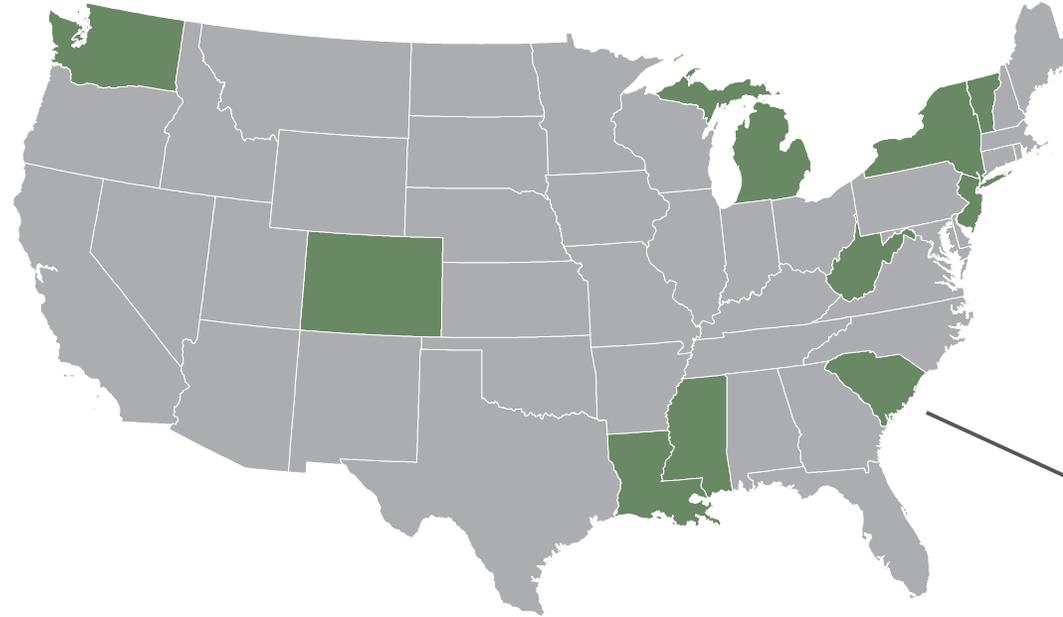
- ACS Participants in a Declared Disaster Area
- ACS Participants in an Undeclared Disaster Area
- FEMA Registrants



Why the American Community Survey (ACS)?

Surveys 3.5 million homes each year with a response rate of 96%

SAMPLE



10% Match
To ACS participants

FEMA Data = 16 declared disasters 2007-2016

Each research hypothesis centered on determining the probability of whether a household would apply for FEMA assistance by comparing **FEMA Registrants** to **ACS participants** who were in the same location at the same time as our survivors.

Populations who are **moderately more likely** to Register for FEMA Assistance, compared to the average survivor

Results



Homeowners with a property value less than \$200K
(10% higher)



Car owners
(7% higher)



Renters residing in units for less than 2 years
(5% higher)



Populations who are **marginally more likely** to Register for FEMA Assistance, compared to the average survivor

Results



Homeowners
residing in their unit
for less than 5 years
(4% higher)



Survivors with rental
payments of <\$1,000
(2% higher)



Homeowners
(4% higher)



Survivors receiving
food stamps
(2% higher)



Homeowners with
household income
less than \$50,000
(3% higher)



Survivors owning units
built before 2004
(2% higher)

Populations who are **unlikely** to Register for FEMA Assistance, compared to the average survivor

Results

moderately ($\geq 5\%$) less likely



Survivors of Hispanic origin
(5% lower)



potentially (1%) less likely



Survivors receiving SSI
(1% lower)



Survivors of color
(1% lower)

Populations whose results were **inconclusive**

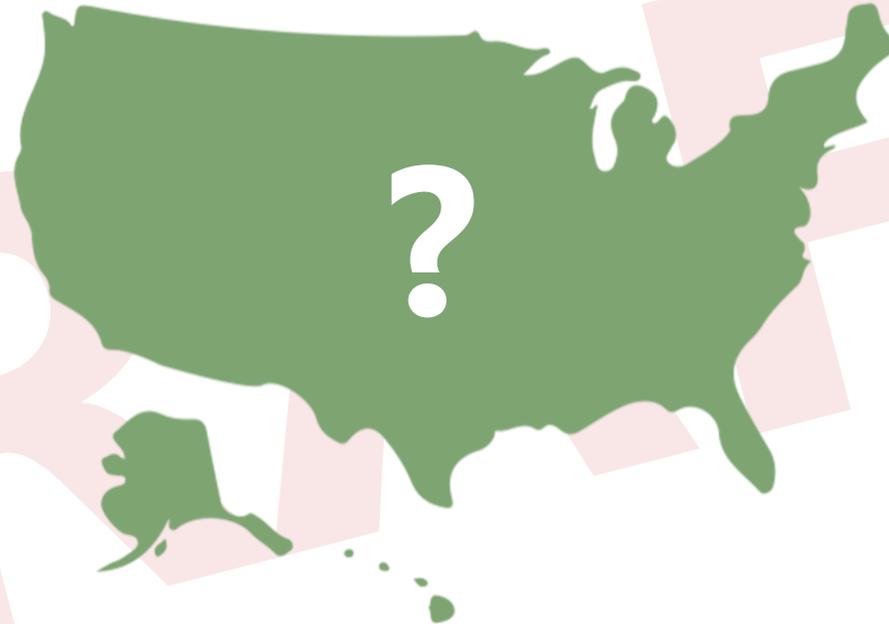
✓ Results



Survivors with an education level of high school or less



Survivors who are married



Households with children living at home



Survivors who are unemployed

Potential Application results to FEMA Recovery operations

Example #1



Increase the accuracy of RAD's predictive models



Does the IA Declared County have a high concentration of ...



Homeowners with a property value less than \$200K ?



Car owners ?



Renters residing in units for less than 2 years ?

Potential Application results to FEMA Recovery operations

Example #2



Better anticipate the need for non-English helpline services and on-site translators at DRCs



Develop more strategic messaging efforts to help reach historically underserved populations



Identify programmatic gaps and reconcile unmet needs of FEMA underserved populations



Does the IA Declared County have a high concentration of ...



Survivors of Hispanic origin ?

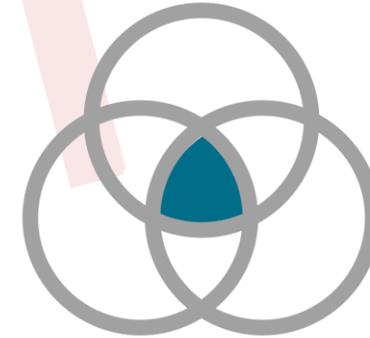


Survivors of color ?



Survivors receiving SSI ?

PHASE 1 SUMMARY



Developed a better familiarity with the **Census Review Board** process and **limitations within the data** populations and sampling methods

Tested and **gained visibility on** previous assumptions and identified opportunities for more **statistically rigorous analyses**

Moving Forward: Phase 2

Incorporate Phase 1 Results and Lessons Learned into Phase 2

Explore partnerships with Individual Assistance (IA)

Mortgage Data and Insurance Verification Assessments

2018

2019

Conducting supplemental analyses to expand the application of the Phase 1 results

Incorporating additional Registration information

Access and Functional Needs (AFN) Assessments



FEMIA