



The Metropolitan Center

Forging Solutions through Research and Training



***2005 HURRICANE SEASON:
LESSONS LEARNED FROM
KATRINA, RITA AND WILMA***

WITH THE ASSISTANCE OF



International Hurricane Research Center
FLORIDA INTERNATIONAL UNIVERSITY

SUMMARY

Hurricane Katrina

- About 78% of people surveyed made some preparations, but most were minor; over 60% did not cover windows.
- 78% would do something different with more resources.
- Nearly half of the Katrina evacuee respondents (48%) indicated that they would **NOT** return to New Orleans and rebuild

Hurricane Rita

- Local officials in counties impacted by Rita (Jefferson and Chambers) indicated they were satisfied that residents heeded the warnings and about 90% of them left the regions where landfall was projected.
- Officials referred to the “Katrina lessons” in terms of coordinating evacuation and re-establishing police presence immediately after the hurricane passed.

Hurricane Wilma

- Hurricane Wilma, despite being a category 2 hurricane, seriously disrupted the lives of residents of Broward, Miami-Dade, and Palm Beach Counties. 58.5% of those polled said that Hurricane Wilma either had a serious or devastating impact on their lives:
- Voters in the three urban Counties rated governmental and utilities’ response to Hurricane Wilma as generally adequate.
- While voters overwhelmingly favor helping individuals and businesses recover from Hurricane Wilma, they also favor investment in mitigation strategies to reduce disruptions in future storms.
- The lesson of Hurricane Wilma is that even minor storms in dense urban areas will cause major economic and social disruptions

METHODOLOGY

Hurricane Katrina

- Survey was conducted from September 12 through September 20, 2005.
- 115 one-on-one interviews/surveys conducted with New Orleans residents in shelters and assistance centers in Houston and Austin, Texas.
- Nationwide telephone poll of registered voters conducted September 11-14, 2005.
- Sample size of 629, representative of the US voter population by partisan ID, ethnicity, gender, and region.

Hurricane Rita

- Interviews conducted from October 2 through October 4, 2005.
- One-on-one interviews with local officials in Chambers and Jefferson Counties, Texas.
- Interviewees included Mark Blanton, Deputy Police Chief, Port Arthur; R.A. “Dick” Nugent, Mayor of the City of Nederland; Guy M. Goodson, Mayor of Beaumont; Nita Kirkham, Chambers County official.

Hurricane Wilma

- Poll was conducted from November 13 through November 20, 2005.
- 612 completed results; 39.1% in Miami-Dade; 33.7% in Broward; 27.3% in Palm Beach.
- 60% Non-Hispanic White; 21% Hispanic; 15.8% African-American.
- 81.7% of the surveys were done in English; 18.3% in Spanish.

2000 CENSUS COMPARISON

	Katrina affected	Rita affected	Wilma affected
Population*	5,926,030	1,114,776	6,873,266
Median Income	Approx. \$33.8K	Approx. \$34,806	Approx. \$37,206
No Vehicle in HH	Approx. 10.4%	Approx. 12%	Approx. 9.2%
HS Grads (25+)	Approx. 70.1%	Approx. 73.8%	Approx. 75.4%
Homeowner	63.2%	63.1%	59.2%
Below Poverty	18.4%	15.7%	13.1%

*Data are shown for counties designated by FEMA as eligible to receive individual and public assistance as of November 4, 2005.

SAMPLE DEMOGRAPHICS

Hurricane Katrina

- 115 completed surveys/interviews, 51% women, 49% men
- 73% African-American, 12% Hispanic
- Household Income: 68% under \$25K, 32% over \$25K

Hurricane Wilma

- 612 completed results; 39.1% in Miami-Dade; 33.7% in Broward; 27.3% in Palm Beach.
- 60% Non-Hispanic White; 21% Hispanic; 15.8% African-American.
- 81.7% of the surveys were done in English; 18.3% in Spanish.

HURRICANE PREPAREDNESS

Katrina

- Most residents had some relevant hurricane experience but past experiences were not so bad. Many felt this storm would be similar to those of years past.
- About 78% made some preparations, but most were minor; over 60% did not cover windows.
- 78% would do something different with more resources.

