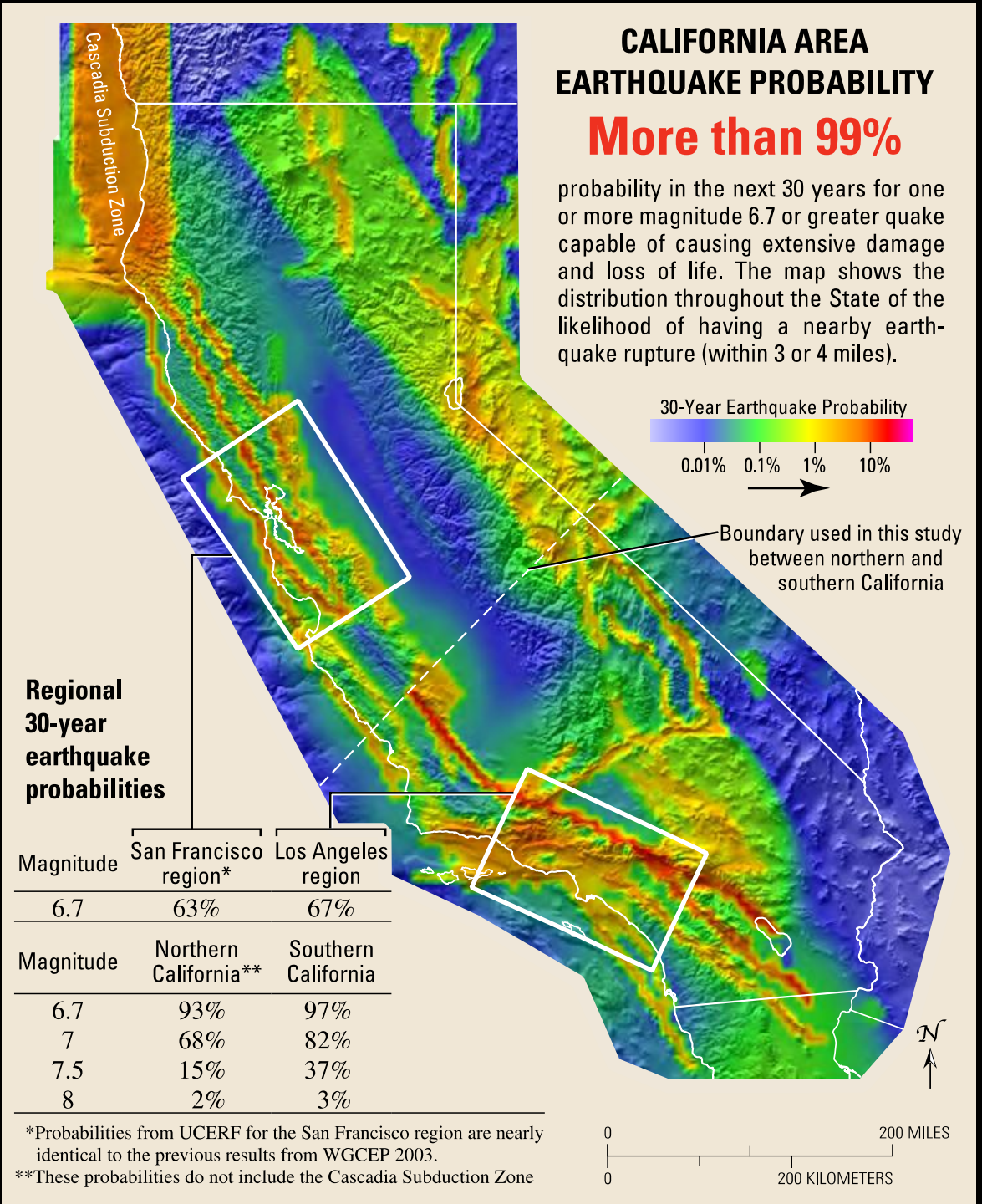
Land Use Planning and Disaster Recovery

Presentation to ABAG's General Assembly

October 18th, 2012

SPUR



Regional 30-year earthquake probabilities

Magnitude	San Francisco region*	Los Angeles region
6.7	63%	67%

Magnitude	Northern California**	Southern California
6.7	93%	97%
7	68%	82%
7.5	15%	37%
8	2%	3%

