



White Paper

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Preparing Public Libraries for Catastrophe Challenges



THE FLORIDA STATE UNIVERSITY
COLLEGE OF BUSINESS

The Florida Catastrophic Storm Risk Management Center

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

Purpose: Florida's individual public libraries provide a range of useful hurricane and disaster preparation and recovery services to their communities but their individual efforts are often isolated and unavailable to the rest of the library community. There has been no systematic effort to identify the roles, best practices, activities, tools and resources developed by local public libraries for their communities and to make them available to the larger library profession. All public library managers could help their communities respond better if they had the benefit of some portion of their fellow library managers' disaster experience. This project will reduce the state's overall risk by raising the capacity of all the state's public libraries to meet the challenges posed by these catastrophes. The project, through a web portal <http://www.ii.fsu.edu/hurricanes/> and other means, will:

- Identify, and then organize, relevant public library hurricane related information resources, services, roles, and best practices;
- Identify, aggregate, assess, and organize successful individual Florida public library best practices related to hurricane preparedness and response;
- Develop model plans, standards, guidelines and recommendations – which will be made available via print and through an interactive website;
- Offer strategies to assist state and regional public library, as well as government officials with disaster coordination and organization responsibilities;
- Disseminate to Florida's public libraries, agencies, and other organizations - through a variety of means - resources, services, experiences, best practices, plans and guidelines to coordinate Florida's public library managers and government partners to better prepare for and respond to hurricanes; and
- Offer workshops during the month of April 2009, throughout Florida, on the roles, best practices, tools and resources now available to public library managers, due to the project's findings, regarding how public libraries can assist their communities to better prepare for, and recover from, hurricanes.

Charles R. McClure, the project's Principal Investigator, stated that "this project offers a great opportunity for Florida public libraries to better demonstrate the range of services and responses they can provide during such disasters." Listen to a 3 minute WFSU [radio interview](#) with McClure about the project, read a [LibraryJournal.com article](#) about the project, or visit the project website at <http://www.ii.fsu.edu/hurricanes/>

Background. The [Information Use Management & Policy Institute](#) (Information Institute) directed by Charles R. McClure, PhD., Francis Eppes Professor at the College of Information, Florida State University (FSU) has been awarded a \$311,440 grant to assist public libraries and local communities better plan for, and respond to, hurricanes. The [Florida Catastrophic Storm Risk Management Center](#), at Florida State University's College of Business, awarded the grant to the Information Institute for the period August 8, 2008 thru December 31, 2009. The Institute has partnered with the [State Library and Archives of Florida](#), directed by Judith Ring, LYRASIS (formerly SOLINET), directed by Kate Nevins, Florida's [Multitype Library Cooperatives](#) and public libraries throughout the region, as well as federal, state, local and community agencies concerned with Florida hurricane preparedness and recovery. The project has resulted in a website <http://www.ii.fsu.edu/hurricanes/> that identifies key service roles, best practices, tools and resources that enable better utilization of the public library in community hurricane preparation and recovery.

Preliminary Findings. Preliminary findings from the study suggest that public libraries play several key roles that aid community and evacuee hurricane response. Before and after a storm, public libraries may provide:

- **Safe Haven:** The public library is the community's living room and study before and after a storm, with safe, secure buildings, relaxing space, light, air conditioning, bathrooms and comfortable chairs.

- **Normal Service:** The community counts on normal library service before and after the storm, be it book, DVD, Internet use, reference or family programming. Normal library service provides hope, re-establishes a local government presence, reduces stress, returns normalcy, and offers recreation and distraction.
- **Disaster Recovery Center (DRC):** The public library offers the community a DRC, whether it's a FEMA designated DRC; a place to prepare residents for a DRC visit; a Point Of Distribution (POD) or a local neighborhood place to make sense of the disaster that has just occurred.
- **Information Hub:** The community counts on the library, before and after a storm, to be a communication hub (offering copiers, phones, fax, computers, WiFi, Internet access rechargers), as well as to offer hurricane preparation and recovery information and assistance.
- **Cultural Organizations Liaison:** The public library may serve as a liaison between emergency management and the community's tourist attractions and cultural institutions.
- **Evacuee Resource:** Evacuees turn to the nearest public library for safe haven, normal service, emergency information hub services and as a disaster recovery center.
- **Improvisation:** The community counts on the public library during a disaster to improvise and do whatever is needed as directed by emergency management and local government.

Key Issues. Many public libraries are an underutilized community asset in disaster response. How can public libraries be better utilized to improve community hurricane preparedness and response?

- **Emphasize effort to aid the community:** Shift public library management emphasis from an internal focus (preservation and restoration of public library facilities and collection) to an external one (How can the public library, as part of a team of responders, aid in its community's hurricane response?);
- **Increase awareness:**
 - **Among public librarians:** about the roles, best practices, tools and resources available to them, as they shape their library's efforts to aid their community's hurricane response. Encourage public library managers to better understand and aid the roles of their fellow responders, particularly emergency management local government leadership and other agencies;
 - **Among fellow responders:** about the roles public libraries may play, as part of a team, to aid in community hurricane preparation and recovery. Responders include: emergency management, local government leadership and agencies, non profits and businesses.
 - **Among residents and evacuees:** by communicating to residents what hurricane preparation and recovery services they can count on from their public library.
- **Pre-coordinate, partner, integrate:** Better pre-coordinate and integrate public libraries' responsibilities, as part of a team of responders aiding the community to respond to disasters.
- **Increase local and regional disaster planning among libraries and other cultural institutions:** Regional library response may be needed if local library capacity is overwhelmed by a disaster. Prior planning and coordination can speed restoration efforts. Currently, local cultural and other community organizations may also be underutilized in your communities' disaster response efforts. The library could take the lead, or be a partner, in remedying this situation.
- **Share what works (and doesn't):** Individual public library hurricane best practices, tools and experiences will remain in isolation and underutilized until hurricane experienced librarians share what they have learned, in such forums as the project web site, workshops and via other means.

Next Steps. The Information Institute will continue to provide training, as well as refine and expand the project website and its content at <http://www.ii.fsu.edu/hurricanes/>. Be sure to check the "[to do](#)" list of quick and practical actions that librarians can take NOW in preparation for the 2009 hurricane season: <http://www.ii.fsu.edu/hurricanes/docs/NextSteps/HurricaneToDo3.31.09.doc>. During the summer and fall of 2009, continued enhancements will be made to the website, so continue to monitor the website throughout the coming hurricane season.

Contact Us. For further information, or to share experiences, please contact Joe Ryan, Project Manager jzryan@earthlink.net or Charles R. McClure, Principal Investigator at the Information Institute cmclure@lis.fsu.edu.



**HURRICANE/DISASTER PREPAREDNESS AND RESPONSE
BY UTILIZING FLORIDA PUBLIC LIBRARIES:
November 1, 2008, First Quarterly Report**

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

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>). The grant began August 8, 2008 and ends July 31, 2009. This quarterly report provides an overview of activities completed and in progress from August 8, 2008 – November 1, 2008 and includes planned activities for the next quarter of the project (i.e. through February 1, 2009).

Overall, the goal of this project is to work with public librarians to better assist the residents of the state of Florida in preparing for and responding to hurricanes. Objectives to meet this goal conducted and/or initiated during the first quarter of the project 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; and
- Assess how libraries can best provide hurricane preparedness and response services in light of the available skills and capacities at the library as well as local conditions.

Data collection efforts related to the objectives above continues through December 15, 2008. Data analysis and web development efforts continue through the third quarter of the project (March 31, 2008).

Project Progress Overview

Organization Phase 8/1/8 to 9/30/8	
1.	Organize and staff project (hire 2 graduate assistants)
2.	Review and refine project tasking
3.	Begin identification of relevant hurricane preparedness/response related information and services for web site and data collection
4.	Initiate project web site options (including initial web design, project description, and population)
5.	Identify in-state and other gulf coast states (as identified) collaborators (state library staff, public librarians, government officials, and community groups) and successful public library hurricane responders as data collection sites.
6.	Plan and arrange site visits with public libraries, selected communities, local and state officials, and other experts (interviews & focus groups)
7.	Begin development of data collection instruments, interview and focus group scripts, and others as appropriate

Table 1: Organization phase tasks

Table one (above) identifies tasks associated with the organization phase of the project. The study team completed tasks one and two, organize and hire staff and review and refine project tasking. In addition, the study team initiated tasks 4 - 6. The project team created an initial web site design and is in the process of developing a test bed web site, identified and contacted potential project collaborators, and planned site visits. In addition, the study team developed data collection instruments (task 7).

Data Collection Phase 10/1/08 to 12/15/08	
1.	Annual FL Public Library Directors meeting Delray – announce project and ask for assistance – initial data gathering event, October 15-17, 2008
2.	Pretest data collection instruments
3.	Continue website design and development
4.	Conduct interviews and focus groups at site visits with librarians, government and community officials, and others to gain enough data to develop draft descriptions, model plans, library roles, best practices, services, etc.
5.	Conduct paper and web-based surveys with librarians, government and community officials, and others to gain enough data to develop draft descriptions, model plans, library roles, best practices, services, etc.
6.	Conduct follow-up phone and e-mail interviews as needed
7.	Establish External Review Board (knowledgeable librarians, agency officials, and others to review proposed products)

Table 2: Data collection phase tasks

The Information Institute Director completed task one (table two above). The director presented an overview of the project at the annual Florida Public Library Director’s meeting in Delray Florida. In addition, the director promoted the project, identified potential interview and focus group participants, and identified potential sites for interviews and focus groups. The study team also completed task 2, pretests of data collection instruments; and task 3, website design and development, which is an ongoing task that will continue through the third quarter of the study.

For task 4, the study team initiated data collection efforts (i.e. conducting interviews and focus groups). The study team conducted interviews and focus groups in coastal states traditionally impacted by hurricanes. To date, data collection efforts occurred in Mississippi, Alabama, and across the Florida panhandle. The next phase of data collection efforts occurs in November-December 2008 at selected sites throughout the Florida peninsula (i.e. west coast, central Florida, east coast, and south Florida). In addition, the study team is currently analyzing data collected from the first round of interviews and focus groups.

