**HURRICANE/DISASTER PREPAREDNESS AND RESPONSE
BY UTILIZING FLORIDA PUBLIC LIBRARIES:**

Final Report

August 4, 2010

Charles R. McClure, **PhD** <cmcclure@lis.fsu.edu>
Director, Information Institute and Francis Eppes Professor

Lauren H. Mandel <lmandel@fsu.edu>
Research Coordinator, Information Institute

Sara Pierce <sep09c@fsu.edu >
Research Associate, Information Institute

John T. Snead, **PhD** <jsnead@ou.edu>
Assistant Professor, University of Oklahoma School of Library and Information Studies

For

Patrick F. Maroney, PhD,
Director, Florida Catastrophic Storm Risk Management Center
College of Business, Florida State University

HURRICANE/DISASTER PREPAREDNESS AND RESPONSE
BY UTILIZING FLORIDA PUBLIC LIBRARIES:
Final Report

In August 2008, the Information Use Management and Policy Institute (Information Institute) of Florida State University began work on the grant entitled *Improving Florida Public Libraries Hurricane/Disaster Preparedness and Response*. The grant is funded by the Florida Catastrophic Storm Risk Management Center (http://www.stormrisk.org) and began August 8, 2008. The original end date for the project was July 31, 2009. The Information Institute received additional funding and performance extensions, which allowed project activities to continue through August 6, 2010. This report provides an overview of activities completed through August 6, 2010.

Background

The Information Use Management & Policy Institute (Information Institute) directed by Charles R. McClure, PhD, Francis Eppes Professor at the Florida State University (FSU) College of Communication & Information, School of Library & Information Studies has been awarded $311,153 grant to assist public libraries and local communities better plan for, and respond to, hurricanes. The Florida Catastrophic Storm Risk Management Center at FSU's College of Business awarded the grant to the Information Institute for the period August 8, 2008 thru December 31, 2009, with an extension to August 6, 2010. The Institute has partnered with the State Library and Archives of Florida(http://dlis.dos.state.fl.us/library/), LYRASIS (formerly SOLINET)(http://www.lyrasis.org/), Florida's Multi-type Library Cooperatives and public libraries throughout the region, as well as federal, state, local and community agencies concerned with Florida hurricane preparedness and recovery.

Overall, the goal of this project is to work with public librarians to assist the residents of the state of Florida in preparing for, and responding to, hurricanes. Objectives to meet this goal include:

- Identify and describe the various plans, services, and activities in which public libraries have engaged for hurricane preparedness and response;
- Meet with various local and state officials to better understand local and situational factors that may affect the success with which public libraries can provide hurricane preparedness and responses;
- Assess how libraries can best provide hurricane preparedness and response services, in light of local conditions, as well as the available skills and capacities at the library;
- Conduct six training sessions for public librarians and local officials to describe the project's findings and educate participants about how they can best enhance their skills and services for hurricane preparedness and response; and
- Disseminate materials - which take a very practical and feasible approach, using electronic and print formats, resources, guidelines, recommendations, and best practices - describing the manner in which public libraries can be effective participants in hurricane preparedness and response.

These objectives continue to guide the study team's efforts with this project.

The project has resulted in the identification of eight key service roles public libraries can fill in hurricane/disaster planning and response, as well as a web portal (http://www.hurricanes.ii.fsu.edu/) that identifies and describes the service roles, best practices, tools and resources that enable better utilization of the public library in community hurricane preparation and recovery. Since many public libraries are underutilized community assets in disaster response, the study team has developed means to help improve community hurricane preparedness and response by encouraging public library management to emphasize an external focus on how the public library, as part of a team of emergency responders, can aid in its community's hurricane response by doing the following:

- *Among public librarians*: Encouraging public library managers to better understand the roles, best practices, tools and resources available to them as they shape their library's efforts to aid their community's hurricane response and to aid the roles of their fellow responders, particularly emergency management, local government leadership, and other agencies;
- *Among fellow responders*: Educating other responders such as emergency management, local government leadership and agencies, non profits and businesses about the roles public libraries may play, as part of a team, to aid in community hurricane preparation and recovery; and
- *Among residents and evacuees*: Communicating to residents which hurricane preparation and recovery services they can count on from their public library.

An important benefit of this project is that it offers a great opportunity for public libraries to better demonstrate the range of services and responses they can provide during such disasters.