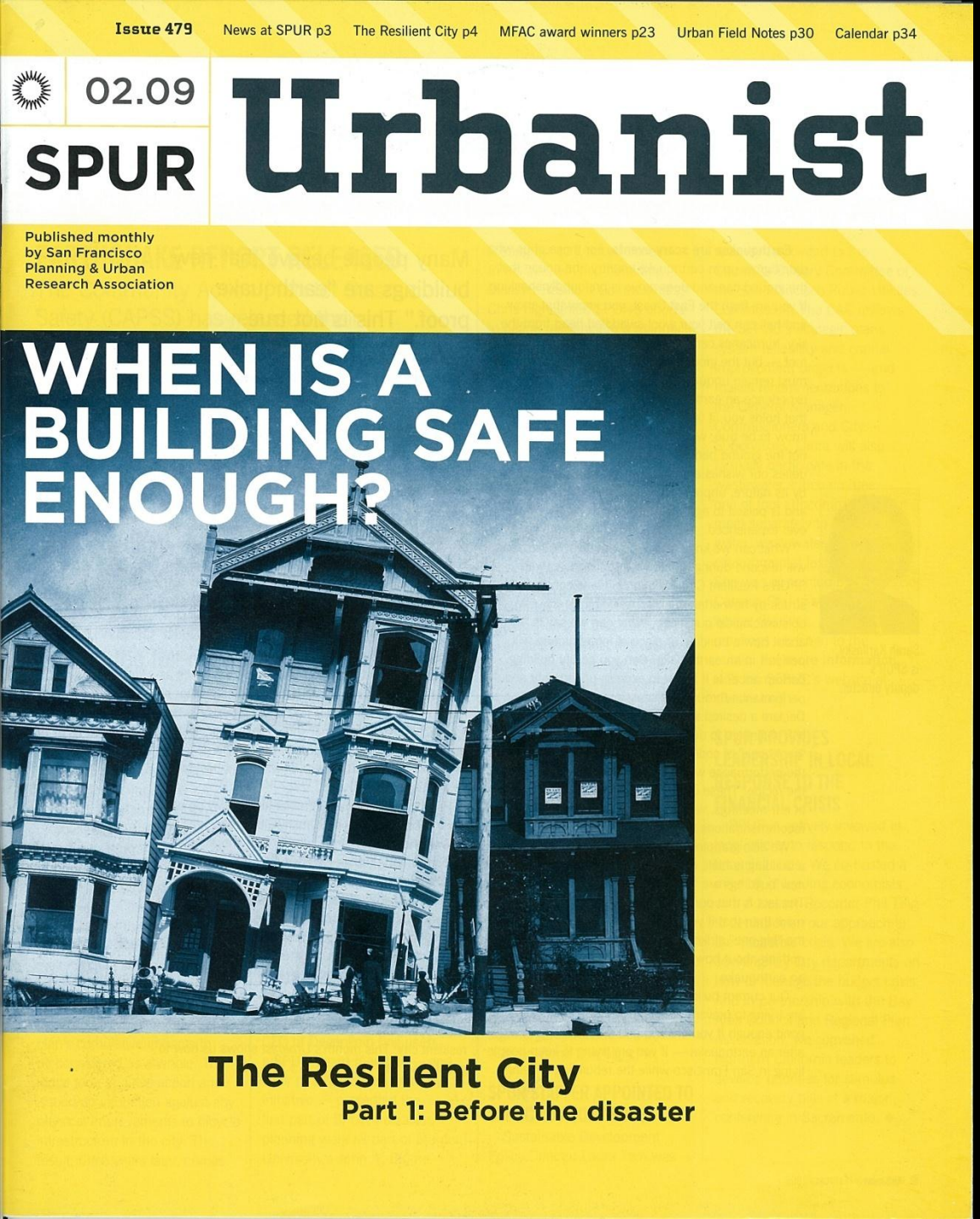
*Probabilities from UCERF for the San Francisco region are nearly identical to the previous results from WGCEP 2003.
**These probabilities do not include the Cascadia Subduction Zone

With seven major fault zones throughout Bay Area the entire region is subject to strong shaking

What is seismic resilience?