Overview of Activities: First Quarter

During the first quarter, the study team conducted a number of activities to address the project tasks. This section presents a more detailed account of the task-related activities.

References and Resources

Activities related to references and resources include the location, identification, assessment, categorization, and annotation of relevant references and resources. Initial efforts to organize references and resources include:

1. Organization of references and resources by projected audience, i.e. public librarians; Florida citizens; and public officials, emergency response agencies and organizations, etc.; and
2. Following the *Hurricane Preparedness Life Cycle* that includes:
 - a. Mitigation – assessments of a library’s location, service capabilities, and structural design to assure it will continue to serve the community as an emergency command post; provide services to Florida citizens, emergency personnel, and others during emergency events; and to serve as rescue operation centers during disaster situations;
 - b. Planning - level of readiness to address crisis conditions that surround an emergency event, such as a hurricane;
 - c. Response – preparation and implementation of procedures to respond to an emergency;
 - d. Recovery – implement activities and/or procedures to recover from an emergency;
 - e. Salvage and rebuilding – actions to repair the facility after an emergency event; and
 - f. Feedback – capture lessons learned during a hurricane or emergency event for incorporation back into the hurricane preparedness life cycle.

In addition, the study team is exploring various software applications to organize collected references and resources for searchable database applications.

Web Site Design and Implementation

The study team has designed and developed a project alpha web site (i.e. test bed and not “live”). At this point, the site has placeholders for potential information areas such as:

1. About the Project that includes:
 - a. Project documents, goals, objectives, and capabilities;
 - b. About the project team;
 - c. Directions to the Institute; and
 - d. Talk to Us – an area for communication with the project team.
2. For Librarians that includes:
 - a. Public Librarian Hurricane Desktop;
 - b. Model Hurricane Plan;
 - c. Potential Public Library Roles in hurricane preparedness and response;
 - d. Talk to Us - an area for communication with the project team.

3. For Florida Citizens that includes:
 - a. Library User Hurricane Desktop;
 - b. Model Hurricane Plan; and
 - c. Talk to Us - an area for communication with the project team.
4. For Public Officials that includes:
 - a. Public Library Hurricane Roles; and
 - b. Talk to Us - an area for communication with the project team.
5. Resources
6. Talk to Us - direct link to the general communication area for contact with the project team.
7. En Español
8. Download Plug-ins such as:
 - a. Adobe Acrobat Reader; and
 - b. Basic Real Player.

Some of the areas above, such as the “For Florida Citizens” have been populated with general information resources that include Web 2.0 applications, such as Geographic Information Systems (GIS) for the presentation of spatial data (i.e. storm track applications, evacuation zones, etc.); a sample of a hurricane preparedness toolkit, etc. These areas are still under development and will be modified as the study progresses. The study team will continue to develop and modify all web site areas as data collection and analysis activities of the project continue.

Additional Activities

Some additional ongoing activities include:

1. Project promotional efforts to increase awareness of the project, identify additional participants for focus groups and interviews, and to identify additional data collection opportunities that include:
 - a. Ongoing project-related blog posts to national and international librarian listservs such as:
 - 1) SOLINET blog (<http://www.solinet.net/News/Blogs.aspx>) – listserv developed primarily for southern and northeastern coastal libraries;
 - 2) PubLib electronic discussion list (<http://lists.webjunction.org/publib>) – this is a national public library listserv;
 - 3) Jesse listserv (<http://web.utk.edu/~gwhitney/jesse.html>) – international library listserv; and
 - b. Additional posts to librarian listservs, blogs, and newsletters through agencies/libraries such as:
 - 1) State library agencies;

- 2) Library consortium/cooperatives; and
 - 3) Local level public libraries.
2. Research of existing hurricane preparedness infrastructure to gain a better understanding of interrelationships between national agencies and organizations, state agencies and organizations, county and local agencies and organizations, public libraries, and others.
 3. GIS related activities, such as:
 - a. Identify and assess potential GIS applications for inclusion in the web site from federal, state, independent organizations, and other online mapping sources;
 - b. Collect available and relevant hurricane spatial data such as:
 - 1) Public library demographics;
 - 2) Hurricane tracks;
 - 3) Evacuation zones;
 - 4) Emergency operation centers;
 - 5) Public shelters, etc.; and
 - c. Explore the potential future need for a public library hurricane spatial data geodatabase.

Next Steps

Ongoing next steps for the project include:

1. Continue with the organization of references and resources into categories for inclusion into the web site;
2. Modify web site design as needed and develop content for each area of the web site;
3. Complete data collection efforts;
4. Continue with data analysis of data collection efforts;
5. Continue with the identification process of collaborators (state library staff, public librarians and government officials, community groups) and successful public library hurricane preparers and responders to locate additional data collection sites and participants; and
6. Promote (ongoing) the project at conferences, meetings, and through the use of blogs, listservs, and newsletters;
7. Continue to hold weekly study team meetings to discuss next steps, modifications/additions to web site, etc.; and
8. Begin web site assessments that include usability, functionality, and accessibility testing.

In addition to the above, the study team will establish the External Review Board that will include knowledgeable librarians, agency officials, and others. During the third quarter of the project, responsibilities of the External Review Board include reviewing proposed draft project products, such as the web site, model plans, guidelines, recommendations, etc.

SUMMARY

For the past three months (August 8, 2008 – November 1, 2008), the study team organized the project and began data collection efforts that include:

1. Identified relevant hurricane preparedness/response related information and services for web site development and data collection efforts;
2. Initiated the development of the project web site;
3. Identified collaborators for data collection locations and participants;
4. Planned and arranged site visits;
5. Conducted data collection activities at State Library conferences and in public libraries across Mississippi, Alabama, and the Florida panhandle;

In addition, the study team initiated data analysis efforts (transcribing) of data collected from focus groups and interviews.

For the next quarter (November 1, 2008 – February 1, 2009), the study team will continue data collection and analysis activities. The study team will also continue designing, developing, and implementing the project web site. In addition, the study team will begin systematic assessments of the web site to assure the site is usable, useful, functional, and meets accessibility requirements so that all Florida citizens, public library staff, public officials, and others have full use of the site.

The study team has made substantial progress and remains on schedule to complete the project in the time allotted. Indeed, the interest by public librarians in the project as well as the need to identify and analyze a large amount of information has necessitated the Information Institute contributing an additional graduate research assistant to the study team. There are no outstanding issues or problems identified at this time.



**HURRICANE/DISASTER PREPAREDNESS AND RESPONSE
BY UTILIZING FLORIDA PUBLIC LIBRARIES:
OVERVIEW OF SECOND QUARTER ACTIVITIES
November 1, 2008 – January 31, 2009**

February 2, 2009

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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 *Florida Catastrophic Storm Risk Management Center* (<http://www.stormrisk.org>) funds the grant, which began August 8, 2008 and ends July 31, 2009. This report provides an overview of second quarter activities completed and in progress from November 1, 2008 – February 1, 2009 and includes planned activities for the next quarter of the project (i.e. through April 30, 2009).

Overall, the goal of this project is to work with public librarians to better 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; and
- Assess how libraries can best provide hurricane preparedness and response services in light of the available skills and capacities at the library as well as local conditions.

Data collection efforts related to the objectives above occurred through January 2009. Data analysis and web development efforts will continue through the third quarter of the project (February 2009 – April 2009).

The project team designed the study in four phases: planning, data collection, data analysis, and presentation of findings and project products. The project team has completed data collection efforts during the project’s second quarter although additional data collection opportunities may occur in the third quarter. The project team is currently analyzing data, developing the web portal product, and beginning marketing and promotional efforts. The data collection phase of the project, shown in Table 1 below, includes the following completed tasks.

Summary of Completed Tasks for Data Collection Phase	
Data Collection Phase Tasks (10/1/08 to 12/15/08)	Pretest data collection instruments
	Continue website design and development
	Conduct interviews and focus groups at site visits with librarians, government and community officials, and others to gain enough data to develop draft descriptions, model plans, library roles, best practices, services, etc.
	Conduct follow-up phone and e-mail interviews as needed
	Establish External Review Board (knowledgeable librarians, agency officials, and others to review proposed products)

Table 1: Summary of Completed Tasks for Data Collection Phase

Overview of Activities: Second Quarter

For the past three months (i.e. November 1, 2008 – January 31, 2009), the study team organized the project, completed initial data collection efforts, and began data analysis and product development efforts. Table 2 below provides an overview of second quarter activities.

Second Quarter Project Activities	
Activity	Brief Description
Identified key hurricane experienced FL public libraries	Project team, with the assistance of the Florida Deputy State Librarian and others, identified Florida public libraries with hurricane experience of interest to the project using literature review and telephone surveys.
Conducted site visits to key libraries and emergency operations centers	Project conducted two waves of site visits interviewing 85 key leaders at 36 libraries, agencies, and/or organizations. The project team transcribed 21 of the interviews for additional study.
Gulf coast site visits	Gulf coast site visits (October 5-23, 2008) – the project team interviewed 35 State Librarians and library managers at 13 library systems in Mississippi, Alabama and the Florida panhandle.
Florida site visits	Florida site visits (December 1-19, 2008) – the project team interviewed 50 State Librarian and personnel, multi-type library consortia managers and personnel, library managers, emergency operations managers and planners, and SOLINET personnel at 23 libraries and agencies
GIS applications	The project team experimented with potential GIS applications culminating in contributing public library data to the Regional Evacuation Studies Project’s, Critical Facilities Inventory and county emergency operations maps. This project is being led by Jeff Alexander, Council Planning Programs Director, NE Florida Regional Planning Council. This contribution puts public libraries at the table, on maps used to respond to Florida disaster threats.
Project website development	The project web master has produced 4 beta versions of a project website. The current beta version has perfected the use of such features as blogs, customized search engines, annotated maps, production and use of digital photograph and video, quick polling, feedback forms, mounting of digital brochures and booklets, use of Google News to capture Florida hurricane news. In addition, plans for future web-portal versions include Spanish language versions of web site materials.
Booklets, brochures, dashboards	The project team identified the need for and began development of a set of brochures (short form), booklets (long, more complete) and dashboards (web based version) that convey needed information to different hurricane affected groups. These groups include evacuees, hurricane resident recovery, library director regional disaster plan resources, and emergency operations center county resources.

