

SB 1205: Why a Recovery Planning Authority Benefits the Bay Area

EZRA RAPPORT, DEPUTY EXECUTIVE DIRECTOR
ASSOCIATION OF BAY AREA GOVERNMENTS

April 20, 2010

Presentation Outline

- What is our hazard?
- Disaster Recovery Phases
- Why plan for long-term recovery?
- Regional long-term recovery goals
- Major issues requiring regional coordination
- SB 1205 (Corbett, DeSaulnier, Hancock)

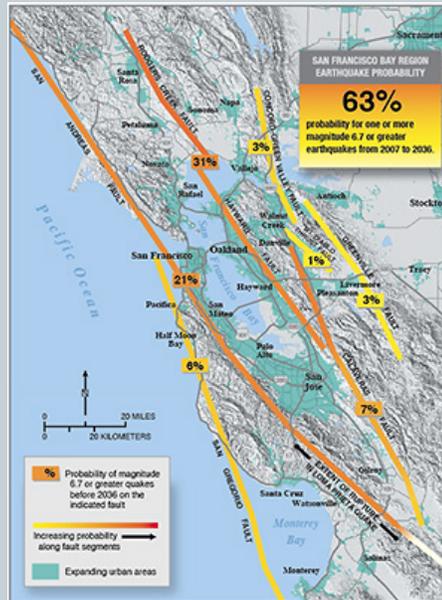
We live in earthquake country

Probability of one or more magnitude 6.7+ before 2036

Entire Bay Area: 63%

Hayward fault: 31%

San Andreas fault: 21%



Source: USGS

Disaster Recovery: Two Overlapping Phases

Long-term recovery

Definition

- Rebuilding a community to its pre-disaster state
- Returning to a "new norm"
- Opportunities to build it back better

Focus

- Future planning

Skill Sets

- Planners, finance, engineers, lawyers, social services, redevelopment, capital projects management

Timeline

- Immediately to decades

Short-term recovery

Definition

- Life-saving and medical support
- Emergency food and shelter
- Debris clearance
- Short-term repairs to infrastructure

Focus

- Immediate needs

Skill Sets

- Emergency personnel, inspectors, Red Cross, engineers, volunteer responders

Timeline

- Immediately to few months

Why plan for long-term recovery?

- **Post-disaster planning difficult when government is in crisis and victims have immediate needs**
- **Complex recovery issues require inter-governmental coordination**
 - 110 jurisdictions, 500 special districts
- **Prevent substantial delays in recovery and loss of public confidence**
- **Increase community resilience and sustainability**
 - Increase capacity to withstand future disasters
- **Reduce scope and intensity of recovery and reconstruction**
 - Recovery priorities help inform mitigation priorities

Adapted from Kenneth C. Topping, PEER Loma Prieta Symposium

Regional Long-term Recovery Goals

- **Demonstrate substantial recovery progress in 1-3 yrs**
- **Retain businesses and investment**
- **Speed reconstruction of permanent housing**
- **Speed recovery of lifelines, schools, and health facilities**
- **Plan for a sustainable redevelopment**

Major Issues Requiring Regional Coordination

- Long-term housing replacement
- Regional water supply
- Transit and transportation
- Airports and Ports
- Special business needs
- Lifeline interdependency
- Address legislative and legal barriers
- Program management assistance for local governments

Expected Housing Losses

3 million total housing units in Bay Area

3% vacancy rate: 90,000 available housing units

155,000 expected uninhabitable housing units

65,000 households needing temporary and permanent housing

Source: ABAG 2003 Shaken Awake, ABAG 2009 Projections

Rebuilding Regional Housing Stock

- Where will we locate temporary housing?
 - How do we attract the capital to rebuild?
 - How do we expedite transfer of foreclosed properties from banks?
 - Do we want to rebuild in the exactly the same way and in the same place as before?
 - Do we want to rebuild to same standards of only life safety?
 - What can we do now to reduce future housing losses?
- Estimated residential losses: **\$90 Billion**
 - Estimated residential losses covered by insurance: **\$4.4 Billion – 5%**



San Francisco soft-story apartment in Loma Prieta earthquake

Regional Water System

- **100+** water retailers
 - **6,000-10,000** water pipeline breaks or major leaks in Hayward fault earthquake
- **75%** of water supplied by agencies that get all or part of water from the Delta or have aqueducts passing through the Delta
 - **50** Delta levee failures in Hayward fault earthquake
 - Export of fresh water disrupted for several years due to a major earthquake
 - Some water districts lack alternative sources of water (e.g. CCWD)



2004 sunny day Jones Tract levee failure

Source: 2008 Delta Risk Management Strategy, ABAG 2009 Local Hazard Mitigation Plan

Restoring Regional Water Service

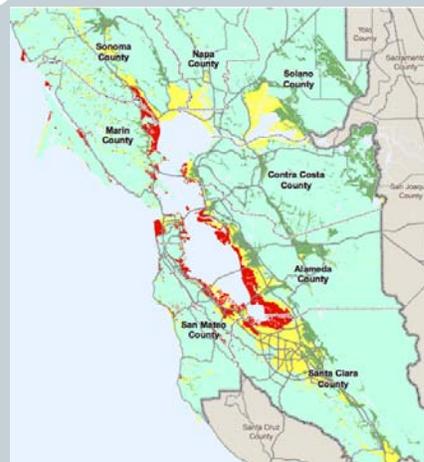
- What is the timeframe for restoring service?
- How much water storage is available within the Bay Area?
- How much Interoperability is there between water retailers?
- How well developed are long-term conservation plans?
- How do we service industries with special water requirements?



