

# ***Libraries as Partners for Emergency Preparedness and Response in Times of Crisis: Survey Design and Development***

**iConference 2024**

Wisdom, Well-being, Win-win

Virtual Academic Program: April 15 - 18, 2024

Onsite Academic Program in Changchun, China: April 22 - 26, 2024

Hosted by Jilin University, China, and University of Tsukuba, Japan

Dr. Lian Ruan

*Head Librarian, Director of IFSI International Programs,*

*Illinois Fire Service Institute, University of Illinois at Urbana-Champaign*

*Project Director,*

*IMLS Grant “Libraries as Partners”*

Kelda Habing

*Research and Grants Librarian, Illinois Fire Service Institute, University of Illinois at Urbana-Champaign*

*Project Assistant,*

*IMLS Grant “Libraries as Partners”*

# Abstract

- *Libraries as Partners for Emergency Preparedness and Response in Times of Crisis* is a **preliminary investigation** into **partnerships** between libraries and emergency response groups during crises, currently funded by the **Institute of Museum and Library Services (IMLS)**.
- While libraries have proven themselves as providers during emergencies, **little systematic work** has been conducted to explore if library partnerships with emergency responders exist and the **scope, nature, and role of libraries in these partnerships**.
- This paper explores the **design and development of the project's first step in gaining an initial understanding of library-community partnerships during emergencies: a survey of Illinois multi-type libraries**.
- The survey's creation was **guided by key factors** including focus on its **target population, use of Participatory Design**, and development of **lines of inquiry** which correspond to the **frameworks of Targeted Universalism and Team Cognitive Work Analysis**.
- The survey's design and development described herein will address the paper's **research questions: How can a survey be developed for a large and diverse target population with multiple stakeholders, and how can such a survey's results be relevant at an even larger scale?**
- **Anticipated results** of the survey include discovery and promotion of the **essential role that libraries** take on during emergencies and with emergency response partners, and the increased safety and resiliency of diverse communities.

# 1 Introduction

- **Project Overview:** Outlines the initial phase of the "Libraries as Partners for Emergency Preparedness and Response in Times of Crisis" project, funded by a **two-year grant** from the Institute of Museum and Library Services.
- **Purpose:** To explore how **Illinois libraries**, representing a **cross-section of the U.S. library community**, partner with emergency responders during crises.
- **Research Questions:** How can a survey be developed for a large and diverse target population with multiple stakeholders, and how can such a survey's results be relevant at an even larger scale? The survey focuses on the following **4 areas**:
  - **Types of emergencies** libraries respond to;
  - **Nature of partnerships** during these emergencies;
  - **Reasons for the lack of partnerships**, if applicable;
  - **Scope of partnerships and libraries' roles** within them.
- **Methodology:** A survey targeting **diverse Illinois libraries** will gather data to assess the current state of library-community emergency **partnerships** and inform **future research** and **collaborative efforts**.
- **Significance:** Will highlight the **critical role libraries** play in community safety and well-being during emergencies and may **guide the creation of similar surveys** for broad and varied populations.

## 2 Background

- Libraries serve as **critical resources during emergencies** for enhancing community resiliency and recovery. They have been **key during numerous crises**, including the COVID-19 pandemic, Uvalde school shooting, California wildfires, opioid crisis, and more. Both the **U.S. Stafford Act and FEMA** (Federal Emergency Management Agency) recognize libraries as essential services post-disaster.
- Despite this, many emergency response organizations **do not fully recognize** libraries as preparedness and response partners.
- **A literature gap** exists regarding the nature and scope of library-community emergency partnerships and libraries' roles within them.
- **Cases** like the Delaware Libraries and Disasters Initiative show successful partnerships, but such collaborations are **not widespread or well-documented**.
- **The research gap** underscores **the need for the survey** discussed in this paper, to enhance understanding of library-community partnerships in crises.

# 3 Methodology

- To begin to answer the Libraries as Partners' research questions, an online survey using the **survey software Qualtrics** was designed and developed.
- To ensure the survey's **relevancy** to respondents and the utility of its eventual findings to a large and diverse audience, **three key factors were applied to the survey's creation:**
  - 1) **Target population**
  - 2) **Participatory Design**
  - 3) **Frameworks of Targeted Universalism and Team Cognitive Work Analysis (TeamCWA)**

The **Methodology** is divided into three parts:

3.1 **Target Population: Multi-Type Illinois Libraries**

3.2 **Participatory Design**

3.3 **Team Cognitive Work Analysis and Targeted Universalism**

# 3.1 Target Population: Multi-Type Illinois Libraries

- The survey's target population: **multi-type libraries of Illinois.**
- **Illinois libraries: 158 academic, 639 public, 788 school, and 224 special libraries** which vary greatly in geographic location, number of users, and types of communities served.
  - 22% of Illinois public libraries serve an area with 2,500 or less, while 64.5% serve populations that range between 2,500 and 50,000.
  - 6.1% of Illinois public libraries serve areas with a population between 50,000 and 250,000 while only 0.2% serve areas with populations of 1,000,000 or more.
  - The Chicago Public Library is the fifth largest library service area in the U.S., serving 2.7 million.
- Due to the amount and diversity of Illinois libraries, Illinois libraries may serve as a **microcosm of the national library community.**
- As a preliminary survey intended to provide **initial understanding** on the state of library-community partnerships during emergencies, **the survey intends to collect as much data from as many libraries as possible regardless of type.**
- Therefore, **the broad range of Illinois' libraries and their differences** had to be considered during the survey design.

