



FEMA

# What People Know about Flood Risk

Results of the Risk MAP National Surveys  
USACE Flood Risk Management and Silver  
Jackets Workshop: August 17, 2011

**RiskMAP**  
Increasing Resilience Together



# Agenda

- Background
- Public survey
- Local official survey
- Cross-survey takeaways
- 2011 survey details

# Background

- **FEMA surveyed local officials and the public to:**
  - Provide a baseline of flood risk awareness
  - Inform national outreach and community engagement
- **FEMA will conduct annual surveys to measure progress toward its awareness goals:**
  - Public awareness and understanding of risk management
  - Local official awareness of flood risk within Risk MAP project areas



# Public Survey Overview

- Conducted 1,019 interviews by phone between July 13-21, 2010
- Valid at the National and Regional levels
- Respondents were 83% homeowners, 16% renters
- Objectives, to determine:
  - Current awareness and understanding of flood risk
  - Actions taken to date to mitigate flood risk
  - How respondents currently receive flood risk information
  - How respondents *prefer* to receive flood risk information



# Public Survey Findings

- **Most do not believe they are at risk**
  - Most (69%) do not believe they are at risk of flooding
- **Many are confused about flood insurance**
  - Many (27%) believe that flood damage is covered by their homeowners insurance
    - 33% in R2 and R10 believe it is covered
  - Most (67%) do not believe that federally-backed flood insurance is available



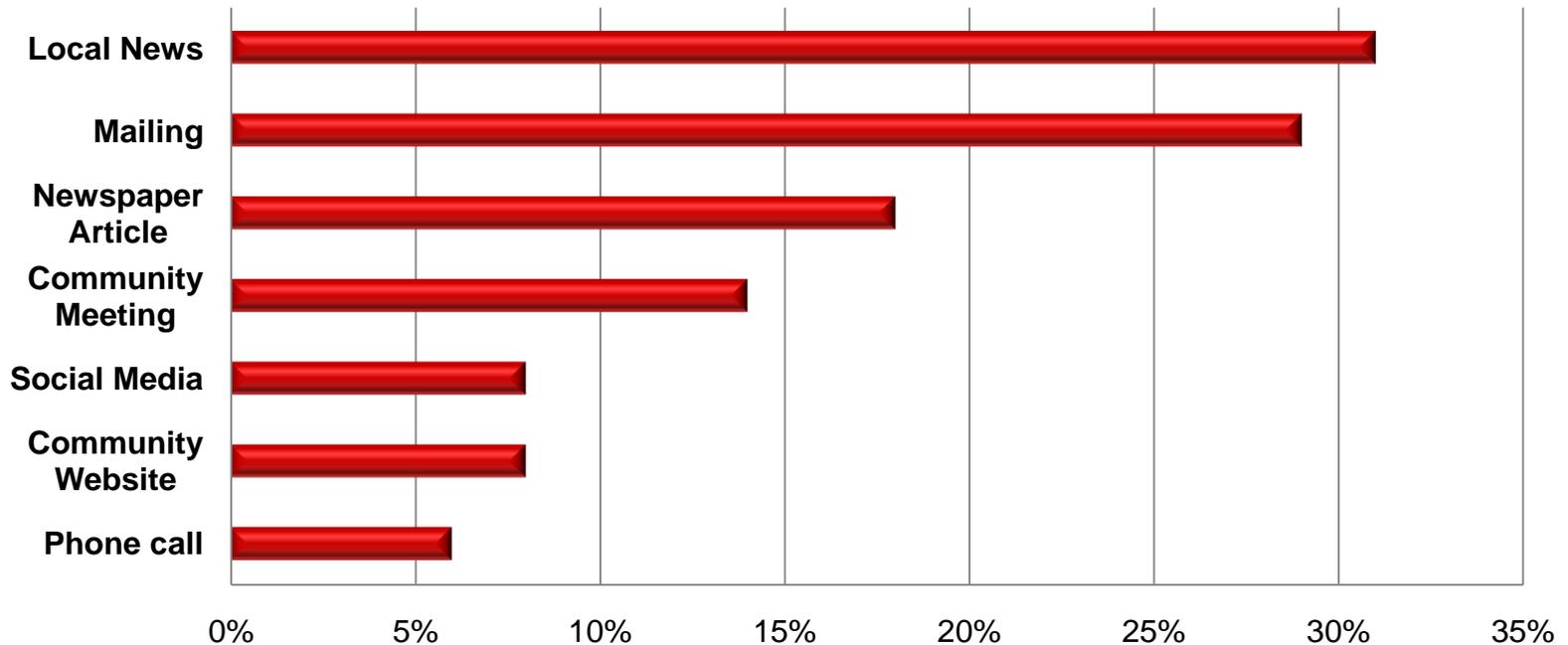
# Public Survey Findings (cont.)