Study Design

The study team designed the original project in four phases: planning, data collection, data analysis, and presentation of findings and products. In the 5th quarter reporting period (August 1, 2009 – December 31, 2009), the study team developed and began implementation of a plan for evaluating the hurricane web portal. The Information Institute initiated additional activities to continue to market and promote the hurricane project in the 5th quarter. Subsequent activities in the final project period included development of a library emergency communication infrastructure model, additional marketing efforts, and the continuation of activities that assess the effectiveness of the training efforts that have included workshops, formal trainings sessions, and presentations at conferences and professional association meetings.

Highlights of Key Activities

During the 1st and 2nd quarters of the project, the study team collected and assembled information from those hurricane-affected public libraries that had made significant contributions to their communities' response to hurricanes, drafted the service roles, and developed the beta version of the web portal. During the 3rd quarter, the study team began to present the findings of that research and introduced the project web portal. Fourth quarter activities focused on efforts

to market and promote the project and the web portal. During the 5th quarter, the team concentrated efforts on the developing a plan to evaluate the web portal, holding a statewide conference, and continuing to market and promote the project. For more information on project activities in the 1st through 5th quarters, see the reports on the Information Institute website at http://ii.fsu.edu/content/view/full/13881.

During the final reporting period (January 1 – August 6, 2010), key project activities included the establishment of a library emergency communication infrastructure module, modifications of the web portal based on previous evaluations, and pursuit of opportunities to further develop the project. These project activities included the following:

- *Marketing and promotion*: Planning and coordination activities continued towards disseminating information about the project and web portal, including formal presentations of the project and web portal at the Texas Library Association conference (April 2010) and Louisiana Library Association conference (March 2010), as well as an online webinar through WebJunction (August 2010);
- *Establishing the Get to Know Your Local EOC service role*: The project team added a service role to the project website that outlines how a library can develop a working relationship with its local emergency operations center (EOC);
- *Training assessment*: The project team continued to evaluate the feedback obtained from the prior training sessions with the goal of further improving the project web portal; and
- *Updating content:* The Institute remains committed to assuring that the web portal content remains current and relevant through ongoing efforts to find opportunities to extend the scope and depth of resources started by this project.

Table 1 outlines the tasks completed during the final reporting period (January 1 – August 6, 2010).

Table 1. Summary of Activities in This Project Period

Activity	Discussion
Update and expand project web portal content	Based on the training and website assessment efforts, the project team launched new efforts to update, revise, and expand web portal content to include more booklets and interactive templates for public librarians, residents, and evacuees, as well as videos and a new service role, Get to Know Your Local EOC.
Continue marketing and promotional efforts	The primary task of developing and implementing a marketing plan was completed during the 4th quarter (July 15, 2009) and is available upon request. Marketing and promotional activities have included articles published in blogs and listservs, presentations at state library association conferences, a mass mailing of the 2010 hurricane project flyer to Florida public libraries, and an online Webjunction Webinar.

_____

Table 1. Summary of Activities in This Project Period (continued)

Activity	Discussion
Investigate ongoing external funding	The project team has sought from the National Oceanographic and Atmospheric Administration (NOAA), Federal Emergency Management Agency (FEMA), and other federal agencies; state library agencies of the Gulf Coast; Lyrasis; the American Library Association, and the National Telecommunications and Information Administration (NTIA)'s Broadband Technology Opportunities Program (BTOP). In this project period, the Information Institute submitted a proposal to the National Weather Service, a division of NOAA.
Get to Know Your EOC Service Role	The project team developed a library emergency communication infrastructure module providing information on building stronger collaborative and cooperative relationships between library and emergency management agencies. The project team completed the new service role, which included video interviews with a library director and EOC director who serve as a good example of a library-EOC working relationship.
Publications for marketing and promotional efforts	The Information Institute prepared an invited article for the *Bulletin of the American Society of Information Science and Technology* on libraries and disaster response and is preparing an invited book chapter on a similar topic. Also, the project team continues to seek opportunities to promote and market the project to all stakeholder groups and interested parties.
Conduct supplemental training	The Information Institute Director presented on this project at two state library association conferences in Texas and Louisiana and the Research Coordinator presented a WebJunction webinar on August 3, 2010 entitled *Prepare and Respond: Partnering with Local* .
Sustainability	The study team has been actively pursuing external funding sources to continue updating and improving the web portal beyond August 2010.

