

Rural libraries and Disasters: Investigating Resiliency in the Digital Environment

Statement of Need: In this proposed research, investigators headed by a team at the University of Texas at Austin are requesting \$250,000 to investigate how small and often rural libraries contribute to community viability. It focuses on the factors important in library resiliency in the face of disasters and crises. Partnering with experts at UT-Austin and Florida State University (Dr. Marcia Mardis), the research should contribute to improved planning and management tools, as well as an understanding of resilience features appropriate to stressed environments. A focal point for this inquiry is the aftermath of natural disasters when libraries were re-purposed as disaster relief centers during the record-breaking 2017 hurricane season in the Gulf and a fire season in Western regions.

This research emphasizes the new challenges accompanying a *digital* information and resource environment in which displaced community members turn to libraries for assistance with information needs on top of other, perhaps more immediate, material needs. Coping with dislocation, housing loss, and possibly job losses, communities turn to libraries for information and communication technologies and resources which become central to coordination purposes, social support, and pragmatic resource monitoring. In addition to possibly suffering their own internal damage, staff attrition and collection threats, local libraries must face the challenges of helping broader communities. Libraries anchor communities and can enhance the needed healing and economic and workforce revitalization. Further, they fulfill the information needs community members experience during recovery.

Our research uses the concept of resilience in order to understand how libraries both prepare for and deal with disaster environments. Resilience is a term applied to numerous phenomena, but as a non-profit, public institution, the library's organizational context suggests framing resilience in terms of how libraries (1) adapt to threats or disturbances, (2) refocus priorities and capacities, (3) learn and (4) change. Common organizational responses to stresses - from natural disasters to economic strain - include downsizing, reorganizing, forming alliances, among other strategies; however, libraries are unique, public institutions operating within constrained circumstances including limited budgets and uneven access to technical assistance, even as they are imbued with public trust and expectations. Their resilience capabilities could vary tremendously. This research will try to account for variation in resilience among the small, often rural, public libraries facing disaster circumstances, and speaks to the IMLS interest in "developing the knowledge and competencies in libraries that can identify opportunities and address community needs" as cited in the NOFA.

The newest literature on disasters underscores the increasing significance of information and communication resources during disasters and recovery. Our previous research examining rural libraries has underscored how these institutions provide local Internet access and wifi, as well as librarians' digital expertise, for various endeavors; some of our qualitative data underscore the assistance libraries provide to people who need to interact with government, insurance or other agencies. To the extent that Internet access alternatives and rural libraries' resources are either highly limited or inaccessible to underserved populations, investigating how libraries re-construct the digital information environment their patrons need could provide important insights into specific opportunities around engaging communities, enabling technologies, and fostering collaboration.

Project Design and Research Questions: We are targeting up to 15 small, public libraries on the Texas and Florida Coasts for a series of case studies. Many of these are underserved and some are rural. The Texas libraries were particularly affected by flooding, while in this most recent cycle of disasters, the Florida libraries were more affected by wind damage. However, beyond library damage, entire communities experienced devastation. In addition to suffering internal damage, the libraries were faced with the challenges of helping communities to cope with facets and phases of the disaster. Resilience therefore has a reciprocal feature and refers to the libraries themselves as well as their local communities.

Our major research questions are: (1) How did libraries in coastal regions respond to the hurricane disaster? Services, information and organizational resources, and community interactions are relevant components. (2) What are the factors that affected libraries' performance over the cycle of disaster and recovery that comprise their levels of resilience?

In order to assess the organizational and community qualities that favor resilience, we plan to (1) interview library staff regarding their experience of and responses to the disasters; (2) gather secondary data on local broadband availability and use from services providers, including those providing services to the libraries; (3) undertake limited, community-wide surveys to investigate aspects of resilience, information needs and organizational resources; and (4) examine content data from library Facebook and other community sites reflecting on the disaster experience. We will construct a "life cycle" of community and organizational responses to disasters, and we will plot timeliness and type of responses, particular stress events (should they exist), and breakthroughs.

This case study research design will allow us to position resilience in terms of contextual features in library settings, including services provided by the libraries (including broadband connectivity). Library assets, staff experience, social capital with other institutions constitute some components of resilience.

