A POST-KATRINA ASSESSMENT

EXECUTIVE SUMMARY

While there had been significant developments in the realm of preparedness research prior to Hurricanes Katrina and Rita, these tragic events have resulted in an even greater emphasis on preparedness research. The five national surveys identified in this Citizen Preparedness Review can be used to determine how these recent disasters may have impacted Americans’ perspectives and actions toward preparedness. Specific conclusions:

- Five national studies were conducted pre- and post-Katrina, which provide a useful comparison to determine the effects of the event. These studies indicate that the events of Hurricane Katrina have not increased the level of citizen preparedness. In contrast, one study measured a decrease in citizen preparedness.

- While self-reported preparedness actions remain relatively unchanged, there is some indication that there is an increased level of cognition for the recommended steps to take for preparedness—the early stage of behavior change where an individual thinks about taking action.

- The events of Hurricane Katrina have tarnished the image and trust that Americans have in the government’s ability to respond effectively to a disaster. Americans are significantly less likely to indicate that they will rely on state and Federal agencies and more likely to rely on their own household members. The findings reveal that nonprofit organizations have not been similarly tarnished by the events of Hurricane Katrina.

- The surveys confirm the existence of an income gap in the level of preparedness. Race appears to have only a small impact on preparedness.

- The events of Hurricane Katrina also brought to the public’s attention the difficulties that those with disabilities face in times of disasters. Thirty-eight percent of those who did not evacuate before Hurricane Katrina cite that they either were physically unable to leave or were caring for someone who was physically unable to leave. Post-Katrina studies indicate that the events of Hurricane Katrina have not caused this group to increase their preparedness levels.

We hope that the availability and analysis of these Citizen Preparedness Reviews will encourage organizations to assist in this effort by providing their own research for inclusion. It is our hope that we present the broadest scope of studies in the critical field of citizen preparedness.
INTRODUCTION

Citizen Corps is the Federal Emergency Management Agency’s (FEMA) grassroots strategy to strengthen collaboration between government and community leaders from all sectors to engage the full community in preparedness, planning, mitigation, response, and recovery. To support this mission, FEMA’s Community Preparedness Division has tasked Macro International Inc. (Macro), an Opinion Research Corporation company, to conduct and analyze research and to develop tools for Citizen Corps Councils and others to help achieve greater community resiliency nationwide. The Citizen Preparedness Review (CPR) is published periodically to summarize research findings and to support local efforts to achieve greater community resilience.

The first Citizen Preparedness Review (CPR) (August 2005) provides an overview of the project, details the purpose of this ongoing research, and explains the methodology used to select studies to be included in the review. The August 2005 CPR also includes an in-depth cross-study analysis of key measures and a methodology section that examines why results from similar surveys are often divergent.

Subsequent CPRs are intended to focus on current trends and new findings, but may also include an in-depth analysis of topics not covered in the initial report. This second CPR focuses primarily on the volume of post-Katrina research, but also includes research that was conducted before Katrina that was unavailable for the first CPR. This report begins with a brief summary of the research environment as of January 2006, and then examines the post-Katrina studies. The report briefly describes other studies that are noteworthy, but that were conducted before Katrina.

SUMMARY OF RESEARCH ENVIRONMENT

Before Katrina, there had been significant developments in the realm of preparedness research. In August, when the first CPR was written, there were a significant number of surveys out in the field and results from others studies were anticipated.

The events of Hurricanes Katrina and Rita, though tragic in consequences, have resulted in an even greater emphasis on preparedness research. In the months following Hurricane Katrina, five major national preparedness-related surveys were conducted—not including a dozen or so news agency surveys that covered primarily the political fallout of the storms. These studies not only provide a snapshot of the post-Katrina environment, but because they were all based on previous studies, they provide excellent pre- and post-Katrina comparisons.

POST-KATRINA SURVEYS

The events of Hurricanes Katrina and Rita sparked a flurry of research activity related to household disaster preparedness. Since these disasters, there have been at least five major national surveys related to household preparedness. These five national surveys are large (more than 1,000 respondents) and all have questionnaires based on prior surveys and therefore can be used to determine how recent disasters may have impacted Americans’ perspectives and actions toward preparedness. A sixth survey, a survey of Katrina evacuees, is also included in this analysis because of its relevance and important place in the research environment. A smaller national study is also included.