Seismic resilience is the ability of the city to:

- **contain the effects** of earthquakes
- **carry out recovery** activities in ways that minimize social disruption
- **rebuild** in ways that mitigate the effects of future earthquakes

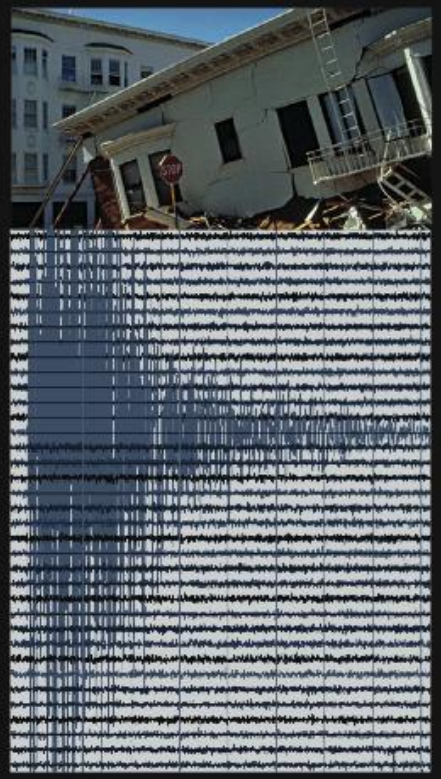


Before the Disaster

Defining what cities need from their seismic mitigation policies

SPUR REPORT 01/2012

Safe Enough to Stay



What will it take for San Franciscans to live safely in their homes after an earthquake? A significant amount of housing may be too damaged to live in while it's being repaired. Residents may leave. And that will put the city's recovery at risk. Here's how to prevent San Francisco from losing its most important asset: its people.

What will it take for San Franciscans to live safely in their homes after an earthquake?

After the Disaster

Rebuilding after a major event

What strategies are needed to address land use planning challenges to facilitate recovery?

San Francisco - 1906

Katrina - 2005

Land Use Planning and Recovery: A Focus on Local Government

- The vast majority of zoning and planning decisions are made at the local level
- Local governments have the responsibility to develop the vision for how their cities will recover
- Actions that local governments take now have the potential to either help or hurt long term recovery

Land Use Planning and Recovery: Issues

- Planning Process
- Regulatory Issues
- Financing
- Information
- Multiple Hazards

Land Use Planning and Recovery: Planning Challenges

- Time Compression
- Scale
- Tension between rebuilding quickly and rebuilding well
- Multiple recoveries all happening at the same time
- Pressure to rebuild what was: the “first plan”
- Information needed to make decisions not readily available

Land Use Planning and Recovery: Planning Process

"Gearing up and sorting out" versus "ready-fire-aim"