Project Team: Our team has a solid record investigating the economic and communication structures of rural communities and the local role of rural libraries. Sharon Strover, University of Texas at Austin – Moody College of Communication, has undertaken rural infrastructure research around the country, attending to community, education and other service dynamics associated with broadband connectivity; her most recent research has focused on rural libraries in Kansas and Maine. We also plan to work with UT's School of Information and Florida State's College of Communication and Information on aspects of the data collection and interpretation. All team members have experience with research projects in rural locations. We also will have regular communication with the respective State Libraries of both Texas and Florida since both were involved in monitoring and responding to libraries affected by disasters.

Projected Performance Goals and Outcomes: This research contributes to the broader literature on resilience, and applies it specifically to small and often rural public libraries. One outcome will be a template for developing strategic and enhanced services within stressed communities. We will offer recommendations that can assist libraries in preparing for the next set of stresses that reach them, whether they are natural disasters or other types of crises. One important goal will be to share the research findings in order to help libraries and communities work with each other and address regional problems. We plan to assemble a group of stakeholders, including State Librarians, to evaluate our research and to make suggestions while it is ongoing; they also will assist with dissemination.

Diversity Plan: We will engage small, and rural libraries, many of them working with underserved populations.

Potential Impact: This project will provide a framework for considering organizational change in times of stress. It will inform us directly about the stages in a library's response to a disaster setting, and could help to contribute to understanding strategies that could be deployed now or in the future – before the next disaster – in order to improve a library's overall resilience. We anticipate our data-gathering will allow us to reflect as well on the broader community-level settings that enhance resilience. We are mindful that resilience in a natural disaster may have implications for coping with disasters beyond those from the natural environment. Our investigation will shed light on the organizational needs of small or rural libraries as they contemplate becoming more resilient. Our prior research suggests that certain kinds of strategic partnerships or scaled responses to perceived needs could be helpful, and our research will attend to that category of organizational adaptation.

Budget: Our funding request supports travel and data gathering costs (50%), as well as one meeting among the investigators and stakeholders to debrief on this project (10%). Advanced graduate students will assist the faculty with the qualitative onsite interviews with staff (40%). University overhead rates (56.5% at the University of Texas) suggest an overall budget of about \$250,000 will be adequate to fund the project.

APPLICATION FOR FEDERAL DOMESTIC ASSISTANCE - Short Organizational	
* 1. NAME OF FEDERAL AGENCY: Institute of Museum and Library Services	
2. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER: 45.313	
CFDA TITLE: Laura Bush 21st Century Librarian Program	
* 3. DATE RECEIVED: 02/01/2018	SYSTEM USE ONLY
* 4. FUNDING OPPORTUNITY NUMBER: LB21-FY18-2	
* TITLE: Laura Bush 21st Century Librarian Program	
5. APPLICANT INFORMATION	
* a. Legal Name: The University of Texas at Austin	
b. Address:	
* Street1: 3925 West Braker Lane	Street2: Suite 3.11072
* City: Austin	County/Parish: Travis
* State: TX: Texas	Province:
* Country: USA: UNITED STATES	* Zip/Postal Code: 78759-5316
c. Web Address: http:// utexas.edu	
* d. Type of Applicant: Select Applicant Type Code(s): H: Public/State Controlled Institution of Higher Education Type of Applicant: Type of Applicant: * Other (specify):	* e. Employer/Taxpayer Identification Number (EIN/TIN): 746000203
	* f. Organizational DUNS: 170230239
	* g. Congressional District of Applicant: TX-025
6. PROJECT INFORMATION	
* a. Project Title: Rural Libraries and Disasters: Investigating Resiliency in the Digital Environment	
* b. Project Description: In this proposed research, investigators headed by a team at The University of Texas at Austin will investigate how libraries contributed to community viability in the face of natural disasters and the factors important in library resiliency in dealing with these events. This research emphasizes the new challenges accompanying a digital information and resource environment in which displaced community members turn to libraries for assistance with information needs.	
c. Proposed Project:	* Start Date: 12/01/2018
	* End Date: 05/31/2019

APPLICATION FOR FEDERAL DOMESTIC ASSISTANCE - Short Organizational**7. PROJECT DIRECTOR**

Prefix: Dr.	* First Name: Sharon	Middle Name: L
* Last Name: Strover	Suffix:	
* Title: Professor	* Email: sharon.strover@austin.utexas.edu	
* Telephone Number: 512-471-6652	Fax Number:	
* Street1: 2504 Whitis Avenue, Stop A0800	Street2:	
* City: Austin	County/Parish: Travis	
* State: TX: Texas	Province:	
* Country: USA: UNITED STATES	* Zip/Postal Code: 78712-1067	