Final Project Evaluation Plan

On September 29, 2009, the Information Institute developed a formal project evaluation plan, entitled *Hurricane/Disaster Preparedness and Response by Utilizing Florida Public Libraries: Final Quarter Evaluation Plan (August 1 – December 31, 2009)*. The plan is available upon request. The evaluation report detailing findings is available on the Institute website[1]; findings include:

- *Initial needs assessment*: Interviews, focus groups, and surveys of public library staff, state library agency staff, and local/state emergency preparation and response personnel to determine public library service roles related to hurricane/disaster response and recovery and identify initial hurricane/disaster response and recovery web portal content;

_____
[1] McClure, C. R., Mandel, L. H., & Hinnant, C. C. (2009). *Hurricane/Disaster Preparedness and Response by Utilizing Florida Public Libraries: Evaluation Report*. Tallahassee, FL: Information Use Management & Policy Institute, Florida State University College of Communication & Information. Retrieved August 3, 2010, from http://ii.fsu.edu/content/download/34804/218412

- *Formative evaluation*: Ongoing usability, functionality, and accessibility testing of successive versions of the project web portal; and
- *Use and usefulness web portal assessments*: Conducted at the end of project training sessions with public library staff members and state library staff during the spring and fall of 2009.

See each of the project's quarterly reports for detailed results of the project's formative evaluation efforts.

The project team conducted the final summative evaluation to determine the degree to which project activities conducted from August 2008 – August 2010 met the project's initial goal and objectives, outlined above. Specifically, the overall goal of this project was to work with public librarians to assist the residents of the state of Florida in preparing for, and responding to, hurricanes, and the project has accomplished this goal. The project team has conducted over 150 interviews with library personnel, both to help identify and develop the service roles and web portal and to evaluate them post-development. As to the objectives, the project has been successful by doing the following:

- Identified and described the various plans, services, and activities in which public libraries have engaged for hurricane preparedness and response, many of which are available on the web portal;
- Met with various local and state officials to better understand local and situational factors that may affect the success with which public libraries can provide hurricane preparedness and responses, information which has been included in the service roles;
- Assessed how libraries can best provide hurricane preparedness and response services, in light of local conditions, as well as the available skills and capacities at the library, with this information reviewed and presented on the web portal and in the service roles;
- Conducted more than the planned six training sessions for public librarians and local officials to describe the project's findings and educate participants about how they can best enhance their skills and services for hurricane preparedness and response; and
- Disseminated materials through the web portal, blogs, listservs, trainings, and other venues - which took a very practical and feasible approach, using electronic and print formats, resources, guidelines, recommendations, and best practices - describing the manner in which public libraries can be effective participants in hurricane preparedness and response.

In sum, the project has been successful in meeting its overall goal and the five objectives.

Developing the New Service Role

The project team utilized user feedback to create a new service role, *Get To Know Your EOC*. This service role focuses on the importance of libraries working with their local emergency management agencies to ensure a 'place at the table' for the public library in emergency preparedness and response matters. By conducting interviews with both library and emergency management personnel, the project team was able to build the case for stronger collaborative and cooperative relationships between library and emergency management

_____

agencies. To illustrate a good example of this working relationship, the project team invited both a library director and emergency management director from Leon County to discuss their experiences and share advice. Their discussion bolsters many of the best practices discovered by the project team, including the importance of making the case to the EOC and of establishing a cooperative relationship. The project team filmed this conversation, and it is currently accessible through the "Get to Know Your EOC" section of the web portal <http://hurricanes.ii.fsu.edu/9eoc.html> and the Information Institute's YouTube channel <http://www.youtube.com/user/infoinst>.

Project Marketing Efforts

The project team has continued efforts to further market and promote the research project and to build awareness of the web portal. Major efforts to build awareness of the project included additional media publicity and the use of listserv announcements to promote the project and inform the library community on issues related to hurricane preparedness. Key activities have included:

- *Professional library blogs and listservs*: Dissemination of project information and updates to a broad spectrum of the library community throughout Florida and the Gulf Coast region, as well as nationally and internationally;
- *Conference presentations*: The project team presented the project and web portal at the Louisiana and Texas Library Associations' annual meetings in the spring 2010;
- *Professional Journals:* The *Bulletin of ASIS&T* (June/July, 2010) published "Helping Libraries Prepare for the Storm with Web Portal Technology," which promotes how the new web portal can helps libraries assist their communities to prepare for and recover from hurricanes and other severe storms (the article is available at http://www.asis.org/Bulletin/Jun-10/JunJul10_Mandel_McClure_Brobst_Lanz.pdf);
- *Mass Mailing:* Development of a new, 2010 hurricane flyer (available at http://hurricanes.ii.fsu.edu/docs/Hurricane_Flyer_July8_2010c.pdf) and dissemination of the flyer and letter of introduction to web portal through mass mailing to all Florida public libraries and multiple library cooperatives (MLCs); and
- *Webinar presentation:* Introduction of the new service role through a WebJunction[2] webinar entitled *Prepare and Respond: Partnering with Local Em* in August 2010.

Feedback continues to be positive for the media publicity, with reports indicating that the listserv and blog venues continue to be effective means for reaching the broader library community.

_____

[2] WebJunction is a service of OCLC (the Online Computer Library Center) that provides interactive seminars conducted over the Web; for more information, see: http://www.webjunction.org/
_____

Dissemination of Project Findings

The Information Institute has worked throughout the project to disseminate project findings. The project team has presented findings in several conferences and webinars, notably presentations at the Texas Library Association and Louisiana Library Association conferences in spring 2010, the Florida State Library Director's Meeting in fall 2009, and two online webinars through OCLC's WebJunction (October 2009 and August 2010). In addition, the Information Institute has presented findings in a number of publications, including:

- McClure, C. R., Ryan, J., Mandel, L. H., Brobst, J., Hinnant, C. C., & Snead, J. T. (in press). Public libraries in hurricane preparedness and response. In J. C. Bertot, C. R. McClure, & P. T. Jaeger (Eds.), *Public libraries and the Internet: Roles, perspectives, and implications*. Westport, CT: Libraries Unlimited;
- McClure, C. R., Mandel, L. H., & Pierce, S. (in press) Public libraries and crisis: Roles of public libraries in hurricane/disaster preparedness and response. In C. Hagar (Ed.), *Crisis information management: Communication and technologies.* Cambridge, UK: Woodhead;
- Mandel, L. H., McClure, C. R., Brobst, J., & Lanz, E. C. (2010). Helping libraries prepare for the storm with web portal technology. *Bulletin of ASIS&T, 36*(5), 22-26; and
- McClure, C. R., Ryan, J., Mandel, L. H., Brobst, J., Hinnant, C. C., Andrade, J., & Snead, J. T. (2009). Hurricane preparedness and response for Florida public libraries: Best practices and strategies. *Florida Libraries, 52*(1), 4-7.

Regular and ongoing news releases related to the project are distributed on a range of library lists. The Information Institute continues to seek venues to present project findings.

Sustaining the Project

During the final reporting period (January 1 – August 6, 2010), the study team has continued to seek partners for funding to sustain the project beyond August 2010. The project team has met with and submitted proposals to federal, local, and state emergency management agencies, including FEMA and Florida's State Emergency Response Team (SERT). Due to budget constraints, additional funding was unavailable through these avenues. Currently, there is a proposal under consideration by the National Weather Service, a division of NOAA.

Summary

For the past seven months (January 1 – August 6, 2010), the study team continued with extensive effort to build awareness and promote the project using venues that included media, print, conferences, and professional association meetings. Efforts to improve awareness and use of the web portal included presentation of a nationally viewed Webinar (including attendees in Alaska and Hawaii) and presentations at two statewide conferences in Texas and Louisiana.

During the project evaluation, a librarian in Southeast Florida remarked about the web portal, "It appears that just about everything you need to set up a plan and execute it is here and it is great to go to one web site and find it all rather than hopping around from site to site using

different organizations' [websites] with less information than is included here." While the librarian focus groups and interviews, questionnaires, the web analytics and the usability, accessibility and functionality assessments all yielded positive results, the study team continues its efforts to see that resources and information are current, and easy to access, and that the website continues to be better known.

Project funding ends August 6, 2010, but the Information Institute is committed to seeking funding to build on this work to ensure that the website continues to be as relevant as possible to users, that resources and information are current, the website continues to be better known, and various avenues for additional external funding are explored. Public librarians in Florida and the entire gulf coast are aware of the website and continue to find it very useful and important in preparing for and responding to hurricanes.