

# **Hazard Mitigation Plan City of West Hollywood, California**

**Original Adoption by City Council: August 16, 2004**

**Formally Updated by City Council: September 20, 2010  
and March 16, 2015**

**Last Updated: November 5, 2018**

## **Primary Point of Contact:**

**Public Safety Department**  
City of West Hollywood  
8300 Santa Monica Boulevard  
West Hollywood, CA 90069  
323-848-6414

Originally Prepared with:

Visual Risk  
MITIGATIONPLAN.COM

## **Planning Team and Promulgation Authority**

**This Hazard Mitigation Plan for the City of West Hollywood was prepared originally in 2004-2005, updated in 2010, 2015, and 2018 by:**

Name: Melissa Antol  
Title: Long Range and Mobility Planning Manager  
Organization: City of West Hollywood – Community Development

Name: Steve Bailey  
Title: Building and Safety Manager  
Organization: City of West Hollywood - Building & Safety

Name: Shirley Berry  
Title: Emergency Management Coordinator  
Organization: City of West Hollywood - Public Safety

Name: Alexander Bazley  
Title: Commissioner  
Organization: Public Safety Commission

Name: Robert Burke  
Title: Commissioner  
Organization: Public Safety Commission

Name: Chris Clarkin  
Title: Commissioner  
Organization: Public Safety Commission

Name: Helen Collins  
Title: Senior Administrative Analyst  
Organization: City of West Hollywood - Facilities

Name: Kristin Cook  
Title: Public Safety Director  
Organization: City of West Hollywood - Public Safety

Name: Maria Grycan  
Title: Community Services Representative  
Organization: Los Angeles County Fire Department

Name: Shawn Hoffman  
Title: Commissioner  
Organization: Public Safety Commission

Name: Gary Honings  
Title: Captain  
Organization: Los Angeles County Sheriff's Department

Name: John Keho  
Title: Assistant Director  
Organization: City of West Hollywood – Community Development

Name: John Leonard  
Title: Revenue Manager  
Organization: City of West Hollywood - Finance

Name: Marcy Norton  
Title: Commissioner  
Organization: Public Safety Commission

Name: Sharon Perlstein  
Title: City Engineer  
Organization: City of West Hollywood – Public Works

Name: Lorena Quijano  
Title: Accounting Manager  
Organization: City of West Hollywood - Finance

Name: Tiffany Robinson  
Title: Assistant Planner  
Organization: City of West Hollywood – Community Development

Name: Bianca Siegl  
Title: Senior Planner  
Organization: City of West Hollywood – Community Development

Name: Bonnie Smith  
Title: Public Safety Supervisor  
Organization: City of West Hollywood – Public Safety

Name: Dave Smith  
Title: Lieutenant  
Organization: Los Angeles County Sheriff's Department

Name: Desiree Jade Sol  
Title: Commissioner  
Organization: Public Safety Commission

Name: Ruth Williams  
Title: Commissioner  
Organization: Public Safety Commission

**The most recent Hazard Mitigation Plan update for the City of West Hollywood was submitted to the West Hollywood City Council on November 5, 2018.**

Copies of City Staff Reports to the West Hollywood City Council and City Council Resolutions in 2004, 2010, 2015 and 2018 are on file with the West Hollywood City Clerk's Office, available via the West Hollywood Public Safety Department, and found in the appendix on pages 26-76.

# **Table of Contents**

## **Section 1 – Introduction**

- 1.1 General Description
- 1.2 Purpose and Authority
- 1.3 Community Information
  - 1.3.1 Topography
  - 1.3.2 Climate
  - 1.3.3 Major River/Watersheds
  - 1.3.4 Population/Demographics
  - 1.3.5 Economy
  - 1.3.6 Industry
  - 1.3.7 Land Use

## **Section 2 – Jurisdictional Information**

- 2.1 Adoption by Local Governing Body
  - 2.1.1 Primary Point of Contact
  - 2.1.2 Promulgation Authority Information
- 2.2 Multi-Jurisdictional Plan Adoption

## **Section 3 – Planning Process Documentation and Public Involvement**

- 3.1 Planning Team Member Information
- 3.2 Multi-Jurisdictional Planning Team Member Information
- 3.3 Public Involvement Items

## **Section 4 – Risk Assessment**

- 4.1 Hazard Identification
  - 4.1.1 Dam Failure
  - 4.1.2 Earthquake

- 4.1.3 Extreme Heat/Drought
- 4.1.4 Flash Flooding/Storms
- 4.1.5 Flooding
- 4.1.6 High Winds/Straight Line Winds
- 4.1.7 Landslide
- 4.1.8 Wildfires
- 4.1.9 Energy Emergency
- 4.1.10 Water Line Emergency
- 4.1.11 Gas Line Emergency
- 4.1.12 Sewer Line Emergency

#### 4.2 Hazard Profile

- 4.2.1 Dam Failure
- 4.2.2 Earthquake
- 4.2.3 Extreme Heat/Drought
- 4.2.4 Flash Flooding/Storms
- 4.2.5 Flooding
- 4.2.6 High Winds/Straight Line Winds
- 4.2.7 Landslide
- 4.2.8 Wildfires
- 4.2.9 Energy Emergency
- 4.2.10 Water Line Emergency
- 4.2.11 Gas Line Emergency
- 4.2.12 Sewer Line Emergency

#### 4.3 Vulnerability Assessment

- 4.3.1 Asset Inventory

- 4.3.1.1 Community Asset Overview
- 4.3.1.2 Critical Facility List
- 4.3.1.3 Non-Critical Facility List
- 4.3.1.4 Individual Hazard Vulnerability Analysis
- 4.3.2 Potential Loss Estimation
  - 4.3.2.1 Facility Replacement Cost/Personal Property/BI/Rents
  - 4.3.2.2 Individual Hazard Economic Loss Estimation
  - 4.3.2.3 Individual Hazard Human Loss Estimation
- 4.3.3 Analysis of Community Development Trends
  - 4.3.3.1 Development History
  - 4.3.3.2 Future Development
- 4.4 Multi-Jurisdictional Risk Assessment

## **Section 5 – Mitigation Strategy**

- 5.1 Community Capability Assessment
  - 5.1.1 Existing Plans, Policies, and Ordinances
  - 5.1.2 Prior Mitigation Actions and Projects
  - 5.1.3 Technical and Fiscal Resources
- 5.2 Mitigation Goals
- 5.3 Mitigation Actions/Projects
- 5.4 Implementation Strategy and Analysis of Mitigation Projects
- 5.5 Multi-Jurisdictional Mitigation Strategy

## **Section 6 – Plan Maintenance**

- 6.1 Monitoring, Evaluating and Updating the Plan
- 6.2 Implementation through Existing Programs

## **Section 1 – Introduction**

The committee reviewed Section 1 in its entirety and updated information as appropriate. It should be noted that the City of West Hollywood will be adopting this plan as an appendix to the City's General Plan. Since the General Plan contains updated versions of the hazard maps and safety element, those documents will not be attached to the Hazard Mitigation Plan itself. All documents and the General Plan in its entirety are available for review via City staff.

### **1.1 General Description**

Emergencies and disasters cause death or leave people injured or displaced, cause significant damage to our communities, businesses, public infrastructure and our environment, and cost tremendous amounts in terms of response and recovery dollars and economic loss.

Hazard mitigation reduces or eliminates losses of life and property. After disasters, repairs and reconstruction are often completed in such a way as to simply restore to pre-disaster conditions. Such efforts expedite a return to normalcy; however, the replication of pre-disaster conditions results in a cycle of damage, reconstruction, and repeated damage. Hazard mitigation ensures that such cycles are broken and that post-disaster repairs and reconstruction result in a reduction in hazard vulnerability.

While we cannot prevent disasters from happening, their effects can be reduced or eliminated through a well-organized public education and awareness effort, preparedness and mitigation. For those hazards which cannot be fully mitigated, the community must be prepared to provide efficient and effective response and recovery.

### **1.2 Purpose and Authority**

The Disaster Mitigation Act of 2000 (DMA 2000), Section 322 (a-d) requires that local governments, as a condition of receiving federal disaster mitigation funds, have a mitigation plan that describes the process for identifying hazards, risks and vulnerabilities, identify and prioritize mitigation actions, encourage the development of local mitigation and provide technical support for those efforts. This mitigation plan serves to meet those requirements.

### **1.3 Community Information**

This section is to provide a broad perspective, brief history and describes the makeup and development of the community.

#### **1.3.1 Topography:**

The City of West Hollywood is located along the southern edge of the Santa Monica Mountains, about 7 ½ miles northwest of downtown Los Angeles. The City is approximately 3 miles long in a west-east direction and ½ to 1 1/3 miles wide in a north-south direction.



The topography within the City is relatively flat and sloped to the south except at the extreme northern margin of the City, which is at the base of the mountains. The maximum elevation is about 500 feet and the minimum elevation is about 160 feet. The average downslope gradient from north to south, not including the base of the mountains, is about 6 percent in the northern 1/3 of the City and about 2 percent in the southern 2/3 of the City.

West Hollywood is located largely on alluvial soil derived from the adjacent Santa Monica Mountains. The northernmost portion of the City is underlain by igneous and metamorphosed sedimentary bedrock. The alluvium consists of a mixture of sand, silt, clay, and gravel. The thickness of alluvium ranges from tens of feet in the vicinity of Sunset Boulevard to the north to hundreds of feet along the southern margin of the City.

Prior to development, a marsh existed within the alluvial plain currently incorporated as the City. The withdrawal of groundwater via pumping in the 1920's from the area contributed to the drying of the marsh. However, soft clays and organic-rich sediments were likely deposited along with sand and silt in this area while the marsh was present.

**1.3.2 Climate:**

The City of West Hollywood's climate is mild most of the year.

<b>Season</b>	<b>Low Temperatures*</b>	<b>High Temperatures*</b>
Winter (December – March)	High 40s	High 60s
Spring (April – June)	Low 50s	Mid 70s
Summer (June-August)	Mid 50s	High 80s
Autumn (September – December)	Mid 50s	Mid 70s

\* Degrees in Fahrenheit

**1.3.3 Major River/Watersheds:**

There are no rivers, lakes, or watersheds within the City of West Hollywood.

**1.3.4 Population/Demographics:**

**Population**

Data from the 2010 Census indicates that West Hollywood's population has remained relatively stable at just under 35,000 within the past ten years, with a 3% decrease between 2000 and 2010. The area that currently comprises West Hollywood had its greatest increase in the past three decades between 1970 and 1980 when the population grew by 21.3%.

### **Race, Gender and Age**

According to the 2010 Census, West Hollywood's racial composition is predominantly Caucasian (84.2%). Latinos represent 10.5%; Asians represent 5.4% and African-Americans constitute 3.2% of the population. One of the unique aspects of West Hollywood is the significant number of residents who are Russian-speaking (13.6%). According to the 2008-12 American Community Survey (ACS) 5 Year Estimates, there are 10,357 foreign born residents in the City of West Hollywood. West Hollywood's male to female ratio is 1.28 to 1, according to the 2010 Census. That is slightly higher than the County ratio, which is almost 1 to 1. The 2010 Census indicates that West Hollywood has an aging population, as the City's median age of 40.4 years old far exceeds the County median of 34.8 years old. In regards to age breakdown, 88.7% of residents are age 25 or older. Almost half of the population is aged 25 to 44 years old, with 26.94% being aged 25 to 34 years old. The city had a very small population of youth with only 5.2% of the residents being age 19 years or younger.

### **Education**

West Hollywood is characterized as a well-educated City. According to the 2008-2012 ACS, 95.1% of residents have attained at least a high school diploma. 20.1% of the population 25 years and older have some college, 6.3% have associate degrees, 39.2% have bachelor's degrees and 16.8% have graduate degrees. Only 4.8% of the City's residents did not graduate from high school, compared to 23.9% of the County's residents.

### **Income**

The ACS estimates that, on average, residents of West Hollywood earned less income between 2008-2012 than County residents did. The median household income of City was \$53,223. The County median household income was \$56,241.

### **West Hollywood Community Study (2013)**

The West Hollywood Community Study Report was designed to update the City's demographics, and to inform the funding priorities for more than \$4.2 million dollars of social service contracts from the City's general fund. West Hollywood's 2013 Community Study Report reflects that the majority of the City's diverse residents rate their quality of life as excellent or good. Overall, residents highly value the City's exceptional social services.

The Community Study is now available in hard copy and online at <http://www.weho.org/home/showdocument?id=13481>. Recently, the City's Community Study took first-place honors for the Project of the Year from the International Association for Public Participation.

The study utilized unprecedented community engagement to develop its findings – a randomly mailed, statistically valid survey with a record number of returns; 11 pop-up workshops; 13 focus groups; 31 community member interviews; a community-wide survey and an interactive community workshop. All surveys and pop-up workshop materials were available in English, Russian and Spanish.

Findings from the statistically valid portion of the survey include:

- 90% of respondents rated their quality of life as excellent or good, citing pedestrian orientation, central location, safe and quiet, near amenities and clean and well-kept as some of the things they like best about living in West Hollywood.
- 88% of survey respondents were satisfied or very satisfied with the job the City is doing to provide services.
- Law enforcement/crime prevention, senior services and disabled services; counseling and emotional support; HIV prevention and education and medical services were identified as the services most important to their household.
- 82% of survey respondents were satisfied with the City's efforts to communicate with residents.
- 56% of survey respondents have lived in West Hollywood for 10 or more years.

### **1.3.5 Economy:**

The West Hollywood business community is an unusual and diverse blend of commercial venues.

The City of West Hollywood receives revenue from property taxes, sales and use taxes, transient occupancy taxes, business license taxes, parking fines, photo safety citations, parking meters, motor vehicle in lieu fees, and other funds.

### **1.3.6 Industry:**

The businesses that populate West Hollywood are diverse. "Mom and Pop" stores co-exist with boutiques. Russian specialty stores and markets co-exist with posh hotels, popular avant-garde nightclubs, restaurants, florists, pet emporiums, and medical and legal professional services.

Santa Monica Boulevard is considered the City's main street and is home to neighborhood businesses, including those serving the Russian-speaking community, restaurants, bars, and markets. The City works collaboratively with the West Hollywood Marketing and Visitors Bureau and the West Hollywood Chamber of Commerce to promote the City as a destination and to advocate for a community environment where businesses can flourish.

### **1.3.7 Land Use:**

The development of West Hollywood reflects its transition from a workers' village for the railroad lines at the turn of the twentieth century to the increasingly dense urban village of today. Characterized by the adjacency of residential districts to main regional thoroughfares such as Sunset Boulevard and La Brea Avenue, the City's commercial buildings are frequently adjacent to residential neighbors. Development is made up of a variety of building types including low rise commercial structures and multifamily structures (generally 1-2 stories) and some 7-8 story apartments dating from the 1920-30's, of wood-frame and/or masonry construction. All masonry buildings have undergone a systematic retrofitting program to bring them into compliance with recent building codes.

Only a few residential buildings remain from the original turn-of-the-century community. Most of the City's single family homes and duplexes are small and date from the 1920s. Development in the 1950s particularly changed the scale of some sections of West Hollywood, placing larger apartment buildings in existing neighborhoods and office towers along the Sunset Strip.

Typical current private development includes demolition of older single family and duplex buildings, and construction of higher density low to midrise apartment and condominium buildings (2-4 stories). There are also a significant number of commercial remodeling projects along the City's commercial streets, although these typically are performed for aesthetic reasons and do not significantly increase building area or intensify existing uses.

## **Section 2 - Jurisdiction Information**

The committee reviewed Section 2 in its entirety and updated information as appropriate.

### **2.1 Adoption by Local Governing Body**

#### **2.1.1 Primary Point of Contact**

The Point of Contact for information regarding this plan is:

Public Safety Department  
City of West Hollywood  
8300 Santa Monica Boulevard  
West Hollywood, CA 90069  
323-848-6414

#### **2.1.2 Promulgation Authority Information**

This Hazard Mitigation Plan was reviewed and approved by the City of West Hollywood City Council on August 16, 2004, updated by staff and the Public Safety Commission in 2010 and 2014, and submitted to City Council again in 2015. The City Council also gave staff the authority to modify the plan as necessary.

## Section 3 - Planning Process Documentation and Public Involvement

The committee reviewed Section 3 in its entirety and updated information as appropriate.

### 3.1 Planning Team Member Information

The City of West Hollywood’s Hazard Mitigation Plan was created as a joint effort with City staff, Los Angeles County Fire and Sheriff’s departments, other cities’ emergency preparedness staff, and the public. Public Safety Department staff invited staff from other City departments to participate in updating the Hazard Mitigation Plan via email. These City departments included Community Development (Building and Safety, Transportation, Planning), Public Works (Code Compliance), Rent Stabilization and Housing, Human Services (Facilities/Landscape/Maintenance, Social Services, and Parks and Recreation), Economic Development, and Finance and Information Systems. Public Safety staff also surveyed each division of the City of West Hollywood to discuss past, current, and future mitigation activities via email and in person. Public Safety staff incorporated this information from other City departments and divisions into the Hazard Mitigation Plan.

In addition, the West Hollywood Emergency Management Coordinator collaborated with counterparts at other Disaster Management Area A cities (Beverly Hills, Culver City, and Santa Monica) to share information via phone and in-person meetings. The three cities represent neighboring communities of West Hollywood. These counterparts wrote and continue to update the Hazard Mitigation Plans for the cities of Beverly Hills, Culver City and Santa Monica.

The Planning Team reviewed several existing City documents and policies to gather information for the plan. City documents reviewed included the City’s Municipal Code, the City’s Emergency Plan, the Safety and Noise Chapter of the City’s General Plan, the City’s Uniform Building Codes, the City’s critical facility lists, City ordinances regarding natural hazards, utility maps, hazard maps, zoning districts, inundation maps, evacuation plans, and emergency notification plans. Other external resources utilized included maps, history of California hazards, as well as other city and county hazard mitigation plans. The information gathered from these documents was incorporated into the introduction, the risk assessment, and the mitigation strategies sections of this plan. Relevant sections of these City documents are included in the appendices.

Table 1. Use of City Documents in Hazard Mitigation Plan

Document	Section of HMP	Page	Appendix
City Emergency Plan	4.1	27	Energy Related Documents
	4.1.9	42	
	4.2.9	53	
	5.1.1	83	
	5.4	98	
	6.2	105	
City General Plan 2035 and Environmental Impact Report (EIR)	4.1.1	27	Planning Related Documents, Building and Safety Related Documents, Dam
	4.2.1	32	
	4.1.5	37	
	4.2.2	45	

	4.3.3.2 5.1.1 5.3 6.2	81 83 85-87 106	Related Documents, Earthquake Related Documents
City Municipal Code: Title 13. Building Code	5.1.1 5.3 6.2	83 86 105	Building and Safety Related Documents
City Strategic Plan: Vision 2020	4.1 5.1.1	27 83	City Council Related Documents
"West Hollywood is Prepared" – Disaster Preparedness Handbook	5.1.1 5.4	83 100	Public Outreach Related Documents
City "Live Work Play" Emergency Preparedness Brochure- English and Russian	5.1.1	83	Public Outreach Related Documents
Water Engineering & Technical Services Division (WETS): Emergency Response Plan – Emergency Notification List	5.1.1	83	Dam Related Documents
City Ordinances	4.1 4.3.1 5.1 5.1.1 5.3 6.2	27 80 82 83 86, 94 105	Building and Safety Related Documents
City Critical Facilities List	3.3 4.3.1.1 4.3.1.2 4.3.1.4 4.3.2.2 5.1.1 5.2	20 58 59 68-71 76 83 85	N/A
City Zoning Districts	5.1.1 6.2	83-84 106	Planning Related Documents
City Hazards Map	4.1 5.1.1	28 83	Planning Related Documents
City Fault Location and Precaution Zone Map	4.1.2 5.1.1	32 83	Earthquake Related Documents

A planning meeting was held in advance of the scheduled plan update for 2015. At this meeting, members of the planning team outlined and assigned all of the necessary tasks for updating the Hazard Mitigation Plan. Afterwards, individual follow-up meetings/phone calls were used to complete subsequent edits. Precise documentation of the initial planning team meeting is unavailable, but the process was similar to previous Hazard Mitigation Plan updates. This plan was compiled and authored by members of the following Planning Team:

**Melissa Antol**

**Previously: Long Range and Mobility Planning Manager**

*Description of Involvement:* provided planning/community development information

*Contact Information:*

City of West Hollywood – Community Development

8300 Santa Monica Boulevard  
West Hollywood, CA 90069  
323-848-6400 or mantol@weho.org

**Steve Bailey**

**Previously: Building and Safety Manager**

*Description of Involvement:* provided building and safety/plans input

*Contact Information:*

City of West Hollywood - Building & Safety  
8300 Santa Monica Boulevard  
West Hollywood, CA 90069  
323-848-6400 or sbailey@weho.org

**Shirley Berry**

**Previously: Emergency Management Coordinator**

*Description of Involvement:* public safety staff

*Contact Information:*

City of West Hollywood - Public Safety  
8300 Santa Monica Boulevard  
West Hollywood, CA 90069  
323-848-6400 or sberry@weho.org

**Alexander Bazley**

**Previously: Commissioner**

*Description of Involvement:* Public Safety Commissioner - provided community input

*Contact Information:*

Public Safety Commission c/o City Hall  
8300 Santa Monica Boulevard  
West Hollywood, CA 90069

**Bob Burke**

**Previously: Commissioner**

*Description of Involvement:* Public Safety Commissioner - provided community input

*Contact Information:*

Public Safety Commission c/o City Hall  
8300 Santa Monica Boulevard  
West Hollywood, CA 90069

**Chris Clarkin**

**Previously: Commissioner**

*Description of Involvement:* Public Safety Commissioner - provided community input

*Contact Information:*

Public Safety Commission c/o City Hall  
8300 Santa Monica Boulevard  
West Hollywood, CA 90069

**Helen Collins**

**Previously: Senior Administrative Analyst**

*Description of Involvement:* provided facilities information

*Contact Information:*

City of West Hollywood - Facilities  
8300 Santa Monica Boulevard



West Hollywood, CA 90069  
323-848-6400 or hcollins@weho.org

**Kristin Cook**

**Public Safety Director**

*Description of Involvement:* project coordinator

*Contact Information:*

City of West Hollywood - Public Safety  
8300 Santa Monica Boulevard  
West Hollywood, CA 90069  
323-848-6492 or kcook@weho.org

**Maria Grycan**

**Community Services Representative**

*Description of Involvement:* provided community/fire department input

*Contact Information:*

Los Angeles County Fire Department  
3970 Carbon Canyon Road  
Malibu, CA 90265  
310-456-7923 or mgrycan@fire.lacounty.gov

**Shawn Hoffman**

**Previously: Commissioner**

*Description of Involvement:* Public Safety Commissioner - provided community input

*Contact Information:*

Public Safety Commission c/o City Hall  
8300 Santa Monica Boulevard  
West Hollywood, CA 90069

**Gary Honings**

**Previously: Captain**

*Description of Involvement:* provided law enforcement/emergency management input

*Contact Information:*

Los Angeles County Sheriff's Department  
780 N. San Vicente Boulevard  
West Hollywood, CA 90069  
310-855-8850 or gshoning@lasd.org

**John Keho**

**Assistant Director, Community Development**

*Description of Involvement:* provided planning/community development information

*Contact Information:*

City of West Hollywood - Planning  
8300 Santa Monica Boulevard  
West Hollywood, CA 90069  
323-848-6400 or jkeho@weho.org

**John Leonard**

**Previously: Revenue Officer**

*Description of Involvement:* provided financial input

*Contact Information:*

City of West Hollywood - Finance  
8300 Santa Monica Boulevard  
West Hollywood, CA 90069  
323-848-6400 or jleonard@weho.org

**Marcy Norton**  
**Commissioner**

*Description of Involvement:* Public Safety Commissioner - provided community input

*Contact Information:*

Public Safety Commission c/o City Hall  
8300 Santa Monica Boulevard  
West Hollywood, CA 90069

**Sharon Perlstein**

**Previously: City Engineer**

*Description of Involvement:* provided public works/engineering information

*Contact Information:*

City of West Hollywood – Public Works  
8300 Santa Monica Boulevard  
West Hollywood, CA 90069  
323-848-6400 or sperlstein@weho.org

**Lorena Quijano**

**Previously: Accounting Manager**

*Description of Involvement:* provided financial information

*Contact Information:*

City of West Hollywood - Finance  
8300 Santa Monica Boulevard  
West Hollywood, CA 90069  
323-848-6400 or lquijano@weho.org

**Tiffany Robinson**

**Assistant Planner**

*Description of Involvement:* provided planning/community development information

*Contact Information:*

City of West Hollywood – Community Development  
8300 Santa Monica Boulevard  
West Hollywood, CA 90069  
323-848-6400 or trobinson@weho.org

**Bianca Siegl**

**Long Range and Mobility Planning Manager (Previously: Senior Planner)**

*Description of Involvement:* provided planning/community development information

*Contact Information:*

City of West Hollywood – Community Development  
8300 Santa Monica Boulevard  
West Hollywood, CA 90069  
323-848-6400 or bsiegl@weho.org

**Bonnie Smith**

**Public Safety Supervisor**

*Description of Involvement:* public safety staff

*Contact Information:*

City of West Hollywood – Public Safety  
8300 Santa Monica Boulevard  
West Hollywood, CA 90069  
323-848-6400 or bsmith@weho.org

**Dave Smith**

**Previously: Service Area Lieutenant**

*Description of Involvement:* provided law enforcement/emergency management input

*Contact Information:*

Los Angeles County Sheriff's Department  
780 N. San Vicente Boulevard  
West Hollywood, CA 90069  
310-855-8850 or d2smith@lasd.org

**Desiree Jade Sol**

**Commissioner**

*Description of Involvement:* Public Safety Commissioner - provided community input

*Contact Information:*

Public Safety Commission c/o City Hall  
8300 Santa Monica Boulevard  
West Hollywood, CA 90069

**Ruth Williams**

**Commissioner**

*Description of Involvement:* Public Safety Commissioner - provided community input

*Contact Information:*

Public Safety Commission c/o City Hall  
8300 Santa Monica Boulevard  
West Hollywood, CA 90069

Relevant documentation outlining the planning team's participation is found in the appendix on pages 301-411. Specifically, summaries of mitigation staff meetings are found on appendix page 301-303. Agendas and minutes from relevant Public Safety Commission meetings are found on appendix pages 304-411.

