

# HB23-1237 – Inclusive Language in Emergency Situations



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Project Report  
ENGLISH



Project Report  
SPANISH



# The Natural Hazards Center

Since 1976, we have served as the National Science Foundation-designated information clearinghouse for the societal dimensions of hazards and disasters.

Translating and  
Sharing  
Information

Building  
Connections

Advancing New  
Knowledge

Educating the Next  
Generation



University of Colorado Boulder

# Research Team



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# HB23-1237: Inclusive Language in Emergency Situations

## Objectives

1. Assess the state of emergency communications in Colorado and identify gaps in current systems as they relate to access and inclusion;
2. Identify best practices for developing and distributing inclusive emergency alerts;
3. Provide actionable recommendations to improve emergency communications systems that serve everyone, particularly those with limited-English proficiency (LEP) and people with disabilities.



Elizabeth Velasco  
Representative, District 57



Perry Will  
Senator, District 5



Tony Exum  
Senator, District 11



# Motivation

## Spanish translations of emergency alerts in Garfield County have room to improve

Aspen Public Radio | By [Halle Zander](#)  
Published October 25, 2022 at 11:23 PM MDT

HEALTH & ENVIRONMENT

## 'This is an emergency alert,' but for English speakers only

Despite the Bay Area's vast diversity and the frequency of natural disasters, Alameda and Solano counties only send out alerts in English, leaving more than 1 in 10 residents at risk of missing possibly life-saving information.

by [Jasmine Aguilera](#)  
Oct. 25, 2023, 4:59 p.m.

## 'They were forgotten': For people with disabilities, few good options during disaster

Hurricane Ida's extended power outage exposed cracks in Louisiana's special needs response

BY EMILY WOODRUFF | Staff writer Sep 20, 2021 Updated Sep 20, 2021 7 min to read



# Colorado is Diverse

- More than **900,000** Coloradans speak a non-English language at home and over **250,000** have Limited English Proficiency.
- More than **500,000** Coloradans have a visual or an auditory disability.

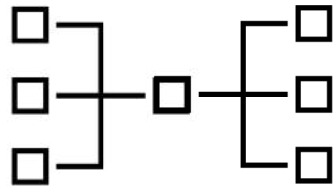
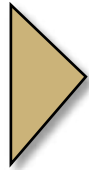


# The Alerting Process



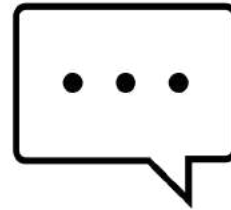
## Alert Triggered

A threat causes an **alerting authority** to determine the need to send an alert



## Alert System Selected

A range of **alert systems** determine the channels and message types that are used



## Message Developed

Authorities craft **the message** to be sent



## Message Sent

That message is dispatched to public audiences through various **channels**

**In Colorado, each step depends on the jurisdiction**



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# Methods

## Review of Literature



62 Documents Reviewed

## Statewide Survey



222 Responses From 57 Counties

## Partners Meetings



18 Meetings with 36 people

## Public Comment Sessions

English | Spanish | ASL

93 attendees and 48 written comments





# Report Findings

1. Colorado has a patchwork of alerting systems.
2. Authorities rely heavily on opt-in systems with low rates of uptake.
3. Resource constraints hinder inclusive alerts.
4. Guidance, funding, and personnel are needed to ensure inclusive alerts.
5. Technical limitations are significant.



## FINAL REPORT

Inclusive Emergency Alerts for Colorado: An Assessment and Recommendations for Language and Disability Considerations