8. PRIMARY CONTACT/GRANTS ADMINISTRATOR

<input type="checkbox"/> Same as Project Director (skip to item 9):		
Prefix:	* First Name: Lorena	Middle Name:
* Last Name: Garza	Suffix:	
* Title: Senior Grants & Contracts Specialist	* Email: l.garza@austin.utexas.edu	
* Telephone Number: 512-471-6269	Fax Number: 512-232-6649	
* Street1: 3925 W. Braker Lane, Ste 3.11072	Street2: WPR Building	
* City: Austin	County/Parish: Travis	
* State: TX: Texas	Province:	
* Country: USA: UNITED STATES	* Zip/Postal Code: 78759-5316	

APPLICATION FOR FEDERAL DOMESTIC ASSISTANCE - Short Organizational

9. * By signing this application, I certify (1) to the statements contained in the list of certifications** and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties (U.S. Code, Title 218, Section 1001)

** I Agree

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

AUTHORIZED REPRESENTATIVE

Prefix: <input type="text"/>	* First Name: <input type="text" value="Elena"/>	Middle Name: <input type="text" value="V"/>
* Last Name: <input type="text" value="Mota"/>	Suffix: <input type="text"/>	
* Title: <input type="text" value="Assistant Director"/>	* Email: <input type="text" value="evmota@austin.utexas.edu"/>	
* Telephone Number: <input type="text" value="512-232-1419"/>	Fax Number: <input type="text" value="512-471-6564"/>	
* Signature of Authorized Representative: <input type="text" value="Elena V Mota"/>	* Date Signed: <input type="text" value="02/01/2018"/>	

IMLS PROGRAM INFORMATION SHEET

PLEASE NOTE: Information contained within this form may be made publicly available.

1. Applicant Information

a. Legal Name as it appears in SAM.gov (5a from SF424S):

b. Organizational D-U-N-S® Number (5f from SF-424S):

1	7	0	2	3	0	2	3	9
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c. Expiration date of your SAM.gov registration:

d. Organizational Unit Name (if different from Legal Name):

e. Organizational Unit Address (if different from Legal Name address)

Street 1:

Street 2:

City: County:

State: Zip+4/Postal Code:

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f. Organizational Unit Type (check one):

- | | | |
|--|--|---|
| <input type="radio"/> Academic Library | <input type="radio"/> Library Association | <input type="radio"/> School Library or School District applying on behalf of a School Library or Libraries |
| <input type="radio"/> Aquarium | <input type="radio"/> Library Consortium | <input type="radio"/> Science/Technology Museum |
| <input type="radio"/> Arboretum/Botanical Garden | <input type="radio"/> Museum Library | <input type="radio"/> Special Library |
| <input type="radio"/> Art Museum | <input type="radio"/> Museum Services Organization/Association | <input type="radio"/> Specialized Museum** |
| <input type="radio"/> Children's/Youth Museum | <input type="radio"/> Native American Tribe/Alaska Native/Native Hawaiian Organization | <input type="radio"/> State Library |
| <input type="radio"/> Community College | <input type="radio"/> Natural History/Anthropology Museum | <input type="radio"/> State Museum Agency |
| <input type="radio"/> Digital Library | <input type="radio"/> Nature Center | <input type="radio"/> State Museum Library |
| <input type="radio"/> Four-year College | <input type="radio"/> Planetarium | <input type="radio"/> Zoo |
| <input type="radio"/> General Museum* | <input type="radio"/> Public Library | <input checked="" type="radio"/> Institution of higher education other than listed above |
| <input type="radio"/> Graduate School of Library and Information Science | <input type="radio"/> Research Library/Archives | <input type="radio"/> Other <input type="text"/> |
| <input type="radio"/> Historic House/Site | | |
| <input type="radio"/> Historically Black College or University (HBCU) | | |
| <input type="radio"/> History Museum | | |

* A museum with collections representing two or more disciplines equally (e.g., art and history)

** A museum with collections limited to one narrowly defined discipline (e.g., textiles, maritime, ethnic group)

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2. Organizational Financial Information

a. Please complete the following table for the Organizational Unit for the three most recently completed fiscal years.

Fiscal Year	Total Revenue*	Total Expenses**	Surplus or Deficit
			\$0

* For nonprofit tax filers, Total Revenue can be found on Line 12 of the IRS Form 990.