**3.3 Public Involvement Items**

During the creation of the original HMP in 2004, Staff provided information to citizens and business owners through neighborhood meetings, the Chamber of Commerce, newsletters, e-mails, the City's cable TV stations, and the City's website. Staff also conducted a city-wide web-based survey in 2004 to ascertain public opinion. Promotional materials can be found in the appendix pages 412 and 414. Survey results can be found on appendix pages 415-487.

The City of West Hollywood provided members of the public an opportunity to participate in the planning, design, and review phases of the Hazard Mitigation Plan. Public input and discussion were possible during staff presentations and also during "public comment" at various Public Safety Commission and City Council meetings. The agenda for each Public Safety Commission and City Council meeting is posted inside and outside of City Hall, faxed/emailed to the posting locations, and posted on the City website. Members of the public are given the opportunity to speak for three

minutes during “public comment.” Members of the Public Safety Commission and Council members are given unlimited time to speak during the item or during Commissioner/Council member comments. In addition, members of the public, Commissioners, and Council members were given the opportunity to provide staff with recommendations both verbally and via e-mail.

Regarding this 2015 update to the Hazard Mitigation Plan, at the October 13, 2014 Public Safety Commission meeting, all seven Commissioners read the Hazard Mitigation Plan draft update and were provided the opportunity to ask questions and provide comments. Specifically, Commissioners asked for clarification regarding critical facilities lists, emergency supplies, individual preparedness, business support in regards to preparedness, and social media as part of emergency communications. There were no public comments regarding the Hazard Mitigation Plan Update.

At the City Council Meeting on March 16, 2015, one Council member asked that information about California’s drought be added to the Hazard Mitigation Plan, which was subsequently included. The remaining four Council members did not comment on the update to the Hazard Mitigation Plan. No members of the public spoke during the meeting regarding the update to the Hazard Mitigation Plan. The Council unanimously passed the 2015 update to the Hazard Mitigation Plan and authorized staff to make modifications to the Plan as necessary or as required before the next formal update.

The Public Opinion Research and Strategy firm conducted a City of West Hollywood Public Safety Resident Survey from January 17-31, 2016. The public outreach process included stakeholder interviews (September 29-October 2, 2015), focus groups (November 14, 2015), a telephone survey (January 17-31, 2016), online surveys (March 5-April 25, 2016) and a community workshop (April 16, 2016). An excerpt from the community survey can be found on appendix pages 269-283.

Additionally, Master’s degree candidates from the University of Southern California conducted an online survey of residents on disaster preparedness in 2015. This online survey was advertised to residents via social media and through the City’s Communication’s Department. Promotion for the outreach can be found on appendix pages 284-289.

A summary of public involvement items follows (Please see appendix pages 36-76 and 290-411 for associated documentation of agendas and minutes):

**City Council Meeting and Public Comment – 3/16/2015**

*Description:* City Council Reviewed Updated Hazard Mitigation Plan.

*Location:* 625 N. San Vicente Boulevard, West Hollywood, CA 90069

**Public Safety Commission Meeting and Public Comment – 10/13/2014**

*Description:* Discussed updates to Hazard Mitigation Plan.

*Location:* 7377 Santa Monica Boulevard, West Hollywood, CA 90046

**Core Planning Team Meeting – 8/11/2014**

*Description:* Discussed updates to plan.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**City Council Meeting and Public Comment – 9/20/2010**

*Description:* City Council Reviewed Updated Hazard Mitigation Plan.

*Location:* 647 N. San Vicente Boulevard, West Hollywood, CA 90069

**Public Safety Commission Meeting and Public Comment - 8/9/2010**

*Description:* Reviewed final draft copy of Hazard Mitigation Plan.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Core Planning Team Meeting – 8/3/2010**

*Description:* Discussed updates to plan.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Public Safety Commission Meeting and Public Comment - 7/14/2010**

*Description:* Reviewed draft copy of Hazard Mitigation Plan.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Core Planning Team Meeting – 7/6/2010**

*Description:* Discussed updates to plan.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Core Planning Team Meeting – 6/8/2010**

*Description:* Discussed updates to plan.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Core Planning Team Meeting – 4/27/2010**

*Description:* Discussed updates to plan.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Public Safety Commission Meeting and Public Comment – 9/14/2009**

*Description:* Reviewed Hazard Mitigation Plan.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Public Safety Commission Meeting and Public Comment - 8/11/2008**

*Description:* Reviewed Hazard Mitigation Plan.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Public Safety Commission Meeting and Public Comment - 8/13/2007**

*Description:* Reviewed public education campaign and work plan.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Public Safety Commission Meeting and Public Comment - 8/14/2006**

*Description:* Reviewed Hazard Mitigation Plan.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Public Safety Commission Meeting and Public Comment – 9/12/2005**

*Description:* Reviewed six month public safety update and work plan.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**City Council Meeting and Public Comment - 8/16/2004**

*Description:* City Council Approved Hazard Mitigation Plan.

*Location:* 647 N. San Vicente Boulevard, West Hollywood, CA 90069

**City Council Deputies Meeting - 8/11/2004**

*Description:* Reviewed final copy of Hazard Mitigation Plan.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Public Safety Commission Meeting and Public Comment - 8/9/2004**

*Description:* Reviewed final copy of Hazard Mitigation Plan.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Public Safety Commission Meeting and Public Comment - 7/12/2004**

*Description:* Reviewed final copy of Hazard Mitigation Plan.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Public Safety Commission Meeting and Public Comment - 6/14/2004**

*Description:* Reviewed draft of Local Hazard Mitigation Plan.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Public Opinion Survey Meeting - 6/08/2004**

*Description:* Discussed results of the web-based public opinion survey.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Core Planning Team Meeting - 6/3/2004**

*Description:* Discussed and reviewed draft of Local Hazard Mitigation Plan.

Selected key directors and staff to review the plan during the month of June.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Staff Review of Internal Mitigation Strategies - 5/18/2004**

*Description:* Review of previous weeks of staff meetings discussing employee mitigation strategies.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Public Safety Commission Meeting and Public Comment - 5/10/2004**

*Description:* Reviewed public opinion survey regarding natural hazards.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Public Safety Commission Meeting and Public Comment - 4/12/2004**

*Description:* Review of LHMP table of contents and outline.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Core Planning Team Meeting - 3/23/2004**

*Description:* The Core Planning Team met and discussed the capability assessment and reviewed the City's various building codes and plans.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**DMAC Meeting with County OEM - 3/22/2004**

*Description:* The Disaster Management Area Coordinators met with representatives from the County of Los Angeles Office of Emergency Management and their consultant regarding the collection of historical data for the various cities.

*Location:* 1275 N. Eastern Avenue, Los Angeles, CA 90063

**Los Angeles County LHMP Working Group - 3/22/2004**

*Description:* Reviewed hazard assessments, County resources, and maps.

*Location:* 1275 N. Eastern Avenue, Los Angeles, CA 90063

**Engineering Staff Meeting - 3/18/2004**

*Description:* Public Safety staff met with the City's Engineer to collect information regarding past, present, and future mitigation projects.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Core Planning Team Meeting - 3/16/2004**

*Description:* Reviewed capabilities assessment.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Economic Development Staff Meeting - 3/15/2004**

*Description:* Public Safety staff met with Economic Development staff to discuss hazards and department mitigation efforts.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Web-based Survey Design Meeting - 3/12/2004**

*Description:* A web-based survey will be conducted in the City of West Hollywood to gather public opinion on natural hazards and potential mitigation of these hazards. Initial survey design meeting was held with both survey and City staff.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Public Safety Commission Meeting and Public Comment- 3/8/2004**

*Description:* Reviewed progress on the City's Local Hazard Mitigation Plan.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Introductory MitigationPlan.com Training - 3/8/2004**

*Description:* Visual Risk Training for all Disaster Management Area A cities regarding MitigationPlan.com.

*Location:* 455 Rexford Drive, Beverly Hills, CA 90210

**Facilities, Landscape, & Street Maintenance Staff Meeting - 2/26/2004**

*Description:* Public Safety staff met with Facilities, Landscape, and Street Maintenance staff to discuss hazards and division mitigation efforts.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Social Services Staff Meeting - 2/24/2004**

*Description:* Public Safety staff met with Social Services staff to discuss hazards and division mitigation efforts.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Human Resources Staff Meeting - 2/12/2004**

*Description:* Public Safety staff met with Human Resources staff to discuss hazards and division mitigation efforts.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Transportation Staff Meeting - 2/12/2004**

*Description:* Public Safety staff met with Transportation staff to discuss hazards and department mitigation efforts.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Recreation Staff Meeting - 2/10/2004**

*Description:* Public Safety staff met with Recreation staff to discuss hazards and division mitigation efforts.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Engineering Staff Meeting - 2/9/2004**

*Description:* Public Safety staff met with Engineering staff to discuss hazards and division mitigation efforts.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Rent Stabilization & Housing Staff Meeting - 2/5/2004**

*Description:* Public Safety staff met with Rent Stabilization and Housing staff to discuss hazards and department mitigation efforts.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**City Clerk Staff Meeting - 2/3/2004**

*Description:* Public Safety staff met with City Clerk staff to discuss hazards and department mitigation efforts.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Core Planning Team Meeting - 1/15/2004**

*Description:* Discussed updates to LHMP.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Public Safety Commission Meeting and Public Comment- 1/12/2004**

*Description:* Received a presentation from the LA County Office of Emergency Management regarding the County's LHMP and West Hollywood's role.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Neighborhood Watch Newsletter - 1/1/2004**

*Description:* Article about LHMP sent to over 1200 Neighborhood Watch members, CERT members, and other key community volunteers.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Los Angeles County LHMP Working Group - 12/22/2003**

*Description:* Introductory meeting with other County and City Agencies to solicit public input on the Los Angeles County LHMP.

*Location:* 1275 N. Eastern Avenue, Los Angeles, CA 90063

**Public Safety Commission Meeting and Public Comment - 12/8/2003**

*Description:* Discussed LHMP/hazards specific to West Hollywood.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Core Planning Team Meeting - 11/18/2003**

*Description:* Discussed updates to LHMP.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Public Safety Commission Meeting and Public Comment - 11/11/2003**

*Description:* Discussed LHMP/hazards specific to West Hollywood.



*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Public Safety Commission Meeting and Public Comment- 10/13/2003**

*Description:* Introduced the plan to Commissioners and members of the public.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Core Planning Team Meeting - 9/22/2003**

*Description:* Discussed division of labor for LHMP.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Core Planning Team Meeting - 7/22/2003**

*Description:* Discussed overview of LHMP.

*Location:* 8300 Santa Monica Boulevard, West Hollywood, CA 90069

**Developing a LHMP Workshop (OES) - 6/5/2003**

*Description:* The Governor's Office of Emergency Services conducted a workshop to assist California local governments to begin the planning process and documentation of required local plan content.

*Location:* 11703 Alameda Street, Lynwood, CA 90262

The Hazard Mitigation Plan will continue to be monitored by the Emergency Management Coordinator. This Staff member will revise the Plan each August to ensure that the most accurate and up to date information is included in the Plan. The Emergency Management Coordinator will review the mitigation actions each August and revise the plan based on progress towards the outlined mitigation actions or new mitigation actions that were identified for existing hazards. After the initial review, the Emergency Management Coordinator will convene a meeting with stakeholders and the core planning team to discuss progress towards mitigation objectives and potential plan revisions. Feedback from stakeholders and members of the plan development team will be documented and shared at the August Public Safety Commission meeting. Currently, Lily Campbell serves as the Emergency Management Coordinator for the City of West Hollywood.

The Local Hazard Mitigation Plan will be evaluated on an annual basis to reflect changes in land development or new programs that may affect mitigation priorities. The Hazard Mitigation Plan evaluation process will be led by the Emergency Management Coordinator. During the review, the core planning team will meet to reassess the Hazard Mitigation Plan. Second, the core planning team will meet with key stakeholders, such as neighborhood groups, fire and law enforcement agencies, community groups, social service agencies, transportation and public works to gather updated hazard mitigation information. After the initial review and key stakeholder meetings, Public Safety staff will present the plan with any recommendations from the core planning team to the Public Safety Commission.

During the Public Safety Commission's review, members of the public will be able to attend a public meeting and voice any concerns or ideas for revisions to the plan. The agenda for each Public Safety Commission and City Council meeting is posted inside and outside of City Hall, faxed/emailed to the posting locations, and posted on the City website. Links to the agenda will also be shared using social media. At that point, the core planning team will meet and make all changes necessary and present

an updated document to the Public Safety Commission and the West Hollywood City Council. In addition, the Public Safety Department will informally involve members of the public as well through presentations at neighborhood meetings, key informant interviews, public meetings, and existing public safety programs.

Prior to these Commission and Council meetings, the Emergency Management Coordinator will lead the monitoring and evaluating efforts to ensure that there is adequate funding for the mitigation activities. After the City's two year budget is passed by City Council, the Emergency Management Coordinator will collaborate with the plan development team to apply for hazard mitigation grants that will help the City implement the mitigation activities that are not included in the City's two year budget. Starting at year four, the Emergency Management Coordinator will begin to go through a formal update to the Hazard Mitigation Plan. The formal five year update to the Hazard Mitigation Plan will be brought to the Public Safety Commission and then to the City Council for formal approval of the updated plan. These meetings will be widely advertised using social media and open to residents, property owners, business owners, and other stake holders. Copies of the Plan will be catalogued and kept in appropriate departments and public locations.

## Section 4 - Risk Assessment

The committee reviewed Section 4 in its entirety and updated information as appropriate.

The goal of mitigation is to reduce the future impacts of a hazard including property damage, disruption to local and regional economies, and the amount of public and private funds spent to assist with recovery. However, mitigation should be based on risk assessment.

A risk assessment is measuring the potential loss from a hazard event by assessing the vulnerability of buildings, infrastructure and people. It identifies the characteristics and potential consequences of hazards, how much of the community could be affected by a hazard, and the impact on community assets. A risk assessment consists of three components: hazard identification, vulnerability analysis, and risk analysis. Technically, these are three different items, but the terms are sometimes used interchangeably.

### 4.1 Hazard Identification

While the City of West Hollywood is only 1.9 square miles, there are various hazards that might affect the community. The core planning team met with various entities, most notably including law enforcement, fire department, the City's planning, building and safety, transportation and public works departments, and members of the public to identify the hazards most likely to impact the West Hollywood community. Sources used to identify hazards included examining past history of Southern California disasters, the City of West Hollywood General Plan 2035 and Environmental Impact Report (EIR), the City Emergency Plan, the City Strategic Plan, hazard websites, the State of California Hazard Mitigation Office, as well as City Building and Safety and Planning materials (municipal codes and ordinances). Appropriate excerpts from these sources are found in the appendix. The assessment of risk is limited to the source documents cited, existing personnel's knowledge, and a short history of the City's existence (West Hollywood incorporated in 1984).

Hazards identified by the core planning group and the public include dam failure, earthquake, extreme heat, flooding, winds, landslides, fire, energy emergencies, drought, and storms. Results from the 2013 West Hollywood Community Study indicated that members of the public are most concerned with earthquakes and their potential impact on their community. The Community Study is now available in hard copy and online at <http://www.weho.org/home/showdocument?id=13481>. Each hazard will be detailed in the following section, except drought and storms which will be included in the extreme heat and flash flooding sections, respectively.

In order to rate the impact of each hazard identified, the core planning team utilized a ranking system, Critical Priority Risk Index. The Critical Priority Risk Index (CPRI) factors the elements of risk: Probability (P), Magnitude/Severity (M), Warning Time (WT) and Duration (D) to create an index which allows for the prioritization of mitigation activities based on the level of risk. CPRI uses a mathematic equation and user defined information to establish a ranking for each hazard that affects a community. For each of the four criteria in the CPRI, there are four options from which to choose. Each of the four options represents a value of 0, 1, 2, 3, or 4. Zero is the value taken when an option is not assigned.

West Hollywood defines hazard occurrence probability as follows:

- **Highly Likely:** Near 100% probability of occurring in the next year;
- **Likely:** Between 10 and 100% probability in the next year, or at least one chance in 10 years;
- **Possible:** Between 1 and 10% probability in next year, or at least one chance in the next 100 years; and
- **Unlikely:** Less than 1% probability in next 100 years.

Based on these four selections, the CPRI is calculated with the following weightings for each of the following criteria: Probability (P) weighted for 45%; Magnitude/Severity (M) for 30%; Warning Time (WT) for 15%; and Duration (D) for 10%. This results in the following index calculation:  $.45P + .3M + .15T + .1D = \text{CPRI}$ . The CPRI is subjective in nature because it is based on the selection of options from four criteria. This ranking was used by the planning team appropriately in the discussion about hazard rankings.

Table 2. Critical Priority Risk Index (CPRI) for each hazard facing West Hollywood.

Hazard	Geographic Area Affected*	Probability	Magnitude/Severity	Warning Time	Duration	Critical Priority Risk Index
Dam Failure	Eastern portion or the SW corner of the City	Unlikely	Limited	Less 6 Hours	Less than one day	1.85
Earthquake	The entire 1.9 sq. miles of the City	Likely	Critical	Less 6 Hours	More than one week	3.25
Extreme Heat/Drought	The entire 1.9 sq. miles of the City	Possible	Limited	24+ Hours	More than one week	2.05
Flash Flooding/Storms	The northern portion of the City is most vulnerable	Possible	Limited	6-12 Hours	Less than six hours	2.05
Flooding	Small portion of the west side of the City is vulnerable to a 100 year flood	Possible	Limited	12-24 Hours	Less than one week	2.1
High Winds/Straight Line Winds	The entire 1.9 sq. miles of the City	High Likely	Limited	12-24 Hours	Less than one week	3
Landslide	The northern portion of the City	Possible	Limited	Less 6 Hours	Less than six hours	2.2
Wildfires	The northern portion of the City	Possible	Critical	Less 6 Hours	Less than one day	2.6
Energy/Utility Emergency	The entire 1.9 sq. miles of the City	Likely	Limited	Less 6 Hours	Less than six hours	2.5

\*The City of West Hollywood is only 1.9 square miles. Most hazards can affect the entire City since it is a small geographic area. Please see the appendix pages 33-34, 102, 174, 187-194, 216, and 264 for various hazard maps.

Hazards with defined geographic areas of risk	Hazards without defined geographic areas of risk
Dam Failure	Earthquake
Flooding	Extreme Heat/Drought
Landslide	High Winds/Straight Line Winds
Wildfires	Energy Emergency
Flash Flooding/Storms	Utility Emergency

According to FEMA, climate change may lead to “more intense storms, frequent heavy precipitation, heat waves, drought, extreme flooding, and higher sea levels” which could affect hazards faced by cities such as the City of West Hollywood. In fact, the state of California experienced a drought from 2011-2017. In response, the City of West Hollywood opened cooling centers during 2016 heat wave to help residents remain cool. The City will remain cognizant of the potential effects of climate change on the occurrence and pattern of hazards.

The following is a list of hazards/threats confronting the City of West Hollywood.

## **Natural Hazards**

### **4.1.1. Dam Failure**

#### ***General Definition:***

A dam is defined as a barrier constructed across a watercourse for the purpose of storage, control, or diversion of water. Dams typically are constructed of earth, rock, concrete, or mine tailings. A dam failure is the collapse, breach, or other failure resulting in downstream flooding.

A dam impounds water in the upstream area, referred to as the reservoir. The amount of water impounded is measured in acre-feet. An acre-foot is the volume of water that covers an acre of land to a depth of one foot. As a function of upstream topography, even a very small dam may impound or detain many acre-feet of water. Two factors influence the potential severity of a full or partial dam failure: the amount of water impounded, and the density, type, and value of development and infrastructure located downstream.

Of the approximately 80,000 dams identified in the National Inventory of Dams, the majority are privately owned: federal agencies own 2,131; states own 3,627; local agencies own 12,078; public utilities own 1,626; and private entities or individuals own 43,656. Ownership of over 15,000 dams is undetermined. The Inventory categorizes the dams according to primary function:

Recreation (31.3%), Fire and farm ponds (17.0%), Flood control (14.6%), Irrigation (13.7%), Water supply (9.8%), Tailings and other (8.1%), Hydroelectric (2.9%), Undetermined (2.3%) and Navigation (0.3%).

Each dam in the inventory is assigned a downstream hazard classification based on the potential loss of life and damage to property should the dam fail. The three classifications are high, significant and low. With changing demographics and land development in downstream areas, hazard classifications are updated continually.

The hazard classification is not an indicator of the adequacy of a dam or its physical integrity. Dam failures typically occur when spillway capacity is inadequate and excess flow overtops the dam, or when internal erosion (piping) through the dam or foundation occurs.

Dam failures can result from any one or a combination of the following causes:

- Prolonged periods of rainfall and flooding, which causes most failures; and inadequate spillway capacity, resulting in excess overtopping flows;
- Internal erosion caused by embankment or foundation leakage or piping;
- Improper maintenance, including failure to remove trees, repair internal seepage problems, replace lost material from the cross section of the dam and abutments;
- Improper design, including the use of improper construction materials and construction practices;
- Negligent operation, including failure to remove or open gates or valves during high flow periods;
- Failure of upstream dams on the same waterway;
- Landslides into reservoirs, which cause surges that result in overtopping;
- High winds, which can cause significant wave action and result in substantial erosion; and
- Earthquakes, which typically cause longitudinal cracks at the tops of embankments that weaken entire structures.

