

WASATCH FRONT UNREINFORCED MASONRY RISK REDUCTION STRATEGY

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Outline

- Introduction: What is FEMA's Role?
- How We Got Here
- Wasatch Front Unreinforced Masonry Risk Reduction Strategy
- 5 Goals of the Strategy
- Next Steps



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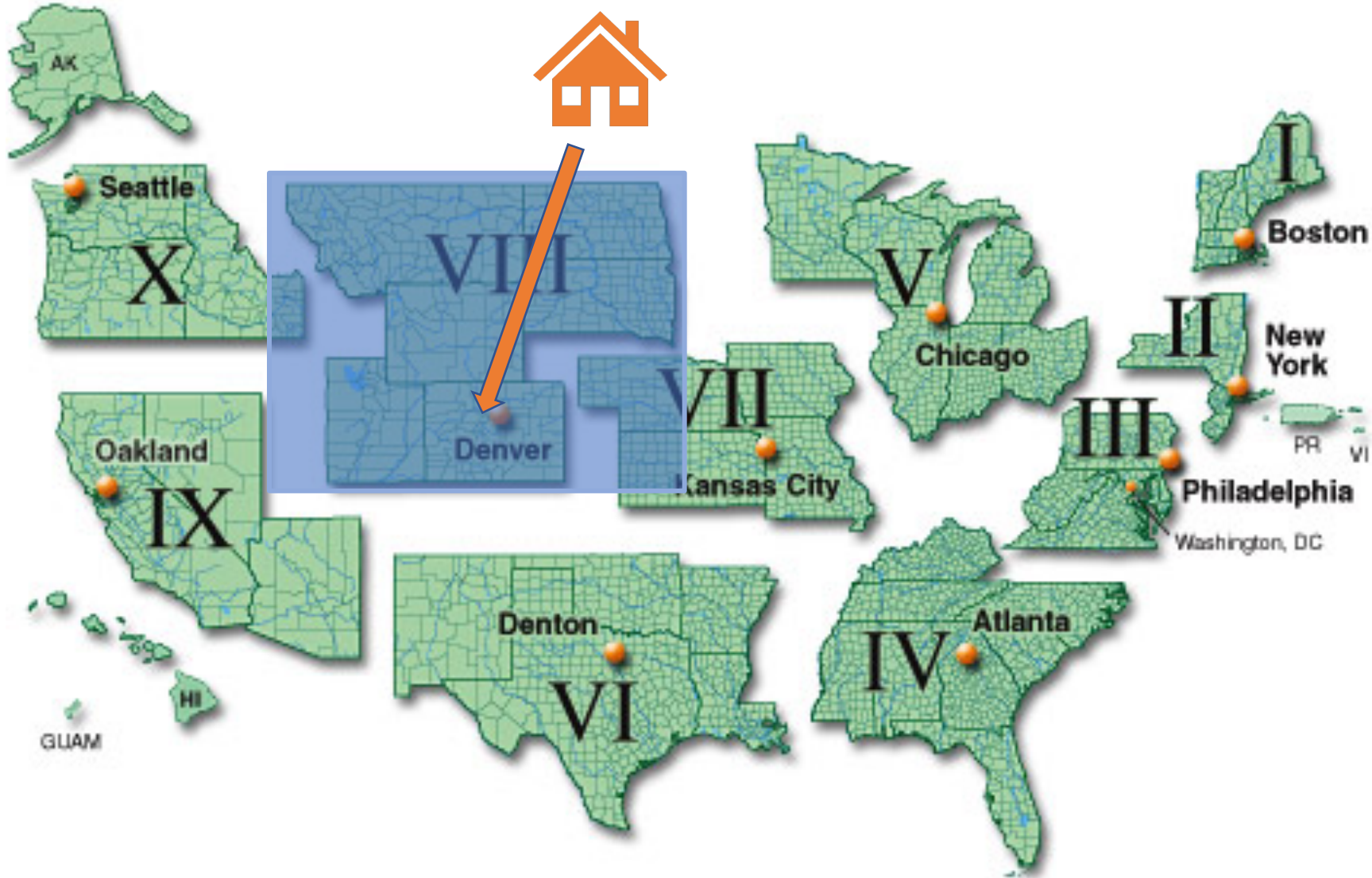
Introduction: What is FEMA's Role?



