



Earthquakes ★ Floods ★ Hurricanes ★ Landslides ★ Tsunamis ★ Volcanoes ★ Wildfires

# USGS Presentations

## ACEHR Meeting, Golden CO

### October 23-24, 2007

U.S. Department of the Interior  
U.S. Geological Survey



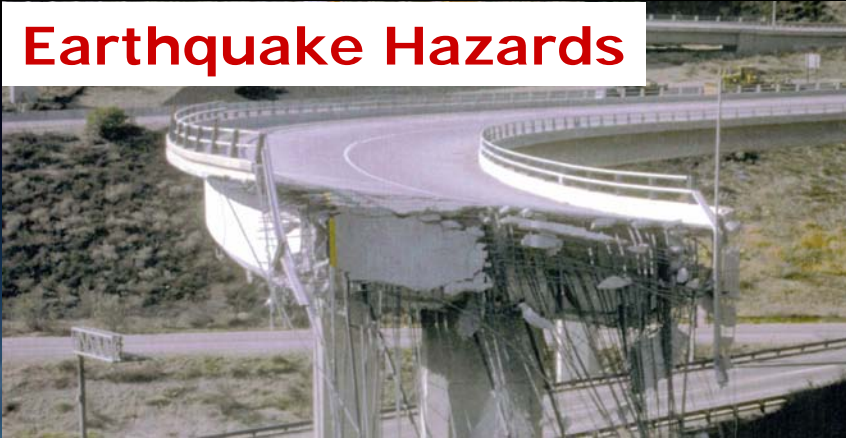
# Current USGS Performance Measures





# USGS geologic hazards programs

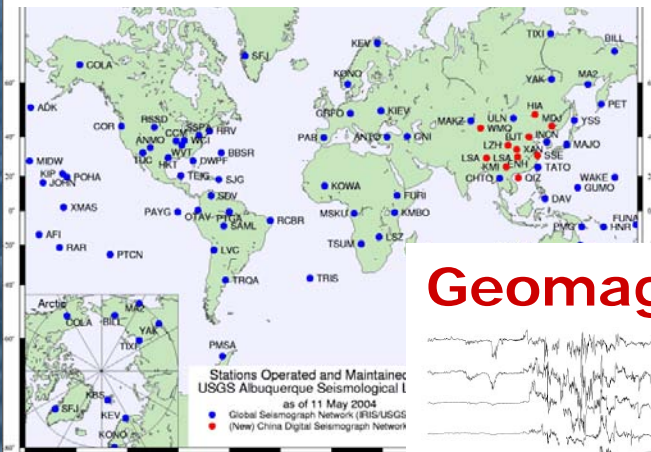
## Earthquake Hazards



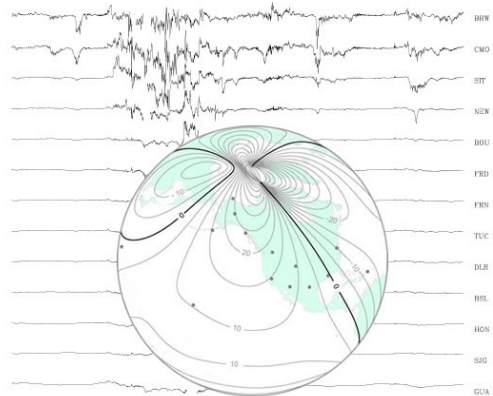
## Volcano Hazards



## Global Seismographic Network



## Geomagnetism



## Landslide Hazards

# Geologic hazard programs and performance

- DOI Strategic Plan
  - Serving Communities: Improve protection of lives, property and assets, advance the use of scientific knowledge, and improve the quality of life for communities we serve
  - End outcome measure: Percentage of communities using DOI science on hazard mitigation, preparedness and avoidance for each hazard management activity.
- OMB Program Assessment Rating Tool
  - The geologic hazards programs were reviewed in FY2003 and found to be working effectively with partners and fulfilling their missions. They received a score of 82. All FY05, FY06 & FY07 improvement plan milestones met.



# OMB FY07 Improvement Plan Milestones

- Integrate performance reporting with Federal partners to ensure comprehensive representation of roles and responsibilities in outcomes.
- Based on evaluation of initial efforts, expand coordination of hazards investments across landslide, earthquake and volcano activities.
- Improve FEMA loss estimates by further integration of USGS seismic monitoring data.