“These surveys can be used to determine how these recent disasters may have impacted Americans’ perspectives and actions toward preparedness.”
THE STUDIES

National Center for Disaster Preparedness (NCDP)—Columbia University
Mailman School of Public Health

The NCDP is an annual national household survey related to disaster preparedness. In July 2005, the NCDP conducted its fourth annual national survey—Where the American Public Stands on Terrorism and Preparedness Four Years after September 11. In October 2005, the NCDP fielded a followup survey to gauge the effect that Hurricanes Katrina and Rita had on Americans’ perceptions and level of preparedness.

From its inception in the wake of 9-11, the NCDP survey has centered more on the threat of terrorism than natural disasters. In the followup survey, additional questions were asked that related to natural disasters.

Center for Excellence in Government (CEG)/American Red Cross

The CEG study stems from the proposed development of a Public Readiness Index—an attempt to develop a brief module of questions that can accurately gauge household preparedness. The most recent of the CEG’s surveys was conducted in partnership with the American Red Cross. The CEG fielded the survey just before and during the landfall of Hurricane Katrina. The survey report indicates that the survey was out of the field “before the devastation in New Orleans was widely known.” The second survey was fielded during the final week of October.

Although the final goal of CEG’s efforts is brevity, the questionnaire used for these surveys is comprehensive. In addition to having some of the most comprehensive questions measuring preparedness, the survey also contains details on the level of perceived threat, trust in sources of information, motivations for taking action, and reasons for not taking action.
Macro International Inc. (Macro)
Macro conducted a post-Katrina study of household preparedness in mid-October, 2005. This study was a followup to a larger study conducted by Macro in 2003 that contained many of the same questions. The Macro study focused on multi-hazard preparedness. The questionnaire measured Americans’ concern over different threats, their level of perceived and actual preparedness, and the reasons for being prepared or unprepared.

Center for Catastrophe Preparedness and Response (CCPR)—New York University
The CCPR collected data for its first survey in the last 2 weeks of July 2005—4 weeks before Katrina came to shore. The followup survey went in the field October 10. At the time of this report, Macro was unable to obtain full results for this survey. The CCPR report covers basic preparedness and the role of disaster events and income play in increasing or decreasing preparedness. The survey also measures America’s confidence in state, local, and Federal government and in select nonprofit organizations.

National Organization on Disability (NOD)
In December 2005, the NOD conducted its third biennial national survey on disaster preparedness. The results, therefore, are comparable to the December 2003 survey. While a primary goal of the survey is to measure preparedness of those with disabilities, the survey was administered to a national sample. The survey is brief in comparison with the other post-Katrina surveys. The questionnaire measures the level of concern of Americans, and how it has changed; their level of preparedness; and their perceptions of the job done by government, nonprofit, and faith-based organizations.

Katrina Evacuee Survey (Katrina Evacuee)—Washington Post, Kaiser Foundation, Harvard University
The Katrina evacuee study interviewed 680 Katrina evacuees in the Houston area. While the primary focus of this survey is not to examine issues of preparedness, it provides an important snapshot into how Katrina victims perceived the threat preceding Katrina and their readiness, willingness, and ability to evacuate.

Operation Hope—Operation Hope, iQ Research & Consulting
The Operation Hope study is a new survey, and therefore, does not have any trend data for comparison. It does, however, provide very relevant questions, some that are not covered in other surveys.
The Findings

**PREPAREDNESS**

These national post-Katrina surveys, asking similar questions within a relatively short time span, provide a remarkable opportunity to examine cross-survey results. Although results related to household preparedness differ from survey to survey, the difference is largely attributable to question wording. Results about plans and kits, in fact, are very consistent across surveys.

For instance, the difference in results between the questions focused on whether households or families have basic emergency kits is quite small (46% Macro vs. 43% CEG vs. 44% NCDP). It is important to note that these surveys indicate that the events of Hurricane Katrina have not served to increase the level of citizen preparedness. A side-by-side comparison of similar questions asked on specific issues illustrates the global trend.

**SAMPLE EMERGENCY SUPPLY KIT QUESTIONS—PRE- TO POST-KATRINA COMPARISON**

<table>
<thead>
<tr>
<th>Study</th>
<th>Question</th>
<th>Pre-Katrina</th>
<th>Post-Katrina</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macro International Inc. (Macro)</td>
<td>Does your household have an emergency supply kit at home to be used only in the case of an emergency disaster?</td>
<td>50%</td>
<td>46%</td>
</tr>
<tr>
<td>Center for Excellence in Government (CEG)</td>
<td>Please tell me if you have actually done, have considered doing it, or have not considered doing it—prepared a Disaster Supply Kit with emergency supplies like water, food and medicine that is kept apart from everyday use. [have actually done]</td>
<td>N/A</td>
<td>43%</td>
</tr>
<tr>
<td>National Center for Disaster Preparedness (NCDP)</td>
<td>Does your family emergency preparedness plan include all, some, or none of the following: at least two days of food and water, a flashlight, a portable radio and spare batteries, emergency phone numbers, and a meeting place for family members in case of evacuation?</td>
<td>All</td>
<td>30%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Some</td>
<td>12%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>None</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No emergency plan</td>
<td>57%</td>
</tr>
</tbody>
</table>