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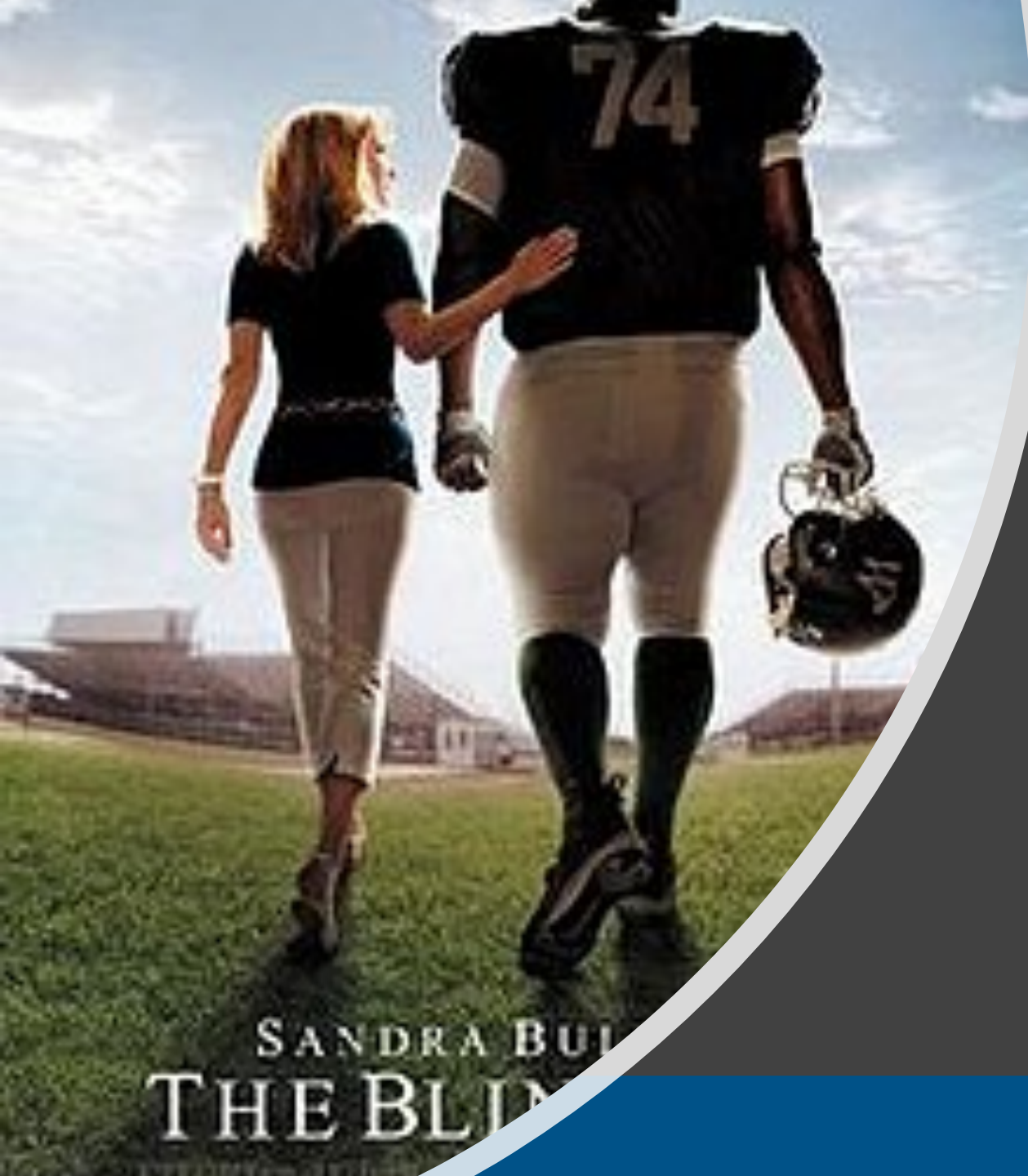


FEMA Region 8 = America's Crumple Zone™



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Earthquake Program: Protecting the Blind Side

SANDRA BUI
THE BLIND

Earthquake Program: Watching Your Blind Side



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Direct State Assistance

- FEMA funding to support earthquake mitigation activities in Utah
- 22 States and Territories participating
 - High or Very High Seismic Risk
(Seismic Design Categories D & E)



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Perishable Data →

What went wrong?



Image source: Barry Welliver, SE

Building Codes

How much offset,
and where?



