

HIGH RISK HAZARDS

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SECTION 4A

EARTHQUAKE

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Section 4A - EARTHQUAKE

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MISSION, GOALS & OBJECTIVES

Mission

The mission of the City of Los Angeles Local Hazard Mitigation Plan is to establish and promote a comprehensive mitigation policy and program to protect City residents, their property, public facilities, the infrastructure and the environment from natural and manmade hazards.

Each one of the mitigation measures is designed to address one or more of the following goals. This is indicated in the last item shown with each mitigation measure.

GOALS:

- **Goal 1 - Protect Life and Property**
- **Goal 2 - Increase Public Awareness**
- **Goal 3 - Strengthen Partnerships**
- **Goal 4 - Increase Emergency Service Effectiveness**
- **Goal 5 - Environmental & Historical Preservation**

Identification of Mitigation Measures

This section describes measures developed by City departments to mitigate the risks associated with identified hazards and to meet the Goals and Objectives of the Plan. Recently completed and ongoing mitigation programs and projects are listed, as well as proposed projects. Within each subsection projects are grouped by primary responsible City department or agency.

CITY OF LOS ANGELES HAZARD MITIGATION PLAN

(Example)

Field Name	Definition
Cost:	\$ = estimated cost in dollars currently funded [\$] = estimated cost in dollars not funded FTE = Full Time Equivalent staff currently funded [FTE] = Full Time Equivalent staff not funded TBD = Cost information to be determined later
Schedule:	Ongoing = a continuous program Start = estimated program start Finish = estimated program finish Not Scheduled = no start date has been established TBD = Schedule information to be determined later
Objective Addressed:	Objectives that relate to the program
Responsible Agency:	City Departments/Bureaus and outside agencies
Financing:	Funding sources for the identified program
Goals Addressed:	Identification of one or more of the five established goals

PROPOSED MITIGATION MEASURES

HARBOR DEPARTMENT (HAR)

EQ-HAR-03

Program/Project: Install or Retrofit Emergency Generators in Terminals
Description: Install/retrofit generators in Terminals No. 4, 6, 14, 26, 34, 38, 55, 62, 63, 67, 77, 79, 80, 81, 82, 91, Ports O'Call, and Pier 400.

Cost: TBD
Schedule: TBD
Objective Addressed: 1B, 1C
Responsible Agency: Harbor Department
Financing: TBD
Goals Addressed: -Protect life/property

EQ-HAR-04

Program/Project: Conduct Non-Structural Hazard Mitigation
Description: Conduct Non-Structural Hazard Mitigation in Terminals No. 4, 6, 14, 26, 34, 38, 55, 62, 63, 67, 77, 79, 80, 81, 82, 91, Ports O'Call, and Pier 400.

Cost: TBD
Schedule: TBD
Objective Addressed: 1B, 1C
Responsible Agency: Harbor Department
Financing: TBD
Goals Addressed: -Protect life/property

EQ-HAR-05

Program/Project: Install Automatic Gas Shutoff Valves
Description: Install Automatic Gas Shutoff Valves in Terminals No. 4, 6, 14, 26, 34, 38, 55, 62, 63, 67, 77, 79, 80, 81, 82, 91, Ports O'Call, and Pier 400.

Cost: \$50,000
Schedule: 9/15/04-4/30/07
Objective Addressed: 1B, 1C
Responsible Agency: Harbor Department
Financing: TBD

CITY OF LOS ANGELES HAZARD MITIGATION PLAN

Goals Addressed: -Protect life/property

EQ-HAR-06

Program/Project: Prevent Shoaling in Terminals

Description: Redo Land Cut or Boulders to Prevent Shoaling in Terminals No. 4, 6, 14, 26, 34, 38, 55, 62, 63, 67, 77, 79, 80, 81, 82, 91, Ports O'Call, and Pier 400.

Cost: TBD

Schedule: TBD

Objective Addressed: 1B, 1C

Responsible Agency: Harbor Department

Financing: TBD

Goals Addressed: -Protect life/property

EQ-HAR-07

Program/Project: TraPac Expansion Program/Berths 145-147 Wharf Improvements

Description: Construction of 705' of new wharf and 1022' of wharf upgrades, work includes dredging, 100' gauge crane rails, AMP, backland redevelopment, and a new longshore toilet.

Cost: \$48,000,000

Schedule: July 2008-June 2010

Objective Addressed: 1B

Responsible Agency: Harbor Department

Financing: TBD

Goals Addressed: -Protect life/property

Los Angeles Fire Department (LAFD)

EQ-LAFD-03

Program/Project: Disaster Awareness Course (DAC) Training Program

Description: Training and administrative equipment to assist instructors in the delivery of earthquake and all hazards training to public and private employees in the City of Los Angeles.

Cost: TBD

Schedule: On-going

Objective Addressed: 4A

CITY OF LOS ANGELES HAZARD MITIGATION PLAN

Responsible Agency: LAFD, CERT/DAC Unit
Financing: General Fund/Grants
Goals Addressed: -Protect life/property

Los Angeles Housing Department (LAHD)

EQ-LAHD-08

Program/Project: Damage Assessment Data Management
Description: Provide and maintain a departmental web-based database to store and share critical real time multifamily dwelling damage assessment dates. Portions of data to be for internal City use in recovery and reconstruction operations and portions to advise the general public of individual property damage assessment reports.

Cost: TBD
Schedule: 2004-2005
Objective Addressed: 1A, 1C, 2A, 2C, 3A, 4A, 4C, 5C
Responsible Agency: LAHD
Financing: TBD
Goals Addressed: -Protect life/property
-Increase public awareness
-Strengthen partnerships
-Increase emergency service effectiveness
-Environmental and historical preservation

EQ-LAHD-09

Program/Project: Mobile Operations Center/Field Command Post/Public Information Center
Description: Provide and maintain a motor home/trailer type of vehicle equipped with cabinetry and apparatuses to serve as a mobile Department Operations Center or as a Field Command Post for major field operations activation, or as a victim information and counseling center in warm zones of major accidents.

Cost: \$400,000
Schedule: 2004-2005
Objective Addressed: 1B, 2A, 2C, 4A, 4B, 5C
Responsible Agency: LAHD
Financing: TBD

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CITY OF LOS ANGELES HAZARD MITIGATION PLAN

Goals Addressed: -Protect life/property
 -Increase public awareness
 -Increase emergency service effectiveness
 -Environmental and historical preservation

EQ-LAHD-10

Program/Project: Personal Property Retrieval Plan
Description: Provide a comprehensive plan for the safe rescue of essential personal property retrieval from damaged multi-family dwellings.

Cost: TBD
Schedule: 2004-2005
Objective Addressed: 1A, 1B, 1C, 1D, 2C, 4A
Responsible Agency: LAHD
Financing: TBD
Goals Addressed: -Protect life/property
 -Increase public awareness
 -Increase emergency service effectiveness

EQ-LAHD-11

Program/Project: Earthquake Survival Kits
Description: Provide Earthquake Survival Kits to essential employees to facilitate their ability to shelter in place or respond rapidly to assist the public.

Cost: \$13,500
Schedule: 2004-2005
Objective Addressed: 4A, 4B
Responsible Agency: LAHD
Financing: TBD
Goals Addressed: -Increase emergency service effectiveness

EQ-LAHD-12

Program/Project: Vacant Housing Unit Identification Plan
Description: Provide a comprehensive plan for the identification of a vacant unit resources through cooperation with owners and housing associations to develop safe havens for displaced occupants.