Table 2: Second Quarter Project Activities (continued next page)

Second Quarter Project Activities (continued)	
Activity	Brief Description
Public library disaster response service roles	The project team identified public library disaster-response service roles that summarize activities that public libraries may engage in to assist their communities' response to hurricane threats. Knowing the range of public library response enables public libraries, emergency operations and responders, and providers of external library support to better plan for public library use in an emergency.
External support roles in aid of local public library disaster response	The project team identified external support roles in aid of local public library disaster response. Networked external public library support providers engage when disaster strikes public libraries and their communities. These external support roles begin the process of systematizing external aid in an emergency
Awareness	The project team is preparing an article on the project for the Spring edition of <i>Florida Libraries</i> .
SEFLIN Regional Severe Disaster Recovery Plan	The project team is advising the Southeast Florida Library Information Network (SEFLIN) in the development of a first in the nation regional severe disaster recovery plan. The intent is to organize and coordinate library, government, emergency, and private resources to aid libraries in the advent of a severe disaster.
Public library hurricane resources	The project team continues to identify high quality resources related to better utilization of public libraries in community hurricane response.

Table 2: Second Quarter Project Activity

State Librarian and SOLINET Eppes Lecture at FSU

The project team has planned an Eppes lecture on *Public Librarians' Response to Hurricanes: Lessons, Issues, and Strategies* at the College of Information for Friday, February 20 from 12:30 p.m. to 2:00 p.m. The Eppes lecture is a panel discussion led by state librarians from Texas, Louisiana, Mississippi, Alabama, and Florida, along with the project manager of SOLINET, who is administering an \$11 million Gates Foundation grant to rebuild libraries along the gulf coast. Topics for the discussion include:

- Lessons from recent hurricanes in Texas, Louisiana, Alabama, Mississippi, and Florida;
- Roles of public libraries before, during, and after a hurricane;
- Rebuilding libraries and community infrastructure;
- Local and state politics in hurricane preparedness and response;
- Integrating public library preparedness and response with the local community;
- Coordinating public library response with other emergency management services;
- The role of the state library in support of and assistance to communities and public libraries;
- Strategies for how public libraries can be better prepared to assist their community; and
- Audience question/answers.

These six experts have had “hands on” experience in assisting libraries plan for and respond to hurricanes. For additional information, see http://www.ii.fsu.edu/news_detail.cfm?newsID=67.

In addition to participating in the panel discussion above, these six experts also serve as members of the project’s *Review Board*. The project team has scheduled a *Review Board* meeting prior to the panel discussion. The project team will conduct additional *Review Board* meetings for the third and fourth quarters of the project.

Public Library Hurricane Preparedness/Response Service Roles

In addition to the activities presented in table two above and the Eppes lecture, the project team has identified a number of public library hurricane preparedness and response service roles. Table 3 below provides an initial framework for understanding the levels of hurricane assistance public libraries currently provide their communities under the leadership and with the aid of their local emergency operations director. The team continues to explore, validate, and develop these roles as models by which public libraries can better prepare for and respond to hurricanes.

Public Library Hurricane Preparedness and Response Service Roles: Brief Descriptions	
Service Role	Description
Ensure Library Continuity & Restoration	Public libraries prepare for hurricane threats by ensuring continuity of library operations (including electricity and communications) or the rapid restoration of all library services immediately (or as soon as possible) after a hurricane event.
Extend Normal Library Service in Abnormal Times	Prompt availability of library services re-establishes local government presence and provides stability and hope. Traditional library services offer recreation, stress reduction and parental relief.
Be a Community Communication Hub	Public libraries offer emergency responders and the public a reliable, secure means of communication during disaster recovery. This may include copier, computer, Internet, phone, text, fax, and amateur radio. This may also include provision of needed office supplies where available.
Offer E-Government Services & Support	The library provides the technology necessary to access E-government information and services; assists residents to identify local, state, and federal e-government hurricane related information and resources including benefits; and aids in the completion of government electronic forms and applications. The library links residents and agency staff together.

Be a Community Information Hub	Library staff obtains and coordinates information from residents, evacuees, emergency managers, and other sources and provide them with accurate and timely information to prepare for, evacuate and recover from hurricane threats.
Be a Community Organizer & Meeting Place	Public libraries offer community organizing services and meeting facilities. This may as simple as a quiet, air-conditioned place for a resident to think. Library meeting rooms may serve as temporary agency office space.
Serve as a Point of Distribution (POD)	PODs distribute meals, sand bags, ice, tarps, water, etc. In some cases, library personnel manage or staff a POD. In other cases, library parking lots provide locations to distribute material.
Provide On Demand Emergency Services	Library does what is needed, or improvises delivery of needed services, based on requests from emergency management or local government without respect to traditional role.
Go Where Locally Assigned	In many Florida counties, all government personnel register with county emergency personnel managers for hurricane assignment.

Next Steps

Tables 4 and 5 provide an overview of Phase 3 tasks and activities.

Phase 3 Tasks - Data Analysis and Products Development	
Data Analysis Phase Tasks (2/1/09 to 5/1/09)	Prepare draft description(s) of potential public library role(s) in hurricane preparedness and response
	Prepare draft model Florida public library disaster plan(s), develop new generic model plans, and develop planning tools like the NCDL dplan
	Prepare draft guidelines, standards, best practices, recommendations, and other materials as appropriate
	Continue design on the web portal and conduct usability, feasibility, and accessibility testing of the web portal
	Prepare training materials for Florida library staff members
	Have the project’s <i>Review Board</i> examine draft project documents (i.e., web site, descriptions, model plans, guidelines, recommendations, etc.)
	Develop and test any appropriate Web 2.0 applications for project web portal

Table 4: Phase 3 Tasks – data analysis, product development, and marketing/promotional efforts

Table 4 (above) provides an overview of third quarter project tasks. For the next quarter (February 1, 2009 – May 1, 2009), the project team will continue data analysis efforts, continue product development activities, prepare and possibly offer training sessions, and continue marketing and promotional efforts. Table 5 (below) provides a summary of planned third quarter activities.

Planned Third Quarter Activities	
Publications for marketing and promotional efforts	Publication and dissemination of <i>Public Library Hurricane Response Service Roles</i> Publication and dissemination of external support roles in aid of local public library disaster response Publication and dissemination of <i>Integrating Public Libraries into Local Emergency Response</i>
Training sessions	Identification of potential training sites and dates Preparation of PowerPoint and other training materials
Networking	Bringing together key library and emergency personnel leadership to improve the utilization of Florida public libraries
Project web site	This quarter will see the launch of the project web portal as a principal way to disseminate project products.
Service Roles, Activities & Aids	The project team, using the project web portal will introduce public library emergency service roles, activities associated with those roles, and aids that will make adoption of those roles easier. Aids will include the development of brochures, booklets, etc.
SEFLIN Planning	The project team will continue to advise the SEFLIN planning team in their development of their <i>Regional Disaster Recovery Plan</i>

Table 5: Planned third quarter activities

SUMMARY

For the past three months (November 1, 2008 – January 31, 2009), the project team organized the project, completed initial data collection efforts, and began data analysis and product development efforts. In addition, the study team has created a project *Review Board* that consists of state librarians and hurricane planning/response experts, planned an Eppes lecture to explore public librarians’ response to hurricanes, and identified preliminary service roles public libraries provide before, during, and following a hurricane. For the next quarter (February 1, 2009 – March 31, 2009), the study team will continue data analysis and product development project tasks and activities as outlined in tables four and five above.

The study team has made substantial progress and remains on schedule to complete the project in the time allotted. There are no outstanding issues or problems identified at this time. Based on early responses from participants of the project, the interest by public librarians and emergency planners and operations officials in the project has been both gratifying and motivating.



**HURRICANE/DISASTER PREPAREDNESS AND RESPONSE
BY UTILIZING FLORIDA PUBLIC LIBRARIES:
THIRD QUARTER ACTIVITIES (February 1, 2009 – April 30, 2009)**

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May 8, 2009

HURRICANE/DISASTER PREPAREDNESS AND RESPONSE BY UTILIZING FLORIDA PUBLIC LIBRARIES

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 *Florida Catastrophic Storm Risk Management Center* (<http://www.stormrisk.org>) funds the grant, which began Aug 8, 2008. The original end date for the project was July 31, 2009; however, the Information Institute received additional funding, which now ends December 31, 2009. This report provides an overview of 3rd quarter activities completed, and in progress, from February 1, 2009 – April 30, 2009 and includes planned activities for the remainder of the project (i.e. May 1 – Dec 31, 2009).

Overall, the goal of this project is to work with public librarians to better 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.

Study Design

The study team designed the original project in four phases: planning, data collection, data analysis, and presentation of findings and products. For the 3rd quarter, the study team completed initial data collection efforts (i.e., interviews and focus groups), introduced the first publicly accessible project website <http://www.ii.fsu.edu/hurricanes/> and conducted the initial training phase (which includes ongoing data collection and analysis efforts).

Overview of Activities: Third Quarter

Table 1 provides an overview of 3rd quarter activities.