Image source: geotripperimages.com

FEMA Earthquake Priorities (*a sampling*)

- Current:
 - Building Codes and design guides
 - Outreach campaigns (*ShakeOut*)
 - Disaster support
 - Support State Earthquake Programs
 - Training
- Where we're headed:
 - Earthquake insurance
 - Building inventories: what's at risk?
 - Guiding states towards retrofit funds
 - Linking with other programs (Mitigation Planning, Grants, etc.)





Building Resilient Infrastructure and Communities (BRIC): \$500 Million in grants available

FEMA's Supporting Role



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How We Got Here



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Utah Unreinforced Masonry Summit Recap

- Strong engagement from ~100 attendees: emergency managers, building officials, local officials, press, & U.S. Congressional staff
- URM Summit + 2021 National Exercise are raising awareness of the threat in Utah
- A bit of outreach can pay dividends...



APPROXIMATELY 66 MILLION YEARS AGO...

WELL THAT LOOKS
LIKE IT WILL COST
A FORTUNE...

ASTEROID
MITIGATION
PROGRAM



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National Mitigation Investment Strategy

- Post-Sandy, Government Accountability Office urged national coordination of mitigation investment to reduce future disaster losses
- *National Mitigation Investment Strategy* recommends setting resilience & mitigation investment priorities to benefit whole community.



Slide courtesy of Jamie Leigh Price, FEMA

National Mitigation Investment Strategy

**Show How
Mitigation
Investments
Reduce Risk**

**Coordinate
Mitigation
Investments to
Reduce Risk**

**Utah is the
first Pilot!**



**Make Mitigation
Investment
Standard
Practice**

Wasatch Front Unreinforced Masonry Risk Reduction Strategy



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What Are Utah's Pilot Priorities?

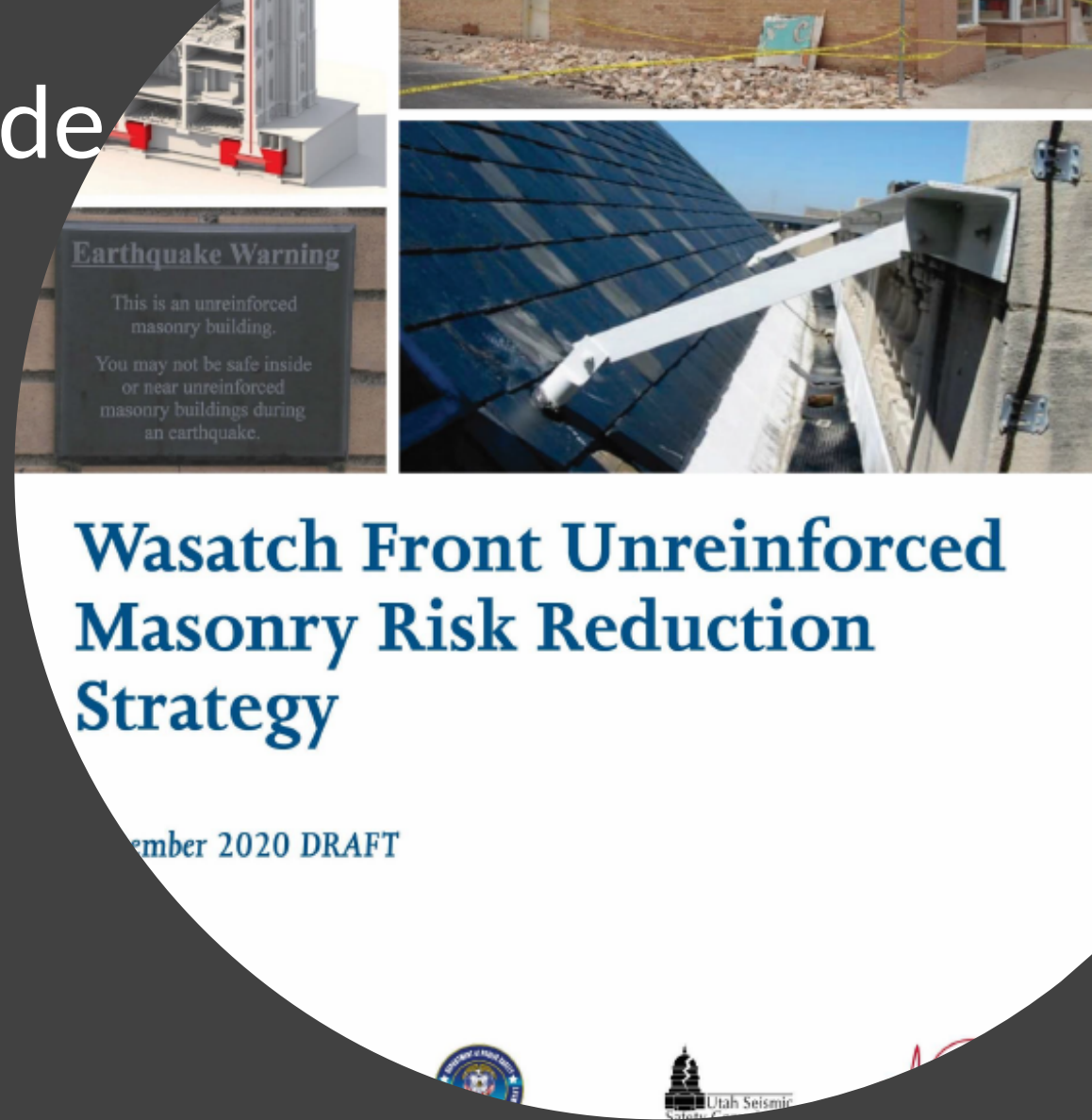
1. Developing a URM risk reduction strategy
 - Strategy development kicked off in Utah: Feb. 2020
 - Finalized strategy last month
2. Outreach & engagement campaign targeting:
 - Public
 - Key decisionmakers