Cost: TBD
Schedule: 2004-2005

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Objective Addressed: 1A, 2C, 3A, 3B, 4A, 4C
Responsible Agency: LAHD
Financing: TBD
Goals Addressed: -Protect life/property
-Increase public awareness
-Strengthen partnerships
-Increase emergency service effectiveness

EQ-LAHD-14

Program/Project: Securing Vacant Buildings
Description: Provide support for the barricading, fencing, and securing of multi family dwellings rendered unsafe and vacated due to a catastrophic event.

Cost: TBD
Schedule: 2004-2005
Objective Addressed: 1A, 1B, 4A, 5C
Responsible Agency: LAHD
Financing: TBD
Goals Addressed: -Protect life/property
-Increase emergency service effectiveness
-Environmental and historical preservation

EQ-LAHD-15

Program/Project: Tenant Relocation Program Expansion
Description: Provide for the expansion of the current tenant relocation program to accommodate the immediate safety and health needs of persons rendered homeless by providing a housing support service to assist in the transition from temporary shelters to temporary or permanent replacement housing.

Cost: TBD
Schedule: 2004-2005
Objective Addressed: 1A, 2C, 3A, 4A
Responsible Agency: LAHD
Financing: TBD
Goals Addressed: -Protect life/property
-Increase public awareness
-Strengthen partnerships

CITY OF LOS ANGELES HAZARD MITIGATION PLAN

-Increase emergency service effectiveness

EQ-LAHD-16

Program/Project: Individual Grant Distribution
Description: Provide support for development of a plan for the rapid distribution of individual small grant funding for rehousing assistance to eligible recipients after a major catastrophic event.

Cost: TBD
Schedule: 2004-2005
Objective Addressed: 1A, 2C, 3A, 4A
Responsible Agency: LAHD
Financing: TBD
Goals Addressed: -Protect life/property
-Increase public awareness
-Strengthen partnerships
-Increase emergency service effectiveness

EQ-LAHD-17

Program/Project: Reassurance Team Development Plan
Description: Provide support for the development of a plan to provide reassurance and related assistance to displaced City residents whose homes have been deemed safe to reoccupy.

Cost: TBD
Schedule: 2004-2005
Objective Addressed: 1A, 2A, 2C, 3A, 4A
Responsible Agency: LAHD
Financing: TBD
Goals Addressed: -Protect life/property
-Increase public awareness
-Strengthen partnerships
-Increase emergency service effectiveness

EQ-LAHD-18

Program/Project: Rent Stabilization Ordinance (RSO) Revision and Outreach
Description: Provide support for revision of the RSO to establish the right of tenants displaced by declared emergencies to resume their tenancies once their homes are repaired. Support development of a plan to provide public education and instructions regarding the

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CITY OF LOS ANGELES HAZARD MITIGATION PLAN

provisions of the RSO in the event of a local disaster or catastrophic event, create informational materials/bulletins, train outreach staff on RSO disaster provisions. Amendment to be modeled on provisions adopted by the city in response to the Northridge earthquake.

Cost: TBD
Schedule: 2004-2005
Objective Addressed: 1A, 2A, 2C, 3A, 4A, 5C
Responsible Agency: LAHD
Financing: TBD
Goals Addressed: -Protect life/property
-Increase public awareness
-Strengthen partnerships
-Increase emergency service effectiveness
-Environmental and historical preservation

Los Angeles Police Department (LAPD)

EQ-LAPD-01

Program/Project: Video Downlink/Video Surveillance and Monitoring Equipment - Technology
Description: Purchase and deployment of both ground based portable systems and aerial mounted systems will provide the Department with the ability to monitor unusual occurrences. Video downlink capabilities will provide police commanders with current situation status and up to the minute intelligence enabling police to monitor and manage events both preplanned and spontaneous. With the information obtained from the video surveillance, commanders are able to make timely, accurate decisions and deploy resources where needed. Via the Los Angeles Regional Common Operational Picture Program, four platforms have been deployed in the City to provide situational awareness to Incident Commanders. In addition, 11 regional platforms have been deployed to support regional operations.

Cost: \$4,500,000
Schedule: Additional platforms to be deployed in 2008.
Objective Addressed: 1C
Responsible Agency: LAPD

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Financing: Phase 1 (completed) 2005 UASI and SHSGP grant program.
Phase 2 2008 UASI and SHSGP grant program.
Goals Addressed: -Protect life/property

Department of Public Works (DPW)

EQ-DPW-01

Program/Project: West Los Angeles Municipal Building
Description: Seismic Retrofit and Non Structural Seismic Upgrade
Cost: \$5,416,159
Schedule: June 2007 through June 2009
Objective Addressed: 4A
Responsible Agency: DPW, Bureau of Engineering
Financing: TBD, FEMA PDM
Goals Addressed: -Protect Life/Property, Increase Emergency Services

EQ-DPW-02

Program/Project: Camp Redford
Description: Seismic Retrofit, Non Structural Seismic Upgrade, Fire Mitigation
Cost: \$5,672,862
Schedule: June 2008 through September 2009
Objective Addressed: 4A, 4C
Responsible Agency: DPW, Bureau of Engineering
Financing: Prop. G, FEMA PDM, Recreation and Parks
Goals Addressed: Protect Life/Property, Increase Fire Safety

EQ-DPW-03

Program/Project: Echo Park Recreation Center
Description: Seismic Retrofit and Non Structural Seismic Upgrade
Cost: \$3,550,000
Schedule: June 2006 through July 2007
Objective Addressed: 4A
Responsible Agency: DPW-Bureau of Engineering
Financing: GF, FEMA PDM, Prop. K
Goals Addressed: Protect Life and Property, Increase Emergency Service Effectiveness

EQ-DPW-04

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Program/Project: Northridge Pool
Description: Soil Mitigation due to long term pool leakage following Earthquake. Pool and Building replacement.

Cost: \$5,800,000
Schedule: December 2005 through May 2007
Objective Addressed: 4A, 4L
Responsible Agency: DPW-Bureau of Engineering
Financing: Seismic Bond, FEMA, Prop. K (Misc)
Goals Addressed: Protect Life/Property

EQ-DPW-05

Program/Project: Barnsdall Park
Description: Protect Life and Property and Environmental and Historic Preservation, Partnerships.