- **People expect to hear about risk from local officials**
  - Many (41%) never hear about flood risk from local officials
    - 51% in R2
  - Many feel that the chief elected official (43%) and insurance agents (31%) should provide flood risk information
  - Over a third were informed of their flood risk when moving in
    - 38% informed by real estate agents
    - 23% lenders
    - 22% insurance agents
  - Most prefer to hear about flood risk from the local news (31%) and mailings (29%)
    - Meetings preferred in R6 and R7



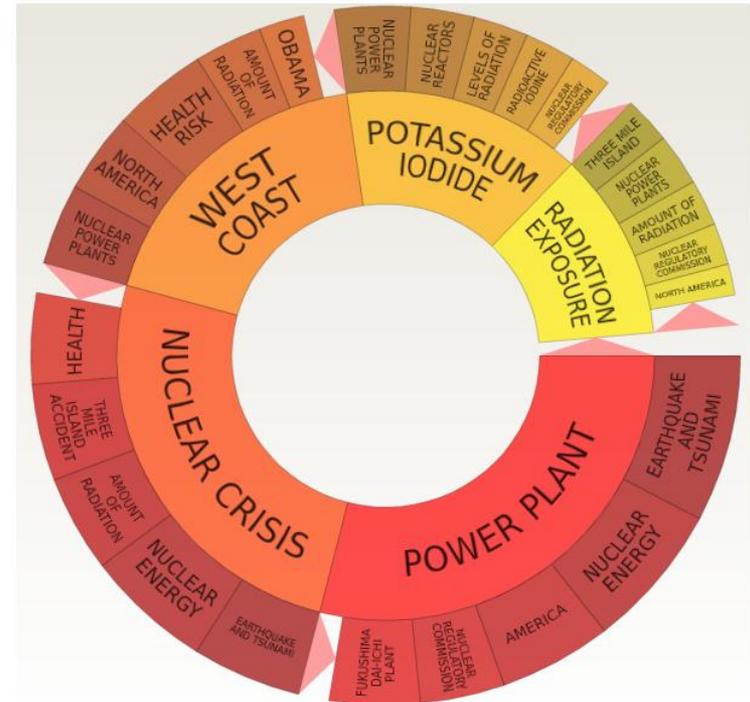
# Public Survey Findings (cont.)

## Preferred Method of Hearing About Flood Risk



# A Note on Social Media

- While social media was not listed as one of the top three ways that the public prefers to hear about flood risk, it is an influencer
- Immediately following the March 2011 earthquake and tsunami in Japan, FEMA's Radiological Emergency Preparedness Program tracked U.S. social media daily to:
  - Identify new or emerging areas of concern (e.g., from air radiation to food radiation)
  - Identify shifts in locations of concern (e.g., from the west coast to the east)
- As a result, FEMA was able to:
  - Update media materials and messaging to address concerns
  - Put media resources in areas where an event or gathering was being planned



Social Media Discussion Topic Frequency  
(Excluding Twitter) on 3/21/11

# Public Survey Findings (cont.)

- **They rely on past experience and maps**
  - Sources of flood information include flood experience (38%) and flood maps (30%)
- **Some have taken action to reduce risk**
  - Over a third have taken steps to reduce flood loss, 41% in R8, 24% in R2
    - 80% of those that did not take steps did not believe they were at risk



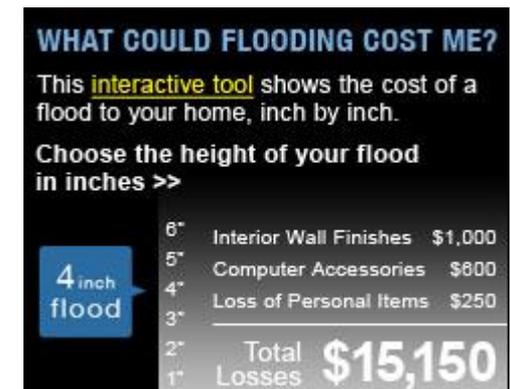
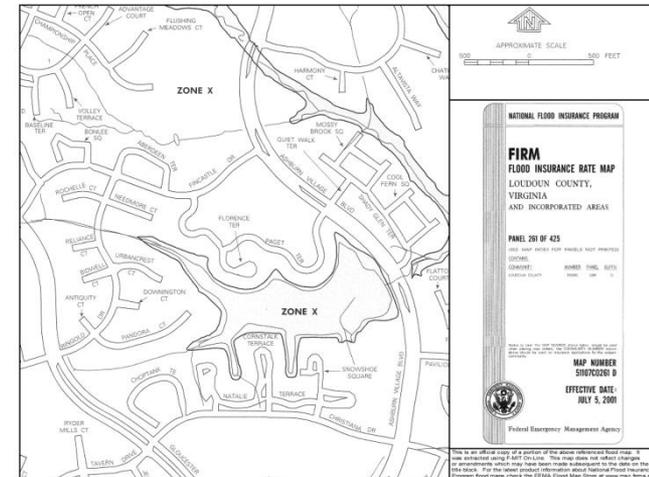
# Public Survey Findings (cont.)