Different types of events will require different recovery strategies

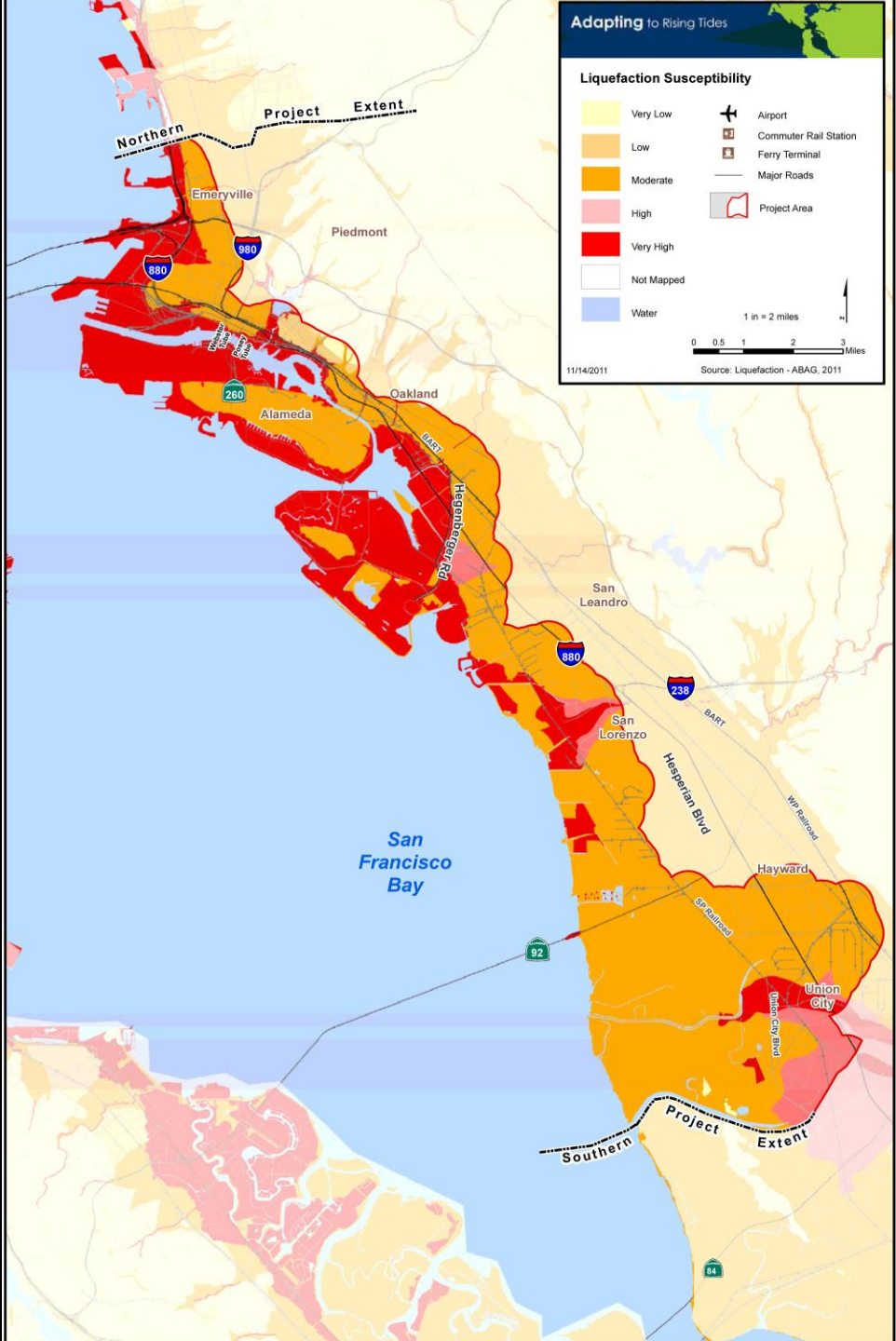
Geographic Scale	Low Impact Event	High Impact Event
Sites/Neighborhood	Localized Restoration	Localized Reconstruction
Substantial Parts of Community	Community Restoration	Community Reconstruction
Substantial Parts of Region	Regional Restoration	Regional Reconstruction (catastrophic)

Source: Ken Topping, draft Planning for Post-Disaster Recovery Guidebook – Next Generation, American Planning Association, currently under development