***Description:***

No major dams and open reservoirs exist in the mountains upstream of the City. However, the Hollywood Reservoir exists to the east of the City, and Franklin Dam exists to the west of the City. A dam break at either of these locations would likely inundate a portion of the City. For the Hollywood Reservoir, the inundation area on the east side of the City might extend as far west as Gardner Street. A Dam Inundation Hazard Areas map is included in the appendix page 102.

A few steel reservoir tanks exist in the mountains upslope of the City. Failure of one of these tanks could adversely impact property downslope. For example, a failure of the tank at Greystone Park would inundate a portion of the southwest corner of the City. There have not been prior occurrences of a breach on either dam to date.

#### **4.1.2. Earthquake**

***General Definition:***

An earthquake is a sudden, rapid shaking of the Earth caused by the breaking and shifting of rock beneath the Earth's surface. For hundreds of millions of years, the forces of plate tectonics have shaped the Earth as the huge plates that form the Earth's surface move slowly over, under, and past each other. Sometimes the movement is gradual. At other times, the plates are locked together, unable to release the accumulating energy. When the accumulated energy grows strong enough, the plates break free causing the ground to shake. Most earthquakes occur at the boundaries where the plates meet; however, some earthquakes occur in the middle of plates.

Ground shaking from earthquakes can collapse buildings and bridges; disrupt gas, electric, and phone service; and sometimes trigger landslides,

avalanches, flash floods, fires, and huge, destructive ocean waves (tsunamis). Buildings with foundations resting on unconsolidated landfill and other unstable soil, and trailers and homes not tied to their foundations are at risk because they can be shaken off their mountings during an earthquake. When an earthquake occurs in a populated area, it may cause deaths and injuries and extensive property damage.

Earthquakes strike suddenly, without warning. Earthquakes can occur at any time of the year and at any time of the day or night. On a yearly basis, 70 to 75 damaging earthquakes occur throughout the world. Estimates of losses from a future earthquake in the United States approach \$200 billion.

There are 45 states and territories in the United States at moderate to very high risk from earthquakes, and they are located in every region of the country. California experiences the most frequent damaging earthquakes; however, Alaska experiences the greatest number of large earthquakes—most located in uninhabited areas. The largest earthquakes felt in the United States were along the New Madrid Fault in Missouri, where a three-month long series of quakes from 1811 to 1812 included three quakes larger than a magnitude of 8 on the Richter Scale. These earthquakes were felt over the entire Eastern United States, with Missouri, Tennessee, Kentucky, Indiana, Illinois, Ohio, Alabama, Arkansas, and Mississippi experiencing the strongest ground shaking.

***Description:***

Historical and geological records show that California has a long history of seismic events. Southern California is probably best known for the San Andreas Fault, a 400 mile long fault running from the Mexican border to a point offshore, west of San Francisco. "Geologic studies show that over the past 1,400 to 1,500 years large earthquakes have occurred at about 130 year intervals on the southern San Andreas Fault. As the last large earthquake on the southern San Andreas occurred in 1857, that section of the fault is considered a likely location for an earthquake within the next few decades." (<http://pubs.usgs.gov/gip/earthq3/when.html>)

But San Andreas is only one of dozens of known earthquake faults that criss-cross Southern California. Some of the better known faults include the Newport-Inglewood, Whittier, Chatsworth, Elsinore, Hollywood, Los Alamos, and Palos Verdes faults. Beyond the known faults, there are a potentially large number of "blind" faults that underlie the surface of Southern California. One such blind fault was involved in the Whittier Narrows earthquake in October 1987.

Although the most famous of the faults, the San Andreas, is capable of producing an earthquake with a magnitude of 8+ on the Richter scale, some of the "lesser" faults have the potential to inflict greater damage on the urban core of the Los Angeles Basin. Seismologists believe that a 6.0 earthquake on the Newport-Inglewood would result in far more damage than a "great" quake on the San Andreas, because the San Andreas is relatively remote from the urban centers of Southern California.

In the past several decades, earthquakes of magnitude 5.0 or greater occurred in the Los Angeles Area, with the most recent being the La Habra earthquake (magnitude 5.1) March 28<sup>th</sup>, 2014. For the La Habra earthquake, the epicenter was one mile east of La Habra and four miles north of Fullerton. An aftershock (magnitude 4.1) centered near the Los Angeles County community of Rowland Heights the following day. Based on the Modified Mercalli Intensity Scale (a measure of the effect of an earthquake on the Earth's surface, or the intensity), the City of West Hollywood received an intensity rating of IV on a Roman numeral scale of I to X. A rating of IV means light shaking, in which the effects are felt indoors by many and outdoor by a few. The second most recent earthquake with a magnitude of 5.0 or greater in the Los Angeles Area was the July 29<sup>th</sup>, 2008 Chino Hills earthquake, with the epicenter located 28 miles east-southeast of downtown Los Angeles. Similar to the La Habra earthquake, the City of West Hollywood received a rating of IV on the Mercalli Intensity Scale. A comprehensive list of earthquakes in the Southern California region with a magnitude of 5.0 or greater is located below.

For decades, partnerships have flourished between the USGS, Cal Tech, the California Geological Survey, and universities to share research and educational efforts with Californians. Tremendous earthquake mapping and mitigation efforts have been made in California in the past two decades, and public awareness has risen remarkably during this time. Major federal, state, and local government agencies and private organizations support earthquake risk reduction, and have made significant contributions in reducing the adverse impacts of earthquakes.

West Hollywood is located in a complex geologic and seismic setting. Numerous major faults occur in the surrounding region that could produce strong ground shaking. The Cal OES website shows one fault line located south of the City of West Hollywood, which could affect the City's vulnerability to earthquakes. This map is included on appendix page 216.

Limitations to predicting damage from an earthquake to the City specifically include not being able to identify with certainty which fault might be affected, the magnitude of the earthquake, or the length of time of the shaking. Comparisons can be drawn from history and geologic studies and are addressed in the Safety and Noise Chapter of the City's General Plan. The City Seismic Hazard Zone map, which is included in the City's General Plan, denotes southern areas of the City that have historic occurrence of liquefaction or local geological, geotechnical and groundwater conditions that indicate a potential for permanent ground displacements. There is also an area in the northern part of the City that either has previous occurrence of landslide movement or local topographic, geological, geotechnical and subsurface water conditions that indicate a potential for permanent ground displacements. This Hazard Zone map is included on appendix page 194.



**Southern California Region Earthquakes with a Magnitude 5.0 or Greater:**

1769	Los Angeles Basin	1916	Tejon Pass Region
1800	San Diego Region	1918	San Jacinto
1812	Wrightwood	1923	San Bernardino Region
1812	Santa Barbara Channel	1925	Santa Barbara
1827	Los Angeles Region	1933	Long Beach
1855	Los Angeles Region	1941	Carpenteria
1857	Great Fort Tejon Earthquake	1952	Kern County
1858	San Bernardino Region	1954	W. of Wheeler Ridge
1862	San Diego Region	1971	San Fernando
1892	San Jacinto or Elsinore Fault	1973	Point Mugu
1893	Pico Canyon	1986	North Palm Springs
1894	Lytle Creek Region	1987	Whittier Narrows
1894	E. of San Diego	1992	Landers
1899	Lytle Creek Region	1992	Big Bear
1899	San Jacinto and Hemet	1994	Northridge
1907	San Bernardino Region	1999	Hector Mine
1910	Glen Ivy Hot Springs	2001	Anza
		2008	Chino Hills
		2010	El Mayor
		2014	La Habra

**Partial List of the Over 200 California Laws on Earthquake Safety**

- Government Code Section 8870-8870.95  
Creates Seismic Safety Commission.
- Government Code Section 8876.1-8876.10  
Established the California Center for Earthquake Engineering Research.
- Public Resources Code Section 2800-2804.6  
Authorized a prototype earthquake prediction system along the central San Andreas Fault near the City of Parkfield.
- Public Resources Code Section 2810-2815  
Continued the Southern California Earthquake Preparedness Project and the Bay Area Regional Earthquake Preparedness Project.
- Health and Safety Code Section 16100-16110  
The Seismic Safety Commission and State Architect, will develop a state policy on acceptable levels of earthquake risk for new and existing state-owned buildings.
- Government Code Section 8871-8871.5  
Established the California Earthquake Hazards Reduction Act of 1986.
- Health and Safety Code Section 130000-130025  
Defined earthquake performance standards for hospitals.

- Public Resources Code Section 2805-2808  
Established the California Earthquake Education Project.
- Government Code Section 8899.10-8899.16  
Established the Earthquake Research Evaluation Conference.
- Public Resources Code Section 2621-2630.  
Established the Alquist-Priolo Earthquake Fault Zoning Act.
- Government Code Section 8878.50-8878.52.  
Created the Earthquake Safety and Public Buildings Rehabilitation Bond Act of 1990.
- Education Code Section 35295-35297.  
Established emergency procedure systems in kindergarten through grade 12 in all the public or private schools.
- Health and Safety Code Section 19160-19169  
Established standards for seismic retrofitting of unreinforced masonry buildings.
- Health and Safety Code Section 1596.80-1596.879  
Required all child day care facilities to include an Earthquake Preparedness Checklist as an attachment to their disaster plan.  
Source: <http://www.ca.gov>

#### **4.1.3. Extreme Heat/Drought**

##### ***General Definition:***

Temperatures that hover 10 degrees or more above the average high temperature for the region and last for several weeks are defined as extreme heat. Humid or muggy conditions, which add to the discomfort of high temperatures, occur when a "dome" of high atmospheric pressure traps hazy, damp air near the ground. Excessively dry and hot conditions can provoke dust storms and low visibility. Droughts occur when a long period passes without substantial rainfall. A heat wave combined with a drought is a very dangerous situation.

Although the City does not have any agriculture, the population is at risk for adverse health effects from extreme heat. Young children, elderly people, and those who are sick or overweight are more likely to become victims. While the City is limited to being able to predict exactly who might be affected, it is known that 17.8% of the City's population is 62 years of age or older, and 5.5% is 80 years of age or older.

##### ***Description:***

While West Hollywood and the Los Angeles area experience moderate temperatures throughout the year, citizens are still vulnerable to unusually hot weather during the summer or early fall months. Temperatures above 90 degrees trigger West Hollywood staff to open the community room at Plummer Park as a cooling center. In addition, if the temperatures stay above 90 degrees for an extended period of time, or if temperatures are above 100 degrees, staff has the ability to offer both City parks as cooling centers as needed.

California has a long history of extended periods of drought.

According to NOAA's Palmer Z Index, California can fall into the "extreme drought" category. The period from 2011 to 2014 was the driest in California history since record keeping began. Adding to the intensity of the drought, California also experienced record hot temperatures during this time period. The *Los Angeles Times*, on March 12, 2015, noted that "Right now the state has only about one year of water supply left in its reservoirs, and our strategic backup supply, groundwater, is rapidly disappearing." Governor Jerry Brown instituted mandatory state-wide water restrictions to take effect in June of 2015. The following winter of 2016-2017 was the wettest on record for Northern California. Rainfall from that winter helped to fill most of the state's major reservoirs, eventually leading to Governor Brown to declare an official end to the drought in April 2017. Prior to the most recent statewide drought period, the second most recent statewide drought occurred in 2007 – 2009. The drought during that time period was the first drought in state history in which a statewide proclamation of emergency was issued, with the second-ever emergency proclamation made in 2012-2014 period. Other significant drought periods in California history include the six-year drought of 1929-1934, the two-year drought of 1976-1977, and the six-year event of 1987-1992. These drought events are notable due to their duration or severe hydrology. Southern California in particular experiences cycles of drought due to its climate, when compared to other regions in California. Therefore, extreme heat and other drought-related hazards are an ongoing concern for the City of West Hollywood.

According to data pulled on August 1, 2018 from the U.S. Drought Monitor, the majority of Los Angeles County was classified into the D2 (Severe Drought) intensity category. The Drought Monitor scale ranges from D0 (Abnormally Dry) to D4 (Exceptional Drought). In 2017, Los Angeles County was classified into the D1 (Moderate Drought) category.

#### **4.1.4. Flash Flooding/Storms**

##### ***General Definition:***

A sudden flood of great volume, usually caused by a heavy rain. "Walls" of water can reach heights of 10 to 20 feet from this sudden movement. Flash floods can cause severe damage; they are able to pick up debris, uproot trees, destroy buildings, and damage bridges and roads. Urban flooding, dam/levee failure, and debris or ice jam water fall under flash flooding type. The greatest risk from flash floods is that they occur with little to no warning.

##### ***Description:***

The northern half of the City of West Hollywood sits at the base of the Hollywood Hills, and many streets have severe grades leading away from the hills. During heavy storms, residential and commercial properties in the area experience flooding and landslide damage from mud and debris. While not common, heavy storms can affect Southern California, e.g. the occasional El Niño Storms. Since the City does not have a long history, there have not been many severe storms; therefore, predictions for future events are limited.

#### 4.1.5. Flooding

##### ***General Definition:***

Floods are the most common and widespread of all natural disasters--except fire. Most communities in the United States have experienced some kind of flooding, after spring rains, heavy thunderstorms, or winter snow thaws.

A flood, as defined by the National Flood Insurance Program is: "A general and temporary condition of partial or complete inundation of two or more acres of normally dry land area or of two or more properties (at least one of which is your property) from overflow of inland or tidal waters, unusual and rapid accumulation or runoff of surface waters from any source, or a mudflow. The collapse or subsidence of land along the shore of a lake or similar body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels that result in a flood."

Floods can be slow or fast rising but generally develop over a period of days. Mitigation includes any activities that prevent an emergency, reduce the chance of an emergency happening, or lessen the damaging effects of unavoidable emergencies. Investing in mitigation steps now, such as, engaging in floodplain management activities, constructing barriers, such as levees, and purchasing flood insurance will help reduce the amount of structural damage and financial loss from building and crop damage should a flood or flash flood occur. Flooding tends to occur in the summer and early fall because of the monsoon and is typified by increased humidity and high summer temperatures.

The standard for flooding is the term "100-year flood," a benchmark used by the Federal Emergency Management Agency to establish a standard of flood control in communities throughout the country. Thus, the 100-year flood is also referred to as the "regulatory" or "base" flood. Actually, there is little difference between a 100-year flood and what is known as the 10-year flood. Both terms are really statements of probability that scientists and engineers use to describe how one flood compares to others that are likely to occur. In fact, the 500-year flood and the 10-year flood are only a foot apart on flood elevation-which means that the elevation of the 100-year flood falls somewhere in between. The term 100-year flood is often incorrectly used and can be misleading. It does not mean that only one flood of that size will occur every 100 years, but rather that there is a one percent chance of a flood of that intensity and elevation happening in any given year. In other words, it is the flood elevation that has a one percent chance of being equaled or exceeded each year, and it could occur more than once in a relatively short period of time. (By comparison, the 10-year flood means that there is a ten percent chance for a flood of its intensity and elevation to happen in any given year.)

##### ***Description:***

The Los Angeles Basin, of which West Hollywood is a part, has historically experienced flooding during major winter storm events. Fortunately, the City is situated on relatively high ground and does not have a major waterway

subject to flood hazards. However, the City is situated at the base of the mountains with steep narrow canyons that drain into the City. Since the City does not have a long history, there has not been a major flood event; therefore, predictions for future events are limited.

No portions of West Hollywood lie within a federally designated mandatory flood insurance zone. The City of West Hollywood entered into the National Flood Insurance Program (NFIP) on June 18<sup>th</sup>, 1987 (CID 060720). On June 3, 1994, FEMA issued a Letter of Map Revision for Case No. 94-09-540P. The FEMA flood insurance rate map was revised for the eastern portion of the City to reflect upgrades to flood protection due to completion of the Los Angeles County Flood Control District's Pan Pacific Flood Control System. On September 29, 2008, FEMA issued a Letter of Map Revision for Case No. 08-09-1715P, which is found in on appendix pages 228-229. The flood insurance rate map was revised for the southwest portion of the City to reflect upgrades to flood protection due to the completion of the Los Angeles County Flood Control District's Holly Hills Storm Drain System. In August 2018, FEMA Region IX staff reviewed the effective Flood Insurance Rate Map for the City of West Hollywood and confirmed that there are no mapped Special Flood Hazard Areas (1% annual chance: 100-year) floodplains within the jurisdictional boundaries of the City. The only mapped area is a 'Zone X' which is the 0.2% Annual Chance Flood Hazard which is out of the 100-year floodplain.

Localized flooding represents the only flood concern in the City. Historically, localized flooding has occurred in low topographic areas where street gutters must accommodate peak flows during a storm event. Generally, localized flooding does not overtop curbs and dissipates quickly after heavy rain ceases. A map from the City's General Plan shows two areas of the city that hold a potential 500 Year Flood Hazard, which is located on appendix page 217.

The topographical features in the City and local drainage infrastructure reduce any serious threat of storm flooding within the City. The Los Angeles County Flood Control District maintains the backbone flood control system, a network of catch basins and underground storm drain pipes. The City owns and maintains a few catch basins and small storm drain pipes that directly flow into the Los Angeles County Flood Control District system.

#### **4.1.6. High Winds/Straight Line Winds**

***General Definition:***

High winds can result from thunderstorm inflow and outflow, or downburst winds when the storm cloud collapses, and can result from strong frontal systems, or gradient winds (high or low pressure systems) moving across the land. High winds are speeds reaching 50 mph or greater, either sustaining or gusting.

***Description:***

Windstorms can damage buildings, power lines, and other property and

infrastructure due to falling trees and branches. For example, tree limbs breaking in winds of only 45 mph can be thrown over 75 feet. During wet winters, saturated soils cause trees to become less stable and more vulnerable to uprooting from high winds. In addition, windstorm activity can negatively impact transportation routes and power outages.

Perhaps the greatest danger from windstorm activity in Southern California comes from the combination of the Santa Ana winds with the major fires that occur every few years in the urban/wildland interface. With the Santa Ana winds driving the flames, the speed and reach of the flames is even greater than in times of calm wind conditions. The higher fire hazard raised by a Santa Ana wind condition requires that even more care and attention be paid to proper brush clearances on property in the wildland/urban interface areas.

One of the strongest and most widespread existing mitigation strategies pertains to tree clearance. Currently, California State Law requires utility companies to maintain specific clearances (depending on the type of voltage running through the line) between electric power lines and all vegetation. The California Public Resource Code (Sections 4293, 4292, 4291, and 4171) provides guidance on tree pruning regulations. In addition the California Code of Regulations and the California Public Utilities Commission both have provisions for clearance. The power companies, in compliance with the above regulations, collect data about tree failures and their impact on power lines. This mitigation strategy assists the power company in preventing future tree failure, and the company can advise residents as to the most appropriate vegetative planting and pruning procedures.

Santa Ana winds are generally defined as warm, dry winds that blow from the east or northeast (offshore). These winds occur below the passes and canyons of the coastal ranges of Southern California and in the Los Angeles Basin. Santa Ana winds often blow with exceptional speed in the Santa Ana Canyon (the canyon from which it derives its name). Forecasters at the National Weather Service in Oxnard and San Diego usually place speed minimums on these winds and reserve the use of "Santa Ana" for winds greater than 25 knots.

The complex topography of Southern California combined with various atmospheric conditions creates numerous scenarios that may cause widespread or isolated Santa Ana events. Commonly, Santa Ana winds develop when a region of high pressure builds over the Great Basin (the high plateau east of the Sierra Mountains and west of the Rocky Mountains including most of Nevada and Utah). Clockwise circulation around the center of this high pressure area forces air downslope from the high plateau. The air warms as it descends toward the California coast at the rate of 5 degrees Fahrenheit per 1000 feet due to compressional heating. Thus, compressional heating provides the primary source of warming. The air is dry since it originated in the desert, and it dries out even more as it is heated.

Santa Ana winds commonly occur between October and February with December having the highest frequency of events. Summer events are rare. Wind speeds are typically north to east at 35 knots through and below passes and canyons with gusts to 50 knots. Stronger Santa Ana winds can have gusts greater than 60 knots over widespread areas and gusts greater than

100 knots in favored areas. Frequently, the strongest winds in the basin occur during the night and morning hours due to the absence of a sea breeze. The sea breeze which typically blows onshore daily, can moderate the Santa Ana winds during the late morning and afternoon hours.

Santa Ana winds are an important forecast challenge because of the high fire danger associated with them. Also, unusually high surf conditions on the northeast side of the Channel Islands normally accompany a Santa Ana event. Other hazards include: wind damage to property, turbulence and low-level wind shear for aircraft, and high wind dangers for boaters. (nimbo.wrh.noaa.gov)

In September 2016, Santa Ana winds toppled over a large tree along the 1000 block of Laurel Avenue in West Hollywood. The tree fell on three unoccupied cars, where two of the cars were totaled. Some power outages were reported by electricity was quickly restored. Source: <http://abc7.com/weather/wild-winds-topple-trees-cause-damage-in-west-hollywood/1523664/>

In January 2017, Santa Ana winds with gusts of up to 58 mile per hour speeds threatened Southern California. Areas of West Hollywood, specifically by the Hollywood Hills, were under a wind advisory due to the expectation of 35 mph winds. Source: <http://patch.com/california/westhollywood/west-hollywood-under-advisory-santa-ana-winds-slam-southland>

#### 4.1.7. Landslide

##### ***General Definition:***

Landslides are a serious geologic hazard common to almost every state in the United States. It is estimated that nationally they cause up to \$2 billion in damages and from 25 to 50 deaths annually. Globally, landslides cause billions of dollars in damage and thousands of deaths and injuries each year. Individuals can take steps to reduce personal risk by learning about potential hazards that affect the area, taking steps to reduce the risk, and practicing preparedness plans.

Some landslides move slowly and cause damage gradually, whereas others move so rapidly that they can destroy property and take lives suddenly and unexpectedly. Gravity is the force driving landslide movement. Factors that allow the force of gravity to overcome the resistance of earth material to landslide movement include: saturation by water, steepening of slopes by erosion or construction, alternate freezing or thawing, earthquake shaking, and volcanic eruptions.

Landslides are typically associated with periods of heavy rainfall or rapid snow melt and tend to worsen the effects of flooding that often accompanies these events. In areas burned by forest and brush fires, a lower threshold of precipitation may initiate landslides.

##### ***Description:***

###### *Non-seismic landslides*

Landslides refer to slope failures in natural rock or soil slopes and typically

occur where a plane of weakness exists in the earth materials and elevated groundwater conditions exist. Previous mapping in the Los Angeles County Seismic Safety Element suggests that the slopes at, or potentially affecting, the northern margin of the City are relatively stable. Soil-slip susceptibility maps for Los Angeles County, created by the USGS in 2003, show the relative susceptibility of hill slopes to the initiation sites of rainfall-triggered soil slip-debris flows. According to the maps, the majority of the City of West Hollywood has zero soil-slip susceptibility values. The hills in north of the City have low-to-moderate soil-slip susceptibility values.

#### *Landslides caused by seismic events*

Landslides tend to occur in loosely consolidated, wet soil and/or rock on sloping terrain. Landslides are also typically associated with bedrock slopes exhibiting unfavorably oriented planes of weakness such as bedding or joints. Oversteepened slopes (cliffs, stream banks, saturated soil-filled swales, man-made cuts and fills, etc.) are often prone to collapse when shaken by an earthquake. Ground motions produced by earthquakes can cause slopes to fail because the resultant force acting on the slide mass from ground acceleration exceeds the at-rest force restraining the slide. Water is often a contributing factor to landslide movement; thus springs, seeps, and man-introduced water sources (landscape irrigation, leach fields, storm drains, and leaking water lines) can influence landslide creation, movement, and extent of damage.

