Risk and Resilience in the Face of Global Change

*Climate Adaptation*

*Disaster Risk Reduction*

*Natural Hazard Mitigation*

December 2, 2015

*Edward A. Thomas Esq.*

*Natural Hazard Mitigation Association*
Howdy!

Ed Thomas, President
Natural Hazard Mitigation Association

This presentation is not and cannot be legal advice, nor does this portion necessarily represent the views of anyone other than the presenter.
Hazard Mitigation: Plain Common Sense

- "Disaster risk reduction is not a luxury. It's an essential insurance policy for a more disaster-prone world, and one of the smartest, most cost-effective investments we can make in our common future. The benefits of this investment will be calculated not only in dollars saved, but most importantly, in saved lives."
- Jan Egeland, Former U.N. Under-Secretary General for Humanitarian Affairs and Emergency Relief Coordinator
What is NHMA?

Created in 2008

To bring together individuals & organizations interested in Hazard Mitigation and Climate Adaptation
“NHMA is a national organization of practitioners committed to natural hazard disaster risk reduction in the context of climate adaptation and mitigation.”

**DEVELOP STRONG PARTNERSHIPS**
- Partner with public & private sectors in support of mitigation, adaptation & resilience goals
- Connect practitioners & leaders to facilitate effective cross-functional mitigation & adaptation practices

**WWW.NHMA.INFO**

**PROMOTE EFFECTIVE PRACTICES**
- Identify, develop, & encourage best practices
- Provide user-friendly guidance to plan & implement long-term resilience strategies
- Promote awareness of social, economic & environmental benefits of resilient development

**FACILITATE EDUCATION & TRAINING**
- Create & disseminate technical information on natural hazard mitigation & climate change adaptation
- Host webinars, training courses, & annual symposiums
- Reach out & engage the community from residents to leaders on hazard risk reduction

**ADVOCATE FOR SOUND POLICY**
- Provide expertise to guide decision makers
- Identify techniques & tools to empower decision makers
- Support community, regional, state & federal initiatives
- Work with insurance, code, energy associations for whole community resiliency
Resilience and Disaster Risk Reduction

Resilience & Climate Adaptation are huge concepts. They are also moving targets as the climate varies.

Think of the arrows being shot at the target as development resources.

We at NHMA focus in on the Disaster Risk Reduction Portion of Climate Adaptation and Resilience.
Finding the Bullseye

© Watson, D. Resilience 101
Used with permission

Prosperous and just economy
Brilliant Publications
Designed to Promote True Resilience
Including Disaster Risk Reduction for ALL

See, http://nhma.info/resources/recommended-reading/
How Much Has the Federal Government Spent on Disasters Since 1983

- Any thoughts?

- See, Focusing on Disaster Costs Before Rather Than After They Happen, Insurance Journal, August 6, 2014


- Billion-Dollar Weather and Climate Disasters: Overview, NOAA, available at: https://www.ncdc.noaa.gov/billions/
Safe Development Is Affordable

- The American Institutes for Research has conducted a detailed study on the cost of floodproofing and elevation.
- That study supports the idea that elevation and floodproofing costs add very small sums and have a significant societal payback.
- The Multihazard Mitigation Council, a group which includes private industry representatives, reports that hazard mitigation has a proven 4-1 payback when retrofitting past mistakes.
- Other Organizations calculate that safe design or redesign following a disaster has a payback of 10-1 or greater.
The Constitution in Exile

- Richard Epstein, a Professor of Law at the University of Chicago is the Intellectual Force Behind a Movement that Feels that Many US Supreme Court Cases in the Twentieth Century were Wrongfully Decided

- Examples of Federal Laws Which they Feel are Unconstitutional: Social Security; Minimum Wage Laws; EPA; OSHA
The Supreme Court agrees with safe development based planning. Justice Alito wrote in the majority opinion:

"Insisting that landowners internalize the negative externalities of their conduct is a hallmark of responsible land-use policy, and we have long sustained such regulations against constitutional attack."
Conservatives Agree

- The Cato Institute Indicates that Compensation is Not Due When:
  
  “... regulation prohibits wrongful uses, no compensation is required.”

  “When the government acts to Secure Rights-when it stops someone from polluting his neighbor ... it is acting under its police power ... because the use prohibited ... was wrong to begin with.”
Equity and Morality Support Safe Development
According To Gandhi's Writings

“Sic Utere Tuo Ut Alienum Non Laedas” That Is, In English: Use Your Property So You Do Not Harm Others Is:

- “A Grand Doctrine Of Life And The Basis Of (Loving Relationships) Between Neighbors”

Gandhi is also quoted as saying:

- “We should act as ‘trustees’ and use natural resources wisely as is our moral responsibility to ensure to future generations a healthy planet.” [See, Narendra Modi in the Financial Times of 11/30/15]
Overcoming Impediments: Paths Forward

- Understanding how much morality, the law and equity support safe development
- Understanding the need for current, actionable, understandable information on risk
- Educating on true risk
- Influencing transformative behavior change through higher standards of care; litigation; inspiration
Dr. Arthur “Chris” Nelson, FAICP at the Rocky Mountain Land Use Institute March 13, 2015

“More than half of the built environment of the United States we will see in 2050 does not exist today.”

Just Released

Hide from the Wind

Tornado Safe Rooms in Central Oklahoma

Prepared by
The Natural Hazard Mitigation Association
for the Federal Emergency Management Agency
Needed: A Common Message of Disaster Risk Reduction-Delivered By Multiple Folks

- We need to deliver knowledgeable messages of enormous business opportunity in resilience [c.f J. Moules in *Financial Times*, 11/3015,]
- To some folks we need to appeal based on disaster vulnerability reduction, safety, and security, with regional and locally based mitigation suggestions.
- Great article on this topic in *New York Times* of 11/15/15: “The Key to Political Persuasion”, by Robb Willer and Matthew Feinberg
- Also in an Article in the journal *Personality and Social Psychology Bulletin* by same authors
- “…frame your position in terms of the moral values of the person you are trying to convince”
- “It’s a simple strategy, It’s just not easy to implement”
Some Suggested Messages

- Resilience presents an enormous business opportunity
  - Increase mass transit, design to reduce Greenhouse Gas Emissions;
  - build *safe rooms*, and have higher *wind load building standards* in areas subject to high probability of high winds/tornadoes;
  - carry out community and individual *wildfire protection* in appropriate areas;
  - design and retrofit to reduce *earthquake* damage;
  - build with higher *freeboard* (generally 4 feet or more) in areas subject to floods, understand the limitations of flood frequency projections based on the past, which include many unrealistic assumptions;
  - recognize the need to protect *water quality*, ecosystem services and threatened and endangered species
  - Avoid litigation caused by improper design
NHMA IS Developing a CROSS-CUTTING Disaster Risk Reduction Ambassador Curriculum

Multihazard

Multidisciplinary

Part of the larger national and international efforts to support “Whole Community” Resilience.
Summary

Fundamentally our society must choose either:

Better standards to protect resources and people

or

Standards which inevitably will result in destruction and litigation

We Need To Make Allies and Friends
To Get Our Message Across

FIND THE COMMON VALUES AND START THERE

All of us can and should play a key role in planning a safe and sustainable future
A Thought Courtesy of Ben Franklin: All of US Who Care About a Safer, Better Future Need To Work Together

Library of Congress