Cost: \$5,000,000
Schedule: July 2006 through March 2009
Objective Addressed: 4A
Responsible Agency: DPW-Bureau of Engineering
Financing: Prop. G, FEMA PDM
Goals Addressed: Protect Life/Property

EQ-DPW-06

Program/Project: Personnel Building
Description: Seismic Retrofit and Non Structural Seismic Upgrade

Cost: \$6,000,000
Schedule: TBD
Objective: 4A
Responsible Agency: DPW-Bureau of Engineering
Financing: TBD, FEMA PDM
Goals Addressed: Protect Life/Property

EQ-DPW-07

Program/Project: La Fayette Park
Description: Seismic Retrofit and Non Structural Seismic Upgrade

Cost: \$3,500,000

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Schedule: TBD
Objective Addressed: 4A
Responsible Agency: DPW-Bureau of Engineering
Financing: Prop K, FEMA PDM
Goals Addressed: Protect Life/Property

EQ-DPW-08

Program/Project: Manchester Jr. Arts Center
Description: Seismic Retrofit and Non Structural Seismic Upgrade

Cost: \$2,670,000
Schedule: TBD
Objective Addressed: 4A
Responsible Agency: DPW-Bureau of Engineering
Financing: Prop K, FEMA PDM
Goals Addressed: Protect Life/Property

EQ-DPW-09

Program/Project: Mid Valley Multi-Purpose Center
Description: Seismic Retrofit and Non Structural Seismic Upgrade

Cost: \$4,570,000
Schedule: TBD
Objective Addressed: 4A
Responsible Agency: DPW-Bureau of Engineering
Financing: Prop K, FEMA PDM
Goals Addressed: Protect Life/Property

EQ-DPW-10

Program/Project: Lincoln Heights Youth Center
Description: Seismic Retrofit and Non Structural Seismic Upgrade

Cost: \$3,500,000
Schedule: TBD
Objective Addressed: 4A
Responsible Agency: DPW-Bureau of Engineering
Financing: Prop. K, FEMA PDM
Goals Addressed: Protect Life/Property

CITY OF LOS ANGELES HAZARD MITIGATION PLAN

EQ-DPW-11

Program/Project: Hollywood Recreation Center
Description: Seismic Retrofit and Non Structural Seismic Upgrade

Cost: \$10,000,000
Schedule: TBD
Objective Addressed: 4A
Responsible Agency: DPW-Bureau of Engineering
Financing: Prop. K, FEMA PDM
Goals Addressed: Protect Life/Property

EQ-DPW-12

Program/Project: Old Fire Station #23 (To be converted into a Junior Arts
Description: Seismic Retrofit and non-structural seismic upgrade

Cost: TDB
Schedule: TDB
Objective: 4A
Responsible Agency: DPW, Bureau of Engineering
Financing: Prop. K, FEMA PDM
Goals Addressed: -Protect Life and Property

EQ-DPW-14

Program/Project: Seismic Retrofit of all Emergency Generators for: Hyperion
Treatment Plant, Donald T. Tillman Plant, Los Angeles-Glendale
Plant, Terminal Island Treatment Plant, Pumping Plant #3,
Pumping Plant #49, Pumping Plant #51, and Pumping Plant #54
Description: N/A

Cost: TBD
Schedule: TBD
Objective Addressed: 1B, 1C
Responsible Agency: DPW, Bureau of Sanitation
Financing: TBD, Grant Money
Goals Addressed: -Protect life/property

EQ-DPW-15

Program/Project: Nonstructural Earthquake Hazard Mitigation for: Hyperion
Treatment Plant, Donald T. Tillman Plant, Los Angeles-Glendale

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CITY OF LOS ANGELES HAZARD MITIGATION PLAN

Description: Plant, Terminal Island Treatment Plant, Pumping Plant #3, Pumping Plant #49, Pumping Plant #51, and Pumping Plant #54
N/A

Cost: TBD
Schedule: TBD
Objective Addressed: 1B, 1C
Responsible Agency: DPW, Bureau of Sanitation
Financing: TBD, Grant Money
Goals Addressed: -Protect life/property

EQ-DPW-16

Program/Project: Structural Hazard Mitigation for: Hyperion Treatment Plant, Donald T. Tillman Plant, Los Angeles-Glendale Plant, Terminal Island Treatment Plant, Pumping Plant #3, Pumping Plant #49, Pumping Plant #51, and Pumping Plant #54
Description: No Description

Cost: TBD
Schedule: TBD
Objective Addressed: 1B, 1C
Responsible Agency: DPW, Bureau of Sanitation
Financing: TBD, Grant Money
Goals Addressed: -Protect life/property

Department of Airports (LAWA)

EQ-LAWA-03 (Project Deferred to another budget year)
Program/Project: Fire Station 80 Shelter
Description: This program will provide a garage space that meets essential building code requirements for several AARF vehicles.

Cost: \$477,000.
Schedule: Estimated start date: July 2005. Estimated completion date: January 2006.
Objective Addressed: 1B, 1C, 4A
Responsible Agency: Airports (LAWA) - LAX
Financing: LAWA Fund

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CITY OF LOS ANGELES HAZARD MITIGATION PLAN

Goals Addressed: -Protect life/property
 -Increase emergency services effectiveness

Update March 3, 2008 – As part of LAX’s Mid-Airfield Development Plan the existing FS 80 will be relocated to a new facility. The existing facility will be demolished to make space for the new airport facility plan. The proposed cost and timeline is currently unknown.

Department of Airports (LAWA)

EQ-LAWA-04

Program/Project: Century Cargo Complex - Airfreight Building 3
Description: A Project to demolish Airfreight Building 3, which is an outdated and debilitated building in the Century Cargo Complex along Aviation Boulevard. Improvements and enhancements by Los Angeles World Airports (LAWA) have been continually made to meet new Earthquake standards, replacing facilities as necessary.

Cost: \$1,000,000.
Schedule: ~~Estimated start date: January 2005; Estimated completion date: June 2005.~~ PROJECT COMPLETED.
Objective Addressed: 1B, 1C
Responsible Agency: Airports (LAWA)
Financing: LAWA Fund
Goals Addressed: -Protect life/property

Department of Water and Power (DWP)

EQ-DWP-01

Program/Project: Regulator Stations Program
Description: Construction of new regulator stations and modification of existing regulator stations throughout the City.

Cost: \$14,200,000
Schedule: Ongoing
Objective Addressed: 1B
Responsible Agency: Department of Water and Power-Water
Financing: DWP

CITY OF LOS ANGELES HAZARD MITIGATION PLAN

Goals Addressed: Protect Life/Property

EQ-DWP-02

Program/Project: Infrastructure Reservoir Improvements Program (dams only)
Description: Design and construct new embankment dam north of the existing dams for seismic hazard mitigation.

Cost: \$56,000,000
Schedule: 2011-2012
Objective Addressed: 1B
Responsible Agency: Department of Water and Power-Water
Financing: DWP
Goals Addressed: Protect Life/Property

EQ-DWP-03

Program/Project: Customer Workshops on Emergency Preparedness
Description: Annual Business Customer Workshops on Emergency Preparedness

Cost: \$5,000
Schedule: Ongoing
Objective Addressed: 1B, 2A, 3A, 4C
Responsible Agency: Department of Water and Power
Financing: DWP
Goals Addressed: Protect Life/Property
Increase Public Awareness
Strengthen Partnerships
Increase Effectiveness of City Emergency Services

EQ-DWP-04

Program/Project: Customer Call Center, Electric Trouble, Water Quality
Description: Integrate Customer Connect with Customer Call Center, Electric Trouble, Water Quality

Cost: TBD
Schedule: 7/01/07 through 6/30/08

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CITY OF LOS ANGELES HAZARD MITIGATION PLAN

Objective Addressed: 3A, 4A
Responsible Agency: Department of Water and Power
Financing: DWP
Goals Addressed: Strengthen Partnerships
Increase Effectiveness of City Emergency Services

EQ-DWP-05

Program/Project: Backup Network Operations Centers
Description: Backup Network Operations Centers

Cost: \$60,000
Schedule: Ongoing
Objective Addressed: 4A
Responsible Agency: Department of Water and Power
Financing: DWP
Goals Addressed: Increase Effectiveness of City Emergency Services

EQ-DWP-06

Program/Project: 900 MHz Mobile Radio Purchase and Installation
Description: 900 MHz Mobile Radio Purchase and Installation

Cost: 1,000,000
Schedule: Ongoing
Objective Addressed: 1A, 4A
Responsible Agency: Department of Water and Power
Financing: DWP
Goals Addressed: Protect Life and Property
Increase Effectiveness of City Emergency Services

EQ-DWP-07

Program/Project: Emergency Telephone Pilot Project
Description: A contractor shall provide automated, prerecorded, high volume telephone calling and tracking services to LADWP so customers can be quickly notified about boil water notices, water outages, emergency alerts, power outages, post-earthquake notices, other emergency situations related to water and power service.