** For nonprofit tax filers, Total Expenses can be found on Line 18 of the IRS Form 990.

b. If you had a budget surplus or deficit greater than 10% of your annual operating budget for two or more of the three fiscal years listed above, please explain the circumstances of this surplus or deficit in the box below.

The University of Texas at Austin does not file IRS form 990 because it is classified as a governmental entity. The only form filed is the IRS form 990-T, which consolidates revenues and expenses only on taxable income for all University of Texas System campuses, not just from The University of Texas at Austin.

c. Were there any material weaknesses identified in your prior year's audit report?

Yes

No

Not applicable

A **material weakness** is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis.

If **yes**, please explain.

d. Has your organization had an A-133 audit in the past three years?

Yes

No

IMLS PROGRAM INFORMATION SHEET

Refer to the Notice of Funding Opportunity for descriptions of these options and instructions for how to make selections.

3. Grant Program

a. Laura Bush 21st Century Librarian Program

1. Select one:

- Planning Grant
- National Forum Grant
- Project Grant
- Research Grant

2. Select one:

- Pre-professional
- Masters-level and Doctoral-level Programs
- Early Career Development
- Continuing Education

3. Select one

- Community Anchors
- National Digital Platform
- Curating Collections

b. National Leadership Grants for Libraries

1. Select one:

- Sparks Grant
- Planning Grant
- National Forum Grant
- Project Grant
- Research Grant

2. Select one:

- Community Anchors
- National Digital Platform
- Curating Collections

c. Native American/Native Hawaiian Library Services

1. Select one:

- Native American Basic Grant
- Native American Enhancement Grant
- Native Hawaiian Library Services

d. Museums for America

1. Select one:

- Learning Experiences
- Community Anchors
- Collections Stewardship

2. Select one:

- \$5,000–\$25,000 with no cost share permitted.
- \$25,001–\$250,000 with cost share required.

e. Museums Empowered (an MFA Special Initiative)

1. Select one:

- Digital Technology
- Diversity and Inclusion
- Evaluation
- Organizational Management

2. Select one:

- \$5,000–\$25,000 with no cost share permitted.
- \$25,001–\$250,000 with cost share required.

f. National Leadership Grants for Museums

1. Select one:

- Advancing Digital Assets and Capacity
- Collection Care and Access
- Diversity and Inclusion
- Professional Development

2. Select one:

- Non-research grant, \$50,000–\$1,000,000 with cost share required.
- Research grant, \$50,000–\$1,000,000 with no cost share required.
- Rapid prototyping grant, \$5,000–\$50,000 with no cost share required.

g. Museum Grants for African American History and Culture

1. Select one:

- \$5,000–\$25,000 with no cost share permitted.
- \$25,001–\$150,000 with cost share required.

h. Native American/Native Hawaiian Museum Services

4. Performance Goals

Select one of the following three IMLS agency-level goals: (a) Learning, (b) Community, or (c) Content and Collections. Then select at least one of the performance goals listed beneath it:

a. Learning

- Train and develop museum and library professionals
- Support communities of practice
- Develop and provide inclusive and accessible learning opportunities

b. Community

- Strengthen museums and libraries as essential partners in addressing the needs of their communities

c. Content and Collections

- Broaden access and expand use of the Nation's content and collections
- Improve management of the Nation's content and collections
- Improve preservation, conservation, and care of the Nation's content and collections

If you select a performance goal listed beneath Learning or Community for your project, please review in the NOFO the specific performance measure statement choices and the information you will be required to collect for each.

IMLS PROGRAM INFORMATION SHEET

5. Funding Request

a. IMLS funds requested: b. Cost share amount:

6. Population Served

Please select the target population(s) served by the proposed project:

- | | |
|---|--|
| <input checked="" type="checkbox"/> General Population | <input type="checkbox"/> Museum and/or Library Professionals |
| <input type="checkbox"/> Early Childhood/Preschool (0-5 years) | <input type="checkbox"/> Native Americans/Alaska Natives/Native Hawaiians |
| <input type="checkbox"/> Middle Childhood/Primary School (6-12 years) | <input type="checkbox"/> People with Mental or Physical Challenges/Disabilities |
| <input type="checkbox"/> Adolescents/High School (13-19 years) | <input checked="" type="checkbox"/> People Who Are Low Income/Economically Disadvantaged |
| <input checked="" type="checkbox"/> Adults | <input checked="" type="checkbox"/> Rural Populations |
| <input checked="" type="checkbox"/> Aging, Elderly, Senior Citizens (65+ years) | <input checked="" type="checkbox"/> Scholars/Researchers |
| <input type="checkbox"/> Ethnic or Racial Minority Populations other than Native Americans/Native Hawaiians | <input type="checkbox"/> Unemployed |
| <input checked="" type="checkbox"/> Families/Intergenerational | <input type="checkbox"/> Urban Populations |
| <input type="checkbox"/> Immigrants/Refugees | <input type="checkbox"/> Other |
| <input type="checkbox"/> Military Families | |