**KEY FINDINGS**

- The events of Hurricane Katrina have not increased the level of citizen preparedness. In contrast, one study indicates a decrease in preparedness.
- While self-reported preparedness actions remain relatively unchanged, there is some indication that there is an increased level of cognition for the recommended steps to take for preparedness—the early stage of behavior change where an individual thinks about taking action.
While actual preparedness remains relatively unchanged, there is some indication that there is an increased level of cognition—the early stage of behavior change where an individual contemplates taking action. The CEG study measured a significant increase in those who considered assembling a disaster supply kit (24% to 31%). The NOD study did measure an increase (from 2003) of those who have made evacuation plans.
TRUST IN GOVERNMENT AND NONPROFIT ORGANIZATIONS

It should be of no surprise that the events of Hurricane Katrina have tarnished the image and trust that Americans have of their local, state, and Federal government. The major news polls have all examined the political effects of the disaster (see http://www.pollingreport.com/disasters.htm for results from many of these polls).

While political ramifications are not the focus of this analysis, the lack of confidence does have an impact on how Americans plan for, prepare for, and respond to a disaster. For instance, the Macro study shows a significant shift in who Americans expect to rely on in case of a disaster. Americans are significantly less likely to indicate that they will rely on state and Federal agencies and more likely to rely on their own household members.

### Sample Questions Related to Confidence in Government—Pre- to Post-Katrina Comparison

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>Macro International Inc. (Macro)</td>
<td>In these types of events, please indicate how much you would expect to rely on the following [State and Federal government agencies] for assistance. [4 &amp; 5 on 5-point anchored scale]</td>
<td>34%</td>
<td>28%</td>
</tr>
<tr>
<td>National Organization on Disability (NOD)</td>
<td>How would you rate the job being done by [Insert] to help you prepare for a terrorist attack, natural disaster, or other crisis? [Excellent &amp; Pretty Good]</td>
<td>Federal Government N/A 38%</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Local Government N/A 40%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>State Government N/A 41%</td>
<td></td>
</tr>
<tr>
<td>Katrina Evacuee Survey</td>
<td>Considering everything, who do you blame most for the problems that occurred due to the hurricane and flooding?</td>
<td>Federal Government N/A 28%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>State of Louisiana N/A 12%</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>City of New Orleans N/A 19%</td>
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<td></td>
<td></td>
<td>All Equally N/A 22%</td>
<td></td>
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<tr>
<td>National Center for Disaster Preparedness (NCDP)</td>
<td>Overall, are you very confident, confident, not too confident, or not confident at all in government to protect the area you live from a terrorist attack [Confident or Very Confident]</td>
<td>49%</td>
<td>42%</td>
</tr>
</tbody>
</table>
Many post-Katrina surveys also asked Americans about their opinions of nonprofit organizations. The findings reveal that these organizations have not been similarly tarnished by Hurricane Katrina.
POVERTY, RACE, AND PREPAREDNESS

The events of Hurricane Katrina have brought to the forefront the issue of poverty and race as they relate to disaster preparedness. In response, many of the new surveys have tried to address these problems either with the addition of new questions or through more targeted analysis. The CCPR director and report author, Professor Paul C. Light, refers to the gap between the preparedness of poor Americans and more wealthy Americans as the Preparedness Divide. The CCPR report indicates that although the divide persists, it appears to have closed slightly—possibly because of heightened awareness of the potential risks poor people face. The CEG, NCDP, and Macro surveys all confirm the existence of an income gap in the level of preparedness, but do not confirm that the gap is shrinking. The NCDP study shows a divide that is consistent with pre-Katrina surveys and in the Macro survey, the divide appears to have expanded rather than contracted. The Macro study also found that nearly a third (32%) of those who did not feel prepared cited lack of money as a reason.

The Katrina Evacuee survey reflects the role money played in determining who evacuated New Orleans before Hurricane Katrina’s landfall. More than a third (36%) of those who did not evacuate before the storm cited that they either were physically unable to leave or were caring for someone who was physically unable to leave.

Disabilities

The events of Hurricane Katrina also brought to the public’s attention the problems that those with disabilities face in times of disasters. The most telling study regarding this problem is the Katrina Evacuee study. This study found that 38% of those who did not evacuate before the storm cite that they either were physically unable to leave or were caring for someone who was physically unable to leave.