## 3.2 Participatory Design

- **Participatory Design:** including a **State Advisory Committee** and a **National Advisory Board** in survey design.
- **The Committee**, comprised of Illinois library and emergency response representatives, ensured the survey was **relevant and reflective of actual experiences in emergencies**.
- **The Board**, comprised of representatives of national library organizations, reviewed the survey to ensure findings would be **applicable to libraries throughout the U.S.** and will contribute to the analysis of the survey results.
- While the survey's target population are the multi-type libraries of Illinois, its findings should be relevant to libraries across the U.S. A National Advisory Board was convened of representatives from **nine national library organizations**. National advisors critiqued the survey to ensure that it was **not too specific to Illinois libraries** so that its findings would be relevant to libraries across the U.S. National advisors will continue to provide **a national perspective during analysis of survey findings**.

### 3.3 Team Cognitive Work Analysis and Targeted Universalism

- The survey's **data analysis** will employ **two frameworks**:
- **Team Cognitive Work Analysis (TeamCWA)**: Examine **complex collaborations across different sectors**, focusing on **shared decision-making** and **factors** leading to **effective partnerships and outcomes**, particularly in emergency situations. Leveraging successful use of TeamCWA to analyze multiple-stakeholder environments, results from the survey will be analyzed to identify factors in shared decision-making among multiple different community partners that contribute to effective partnerships and intended shared outcomes.
- **Targeted Universalism**: Sets **universal goals** while acknowledging **group differences** through tailored approaches. Incorporation of Targeted Universalism into the survey design will begin to establish **the targeted processes needed for different groups**, especially **underserved populations** and those shown to be at **higher risk** during emergencies through use of the **social vulnerability index**, so that **the universal goal of equitable service** in library-partner crises response will be achieved across communities.



# 4 Survey

- The survey was created on **Qualtrics**.
- The survey will be completely **anonymous** unless respondents choose to provide their contact information for follow-up questions.
- It is intended to last about **30-60 minutes**, and this time will vary depending on participants' choices as some responses will prompt further details while others will not.
- The survey includes **four sections**:
  - **4.1 About You**
  - **4.2 Emergencies**
  - **4.3 Scope and Nature of Partnership**
  - **4.4 Role of Libraries in Partnership.**

# 4.1 About you

- **9 questions** gather **background data** about the respondents and their library, including their primary job responsibilities and time working in libraries, as well as the type of library they work in and size of user-community served.
- **3 questions** are included in this section which were created with **Targeted Universalism** in mind to begin to identify the varied communities that libraries serve and how libraries interact with them:
  - Please describe the **diversity of your user community** in your own words.
  - How often do you **collaborate with your user community** to create library **policies**?
  - How often do you collaborate with your user community to create library **programming**?

# 4.2 Emergencies

- **10 primary questions** with potential for follow-up questions based on responses chosen.
  - For example, respondents can choose **multiple provided emergency types** in response to “Has your library responded to any of the following emergency events and long-term or ongoing crises?”
  - For **each emergency that respondents mark**, they will be prompted for further details about their library’s response.
  - Many of these follow-up questions align with **TeamCWA** as they begin to **identify partners** and how libraries work with partners especially through communication:
    - . During the emergency, who did you contact or seek partnership with?
    - . What information technologies did you use to contact other partners or gather information?
    - . What information did you request from an external partner? Which partner?
  - Questions included which address **Targeted Universalism** continue to identify the different communities that libraries serve during emergencies:
    - . To what degree does your library provide services to the following groups (followed by a list of groups such as historically marginalized/underserved communities, homeless patrons, non-English speakers, etc.)
    - . When planning for emergencies, my library factors in the varying needs of different groups.

## 4.3 Scope and Nature of Partnership

- Begins with the question “**How do you define partnership?**” and followed by “**Does your library have established partnerships with emergency response groups?**” Depending on an affirmative or negative response, the number of questions in this section is variable.
  - **Negative responses** will only be asked two other questions: why partnerships do not exist and if they plan to establish partnerships in the future.
  - **Affirmative responses** will be asked 10 other questions for more details on who their community partners are and how they work with them.
- Because of the section’s focus on partners and collaboration, several questions were added that **align with TeamCWA**:
  - **In what ways** does your library communicate with and share information with community partners (email, phone, in-person, etc.)?
  - What is **the nature** of that communication? (unidirectional, bidirectional, transdirectional)?
  - List and describe **strategies and actions** that might enhance or build sustainable partnerships with partners. Describe any **barriers** to enacting these strategies.