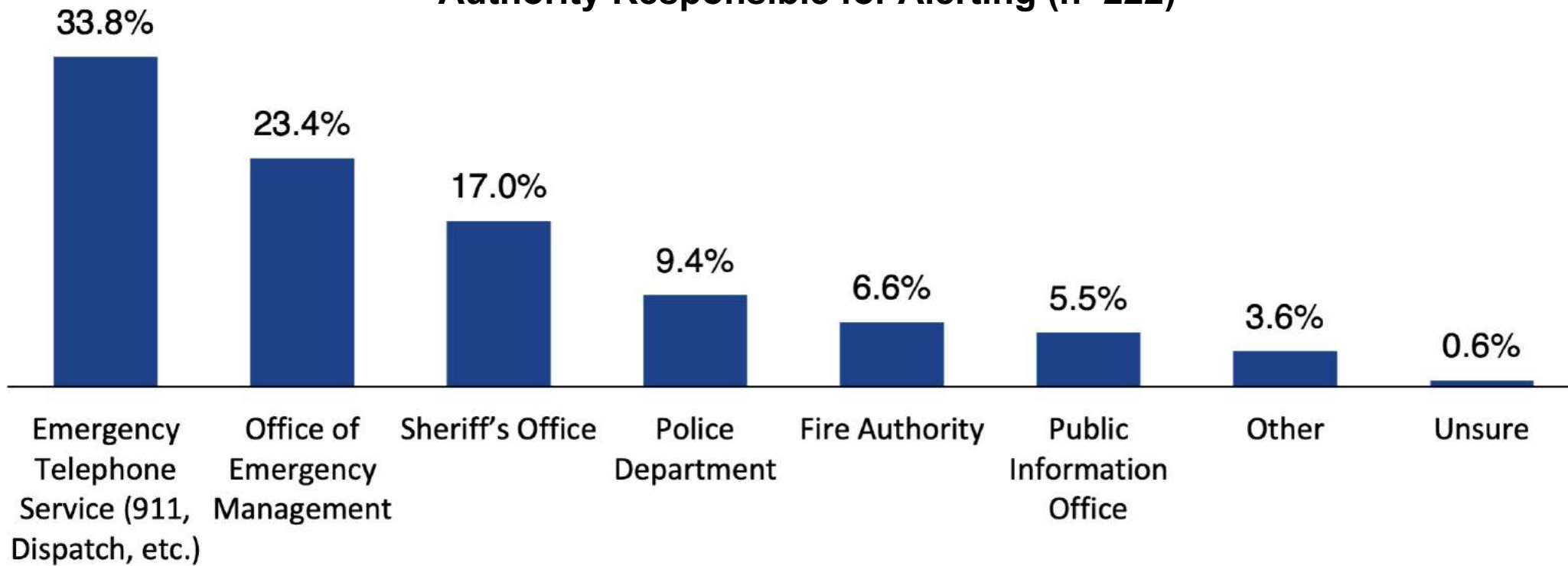


January 2024



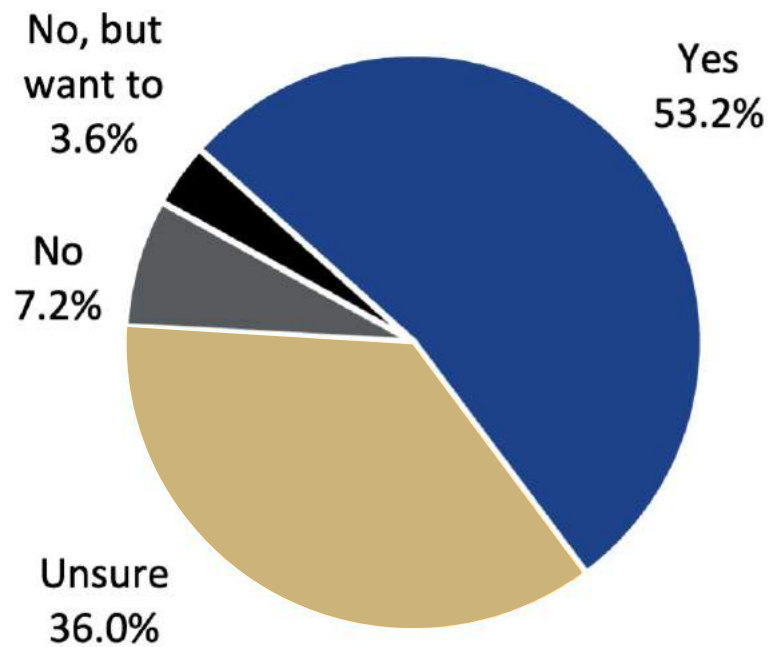
**Finding 1:** Colorado’s alert systems and processes are a patchwork that, while flexible, makes it challenging to provide consistent and accessible emergency alerts. Community resources largely determine the level of access that can be provided. As a result, capabilities vary.