Cost: \$2,000,000
Schedule: 1/01/08 through 1/01/11
Objective Addressed: 1A, 2A, 3A, 4A

CITY OF LOS ANGELES HAZARD MITIGATION PLAN

Responsible Agency: Department of Water and Power
Financing: DWP
Goals Addressed: Protect Life and Property
Increase Public Awareness
Strengthen Partnerships
Increase Effectiveness of City Emergency Services

EQ-DWP-08

Program/Project: On-line Water Quality Monitoring
Description: Installation of on-line, real time, remote monitoring for the following types of water quality constituents: 1) physical 2) inorganic 3) organic 4) microbial and 5) radiologicals. These monitors will be installed at key water supply locations and in the distribution system.

Cost: \$3,000,000
Schedule: 1/01/08 through 1/01/13
Objective Addressed: 1A, 4A
Responsible Agency: Department of Water and Power
Financing: DWP
Goals Addressed: Protect Life and Property
Increase Effectiveness of City Emergency Services

Department of Animal Services (ASD)

EQ-ARD-01

Program/Project: Animal critical care field facility
Description: Purchase portable emergency animal critical care shelter and medical equipment to administer medical care to search and rescue animals and other animals injured as a result of an earthquake and a trailer to haul it.

Cost: \$75,000
Schedule: Ongoing
Objective Addressed: 1A, 4A
Responsible Agency: Department of Animal Services
Financing: TBD
Goals Addressed: -Protect life/property
-Increase emergency services effectiveness

CITY OF LOS ANGELES HAZARD MITIGATION PLAN

EQ-ARD-02

Program/Project: 900 MHz Mobile Radio Purchase and Installation
Description: 900 MHz mobile radio purchase and installation for first responders to better coordinate field resources with ICP/DOC.

Cost: \$35,000
Schedule: Ongoing
Objective Addressed: 1A, 4A
Responsible Agency: Department of Animal Services
Financing: TBD
Goals Addressed: -Protect life/property
-Increase emergency services effectiveness

EQ-ARD-03

Program/Project: Seismic Retrofit
Description: Seismic retrofit the North Central Animal Shelter to meet code.

Cost: \$1,000,000
Schedule: TBD
Objective Addressed: 1A, 4A
Responsible Agency: Department of Animal Services
Financing: TBD
Goals Addressed: -Protect life/property
-Increase emergency services effectiveness

CITY OF LOS ANGELES HAZARD MITIGATION PLAN

EXISTING/ONGOING MITIGATION MEASURES

Department of Aging (DAG)

EQ-DAG-01

Program/Project: Red Cross/Department of Aging Community Partnership
Description: To provide Water Heater strap down Services to Seniors in the City of Los Angeles - A Voluntary Assistance Program in which the Department of Aging has teamed up with the Los Angeles Chapter of the Red Cross, where volunteers assist homeowners (seniors identified through the Department of Aging's 15 Multipurpose Centers, Care Managers) where volunteers assist senior homeowners to mitigate a wide variety of potential earthquake damage and hazards. These include:

- -
 -
- Fallen/damaged water heaters;
Furniture;
Open
cupboard doors.

The focus for Fiscal Year 2003-2004 - strapping down water heaters (100) done. The focus for Fiscal Year 2004-05, securing furniture and cupboard doors (estimated 125).

Cost: No cost.
Schedule: Grant schedule one year duration - FY 2003-04; FY2004-05.
Objective Addressed: 1B, 1C, 2A, 3A, 3C
Responsible Agency: Aging/American Red Cross
Financing: Not Applicable - Volunteer effort
Goals Addressed:
-Protect life/property
-Increase public awareness
-Strengthen partnerships

Department of Airports (LAWA)

EQ-LAWA-01

Program/Project: Tom Bradley International Terminal (TBIT) Fire/Life Safety Upgrade
Description: This project will repair and/or upgrade the fire/life safety system in TBIT to be code compliant.

CITY OF LOS ANGELES HAZARD MITIGATION PLAN

Cost: \$1,900,000.
Schedule: **PROJECT COMPLETED**
Objective Addressed: 1B, 1C
Responsible Agency: LAWA
Financing: LAWA Fund
Goals Addressed: -Protect life/property

EQ-LAWA-02

Program/Project: Improved LAX Airport Passenger Access and Airfield Modifications to Improve Safety and Efficiency

Description: This program will include the following measures:

- New West Entrance to LAX with new Terminal with additional aircraft gates, rental car facilities and parking.
- A people mover.
- The LAX Expressway would draw traffic off the San Diego Freeway (I-405) and connect to an airport ring road providing direct access to terminals and cargo areas.
- The MTA Green Line would be extended into the airport to provide direct mass transit service to LAX.
- A more balanced and efficient airfield capable of handling increased operations and larger aircraft would be constructed.
- The outbound Northern runway would be relocated and the inbound Northern runway would be lengthened to accommodate larger aircraft. Taxiways/taxi-lanes would be added to the two northern and southern airfields to improve safety and operational efficiency.

Cost: \$14,000,000,000.
Schedule: Projected completion date 2015.
Objective Addressed: 1B, 1C
Responsible Agency: Airports (LAWA)/Federal Aviation Administration/City of Los Angeles
Financing: LAWA/FAA
Goals Addressed: -Protect life/property

EQ-LAWA-05

Program/Project: Runway 26R Reconstruction - Ontario Airport

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Description: This project will reconstruct the westerly 10,000 feet of the runway with full strength PPC pavement. Improved public and airline safety, design changes to the approach lighting system requested.

Cost: \$32,000,000.

Schedule: Estimated design completion date: May 2004; Estimated start date; November 2004; Estimated completion date: April 2006.

Objective Addressed: 1A, 1B, 1C

Responsible Agency: Airports

Financing: Airports/Federal Aviation Administration

Goals Addressed: -Protect life/property

Department of Building and Safety (LADBS)

EQ-LADBS-01

Program/Project: Description: City of Los Angeles Building Code, Chapter 88
Description: Reinforcement/Demolition of All Unreinforced Masonry Buildings built prior to October 6, 1933.

Cost: Recovered through permit fees.

Schedule: Ongoing, all but four buildings have been completed.

Objective Addressed: 1B, 1C, 4A, 4C

Responsible Agency: LADBS

Financing: General fund and block grant

Goals Addressed: -Protect life/property
-Increase emergency services effectiveness

EQ-LADBS-02

Program/Project: City of Los Angeles Building Code, Chapter 91
Description: Earthquake Hazard Reduction in Existing Tilt-up Concrete Wall Buildings. All concrete tilt-up buildings designed under the building codes in effect prior to January 1978 must be reinforced.

Cost: Recovered through permit fees.

Schedule: The program began in 1994 and all but three buildings have been completed.