Land Use Planning and Recovery: Regulatory Issues

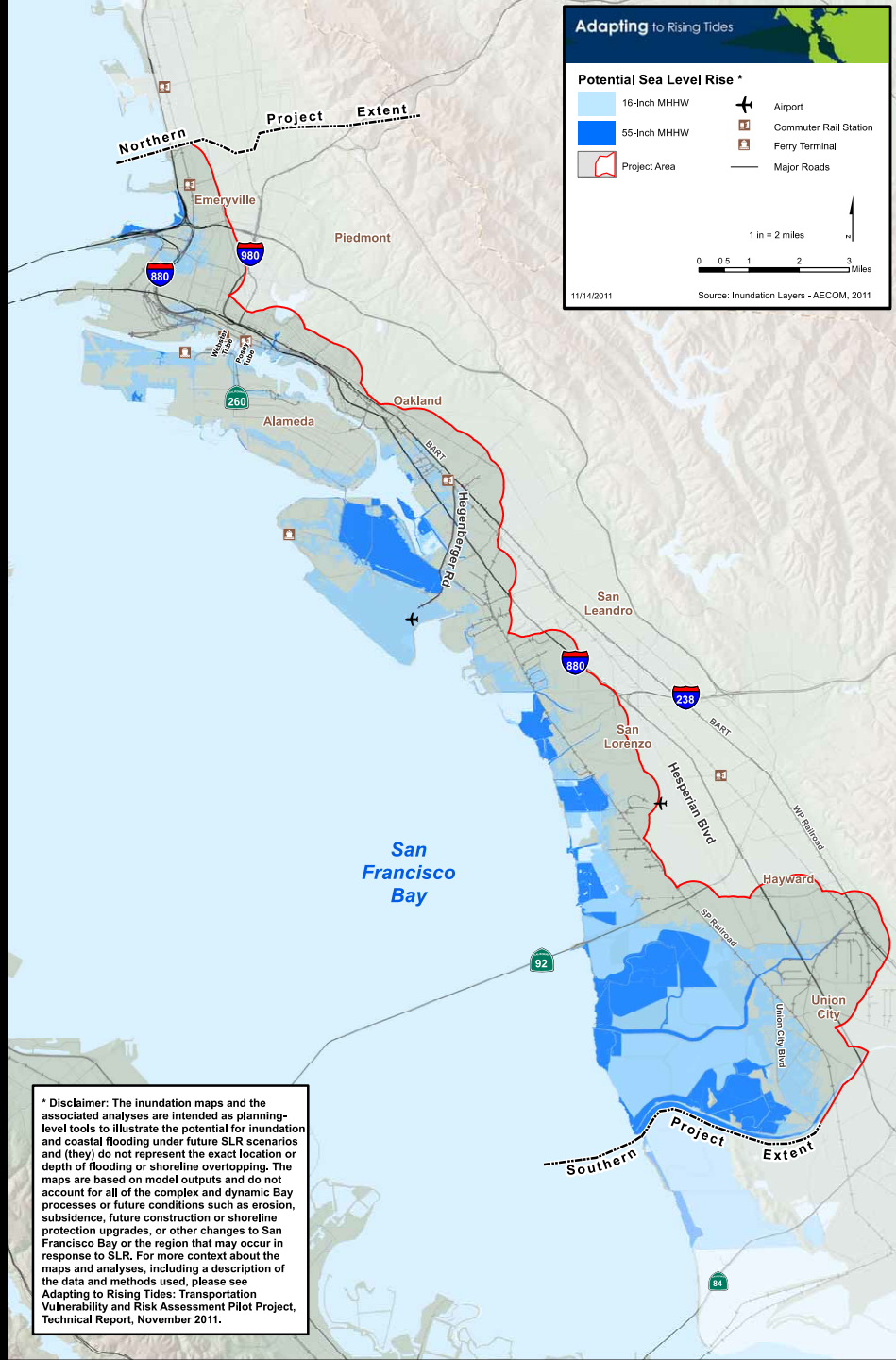
- CEQA/NEPA
- Redevelopment in a post redevelopment world
- Historic Preservation
- Brownfields
- Affordable Housing
- Non-Conforming Uses
- Code Enforcement

Land Use Planning and Recovery: Multiple Hazards



Adapting to Rising Tides: Transportation Vulnerability and Risk Assessment Pilot Project. Briefing Book November 2011, Prepared for MTC, Caltrans and BCDC, Figure 3.3