- **Awareness prompts action and understanding**
  - Those who believed their community was at risk were more likely to:
    - Have reviewed their flood map
    - Believe flood insurance was available
    - Have taken steps to prevent flood risk
  
- **Flood maps provide understanding**
  - Those who reviewed their flood map were more likely to:
    - Believe their community was at risk for flooding
    - Believe flood insurance was available
    - Have taken steps to prevent flood risk



# Opportunities Identified by Survey

- Citizens expect to hear about risk from local officials and insurance agents
  - Most don't believe that they are at risk
- To raise awareness of flood risk:
  - Draw upon first-hand experience
  - Address insurance confusion
  - Note that they may have already taken other steps to reduce flood risks
  - Show the flood maps and other tools
  - Use mailings, local news



# Local Official Survey Overview

- Collected 718 responses to online survey, July 2010
- Valid at the National level
- Objectives
  - Understand their awareness and understanding of local flood risk
  - Identify the types of flood prevention or flood risk reduction activities undertaken
  - Determine if and how they share flood risk information with their citizens
  - Understand how FEMA can make it easier for them to communicate about flood risk



# Local Official Survey Findings

- **They know their communities are at risk**
  - Most (68%) know that their communities are at risk for flooding, but may underestimate that risk
  - They learn about flood risk from flood maps (80%) and personal experience (69%)
  - Those aware of their flood risk take action
    - Public officials who thought their community was at a risk for flooding were more likely to say their community has taken action to prevent flood risk
- **They know flood insurance is available**
  - Most (78%) are aware of the availability of federally-backed flood insurance

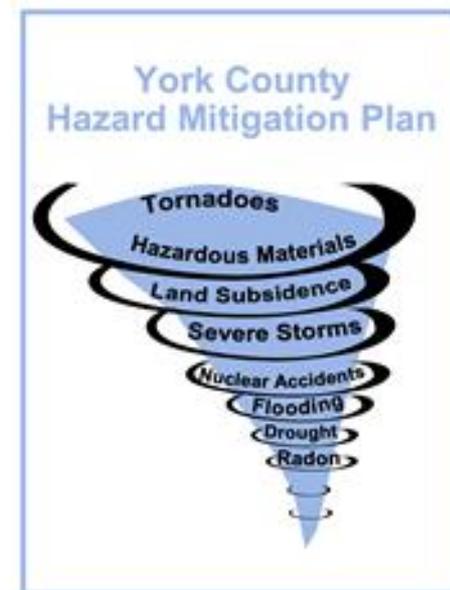
# Local Official Survey Findings (cont.)

- They have taken steps to reduce risk
  - Almost two-thirds of communities have taken action to reduce flooding
    - Of those that did take action, 56% cited planning and zoning, 48% building codes, 47% storm water management



# Local Official Survey Findings (cont.)

- **Mitigation plans increase awareness, not mitigation activities**
  - Just over half have FEMA-approved hazard mitigation plans
    - 31% were not sure
  - Those who have a FEMA-approved hazard mitigation plan:
    - Are not more likely to take action than those that do not have a plan
    - Are more likely to communicate at least annually about flood risk
    - Are more likely to characterize their flood risk as high
    - Are more likely to believe flood insurance is available