Objective Addressed: 1B, 1C, 4A, 4C

Responsible Agency: LADBS

Financing: General Fund

Goals Addressed: -Protect life/property

CITY OF LOS ANGELES HAZARD MITIGATION PLAN

-Increase emergency services effectiveness

EQ-LADBS-03

Program/Project: City of Los Angeles Building Code, Chapter 92
Description: Voluntary Earthquake Hazard Reduction in Existing Wood Frame Residential Buildings with Weak Cripple Walls and Unbolted Sill Plates.

Cost: Recovered through permit fees.
Schedule: Ongoing
Objective Addressed: 1B, 1C, 4A, 4C
Responsible Agency: LADBS
Financing: General Fund
Goals Addressed: -Protect life/property
-Increase the effectiveness of City emergency services

EQ-LADBS-04

Program/Project: City of Los Angeles Building Code, Chapter 93
Description: Voluntary Earthquake Hazard Reduction in Existing Wood Frame Residential Buildings with Soft, Weak or Open Front Walls.

Cost: Recovered through permit fees.
Schedule: Ongoing.
Objective Addressed: 1B, 1C, 4A, 4C
Responsible Agency: LADBS
Financing: General Fund
Goals Addressed: -Protect life/property
-Increase emergency services effectiveness

EQ-LADBS-05

Program/Project: City of Los Angeles Building Code, Chapter 94
Description: Voluntary Earthquake Hazard Reduction in Existing Hillside Buildings. This voluntary program will reduce the hazards for buildings constructed on or into slopes in excess of one unit vertical in three units horizontal.

Cost: Recovered through permit fees.
Schedule: Ongoing.
Objective Addressed: 1B, 1C, 4A, 4C
Responsible Agency: LADBS
Financing: General Fund

CITY OF LOS ANGELES HAZARD MITIGATION PLAN

- All buildings sold in the City of Los Angeles after February 05, 1998.

Cost: Recovered through permit fees.
Schedule: Ongoing.
Objective Addressed: 1B, 1C, 4A, 4C
Responsible Agency: LADBS
Financing: General Fund
Goals Addressed: -Protect life/property
-Increase emergency services effectiveness

EQ-LADBS-09

Program/Project: Enforcement of the City of Los Angeles Building Code and related State of California codes.

Description: N/A

Cost: Recovered through permit fees.
Schedule: Ongoing
Objective Addressed: 1C, 5B
Responsible Agency: LADBS
Financing: General Fund
Goals Addressed: -Protect life/property
-Environmental & historical preservation

EQ-LADBS-10

Program/Project: Enforcement of the City of Los Angeles Electrical Code and related State of California codes.

Description: N/A

Cost: Recovered through permit fees.
Schedule: Ongoing
Objective Addressed: 1B, 1C
Responsible Agency: LADBS
Financing: General Fund
Goals Addressed: -Protect life/property

EQ-LADBS-11

Program/Project: Enforcement of the City of Los Angeles Mechanical Code and related State of California codes.

Description: N/A

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Cost: Recovered through permit fees.
Schedule: Ongoing
Objective Addressed: 1B, 1C
Responsible Agency: LADBS
Financing: General Fund
Goals Addressed: -Protect life/property

EQ-LADBS-12

Program/Project: Enforcement of the City of Los Angeles Plumbing Code and related State of California codes.

Description: N/A

Cost: Recovered through permit fees.
Schedule: Ongoing
Objective Addressed: 1B, 1C
Responsible Agency: LADBS
Financing: General Fund
Goals Addressed: -Protect life/property

EQ-LADBS-13

Program/Project: Enforcement of the City of Los Angeles Elevator Code and related State of California codes.

Description: N/A

Cost: Recovered through permit fees.
Schedule: Ongoing
Objective Addressed: 1B, 1C
Responsible Agency: LADBS
Financing: General Fund
Goals Addressed: -Protect life/property

EQ-LADBS-14

Program/Project: Enforcement of the City of Los Angeles Boilers, Unfired Pressure Vessels, and Other Equipment Codes and related State of California codes.

Description: N/A

Cost: Recovered through permit fees.
Schedule: Ongoing
Objective Addressed: 1B,1C, 4A, 5B

CITY OF LOS ANGELES HAZARD MITIGATION PLAN

Responsible Agency: LADBS
Financing: General Fund
Goals Addressed: -Protect life/property
-Increase emergency services effectiveness
-Environmental and historical preservation

Emergency Preparedness Department (EPD)

EQ-EPD-01

Program/Project: Earthquake Management Course
Description: Course for emergency managers and EOC/DOC staff to learn how the City will coordinate response and recovery operations following an earthquake.

Cost: \$5,000, FTE
Schedule: Ongoing
Objective Addressed: 4B
Responsible Agency: EPD
Financing: Emergency Operations Fund
Goals Addressed: -Increase emergency services effectiveness

EQ-EPD-02

Program/Project: "Emergency Preparedness Patrol" PSA
Description: Videotape series of public service announcements focusing on individuals and families.

Cost: \$6,000, FTE
Schedule: One-time project
Objective Addressed: 2B
Responsible Agency: EPD
Financing: Emergency Operations Fund and ITA
Goals Addressed: -Increase public awareness

Los Angeles Fire Department (LAFD)

EQ-LAFD-01

Program/Project: Project for all existing Fire Stations
Description: Retrofit all existing Fire Stations to new earthquake building standards; relocate fire stations to outside impact area.

Cost: TBA

CITY OF LOS ANGELES HAZARD MITIGATION PLAN

Schedule: Projected
Objective Addressed: 1B, 1C, 4A
Responsible Agency: LAFD
Financing: TBD/Grants

Goals Addressed: -Protect life/property
-Increase emergency services effectiveness.

EQ-LAFD-02

Program/Project: Earthquake Response Program
Description: Operating procedures and instruction after a quake for firefighters;
Identifies critical and potential high life loss structures in City of Los Angeles

Cost: FTE
Schedule: Ongoing
Objective Addressed: 1B, 1C
Responsible Agency: LAFD
Financing: General Fund
Goals Addressed: -Protect life/property

Department of General Services (GSD)

EQ-GSD-01

Program/Project: Fire Retardant, Secured and Bolted Storage Cabinets
Description: To store supplies to avoid physical harm from chemical spillage or equipment.

Cost: TBD
Schedule: Future - TBD
Objective Addressed: 1B, 1C
Responsible Agency: GSD, Custodial Services
Financing: General Fund, Mitigation Grants
Goals Addressed: -Protect life/property

EQ-GSD-02

Program/Project: Non-structural Earthquake Hazard Mitigation
Description: Seismic Relocation Committee conducted safety inspections with Safety Engineers and identified equipment for earthquake bolting.

- Mailing machines
- Barcode printers

CITY OF LOS ANGELES HAZARD MITIGATION PLAN

- File cabinets
- Computers
- Desks
- Conveyors
- Office supplies
- Pigeon holes
- Vehicles (cargo vans)

Cost: TBD
Schedule: August 2001
Objective Addressed: 1B, 1C
Responsible Agency: GSD, Mail Services
Financing: General Fund
Goals Addressed: -Protect life/property

EQ-GSD-03

Program/Project: Earthquake/Survival Kits
Description: 31 Earthquake/Survival Kits were distributed to employees in 2001; now, kits are provided to new employees.