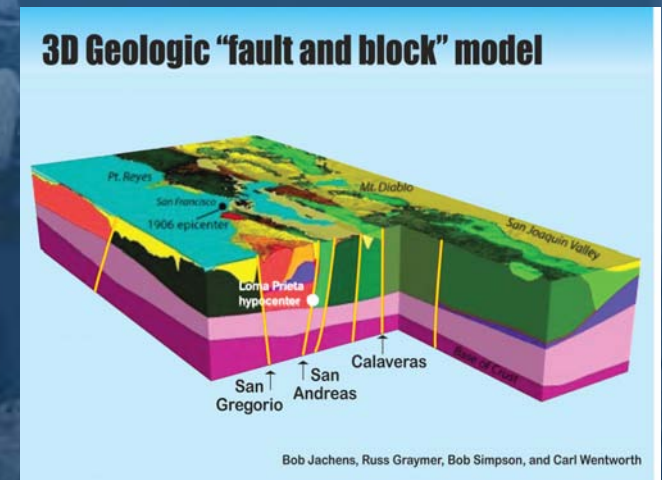
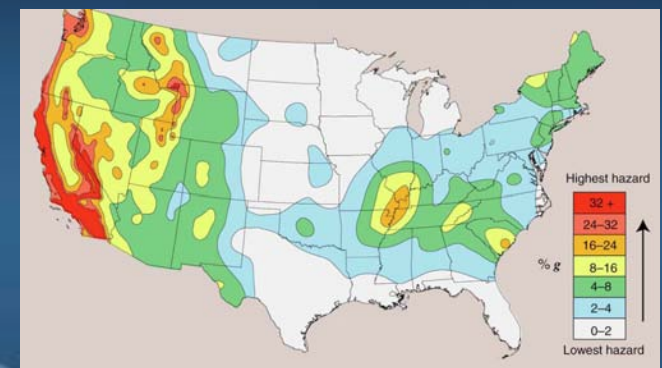
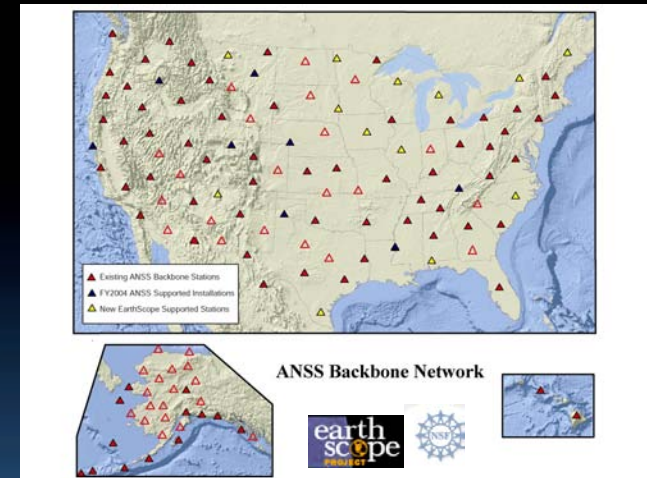




# The USGS role in NEHRP

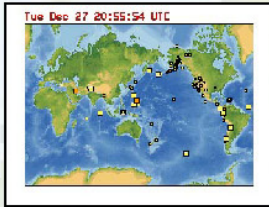
- Provide earthquake monitoring and notifications,
- Assess seismic hazards, and
- Conduct research needed to reduce the risk from earthquake hazards nationwide.

	Estimated Funding (\$ million)		
Activity	ABC Code	FY 2007	% of funds
Hazard Assessments	N8	16.7	33
Earthquake Monitoring	J7	20.2	39
Earthquake Research	N7	9.7	19
Response, assistance, training	Z3	3.3	7
Program Planning	04	1.4	3





## ANSS Earthquake Information Products & Tools



### Latest Earthquakes

Maps and information for U.S. and worldwide earthquakes within minutes after they occur.

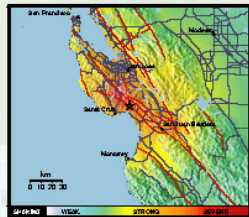
<http://earthquake.usgs.gov/eqcenter/>



### Earthquake Notification

Customizable earthquake information automatically sent to your wireless device or email account.

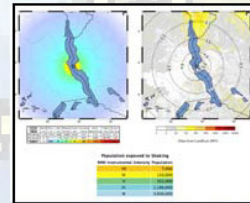
<http://earthquake.usgs.gov/ens/>



### ShakeMaps

Distribution of shaking from an earthquake anywhere in the world within minutes.

<http://earthquake.usgs.gov/shakemap/>



### PAGER

Estimates of population exposure to significant earthquake shaking anywhere in the world within minutes.