Table 1. Key Third Quarter Project Activities

Activity	Discussion
Completed Initial Interview and Focus Group Data Analysis	The study team continued analysis of interview and focus group results. These findings clarified library service roles, identified best practices and associated tools, as well as provided content for the project website. This work will continue during the 4 th quarter.
Eppes Panel Discussion February 20, 2009	Brought together at FSU the key Gulf Coast leaders of external support for public library hurricane response, including state librarians from Texas, Louisiana, Mississippi, Alabama, and Florida, along with the project manager of the Gulf Coast Library Project administered by LYRASIS (formerly SOLINET) and funded by the Bill and Melinda Gates Foundation.
GIS Applications	The study team continues to assess potential GIS applications. The project team worked with the Florida State Library and Archives to provide Jeff Alexander, <i>Council Planning Programs Director, NE Florida Regional Planning Council</i> with accurate public library data for the Florida <i>Regional Evacuation Studies Project's, Critical Facilities Inventory, and County Emergency</i> operations maps. This effort is significant because it identifies Florida public libraries as essential disaster services on maps used by emergency managers to respond to Florida disaster threats.
Project Website Development	The project web site went from internal beta version to a publicly (key audiences are public library managers, emergency managers and local government) available site http://www.ii.fsu.edu/hurricanes/ . The site is also useful for training purposes. Future web site efforts will include a better web site feedback mechanism (blog, form or e-mail), improved customized search engines (including the use of Google News to search for Florida hurricane specific news), addition of digital photographs and video, and use of a quick polling feature. In addition, planning continues for development of a Spanish language web site version.
External Support Roles in Aid of Local Public Library Disaster Response	The study team continues to identify external support roles in aid of local public library disaster response. Networked external public library support providers engage when disaster strikes public libraries and their communities. These external support roles begin the process of systematizing external aid in an emergency.
Training Sessions	The study team planned, coordinated, and initiated training sessions and data collection efforts related to the training sessions; implemented initial training sessions; and began collection of feedback from training sessions (i.e. post training surveys) for further data analysis, as well as web site and project product development
SEFLIN Regional Severe Disaster Recovery Plan	The study team continues to advise the SouthEast Florida Library Information Network (SEFLIN) in the development of a first in the nation regional severe disaster recovery plan. The intent is to organize and coordinate library, government, emergency, and private resources to aid libraries in the advent of a severe disaster. The plan should be completed and available by August 2009.
Marketing and Promotional Efforts	The study team began development of a project marketing/promotion plan for implementation from May – October 2009, including dissemination efforts at Florida and National conferences, such as the Florida Library Association (FLA) and the American Library Association (ALA).

Highlights of Key 3rd Quarter Activities

Eppes Lecture/Panel Discussion at FSU & Project Review Board

The study team sponsored an Eppes lecture and panel discussion on *Public Librarians' Response to Hurricanes: Lessons, Issues, and Strategies* at the College of Information on Friday, February 20 from 12:30 p.m. to 2:00 p.m. The panel discussion included state librarians from Texas, Louisiana, Mississippi, Alabama, and Florida, along with the project manager of SOLINET, who is administering an \$11 million Gates Foundation grant to rebuild libraries along the gulf coast. Topics discussed included:

- Lessons from recent hurricanes in Texas, Louisiana, Alabama, Mississippi, and Florida;
- Roles of public libraries before, during, and after a hurricane;
- Rebuilding libraries and community infrastructure;
- Local and state politics in hurricane preparedness and response;
- Integrating public library preparedness and response with the local community;
- Coordinating public library response with other emergency management services;
- The role of the state library in support of, and assistance to, communities and public libraries; and
- Strategies for how public libraries can be better prepared to assist their community.

A panel discussion detailed description is available at <http://www.ii.fsu.edu/hurricanes/eppesPanel.html>. The speakers have made their PowerPoint presentations available at <http://www.ii.fsu.edu/hurricanes/archive.html>. A video of the session is available at <http://ci.fsu.edu/news/?p=1135>. The panel discussion was well attended, and widely viewed and discussed in Florida, throughout the region and beyond (including broadcast to Washington State) via web conference.

Panel participants agreed to be members of a project Review Board to advise the study team on various aspects of the project. The first meeting of the Board was held on the morning of February 20, 2009.

Identification of Public Library Hurricane Response Service Roles

The project team further modified the public library hurricane response roles. The study team originally developed these roles in the 2nd quarter from interview and focus group results. Table 2 below provides the current framework for understanding the key roles that public libraries play when helping their communities prepare for, and recover from, hurricane disasters. A more detailed discussion of these service roles forms the core of the project web site <http://www.ii.fsu.edu/hurricanes/> and is the basis for the workshops and presentations described next. The team will continue to explore, validate, and develop these roles throughout the course of the project.

Table 2. Public Library Hurricane Response Service Roles: Brief Descriptions	
Service Role	Description
Safe Haven	The public library is the community's living room and study, before and after a storm, with safe, secure buildings, relaxing space, light, air conditioning, bathrooms and comfortable chairs.
Normal Service	The community counts on normal library service before and after the storm, be it book, DVD or Internet use, as well as reference or family programming. Normal service provides hope, re-establishes a government presence, reduces stress, returns normalcy, and offers recreation and distraction.
Disaster Recovery Center	Disaster Recovery Center (DRC) offers the community a DRC whether a FEMA designated DRC; a state, county or municipal DRC, a Point Of Distribution (POD) for aid, or simply a place for neighbors to make sense of their current situation and provide each other assistance.
Information Hub	Public libraries offer emergency responders, and the public, a reliable, secure means of communication during disaster recovery. This may include copier, computer, Internet, phone, text, fax, and amateur radio. This may also include the provision of needed office supplies where available.
Cultural Organizations Liaison	The public library may serve as a liaison between emergency management and the community's cultural organizations.
Evacuee Resource	Evacuees count on the nearest public library for safe haven and normal service, as well as as a disaster recovery center and information hub. Specific information resources and tools are developed for evacuees, should they come to the community.
Improvise	Should a disaster strike, the community counts on the public library to improvise and do what is needed to assist in the community's recovery efforts.

Workshops and Presentations

The study team assembled enough evidence, in the 1st and 2nd quarters of the project, from hurricane-affected public libraries that had made significant contributions to their communities' response to hurricanes, to begin to present findings. The goal of the workshops and presentations offered were to:

- Make Florida public library managers aware of the roles (and associated best practices and aids) that public libraries have played and might play in helping their communities' respond to hurricanes;

- Make emergency managers and local government officials aware of the roles that public libraries might play to help communities better respond to hurricanes;
- Introduce the project web site as a place to obtain detailed information on the roles, best practices and aids that enable better public library community hurricane response.

Table 3 identifies the workshops and training presented by the study team during this training cycle.

Table 3. Public Library – Hurricane Response Workshops and Presentations		
Date	Location	Topic
4/9/09	Austin, TX	National Hurricane Conference, Public Libraries and Disaster Response and Recovery presentation
4/13/09	Panama City, FL	Panhandle Library Access Network, Public Libraries and Disaster Response and Recovery half day workshop
4/16/09	Jacksonville Public Library	Public Libraries and Disaster Response and Recovery presentation
4/20/09	Orange County Public Library	Public Libraries and Disaster Response and Recovery presentation
4/22/09	Coconut Creek, FL	SouthEast Florida Library Network (SEFLIN), Public Libraries and Disaster Response and Recovery half day workshop
4/23/09	Miami Gardens, FL	SEFLIN, Public Libraries and Disaster Response and Recovery half day workshop
4/24/09	Brandon, FL	Tampa Bay Library Consortium (TBLC), Public Libraries and Disaster Response and Recovery half day workshop
4/27/09	Fort Meyers, FL	SouthWest Florida Library Network (SWFLIN), Public Libraries and Disaster Response and Recovery half day workshop
5/6/09	Orlando, FL	Florida Library Association (FLA) annual conference
5/14/09	Fort Lauderdale, FL	Florida Governor’s Hurricane Conference, Public Libraries and Disaster Response and Recovery presentation
5/15/09	Atlanta, GA	Lyrasis/SOLINET annual conference, Public Libraries and Disaster Response and Recovery presentation

Presentation and workshop feedback indicate the project is of great interest and the information presented on the project web site is appropriately focused and of high quality. Project staff distributed several hundred handouts describing the project and the availability of the web site.

Publications

Project work was presented in the following articles published during this quarter:

Oder, Norman et al. (2009, March 31). Insights on disaster response at FSU panel with State Librarians from SE. *Library Journal*.

<http://www.libraryjournal.com/article/CA6646914.html?q=mcclure>

Oder, Norman et al. (2009, April 15). After hurricanes, insights on disaster response. *Library Journal*. p. 12. <http://www.libraryjournal.com/article/CA6650288.html>

McClure, Charles R.; Ryan, Joe; Mandel, Lauren H.; Brobst, John; Hinnant, Charles C.; Andrade, Jordan and Snead, John T. (2009, Spring). Hurricane preparedness and response for Florida public libraries: best practices and strategies. *Florida Libraries Journal* 52 (1), 4-7.

Next Steps

Table 4 provides an overview of planned 4th quarter tasks and activities.

Table 4. Fourth Quarter Tasks (May 1, 2009 – July 31, 2009)	
1.	Complete descriptions of public library roles in hurricane preparedness and response
2.	Complete Florida public library disaster plans, develop new generic model plans, and develop planning tools like the NCDL dplan (disaster plan)
3.	Complete guidelines, standards, best practices, recommendations, and other materials as appropriate
4.	Continue design on the web portal and conduct usability, feasibility and accessibility testing of the web portal
5.	Develop self-help training materials for Florida library staff members, where training materials are presented through the web site
6.	Have the <i>Review Board</i> examine final documents (i.e. web site, descriptions, model plans, guidelines, recommendations, etc.) and provide feedback to the study team for final development of the web site and associated products
7.	Continue to develop, assess and test any appropriate Web 2.0 applications for the web portal
8.	Implement marketing and promotional efforts
9.	Begin dissemination efforts at the Florida Public Library (FLA) association conference and the American Library Association (ALA) summer conference.
10.	Develop web site evaluation and assessment tools that Florida librarians would complete, should a hurricane approach or hit Florida.

The [Florida Catastrophic Storm Risk Management Center](#), at the Florida State University’s College of Business, awarded the Information Institute a \$93,440 grant to extend the project through the end of 2009 during this 3rd quarter. Table 5 provides planned and projected activities through the remainder of the project.

Table 5. Planned and Projected Project Extension Activities (August 1 – December 31, 2009)	
Publications for Marketing and Promotional Efforts	<ul style="list-style-type: none"> •Publication and dissemination of <i>Public Library Hurricane Response Service Roles</i>; •Publication and dissemination of external support roles in aid of local public library disaster response; and •Publication and dissemination of <i>Integrating Public Libraries into Local Emergency Response</i>.
Networking	Bringing together key library and emergency personnel leadership to improve the utilization of Florida public libraries in disaster response and preparedness.
Project Web Site	This quarter will see the launch of the web portal as a principal way to disseminate project products.
Service Roles, Activities & Aids	The study team, using the web portal, will introduce public library emergency service roles, activities associated with those roles and aids that will make adoption of those roles easier. Aids will include the development of brochures, booklets, etc.