Cost: TBD
Schedule: Ongoing
Objective Addressed: 1B, 4B
Responsible Agency: Department of General Services, Mail Services
Financing: General Fund
Goals Addressed: -Protect life/property
-Increase emergency service effectiveness

EQ-GSD-04

Program/Project: First Aid Kits
Description: Eight First Aid Kits were issued for main office and satellite locations; replenished as necessary.

Cost: TBD
Schedule: Ongoing
Objective Addressed: 1B, 4B
Responsible Agency: Department of General Services, Mail Services
Financing: General Fund
Goals Addressed: -Protect life/property
-Increase emergency service effectiveness

EQ-GSD-05

CITY OF LOS ANGELES HAZARD MITIGATION PLAN

Program/Project: Non-Structural Earthquake Hazard Mitigation
Description: Cash registers mounted at waist level, copy machine bolted to wall, chemicals and other supplies secured in cabinets at a lower level.

Cost: TBD
Schedule: Ongoing/continuous
Objective Addressed: 1B
Responsible Agency: Department of General Services
Financing: General Fund
Goals Addressed: -Protect life/property

EQ-GSD-06

Program/Project: Division Training in Emergency Procedures
Description: 20 employees trained in:

- Emergency evacuation procedures,
- Traffic control within parking area,
- Street closure,
- Revenue security,
- Power failure,
- MSDS precaution during oil absorbent use and disposal, including oil spill removal.

Cost: FTE/TBD
Schedule: Ongoing
Objective Addressed: 1B, 3A, 4B
Responsible Agency: GSD, Parking Services
Financing: General Fund
Goals Addressed: -Protect life/property
-Strengthen Partnerships
-Increase emergency service effectiveness

EQ-GSD-07

Program/Project: Certified Community Emergency Response Team (CERT)
Description: Trained entire staff (40 employees) in 2002/03. Topics included: 1) Search and Rescue Operations 2) Disaster Medical Operations 3) Fire Suppression Techniques 4) Earthquake Awareness 5) Disaster response Team.

Cost: FTE/TBD
Schedule: 2002-03

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Objective Addressed: 1B, 4B, 4C
Responsible Agency: Los Angeles Fire Department, GSD Staff
Financing: General Fund, EOF
Goals Addressed: -Protect life/property
-Increase emergency service effectiveness

Harbor Department (HAR)

EQ-HAR-01

Program/Project: Automatic Earthquake Gas Shut-off Valves
Description: For Port Facilities: Warehouse 13, 17, Fish Market, Ports O'Call Restaurant, B-208-09, Auto garage, B-214-19

Cost: \$50,000
Schedule: 04/00 - 11/04
Objective Addressed: 1B, 1C
Responsible Agency: Harbor Department
Financing: Capital Improvement Budget
Goals Addressed: -Protect life/property

EQ-HAR-02

Program/Project: Berth 145-147 Wharf Improvements
Description: Seismic upgrade of 1022' of existing Wharf. Construct 705ft of new concrete wharf. Dredge for 53ft of draft at wharf face.

Cost: \$33,300,000 (currently funded, additional cost TBD)
Schedule: TBD
Objective Addressed: 1B, 1C
Responsible Agency: Harbor Department
Financing: General Fund (additional funding TBD)
Goals Addressed: -Protect life/property

Los Angeles Housing Department (LAHD)

EQ-LAHD-01

Program/Project: Enforce California Health and Safety Codes Related to Maintaining Resistance to Seismic Activity
Description: This program systematically inspects more than 850,000 occupied multi-family residential units for compliance.

Cost: TBD

CITY OF LOS ANGELES HAZARD MITIGATION PLAN

Schedule: Ongoing
Objective Addressed: 1A, 1B, 1C, 2A, 2B, 2C, 3A, 3B, 4B, 4C, 4D, 5B, 5C
Responsible Agency: LAHD, Code Enforcement Unit
Financing: Fee Supported
Goals Addressed: -Protect life/property
-Increase public awareness
-Strengthen partnerships
-Increase emergency service effectiveness
-Environmental and historical preservation

EQ-LAHD-02

Program/Project: Enforce the City of Los Angeles Building Code and California Codes Related to Maintaining Resistance to Seismic Activity
Description: This program systematically inspects more than 850,000 occupied multi-family residential units for compliance.

Cost: TBD
Schedule: Ongoing
Objective Addressed: 1A, 1B, 1C, 2A, 2B, 2C, 3A, 3B, 4B, 4C, 4D, 5B, 5C
Responsible Agency: LAHD, Code Enforcement Unit
Financing: Fee Supported
Goals Addressed: -Protect life/property
-Increase public awareness
-Strengthen partnerships
-Increase emergency service effectiveness
-Environmental and historical preservation

EQ-LAHD-03

Program/Project: Enforce the City of Los Angeles Plumbing Code and California Codes Related to Maintain Resistance to Seismic Activity
Description: This program systematically inspects more than 850,000 occupied multi-family residential units for compliance.

Cost: TBD
Schedule: Ongoing
Objective Addressed: 1A, 1B, 1C, 2A, 2B, 2C, 3A, 3B, 4B, 4C, 4D, 5B, 5C
Responsible Agency: LAHD, Code Enforcement Unit
Financing: Fee Supported
Goals Addressed: -Protect life/property
-Increase public awareness
-Strengthen partnerships
-Increase emergency service effectiveness

CITY OF LOS ANGELES HAZARD MITIGATION PLAN

-Environmental and historical preservation

EQ-LAHD-04

Program/Project: Enforce the City of Los Angeles Electrical Code and California Codes Related to Maintain Resistance to Seismic Activity
Description: This program systematically inspects more than 850,000 occupied multi-family residential units for compliance.

Cost: TBD
Schedule: Ongoing
Objective Addressed: 1A, 1B, 1C, 2A, 2B, 2C, 3A, 3B, 4B, 4C, 4D, 5B, 5C
Responsible Agency: LAHD, Code Enforcement Unit
Financing: Fee Supported
Goals Addressed:
-Protect life/property
-Increase public awareness
-Strengthen partnerships
-Increase emergency service effectiveness
-Environmental and historical preservation

EQ-LAHD-05

Program/Project: Enforce the City of Los Angeles Mechanical Code and California Codes Related to Maintain Resistance to Seismic Activity
Description: This program systematically inspects more than 850,000 occupied multi-family residential units for compliance.

Cost: TBD
Schedule: Ongoing
Objective Addressed: 1A, 1B, 1C, 2A, 2B, 2C, 3A, 3B, 4B, 4C, 4D, 5B, 5C
Responsible Agency: LAHD, Code Enforcement Unit
Financing: Fee Supported
Goals Addressed:
-Protect life/property
-Increase public awareness
-Strengthen partnerships
-Increase emergency service effectiveness
-Environmental and historical preservation

EQ-LAHD-06

Program/Project: Enforce the City of Los Angeles Planning and Zoning Codes and Related California Codes
Description: This program systematically inspects more than 850,000 occupied multi-family residential units for compliance.

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Cost: TBD
Schedule: Ongoing
Objective Addressed: 1A, 1B, 1C, 2A, 2B, 2C, 3A, 3B, 4B, 4C, 4D, 5B, 5C
Responsible Agency: LAHD, Code Enforcement Unit
Financing: Fee Supported
Goals Addressed:
-Protect life/property
-Increase public awareness
-Strengthen partnerships
-Increase emergency service effectiveness
-Environmental and historical preservation

EQ-LAHD-07

Program/Project: Tenant Relocation Program (TRP)
Description: Provides a housing support service to assist City residents displaced from their homes due to a variety of hazards (both declared and non-declared emergencies). Works with the Red Cross and other service providers to enable displaced residents to move from temporary shelters to temporary or permanent replacement housing.