There are some areas considered susceptible to landslides during strong earthquake ground shaking within the City derived from the CDMG Seismic Hazard Zone maps for the Beverly Hills and Hollywood quadrangles. This map is included on appendix page 194.

There have been no major landslides in the City of West Hollywood. However, in January 2017, two homes in the city of Los Angeles were red-tagged, meaning entry was prohibited, due to a landslide in the Hollywood Hills. No injuries were reported. Portions of West Hollywood lie on the base of the Hollywood Hills. There was concern that additional slippage along the hillsides could affect West Hollywood, however this did not occur. Source: <http://www.dailynews.com/general-news/20170131/2-homes-red-tagged-after-hollywood-hills-landslide>

#### **4.1.8. Wildfires**

##### ***General Definition:***

There are three different classes of wild land or wildfires. A surface fire is the most common type and burns along the floor of a forest, moving slowly and killing or damaging trees. A ground fire is usually started by lightning and burns on or below the forest floor. Crown fires spread rapidly by wind and move quickly by jumping along the tops of trees. Wildfires are usually signaled by dense smoke that fills the area for miles around. Wildfires present a significant potential for disaster in the southwest, a region of relatively high temperatures, low humidity, and low precipitation during the summer, and during the spring, moderately strong daytime winds. Combine



these severe burning conditions with people or lightning and the stage is set for the occurrence of large, destructive wildfires.

***Description:***

The City of West Hollywood sits at the base of the "Hollywood Hills" in the City of Los Angeles. The Hollywood Hills is densely populated by mostly single family homes and apartment buildings. Roads are difficult to navigate, and there is a lot of brush in the area. A fire in the Hollywood Hills could easily spread to the northern region of the City of West Hollywood which is also densely populated, making large evacuations difficult. According to a 2012 CAL FIRE Hazard Severity Zone map for local-responsibility areas (of which the City of West Hollywood is categorized), none of the city is in a fire-hazard zone area. However, some of the hills above the northwest section of the city are classified as a very high fire hazard severity zone.

Fire growth is related to building density, types of building construction, the presence and amount of flammable materials, wind speed and direction, width of fire breaks, water supply, time of fire department arrival, and available fire fighter resources. There are two fire stations in the City of West Hollywood: Fire Station 7 at 864 N San Vicente Blvd, West Hollywood, CA 90069 and Fire Station 8 at 7643 Santa Monica Blvd, West Hollywood, CA 90046.

*Urban Fires due to Seismic Events*

Urban fires are a constant threat in the City, given the seismic hazards of fault rupture, strong ground shaking, and liquefaction. In the United States, fires following earthquakes have caused the largest losses associated with earthquakes. Urban fires following earthquakes are driven by two key features: 1) the earthquake is likely to ignite multiple, nearly simultaneous fires; and 2) the earthquake is likely to damage and disrupt fire suppression by severing water pipelines and delaying the arrival of adequate fire-fighting equipment and personnel. There have been no recent fires due to seismic events in the City of West Hollywood.

**Technology/Utility Related Hazards**

**4.1.9. Energy Emergency**

***General Definition:***

A power/utility failure is defined as an actual or potential shortage of electric power or the interruption of electrical power which significantly threatens health and safety.

Many communities are vulnerable to many localized, short and long term energy emergencies. Power shortages or failures do occur and may be brought on by severe weather conditions, such as extreme heat, thunderstorms, or events such as war or civil disturbance.

***Description:***

As did much of California, the City of West Hollywood has experienced Rolling Blackouts caused by an energy supply shortage. Rolling blackouts are

ordered by the California ISO. Maps of rolling blackouts that affect the City are found in the City's Emergency Plan, and on appendix pages 204-214. The City is served by Southern California Edison (SCE), so SCE would notify City officials of pending blackouts and give the circuits and times the blackouts would take place.

#### **4.1.10. Water Line Emergency**

***General Definition:***

A water line failure is defined as an interruption of water which can significantly threaten health and safety. Many communities are vulnerable to many localized, short and long term water emergencies. Two major water lines that traverse West Hollywood are over 80 years old and are owned by the Metropolitan Water District and Los Angeles Department of Water and Power and supply water to the west side of Los Angeles as well.

***Description:***

West Hollywood has experienced its share of smaller water line and water main breaks flooding grade level and underground parking garages and damaging property. West Hollywood experienced a significant water main break in September 2014 on Sunset Boulevard at Queens Road which took multiple days to fix and restore the street to normal operations. There was no public property damage and there are no estimates for private property damage (the lobby of the Grafton Hotel was damaged). No injuries were reported.

#### **4.1.11. Gas Line Emergency**

***General Definition:***

A gas line failure is defined as a rupture or an interruption of service which can significantly threaten health and safety. Many communities are vulnerable to many localized, short and long term gas line emergencies.

***Description:***

The City of West Hollywood could experience interruption in gas service to the community due to an earthquake or other emergency. However, daily operations in the city do not warrant any significant risk to a gas line emergency.

#### **4.1.12. Sewer Line Emergency**

***General Definition:***

A sewer line failure is defined as an interruption of service or a leak which can significantly threaten health and safety. Many communities are vulnerable to many localized, short and long term sewer line emergencies. Sewer line failures or interruptions in service can occur due to earthquake, construction accidents, or other issues.

**Description:**

As does much of Los Angeles, City of West Hollywood has many sewer lines built in the 1920s. Even newer sewer lines are at risk of a blockage, and a sewage overflow incident can happen.

**4.2 Hazard Profile**

The Critical Priority Risk Index (CPRI) factors the elements of risk: Probability (P), Magnitude/Severity (M), Warning Time (WT) and Duration (D) to create an index which allows for the prioritization of mitigation activities based on the level of risk. CPRI uses a mathematic equation and user defined information to establish a ranking for each hazard that affects a community.

For each of the four criteria in the CPRI, there are four options from which to choose.

	1	2	3	4
<b>Probability</b>	"Unlikely"	"Possible"	"Likely"	"Highly Likely"
<b>Magnitude/Severity</b>	"Negligible"	"Limited"	"Critical"	"Catastrophic"
<b>Warning Time</b>	"Greater than 24 hours"	"12-24 hours"	"6-12 hours"	"less than 6 hours"
<b>Duration</b>	"Less than 6 hours"	"Less than 1 day"	"Less than 1 week"	"More than 1 week"

As depicted in the above table, each of the four options represents a value of 0, 1, 2, 3, or 4. (Zero is the value taken when an option is not assigned). Based on these four selections, the CPRI is calculated with the following weightings for each of the following criteria: Probability (P) weighted for 45%; Magnitude/Severity (M) for 30%; Warning Time (WT) for 15%; and Duration (D) for 10%. This results in the following index calculation:  $.45P + .3M + .15WT + .1D = CPRI$ .

The CPRI is subjective in nature since it is based on the selection of options from four criteria. This ranking was used by the planning team appropriately in the discussion about hazard rankings.

As previously stated, West Hollywood defines hazard occurrence probability as follows:

- **Highly Likely:** Near 100% probability of occurring in the next year;
- **Likely:** Between 10 and 100% probability in the next year, or at least one chance in 10 years;
- **Possible:** Between 1 and 10% probability in next year, or at least one chance in the next 100 years; and
- **Unlikely:** Less than 1% probability in next 100 years.

The following hazards are listed with their CPRI scores.

#### 4.2.1. Dam Failure

##### ***Historical Events***

There are no documented historical dam failures that have affected the City of West Hollywood. Although the City of West Hollywood has no jurisdictional control over the dams and reservoirs in its vicinity, the City collaborates with the County of Los Angeles and surrounding water agencies to stay abreast of any potential negative to the community. The City receives a Dam and Reservoir Emergency Notification List from the City of Los Angeles, Department of Water and Power.

##### ***Calculated Priority Risk Index (CPRI)***

Please refer back to the beginning of Section 4.2 for a description of the CPRI.

Probability: **1 - Unlikely**

The core planning team selected “unlikely” due to the review of the Dam and Reservoir Emergency Notification List from the City of Los Angeles (appendix pages 128-173) and dam hazard inundation map on appendix page 102. In addition, there have been no prior historical incidents.

Magnitude/Severity: **2 - Limited**

After a review of Los Angeles dam inundation maps, the impact to the City of West Hollywood is limited. A break at the Hollywood Reservoir would affect a limited portion of the eastern side of the City (less than 1 square mile affected). Failure of the tank at Greystone Park would inundate a portion of the southwest corner of the City (less than 1 square mile affected).

Warning Time: **4 - Less than six hours**

The warning time for a dam break is short, and most likely less than six hours.

Duration: **2 - Less than one day**

Severe inundation of water is not likely to last more than one day although there could be lingering affects of residual water.

The CPRI for the Dam Failure hazard for the City of West Hollywood is:

Probability + Magnitude/Severity + Warning Time + Duration = CPRI

$$1 \times .45 + 2 \times .30 + 4 \times .15 + 2 \times .10 = 1.85$$

## 4.2.2. Earthquake

### *Historical Events*

The City of West Hollywood is only 25 years old and has not experienced a major earthquake within its borders, but the City is located in a complex geologic and seismic setting. Numerous major faults occur in the surrounding region that could produce strong ground shaking. Limitations to predicting damage from an earthquake to the City specifically include not being able to identify with certainty which fault might be affected, the magnitude of the earthquake, or the length of time of the shaking. Comparisons can be drawn from history and geologic studies and are addressed in the City's Safety and Noise Chapter of the General Plan.

Since it is very possible that the City will be seriously affected by a major earthquake in the future, the following section lists and describes three historical earthquakes that occurred near the City of West Hollywood in order to possibly predict effects of future events:

#### *Chino Hills Earthquake – 7/29/2008*

A 5.4 magnitude earthquake hit Chino Hills at 11:42 a.m. it was centered in the hills south of communities of Diamond Bar and Chino Hills. There was no property damage.

Hazard: Earthquake

Deaths: 0

Injuries: 0

Chino Hills, CA

#### *Northridge Earthquake - 1/17/1994*

A 6.7 magnitude earthquake struck Southern California on January 17, 1994 at 4:31 AM. The epicenter was in the San Fernando Valley which is a densely populated area in Northern Los Angeles. According to a summary report by EQE International, "A few days after the earthquake, 9,000 homes and businesses were still without electricity; 20,000 were without gas; and more than 48,500 had little or no water. About 12,500 structures were moderately to severely damaged, leaving thousands of people temporarily homeless." FEMA estimates that the total cost of the earthquake was over \$26 billion dollars.

Hazard: Earthquake

Deaths: 57

Injuries: 12,000 or more

Displaced People: 20,000 or more

Los Angeles, CA

The City of West Hollywood did declare a local emergency on January 25, 1994 and terminated the emergency's existence on February 22, 1994.

#### *Whittier Earthquake - 10/1/1987*

It was at 7:42 a.m. on October 1, 1987, that a strong earthquake

measuring M5.8 rocked the east Los Angeles region. The Whittier Narrows earthquake shook the region quite hard, registering shaking intensities of VIII on the Modified Mercalli intensity scale (a relative shaking intensity scale from 1-12 shown in Roman Numerals).

The temblor was centered between Whittier and Montebello along the west-northwest trending Whittier fault zone and was felt as far away as Las Vegas. No surface fault ruptures were ever discovered. Eight people were killed and many were injured.

The quake damaged more than 10,400 buildings and the total cost of property damage exceeded \$350 million. Felt aftershocks lasted for months and micro earthquakes were recorded for years.

Hazard: Earthquake  
 Deaths: 8  
 Injuries: 200  
 Whittier, CA

Table 3. Summary of Impact and Costs

<b>Hazard: Earthquake</b>		<b>Response and Recovery Costs</b>
Name	Date	Estimated Total Spent on Response and Recovery
Chino Hills EQ	7/29/2008	N/A – No property damage reported
Northridge EQ	1/17/1994	over \$26,000,000,000
Whittier EQ	10/1/1987	over \$358,000,000
Total:		\$26,358,000,000

***Calculated Priority Risk Index (CPRI)***

Please refer back to the beginning of Section 4.2 for a description of the CPRI.

Probability: **3 - Likely**

The planning team identified the probability for a future earthquake affected the City as “likely”. Although the City has a short history, the review of historical events in Southern California indicate that an earthquake will likely occur.

Magnitude/Severity: **3 - Critical**

A review of the fault maps in the Southern California area indicates that a magnitude of 5.0 or greater is very possible. This magnitude would severely impact the community, so a “critical” designation is given.

Warning Time: **4 - Less than six hours**

Earthquakes give no warning. There is research into the field of “early warning” systems, but at this time, no warning system is available to the community.

Duration: **4 – More than one week**

The duration of the actual “shaking” is usually only several seconds, but the recovery process is likely to last several months and could drastically impact the community and its economy.

The CPRI for the Earthquake hazard for the City of West Hollywood is:

Probability + Magnitude/Severity + Warning Time + Duration = CPRI

$$3 \times .45 + 3 \times .30 + 4 \times .15 + 4 \times .10 = 3.25$$

#### **4.2.3. Extreme Heat/Drought**

##### ***Historical Events***

The City of West Hollywood does not have any agriculture so is not likely to experience economic loss from crops. Even though, periods of extreme heat could be a public health emergency as very high temperatures will negatively impact the health of West Hollywood residents. In addition, an especially vulnerable population is the City’s senior population which is seventeen percent of the total population. The City is also vulnerable to the current drought in the State of California and the very low water supplies.

The following section lists and describes the historical events associated with this hazard in the City of West Hollywood:

##### ***Annually***

The City cooperates annually with the County of Los Angeles to offer cooling centers during significantly hot weather. Cooling centers are opened to community members who do not have access to air conditioning when temperatures are extreme and consistent (when the temperature reaches the upper 80’s for several days in a row). The primary center is located in the Senior Lounge in Plummer Park. Occasionally the City offers bottled water to seniors who are in the cooling centers.

##### ***Summer 2000***

The City of West Hollywood and the greater Los Angeles region experienced periods of extreme heat during the summer of 2000. The City opened cooling centers and held several sessions for seniors to educate them on the health risks involved and the resources available to them.

##### ***Summer 2014***

The City of West Hollywood and the greater Los Angeles region experienced periods of extreme heat during the summer of 2014. The City opened cooling centers and worked with the Los Angeles County Department of Public Health to disseminate information.

##### ***Summer 2016***

The City of West Hollywood and the greater Los Angeles region experienced periods of extreme heat during the summer of 2016. The City opened cooling

centers and worked with the Los Angeles County Department of Public Health to disseminate information.

Table 4. Summary of Impact and Costs

<b>Hazard: Extreme Heat</b>		<b>Public Education/Flashlight/Water Distribution Costs</b>
Name	Date	Total
Senior Heat Alert	Summer 2000	\$1500
Cooling Centers	Annually	Staff costs/occasional water costs

***Calculated Priority Risk Index (CPRI)***

Please refer back to the beginning of Section 4.2 for a description of the CPRI.

Probability: **2 - Possible**

Most of the year, the weather is mild in Southern California, but it is possible to have periods of extreme heat.

Magnitude/Severity: **2 - Limited**

Generally, vulnerable populations are affected more severely than the general population.

Warning Time: **1 - 24+ Hours**

Meteorologists can predict with some accuracy future weather events.

Duration: **4 - More than one week**

Extreme heat becomes more dangerous to the population when it lasts more than a few days.

The CPRI for the Extreme Heat hazard for the City of West Hollywood is:

Probability + Magnitude/Severity + Warning Time + Duration = CPRI

$$2 \times .45 + 2 \times .30 + 1 \times .15 + 4 \times .10 = 2.05$$

**4.2.4. Flash Flooding/Storms**

***Historical Events***

There are no documented historical major flash flooding events that have affected the City of West Hollywood since its incorporation. City residents and businesses located on the northern slope of the City (less than 1 square mile



affected) do experience some flooding and debris damage from heavy storms that push debris, soil, and water down the hill.

***Calculated Priority Risk Index (CPRI)***

Please refer back to the beginning of Section 4.2 for a description of the CPRI.

Probability: **2 - Possible**

Although the weather is generally mild in Southern California, it is possible to experience some stronger storms.

Magnitude/Severity: **2 - Limited**

The magnitude of a flash flooding event is limited since it would not affect the entire City. The structures located on the northern slope and also at its base would experience the most damage (less than 1 square mile affected).

Warning Time: **3 – Six to Twelve Hours**

Since meteorologists can predict with some accuracy extreme weather events, the population may receive some warning so a timeframe of 6-12 hours was selected by the planning team.

Duration: **1 - Less than six hours**

Flash flooding is not likely to last more than a few hours, although the recovery process is likely to last for several days or weeks.

The CPRI for the Flash Flooding hazard for the City of West Hollywood is:

Probability + Magnitude/Severity + Warning Time + Duration = CPRI

$$2 \times .45 + 2 \times .30 + 3 \times .15 + 1 \times .10 = 2.05$$

**4.2.5. Flooding**

***Historical Events***

The following section lists and describes the historical events associated with this hazard in the City of West Hollywood:

As did much of Southern California, the City of West Hollywood has experienced flooding caused by the El Nino storms. Since the City is only 25 years old, it does not have much history with severe storms and flooding and is limited to predict future events. In 2004 and 2005, the City did experience some flooding and facility damage due to strong storms and received FEMA reimbursement for the damages. The FEMA reimbursement was \$15,734.00 for 5 projects: repair to eroded parking area at West Hollywood Community

Center, debris removal throughout the city, back fill eroded tree wells, repair and replace city's computer equipment at City Hall caused by water leaking through roof, and repair pot holes. There were no associated injuries.

***Calculated Priority Risk Index (CPRI)***

Please refer back to the beginning of Section 4.2 for a description of the CPRI.

Probability: **2 - Possible**

Although the weather is generally mild in Southern California, it is possible to experience some stronger storms.

Magnitude/Severity: **1 - Negligible**

The magnitude of a flooding event is limited since it most likely would not affect the entire City. Fortunately, the City is situated on relatively high ground and does not have a major waterway subject to flood hazards. However, the City is situated at the base of the mountains with steep narrow canyons that drain into the City. No portions of West Hollywood lie within a federally designated mandatory flood insurance zone.

Warning Time: **2 - 12-24 Hours**

Since meteorologists can predict with some accuracy extreme weather events, the population may receive some warning so a timeframe of 6-12 hours was selected by the planning team.

Duration: **3 - Less than one week**

The CPRI for the Flooding hazard for the City of West Hollywood is:

Probability + Magnitude/Severity + Warning Time + Duration = CPRI

$$2 \times .45 + 1 \times .30 + 2 \times .15 + 3 \times .10 = 1.8$$

**4.2.6. High Winds/Straight Line Winds**

***Historical Events***

Although the climate in Southern California is generally mild, the area can experience high winds or even Santa Ana winds which blow with exceptional speed (greater than 25 knots). Historically, falling trees have been the major cause of power outages in the region.

The following section lists and describes the historical events associated with this hazard in the City of West Hollywood:

*Santa Ana Windstorm 2017 – January*

Santa Ana winds with gusts of up to 58 mile per hour speeds threatened Southern California. Areas of West Hollywood, specifically by the Hollywood Hills, were under a wind advisory due to the expectation of 35 mph winds.

*Santa Ana Windstorm 2016 – September*

Santa Ana winds toppled over a large tree along the 1000 block of Laurel Avenue in West Hollywood. The tree fell on three unoccupied cars, where two of the cars were totaled. Some power outages were reported by electricity was quickly restored.

*Storms 2005 – Disaster #1577*

The City of West Hollywood experienced heavy rains and strong winds that damaged several trees and facilities. City response included debris removal, facility and water damage repair and coordination with utility companies to repair power lines.

*Windstorm 2003 - 3/26/2003*

The City of West Hollywood experienced strong winds on March 26, 2003 that damaged several trees, light poles, and signs. City response included debris removal, repair of signs, and coordination with utility companies to repair power lines.

Table 5. Summary of Impact and Costs

<b>Hazard: High Winds/Straight Line Winds</b>		<b>Response and Recovery Costs</b>
Name	Date	Total
Winter Storms 2005	Feb/March 2005	\$36,855
Windstorm 2003	3/26/2003	\$10,000
Total:		\$46,855

***Calculated Priority Risk Index (CPRI)***

Please refer back to the beginning of Section 4.2 for a description of the CPRI.

Probability: **4 - Highly Likely**

Magnitude/Severity: **2 - Limited**

Warning Time: **2 - 12-24 Hours**

Duration: **3 - Less than one week**

The CPRI for the High Winds/Straight Line Winds hazard for the City of West Hollywood is:

Probability + Magnitude/Severity + Warning Time + Duration = CPRI

**4 x .45 + 2 x .30 + 2 x .15 + 3 x .10 = 3**

#### 4.2.7. Landslide

##### ***Historical Events***

Over twenty documented historical landslides have occurred in California since 1928. There are no documented historical major landslides that have affected the City of West Hollywood since its incorporation.

##### ***Calculated Priority Risk Index (CPRI)***

Please refer back to the beginning of Section 4.2 for a description of the CPRI.

Probability: **2 - Possible**

Although the northern slopes of the City are relatively stable, a landslide is still possible.

Magnitude/Severity: **2 - Limited**

The portion of the City that is on or near a slope is less than 1 square mile.

Warning Time: **4 - Less 6 Hours**

It is likely that little or no warning will be given for a major landslide event.

Duration: **1 - Less than 6 hours**

A landslide is unlikely to last more than a few minutes, although the recovery process may last for several weeks.

The CPRI for the Landslide hazard for the City of West Hollywood is:

Probability + Magnitude/Severity + Warning Time + Duration = CPRI

$$2 \times .45 + 2 \times .30 + 4 \times .15 + 1 \times .10 = 2.2$$

#### 4.2.8. Wildfires

##### ***Historical Events***

The City of West Hollywood does not contain any forest area and is completely developed, but it is located at the base of the Hollywood Hills in Los Angeles City. A fire in Los Angeles City could spread down the hills into the City's jurisdiction. Since the City's incorporation, there are no documented historical wildfires that have spread into the City limits.

##### ***Calculated Priority Risk Index (CPRI)***

Please refer back to the beginning of Section 4.2 for a description of the CPRI.

Probability: **2 - Possible**

While there has never been a wildfire that has spread into the borders of the City, it is still possible due to the history of wildfires in the Southern California area.

Magnitude/Severity: **3 - Critical**

Although the City is only 1.9 square miles, it is populated by approximately 38,223 residents. In addition, on a busy weekend night on Sunset Strip, several more thousand people are in town making evacuations extremely difficult.

Warning Time: **4 - Less than 6 Hours**

Warning for the need for a major evacuation due to a quickly spreading fire would be extremely limited.

Duration: **2 - Less than one day**

While a wildfire in a neighboring jurisdiction is likely to last several days or weeks, structure fires in the City of West Hollywood due to a neighboring fire are unlikely to burn for more than one day. Safe evacuation of residents and others would be critical.

The CPRI for the Wildfires hazard for the City of West Hollywood is:

Probability + Magnitude/Severity + Warning Time + Duration = CPRI

$$2 \times .45 + 3 \times .30 + 4 \times .15 + 2 \times .10 = 2.6$$

#### **4.2.9. Energy Emergency**

##### ***Historical Events***

Most of California experienced rolling blackouts and power outages during the years 2000-2001. On November 13, 2003, Governor Gray Davis ended the state of emergency. While systems are in place to prevent such widespread blackouts due to supply shortages in the future, rolling blackouts are still possible. In addition, the City could experience an energy emergency for other reasons. For example, New York City and other portions of the country experienced a major power outage in 2003 which forced major urban area evacuations.

The following section lists and describes the historical events associated with this hazard in the City of West Hollywood.

