The Message Design Dashboard: A Tool for Effective Alert and Warning Design

Jeannette Sutton, Micki Olson, and Lauren B. Cain

College of Emergency Preparedness, Homeland Security, and Cybersecurity; University at Albany

PROJECT OBJECTIVES

Design, develop, validate, and implement the Message Design Dashboard (MDD), a template-based software tool to help Alerting Authorities quickly write effective and complete Wireless Emergency Alerts (WEAs).

MDD Content and Validation

- Developed the **Warning Lexicon**– content for **48 hazards**, including **impact statements** and **protective actions**
  - Verified by hazard and warning message design subject matter experts
- Workflow designed to follow Mileti and Sorensen's (1990) **Warning Response Model**
- Validated standardized contents in an **experimental survey** testing **MDD messages** against **complete and incomplete standard of practice messages** (SOP)

Understanding	MDD messages increased understanding over both SOP messages
Belief	MDD messages increased belief over both SOP messages
Self-efficacy	MDD and complete SOP messages increased self-efficacy over incomplete SOP messages

MDD Interface

Training Content

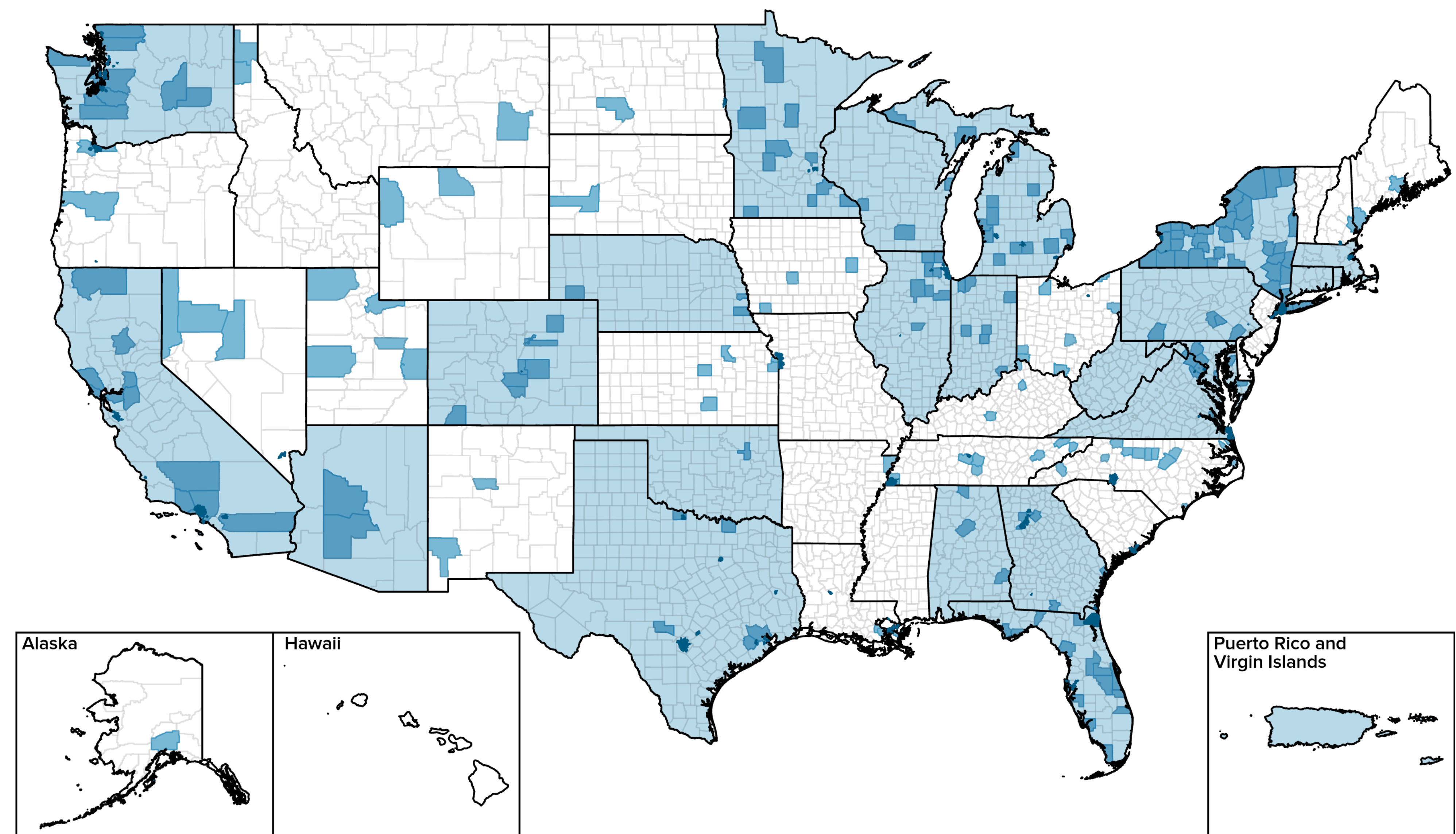| Socio-behavioral model of warning response and message design fundamentals	Overview of MDD functions and hands-on training	Scenario-based message design activities pre-, during- and post-training

Training Impact

11 deliveries

666 participants

49 states + Washington, D.C.

2 territories

76% of Americans served by trained Alerting Authorities

Next Steps

- Finalize "MDD 2.0" prototype with improvements to user interface based on evaluation feedback
- Analyze training data– message proficiency pre-, during-, and post-training
- Official software launch via FEMA's Alerting Tools Portal
- **Additional research:**
  - All-clear messaging
  - Missing persons alerts
  - Symbols and icons

Resources

Warning Lexicon Paper

Decade of WEAs Paper

MDD Training

The Warn Room