Building Official Workshop on Bay Area Multi-Jurisdictional Local Hazard Mitigation Plan

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ABAG Earthquake and
Hazards Program





The federal Disaster Mitigation Act of 2000 (DMA 2000) focuses on -

- Mitigation before, rather than after, disasters
- Ties future mitigation funding to cities, counties, and special districts having "Local Hazard Mitigation Plans" completed



- PDM-C Grants
 HMGP Grants
 - Flood Grants



NEW 2007 State Legislation impacts Public Assistance dollars for damage reimbursement -

"Waives" the 6.25% "match" requirement for Public Assistance damage reimbursement



ABAG has taken the lead in developing a Bay Area "multi-jurisdictional" LHMP

- Participating in the MJ-LHMP is simpler than a "stand-alone LHMP
- □ That plan is being updated 2009.
- Thus, now is the logical time to "get on board"





Earthquake-Related Hazards

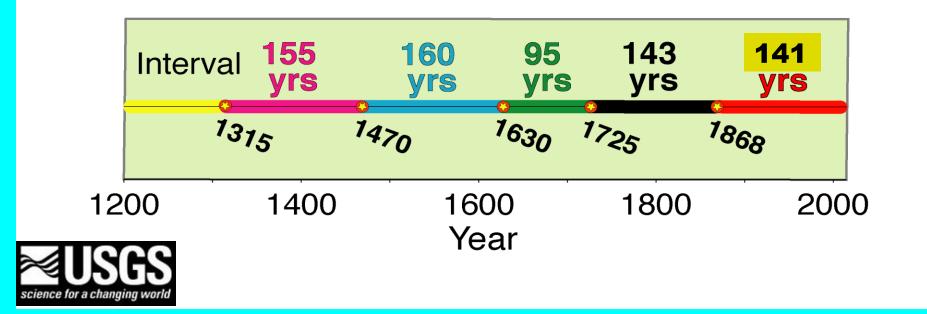
- Ground Shaking
- □ Fault Rupture
- Liquefaction
- Landslides
- Tsunamis







The Last Five Hayward Fault Earthquakes Have Been 140 Years Apart on Average



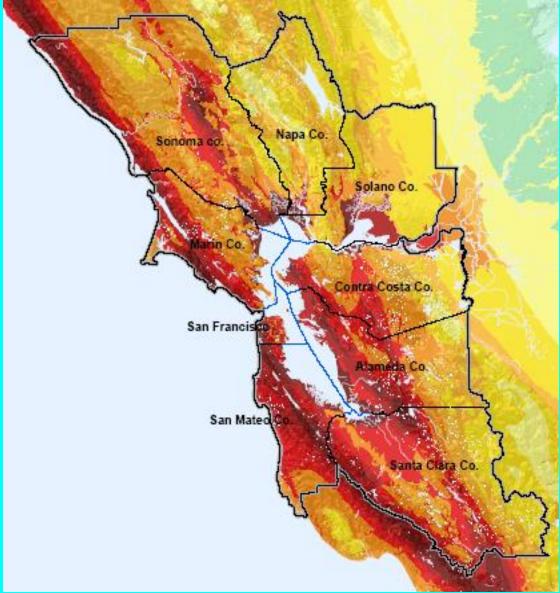
Realistically – earthquakes dominate any analysis.



Shaking Potential

Highest Two Units

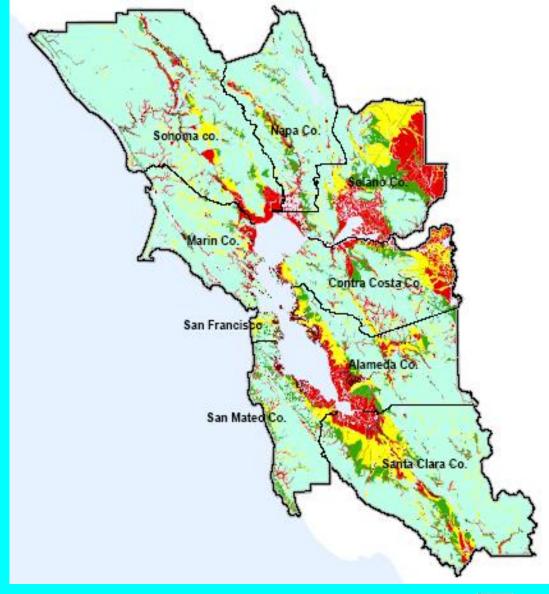
- □ 37.1% of land
- □ 55.5% of urban
- □ 55.7% of roads