SEFLIN Planning	The study team will continue to advise the SEFLIN planning team in their development of their <i>Regional Disaster Recovery Plan</i> .
Project and Website Evaluation	Should a hurricane warning, or a hurricane, hit Florida in the 2009 season, the study team will obtain assessments of the usefulness of the web site and how the web site might be improved.
Sustainability	The study team will be actively pursuing external funding sources to continue updating and improving the web site beyond December 2009.

SUMMARY

For the past three months (February 1 – April 30, 2009), the study team revised library hurricane preparedness and response service roles, introduced the first public version of the project web site: <http://www.ii.fsu.edu/hurricanes/index.html>, and began workshops and presentations of project findings and the use of the web site. The study team also created a *Review Board* that consists of state librarians and hurricane planning/response experts, sponsored an Eppes lecture at FSU to explore public librarians' response to hurricanes, and conducted training sessions on use of the hurricane web site and on the important roles public libraries assume in preparation for, and response to, hurricanes/emergency situations. Table 4 outlines the expected tasks for the next quarter (May 1 – July 31, 2009) and Table 5 projects tasks for the following period (August 1 – December 31, 2009).

The study team continues to make steady and substantial progress in meeting the project's goals. The study team also remains on schedule to complete the project in the time allotted. There are no outstanding issues or problems identified at this time.



**HURRICANE/DISASTER PREPAREDNESS AND RESPONSE
BY UTILIZING FLORIDA PUBLIC LIBRARIES:
INTERIM REPORT (August 1, 2009 – December 31, 2009)**

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

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 allow project activities to be conducted through August 6, 2010. This report provides an overview of activities completed and in progress from August 1, 2009 – December 31, 2009 and includes planned activities for the remainder of the performance period (January 1, 2010 – August 6, 2010).

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.

Study Design

The study team designed the original project in four phases: planning, data collection, data analysis, and presentation of findings and products. For this reporting period (August 1, 2009 – December 31, 2009), the study team developed and began implementation of a plan for evaluating the hurricane web portal. Additional activities were initiated to continue to market and promote the hurricane project. A major focus of these activities was the statewide conference held in conjunction with the Florida Library Directors' Meeting on October 8, 2009. This quarter also saw the initiation of efforts to develop a library emergency communication infrastructure model 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.

5th Quarter Activities Overview

During this reporting period, there were major efforts initiated to market the project further and to make the project resources more available and valuable to the library community. These activities further extend the objectives that include the dissemination of project findings and recommendations. The dissemination activities, while focused primarily on the Florida public library community, are being extended to the Gulf Coast region and beyond. Further, these expanding activities enable the project to incorporate better library roles with the greater emergency response networks that include emergency management organizations, disaster response agencies, and the academic research community. Table 1 (below) provides the status of 5th quarter activities.

Table 1. Summary of August 1 - December 31, 2009 Project Activities	
Activity	Discussion
Evaluate the project web portal.	A website evaluation plan was issued on September 29, 2009, and implementation of that plan is underway with completion of data collection expected by January 31, 2010. A copy of the evaluation plan is available upon request. A final report that presents the analysis of findings will be provided by March 31, 2010.
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 project web portal content to include more booklets and interactive templates for public librarians, residents, and evacuees. This task will continue in conjunction with the ongoing field evaluation and usability assessment.
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. Ongoing marketing and promotional activities have included articles published in blogs and listservs, and included an internationally telecast Webinar (web based seminar).
Conduct a statewide conference to promote the project and web portal	A statewide conference was held in conjunction with the Florida Library Directors' Meeting (October 8, 2009). The activities include a formal presentation of the hurricane project and website, along with an informal reception that afforded the opportunity to assess the use of the website and next steps to extend and sustain the project.
Explore additional public library disaster roles	The study team developed and specified seven hurricane/disaster preparedness service roles for public libraries. As a result of the field review and other input from Florida residents, these service roles are being refined and better specified. This task will be finalized after completing the website usability study and project evaluation/field review.
Develop a library emergency communication infrastructure module	Initial meetings with SERT and other key emergency management leaders and library within Florida have indicated strong support for this module. The Institute will begin to develop a draft module that can be critiqued and refined before completion by the end of the contract period (August 6, 2010).
Integrate public libraries into local emergency management	The study team identified opportunities and activities to encourage public library participation in the National Incident Management System (NIMS) online training and explored the feasibility of selected public libraries serving as FEMA Disaster Recovery Centers. Also, the team met with the Florida State Emergency Response Team (SERT) on October 14, 2009 to develop practical strategies, such as a possible new module, , "Get to Know Your EOC," that will be explored and developed.
Integrate public libraries into local emergency management	The study team identified opportunities and activities to encourage public library participation in the National Incident Management System (NIMS) online training and explored the feasibility of selected public libraries serving as FEMA Disaster Recovery Centers. Also, the team met with the Florida State Emergency Response Team (SERT).

Hurricane/Disaster Preparedness and Response by Utilizing Florida Public Libraries

Table 1. Summary of August 1 – December 31, 2009 Project Activities (continued)

Activity	Discussion
Provide advice for regional library disaster planning	The project team continued to work with the Southeast Florida regional multi-type library cooperative SEFLIN to develop a disaster plan that will be finalized during the next quarter. SEFLIN's current restructuring has put this project on hold in the short term, but the project team will continue to work with SEFLIN to develop the plan further and to integrate experiences from this effort into the website as a module to assist other regional library hurricane planning efforts.
Conduct supplemental training	The project team conducted trainings at select locations throughout the state in order to update librarians, emergency managers, and community officials on project activities and the web portal with a focus on opportunities promoting joint planning among emergency managers and public library directors. Trainings included an informational session that was part of the statewide hurricane conference (October 8, 2009), an OCLC webinar that provided broad exposure to a diverse, international audience of library leaders (October 21, 2009), and training sessions in South Florida as part of the project field review.
Conduct a formal assessment of training efforts	The study team continues to assess formally the various training activities (i.e., workshops, training sessions, conference demonstrations) and presentations at professional association meetings. These training activities are ongoing, with a final report issued by the end of the contract period to include summary details.
Investigate ongoing external funding	The project team has been laying groundwork to obtain future funding from NOAA, FEMA, and other federal agencies; state library agencies of the Gulf Coast; Lyrasis; the American Library Association, and others. Other efforts have included submission of a proposal to National Telecommunications and Information Administration (NTIA)'s Broadband Technology Opportunities Program (BTOP) that includes support for broadband disaster/emergency planning for Florida public libraries. The Institute has obtained funding from the State Library & Archives of Florida that will further expand the content of the Hurricane Preparedness website into disaster/emergency planning as part of library service roles related to Electronic Government (E-Government).

Highlights of August 1 – December 31, 2009 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. 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 current reporting period, the efforts concentrated on the developing a plan to evaluate the web portal, to hold a statewide conference, and to continue to market and promote the project.

Project Evaluation Plan

On September 29, 2009, a formal project evaluation plan was developed, 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 plan details the evaluative efforts that include:

- ***Initial needs assessment:*** Interviews, focus groups, and surveys with 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 identify initial hurricane/disaster response and recovery web portal content;

- **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 of 2009.

Detailed results of the project's formative evaluation efforts are presented in each of the project's quarterly reports.

The final evaluation plan includes formative evaluations and an overall summative evaluation of the project, specifically: 1) assessments of the use and usefulness of the project's web portal; 2) final usability, functionality, and accessibility testing of the project's web portal; and 3) project and web portal evaluation data collected at the October 8, 2009 Florida Public Library Directors' Meeting. Upon completion of the formative assessments, the study team will conduct a final summative evaluation that will determine the degree to which project activities conducted from August 2008 – August 2010 meet the project's initial goal and objectives.

Statewide Conference

On October 8, 2009, Dr. Charles McClure made a presentation to the Florida Public Library Directors' Conference held in Tallahassee about the Public Library Hurricane Preparedness and Recovery Project and the project's web portal. The conference included over 100 library directors from across the state of Florida, as well as officials from the State Library & Archives of Florida and the Florida Legislature. The formal presentation covered the scope and intent of the project, as well as a discussion of the findings and their impact on the library community. The presentation by Dr. McClure and the accompanying reception afforded the opportunity to disseminate information about the project, assess the value this project has provided to the Florida library community, and solicit feedback and suggestions towards improving the web portal design and content.

Project Marketing Efforts

During the current reporting period, the project team 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:

- **Webinar through OCLC's WebJunction (October 21, 2009):** Introduction of the project web portal, overview of the identified service roles, and discussion of ongoing project activities, interactions between the Institute presented and webinar attendees through real-time polls and chat, and discussion focusing on additional disasters the portal could address (e.g., H1N1, fires, and tornados) and success stories from participants' libraries.;

- **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. As this quarter coincided with the peak of hurricane season, blog and listserv articles were issued to provide a reminder to librarians of the information and resources available from the web portal.
- **Upcoming presentations:** The project team will present the project and web portal at the Louisiana and Texas Library Associations' annual meetings in the spring 2010.
- **Statewide Conference:** The Institute's presentation to the Florida Public Library Directors' Conference held in Tallahassee included a formal briefing on the Hurricane Preparedness and Recovery Project and the project's web portal. The impact of that presentation was strengthened by providing informational brochures and project summaries. Also during the statewide conference activities, the Information Institute distributed over 50 copies of the promotional flyer to be displayed in Florida public libraries.
- **Professional Journals:** The American Libraries Direct newsletter (June 10, 2009) published "FSU Aids Public Libraries with Hurricane Preparedness." The article promoted how the new web portal can help libraries assist their communities to prepare for and recover from hurricanes and other severe storms.
- **Internet Public Library:** The Internet Public Library is a library oriented public service organization and a learning/teaching environment founded at the University of Michigan School of Information and hosted by Drexel University's College of Information Science & Technology. This online reference service has added an active hyperlink, including descriptive narrative that links to the hurricane project web portal.
- **Florida Division of Emergency Management (SERT):** The Institute has been working closely with local and state emergency management officials to further promote the website project. One major outcome of those meetings is the placement of a hyperlink on the Florida SERT website that links to the hurricane web portal.