Land Use Planning and Recovery: Multiple Hazards

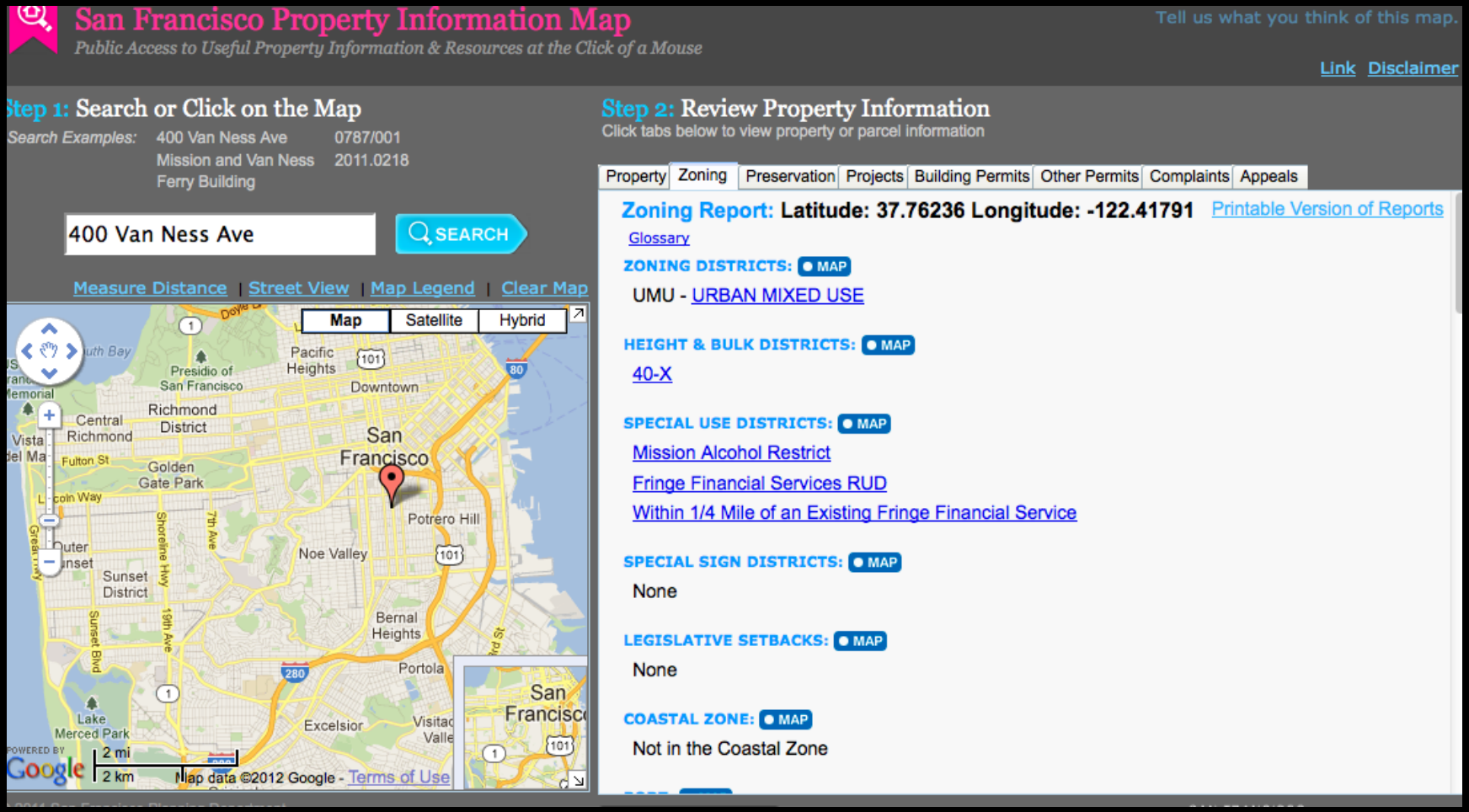


Adapting to Rising Tides: Transportation Vulnerability and Risk Assessment Pilot Project. Briefing Book November 2011, Prepared for MTC, Caltrans and BCDC, Figure 1.1

Land Use Planning and Recovery: Financing

- Money fuels disaster recovery
- Funding comes from federal, state and private sources, but local government will also have to find ways to fund recovery
- We have very low rates of private insurance – but residents and businesses will also need funding to rebuild
- Limited funds for land use planning issues

Land Use Planning and Recovery: Information



Summary

- A major earthquake is very likely to occur in the Bay Area in the next 30 years.
- Our region is subject to multiple hazards, including liquefaction, flooding and sea level rise.
- How do we get to a place where our recovery can be a process of “gearing up and sorting out” as opposed to “ready, fire, aim”?