Liquefaction Susceptibility Very High

- □ 2.4% of land
- □ 6.0% of urban
- □ 4.6% of roads





Infrastructure - Roads

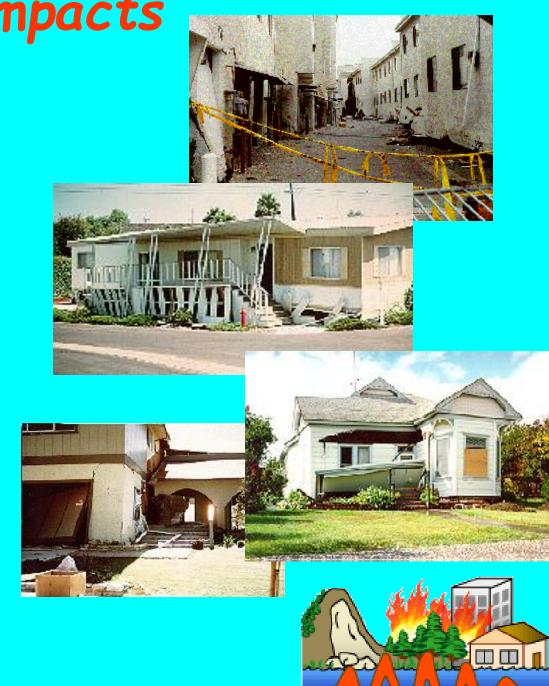
- 142 road closures in Loma Prieta
- 140 road closures in Northridge
- 1,700 road closures in future "entire" Hayward quake





Past Housing Impacts

- Over 16,000 uninhabitable units in Loma Prieta
- Over 46,000 uninhabitable units in Northridge
- Over 155,000
 uninhabitable units
 in future Hayward
 or San Andreas
 earthquakes