*Rolling Blackouts - 12/5/2000*

As did much of California, the City of West Hollywood experienced Rolling Blackouts during late 2000 and 2001. The blackouts were caused by an energy supply shortage and were ordered by the California ISO. At times, the power outages forced closure of City Hall and other government facilities which reduced the amount of general services the City could provide to the community. Maps of rolling blackouts by California ISO are found in the City's Emergency Plan and the appendix pages 204-214. Power outages in West Hollywood also affect some of the street signals by rendering them ineffective for traffic control. Vulnerable populations were also at risk as the blackouts continued into warmer weather. The City conducted "Extreme Heat Precaution" informational meetings for the senior population during this time.

Rolling blackouts cause a drain on the City's public safety and transportation resources and can impact the delivery of both emergency and essential services.

***Calculated Priority Risk Index (CPRI)***

Please refer back to the beginning of Section 4.2 for a description of the CPRI.

Probability: **3 - Likely**

Power outages are likely in the region.

Magnitude/Severity: **2 - Limited**

Power outages generally do not last for more than a few hours at a time.

Warning Time: **3 - 6-12 Hours**

At times, Southern California Edison is able to warn the City when rolling blackouts are necessary. Unplanned outages generally have no warning. The group selected the mid-range of 6-12 hours to balance out the two different scenarios.

Duration: **1 - Less than 6 hours**

Power outages generally do not last for more than a few hours, although a widespread outage in California or the western United States could potentially last for a longer period of time.

The CPRI for the Energy Emergency hazard for the City of West Hollywood is:

Probability + Magnitude/Severity + Warning Time + Duration = CPRI

$$3 \times .45 + 2 \times .30 + 3 \times .15 + 1 \times .10 = 2.5$$

#### 4.2.10. Water Line Emergency

##### *Historical Events*

Many communities in the Los Angeles basin are vulnerable to both planned and unplanned localized, short, or long term water emergencies. The City of West Hollywood is served by Beverly Hills Water and the Los Angeles Department of Water and Power. Both have aging infrastructure.

The following section lists and describes the historical events associated with this hazard in the City of West Hollywood.

##### *Water Main Break on Sunset Boulevard – September 2014*

There was a major break on Sunset Boulevard at Queens Road on September 26, 2014 which caused the street to be closed for over 24 hours. There was no public property damage and there are no estimates for private property damage (the lobby of the Grafton Hotel was damaged). No injuries were reported.

Water disruptions cause a drain on the City's public safety and transportation resources and can impact the delivery of both emergency and essential services. In addition, there can be significant fiscal impact to businesses.

##### ***Calculated Priority Risk Index (CPRI)***

Please refer back to the beginning of Section 4.2 for a description of the CPRI.

Probability: **3 - Likely**

Water line ruptures are likely in the region due to aging infrastructure or earthquake.

Magnitude/Severity: **2 - Limited**

Typically water line interruptions do not last for more than a few hours.

Warning Time: **3 - 6-12 Hours**

At times, water companies are able to warn the City when planned repairs are necessary. Unplanned breaks in service generally have no warning. The group selected the mid-range of 6-12 hours to balance out the two different scenarios.

Duration: **1 - Less than 6 hours**

Water service interruption generally does not last for more than a few hours, although interruption in service due to a widespread earthquake could potentially last for a longer period of time.

The CPRI for the Water Line Emergency hazard for the City of West Hollywood is:

Probability + Magnitude/Severity + Warning Time + Duration = CPRI

$$3 \times .45 + 2 \times .30 + 3 \times .15 + 1 \times .10 = 2.5$$

#### 4.2.11. Gas Line Emergency

##### *Historical Events*

Many communities in the Los Angeles basin are vulnerable to both planned and unplanned interruptions in service. The City of West Hollywood is served by the Southern California Gas Company.

The following section lists and describes the historical events associated with this hazard in the City of West Hollywood.

##### *Major Gas Line Rupture - 2000*

There was a gas line rupture on Santa Monica Boulevard in the year 2000 which was caused by the reconstruction of the Boulevard. Service was disrupted for several hours. There were no damages or injuries. Only material cost is delay in construction, however no estimates are available.

Gas service disruptions cause a drain on the City's public safety and transportation resources and can impact the delivery of both emergency and essential services. In addition, there can be significant fiscal impact to businesses.

##### ***Calculated Priority Risk Index (CPRI)***

Please refer back to the beginning of Section 4.2 for a description of the CPRI.

Probability: **3 - Likely**

Gas line ruptures are likely in the region due to aging infrastructure or earthquake.

Magnitude/Severity: **2 - Limited**

Power outages generally do not last for more than a few hours at a time.

Warning Time: **3 - 6-12 Hours**

At times, the gas company is able to warn the City when planned repairs are necessary. Unplanned breaks in service generally have no warning. The group selected the mid-range of 6-12 hours to balance out the two different scenarios.

Duration: **1 - Less than 6 hours**

Gas service interruption generally does not last for more than a few hours, although interruption in service due to a widespread earthquake could potentially last for a longer period of time.

The CPRI for the Gas Line Emergency hazard for the City of West Hollywood is:



Probability + Magnitude/Severity + Warning Time + Duration = CPRI

$$3 \times .45 + 2 \times .30 + 3 \times .15 + 1 \times .10 = 2.5$$

#### 4.2.12 Sewer Line Emergency

##### *Historical Events*

Many communities in the Los Angeles basin are vulnerable to both planned and unplanned interruptions in sewer service.

While the City of West Hollywood has not experienced a large sewer line issue, any service disruption can cause a drain on the City's public safety and transportation resources and can impact the delivery of both emergency and essential services. In addition, there can be significant fiscal impact to businesses.

##### *Calculated Priority Risk Index (CPRI)*

Please refer back to the beginning of Section 4.2 for a description of the CPRI.

Probability: **3 - Likely**

Sewer line ruptures are likely in the region due to aging infrastructure or earthquake.

Magnitude/Severity: **2 - Limited**

Disruptions in service generally do not last for more than a few hours.

Warning Time: **3 - 6-12 Hours**

At times, the repairs and interruption in service are planned. Unplanned breaks in service generally have no warning. The group selected the mid-range of 6-12 hours to balance out the two different scenarios.

Duration: **1 - Less than 6 hours**

Sewer service interruption generally does not last for more than a few hours, although interruption in service due to a widespread earthquake could potentially last for a longer period of time.

The CPRI for the Sewer Line Emergency hazard for the City of West Hollywood is:

Probability + Magnitude/Severity + Warning Time + Duration = CPRI

$$3 \times .45 + 2 \times .30 + 3 \times .15 + 1 \times .10 = 2.5$$

## **4.3 Vulnerability Assessment**

### **4.3.1 Asset Inventory**

The total population of City of West Hollywood that is vulnerable to a hazard is approximately 34,399.

#### **4.3.1.1 Community Asset Overview**

This section provides an overview of the assets in City of West Hollywood as determined by the core planning team. The team examined financial documents, rent stabilization and housing records, law enforcement critical facilities lists, fire department critical facilities lists, existing City critical facilities lists, and social services organization lists. In addition, planning team members discussed the general population and housing characteristics of the City with members of the public and the Community Development Department.

Approximately 66% of the City's property is residential, 23% is commercial, 6% is public/quasi-public, 5% vacant or surface parking lot, and less than 1% industrial. Development is made up of a variety of building types including low rise commercial structures and multifamily structures (generally 1-3 stories) and some 7-8 story apartments. Business types include restaurants, clubs, fast food, retail, service and repair, hotels, and various small shops. The City of West Hollywood is completely "built out". Any development involves demolishing or renovating existing structures in order to build new structures. Future development is limited to existing parcels. The major projects under construction are at "Faith Plating – The Domain" (6 story mixed use structure), "Movietown Plaza" (demolishing strip mall and building a 6 & 10 story mixed use structure), "Walgreens" (demolishing existing commercial and building mixed use structure), and "Sunset/La Cienega" (residential, hotel & commercial). The effects of future development are negligible as compared to current development.

#### *Critical Facilities:*

Government facilities include city hall, various parks, a maintenance facility, parking structures, storage, one Sheriff's Station, and two fire stations. There are several businesses on Sunset Boulevard, Santa Monica Boulevard, and in the Avenues of Art and Design area. A list of the principal tax payers in the City are listed in a chart at the end of this section. In addition, there are several schools, religious institutions, high-rises, multi-unit residential buildings, senior housing, and non-profit agencies in the City.

#### *Non-Critical Facilities:*

The City contains single family homes, multi-unit residential buildings, commercial buildings, and other structures.

Table 6. Asset Summary

Parameter	Value	Source
Residents	34,399	2010 Census
Assessed Value of Residential Property – 59.1%	\$4,880,737,922	HDL Basic Property Value Table (CAFR Package)
Residential Units	24,573	2008 Southern California Association of Governments
Assessed Value of Commercial Property – 34.8%	\$2,873,271,627	HDL Basic Property Value Table (CAFR Package)
Bridges, Airports, Freeways	0	N/A
Hospitals	0	N/A
Utilities, Large Industrial Sites	0	N/A
Post Offices	2	US Post Office
Libraries	1	Human Services Department
Parks	5	Human Services Department
Stadiums, Convention Centers, Major Public Venues	0	N/A
Schools & Preschools (private and public)	15	Human Services Department
Senior Housing Buildings	11	Human Services Department
Religious Organizations	6	Human Services Department
Fire Stations	2	Public Safety Department
Police Stations	1	Public Safety Department

#### 4.3.1.2 Critical Facility List

This section provides a listing of the government owned Critical Facilities in City of West Hollywood (updated 2014).

##### **City Hall**

##### **Government Facilities**

8300 Santa Monica Boulevard

West Hollywood, CA 90069

Size: 39,512 SQ. FT.

*Facility Description:* NON COMB STEEL FRAME structure.

All essential and additional services that the City provides are coordinated by staff housed in City Hall. In addition, the West Hollywood City Council offices and City

Departments, including City Manager, Administrative Services, Community Development, Economic Development, Finance, Human Services, Public Safety and Community Services, Public Information and Legal Services, Rent Stabilization and Housing, and Transportation and Public Works.

*Primary Contact:* Facilities/Landscape Manager 323-848-6400

**West Hollywood Park Auditorium  
Government Facilities**

647 N. San Vicente Boulevard  
West Hollywood, CA 90069

Size: 10,818 SQ. FT.

*Facility Description:* Auditorium/Gym/Cable Offices: MASONRY CONST/WOOD ROOF  
Used for City Council meetings, public meetings, recreation activities, special events, cable TV operations, and community events. Can be used as an emergency shelter.

*Primary Contact:* Park Office 323-848-6400

**West Hollywood Library, Council Chambers, and Community Room  
Government Facilities**

625 N. San Vicente Boulevard  
West Hollywood, CA 90069

Size: Building 47,741 SQ. FT., Plinth Parking 31,560 SQ. FT.

*Facility Description:* Library, Council Chambers, Plinth, and Community Meeting Space: STEEL FRAME CONSTR WITH MASONRY EXTERIOR/PVC MEMBRANE ROOF  
Used for City Council meetings, public meetings, recreation activities, special events, cable TV operations, and community events.

*Primary Contact:* Park Office 323-848-6400

**West Hollywood 5 Story Parking Structure  
Government Facilities**

625 N. San Vicente Boulevard  
West Hollywood, CA 90069

Size: 137,386 SQ. FT.

*Facility Description:* Parking Lot and Sport Courts  
Used for Parking.

*Primary Contact:* Park Office 323-848-6400

**West Hollywood Park Various Structures  
Government Facilities**

647 N. San Vicente Boulevard  
West Hollywood, CA 90069

Size: 8,505 SQ. FT.

*Facility Description:* West Hollywood Park Various Structures/Recreation Building, Pool/Shower, Restroom: MASONRY CONST/WOOD ROOF

Tiny Tots, Equipment Shed, Storage Shed: ALL COMB (WOOD FRAME)

Used for Recreation Activities.

*Primary Contact:* Park Office 323-848-6400

**Werle Building  
Government Facilities**

626 N. Robertson Boulevard  
West Hollywood, CA 90069

Size: 8,570 SQ. FT.

*Facility Description:* Werle Building: ALL COMB (WOOD FRAME)  
Used for community and/or recreation activities.  
*Primary Contact:* Facilities Manager 323-848-6400

### **Plummer Park Community & Senior Center**

#### **Government Facilities**

7377 Santa Monica Boulevard  
West Hollywood, CA 90046  
Size: 1013 SQ. FT.

*Facility Description:* Plummer Park Community and Senior Services Center: ALL COMB (WOOD FRAME).  
Contains Park Offices, Social Service Agency Office, Classrooms, and Teen Center.  
Used for recreation activities, classes, senior activities, social services, special events, community events, and lectures. Can be used as an emergency shelter.  
*Primary Contact:* Park Office 323-848-6400

### **Plummer Park Fiesta Hall**

#### **Government Facilities**

7377 Santa Monica Boulevard  
West Hollywood, CA 90046  
Size: 8,890 SQ. FT.

*Facility Description:* Plummer Park Fiesta Hall: MASONRY CONST/WOOD ROOF  
Used for recreation activities, meetings, special events. Could be used for an emergency shelter.  
*Primary Contact:* Park Office 323-848-6400

### **Plummer Park Various Structures**

#### **Government Facilities**

7377 Santa Monica Boulevard  
West Hollywood, CA 90046  
Size: 10,391 SQ. FT.

*Facility Description:* Plummer Park/Great Hall, Long Hall, Restroom, Pre-school, Tennis Shop: ALL COMB/WOOD FRAME  
Used for recreation activities.  
*Primary Contact:* Park Office 323-848-6400

### **Kings Road Park**

#### **Government Facilities**

1000 Kings Road,  
West Hollywood, CA 90069  
Size: 2,735 SQ. FT.

*Facility Description:* Kings Road Park/Conference Center and Arbors/Public Restrooms: ALL COMB (WOOD FRAME)  
Used for recreation activities, neighborhood meetings, community events. Could be utilized as an employee child care center in an emergency.  
*Primary Contact:* Parks and Recreation Division 323-848-6400

### **Hart Park**

#### **Government Facilities**

8341 De Longpre  
West Hollywood, CA 90069  
Size: 4,758 SQ. FT.

*Facility Description:* Hart Park/Actor's Studio: ALL COMB (WOOD FRAME)  
Used for recreation activities.  
*Primary Contact:* Recreation Division 323-848-6400

### **Formosa Park**

#### **Government Facilities**

1140 Formosa Avenue

West Hollywood, CA 90046

Size: 4,600 square feet of green space

*Facility Description:* Formosa Park is a passive use open-air neighborhood park with landscaping, trellis seating and gathering area, streambed fountain and public art display. *Primary Contact:* Park Office 323-848-6400

### **Havenhurst Park**

#### **Government Facilities**

1351 Havenhurst Drive

West Hollywood, CA 90069

Size: 6,000 square feet of green space

*Facility Description:* Havenhurst Park is a passive use open-air neighborhood park with landscaping, trellis seating and gathering area, two separate water features and public art display.

*Primary Contact:* Park Office 323-848-6400

### **Kings Road Parking Structure**

#### **Government Facilities**

8383 Santa Monica Boulevard

West Hollywood, CA 90069

Size: 65,760 SQ. FT.

*Facility Description:* Primary Employee Parking Structure.

*Primary Contact:* Parking Manager 323-848-6400

### **Fire Station #7**

#### **Fire Stations**

864 N. San Vicente Boulevard

West Hollywood, CA 90069

*Facility Description:* Los Angeles County Fire Station #7 - houses first responders and fire prevention offices. This structure is maintained by the County of Los Angeles.

*Primary Contact:* Fire Captain 310-358-3430

### **City Field Services Facility**

#### **Government Facilities**

7317 Romaine Street

West Hollywood, CA 90046

Size: 11,000 SQ. FT.

*Facility Description:* Maintenance Facility with large indoor storage (open bay) and office space: ALL COMB (WOOD FRAME) Used by facilities, streets, and landscape staff. Note: Entire facility is not being used, only first floor single story and two stories open bay area.

*Primary Contact:* Facilities Manager 323-848-6400

**Fire Station #8****Fire Stations**

7643 Santa Monica Boulevard

West Hollywood, CA 90046

*Facility Description:* Los Angeles County Fire Station #8 - houses first responders. This structure is maintained by the County of Los Angeles.

*Primary Contact:* Fire Captain 323-654-5445

**West Hollywood Sheriff's Station****Police Station**

780 N. San Vicente Boulevard

West Hollywood, CA 90069

*Facility Description:* Los Angeles County Sheriff's Department/West Hollywood Station - houses first responders. This structure is maintained by the County of Los Angeles.

*Primary Contact:* Watch Commander 310-855-8850

Table 7. Summary of Critical Facility List

<b>Name</b>	<b>Facility Type</b>	<b>Critical Rank</b>	<b>Hazards Likely to Cause Property Damage</b>
City Hall	Government Facilities	Critical	EQ, Flooding, Winds, Fire
City Hall Automated Parking Structure (under construction)	Government Facilities	Critical	EQ, Flooding, Winds, Fire
West Hollywood Library	Government Facilities	Critical	EQ, Flooding, Winds, Fire
West Hollywood Park Auditorium	Government Facilities	Critical	EQ, Flooding, Winds, Fire
WH Park Various Structures	Government Facilities	High	EQ, Flooding, Winds, Fire
PP Community & Senior Center	Government Facilities	Critical	EQ, Flooding, Winds, Fire, Dam Failure
PP Fiesta Hall	Government Facilities	Critical	EQ, Flooding, Winds, Fire, Dam Failure
PP Various Structures	Government Facilities	High	EQ, Flooding, Winds, Fire, Dam Failure
Werle Building	Government Facilities	High	EQ, Flooding, Winds, Fire
Hart Park	Government Facilities	High	EQ, Flooding, Winds, Fire, Landslide
Formosa Park	Government Facilities	High	EQ, Flooding, Winds, Fire

Havenhurst Park	Government Facilities	High	EQ, Flooding, Winds, Fire
Kings Road Parking Structure	Government Facilities	Critical	EQ, Flooding, Winds, Fire
Kings Road Park	Government Facilities	High	EQ, Flooding, Winds, Fire
Fire Station #7	Fire Stations	Critical	EQ, Flooding, Winds, Fire
City Field Services Facility	Government Facilities	Critical	EQ, Flooding, Winds, Fire
Fire Station #8	Fire Stations	Critical	EQ, Flooding, Winds, Fire
West Hollywood Sheriff's Station	Police Stations	Critical	EQ, Flooding, Winds, Fire

Housing Inventory by Unit Type

<i>Dwelling Type:</i>	<i>1990</i>	<i>2000</i>	<i>2008</i>
Single-Family Dwelling	2,517	2,496	1,019
Multi-Family Dwelling	21,244	21,660	23,554

In addition, there are various facilities within the City that house vulnerable populations. A sampling of these structures is provided by the West Hollywood Housing Division below:

Table 8. Affordable Housing for Vulnerable Populations (Updated 2015)

<b>Building Name</b>	<b>Building Address</b>	<b>Units</b>	<b>Tenant Type</b>	<b>Year Built</b>	<b>Owner</b>
Fairfax Towers	1222 Fairfax Avenue	150	Senior	1982	Goldrich & Kest Industries, LLC
West Knoll Senior	838 West Knoll Drive	136	Senior	1974	Los Angeles County Housing Authority
Palm Senior	959 Palm Avenue	127	Senior	1979	Los Angeles County Housing Authority
Kings Road Senior	800-801 Kings Road	106	Senior	1980	Los Angeles County Housing Authority
Movietown Square	7302 Santa Monica Boulevard	76	Senior	2016	WH Community Housing Corp.
Hayworth House	1234 Hayworth Avenue	48	Senior	2012	WH Community Housing Corp.
Sierra Bonita Apartments	7530 Santa Monica Boulevard	42	Disabled	2010	WH Community Housing Corp.
Laurel/Norton Apartments	1213-1217 Laurel Avenue	41	Family/Senior	1994	WH Community Housing Corp.
Palm View	976-980 Palm Avenue	40	HIV/AIDS	1998	WH Community Housing Corp.
Courtyard on La Brea	1145 La Brea Avenue	32	Special Needs	2013	WH Community Housing Corp.
Havenhurst Apartments	1435 Havenhurst Drive	24	Disabled	2004	WH Community Housing Corp.
Harper Community	1260 Harper Avenue	22	HIV/AIDS	1993	WH Community Housing Corp.



Gardner Apartments	916 Gardner Street	18	Senior	1991	Affordable Living for the Aging
Janet L. Witkin Center	937 Fairfax Avenue	17	Senior	2014	Affordable Living for the Aging
Harper Avenue Partners	1276-1280 Harper Avenue	17	Senior	1925(6)/1990(11)	WH Community Housing Corp.
Detroit Senior Apartments	1155 Detroit Street	10	Senior	2001	WH Community Housing Corp.
Menorah Terrace	1123 Fuller Avenue	39	Senior	1982	Menorah Housing
	<b>Total</b>	<b>945</b>			

Table 9. Affordable Housing for General Lower Income Populations (Updated 2015)

Building Name	Building Address	Units	Tenant Type	Year Built	Owner
Fountain Avenue	7292 Fountain avenue	28	Very-Low & Low Income	1930	WH Community Housing Corp.
7214 Fountain	7214 Fountain	21	Low & Moderate Income	1961	WH Community Housing Corp. (inclusionary)
7719 Willoughby	7719 Willoughby Avenue	12	Very-Low & Low Income	1954	WH Community Housing Corp.
901 Genesee	901 Genesee Avenue	12	Very-Low & Low Income	1954	WH Community Housing Corp.
1225 Genesee	1225 Genesee	10	Low & Moderate Income	1958	LA Housing Partnership (inclusionary)
Detroit Family Apartments	1212 Detroit Street	10	Very-Low & Low Income	2001	WH Community Housing Corp.
Detroit Bungalows	1123 Detroit Street	8	Very-Low & Low Income	1923	WH Community Housing Corp.
The Firehouse	954 Hancock Avenue	3	Very-Low & Low Income	2004	LA Housing Partnership
	<b>Total</b>	<b>104</b>			

**4.3.1.3 Non-Critical Facility List – High Economic Importance**

There are no repetitive loss properties in the City of West Hollywood. The following is a list of the Non-Critical Facilities in the City of West Hollywood.

**Sunset Parking Lot  
High Economic Importance**

8775 Sunset Boulevard  
West Hollywood, CA 90069

Size: 78 spaces

*Facility Description:* City owned parking lot on Sunset Boulevard. Generates revenue.

*Primary Contact:* Parking Manager 323-848-6400

**Spaulding Parking Lot  
High Economic Importance**

7718 Santa Monica Boulevard  
West Hollywood, CA 90046

Size: 28 spaces

*Facility Description:* City owned parking lot on Santa Monica Blvd. Generates revenue.

*Primary Contact:* Parking Manager 323-848-6400

**La Jolla Havenhurst Parking Lot**  
**High Economic Importance**

1042-44 La Jolla Avenue  
West Hollywood, CA 90046  
Size: 28 spaces

*Facility Description:* City leased parking lot on La Jolla. Generates revenue.

*Primary Contact:* Parking Manager 323-848-6400

**El Tovar Parking Lot**  
**High Economic Importance**

8752 El Tovar Place  
West Hollywood, CA 90069  
Size: 44 spaces

*Facility Description:* City owned parking lot on El Tovar. Generates revenue.

*Primary Contact:* Parking Manager 323-848-6400

**Melrose Parking Lot**  
**High Economic Importance**

8759 Melrose Avenue  
West Hollywood, CA 90069  
Size: 15 spaces

*Facility Description:* City leased parking lot on Melrose Avenue. Generates revenue.

*Primary Contact:* Parking Manager 323-848-6400

**Queens City Parking Lot**  
**High Economic Importance**

8459 Sunset Boulevard  
West Hollywood, CA 90069  
Size: 34 spaces

*Facility Description:* City leased parking lot on Sunset Boulevard. Generates revenue.

