



# HAZARD MITIGATION PLAN UPDATE

October 18, 2022

# NATURAL HAZARD MITIGATION PLAN

**Purpose: Reduce impacts to the built environment and the whole community**

- Identify natural hazards
- Determine potential impacts
- Develop and implement mitigation measures

**FEMA requirement to be updated every five years**

- Comply with Federal and State requirements
- Maintain eligibility for pre- and post-disaster funding

## Natural Hazard Mitigation Plan

Public Review Draft | September 2022



# NATURAL HAZARD MITIGATION PLAN

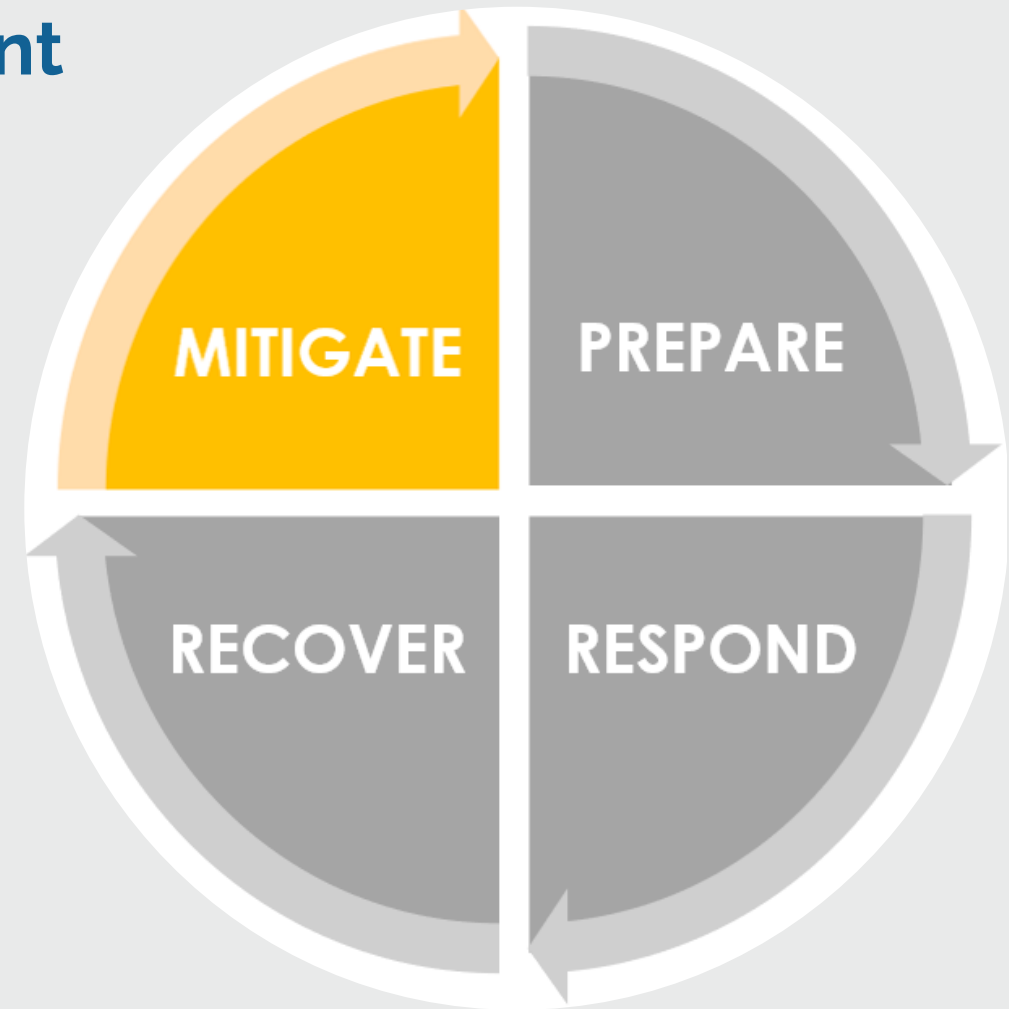
## Four Phases of Emergency Management

**Prepare:** Life safety through planning, training and educational services

**Respond:** Life safety through actions taken in the immediate aftermath of a disaster

**Recover:** Returning to normalcy through restoration efforts

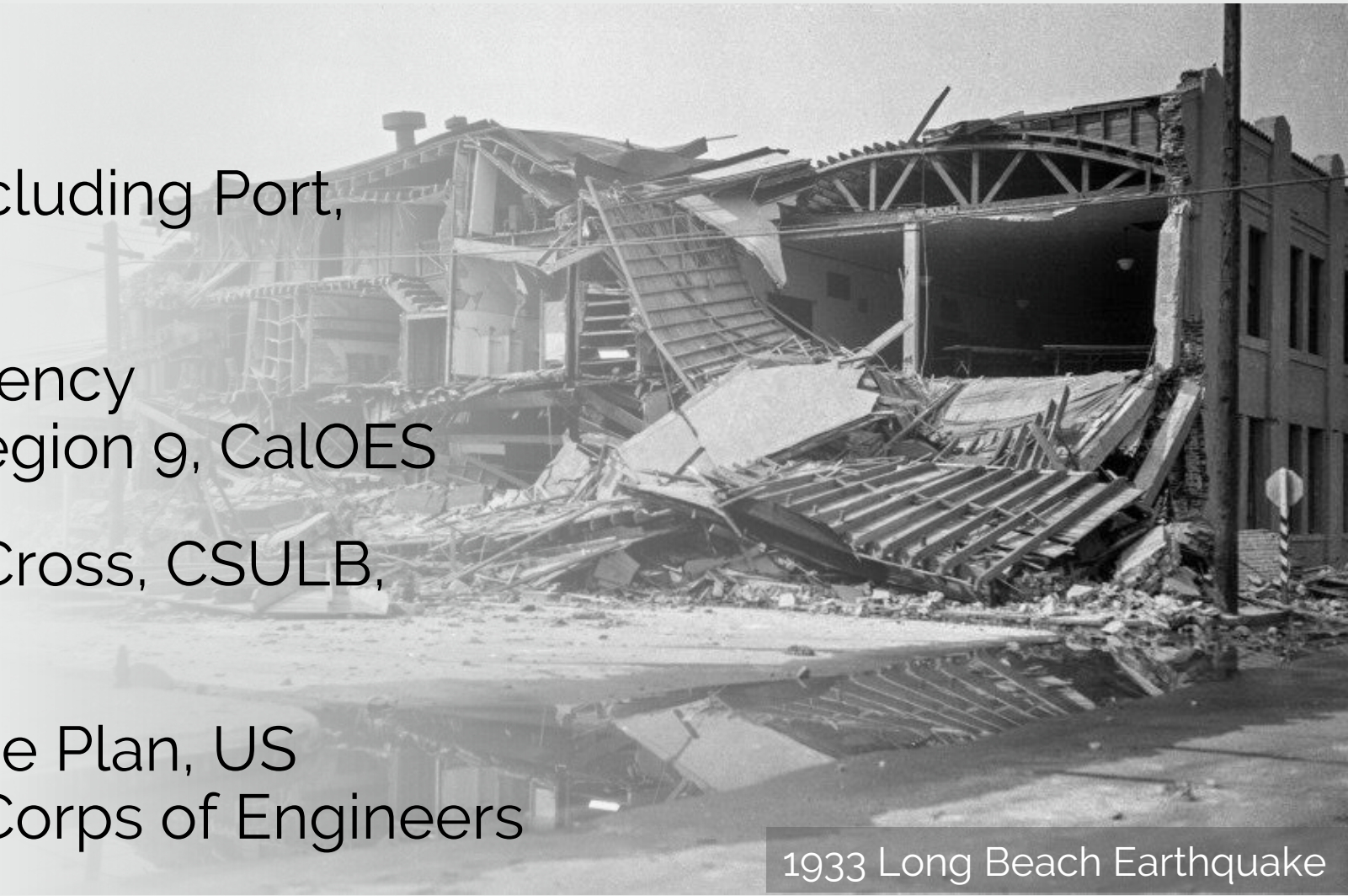
**Mitigate:** Actions taken to reduce the impact of disasters to the built environment, public and private



# NATURAL HAZARD MITIGATION PLAN

## Steering Committee

- 13 City Departments, Including Port, Airport and Water
- County Office of Emergency Management, FEMA, Region 9, CalOES
- Local non-profits, Red Cross, CSULB, LBCC, and LBUSD
- National Flood Insurance Plan, US Geological Survey, US Corps of Engineers



1933 Long Beach Earthquake

# NATURAL HAZARD MITIGATION PLAN

## Public Outreach and Engagement



**2,500**

Unique Engagements via  
Social Media and Survey



**9/16/22**

Launched Hazardous  
Mitigation Website



**9**

Citywide Locations with  
Plan Available to Public



**30**

Days for Public  