Cost: TBD
Schedule: As needed
Objective Addressed: 2C, 3A, 3B
Responsible Agency: LAHD, Code Enforcement Unit
Financing: TBD. The current budget serves only those displaced due to life-safety code violations. It is an insufficient amount for a major disaster with numerous displaced individuals.
Goals Addressed:
-Increase public awareness
-Strengthen partnerships

Department of Public Works (DPW)

EQ-DPW-01

Program/Project: Accelerated Sewer Repair
Description: \$171 million program to repair sanitary sewers damaged in 1994 Northridge Earthquake.

Cost: \$9,697,000

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Schedule: Continuing since 1994
Objective Addressed: 1B, 1C, 5B
Responsible Agency: DPW, Bureau of Engineering
Financing: General Fund, Special Fund
Goals Addressed: -Protect life/property
-Environmental and historical preservation

EQ-DPW-02

Program/Project: Northridge Earthquake Repairs
Description: \$180 million to manage design, repair and retrofit of 388 buildings damaged during the 1994 Northridge Earthquake including City Hall and Van Nuys City Hall.

Cost: \$180,000,000.
Schedule: 1994 - 2005
Objective Addressed: 1B, 1C, 4A, 5B
Responsible Agency: DPW, Bureau of Engineering
Financing: General Fund, Special Fund
Goals Addressed: -Protect life/property

-Increase emergency services effectiveness
-Environmental and historical preservation

EQ-DPW-03

Program/Project: Animal Facilities
Description: \$154 million, 6-year program to provide Community oriented animal care; provide safe environment for animals in the City's care; and establish community relationships to enhance responsible pet ownership, increase the number of pets reclaimed by owners and adopted to new homes.

Cost: \$3,150,000
Schedule: 1994 - 2005
Objective Addressed: 1B, 1C
Responsible Agency: DPW, Bureau of Engineering
Financing: Special Fund
Goals Addressed: -Protect life/property

EQ-DPW-04

Program/Project: Bridge Improvement Program
Description: \$300 million program including 80 bridge improvement projects: bridge replacements, widening, seismic retrofits, structural

CITY OF LOS ANGELES HAZARD MITIGATION PLAN

improvements, and historical renovations under the federal Highway Bridge Rehabilitation and Replacement (HBRR) program and Metropolitan Transportation Authority grant funds.

Cost: \$4,240,000
Schedule: Continuing since 05/01/2000
Objective Addressed: 1B, 1C, 5B, 5C
Responsible Agency: DPW, Bureau of Engineering
Financing: Special Fund
Goals Addressed: -Protect life/property
-Environmental and historical preservation

EQ-DPW-05

Program/Project: Seismic Retrofit
Description: Program for nonstructural seismic retrofit of 125 Police and Fire facilities and 77 other municipal buildings, and structural seismic retrofit for 145 municipal facilities

Cost: \$28,000,000
Schedule: 1998 - 2004
Objective Addressed: 1B, 1C, 4A, 4B
Responsible Agency: DPW
Financing: General Fund, FEMA
Goals Addressed: -Protect life/property
-Increase emergency services effectiveness

EQ-DPW-06

Program/Project: Fire Facilities
Description: \$378.6 million, a 6-year program to adequately house the necessary equipment and personnel for efficient deployment of resources following the 1998 Public Safety Facilities Master Plan Study.

Cost: \$4,240,000
Schedule: 11/01/02 - 11/01/08
Objective Addressed: 1B, 4B
Responsible Agency: DPW, Bureau of Engineering
Financing: Special Fund
Goals Addressed: -Protect life/property
-Increase emergency services effectiveness

EQ-DPW-07

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Program/Project: Libraries
Description: a \$178,300,000 program to improve, renovate, expands and constructs 32 branch libraries (1998 Bonds).

Cost: \$4,322,000
Schedule: 11/03/98 - 2004
Objective Addressed: 1B, 1C
Responsible Agency: DPW, Bureau of Engineering
Financing: Special Fund
Goals Addressed: -Protect life/property

EQ-DPW-08

Program/Project: Municipal Facilities
Description: An ongoing program to design and build new City facilities and modify existing facilities to meet current needs and code requirements.

Cost: \$10,515,000
Schedule: 11/01/02 - 11/01/08
Objective Addressed: 1B, 1C
Responsible Agency: DPW, Bureau of Engineering
Financing: Capital Improvement Budget
Goals Addressed: -Protect life/property

EQ-DPW-09

Program/Project: Privately Financed
Description: Regulates public improvements built with private funds to assure conformance with public standards for safety and reliability.

Cost: \$22,403,000
Schedule: Ongoing
Objective Addressed: 1B, 1C
Responsible Agency: DPW, Bureau of Engineering
Financing: Special Fund
Goals Addressed: -Protect life/property

EQ-DPW-10

Program/Project: Public Safety Facilities
Description: \$600 million program to improve, renovate, expand and build Police-Fire-Paramedic Facilities (Proposition Q Bonds).

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Cost: \$2,686,000
Schedule: Started 03/05/2002
Objective Addressed: 1B, 1C, 4A, 4B
Responsible Agency: DPW, Bureau of Engineering
Financing: Proposition Q Bond
Goals Addressed: -Protect life/property
-Increase emergency services effectiveness

EQ-DPW-11

Program/Project: Seismic Bond Program
Description: \$966 million program to design and retrofit seismically deficient municipal buildings identified under Proposition G.

Cost: \$2,241,000
Schedule: Started in 1998
Objective Addressed: 1B, 1C, 4A, 5B
Responsible Agency: DPW, Bureau of Engineering
Financing: Special Fund, General Fund, Proposition G
Goals Addressed: -Protect life/property
-Increase emergency services effectiveness
-Environmental and historical preservation

EQ-DPW-12

Program/Project: ICSD
Description: Multiple Data Center Project for the Bureau of Sanitation

Cost: TBD
Schedule: Ongoing
Objective Addressed: 4B
Responsible Agency: DPW, Bureau of Sanitation
Financing: FTE
Goals Addressed: -Increase emergency services effectiveness

EQ-DPW-13

Program/Project: ICSD
Description: Offsite Backup Tape Storage/Archiving for the Bureau of Sanitation

Cost: TBD
Schedule: Ongoing
Objective Addressed: 1B, 4A

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Responsible Agency: DPW, Bureau of Sanitation
Financing: FTE
Goals Addressed: -Protect life/property
-Increase emergency services effectiveness

EQ-DPW-17

Program/Project: Annual Inspection to Ensure Structural Integrity of: Donald C. Tillman Plant, Los Angeles-Glendale Plant, Pumping Plant #3, Pumping Plant #49, Pumping Plant #51, and Pumping Plant #54.