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.

Next Steps

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

- **Marketing and promotion:** Planning and coordination activities will continue 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);
- **Continuous evaluation:** The project team will complete additional research on the needs and activities of Florida public libraries related to hurricane response, conduct usability testing of the project web portal, and implement and complete the hurricane portal evaluation plan;

Hurricane/Disaster Preparedness and Response by Utilizing Florida Public Libraries

- **Establishing a library emergency communication infrastructure module:** The project team will add a module to the project website (cross listed in the Safe Haven and Information Hub roles sections) that outlines requirements and resources available to ensure a public library's ability to communicate throughout a hurricane emergency and to offer communication facilities to residents;
- **Training assessment:** The project team will continue to evaluate the feedback obtained from the prior training sessions with the goal of further improving the project web portal; and
- **Update 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 2 outlines the expected tasks for the planned and projected activities for the remainder of the performance period (January 1 – August 6, 2010). Efforts for this period will focus on completing the evaluation of the web portal, updating the content and resources provided within the web portal, and the development of a library emergency communication infrastructure module.

Table 2. Planned and Projected Activities (January 1, 2010 – August 6, 2010)	
Web portal evaluation	Continue the website evaluation program, integrating feedback and suggestions as web portal improvements.
Library emergency management module	Develop a library emergency communication infrastructure module providing information on building stronger collaborative and cooperative relationships between library and emergency management agencies. The Institute has received strong support for this module from local SERT teams, other local emergency management agencies, and Florida library directors. The project team will complete the user assessment phase and develop module, to include the collection of user feedback and performing an evaluation of the utility of the module. Feedback from user contact will be incorporated into subsequent refinements and improvements during this period.
Conduct and assess training	Continue to seek out and engage in training activities as workshop sessions, conferences, and meetings that will serve to promote awareness of the project and the web portal. Conduct ongoing formal assessments of all training efforts.
Publications for marketing and promotional efforts	Prepare an invited article for the <i>Bulletin of the American Society of Information Science and Technology</i> on libraries and disaster response. Also, continue the publication and dissemination of external support roles in aid of local public library disaster response, as well as the module <i>Integrating Public Libraries into Local Emergency Response</i> . Continue to seek opportunities to promote and market the project to all stakeholder groups and interested parties.
Networking	Conduct ongoing collaboration with key library and emergency personnel leadership to improve the utilization of Florida public libraries in disaster response and preparedness.
Project web portal	This timeframe will see the further development of the web portal as a principal way to disseminate project products.
SEFLIN planning	The study team will continue to advise the SEFLIN planning team in their development of their <i>SEFLIN Regional Disaster Recovery Plan</i> . SEFLIN has temporarily suspended activities pending the hiring of the a new executive director.
Sustainability	The study team will be actively pursuing external funding sources to continue updating and improving the web portal beyond August 2010.

Each of these next step activities, as identified in Table 2, is underway with significant progress already made. These activities will make a major contribution to the objectives of promoting the hurricane project and adding value to the web portal. The study team continues to

make steady and substantial progress in meeting the project's goals and remains on schedule to complete the project in the time allotted. There are no outstanding issues or problems identified at this time.

Summary

For the past five months (August 1 – December 31, 2009), 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 an internationally viewed Webinar and the conducting of a statewide conference that included a formal briefing on the web portal to an assembly of over 100 Florida library directors. Future activities will 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.



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

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HURRICANE/DISASTER PREPAREDNESS AND RESPONSE BY UTILIZING PUBLIC LIBRARIES: EVALUATION 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 allow project activities to be conducted through August 6, 2010. This report provides an overview of web portal evaluation activities completed November 2009 through January 2010.

Methodology

The Hurricane/Disaster Preparedness and Response web portal was developed to aid Florida public librarians and emergency response personnel during hurricanes and/or disasters (see: <http://hurricanes.ii.fsu.edu/>). The study team developed plans for use and usefulness data collection activities based on the following two scenarios:

- **Scenario 1 – Hurricane/Disaster Event Occurs:** If a hurricane/disaster event occurred during the project, the study team would conduct interviews, focus groups, and surveys to collect information related to the use and usefulness of the web portal prior to, during, and after the event; and
- **Scenario 2 – Hurricane/Disaster Event Does Not Occur:** If no hurricane/disaster event occurred during the project, the study team would conduct interviews, focus groups, and surveys to collect information related to the use and usefulness of the web portal.

Since no significant hurricane/disaster event occurred during the 2009 season, the project team implemented the evaluation plan under Scenario 2.

The web portal evaluation includes three primary methods, as follows:

- **Interviews/focus groups and surveys:** The interviews and surveys were designed to assess the use and usefulness of the project's web portal by soliciting feedback and opinions from hurricane-experienced librarians from a convenience sample of Florida public libraries;
- **Usability, functionality, and accessibility testing:** These assessments of the overall usability of the project web portal included user and expert usability testing, and expert functionality and accessibility testing to assess the degree to which the hurricane web portal meets general usability, functionality, and accessibility standards; and
- **Web analytics:** The project team utilized Google Analytics to evaluate web portal usage from October 1 through December 31, 2009.

Based on the analyses of these data, the study team will edit, refine, and improve the project web portal to better meet Florida librarians' and local/state emergency responders' needs.

Interviews, Focus Groups, and Surveys

The study team conducted interviews, focus groups, and surveys with Florida public librarians to obtain feedback on the web portal. Using an interview/focus group script and Hurricane Web Site Use Survey (See Appendix A for the interview/focus group script and Appendix B for the survey), hurricane-experienced librarians across the state were questioned regarding the effectiveness of the web portal, its usability, its organization and its comprehensiveness. The interview script and survey were pretested on librarians at a Southeast Florida public library. Their answers were recorded to preserve the input, and the study teams' questions were refined to acquire the most valuable recommendations. After making the necessary changes to the script and survey, 15 librarians were interviewed and their responses were recorded and analyzed so their feedback could be used to make changes to the web portal.

Librarians' responses indicated significant interest in extending and refining the web portal project. These hurricane-experienced librarians stated unanimously that the web portal would be a primary reference site in the event of a hurricane/disaster (See Figure 1 for a summary of the responses to the survey questions and Table 1 for key themes from the survey comments.) The most frequent request was the addition of links to county by county information regarding library locations, services and shelters, if this were done, said one librarian, "this web portal would be all we would need." A second request was to add a service role related to working with local Emergency Operations Centers (EOC).

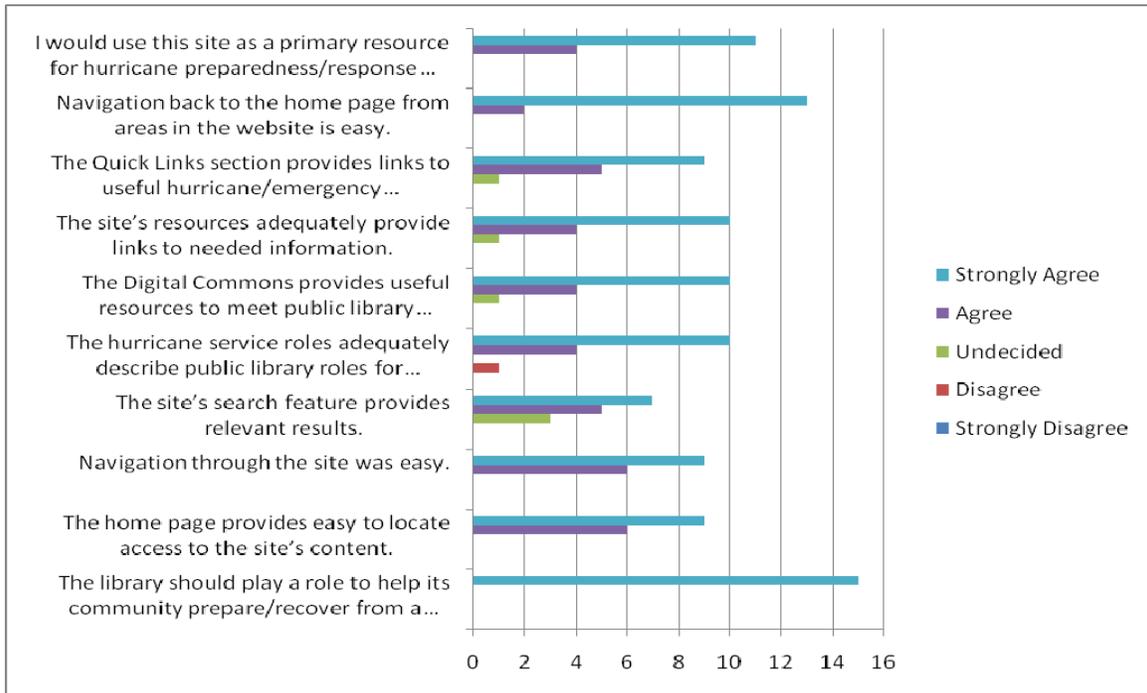


Figure 1. Summary of Responses to Survey Questions

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Table 1. Key Themes Emergent from Librarian Comments in the Survey

TOPICS	KEY THEMES
Service Roles	<ul style="list-style-type: none"> Public Libraries in Florida have been centers for information both before and after a storm. Overall, the service roles do a good job explaining what librarians can do for their communities before, during, and after a hurricane. Librarians find the service roles to be comprehensive.
Web Portal Usability	<ul style="list-style-type: none"> In general, the homepage is well-organized, uncluttered and links to vital information. Overall, navigation is uncomplicated and requires no specialized training to use. In general, librarians found the portal to be really useful, well-organized, and containing valuable resources. Search retrieves relevant results.
Web Portal Usage	<ul style="list-style-type: none"> Librarians are already bookmarking the portal to their “favorites” lists. The Digital Commons will be exceptionally valuable allowing updated information to be shared and made publically available to librarians and citizens at a time when communications will be difficult at best. State and national links are really useful.