*Primary Contact:* Parking Manager 323-848-6400

**Orange Grove Parking Lot**  
**High Economic Importance**

1114 N. Orange Grove  
West Hollywood, CA 90046  
Size: 45 spaces

*Facility Description:* City leased parking lot on Orange Grove. Generates revenue.

*Primary Contact:* Parking Manager 323-848-6400

**West Hollywood Five Story Parking Lot**  
**High Economic Importance**

625 N. San Vicente Boulevard  
West Hollywood, CA 90069  
Size: 326 spaces

*Facility Description:* City owned parking lot at West Hollywood Park. Generates revenue.

*Primary Contact:* Parking Manager 323-848-6400

City parking lots do not generally contain structures, yet damage to the lots or billboards can cause loss of revenue to the City.

Table 10. Summary of Non-Critical Facilities of High Economic Importance

<b>Name</b>	<b>Facility Type</b>	<b>Critical Rank</b>	<b>Hazards Likely to Cause Property Damage</b>
Sunset Parking Lot/Billboard	High Economic Importance	High	EQ, Winds
Spaulding Parking Lot/Billboard	High Economic Importance	High	EQ, Winds
La Jolla/Havenhurst Parking Lot	High Economic Importance	High	EQ, Winds
El Tovar Parking Lot	High Economic Importance	High	EQ, Winds
Melrose Parking Lot	High Economic Importance	High	EQ, Winds
Queens City Lot	High Economic Importance	High	EQ, Winds
Orange Grove Parking Lot	High Economic Importance	High	EQ, Winds
West Hollywood Five Story Parking Lot	High Economic Importance	High	EQ, Winds

Table 11. Principal Property Tax Payers of 2014

<b>Taxpayer</b>	<b>Taxable Assessed Value</b>	<b>Percentage of Total Taxable Assessed Value</b>
Mani Brothers 9200 Sunset De LLC	\$ 231,213,166	2.80%
Pacific Red LLC	187,661,315	2.27%
Pacific Design Center LLC	169,840,516	2.06%
Wolverines Owner LLC	166,640,800	2.02%
BPRC Millennium LLC	126,879,887	1.54%
CLPF West Hollywood LP	85,326,635	1.03%
Studio Lending Group LLC	71,277,955	0.86%
NWLWH LLC	63,471,479	0.77%
LHO LE PARC LP	54,799,683	0.66%
West Hollywood Retail Owner Inc.	50,796,000	0.61%
Total	\$ 1,207,907,436	14.62%

Source: HdL Coren & Cone.

#### **4.3.1.4 Individual Hazard Vulnerability Analysis**

This section serves to identify each hazard confronting the community and its vulnerabilities to that hazard. All maps for specific hazards are located in the appropriate section of the appendices (see "Table of Contents" for the appendix).

### **Natural Hazards**

#### **1. Dam Failure**

*a. Population.*

In the City's 1.9 square miles, only a small portion of the community's population is vulnerable to dam failure. Less than 1 square mile of area would be affected, and substantially less than the City's 34,399 residents would be impacted.

*b. Critical Facilities.*

Critical Facilities on the east, such as Plummer Park, are vulnerable to the reservoir or dam failing, and critical facilities on the west, such as West Hollywood Park, are vulnerable to property damage from steel tanks failing. The water is estimated to only be a few inches at most so the damage would be minor.

*c. Non-Critical Facilities.*

Non-Critical Facilities on the east, such as commercial and residential properties, are vulnerable to the reservoir or dam failing, and non-critical facilities on the west, such as commercial and residential properties, are vulnerable to property damage from steel tanks failing. The water is estimated to only be a few inches at most so the damage would be minor.

#### **2. Earthquake**

*a. Population.*

The entire population of 34,399 is vulnerable to an earthquake. In addition, on a busy weekend night, thousands more visitors are present in the City's restaurants and clubs on Sunset Strip.

*b. Critical Facilities.*

Every structure is potentially at risk during an earthquake. The specific critical facilities vulnerable in City of West Hollywood include City Hall, City Parks, City Maintenance Facilities, City Parking Structures, Residential Properties, Commercial Properties, High-Occupancy Buildings, and Senior Facilities. While difficult to predict the exact amount of damage, the area could experience something similar to the Northridge Earthquake which caused an estimated \$20 billion in damage.

*c. Non-Critical Facilities.*

The specific Non-Critical Facilities vulnerable in City of West Hollywood include various residential and commercial properties, social service agencies, and government resources. While difficult to predict the exact amount of damage, the area could experience something similar to the Northridge Earthquake which caused an estimated \$20 billion in damage.

#### **3. Extreme Heat/Drought**

*a. Population.*

All of the West Hollywood population can be negatively impacted by extreme heat and water shortages due to drought. Seniors, infants, and other especially vulnerable populations would be affected more dramatically.

Currently the majority of the senior population, defined as those 62 years of age and older, (17.8% of the City's population or a little over 6,000 residents) resides in the eastern portion of the City. Temperatures above 90 degrees trigger City staff to open cooling centers at City parks.

*b. Critical Facilities.*

This hazard affects people and the ability to provide resources more than it affects actual structures.

*c. Non-Critical Facilities.*

This hazard affects people and the ability to provide resources more than it affects actual structures.

#### **4. Flash Flooding/Storms**

*a. Population.*

Residents and businesses located on the northern slopes of the City are the most vulnerable to damage from hillside flooding. Although the area is less than one square mile, several high occupancy buildings, hotels, and residential structures are located on the slope.

*b. Critical Facilities.*

The specific critical facilities vulnerable in City of West Hollywood include key commercial and residential properties in the northern portion of the City, such as hotels, businesses on the Sunset Strip, high occupancy buildings, and residential structures.

*c. Non-Critical Facilities.*

The specific Non-Critical Facilities vulnerable in the City of West Hollywood include various smaller commercial and residential properties.

#### **5. Flooding**

*a. Population.*

The magnitude of a flooding event is limited since it most likely would not affect the entire City. Fortunately, the City is situated on relatively high ground and does not have a major waterway subject to flood hazards. However, the City is situated at the base of the mountains with steep narrow canyons that drain into the City. No portions of West Hollywood lie within a federally designated mandatory flood insurance zone. Residents and businesses are unlikely to be affected by this post construction of the Los Angeles County Holly Hills Storm Drain Project.

*b. Critical Facilities.*

Critical facilities could be affected by a very large flood and include various structures; although no portions of West Hollywood lie within a federally designated mandatory flood insurance zone.

*c. Non-Critical Facilities.*

Non-Critical facilities could be affected by a very large flood and include various structures; although no portions of West Hollywood lie within a federally designated mandatory flood insurance zone.

#### **6. High Winds/Straight Line Winds**

*a. Population.*

Very few injuries to people are recorded during the types of high winds that Southern California experiences. Most damage is to property, but roads blocked by fallen trees during a windstorm may have severe consequences to people who need access to emergency services.

*b. Critical Facilities.*

All critical facilities are at risk for damage from severe winds which can

damage structures, roads, traffic signals, and streetlights. The area affected is 1.9 square miles. In the storms and winds of 2005, the City experienced over \$30,000 of property damage.

*c. Non-Critical Facilities.*

All Non-Critical Facilities are at risk for damage from severe winds. The area affected is 1.9 square miles. Industry and commerce can suffer economic losses from interruptions in electric services and from extended road closures as well as sustaining direct property damage.

## **7. Landslide**

*a. Population.*

Residents and businesses located on the northern slopes of the City are the most vulnerable to damage from landslides. Although the area is less than one square mile, several high occupancy buildings, hotels, and residential structures are located on the slope.

*b. Critical Facilities.*

The specific critical facilities vulnerable in the City of West Hollywood include key commercial and residential properties in the northern portion of the City, such as hotels, businesses on the Sunset Strip, high occupancy buildings, and residential structures. The area affected is less than one square mile.

According to the USGS, landslides cause \$1-2 billion in damages and more than 25 fatalities on average each year.

*c. Non-Critical Facilities.*

Non-Critical Facilities in the City that are near or close to the Hollywood Hills are susceptible to debris damage from a landslide. The area affected is less than one square mile. According to the USGS, landslides cause \$1-2 billion in damages and more than 25 fatalities on average each year.

## **8. Wildfires**

*a. Population.*

The City of West Hollywood sits at the base of the "Hollywood Hills" in the City of Los Angeles. The Hollywood Hills is densely populated by mostly single family homes and apartment buildings. Roads are difficult to navigate, and there is a lot of brush in the area. A fire in the Hollywood Hills could easily spread to the northern region of the City of West Hollywood which is also densely populated making large evacuations difficult.

*b. Critical Facilities.*

Fire growth is related to building density, types of building construction, the presence and amount of flammable materials, wind speed and direction, width of fire breaks, water supply, time of fire department arrival, and available fire fighter resources. Fortunately in this regard, the Salt Lake oil field is isolated along Beverly Boulevard at the southwest margin of the City. There are no major petrochemical or industrial plants. Specific Critical Facilities vulnerable in the City of West Hollywood include major commercial and residential properties on and around the Sunset Strip. A small area along the northernmost edge of the City is located within a CAL FIRE-defined Moderate Wildfire Hazard Severity Zone. This area is at the southern fringe of the Hollywood Hills. The Hollywood Hills, located immediately adjacent to West Hollywood to the north (but within the city limits of Los Angeles and Beverly Hills), are High and Very High Wildfire Hazard Severity Zones.

*c. Non-Critical Facilities.*

The specific Non-Critical Facilities vulnerable in the City of West Hollywood include major commercial and residential properties on and around the Sunset Strip. The area affected is less than one square mile.

**Technology/Utility Related Hazards**

**1. Energy Emergency**

*a. Population.*

An energy emergency affecting the entire 1.9 square miles of the City would affect approximately 34,399 residents. In addition, several thousand visitors can be present on a busy weekend evening, especially on Sunset Strip.

*b. Critical Facilities.*

All government facilities can be affected by rolling blackouts and power failures. It is predicted that the State of California will experience more rolling blackouts in the future.

*c. Non-Critical Facilities.*

All neighborhoods in West Hollywood are vulnerable to rolling blackouts and power outages.

**2. Water Line Emergency**

*a. Population.*

Water line emergencies generally affect a few hundred residents at a time. A water line emergency affecting the entire 1.9 square miles of the City would impact approximately 34,399 residents. In addition, several thousand visitors can be present on a busy weekend evening, especially on Sunset Strip.

*b. Critical Facilities.*

All government facilities can be affected by water line emergencies.

*c. Non-Critical Facilities.*

All neighborhoods in West Hollywood are vulnerable to water line emergencies.

**3. Gas Line Emergency**

*a. Population.*

Gas line emergencies generally affect a few hundred residents at a time. A gas line emergency affecting the entire 1.9 square miles of the City would affect approximately 34,399 residents. In addition, several thousand visitors can be present on a busy weekend evening, especially on Sunset Strip.

*b. Critical Facilities.*

All government facilities can be affected by gas line emergencies.

*c. Non-Critical Facilities.*

All neighborhoods in West Hollywood are vulnerable to gas line emergencies.

**4. Sewer Line Emergency**

*a. Population.*

Sewer line emergencies generally affect a few hundred residents at a time. A sewer line emergency affecting the entire 1.9 square miles of the City would impact approximately 34,399 residents. In addition, several thousand visitors can be present on a busy weekend evening, especially on Sunset Strip.

*b. Critical Facilities.*

All government facilities can be affected by sewer line emergencies.

*c. Non-Critical Facilities.*

All neighborhoods in West Hollywood are vulnerable to sewer line emergencies.

#### **4.3.2 Potential Loss Estimation**

##### **4.3.2.1 Facility Replacement Cost/Personal Property/BI/Rents Estimation**

This section describes the replacement costs and economic impacts from lost facilities. All listed values are current as of January 23, 2015, and are from the PARSAC property schedule prepared by Alliant Insurance Services.

###### **Sunset Parking Lot**

###### **High Economic Importance**

Insurance Value - Facility Replacement Cost/Personal Property/BI/Rents: \$42,341

\$420,000 annual billboard revenue

\$174,262 annual transient parking revenue

\$400,000 in improvements

Description of Economic Impact: Damage to City parking lots would result in a loss of revenue. In addition, a City billboard generating revenue is also located at this site.

###### **Spaulding Parking Lot**

###### **High Economic Importance**

Insurance Value - Facility Replacement Cost/Personal Property/BI/Rents: \$15,781

\$80,000 annual billboard revenue

\$32,659 annual transient parking revenue

\$300,000 in improvements

Description of Economic Impact: Damage to City parking lots would result in a loss of revenue.

###### **La Jolla Havenhurst Parking Lot**

###### **High Economic Importance**

Insurance Value - Facility Replacement Cost/Personal Property/BI/Rents: N/A

\$13,000 in improvements

Description of Economic Impact: Damage to City parking lots would result in a loss of revenue.

###### **El Tovar Parking Lot**

###### **High Economic Importance**

Insurance Value - Facility Replacement Cost/Personal Property/BI/Rents: N/A

\$212,648 annual transient parking revenue

\$250,000 in improvements

Description of Economic Impact: Damage to City parking lots would result in a loss of revenue.

###### **Melrose City Lot**

###### **High Economic Importance**

Insurance Value - Facility Replacement Cost/Personal Property/BI/Rents: N/A

\$2,000 in improvements

Description of Economic Impact: Damage to City parking lots would result in a loss of revenue.

###### **Queens Parking Lot**

###### **High Economic Importance**

Insurance Value - Facility Replacement Cost/Personal Property/BI/Rents: \$16,681

\$148,733 annual transient parking revenue



\$278,175 in improvements

Description of Economic Impact: Damage to City parking lots would result in a loss of revenue.

**Orange Grove Parking Lot  
High Economic Importance**

Insurance Value - Facility Replacement Cost/Personal Property/BI/Rents: \$15,781  
\$49,511 annual transient parking revenue

\$225,000 in improvements

Description of Economic Impact: Damage to City parking lots would result in a loss of revenue.

**Doheny Parking Lot  
High Economic Importance**

Insurance Value - Facility Replacement Cost/Personal Property/BI/Rents: \$16,336  
\$95,523 annual transient parking revenue

\$200,000 in improvements

Description of Economic Impact: Damage to City parking lots would result in a loss of revenue.

**City Hall  
Government Facilities**

Insurance Value - Facility Replacement Cost/Personal Property/BI/Rents:  
\$15,443,581

Description of Economic Impact: The loss of this structure would critically impact the City's ability to respond to the community's needs.

**West Hollywood Park Auditorium  
Government Facilities**

Insurance Value - Facility Replacement Cost/Personal Property/BI/Rents: \$3,945,650

Description of Economic Impact: Damage to this facility would result in a reduction of recreation services to the community.

**West Hollywood Park Library  
Government Facilities**

Insurance Value - Facility Replacement Cost/Personal Property/BI/Rents:  
\$28,514,935

Description of Economic Impact: Damage to this facility would result in a reduction of public services to the community. In addition, this facility is used for public meetings such as City Council meetings and Commission meetings.

**West Hollywood Park 5-Story Parking Structure  
Government Facilities**

Insurance Value - Facility Replacement Cost/Personal Property/BI/Rents:  
\$12,137,625

\$1,000,000 annual parking revenue

Description of Economic Impact: Damage to City parking lots would result in a loss of revenue. In addition, damage to this facility would limit the amount of parking available for visitors to facilities located at West Hollywood Park, including, the Library and City Council Chambers.

### **Plummer Park Community & Senior Center**

#### **Government Facilities**

Insurance Value - Facility Replacement Cost/Personal Property/BI/Rents: \$4,040,372

Description of Economic Impact: Damage to this facility would result in a reduction of social services and recreations services to the community.

### **Plummer Park Fiesta Hall**

#### **Government Facilities**

Insurance Value - Facility Replacement Cost/Personal Property/BI/Rents: \$5,718,166

Description of Economic Impact: Damage to this facility would result in a reduction of recreation services to the community.

### **Plummer Park Various Structures (Great Hall, Long Hall, Restroom, Pre-School, Tennis Shop)**

#### **Government Facilities**

Insurance Value - Facility Replacement Cost/Personal Property/BI/Rents: \$1,313,476

Description of Economic Impact: Damage to this facility would result in a reduction of recreation services to the community.

### **West Hollywood Park Various Structures (Recreation Building, Pool/Shower, Restroom, Tiny Tots)**

#### **Government Facilities**

Insurance Value - Facility Replacement Cost/Personal Property/BI/Rents: \$1,165,228

Description of Economic Impact: Damage to this facility would result in a reduction of recreation services to the community.

### **Werle Building**

#### **Government Facilities**

Insurance Value - Facility Replacement Cost/Personal Property/BI/Rents: \$1,193,113

Description of Economic Impact: Damage to this facility would result in a reduction of recreation services and social services to the community.

### **Hart Park/Actor's Studio**

#### **Government Facilities**

Insurance Value - Facility Replacement Cost/Personal Property/BI/Rents: \$896,334

Description of Economic Impact: Damage to this facility would result in a reduction of recreation services to the community.

### **Kings Road Parking Structure**

#### **Government Facilities**

Insurance Value - Facility Replacement Cost/Personal Property/BI/Rents: \$5,016,901

\$500,000 annual parking revenue

Description of Economic Impact: Damage to City parking lots would result in a loss of revenue that the City utilizes to pay debt service.

### **Laurel House**

#### **Government Facilities**

Insurance Value - Facility Replacement Cost/Personal Property/BI/Rents: \$1,584,452

Description of Economic Impact: This facility is currently slated to be converted into a community center and housing. Damage to this structure would impede the progress of this project.

**Kings Road Park  
Government Facilities**

Insurance Value - Facility Replacement Cost/Personal Property/BI/Rents: \$312,059  
Description of Economic Impact: Damage to this facility would result in a reduction of recreation services to the community.

**City Field Services Facility  
Government Facilities**

Insurance Value - Facility Replacement Cost/Personal Property/BI/Rents: \$3,506,695  
Description of Economic Impact: Damage to this facility would result in a reduction of facilities, landscape, and maintenance staff to provide services to the City.

**Russian Library/Block-by-Block Office  
Government Facilities**

Insurance Value - Facility Replacement Cost/Personal Property/BI/Rents: \$782,615  
Description of Economic Impact: Damage to this facility would result in a reduction of City social facilities, and critically impair the ability of Block-by-Block (third party security firm hired by the City) to patrol areas of the City.

**Fire Station #7  
Fire Stations**

Insurance Value - Facility Replacement Cost/Personal Property/BI/Rents: This structure is the responsibility of the County of Los Angeles.  
Description of Economic Impact: The loss of this structure would critically impair the ability of the County of Los Angeles Fire Department to respond to an emergency.

**Fire Station #8  
Fire Stations**

Insurance Value - Facility Replacement Cost/Personal Property/BI/Rents: This structure is the responsibility of the County of Los Angeles.  
Description of Economic Impact: The loss of this structure would critically impair the ability of the County of Los Angeles Fire Department to respond to an emergency.

**West Hollywood Sheriff's Station  
Police Stations**

Insurance Value - Facility Replacement Cost/Personal Property/BI/Rents: This structure is the responsibility of the County of Los Angeles.  
Description of Economic Impact: The loss of this structure would critically impair the ability of the County of Los Angeles Sheriff's Department to respond to an emergency.

**City Hall Automated Parking Structure  
Government Facilities**

Insurance Value - Facility Replacement Cost/Personal Property/BI/Rents: N/A (at this time)  
\* This facility is currently under construction; value at the time of completion is estimated at \$15 million. The facility is approximately one-half complete, estimated value at this time is \$7.5 million.  
Description of Economic Impact: Damage to City parking lots would result in a loss of revenue that the City utilizes to pay debt service.

## **Private Structure Damage Cost and Effects on City's Revenue**

While difficult to estimate the potential loss for private structures, according to Raimi and Associates 2010, there are 586.3 acres of residential and 209.2 acres of commercial development in the City of West Hollywood.

The City's three major sources of revenue are transient occupancy tax, property tax, and sales tax. Any large disaster in the City (particularly an earthquake), could result in significant loss of revenue for the City, if properties were destroyed, businesses closed, and/or hotels were damaged.

There are 18 hotels located within the City, with a total of 2,088 hotel rooms. Many of the hotels in the City are over 100 rooms and include some of the more popular hotels in the Los Angeles region. The City's largest source of revenue is transient occupancy tax (TOT), paid by hotel guests. In fiscal-year 2013/14 the City collected \$18,982,361 in TOT, approximately 21% of the City's total General Fund revenue of \$89 million in the same year.

The assessed value of residential property is \$4,880,737,922, the assessed value of commercial property is \$2,873,271,627, and the value of all other property is \$509,902,544; for a total assessed value of \$8,263,912,093 (CAFR for the fiscal year ending 6/30/14). Approximately \$1.2 billion (14%) of the total assessed value is concentrated within 18 buildings in the City, which are held by the top 10 taxpayers in the City. In fiscal-year 2013/14 the City received \$17,247,544 in property tax.

The City has a variety of commercial businesses that generate sales tax, include hundreds of restaurants and bars/clubs (many high-end), boutique retail stores, big-box retailers (Target and Best Buy), supermarkets, and design showrooms/retailers (many located in the Pacific Design Center). In fiscal-year 2013/14 the City received \$13,799,302 in sales tax.

### **4.3.2.2 Individual Hazard Economic Loss Estimation**

The kind and level of damage to buildings, infrastructure, critical facilities, and other activities (such as evacuation and emergency services) is difficult to estimate accurately. A limitation to generating specific estimates includes not knowing the exact impact of a potential hazard. For example, it would depend on magnitude of earthquake, location of the epicenter, duration of the shaking, types of structures affected, time of day, etc. to start to accurately predict exact financial loss. Facility Replacement Cost/Personal Property/BI/Rents are detailed in Section 4.3.2.1 and the top ten taxpayers are listed in 4.3.1.3.

This section describes the potential losses due to each hazard confronting the community or jurisdiction:

#### **1. Dam Failure**

A dam failure could cause flooding and water damage to structures resulting in loss of revenue and ability to provide emergency, essential, and non-essential services. The total geographical area affected is less than one square mile.

## **2. Earthquake**

An earthquake can cause damage to structures, utilities, transportation routes, and communication resulting in loss of revenue and ability to provide emergency, essential, and non-essential services. In addition, recovery includes substantial debris removal issues and multiple building inspections. The area affected is the entire 1.9 square miles of the City.

## **3. Extreme Heat/Drought**

An extreme heat episode can cause damage to utilities and impede the City's ability to provide emergency, essential, and non-essential services. The State is also in a current drought. The area affected is the entire 1.9 square miles of the City.

## **4. Flash Flooding**

Flash flooding can cause damage to structures, utilities, transportation routes, and communication resulting in loss of revenue and ability to provide emergency, essential, and non-essential services. In addition, recovery includes substantial debris removal issues and multiple building inspections. The total area affected is less than one square mile.

## **5. Flooding**

Flooding can cause damage to structures, utilities, transportation routes, and communication resulting in loss of revenue and ability to provide emergency, essential, and non-essential services. In addition, recovery includes substantial debris removal issues and building inspections. Since the construction of the Los Angeles County Holly Hills Storm Drain, no portions of West Hollywood lie within a federally designated mandatory flood insurance zone.

## **6. High Winds/Straight Line Winds**

High winds can cause damage to structures, utilities, transportation routes, and communication resulting in loss of revenue and ability to provide emergency, essential, and non-essential services. In addition, winds can aggravate fires and intensify the damage and the resources needed to respond. The area affected is the entire 1.9 square miles of the City.

## **7. Landslide**

Landslides can cause damage to structures, utilities, transportation routes, and communication resulting in loss of revenue and ability to provide emergency, essential, and non-essential services. In addition, landslides generate many debris removal issues. The total area affected is less than one square mile.