Description: N/A

Cost: TBD
Schedule: TBD
Objective Addressed: 1B, 1C
Responsible Agency: DPW
Financing: TBD
Goals Addressed: -Protect life/property

EQ-DPW-18

Program/Project: Van Nuys Hall Retrofit

Description: Seismic retrofit and refurbishing of Van Nuys City Hall

Cost: \$17,500,000. ; \$500,000 (from Project Restore LA)
Schedule: June 2003 through June 2005
Objective Addressed: 1B, 1C, 4A, 4B, 4C
Responsible Agency: DPW, Project Restore LA
Financing: Seismic Bond, FEMA; Project Restore LA
Goals Addressed: -Protect life/property
-Increase emergency service effectiveness

Department of Water and Power (DWP)

EQ-DWP-01

Program/Project: Generation Backup Program
Description: Install backup generators at various substations, regional headquarters, Lookout Mountain, Operations Control Center, etc.

Cost: TBD

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CITY OF LOS ANGELES HAZARD MITIGATION PLAN

Schedule: 7/06 through 7/08
Objective Addressed: 1B, 1C, 4B
Responsible Agency: DWP, Power
Financing: DWP
Goals Addressed: -Protect life/property
-Increase effectiveness of City emergency services

EQ-DWP-02

Program/Project: Spill Mitigation Project
Description: Spill prevention control and countermeasures mitigation work at various substation facilities.

Cost: \$1M
Schedule: 7/06 through 7/08
Objective Addressed: 1B, 1C, 5B
Responsible Agency: DWP, Power
Financing: DWP
Goals Addressed: -Protect life/property
-Environmental and historical preservation

EQ-DWP-03

Program/Project: Electrical Substation Maintenance Program
Description: ESM callout system for emergencies

Cost: TBD
Schedule: 7/06 through 7/08
Objective Addressed: 1A, 4B, 5B
Responsible Agency: DWP, Power
Financing: DWP
Goals Addressed: -Protect life/property
-Increase effectiveness of emergency services
-Environmental and historical preservation

EQ-DWP-04

Program/Project: Emergency Equipment Project
Description: Obtain emergency response equipment through Office of Emergency Services' Federal Grant.

Cost: \$300K
Schedule: 7/06 through 7/08
Objective Addressed: 1B, 4B
Responsible Agency: DWP, Power
Financing: Special Fund (currently not funded)
Goals Addressed: -Protect life/property

CITY OF LOS ANGELES HAZARD MITIGATION PLAN

-Increase effectiveness of emergency services

EQ-DWP-05

Program/Project: DS HMPG Project
Description: Seismic strengthening of substations.

Cost: \$11,300,000 and \$7,500,000 (currently not funded)
Schedule: 7/06 through 7/08
Objective Addressed: 1B, 1C, 5B
Responsible Agency: DWP, Power
Financing: DWP
Goals Addressed: -Protect life/property
-Environmental and historical preservation

EQ-DWP-06

Program/Project: DS HMPG Project Phase 2
Description: Seismic strengthening of substations (11 stations).

Cost: \$4,900,000 (currently not funded)
Schedule: 7/06 through 7/08
Objective Addressed: 1B, 1C, 5B
Responsible Agency: DWP, Power
Financing: DWP, Grant Funds
Goals Addressed: -Protect life/property
-Environmental and Historical Preservation

EQ-DWP-07

Program/Project: HMPG-High Voltage Facilities Seismic Project
Description: Seismic hardening of electrical equipment in 19 Receiving Stations, 2 Switching Stations, 2 Terminal Towers and 4 Generating Stations.

Cost: \$29,100,000 and \$19,400,000 (currently not funded)
Schedule: 7/06 through 7/08
Objective Addressed: 1B, 1C, 5B
Responsible Agency: DWP, Power
Financing: DWP
Goals Addressed: -Protect life/property
-Environmental and historical preservation

EQ-DWP-08

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CITY OF LOS ANGELES HAZARD MITIGATION PLAN

Program/Project: HMP-GAP UNDER-RUN - Seismic Project
Description: Seismic hardening of electrical equipment in five Receiving Stations and one Switching Station

Cost: \$12,100,000 and \$2,100,000 (currently not funded)
Schedule: 7/06 through 7/08
Objective Addressed: 1B, 1C, 5B
Responsible Agency: DWP, Power
Financing: DWP
Goals Addressed: -Protect life/property
-Environmental and historical preservation

EQ-DWP-09

Program/Project: Trunk lines and Major System Connections Program
Description: Seismic and fire protection improvements to Trunk lines and connections to protect life and infrastructure

Cost: \$73,900,000
Schedule: Ongoing
Objective Addressed: 1B, 1C
Responsible Agency: DWP, Water
Financing: Capital Improvement Budget (DWP)
Goals Addressed: -Protect life/property

EQ-DWP-10

Program/Project: Pump Stations Program
Description: Seismic and fire protection improvements to Pump Stations to protect life and infrastructure

Cost: \$134,200,000
Schedule: Ongoing
Objective Addressed: 1B, 1C
Responsible Agency: DWP - Water
Financing: Capital Improvement Budget (DWP)
Goals Addressed: -Protect life/property

EQ-DWP-11

Program/Project: Infrastructure Reservoir Improvements Program (tanks only)
Description: Seismic and fire protection improvements to reservoir tanks to protect life and infrastructure

Cost: \$5,600,000

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CITY OF LOS ANGELES HAZARD MITIGATION PLAN

Schedule: 2011-2012
Objective Addressed: 1B, 1C
Responsible Agency: DWP, Water
Financing: Capital Improvement Budget (DWP)
Goals Addressed: -Protect life/property

EQ-DWP-12

Program/Project: Griffith Park Improvements Project
Description: Seismic and fire protection improvements to Griffith Park to protect life and infrastructure

Cost: \$20,800,000
Schedule: 2015-16
Objective Addressed: 1B, 1C
Responsible Agency: DWP, Water
Financing: Capital Improvement Budget (DWP)
Goals Addressed: -Protect life/property

EQ-DWP-13

Program/Project: Terminal Hill Tunnel Project
Description: Seismic improvements to Terminal Hill tunnels to protect life, infrastructures and prevent landslides.

Cost: \$23,800,000
Schedule: 2010-2011
Objective Addressed: 1B, 1C
Responsible Agency: DWP, Water
Financing: Capital Improvement Budget (DWP)
Goals Addressed: -Protect life/property

EQ-DWP-14

Program/Project: Van Norman High Speed and Bypass Channels Project
Description: Seismic improvements to channels to protect life, infrastructures and prevent landslides

Cost: \$2,000,000
Schedule: 2012-2013
Objective Addressed: 1B, 1C
Responsible Agency: DWP, Water
Financing: Capital Improvement Budget (DWP)
Goals Addressed: -Protect life/property

CITY OF LOS ANGELES HAZARD MITIGATION PLAN

EQ-DWP-15

Program/Project: Purchase Generator - Bishop Administration Office
Description: Buy a generator for the Bishop Administration Office.

Cost: \$45,000
Schedule: 07/01/06 - 06/30/07
Objective Addressed: 1B, 1C
Responsible Agency: DWP, Water
Financing: Capital Improvement Budget (DWP)
Goals Addressed: -Protect life/property

EQ-DWP-16

Program/Project: Groundwater - North Hollywood Well Field Restoration
Description: ~~Installation of eight groundwater production wells along the eastern edge of the Tujunga Wash~~ **PROJECT REMOVED**

Cost: \$17,000,000
Schedule: 05/01/05 - 08/31/07
Objective Addressed: 1B, 1C
Responsible Agency: DWP, Water
Financing: Capital Improvement Budget (DWP)
Goals Addressed: -Protect life/property
-Increase emergency services effectiveness