Due to the current public library funding and staffing shortages, the librarians appreciated the information made available through the web portal to meet their needs. They believe more advertising of the site should be done to reach those librarians who lack the funds or time for continuing education. In all interviews, service roles were thought to be complete, comprehensive and said to represent all the activities these librarians had been asked to do in the past or might be called upon to do in the future. Comments regarding the look, terminology and organization of the site were helpful in improving the web portal design from a usability standpoint, such as the following key issues:

- More than half of the public librarians interviewed were unfamiliar with the term “Digital Commons” used to describe the location of Web 2.0 applications available on the site and requested a more readily understandable term;
- Many librarians requested that the Quick Links be moved to the top of the site so that the web portal would be structured for quick action; and
- Several librarians would like the portal to include a mechanism to specifically search the site’s resources and bibliographies.

Several of the librarians were pleased to have access to the wiki and blog to communicate directly with one another; however, others worked in libraries that used filtering software that blocked their access to wikis, blogs and YouTube presentations. When speaking about creating policies which would apply during a hurricane/disaster event, several librarians appreciated the links in the bibliography which provided access to what one librarian called “real-life” library policies that are being used and are working in other library systems.

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In general, the librarians appreciate the project team’s focus on them as the primary audience of the web portal. Interviewees took ownership of the site and were active in suggesting improvements to its structure and organization for their use. Over 66% indicated a desire to be informed of changes and improvements, and several librarians offered to visit the site regularly to view updates and suggest more improvements through the “Contact Us” feature. They expressed the hope that funding would continue to keep the site relevant and dynamic.

Web Analytics

The study team utilized Google Web Analytics to examine web portal usage and collect metrics determined to be the most useful for assessment of web portal usage. The project team evaluated usage data from October – December 2009, choosing a convenience sample of the quarter after the portal was launched and the marketing campaign has been in full effect. Overall, the analytics indicate that the portal is experiencing increased usage, even toward the end of a quiet hurricane season.

The web portal experienced an average of 8.14 visits per day primarily through direct traffic (Figure 2), meaning users arrive at the portal by typing the URL in their browser window, rather than being directed to the portal from another website or search engine. Large spikes in visits in October may be related to web portal awareness campaigns at the Florida public library directors’ meeting and the Webjunction webinar, both held in October 2009.

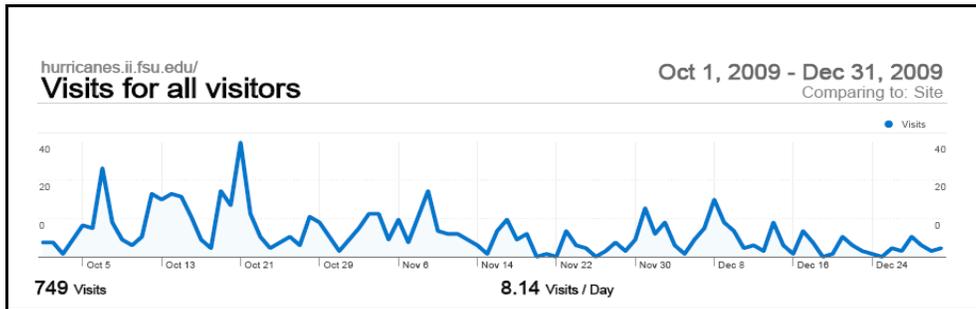


Figure 2. Visits to the Website by Day, for October – December 2009

For informational sites such as the hurricane project web portal, metrics such as returning visitors vs. new visitors can be informative (Figure 3). More than 700 users (749) visited the portal between October and December 2009, and 33% of them were returning visitors, indicating that they find the information on the portal to be useful, relevant, and worth multiple visits. Users viewed 3.52 pages on average, and the average length of a user session was nearly 3.5 minutes. Over 2500 pages were visited, compared to the Google benchmark of 110 pages for a web portal of similar size. During sessions, there was considerable viewing, search activity and time spent on the main page, the index and the service roles, with Safe Haven being the most frequently viewed service role (Figure 4). Nearly 75% of users (73.57%) entered the portal via direct traffic or referring sites (Figure 5), indicating that users knew where they were going and what they were looking at.

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These metrics suggest that users of the web portal were looking for it, not misdirected to it. The analytics indicate that the site is engaging users' interest, since there was a high number of pageviews against the Google benchmarks. Also, web portal viewers stayed in the site for a fairly lengthy time period, searching for service roles and other resources, presumably finding needed information.

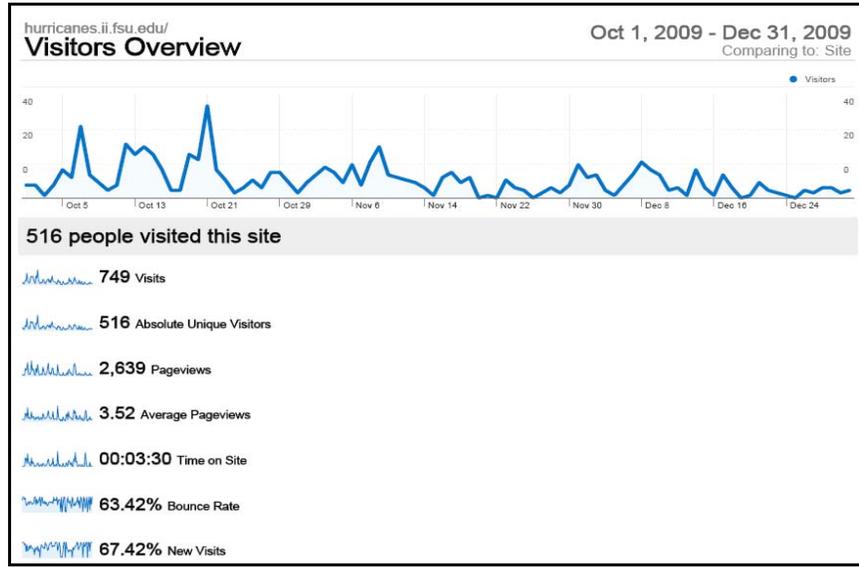


Figure 3. Visitors to the Hurricane Web Portal, Including Pageviews, Time on Site, Bounce Rate, and New Visits

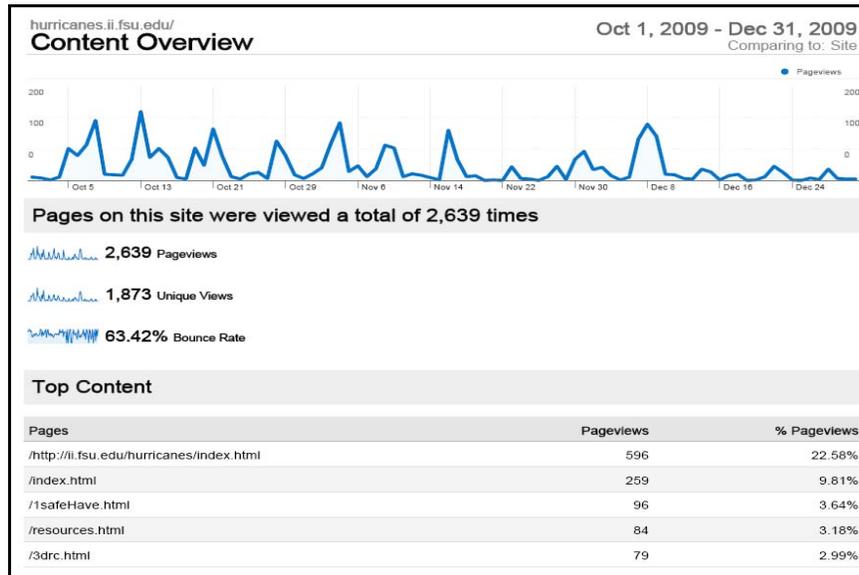


Figure 4. Usage of Web Portal Content

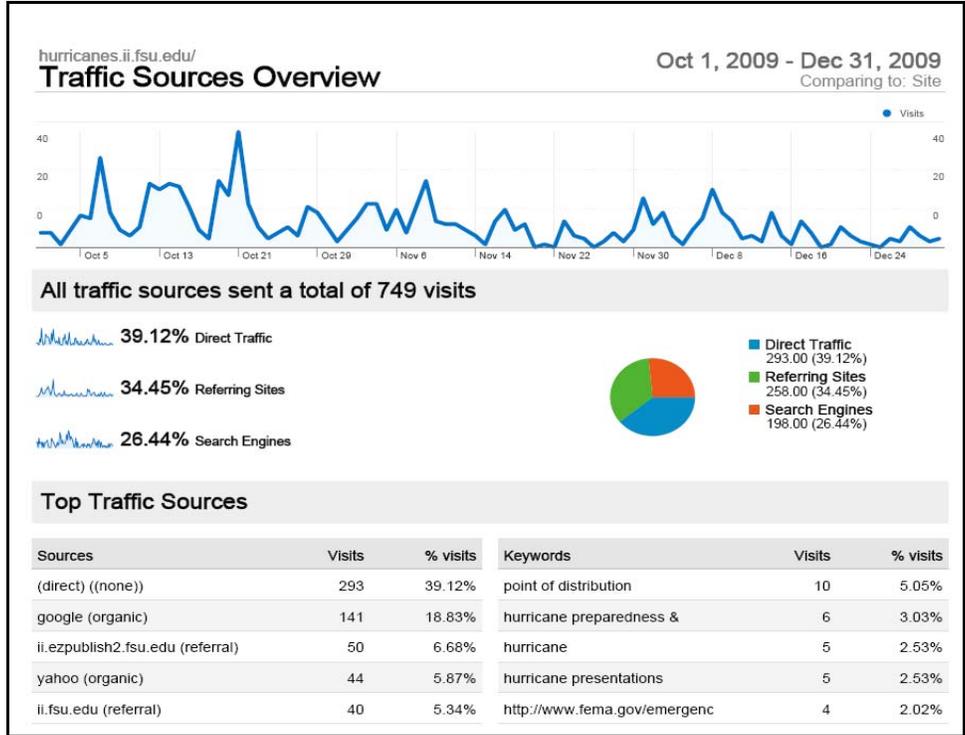


Figure 5. Sources of User Traffic to the Project Web Portal

Usability, Functionality and Accessibility Testing

To perform usability, functionality and accessibility testing, the team developed standard usability protocols for the evaluation of the hurricane web portal. Areas included within the protocols were based on general information seeking behaviors of users that include the use and usefulness of the web portal’s content and design. In addition, the usability protocol included questions related to the most and least useful aspects of the web portal and recommendations to improve the web portal. An overview of the usability, functionality, and accessibility assessment is included here, and the full report is available upon request from the Information Institute.