**Authority Responsible for Alerting (n=222)**

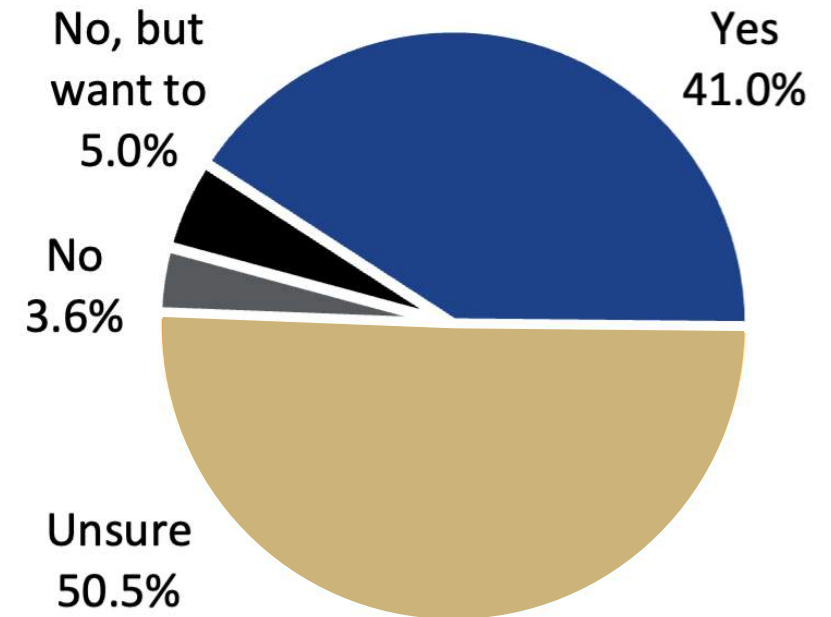


**Finding 1 Cont'd:** Colorado's alert systems and processes are a patchwork that, while flexible, makes it challenging to provide consistent and accessible emergency alerts. Community resources largely determine the level of access that can be provided. As a result, capabilities vary.

**Does your alert system have the capability to send multilingual alerts? (n=222)**



**Does your alert system have the capability to send alerts to people with disabilities? (n=222)**



# Audience Questions

- Raise your hand if you received the nationwide alert sent this past October?
- Raise your hand if you have registered to receive emergency alerts through your county?

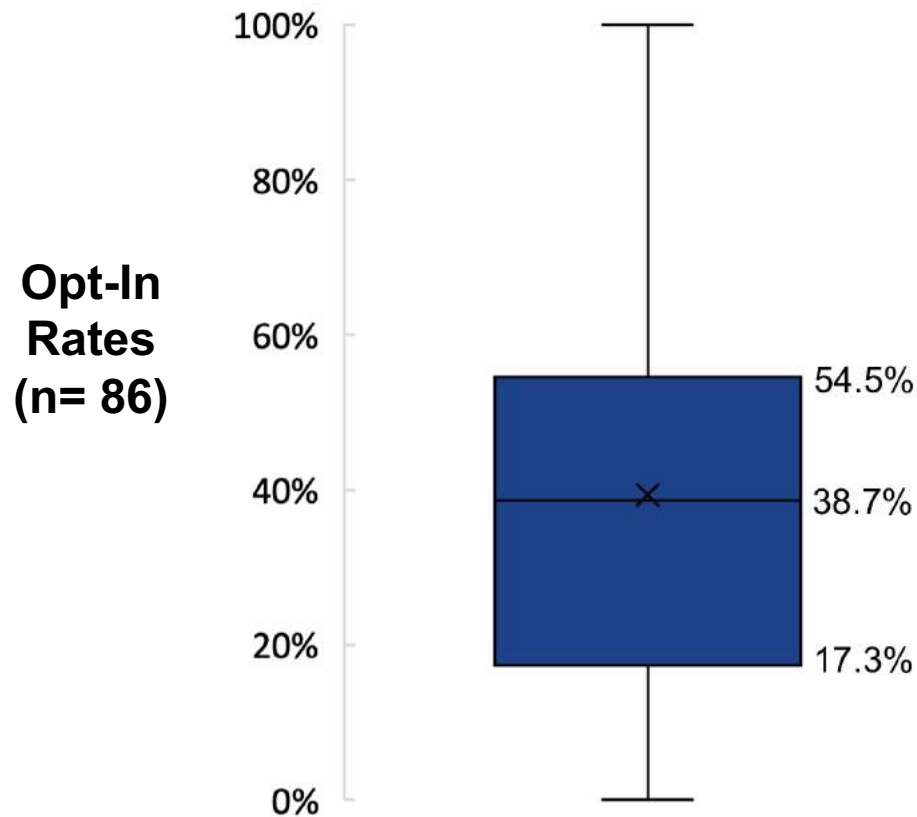


Denver County Sign Up



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**Finding 2:** Colorado relies heavily on opt-in emergency alert systems but most localities report opt-in rates below 40%. These systems create barriers for everyone, but especially those who don't speak English or who have disabilities.