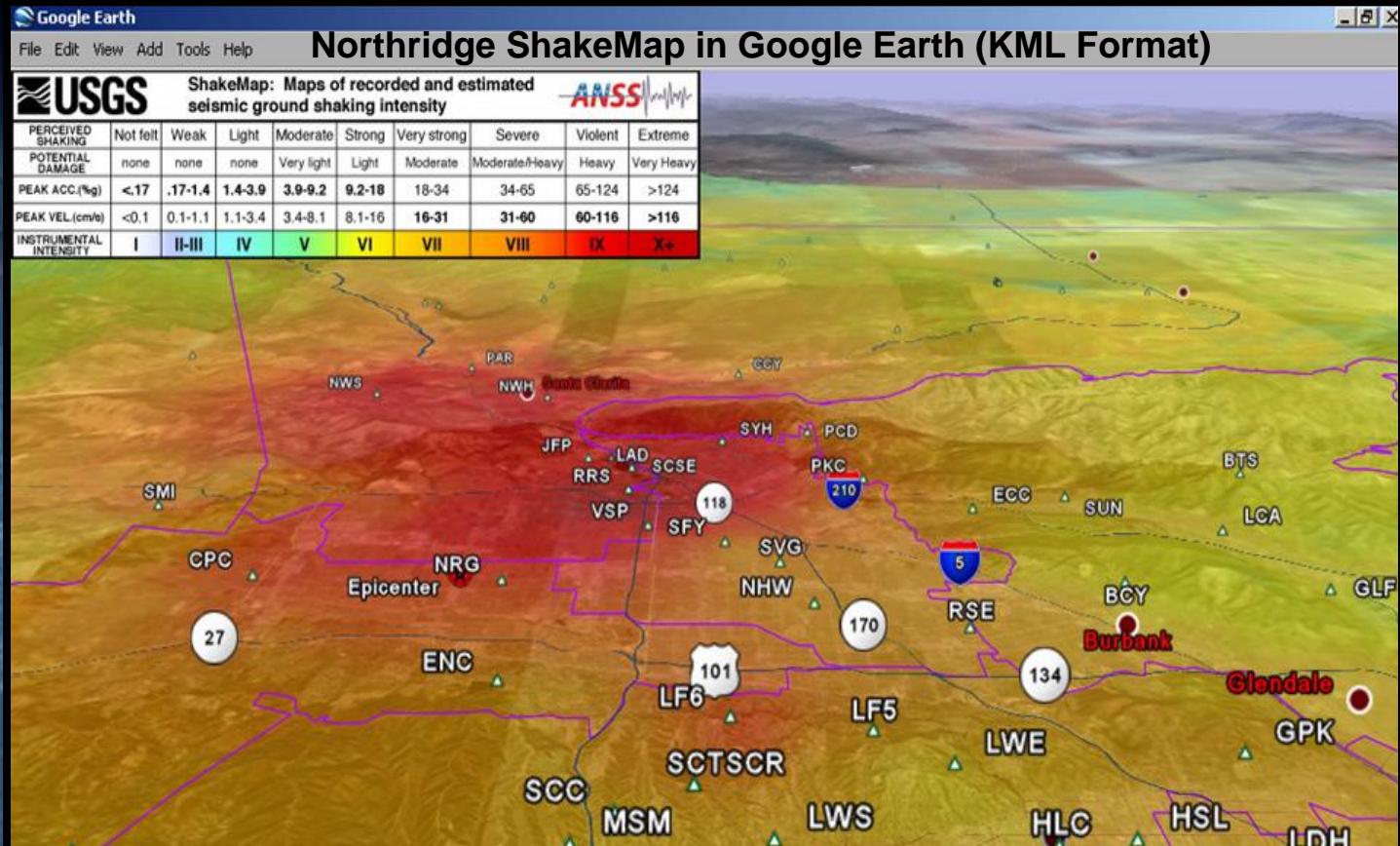
<http://earthquake.usgs.gov/pager/>

### Performance Measures:

- Number of real-time ANSS earthquake sensors. **PART**
- Number of counties, or comparable jurisdictions, that have adopted improved building codes, land-use plans, emergency response plans, or other hazard mitigation measures based on USGS earthquake hazards information. **PART**