Usability Testing

The usability evaluation included assessments by selected public librarians and expert testing by members of the study team. The study team emailed a usability protocol to 3-5 selected Florida public librarians. The usability protocol developed for this project was specific to the hurricane/disaster preparedness and response web portal and was based on the study team’s prior usability testing experience. The selected participants reviewed the protocol and project web portal, and completed and returned the usability protocol form to the project team along with recommendations on how to improve the web portal. The study team also conducted expert usability assessments of the project web portal where members of the study team reviewed the project web portal and completed the usability protocol.

The usability testing found that navigation with the toolbar and arrows were easy and clear. Some inconsistencies related to pop-up boxes and navigation tabs of the *About the Project*, *Project Team* and *Training* toolbar links were noted, as were problems with the *Search* feature which is prominent at the top of each page. There were no unproductive navigation choices or navigation errors when navigating all internal, embedded, and external links. The usability testing found that navigation through the portal to desired content areas via the navigation toolbar and embedded links is effective and efficient. Navigation features to enhance users' navigation between web pages and back to the home page were examined and no major problems found. Embedded links in content areas were found to be easy to locate and lead directly to content, and the *Contact Us* support feature was found to include sufficient contact information the only recommendation being that it be more visible on the page, a suggestion also made by one of the focus group librarians.

Functionality Testing

Functionality is the degree to which all aspects of a website are functional and operate properly. Functionality testing helps assure that a system performs as expected, or that it works. This testing insures that the web portal is delivering the intended services and capabilities that are needed by the targeted population of users. For the project web portal, functionality testing included a systematic assessment of every page of the portal. All results are based on functionality testing conducted November 13-15, 2009.

Overall, results of the functionality assessment found that all links from the navigation toolbar, embedded links in content areas of the site, and other navigation features are functional and operate as they should. It was recommended that the project team fix/remove identified broken resource links from *Articles*, *Web Sites*, and *Others*. In addition to the broken links, some areas of the *Resource* topic documents contain too much white space in the pages. Recommendations include fixing or removing broken resource links and removing excess white space from the resource documents.

Accessibility Testing

Accessibility is the level at which a technology can be used by individuals with disabilities. Accessibility testing is particularly important in Florida as many seniors have disabilities including visual, hearing, and mobility impairments that impact the ability to use Web-based materials. Categories of evaluation include checking for accessibility friendly features as menu driven selections, testing policy, accessibility statement, and compatibility with assistive devices used by individuals with disabilities. Members of the study team conducted the accessibility testing (see Appendix C for the accessibility test instrument) and have edited and refined the project's web portal based upon the findings of this testing.

It was found that generally, the web portal does a good job of meeting accessibility standards. Text, links, tables and text boxes, HTML code and CSS all readily accommodate screen enlargement. The web portal also provides clear context and orientation information (e.g., navigation features such as navigation links, breadcrumbs, and the *Home* link), and web portal documents are consistent, clear, organized, and readily accommodate screen enlargement.

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It was recommended that there be a change in the site design to use colors that are not static to allow users to better view pages with alternate contrast settings and it was noted that the site may not adequately accommodate screen reading software (i.e. for audio). Suggestions made regarding these issues have been addressed by the project team.

Next Steps

Findings from the interviews/focus groups and surveys, web analytics, and usability, functionality and accessibility testing indicate several areas where the hurricane project web portal needs improvement. These are detailed in Table 2.

Table 2. Areas of the Web Portal That Need Improvement/Alteration

TOPICS	KEY THEMES
Terminology	<ul style="list-style-type: none"> • Rename “Digital Commons” with a more familiar term • Rename “Hurricane Centers” (in Quicklinks) to “NOAA” per librarians’ requests
Quicklinks and other links	<ul style="list-style-type: none"> • Move Quicklinks up in navigation menu • Possibly set links to open in separate window, but be consistent in how links operate • Investigate changing Quicklinks to operate as pop-up instead of mouseover, per librarians’ indications of difficulty in using the mouseover feature • Identify and fix/remove broken resource links
Resources	<ul style="list-style-type: none"> • Include additional resources and links that are useful to public, as well as librarians • Increase readability by minimizing white space in the resources documents
Search Features	<ul style="list-style-type: none"> • Possibly move search box to the left (based on librarian preferences) • Investigate implementing keyword or other search of the resources • Clarify that Search uses Google Search • Investigate implementation of internal search feature incorporating metadata into header code of internal pages
Accessibility	<ul style="list-style-type: none"> • Change site design to use colors that are not static to allow users to better view pages with alternate contrast setting • Investigate possibilities to allow portal to accommodate screen reading software

Evaluation participants also suggested the usefulness of developing a new service role related to working with local EOCs. We will continue with a new marketing effort beginning this summer for the fall 2010 hurricane season that will include presentations in Louisiana and Texas as well as in Florida. The project team will address these issues during the remainder of the project period (through August 6, 2010). The final project report, which will be submitted by August 31, 2010, will summarize work completed on these recommendations and other project activities completed between this report and the end of the project.

Assisting Florida Public Librarians During a Hurricane

According to interview/focus group comments, many public reference librarians remain unfamiliar with the contents of the web portal and are not being reached by efforts due to staffing shortages, and budget cuts in the area of professional development and continuing education. However, participants agree that the various plans, services, and activities in which public libraries have engaged for hurricane preparedness and response have been described and identified as Hurricane Service Roles. Recommendations from hurricane-experience librarians indicate that future activities must build on this work to ensure that the web portal continues to be as relevant and current as they believe it to be. The consensus is that this resource is very valuable to them. Web analytics while encouraging, might be better gauged during a hurricane event, and recommendations of the usability, functionality and accessibility study have been implemented.

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. It is great to go to one website 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 interviews/focus groups and surveys, 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 web portal continues to be better known. This continues to be done while various avenues for additional external funding are explored.

APPENDICES

Appendix A: Hurricane Website Interview/Focus Group Script

The Information Institute has been awarded a grant from the Florida Catastrophic Storm Risk Management Center to increase the state's capacity to prepare for and recover from hurricanes by better utilizing Florida's public libraries in these disasters. As part of the grant, the Information Institute has created a Hurricane Preparedness and Response website for public libraries at: <http://www.ii.fsu.edu/hurricanes/>.

The purpose of this focus group is to learn from successful, hurricane experienced, public library managers, state and federal government emergency response officials, and community organization leaders to determine what areas of the website are most useful related to hurricane preparedness and response through public libraries and what areas of the website need additional development. This is why you have been asked to participate. The study team is particularly interested in your experience in helping your state and local community prepare for and recover from hurricanes and other disasters.

We will take a few moments and go through the website. While we preview the site, we have some statements (below) related to the site for us to discuss with you.

1. The home page provides easy to locate access to the site's content.
2. Navigation through the site was easy.
3. The site's search feature provides relevant results.
4. The hurricane service roles adequately describe public library roles for hurricane preparedness and response.
5. The Digital Commons provides useful resources to meet public library hurricane preparedness needs.
6. The site's resources adequately provide links to needed information.
7. The Quick Links section provides links to useful hurricane/emergency preparedness and response sites.
8. Navigation back to the home page from areas in the website is easy.
9. I would use this site as a primary resource for hurricane preparedness/response information.
10. The library should play a role to help its community prepare/recover from a hurricane.

Thank You for your participation!

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Appendix B: Hurricane Website Use Survey

The Information Institute has been awarded a grant from the Florida Catastrophic Storm Risk Management Center to increase the state’s capacity to prepare for and recover from hurricanes by better utilizing Florida’s public libraries in these disasters.

Please take a few moments to review the statements below and explore the hurricane preparedness and response web site at: <http://www.ii.fsu.edu/hurricanes/>. After exploring the web site, please respond to the statements below.

Please circle the number that best reflects your opinion for each statement/question AND PROVIDE ADDITIONAL COMMENTS

	Strongly disagree	Disagree	Undecided	Agree	Strongly agree	
1. The library should play a role to help its community prepare/recover from a hurricane	1	2	3	4	5	
Please comment:						
2. The home page provides easy to locate access to the site’s content.	1	2	3	4	5	
Please comment:						
3. Navigation through the site was easy.	1	2	3	4	5	
Please comment:						
4. The site’s search feature provides relevant results.	1	2	3	4	5	
Please comment:						
5. The hurricane service roles adequately describe public library roles for hurricane preparedness and response	1	2	3	4	5	
Please comment:						

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	Strongly disagree	Disagree	Undecided	Agree	Strongly agree	
6. The Digital Commons provides useful resources to meet public library hurricane preparedness needs.	1	2	3	4	5	
Please comment:						
7. The site's resources adequately provide links to needed information.	1	2	3	4	5	
Please comment:						
8. The Quick Links section provides links to useful hurricane/emergency preparedness and response sites	1	2	3	4	5	
Please comment:						
9. Navigation back to the home page from areas in the web site is easy	1	2	3	4	5	
Please comment:						
10. I would use this site as a primary resource for hurricane preparedness/response information	1	2	3	4	5	
Please comment:						

Thank You for your participation!

Appendix C: Accessibility Test Instrument

Functional Requirement	Results			Comments
Do the appearance and function of the site comply with the accessibility principles mandated by Section 508 of the Rehabilitation Act by complying with W3C principles that:				
-Provides equivalent alternatives to auditory and visual content?	Yes	No	Somewhat	
-Does not rely on color alone?	Yes	No	Somewhat	
-Uses markup and style sheets and does so properly?	Yes	No	Somewhat	
-Creates tables that transform gracefully?	Yes	No	Somewhat	
-Ensures user control of time-sensitive content changes?	Yes	No	Somewhat	
-Ensures direct accessibility of embedded user interfaces?	Yes	No	Somewhat	
-Designs for device-independence?	Yes	No	Somewhat	
-Provides context and orientation information?	Yes	No	Somewhat	
-Provides clear navigation mechanisms?	Yes	No	Somewhat	
-Ensures that documents are clear and simple?	Yes	No	Somewhat	