Review of Draft Plan

# NATURAL HAZARD MITIGATION PLAN

## Risk Assessment Methodology

- Profile each hazard
- Determine exposure & vulnerability

## Assessment Tools

- Map hazard area
- Model potential for losses
- Building cost estimates



# NATURAL HAZARD MITIGATION PLAN

## 2022 Natural Hazards of Highest Concern\*

- Earthquake
- Tsunami
- Dam Failure
- Climate Change/  
Sea-Level Rise
- Severe Weather
  - Extreme Heat
  - Thunderstorms
- Flooding
- Drought

*\*In no particular order.*



# NATURAL HAZARD MITIGATION PLAN

## Samples of mitigation measures/policies to be maintained or upgraded:

- Generator and pump station maintenance
- Beach berm maintenance
- Building codes adoption
- Early warning systems
- Plans for senior, disabled and AFN communities
- Shelters and Cooling Centers
- Earthquake and tsunami drills
- Evacuation plan development
- Retrofit city critical infrastructure
- Gas and water line upgrades
- Storm water drainage systems
- Flood plan management
- Water conservation programs



# NATURAL HAZARD MITIGATION PLAN

## Integration with Existing Plans

- Climate Action and Adaptation Plan
- Public Health Plans
- Land Use and Air Quality Elements
- Safety Element, including Seismic
- California Fire and Building Codes
- Emergency Operations Plan
- Coastal Plan
- Mobility Element



# NATURAL HAZARD MITIGATION PLAN

## Next Steps

- City Council consideration
- Submit draft plan to CalOES and FEMA for review
- Authorize City Manager to amend as prescribed





**Thank you**

**Reginald Harrison**

**Director**

**Disaster Preparedness and Emergency  
Communications**