# ShakeMap delivery

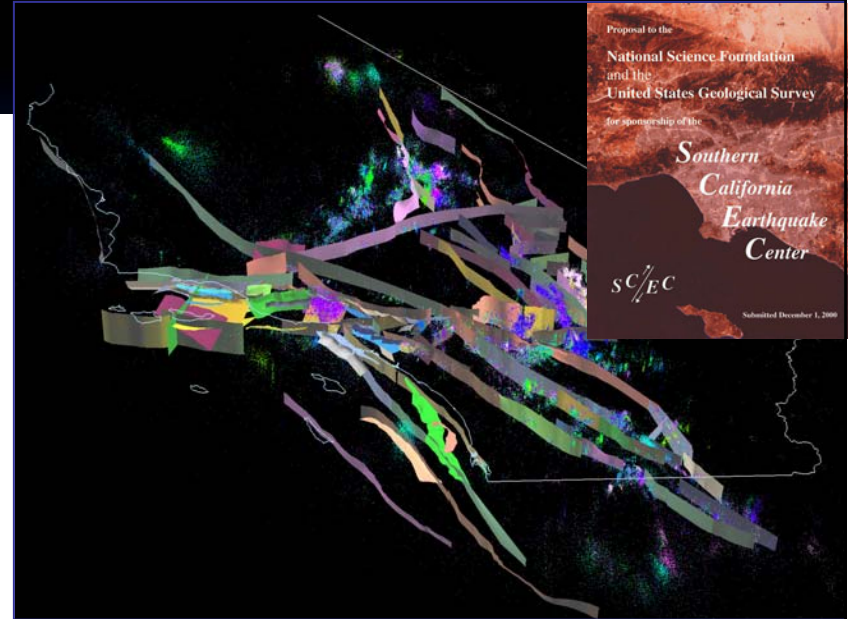
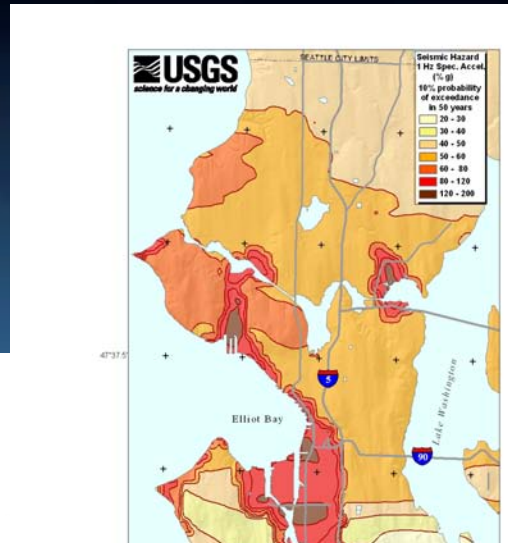
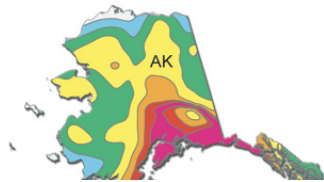


## Performance Measure:

- Number of metropolitan areas where ShakeMap is incorporated into emergency procedures. **PART**



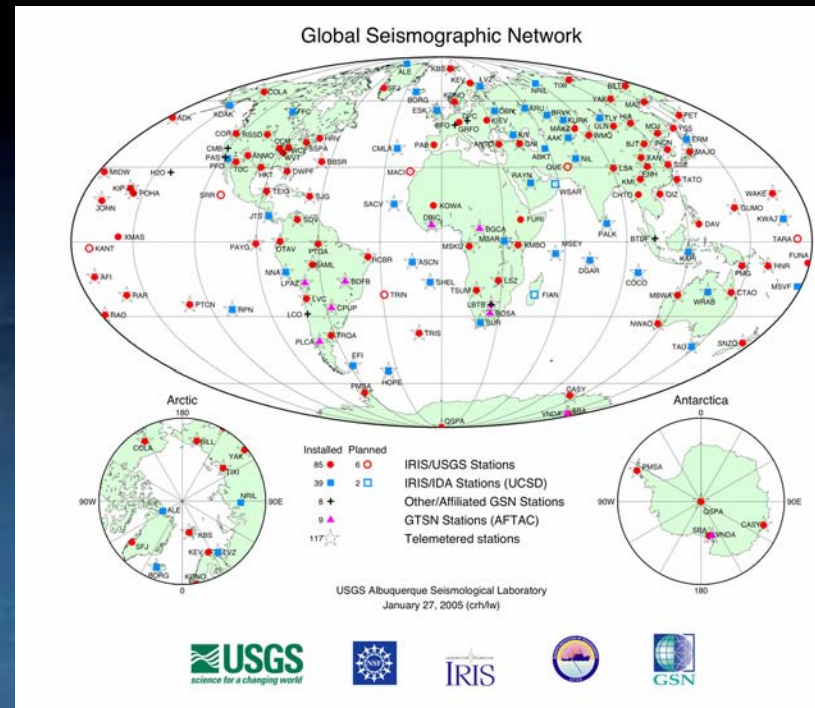
# Measuring performance of research and assessment activities



## Performance Measures:

- Number of urban areas for which detailed seismic hazard maps are completed. **PART**
- Number of systematic analyses (~~risk/hazard assessments~~ **publications**) delivered to customers.
- Number of workshops or formal training provided to customers.

# Global Seismographic Network



## Performance Measures:

- Percentage of GSN monitoring stations that have telemetry (increase reporting speed from one hour to 20 minutes).
- Percentage data availability for real-time data from the GSN. **PART**
- Data processing and notification costs per unit volume of input data from sensors in GSN (cost per gigabyte). **PART Efficiency**