## 4.4 Role of Libraries in Partnerships

- **Includes 10 questions: Affirmative responses** to the previous section's question on if partnerships answer all ten, while **negative responses** only answer two. Their shared questions are:
  - What do you believe is **the role of libraries** during emergencies?
  - What **future roles** would you like your library to take with community partners during emergencies?

The questions that respondents who answered **affirmatively to partnerships** answer provide more details on the services that they provide in partnership with emergency response groups and the benefits these partnerships bring to their communities.
- **3 questions** may uncover **shared decision-making for TeamCWA**, as libraries and partners may collaborate to develop common goals for emergency partnership:
  - How does **your library's role** before, during, and after emergencies benefit your community emergency response partners?
  - When you build **partnerships**, you have intended outcomes in mind (Strongly Agree to Strongly Disagree)
  - How do you evaluate **levels of intended outcomes** related to partnerships for emergency management and response?

# 5 Discussion

- The survey's development was significantly shaped by **Participatory Design**, involving **state and national advisors** who ensured its relevance to both the Illinois library community and the nation.
- **Advisors' insights** led to the addition of **new questions and revisions** to better reflect real-world challenges, such as compromised building during emergencies and different types of crises.
- The advisors also influenced the survey's language to be **inclusive**, allowing it to more effectively serve a broad audience.
- The survey's design, **informed by frameworks like Targeted Universalism and TeamCWA**, is set to provide a **foundation for future research**, aiming to enhance community safety and resilience through improved emergency response collaboration between libraries and relevant agencies.

# Conclusion

- The Libraries as Partners survey design and development is a **strong example** of how collaboration, knowledge of a **target population**, and use of **frameworks** can contribute to a survey's relevance to a large and diverse target population and relevancy on the national level.
- While the survey data collection is completed and data analysis is ongoing, **findings** will directly inform the second year of the project on the **two two-day Community Engagement Roundtables**: a national discussion on library-community partnerships during emergencies.
- This initial survey will lay the **groundwork** for future research and practice, with the **ultimate goal** of deepening the bond and strength of community networks and increasing libraries' capacity for constituency support in times of crisis.

# References

- Stricker, M.: Ports in a storm: the role of the public library in times of crisis. *Collaborative Librarianship* 11(1), 11-16 (2019)
- Zalusky, S.: 2021 state of America's libraries special report: COVID-19. American Library Association (2021)
- Hendrick, G.: Library of hope and healing: Uvalde. LibLime, <https://liblime.com/2022/10/13/library-of-hope-healing-uvalde/>, last accessed 2023/09/15 (2022).
- Peet, L.: California libraries reopen, respond to wildfires. *Library Journal*, <https://www.libraryjournal.com/story/181121CAWildfires>, last accessed 2023/09/15 (2018)
- Allen, S., et al.: Public libraries respond to opioid crisis with their communities: summary report. OCLC (2019)
- Hagar, C.: Public library response to natural disasters: a 'whole community' approach. San José State University School of Information, <https://ischool.sjsu.edu/ciri-blog/public-library-response-natural-disasters-whole-community-approach>, last accessed 2023/09/15 (2013)
- Patin, B.: What is essential?: understanding community resiliency and public libraries in the United States during disasters. *Proceedings of the Association for Information Science and Technology* 57(1), (2020).
- Smith, M.: Top ten challenges facing public libraries. *Public Library Quarterly* 38(3), 241-247 (2019).



# References

- Hagar C.: Public library partnerships with local agencies to meet community disasters preparedness and response needs. In: 12th International Conference of the Information Systems for Crisis Response and Management (2015)
- Young, P.: Libraries as public health partners in times of crisis. Delaware Journal of Public Health 6(4), 24-25 (2020)
- Charney, R., Spencer, A., & Tao, D.: A novel partnership between physicians and medical librarians during the COVID-19 pandemic. Medical Reference Services Quarterly 40(1), 48-55 (2021).
- Institute of Museum and Library Services: Public libraries survey. <https://www.imls.gov/research-evaluation/data-collection/public-libraries-survey>, last accessed 2023/09/15 (2019)
- American Library Association: Library statistics and figures: the nation's largest public libraries. <https://libguides.ala.org/librarystatistics/largest-public-libs>, last accessed 2023/09/15 (2023)
- Ashoori, A., & Burns, C.: Team cognitive work analysis: structure and control tasks. Journal of Cognitive Engineering and Decision Making 7(2), 123-140 (2013)
- Powell, J., Menendian, S., & Ake, W.: Targeted universalism: policy & practice. Othering & Belonging Institute at the University of California Berkeley (2022)
- Flanagan, B., et al: A social vulnerability index for disaster management. Journal of Homeland Security and Emergency Management 8(1) (2011)