“  
The success of these systems in an emergency relies on the community actively signing up for alerts.  
”

-Delta County Survey Respondent



**Finding 3:** Given resource constraints, alerting authorities turn to resources that are available to provide alerts in other languages, but they may not align with best practices.

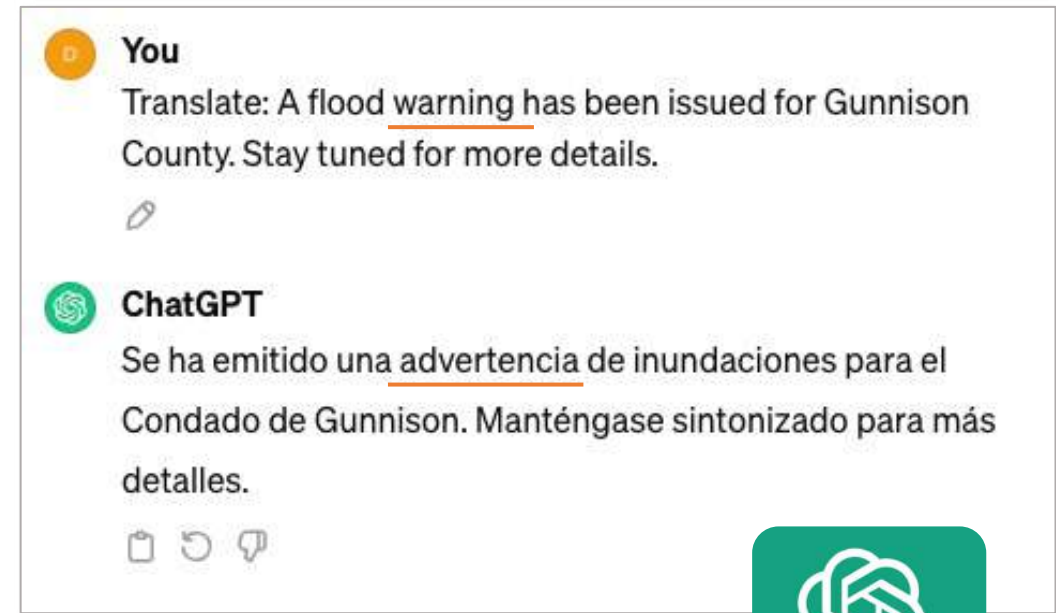
“

...we usually resort to online translation services, but they are rarely correct.

It's a Catch-22 when we are expected to get warnings out as quickly as possible in every language possible but doing so isn't possible in a timely manner.

