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NON-COMPETITIVE DIVISION

Enhancing Community Risk Reduction (CRR) Efforts: Leveraging Technology-Mediated Self-Reporting Tools for Emergency Preparedness

Due to rapid advances in technology, particularly location-based services, there has been an increase in the availability of self-reporting hazard tools and mobile applications. The increasing availability of these tools and applications has enhanced information sharing capabilities between different communities during emergency response.

The extant literature has traditionally focused on Wildland Urban Interface (WUI), citizen science for Geographic Information Systems (GIS), and participatory mapping as disciplines leading efforts to increase data sharing between first responders and communities in an emergency. Still, the extant literature does not comprehensively evaluate all community stakeholders' perceptions and engagement in emergency preparedness efforts. Applications designed for multiple groups of users, including community members and first responders, have not been fully evaluated from an information-sharing perspective. For example, small business owners, community members, housing associations, and other relevant stakeholders are essential in understanding how self-reported hazards are communicated to emergency response agencies.

To date, more research is required to better understand the relationships between the first responders, technology, and residents they serve in their first-due areas. The objective of this work is to facilitate more constructive communication between first responders and the communities they serve, through technology-mediated self-reporting tools.

This presentation will emphasize the important concerns practitioners face when leveraging self-reported information from community members and the public. This poster will capture some of the results from a nationwide survey designed to capture the needs of practitioners responding to emergency situations.

Presentation Theme: This presentation is focused on emergency preparedness research.

Collaborators, Advisor(s) and Department(s) that assisted with this research: Dr. Christine Toh; Tera Maher; Lindsey Langdon, University of Nebraska at Omaha; Dr. Charles Jennings; Director Christian Regenhard Center for Emergency Response Studies; Captain (ret.) Kirk McKinzie

Institutional Review Board Proof of Regulatory Committee Approval: University of Nebraska Medical Center (UNMC)