Wilma

- Respondents reported a high degree of hurricane preparedness; 80.5% described their household preparation for Wilma as adequate.
- 63.4% of the respondents said that they shuttered their homes.
- 63.6% said they had a week's worth of hurricane supplies.
- 22.9% said they owned generators.

EXAMINING PREPAREDNESS

Katrina

- 70% of respondents indicated that they perceived Katrina as somewhat to very dangerous
- TV was the main news source for 91% of people surveyed; 37% felt the information they were receiving was insufficient
- 58% of respondents evacuated after Katrina's landfall

Wilma

- Of all who indicated they were adequately prepared for Wilma, 44.1% said they received free ice, water, or food.
- Interestingly, this means that 76% of the people who received free food and ice described themselves as adequately prepared.
- 56.5% of the respondents said that they will buy more hurricane supplies for the next storm.

ECONOMIC COSTS

Katrina

- 80 % of respondents reported their homes were destroyed or had sustained a great deal of damage
- 82% would leave the area completely if threatened by another hurricane
- Nearly half of the Katrina evacuee respondents (48%) indicated that they would **NOT** return to New Orleans and rebuild

Wilma

- 29.2% of the respondents reported losing over a week's worth of wages. Minorities reported slightly more lost wages.
 - 33% of African-Americans, 32.8% of Hispanics, and only 25% of non-Hispanic whites reported losing over a week's worth of wages.
- 28.9% reported that the storm cost their household more than \$2,000 in expenses. Only 19.5% of Hispanics reported over \$2,000 in expenses significantly less than African-Americans at 33%, and non-Hispanic whites at 31.4%. This is partly explained by the fact that only 25% of the respondents in Miami-Dade reported expenses of over \$2,000 compared to 32% in Broward and Palm Beach.

SOCIAL IMPACTS

Katrina

- From a demographic perspective, the widespread displacement of population has brought about major demographic shifts in New Orleans
- From a social perspective the devastation has been disproportionately felt by the poor and by people of color

Wilma

- The loss of power was ranked as the most disruptive aspect of the storm by 51.3% of voters; with another 29.6% ranking it as the second most disruptive aspect of Wilma.
- Loss of power was ranked as most disruptive uniformly across County and ethnic cross-tabulations.
- 24% of the voters ranked structural damage to their homes as the most disruptive aspect of Wilma.
- Expenses dealing with the storm was mentioned by only 9.3% of voters as the most disruptive aspect of Wilma, but 20.6% ranked it as the second most disruptive aspect.

RATING GOVERNMENT-THE KATRINA RESPONSE

National Phone Survey

- The public is *split evenly* over President Bush's response to the disaster.
- 19% primarily blame President Bush for the slow response; 11.6% blame Mayor Ray Nagin; 12.8% blame FEMA and the Department of Homeland Security
- By a *more than 2 to 1 margin*, voters think the overall governmental response to the disaster was inadequate.
- Only 20% of voters believe the response was slow because most of the victims were African-Americans.
- The public is *split* over whether the federal government's response was slow because it is "overextended" in other areas.