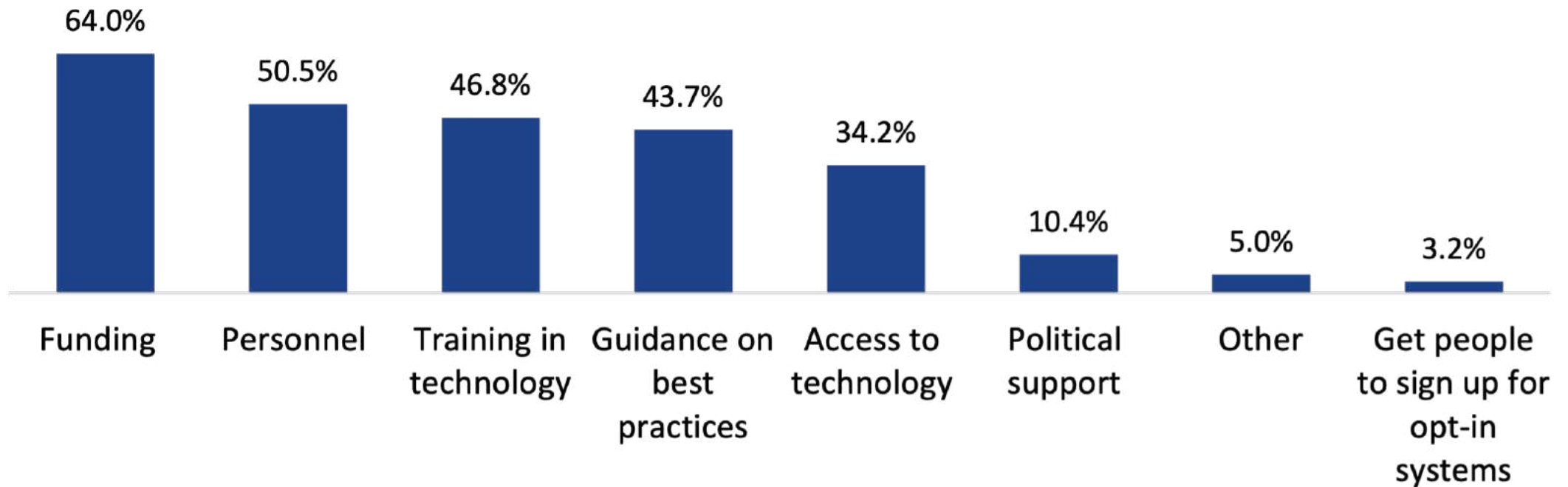
-San Miguel County Survey Respondent

”



**Finding 4:** Many emergency response personnel are interested in incorporating systems and practices that would make alerts more inclusive, but need more guidance, funding, and personnel to adequately do so

**Top Resource Needs Identified (n= 222)**



**Finding 4, Cont.:** Many emergency response personnel are interested in incorporating systems and practices that would make alerts more inclusive, but need more guidance, funding, and personnel to adequately do so

“

We simply do not have the resources (both financial and people) to deploy all of these systems.

-Gunnison County Survey Respondent

”

“

Everything has a cost, and we cannot afford to implement [inclusive alerting] to the degree that it needs. Our money goes to keeping the doors open.

-Public Information Officer

”





**Finding 5:** Technical and practical limitations of emergency alerts hinder most people and compound the challenges faced by those with disabilities and populations with LEP.

- Limited language options
- Delays in technology upgrades
- Pushback from private industry
- Enforcement of Federal Communications Commission is lacking



# Findings Summary

The status quo for emergency alerts in the State creates unequal access to lifesaving information for Coloradans.

By changing this, Colorado has the opportunity to become a **national leader in emergency alerting** and **save lives** when emergencies occur.



## FINAL REPORT

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January 2024



# Recommendations

## People

- Hire state-level language access personnel
- Develop formal relationships with populations with LEP and disabilities

## Practices

- Adopt a centralized alerting system and standardize practices
- Create and distribute language and disability access resources

## Funding

- Support research on inclusive practices
- Secure funding to support inclusive alerts



## FINAL REPORT

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January 2024



# Recommendations: People

## Hire state-level language access personnel

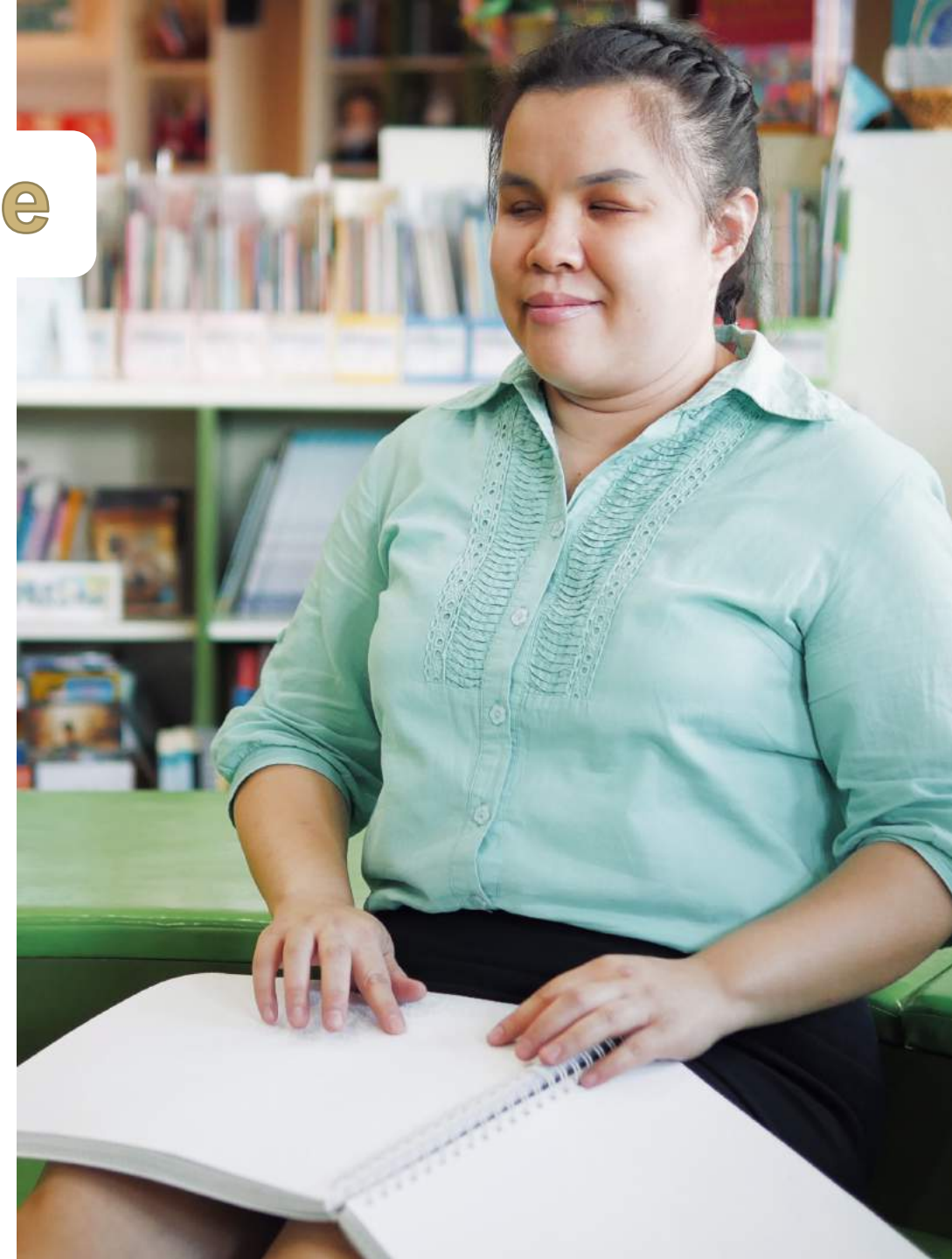
- Can help standardize alerting practices at State level
- Can develop shared guidance
- Can be part of the existing access and functional needs office within Office of Emergency Management (Sadie Martinez)