Weather-Related Hazards

- Flooding
- Landslides
- Wildfires
- Drought
- Climate Change



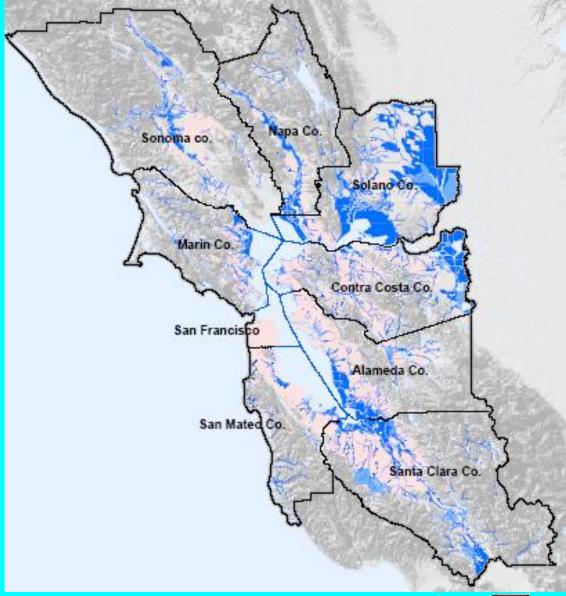






Flooding Hazard based on Q3 date 100-Year Event

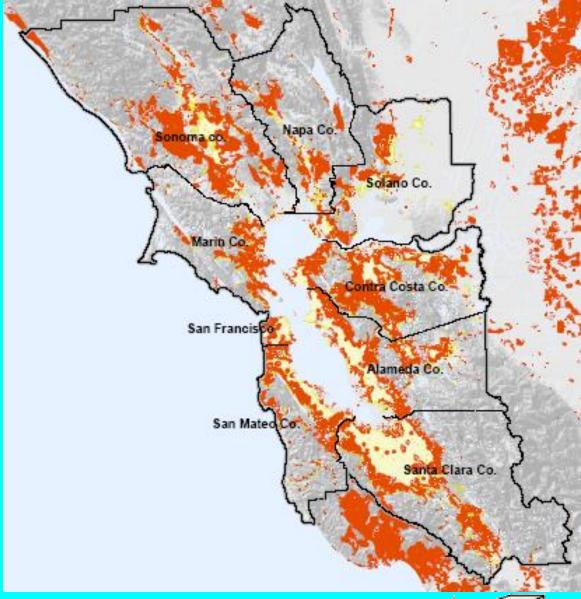
- □ 9.4% of land
- □ 8.9% of urban
- □ 7.3% of roads





Wildland-Urban Interface Fire Threatbased on 2004 data

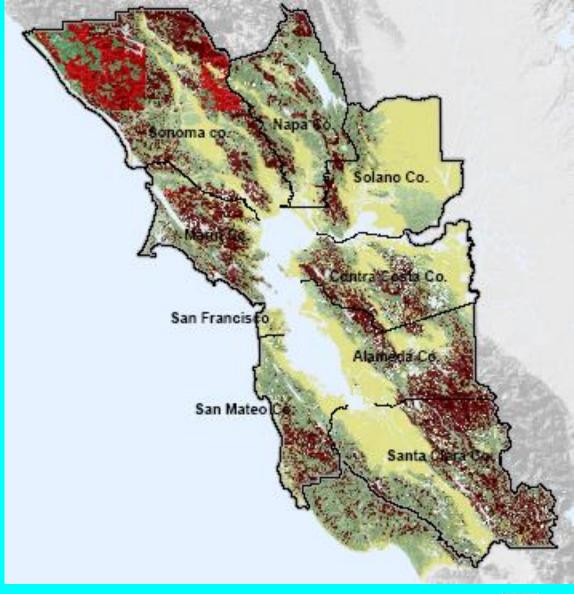
- □ 48.5% -urban
- □ 40.7% -roads





Existing Landslide Areas Mostly Slides

- □ 23.0% of land
- □ 8.3% of urban
- □ 10.5% of roads







Two ways to deal with hazards

- Increase emergency response capability
- Increase actions taken to reduce or eliminate the impacts of future incidents





1. Infrastructure Lifeline facilities "critical" for operations AND recovery.





- 2. Health (more than hospitals)
- 3. Housing (residential buildings)
- 4. Economy (commercial and industrial buildings)





5. Government Services - This includes mitigation related to government facilities, in general.



6. Education (for school districts)

7. Environment (including climate)
8. Land Use





Setting Priorities

- Existing Program
- □ Very High NOW!
- High need money
- Moderate if money
- Under Study
- □ Not Applicable
- □ Not Yet Considered









Long-Term Recovery Initiative

GOAL - 3 years to recovery - not 10 years



- Financing RecoveryRecovery of Government
- Housing (including soft-story)
- Business (particularly small local ones)



Long-Term Recovery (continued)

Utilities and Transportation



- Schools and Education
- Health Care



- Land Use Change
- Governance





You want to maximize the likelihood that you as much money as you can from FEMA to repair local government buildings.

The 1989 Oakland Case... (plus 1994) thus new requirements:

- □ NOT be a "disaster" ordinance.
- Applies to both public & private buildings
- Best if actually "used" pre-event (showing enforcement of this type of provisions)

Housing Mitigation and Recovery Issues Related to Building Departments

Housing

- Single-Family Cripple
 Wall (including Plan
 Set A)
- Multifamily Soft-Story Buildings

- Tagging Issue
- Permitting and Rebuilding Streamlining









Business Building Issues

- URM Retrofits
- Multifamily Soft-Story Building

- Tagging Issue
- Permitting and Rebuilding Streamlining



Where is ABAG's Local Hazard Mitigation Plan and Recovery Initiative information on the internet?

http://quake.abag.ca.gov/