RATING GOVERNMENT-THE KATRINA RESPONSE

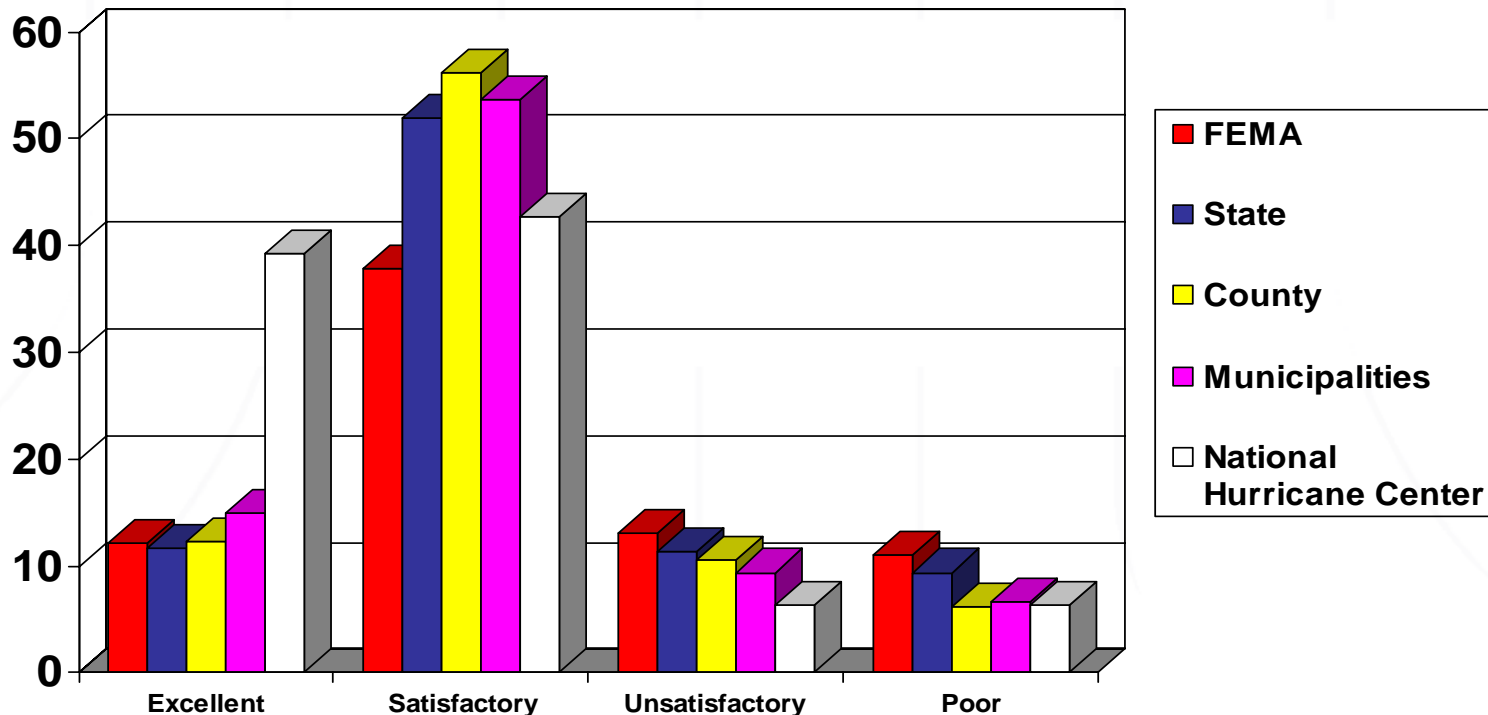
National Phone Survey

- Only 49.3% of the public support *rebuilding* New Orleans at its current location.
- The majority of the public are *unwilling* to pay higher taxes to rebuild New Orleans and the Gulf coast.
- As to the *cause* of the disaster, a large majority believe it was a natural event that could happen anywhere along the coast....
- Nearly ¼ believe it was the result of poor planning...
- While 6.2% saw this as a punishment from God...
- And 7.6% blamed global warming.

RATING GOVERNMENT - THE WILMA RESPONSE

National Phone Survey

- The National Hurricane Center received the highest approval rating; 39.2% excellent and 42.7% satisfactory.
- FEMA received the lowest approval rating with only 12.1% excellent and 37.8% satisfactory.
- State, County, and City governments were all in the same range with the State receiving 63.7% combined excellent and satisfactory, Counties and Cities, a combined 68.5%.



CONCLUSION

- Emergency plans should include consideration of extremely vulnerable populations and their needs
- Hurricanes have a significant impact in densely populated areas, even if they are not major storms.
- Voters also feel that tax payers' money should be used to help businesses (74.8%) and individuals (90.9%) recover from the hurricanes.
- Similarly, 80.2% feel that more tax payer money needs to be used to mitigate the impact of future hurricanes.

The Metropolitan Center Florida International University

The Metropolitan Center at Florida International University is engaged in the study of the demographics, economics and politics of South Florida. The overall goal of the Center, as an applied research institute, is to provide decision-makers with the best possible information to forge solutions to the problems confronting South Florida's urban areas. Toward that goal the Center provides research, training, and technical assistance to governmental and nonprofit institutions in South Florida. The Center provides usable knowledge to inform decision-makers on a variety of issues ranging from land use and housing to economic development and public opinion. The Center also provides organizational management planning and development to strengthen local area organizations ability to serve their client basis.