SFPUC Seismic Upgrade

Regional Transportation System

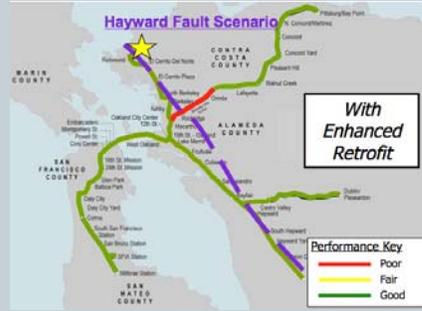
- **1,700** predicted road closures
- Alameda-Contra Costa BART tunnel expected to take **2+ years** to restore full service
- Major susceptibility of roads, bridge approaches, railways, airport runways, and ports to liquefaction



Liquefaction Hazard – M6.9 San Andreas fault

Restoring Regional Transportation System

- How are road repairs prioritized for recovery activities?
- What regional coordination efforts will be necessary to bridge Caldecott BART tunnel disruption?
- What is the systems approach for restoring external linkages to ports and airports?
- Use of general aviation airports for recovery?
- How will transit be reorganized for recovery phase?



BART system vulnerability- from Jack Moehle, Loma Prieta Commemorative Symposium, October 17, 2009

Lifeline interdependencies create a critical need for sharing information in order to schedule repairs

Major susceptibility to liquefaction damage

Major water, gas, and electric lines, roads, railways vulnerable to levee failure in the Delta

Other Lifelines

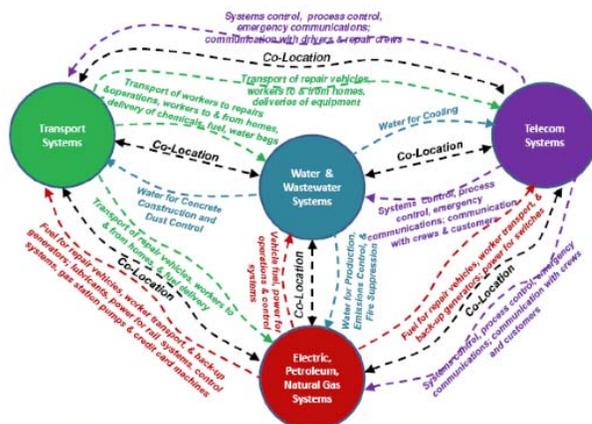


FIGURE: Transportation System Interdependencies with Other Infrastructure Systems. (Arrows point FROM one system TO another indicate that one system supplies another with a service)

Source: Adapted from Peerenboom et. al, 2001

Recovery of Lifelines

- How do we manage the coordination of critical lifeline repair among so many utility providers
- How does the region strategically reinvest in utility reconstruction?
- How do we rebuild lifelines to be more resilient to future damage?



Bay Bridge East Span Replacement

Private Business

- Modern building codes protect life, not investment
 - 40% of buildings in downtown SF unrepairable
 - Nonstructural damage renders many buildings unoccupiable even if no structural damage
 - Basin effects in Silicon Valley will amplify shaking damage
 - Only 12% of commercial buildings estimated to have adequate earthquake insurance
 - Disasters accelerate current economic trends
- 25% of businesses that close following a disaster, do not reopen



Failure of office partitions, ceilings, and light fixtures in the 1994 Northridge Earthquake (FEMA 74, 1994)

Source: Kircher et al, EERI Spectra 2006, California Department of Insurance, Institute for Business and Home Safety.

Economic Recovery

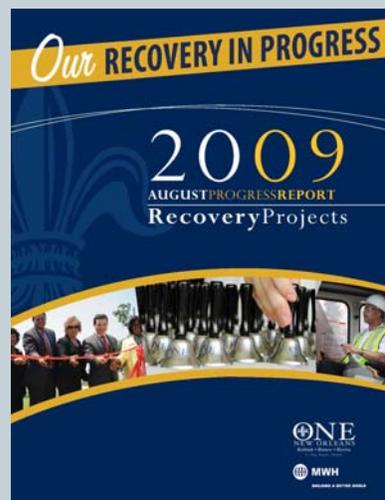
- How can we avert major employers from leaving the region?
- What are the options for assisting large and small businesses to re-establish in a new location within the Bay Area?
- How can we maximize financing and loans for continuing operation?
- How do we prioritize utility resumption and housing replacement to benefit major business centers?



Downtown Santa Cruz, Loma Prieta

Critical Regional Management Issues

- The Federal Government will require an adopted recovery plan to program disaster CDBG funds
- Local governments will need to fast track thousands of capital projects
- Complex legal, finance and permitting issues will need to be resolved during reconstruction
- Legislative advocacy will be required to resolve unforeseen problems



SB 1205 Goals

- Identify gaps in regional recovery planning
- Create a clear, implementable recovery planning process to address long-term issues
- Attract new funding sources for needs identified in the recovery plan
- Analyze legal barriers to reconstruction
- Prepare legislative advocacy necessary to spur rebuilding
- Communicate recovery issues to support increased investment in mitigation efforts
- Increase visibility of requirements of local governments to both respond and recover

Why should ABAG be the institution to manage the Authority?

- All local governments are members
- Designated regional planning agency
- Ensure coordination with all regional planning activities
- 30 years of history of working with local government to reduce risk from natural disasters
- Continuous engagement with elected officials
- Long-standing relationships with key local government staff and stakeholders
- Need to build long-term institutional knowledge and memory

Questions for Discussion



- How do we clarify bill language so that the role and scope of this Authority is complementary and supplementary to UASI and emergency response?
- How we can amend the bill language to ensure that the Authority does not compete for emergency response funds?
- How can we use the Authority to draw attention for additional funding needs for emergency response, as well as mitigation and long-term recovery planning?