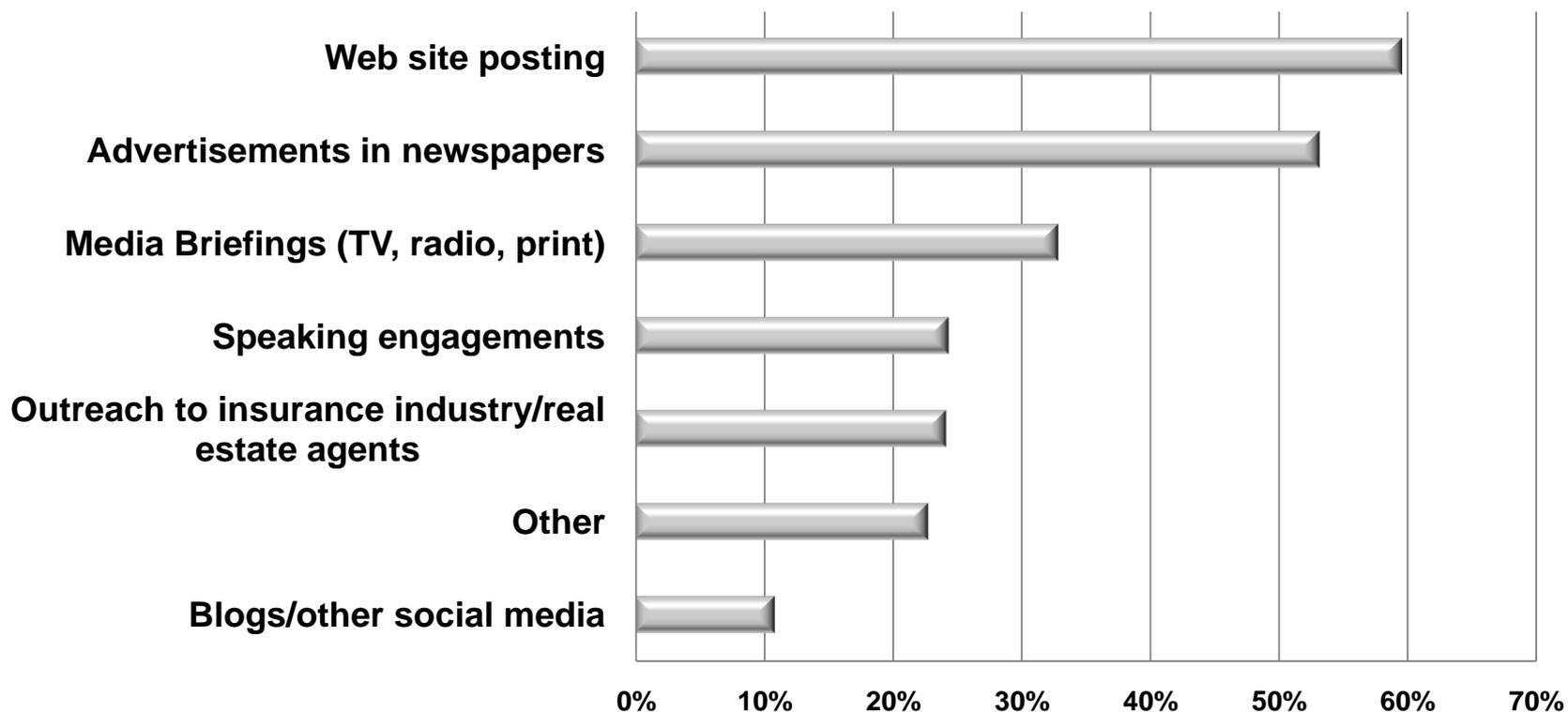
# Local Official Survey Findings (cont.)

- **Many do not communicate often about risk**
  - Many understand they are responsible for communicating flood risk, but not many do it
    - 48% cited the Mayor as responsible, 43% cited the emergency manager
    - 32% have never communicated with citizens about flood risk
  - They prefer to provide new maps to their citizens through the Web (60%) and newspaper ads (53%)
    - 33% would brief local media



# Local Official Survey Findings (cont.)

## Local Officials' Methods for Communicating About New Flood Maps



# Opportunities Identified by Survey

- **To raise awareness of flood risk:**
  - Share information about funding and resources available to enable/assist/incentivize mitigation activities
  - Encourage development and review of mitigation plans
  - Make flood maps as user friendly and easily accessible as possible
  - Arm those with mitigation plans with outreach materials

# Cross-Survey Takeaways

- **Local officials understand that:**
  - Their communities are at risk for flooding, while the public does not
  - Federally-backed flood insurance is available, while the public does not
- **The public:**
  - Expects to hear about flood risk from local CEO's, but CEO's are not providing much information
  - Prefers to hear about flood risk through local media, mailings and meetings, while CEO's prefer to use Websites and newspaper ads



# Risk MAP's Response

- **In response to the survey findings, Risk MAP has:**
  - Updated messaging
    - Updated talking points and materials to let local officials know that the public is looking to them for flood-related information
    - Shifted messaging focus from mitigation planning to mitigation action
  - Updated/created materials
    - Created media materials to support local official outreach to constituents
    - Created a letter template for local officials to send to constituents
    - Created an outreach strategy template that Risk MAP project teams can use to help communities create customized outreach strategies
    - Updated slide deck templates for Risk MAP meetings to encourage Risk MAP project teams to use stories and images to demonstrate flood risk information
    - Created a fact sheet on grant availability to share with communities
  - Shared findings
    - Shared information with FloodSmart to inform their insurance outreach
    - Shared findings at various conferences and with USACE, NOAA

# 2011 Surveys

- **Survey sampling changes**

- Surveying the public and local officials in Risk MAP vs. non-Risk MAP communities
- Adding more Tribal officials

- **Survey tool changes**

- Questions related to risk behind levees and dams
- Question related to flood risk to an individual's home or apartment
- Refined questions about insurance
- Added more on review of flood maps
- Added more community demographic questions



# FEMA