## **8. Wildfires**

Wildfires can cause damage to structures, utilities, transportation routes, and communication resulting in loss of revenue and ability to provide emergency,

essential, and non-essential services. The total area affected is less than one square mile.

### **9. Energy Emergency**

While rolling blackouts do not cause the devastation of other hazards, they can severely impact the City's ability to provide emergency and regular services to its constituents. In addition, if businesses are unable to operate due to a power loss, revenue is substantially affected. The area affected is the entire 1.9 square miles of the City.

### **10. Water Line Emergency**

While water service disruptions do not cause the devastation of other hazards, they can severely impact the City's ability to provide emergency and regular services to its constituents. In addition, if businesses are unable to operate, revenue is substantially affected. The area affected can be up to the entire 1.9 square miles of the City.

### **11. Gas Line Emergency**

While gas service disruptions do not cause the devastation of other hazards, they can severely impact the City's ability to provide emergency and regular services to its constituents. In addition, if businesses are unable to operate, revenue is substantially affected. The area affected can be up to the entire 1.9 square miles of the City.

### **12. Sewer Line Emergency**

While sewer service disruptions do not cause the devastation of other hazards, they can severely impact the City's ability to provide emergency and regular services to its constituents. In addition, if businesses are unable to operate, revenue is substantially affected. The area affected can be up to the entire 1.9 square miles of the City.

#### **4.3.2.3 Individual Hazard Human Loss Estimation**

The following description of human loss is severely limited by the lack of the ability of City personnel to predict the magnitude, the location, the time of day, and the duration of the hazard.

##### **1. Dam Failure**

A dam failure can cause fatalities, injuries, displaced populations, and public health issues.

##### **2. Earthquake**

An earthquake can cause fatalities, injuries, displaced populations, and public health issues.

### **3. Extreme Heat/Drought**

A period of extreme heat can cause fatalities, injuries, displaced populations, and public health issues.

### **4. Flash Flooding**

Flash flooding can cause fatalities, injuries, displaced populations, and public health issues.

### **5. Flooding**

Flooding can cause fatalities, injuries, displaced populations, and public health issues.

### **6. High Winds/Straight Line Winds**

Severe winds can cause fatalities, injuries, displaced populations, and public health issues.

### **7. Landslide**

Landslides can cause fatalities, injuries, displaced populations, and public health issues.

### **8. Wildfires**

Wildfires can cause fatalities, injuries, displaced populations, and public health issues.

### **9. Energy Emergency**

Energy emergencies can cause fatalities, injuries, displaced populations, and public health issues.

### **10. Water Line Emergency**

Water line emergencies can cause fatalities, injuries, displaced populations, and public health issues.

### **11. Gas Line Emergency**

Gas line emergencies can cause fatalities, injuries, displaced populations, and public health issues.

### **12. Sewer Line Emergency**

Sewer line emergencies can cause fatalities, injuries, displaced populations, and public health issues.

### **4.3.3 Analysis of Community Development Trends**

#### **4.3.3.1 Development History**

This section describes the development history for City of West Hollywood.

Development History:

The development of West Hollywood reflects its transition from a workers' village for the railroad lines at the turn of the twentieth century to the increasingly dense urban village of today. Characterized by the adjacency of residential districts to main regional thoroughfares such as Sunset Boulevard and La Brea Avenue, the City's commercial buildings are frequently adjacent to residential neighbors. Development is made up of the variety of building types including low rise commercial structures and multifamily structures (generally 1-2 stories) and some 7-8 story apartments dating from the 1920-30's, of wood-frame and masonry construction. All masonry buildings have undergone a systematic retrofitting program to bring them into compliance with recent building codes.

Only a few residential buildings remain from the original turn-of-the-century community. Most of the City's single family homes and duplexes are small and date from the 1920s. Development in the 1950s particularly changed the scale of some sections of West Hollywood, placing larger apartment buildings in existing neighborhoods and office towers along the Sunset Strip.

Typical current private development includes demolition of older single family and duplex buildings, and construction of higher density low to midrise apartment and condominium buildings (2-4 stories). There are also a significant number of commercial remodeling projects along the City's commercial streets, although these typically are performed for aesthetic reasons and do not significantly increase building area or intensify existing uses. Approximately 24 private development permits (10,000 SF or greater) were approved since 2010.

These new developments do not affect overall risk for the city. The City of West Hollywood has strict ordinances and building codes, and re-development generally occurs in the same geographic areas as similar buildings. These new developments do not require a change in priorities or create new hazard risks.

Capital Improvement Projects since Cityhood:

- Purchased, redesigned, and reconstruction of Santa Monica Boulevard
- Constructed the West Hollywood Community Center at Plummer Park
- Renovated William S. Hart Park
- Constructed Kings Road Park
- Constructed Kings Road Parking Structure
- Purchased and constructed a new City Hall
- Constructed Fire Station #7 in collaboration with the County of Los Angeles
- Constructed Holloway Park and Veteran's Memorial
- Purchased and renovated several public parking lots
- Reconstruction of Sunset Boulevard
- Constructed a new Library, Council Chambers, and Meeting Room



- Constructed a Five Story Parking Structure
- City Hall Automated Parking Structure
- Robertson Parking Lot
- Plummer Park improvements

#### **4.3.3.2 Future Development**

West Hollywood’s overall density of 18,998 persons per square mile is almost twice as much as any other local city and one of the densest in all of California. Its residential character is a blend of architectural richness and historic landmarks co-existing with the City’s eclectic businesses.

Tensions arising from the residents’ desire to retain parking spaces and personal privacy, and the resources the businesses need to survive require an ongoing balancing act. The City often works with a neighborhood and its surrounding commerce to discuss their differences and achieve solutions or compromise.

West Hollywood remains committed to providing market-rate and affordable housing for residents who face displacement due to rising housing costs. The West Hollywood Community Housing Corporation develops, owns, and operates more than 200 affordable housing units in the City financed, in part, by the City’s Housing Trust Fund. The West Hollywood Inclusionary Housing Program requires new residential developments to reserve a specific percentage of housing units for low and moderate-income persons. In an effort to develop other possibilities for more affordable housing within the community, the concept of providing incentives for mixed-use and live-work development was proposed by the participants at virtually each of the strategic planning sessions of the Strategic Plan development. In future development, mitigation measures are planned for and are in collaboration with the City’s General Plan, building and safety codes, state mandated programs, and traffic circulation requirements.

Future Capital Improvement Projects may include:

- West Hollywood Park improvements (currently under construction)
- Plummer Park improvements (currently in public hearings)
- Additional parking opportunities

## **Section 5 – Mitigation Strategy**

The committee reviewed Section 5 in its entirety and updated information as appropriate. All development shall be in compliance with the following:

### **5.1 Community Capability Assessment**

Storm Water Management Ordinances: Yes

Stream Management Ordinances: No

Zoning Management Ordinances: Yes

Subdivision Management Ordinances: Yes

Erosion Management Ordinances: Yes

Floodplain Management Ordinances: Yes

Floodplain Management Plan Published Date: 1988

Floodplain Management Last Delineation Date: 9/29/2008

Elevation Certificates Maintained: Yes

National Flood Insurance Program Community: No

Land Use Plan: Yes                      Land Use Plan Last Update: 5/1/2001

Community Zoned: Yes              Zoned Date: 5/1/2001

Established Building Codes: Yes

Building Codes Last Updated: 4/19/2010 – Ordinance No. 10-848

Type of Building Codes: International/Uniform

Local Electric Utilities: Southern California Edison

Local Water Utilities: LA City DWP/City of Beverly Hills

Local Sewage Treatment Utilities: Los Angeles City

Local Natural Gas Utilities: Southern California Gas

Local Telephone Utilities: Various

Fire Insurance Rating: West Hollywood is located within Fire Zone 3.

The Community Development and Public Works Departments maintain the City's various plans, ordinances, and projects.

### **5.1.1 Existing Plans, Policies, and Ordinances**

This section describes the existing plans, policies, and ordinances for the City of West Hollywood. One page 15 there is a table documenting how each Community Plan/Document is referenced in the Hazard Mitigation Plan and where it can be found in the appendix.

Existing Community Plans/Documents:

- City of West Hollywood Emergency Plan
- City of West Hollywood General Plan 2035 and Environmental Impact Report (EIR)
- City of West Hollywood Municipal Code: Title 13. Building Code
- City of West Hollywood Strategic Plan: Vision 2020
- "West Hollywood Is Prepared" - Disaster Preparedness Handbook
- City "Live Work Play" Emergency Preparedness Brochure – English and Russian
- Water Engineering & Technical Services Division (WETS): Emergency Response Plan – Emergency Notification List
- City of West Hollywood Ordinances
- City Critical Facilities List
- City Zoning Districts
- City Hazards Map
- City Fault Location and Precaution Zone Map

The City would like to increase its capability to utilize Geographic Information System (GIS) Mapping Technology to improve the capacity for community capability assessments. The City currently doesn't have a dedicated staff member with GIS expertise, so dedicating funds to providing GIS training to staff members will help improve the City's capacity to evaluate hazards. Additionally, the City would like to apply for more grant funds, yet there is a lack of grant writing experience among staff members. Providing training on grant writing techniques would help to improve the likelihood of receiving additional grant funds, which could be used to provide staff trainings or be directed towards other activities that improve the City's capacity to evaluate hazards. Conducting an assessment of the need for a climate adaptation plan could also help identify future risks based on expected changes due to climate change.

### **5.1.2 Prior Mitigation Actions and Projects**

This section serves to identify previous mitigation plans, projects and actions.

*Previous Mitigation Plans, Projects and Actions:*

The Community Development Department and the Public Works Department maintain the various plans, ordinances, and projects for which the City is responsible.

Previous mitigation projects include retrofits after the Northridge Earthquake, the renovation of Santa Monica Boulevard, the renovation of Sunset Boulevard, the update of traffic signals, and the County of Los Angeles' Holly Hills Storm Drain Project. In addition, the Public Works Department conducts annual maintenance of

tree roots affecting sewers and sidewalk/infrastructure repairs. Please see the mitigation project summary chart for more detail on page 99.

*Capital Improvement Projects:*

Capital projects are long-term improvement and maintenance programs designed to preserve the City's physical systems and facilities. The programs have been broad, and have included land and building acquisitions, development of off-street parking, street and sidewalk rehabilitation, sewer reconstruction, information technology systems development, public lighting projects, affordable housing development, and park acquisition and renovations. Capital improvements enhance economic development by attracting new businesses and new customers, bringing increased vitality to the City.

Capital projects may be funded from several sources, including operating capital, grants, joint agency endeavors, public/private partnerships, special district projects, and debt financing. Tax increases and special districts have historically been used to fund capital projects; however, legislation now places severe restrictions on cities' abilities to raise revenues in these ways. Special taxes must be approved by a two-thirds vote of the electorate; general taxes must be approved by a majority vote of the electorate.

### **5.1.3 Technical and Fiscal Resources**

This section describes the technical and fiscal resources for City of West Hollywood.

*Technical and Fiscal Resources:*

The City of West Hollywood has several departments that direct all resources including, Administrative Services (City Clerk, Human Resources), Communications (Public Information), City Attorney, City Manager (Legal Services), Economic Development, Community Development (Building and Safety, Current Planning, and Long Range and Mobility Planning), Finance (Accounting, Budget, Information Systems, and Revenue), Human Services (Housing and Rent Stabilization, Recreation, Social Services, and Special Events), Public Safety (Public Safety Administration, Emergency Management, Sheriff and Fire Departments), and Public Works (Code Compliance, Engineering, Facilities, and Parking). The City's fiscal resources are provided by the City's General Fund. The General Fund is supported by various tax and other revenue sources. City Departments submit two year budget plans which are approved by City Council.

Local funding sources for mitigation projects are limited but can include taxes and grants for Capital Improvement Projects and maintenance projects.

## 5.2 Mitigation Goals

### **Ensure Effective Response of Emergency Services to Hazards**

- Maintain adequate levels of law enforcement, fire protection, and emergency medical services to meet the needs of a changing population.
- Cooperate and collaborate with neighboring jurisdictions, social services, and internal departments to maximize public safety and emergency services
- Support the County's existing mutual aid and automatic aid agreements for additional fire and police resources needed during an emergency.

### **Reduce impact (injury and damage) from natural and man-made hazards**

- Minimize the level of death, injury, property damage, economic and social dislocation and disruption of vital services as a result of a hazard
- Protect critical facilities from damage, loss of function, or inaccessibility in the event of a hazard
- Minimize exposure to hazardous materials

### **Maximize Internal and External Resources for Investment in Hazard Mitigation**

- Maximize the use of internal sources of funding for mitigation programs.
- Identify, apply for, and utilize external sources of funding for mitigation programs.
- Prioritize mitigation and capital improvement projects, based on cost effectiveness for projects that promote protecting life, property, and the environment.
- Plan for alternative sources of financing of damage and reconstruction.

### **Increase Public Understanding, Support, and Demand for Hazard Mitigation and Emergency Preparedness**

- Utilize existing and procure additional resources to adequately educate the residents and business owners of West Hollywood regarding hazard mitigation and emergency preparedness
- Provide printed materials and seminars to residents and business owners regarding non-structural hazard mitigation and other mitigation activities.

## 5.3 Mitigation Actions/Projects

The City of West Hollywood is 1.9 square miles and has no waterways, freeways, bridges, or dams. The City is not in a high hazardous fire area, and no portions of West Hollywood lie within a federally designated mandatory flood insurance zone.

Although storms, flooding, extreme heat or winds can affect the City, the most likely hazard that could inflict devastating damage on the City is an earthquake. As such, all City facilities have been built to code, and the City adopts a new building code approximately every three years. This code update includes updating seismic and structural requirements. Additionally, the City has completed a city-wide retrofit project where dozens of private and public buildings were retrofitted in 2015.

The Hazard Mitigation Planning Team reviewed the many mitigation projects that have already been conducted by the City. In addition, the General Plan has reviewed ground surface and shaking, seismically induced hazards, mudslides, landslides, expansive soils and rocks, collapsible soils, and ground subsidence. The General

Plan and EIR have examined flood and inundation, urban fires, building inventory, emergency response, and post-disaster recovery.

With the exception of a few vacant parcels, the City of West Hollywood is completely developed. The Unreinforced Masonry Retrofit Program addressed mitigating existing structures against a seismic event, and the Holly Hills Storm Drain Project mitigated against flood events. All new buildings and infrastructure have to comply with existing building codes and mitigation strategies. All plans for construction are reviewed by the Building and Safety Division and the Planning Division to ensure compliance with the Uniform Building Code, the General Plan, and City Ordinances.

The Hazard Mitigation Planning Team discussed the most likely hazards and potential mitigation projects at length in order to evaluate which mitigation activities would be most beneficial to the City. The team discussed modifying infrastructure, facilities, land use, seismic retrofitting, and updates to the General Plan and the Municipal Code. Fortunately, there are no major issues at this time that require changes to West Hollywood's Municipal Code. The Hazard Mitigation Planning Team will continue to meet and discuss the need for major mitigation projects as codes change, disasters occur, and the housing and commercial buildings age.

The ongoing benefits from conducting these mitigation activities greatly outweigh the financial and personnel costs. All projects attempt to mitigate most, if not all, hazards that West Hollywood may face.

City Staff make recommendations to the West Hollywood City Council regarding prioritization and funding of the above and future projects, yet the decision lies ultimately with the Councilmembers. Capital Improvement Projects and other Mitigation Projects receive public hearings as either part of the budgeting process or as individual staff items for City Council which allows for public input.

Mitigation Actions/Projects Status:

Mitigation Action/Project	Hazards Mitigated	Responsible Department	Status	Plan Goals Addressed				Cost	Funding Source	Timeframe
				Ensure Effective Response of Emergency Services to Hazards	Reduce impact from natural and man-made hazards	Maximize Internal and External Resources for Investment in Hazard Mitigation	Increase Public Understanding, Support, and Demand for Hazard Mitigation and Emergency Preparedness			
West Hollywood Emergency Management Plan: Updated as appropriate to reflect current conditions in the city and prepare for expected future growth.	All Hazards	Public Safety (Emergency Preparedness Coordinator)	Ongoing	X	X			\$5,000 every 3 years	City of West Hollywood General Fund	Every 3 years
Adoption of new City building code approximately every three years: Includes updating seismic and structural requirements.	All Hazards	Community Development (Building and Safety, Planning)	Ongoing		X			Part of Building and Safety Division's operating costs	City of West Hollywood General Fund	Every 3 years (next CA code adoption will be January 1 <sup>st</sup> , 2020)
General Plan: Reviews ground surface and shaking, seismically induced hazards, mudslides, landslides, expansive soils and rocks, collapsible soils, ground subsidence, flood and inundation, urban fires, building inventory, emergency response, and post-disaster recovery.	All Hazards	Community Development (Planning)	Ongoing	X	X	X	X	Part of Community Development Department's operating costs	City of West Hollywood General Fund	Every 3 years (Next CA code adoption in 2020)

Mitigation Action/Project	Hazards Mitigated	Responsible Department	Status	Plan Goals Addressed				Cost	Funding Source	Timeframe
				Ensure Effective Response of Emergency Services to Hazards	Reduce impact from natural and man-made hazards	Maximize Internal and External Resources for Investment in Hazard Mitigation	Increase Public Understanding, Support, and Demand for Hazard Mitigation and Emergency Preparedness			
Community Forums for Sheriff/Fire Services Assessment and Community Engagement: Communication forums between police and fire department staff and the community to obtain community feedback regarding service, service needs and, to engage the community in crime prevention.	All Hazards	Public Safety Department	Ongoing	X	X		X	No/low cost	City of West Hollywood General Fund	Annually
Public Safety Education: Host public education programs to enhance public safety about fire safety and crime prevention as well as emergency preparedness	All Hazards	Public Safety Department	Ongoing	X	X		X	No/low cost	City of West Hollywood General Fund	Annually
Sunset Boulevard Reconstruction: Repave roadway, fix broken and damaged sidewalks, upgrade traffic signal equipment, install ADA ramps at the corners of streets, add landscaped medians and storm drain catch basins at locations	All Hazards	Public Works	Finished	X	X			\$5,400,000	City of West Hollywood General Fund	Completed (July 2010)
Employee Emergency Notification System: Contract with Alert First for a Community Alerting Emergency Notification System and Continue	All Hazards	Public Safety and Communication	Ongoing	X	X			\$2,500 annually	City of West Hollywood General	Annually, began in 2005



Mitigation Action/Project	Hazards Mitigated	Responsible Department	Status	Plan Goals Addressed				Cost	Funding Source	Timeframe
				Ensure Effective Response of Emergency Services to Hazards	Reduce impact from natural and man-made hazards	Maximize Internal and External Resources for Investment in Hazard Mitigation	Increase Public Understanding, Support, and Demand for Hazard Mitigation and Emergency Preparedness			
Coordination with County's Emergency Alert system.		s (Public Information Officer)						Fund		
Advanced License Plate Recognition (ALPR) camera system: ALPR camera system installed to expand intelligence gathering capabilities, prevent crime and collect evidence.	All Hazards	Public Safety and Sheriff's Department	Ongoing	X				\$160,000 total cost	City of West Hollywood General Fund	Annually
SafeCity GIS for EOC: Purchased GIS project with EOC to accurately track incidents and their related responses.	All Hazards	Public Safety and Information Technology Division	Ongoing		X		X	\$20,000	City of West Hollywood General Fund	Annually
Santa Monica Boulevard Reconstruction: Complete removal and replacement of three miles of roadway, curbs, gutters, sidewalks, landscaping, lighting, traffic signals, and utility (storm drain and sewer) rehabilitation. This includes pedestrian visibility enhancements (roadway markings and signage; bicycle lane; traffic signal synchronization; and pavement	All Hazards	Public Works (Facilities Division)	Finished	X	X			Total Cost \$30,000,000 City \$14,000,000 County \$9,000,000 State \$7,000,000	City of West Hollywood General Fund, Transportation Funds	Completed in 2/22/2002

Mitigation Action/Project	Hazards Mitigated	Responsible Department	Status	Plan Goals Addressed				Cost	Funding Source	Timeframe
				Ensure Effective Response of Emergency Services to Hazards	Reduce impact from natural and man-made hazards	Maximize Internal and External Resources for Investment in Hazard Mitigation	Increase Public Understanding, Support, and Demand for Hazard Mitigation and Emergency Preparedness			
repairs).										
Continuation of Public Education Campaign "Live, Work, Play, Be Safe": Used to address community emergency preparedness.	All Hazards, with focus on Earthquakes	Public Safety	Ongoing				X	\$20,000 initial cost; \$5,000 annually	City of West Hollywood General Fund	Completed Creation of Materials, Outreach Ongoing
Traffic Signal Battery Back-up: Installed battery back-up systems for traffic signals at eight major intersections and adding an additional 20 in 2014. Under power failure conditions, the traffic signals will continue to operate, rather than go black.	All Hazards	Public Works	Finished	X				Total Cost \$38,000 City \$20,000 State \$18,000	Partial funding (70%) from the California Energy Commission, other funds from Traffic Signal Maintenance Account	Completed (2004)

Mitigation Action/Project	Hazards Mitigated	Responsible Department	Status	Plan Goals Addressed				Cost	Funding Source	Timeframe
				Ensure Effective Response of Emergency Services to Hazards	Reduce impact from natural and man-made hazards	Maximize Internal and External Resources for Investment in Hazard Mitigation	Increase Public Understanding, Support, and Demand for Hazard Mitigation and Emergency Preparedness			
Traffic signal Preemption for Sheriff's Station: Installed pre-emption push button system at the Sheriff's Station to enable the officers to control traffic at the Santa Monica/San Vicente intersection and at the Santa Monica/PDC Road intersection during times of emergency.	All Hazards	Public Works coordinates with Los Angeles County Department of Public Works	Finished	X				City \$20,000	Pedestrian Safety Account	Completed (2002)
Annual Fire Department Structural Inspections: Personnel from Fire Stations 7 & 8 annually inspect each structure in the City.	All Hazards	Los Angeles County Fire Department Fire Captain 7 and Fire Captain 8	Ongoing	X	X			County funded project/Utilizes existing personnel	Los Angeles County	Annually, began in 1984
Sidewalk Repair Program: Annually have a staff person walk every sidewalk in the City to identify locations needing repairs to prevent trip/fall hazards and contract the repairs.	All Hazards	Public Works (City Engineer oversees inspection and Urban Forest & Landscape Maintenance	Ongoing	X	X			City \$200,000	City of West Hollywood General Fund, Community Development Block Grant	Annually each June, began in 1995

Mitigation Action/Project	Hazards Mitigated	Responsible Department	Status	Plan Goals Addressed				Cost	Funding Source	Timeframe
				Ensure Effective Response of Emergency Services to Hazards	Reduce impact from natural and man-made hazards	Maximize Internal and External Resources for Investment in Hazard Mitigation	Increase Public Understanding, Support, and Demand for Hazard Mitigation and Emergency Preparedness			
		Supervisor oversees repairs)								
New Facility for City Hall: The City purchased and constructed a new City Hall which included several seismic upgrades and installation of an Emergency Operation Center.	All Hazards	Public Works (Facilities Division)	Finished	X	X	X		Replacement Cost \$7,419,851	City of West Hollywood General Fund	Completed in 1995
Employee Emergency Backpacks: All employees are issued an emergency backpack and supplies are restocked annually.	All Hazards	Public Safety (Emergency Management Coordinator)	Ongoing	X	X			City initial investment: \$5000 Maintenance : \$500/year	City of West Hollywood General Fund	Annually, began in 1994
Area Monitors: Several staff act as Area Monitors in City Hall to assist with employee preparedness, including conducting monthly fire extinguisher checks, maintaining employee lists, practicing evacuations, and assisting the Public Safety Department with other preparedness and response activities.	All Hazards	Public Safety (Emergency Management Coordinator)	Ongoing	X	X			City Approximatel y \$500/year	City of West Hollywood General Fund	Annually, began in 1994