# Recommendations: People

**Develop formal relationships with LEP populations and those with disabilities**

- Communities have the lived experience necessary to provide guidance and need a seat at the table
- Formal agreements with community-based organizations (e.g., MOUs) need to be developed before, during, and after disaster to improve operations



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# Recommendations: Practices

## Adopt a centralized alerting system and standardize practices

- Reduces local cost burden
  - Rural and urban jurisdictions
- Promotes consistency that builds trust
- Expands resource sharing opportunities
- Other states have found success
  - Oregon and Florida



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# Recommendations: Practices

## Create and distribute language and disability access resources

- Emergency response officials want guidance
- Regular training on language and disability access will strengthen community connections and response plans
- Shared resources can help standardize access



# Recommendations: Funding

**Unfunded mandates are unpopular and unlikely to address key issues.**

- Funding is needed to:
  - Support personnel
  - Develop and implement novel practices
  - Close the gap on data needs
- Grant writing assistance may be needed.
- There may be opportunities to reallocate existing funds to advance inclusive alerting.





# Recommendations: Funding

Support research to fill information gaps to support inclusive alerts

- More research and data are needed to offer further evidence-based recommendations.
- We don't know:
  - Community awareness of opt-in systems
  - How people are responding to alerts
  - Best practices for developing working agreements
  - What the specific funding needs are



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# Next Steps

**We have more to do!**

Natural Hazards Center applied for a small grant (\$15,000) from CU Boulder to pilot a study on how Spanish-speakers are receiving and perceiving emergency alerts in Colorado.

**Other funding opportunities...**

- National Science Foundation (Research)
- Federal Emergency Management Agency (Practice)



# Next Steps

**We need you!**

Support from the State of Colorado for more research and collaboration with the Natural Hazards Center will position Colorado as a leader in equitable alerting practices.



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Throughout this study, it was clear that emergency officials, alert providers, and community representatives share a [united vision](#) to provide lifesaving emergency information to those who need it.

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# Acknowledgements



Representative Velasco and Team, Garry Briesse (Fire), Jennifer Kirkland (9-1-1), Micki Trost, Mike Willis, Sadie Martinez (OEM), Shirl Garcia, Natural Hazards Center Team, Specifically Lori Peek, Jolie Breeden, Jennifer Tobin, and Jeffrey Gunderson.

Thank you to the Colorado State Legislature for providing funding to do this important work.



NSF Award #1635593 and #1841338



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# THANK YOU



Questions? Contact:  
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