While Hurricane Katrina highlighted the special preparedness needs of those affected by disabilities, it did not result in a higher relative level of preparedness for this group. The Macro survey measured a higher level of perceived vulnerability among those with disabilities or those who care for those with disabilities, but did not show that this group was any more prepared. Similarly, the NOD survey reports that while those with disabilities are generally more concerned about the threat of terrorism and natural disasters than others, they are no more likely to have made a plan to evacuate their homes in case of a disaster.

FATALISM

One third of Americans indicate that, in a disaster, they think that events will likely overtake their preparedness. This concern is spread fairly evenly across demographic groups and regions. It is therefore important to examine this issue in order to understand why certain people are not prepared and to determine if a catastrophic event confirms this feeling of fatalism.

The 2003 Citizens Corps survey asked respondents if they agreed with the following statement: “In a disaster, [the] events will likely overtake any preparations you and your household have made.” Macro asked the same question in their post-Katrina study. In all, almost one-third of Americans (31%) strongly agreed or agreed with the statement—a figure only marginally higher than in 2003 (28%).

KEY FINDINGS

- The surveys confirm the existence of an income gap in the level of preparedness, but do not confirm that the gap is shrinking. Race appears to have only a small impact on preparedness.
- 38% of those who did not evacuate before the storm cite that they either were physically unable to leave or were caring for someone who was physically unable to leave.
- One-third of Americans indicate that, in a disaster, they think that events will likely overtake their preparedness.
PRE-KATRINA STUDIES

National Studies

The analysis above mentions three pre-Katrina studies that were fielded in the summer of 2005 (CEG, NCDP, and CCPR). The CEG survey was designed to pre-test questions for their declared goal of developing a concise measurement of household preparedness. The fourth annual NCDP survey was also highly anticipated. The survey’s core questions have remained consistent providing a unique opportunity to track progress over time. Also, the NCDP survey is now the first to provide, upon request, detailed cross-tabulations of survey question to demographics.

The CCPR survey, however, was new to the preparedness research environment. While the amount of information about their research is still limited, the addition of another national survey is welcome.

Local Studies

Data from a number of local pre-Katrina studies have also become available since the first CPR, including the Metropolitan Philadelphia Indicator (MPI) survey report. The data from this survey is rich with demographic data including multiple socioeconomic variables, commuting behavior, and civil participation. Unfortunately, since the study’s main focus is not preparedness, the survey report does not cover the topic in the detail that the data has the potential to provide. The MPI study was expanded to the Pennsylvania Quality of Life Survey—a project co-funded by the Pennsylvania Department of Health and Temple University. Temple University’s Center for Preparedness Research, Education, and Practice has been active in adding preparedness sections to both surveys.

Disaster preparedness was a major theme of the annual meeting of the American Public Health Association with a number of papers submitted on household preparedness—including papers by the Temple University group. Another study presented at the conference is a study conducted in Maine. While data is currently not available, the study is notable because it was conducted as a module for the CDC’s Behavior Risk Factor Surveillance System (BRFSS).

A final notable study is one conducted by the National Capital Region—a collaboration of a number of local Washington, DC-area governments. The efforts of this group included focus groups, in-depth interviews, a stakeholder survey, and a large local household survey (1,800 respondents). This survey is notable in its attempt to create a preparedness index that summarizes household preparedness. Macro has recently discovered that the National Capital Region plans to conduct additional studies in order to measure and track area preparedness.

A LOOK AHEAD

At present, there are few major anticipated events in the citizen preparedness research environment. It is anticipated that the CEG will continue with the development of its preparedness index, and there is indication that the King County OEM is preparing for a follow up of a tri-county survey in the Seattle area. There is also indication that the National Capital Region is expanding its preparedness research efforts. As always, we anticipate continual output from new entrants in the field, but nonetheless, anticipate a diminished amount of activity relative to the post-Katrina environment.

We have limited information for many studies that have been completed. We hope that the availability and analysis of the first CPR will inspire organizations to assist in our efforts to present the broadest scope of studies in the critical field of citizen preparedness.
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**National Center for Disaster Preparedness—Mailman School of Public Health**


**National Organization on Disabilities**


**Operation Hope/IQ Research and Consulting**


**Macro International Inc.**


**Pennsylvania Quality of Life Survey, 2004**

The Citizen Corps mission is to bring community and government leaders together to involve community members and organizations in all-hazards emergency preparedness, planning, mitigation, response, and recovery.