If other, please specify:

7. Museum Profile (Museum Applicants Only)

a. Is your institution organized on a permanent basis for essentially educational or aesthetic purposes, and is it **either** a private not-for-profit organization that has tax-exempt status under the Internal Revenue Code **or** a unit of state or local government? Yes No

b. Does your institution own or use tangible objects, either animate or inanimate? Yes No

c. Does your institution care for these objects? Yes No

d. Does your institution exhibit these objects to the general public at least 120 days a year through facilities your institution owns or operates? Yes No

e. Your institution's attendance for the 12-month period prior to the application

f. Year your institution was first open and exhibiting to the public:

g. Total number of days your institution was open to the public for the 12-month period prior to application:

h. Does your institution employ at least one professional staff member, or the full-time equivalent, whether paid or unpaid, who is primarily engaged in the acquisition, care, or exhibition to the public of tangible objects owned or used by your institution? Yes No

i. Number of full-time paid institution staff:

j. Number of full-time unpaid institution staff:

k. Number of part-time paid institution staff:

l. Number of part-time unpaid institution staff:

IMLS PROGRAM INFORMATION SHEET

8. Project Elements (Museums for America Only)

Your response to this question will help us match your application to reviewers with appropriate experience. Make your choice under the project category that you selected in Question 3 (Grant Program).

LEARNING EXPERIENCES

If you are applying in the Learning Experiences Project Category, select the **primary** element that is core to your proposed project from the list below (**check only one**):

- | | |
|---------------------------------------|---|
| <input type="radio"/> Adult Programs | <input type="radio"/> Interpretation |
| <input type="radio"/> Digital Media | <input type="radio"/> K-12 Programs, With Schools |
| <input type="radio"/> Early Learning | <input type="radio"/> K-12 Programs, Out of School |
| <input type="radio"/> Exhibitions | <input type="radio"/> Professional Development/Training |
| <input type="radio"/> Family Programs | <input type="radio"/> Public Programs |

COMMUNITY ANCHORS

If you are applying in the Community Anchors Project Category, select the **primary** element that is core to your proposed project from the list below (**check only one**):

- | | |
|---|---|
| <input type="radio"/> Audience Research and Evaluation | <input type="radio"/> Community Outreach/Audience Development |
| <input type="radio"/> Civic Engagement | <input type="radio"/> Digital Media |
| <input type="radio"/> Community-Driven Exhibitions and Programs | <input type="radio"/> Professional Development/Training |
| <input type="radio"/> Community-Focused Planning Activities | |

COLLECTIONS STEWARDSHIP

If you are applying in the Collections Stewardship Project Category, select the **primary** element that is core to your proposed project from the list below (**check only one**):

- | Access and Use | Collections Management | Conservation |
|---|---|--|
| <input type="radio"/> Database Management | <input type="radio"/> Cataloguing, Inventorying, Registration | <input type="radio"/> Conservation Environmental Improvement/Rehousing |
| <input type="radio"/> Digitization | <input type="radio"/> Collections Information Management | <input type="radio"/> Conservation Survey |
| <input type="radio"/> Software Applications | | <input type="radio"/> Conservation Treatment |
| <input type="radio"/> Website Development | <input type="radio"/> Collections Planning | <input type="radio"/> Professional Development/Training |

Please identify the material type(s) that will be affected by your project:

- | | |
|---|---|
| <input type="checkbox"/> Animals, living | <input type="checkbox"/> Photographic Materials |
| <input type="checkbox"/> Animals, preserved | <input type="checkbox"/> Plants, living |
| <input type="checkbox"/> Architecture | <input type="checkbox"/> Plants, preserved |
| <input type="checkbox"/> Books and Paper | <input type="checkbox"/> Sculpture |
| <input type="checkbox"/> Electronic Media | <input type="checkbox"/> Textiles |
| <input type="checkbox"/> Objects | <input type="checkbox"/> Wooden Artifacts |
| <input type="checkbox"/> Paintings | |