URM Strategy: 127 pages, 1 slide

- 20 authors & 27 reviewers: representing 22 agencies, companies, and nonprofits
- 600+ reviewer comments
- Funding ideas – linking resources to maximize Federal/State grants
- Creative solutions: tax breaks, Historic Preservation credits
- Engineering analysis of retrofit levels
- Examples of effective model ordinances
- Roadmap for public engagement and soliciting buy-in
- Pros/Cons of Voluntary and Mandatory programs
- Overcoming obstacles (resistance from developers, legislative indifference, etc.)

...much of which leverages input from the 2019 URM Summit.



5 Goals of the Strategy



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A photograph of the Utah State Capitol building, featuring a large dome and classical columns, with the Utah state flag flying in front. The image is partially obscured by a white curved line that separates it from the dark grey background on the right.

URM Strategy: Goal 1

- Establish a statewide URM risk reduction program
 - Emphasis: leverage multiple existing Federal and State funding sources
 - Identify new funding streams and program linkages - case studies from around the U.S.

URM Strategy Goal 2: Protect schools:

- Set aggressive dates to repurpose, retrofit, or demolish URM schools
- Finalize schools inventory – where are most vulnerable schools located?
- Technical support to local school districts - guide through (BRIC) grant application process
- Set the standard for linking multiple FEMA and State programs

Image source: Deseret News



URM Strategy: Goal 3

- Retrofit or relocate government facilities
 - Prioritize facilities needed for post-disaster short and long-term recovery
 - Not just traditional “critical facilities”, but locations like building departments and job training centers





URM Strategy Goals 4 & 5: Fix Building Codes

- Tighten existing building code loopholes and empower local communities to enforce the retrofit requirements they already have on the books.
 - One example: local structural engineers in Utah vocally highlight many older buildings are converted to condominiums, yet no retrofit is required
 - Support local jurisdictions in adopting model retrofit ordinances that have proven successful elsewhere

Next Steps



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What Are the Priorities Going Forward?

- Engage expanded DEM/FEMA team; facilitated discussions to
 - Identify first goal(s) from URM Strategy to address
 - Convert goals to tactical next steps
 - Pull in USSC expertise on key issues
 - Building codes
 - Legislative outreach
 - Local jurisdiction engagement

What Are the Priorities Going Forward?

- Use additional funding to expand local stakeholder engagement
 - Map out an external engagement strategy
 - Coordinate one-on-one or sector-specific meetings with key stakeholders to gain support for URM mitigation
- Target stakeholders most likely to oppose this effort, e.g.:
 - Developers
 - Homebuilders
 - Legislators
 - Other special interest groups

Conclusion

- USSC has built a strong local URM coalition – you have FEMA’s attention!
- The URM Strategy includes best available local, statewide, and national input
- Many of the tools for risk reduction already exist – now we need to put them into action!
- To do this right, we’ll need to pull in experts when you’re needed
- Now is the time!



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Thanks!

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