Mitigation Action/Project	Hazards Mitigated	Responsible Department	Status	Plan Goals Addressed				Cost	Funding Source	Timeframe
				Ensure Effective Response of Emergency Services to Hazards	Reduce impact from natural and man-made hazards	Maximize Internal and External Resources for Investment in Hazard Mitigation	Increase Public Understanding, Support, and Demand for Hazard Mitigation and Emergency Preparedness			
CERT Program: City coordinates with the Los Angeles County Fire Department to offer CERT training and courses for residents	All Hazards	Public Safety (Administrative Analyst)	Ongoing				X	\$500 per class	City of West Hollywood General Fund	Annually
EOC Drill: Conduct annual EOC drill or exercise to provide City staff with the opportunity to practice their responsibilities during an emergency	All Hazards	Public Safety	Ongoing	X	X			\$1,000 per table top \$15,000 per field exercise	City of West Hollywood General Fund; Los Angeles County Funds for Personnel	Annually each fall
Mandatory NIMS/SEMS Refresher: Conduct refresher trainings annually for all City staff on NIMS and SEMS	All Hazards	Public Safety	Ongoing	X	X			No/low cost	City of West Hollywood General Fund	Annually in December
New Development Seismic Standards: Evaluate and update seismic standards for all new development based on best practices and needs.	Earthquakes	Community Development (Planning,	Ongoing		X			Approximately \$450,000	State of California (West	Completed

Mitigation Action/Project	Hazards Mitigated	Responsible Department	Status	Plan Goals Addressed				Cost	Funding Source	Timeframe
				Ensure Effective Response of Emergency Services to Hazards	Reduce impact from natural and man-made hazards	Maximize Internal and External Resources for Investment in Hazard Mitigation	Increase Public Understanding, Support, and Demand for Hazard Mitigation and Emergency Preparedness			
		Building and Safety), Public Works (Engineering)						Hollywood is required to enforce the CA Building Codes)		
Building and Infrastructure Seismic Retrofits: Evaluate and update the City's existing building stock and infrastructure seismic retrofit program for orderly and effective identification of vulnerable buildings/infrastructure, outreach, education, support and enforcement.	Earthquakes	Community Development (Planning, Building and Safety), Public Works (Engineering)	Ongoing		X		X	Approximately \$200,000	No official funding source, but City Council has proposed a cost sharing system between landlords and tenants as of August 2018.	Seismic Retrofit Ordinance approved by City Council in 2017

Mitigation Action/Project	Hazards Mitigated	Responsible Department	Status	Plan Goals Addressed				Cost	Funding Source	Timeframe
				Ensure Effective Response of Emergency Services to Hazards	Reduce impact from natural and man-made hazards	Maximize Internal and External Resources for Investment in Hazard Mitigation	Increase Public Understanding, Support, and Demand for Hazard Mitigation and Emergency Preparedness			
Earthquake Insurance for City Hall: The City has secured earthquake insurance coverage for City Hall.	Earthquakes	Finance (Accounting Specialist)	Ongoing			X		City \$534,850/year (for FY 2019)	City of West Hollywood General Fund and Parking Improvement Fund	Annually, began in 1996
Unreinforced Masonry Retrofit Program: The City identified 81 URM buildings for retrofitting.	Earthquakes	Community Development (Building & Safety)	Finished		X			Information not available	The State of CA didn't provide a funding source at the time	Completed in 1990
Fault Rupture Hazard Studies: Required for sites located within the City-defined Fault Precaution Zone	Earthquakes	Community Development, in coordination with private developers	Ongoing		X			Developers incur cost	Private Funding (developers pay cost)	As needed

Mitigation Action/Project	Hazards Mitigated	Responsible Department	Status	Plan Goals Addressed				Cost	Funding Source	Timeframe
				Ensure Effective Response of Emergency Services to Hazards	Reduce impact from natural and man-made hazards	Maximize Internal and External Resources for Investment in Hazard Mitigation	Increase Public Understanding, Support, and Demand for Hazard Mitigation and Emergency Preparedness			
Participation in Great California Shakeout Drill: Annually, participate in the Great California Shakeout Drill at City Hall and provide prizes for participation	Earthquakes	Public Safety		X				No/low cost	City of West Hollywood General Fund	Annually
Holly Hills Storm Drain: Construction of a regional County Flood Control Facility (Storm Drain) to eliminate the FEMA designated AO Flood Hazard Zone. This regional project has been constructed in 8 phases. Phases #5, 6, 7 & 8 directly benefit the City of West Hollywood. Units 1, 2, 3 & 4 were to the south of the City in Los Angeles.	Flooding	Public Works	Finished		X			County \$38,223,000	Los Angeles County	Completed on January 1, 2007
Sewer Root Control: Annually treat approximately 20% of the citywide sewer system with herbicide to retard tree root intrusion. This prevents sewer blockages and overflows which are a health and safety emergency.	Flooding	Public Works (Engineering Division)	Ongoing		X			City \$60,000	City of West Hollywood General Fund	Annually each June, began in 1995
Pitch & Purge: The City Clerk conducts an employee "Pitch and Purge Day" where non-structural hazards are mitigated and non-essential	Earthquake, Fire, Flood	City Clerk (Records Management)	Ongoing		X			City \$1,000/year	City of West Hollywood General	As needed, began in 2000



Mitigation Action/Project	Hazards Mitigated	Responsible Department	Status	Plan Goals Addressed				Cost	Funding Source	Timeframe
				Ensure Effective Response of Emergency Services to Hazards	Reduce impact from natural and man-made hazards	Maximize Internal and External Resources for Investment in Hazard Mitigation	Increase Public Understanding, Support, and Demand for Hazard Mitigation and Emergency Preparedness			
items are disposed of or recycled.		Specialist) and Public Works (Facilities Division)						Fund		
City Hall Roof Repair: Repair and replacement of sections of the roof of City Hall	Earthquake, Flooding, Winds	Public Works	Finished		X			\$23,650	City of West Hollywood General Fund	Completed in 2010
Tree Trimming: City street trees are pruned once every four years in residential areas and annually along commercial streets. In addition, trees in need of additional care are addressed by "service requests".	Fire, Winds, Landslides	Public Works (Urban Forest & Landscape Maintenance Supervisor)	Ongoing	X	X			City \$335,000	City of West Hollywood General Fund	As needed, began in 1984

## 5.4 Implementation Strategy and Analysis of Mitigation Projects

After mitigation projects have been selected for implementation, City staff conduct cost/benefit analyses to prioritize them. All projects attempt to mitigate most (and for some, all) hazards that may affect West Hollywood. The following characteristics are considered when prioritizing mitigation projects: Hazard Mitigation Plan Goals addressed, political or community support, cost, hazards mitigated, effect on overall risk to life and property, ease of implementation, and limitations.

Since the 2010 plan update, priorities for hazard mitigation projects have shifted towards response and staff preparedness. This change in priorities is reflected in the updated City Emergency Plan, Debris Management Plan, Family Assistance Center Plan, Crisis Communication Plan and Best Safety Practices for Nighttime Establishments handbook, all which were written or completed during the last two years. Additionally, the City has hosted multiple full-scale Emergency Operations Center drills and participated in the annual Great Shakeout Drill at all City facilities.

As previously stated, although City Staff make recommendations to the West Hollywood City Council regarding prioritization and funding of future projects, the decision lies ultimately with the Councilmembers to fund and implement each mitigation project, because City Council approves the two year budget. The public has the opportunity to speak about planned mitigation projects during public hearings, the budget approval process, or City Council meetings. The mitigation projects listed below were prioritized by the City because they address high priority hazards that affect vulnerable populations and have broad support of the West Hollywood City Council.

Evaluating the proposed projects is done by each responsible department by surveying City staff assigned and members of the public, reviewing citizen complaints and public safety records, and conducting a cost analysis. In leaner budget years, some projects may lack funding, but staff will continue to identify potential funding streams as well as to set priorities based on a needs assessment in addition to the costs and benefits.

*Table 12. Summary of Analysis of Proposed Mitigation Strategy: Public Education Campaign – Incorporate Social Media*

<i>Description</i>	The City of West Hollywood regularly communicates with its residents regarding emergency preparedness, and it established a formal program to do so regarding hazard mitigation through the “Live, Work, Play, Be Safe” campaign. In addition, the City participates in the “Great California Shake Out” campaign.
<i>Plan Goals Addressed:</i>	2, 3
<i>Alternatives:</i>	Continue to disseminate information through normal venues including Neighborhood Watch, CERT, and other City meetings.
<i>Strategy:</i>	Continue to utilize a public education campaign to encourage residents to properly prepare for an emergency. Outreach includes utilizing the City’s website, Cable TV stations,

	public meetings, printed materials and advertising, and classes for constituents
<i>Status</i>	Ongoing
<i>Responsible Department(s)</i>	Public Safety and Communications
<i>Completion Date:</i>	Ongoing
<i>Overall Priority:</i>	High
<i>Political and/or Community Support:</i>	High
<i>Hazards Mitigated:</i>	Multi-Hazard
<i>Total Cost:</i>	Initial campaign cost \$20,000; ongoing printing costs and instruction are approximately \$5,000 per year
<i>Effect on Overall Risk to Life and Property:</i>	Medium
<i>Ease of Implementation:</i>	Moderate
<i>Cost-Benefit Analysis:</i>	Based on the public opinion survey, the concern for earthquakes is high, and it seems that a public education campaign is making some impact.
<i>Limitations:</i>	Ongoing funding is unpredictable, so staff continues to transform most materials into electronic versions which are not as costly to distribute.

*Details on Proposed Mitigation Strategy: Continuation of Public Education Campaign – Incorporate Social Media*

A broad public education campaign educating citizens on the multiple hazards that the City of West Hollywood faces and how they can prepare for, respond to, and recover from these hazards has been beneficial. This project had been designated a high priority due to the results of a public opinion survey that the City conducted in 2004. As might be expected, participants ranked “earthquake” as the most concerning type of natural disaster. Survey participants suggested many ways for the City to alleviate some of their disaster concerns, including disseminate information on preparedness and mitigation, hold more classes/forums/drills, and ensure the availability of emergency preparedness kits.

Those who were aware and/or who participated in “preparedness” programs provided by the City were more likely to be prepared, i.e., have a Disaster Plan and/or Emergency Preparedness Kit at home and/or work. This means that there is an opportunity for the City to have a more prepared community by increasing awareness of and participation in City programs. In conjunction with staff, the Public Safety Commission started the “Live, Work, Play, Be Safe” campaign to accomplish these goals. The campaign was so successful, that it expanded into crime prevention areas as well. In addition, the City participates in the “Great California Shake Out” campaign. Printed materials and presentations are aired on the local cable station and online, and it has been beneficial to have Russian versions of the program’s materials.

Results from the web-based public opinion survey indicate that those residents and business owners who are aware of the City’s preparedness programs are more likely to prepare themselves. For example, those residents who indicated that they are aware of preparedness classes and programs are more likely to have a disaster plan

and emergency kit for their home. For this reason, the City has designated that public education is an ongoing mitigation priority. While it is difficult to quantify, the benefit of conducting a public outreach campaign would mitigate against the costs of having a population that is not prepared. An appropriately prepared population would hopefully have mitigated non-structural damage, obtained proper insurance, and learned to care for themselves, their families, their property, and their neighborhoods in a disaster.

Ongoing activities include:

- Continue to utilize the Public Safety Commission as a steering committee to manage and direct the public education campaign, “Live, Work, Play” Be Safe”. The Emergency Preparedness brochures (in English and Russian) are found on appendix pages 297-300.
- Incorporate social media into education activities and engage and gather input from the public through the Public Safety Commission and other meetings as appropriate.
- Continue to offer public education classes such as the Community Emergency Response Training (CERT) and Emergency Preparedness Town Halls.
- Continue to utilize printed materials and video pieces to educate the community on the various hazards and encourage individual, family, and business preparedness. The “West Hollywood is Prepared” – Disaster Preparedness Handbook is found on pages 267-268.
- Continue to work with the Social Services Division to identify especially vulnerable populations.
- Continue to partner with residents, neighborhood groups, and businesses to effectively reach all members of the community.
- Continue to procure emergency kits for distribution to those who participate in the public outreach program.
- Continue to evaluate the effectiveness of the program

Current constraints to continuing this program are minimal.

*Table 13. Summary of Analysis of Proposed Mitigation Strategy: Traffic Signal Battery Backup*

<i>Description</i>	The City of West Hollywood’s Public Works Department has identified the need for working traffic signals during a power outage in order to assist first responders and residents.
<i>Plan Goals Addressed:</i>	1, 2, 3, 4
<i>Alternatives:</i>	Non-working traffic signals during power outages.
<i>Strategy:</i>	Identify funding sources to continue installing battery back-ups to key intersections. As of November 2014, the City has installed eight to date, is working on twenty more, and needs several more.
<i>Status</i>	Ongoing
<i>Responsible Department(s)</i>	Department of Public Works
<i>Completion Date:</i>	Ongoing
<i>Overall Priority:</i>	High

<i>Political and/or Community Support:</i>	High
<i>Hazards Mitigated:</i>	Multi-Hazard
<i>Total Cost:</i>	To be determined
<i>Effect on Overall Risk to Life and Property:</i>	Medium
<i>Ease of Implementation:</i>	Easy
<i>Cost-Benefit Analysis:</i>	Implementation is very easy once funding is identified.
<i>Limitations:</i>	Funding is the limitation to implementing this strategy.

*Details on Proposed Mitigation Strategy: Traffic Signal – Battery Back-up*

This project has been designated a high priority due to the need for working traffic signals during or after an emergency. Although small, the City of West Hollywood is extremely dense. Working signals will enable emergency personnel and others to navigate the City more easily during a power outage. As of summer 2014, the City of West Hollywood is installing battery back-ups at twenty additional intersections. As of summer 2014, the City is installing the battery back-ups at an additional 20 locations (originally 8 locations). Funding has yet to be identified beyond these 28 locations, but it continues to be a priority project for the City to consider continuing to implement.

*Table 14. Summary of Analysis of Proposed Mitigation Strategy: West Hollywood Auditorium Generator Installation*

<i>Description</i>	The City of West Hollywood's Public Works Department has identified the need for generators at the West Hollywood Auditorium.
<i>Plan Goals Addressed:</i>	1, 2, 3, 4
<i>Alternatives:</i>	No power at shelters for residents or visitors during emergency situations.
<i>Strategy:</i>	Identify facilities that may be used as a shelter and ensure that there are generators for backup power in emergency situations.
<i>Status</i>	Cancelled
<i>Responsible Department(s)</i>	Department of Public Works
<i>Completion Date:</i>	N/A
<i>Overall Priority:</i>	High
<i>Political and/or Community Support:</i>	High
<i>Hazards Mitigated:</i>	Multi-Hazard
<i>Total Cost:</i>	To be determined
<i>Effect on Overall Risk to Life and Property:</i>	High
<i>Ease of Implementation:</i>	Not possible
<i>Cost-Benefit Analysis:</i>	Not beneficial to install generators, as the West Hollywood Auditorium will be demolished as part of the West Hollywood Park construction project.
<i>Limitations:</i>	The facility will be under construction, so installation of generators would not be cost effective.

### *Details on Proposed Mitigation Strategy: West Hollywood Auditorium Generator Installation*

The West Hollywood Auditorium building is scheduled to be demolished as part of West Hollywood Park Improvements, which began in 2015. The new buildings located at West Hollywood Park will include a large gymnasium, which will be used during emergencies as a shelter. Therefore, generators will be installed in these new buildings to ensure that shelters have power during emergency situations. Thus, although the priority of the project is still high, the implementation date has been pushed back due to construction of the facility.

### **Capital Improvement Projects**

As discussed in Section 5.1.2, capital projects are long-term improvement and maintenance programs designed to preserve the City's physical systems and facilities. Most of West Hollywood's capital improvement projects also address mitigation issues. The following information is provided as a supplement to the official mitigation projects above.

Capital Improvement Projects are rated according to the following priority levels:

- Priority 1: The project is urgent and/or mandated, and must be completed quickly. Failure to address the project will impact the health, safety, or welfare of the community, or have a significant impact on the financial well-being of the City. The project must be initiated or financial/opportunity losses will result.
- Priority 2: The project is important and addressing it is necessary. The project impacts safety, law enforcement, health, welfare, economic base, and/or the quality of life in the community.
- Priority 3: The project would enhance the quality of life and would provide a benefit to the community. Completion of the project would improve the community providing cultural, recreational, and/or aesthetic effects.
- Priority 4: The project would be an improvement to the community, but need not be completed within a five-year capital improvement program.

Examples of current and proposed capital improvement projects for the City of West Hollywood include City Hall telephone system improvement, vehicle purchase, repairs of city buildings, emergency power generator installation, implementation of a park master plan, street tree planting, new parking lot construction, pedestrian safety, traffic control features, curb/sidewalk construction, pavement repair, traffic signal preemption for priority movement of emergency vehicles, sewer reconstruction, and catch basin retrofit.

The ability of the City to raise revenues is limited; programs and projects compete for resources, so it is important to have a clear understanding of the City's capital needs, and imperative to strive to maintain a reasonable capital funding level which ensures the preservation of facilities and infrastructure. The cost/benefit analysis of these projects is conducted by the City's finance department which reviews prior insurance claims, estimates of planned work and staff time, and the predicted financial benefit of completed projects.

Other mitigation projects are rated in a similar manner to the City's capital improvement projects. The mitigation projects listed in the previous chart have been funded by various resources, including federal funding, state funding, county funding, and local taxes. Future mitigation projects are dependent on the following factors: availability of funding; availability of personnel; consistency with the capital improvement project schedule; and the project's ability to mitigate an immediate hazard.

Proposed capital improvement projects include increased parking opportunities, upgrading the City's parks, and transportation and public works improvements. Projects will be implemented as funding and personnel are identified to manage each project.

Existing mitigation and capital improvement projects are possible due to identified funding and personnel to appropriately manage each project. Please see the previous section for a listing of completed and ongoing mitigation projects and for examples of ongoing capital improvement projects. The mitigation projects listed in the previous charts have been funded by various resources, including federal funding, state funding, county funding, and local taxes. Existing mitigation projects are dependent on the following factors: availability of funding; availability of personnel; consistency with the capital improvement project schedule; and the project's ability to mitigate an immediate hazard.

## **Section 6 – Plan Maintenance**

The committee reviewed Section 6 in its entirety and updated information as appropriate.

### **6.1 Monitoring, Evaluating and Updating the Plan**

Plan Last Updated: March 16, 2015

The Hazard Mitigation Plan will continue to be monitored by the Emergency Management Coordinator. This Staff member will revise the Plan each August to ensure that the most accurate and up to date information is included in the Plan. The Emergency Management Coordinator will review the mitigation actions each August and revise the plan based on progress towards the outlined mitigation actions or new mitigation actions that were identified for existing hazards. After the initial review, the Emergency Management Coordinator will convene a meeting with stakeholders and the core planning team to discuss progress towards mitigation objectives and potential plan revisions. Feedback from stakeholders and members of the plan development team will be documented and shared at the August Public Safety Commission meeting. Currently, Lily Campbell serves as the Emergency Management Coordinator for the City of West Hollywood.

The Local Hazard Mitigation Plan will be evaluated on an annual basis to reflect changes in land development or new programs that may affect mitigation priorities. The Hazard Mitigation Plan evaluation process will be led by the Emergency Management Coordinator. During the review, the core planning team will meet to reassess the Hazard Mitigation Plan. Second, the core planning team will meet with key stakeholders, such as neighborhood groups, fire and law enforcement agencies, community groups, social service agencies, transportation and public works to gather updated hazard mitigation information. After the initial review and key stakeholder meetings, Public Safety staff will present the plan with any recommendations from the core planning team to the Public Safety Commission.

During the Public Safety Commission's review, members of the public will be able to attend a public meeting and voice any concerns or ideas for revisions to the plan. The agenda for each Public Safety Commission and City Council meeting is posted inside and outside of City Hall, faxed/emailed to the posting locations, and posted on the City website. Links to the agenda will also be shared using social media. At that point, the core planning team will meet and make all changes necessary and present an updated document to the Public Safety Commission and the West Hollywood City Council. In addition, the Public Safety Department will informally involve members of the public as well through presentations at neighborhood meetings, key informant interviews, public meetings, and existing public safety programs.

Prior to these Commission and Council meetings, the Emergency Management Coordinator will lead the monitoring and evaluating efforts to ensure that there is adequate funding for the mitigation activities. After the City's two year budget is passed by City Council, the Emergency Management Coordinator will collaborate with the plan development team to apply for hazard mitigation grants that will help the City implement the mitigation activities that are not included in the City's two year budget. Starting at year four, the Emergency Management Coordinator will begin to go through a formal update to the Hazard Mitigation Plan. The formal five year



update to the Hazard Mitigation Plan will be brought to the Public Safety Commission and then to the City Council for formal approval of the updated plan. These meetings will be widely advertised using social media and open to residents, property owners, business owners, and other stake holders. Copies of the Plan will be catalogued and kept in appropriate departments and public locations.

A strength of the document is an actively participating community in the public process which includes the involvement of the Historic Preservation Commission, the Planning Commission, the Public Safety Commission, and the City Council as appropriate.

## **6.2 Implementation through Existing Programs**

Mitigation strategies are regularly reviewed through the City's existing programs, including the City General Plan review and updates, Building and Safety municipal code review and updates, transportation and public works projects, commercial and residential code compliance, housing authority programs, capital improvement plans and projects, and City Emergency Plan review and updates. Hazard identification and risk assessment is part of the development approval process. In addition, the City's "green building" ordinance is applicable to most future development.

The chart of mitigation strategies will be reviewed by staff at regular intervals in order to identify funding and to incorporate work into other City projects when possible. For example, the Hazard Mitigation Planning team will work together during the City's budget process, capital improvement project planning, and other areas as appropriate to incorporate mitigation projects. Commercial and Residential Code Compliance, with assistance from the Planning and Building and Safety Divisions, will look for ways to strengthen the Municipal Code and other laws to support the City's mitigation strategies. In addition, there are several public meetings which will be used to encourage both public and private input and to adopt or incorporate mitigation projects into community outreach. The City has an active and participatory electorate.

Please see the chart on the following page for a summary of the City's Existing Programs and the opportunities they provide for mitigation strategy incorporation.

<b>Local Planning Mechanisms</b>	<b>Issues Addressed</b>	<b>Responsible Department</b>	<b>Time Frame</b>	<b>Possibility for Mitigation Strategy Incorporation</b>
General Plan and Environmental Impact Report (EIR)	Identifies Hazards and Impact, Land Use, Vehicular Transportation, Housing, Environmental	Community Development	Updated in 2011	Examine Plan for Ways to Incorporate Mitigation Strategies
Planning Commission Meetings	Land Use, Development	Community Development	Twice a month	Community Input
Historic Preservation Commission Meetings	Land Use, Development	Community Development	Twice a month	Community Input
Public Safety Commission Meetings	Emergency Management, Hazard Identification	Public Safety	Once a month	Community Input
Emergency Plan	Identifies Hazards and Impact, Vulnerable Populations and Structures, Emergency Response Capabilities	Public Safety	Annual review	Examine Plan for Ways to Incorporate Mitigation Strategies
Building and Safety Codes	Development, Construction Standards	Building and Safety	Every 3 years	Strengthen Code to Support Mitigation Strategies
Municipal Code	Identifies Hazards and Impact, Land Use, Vehicular Transportation, Housing, Environmental	Various Departments (Community Development, Administrative Services, etc.)	Updated as necessary	Strengthen Code to Support Mitigation Strategies
Commercial Code Compliance	Zoning, Encroachment	Commercial Code Compliance	Updated as necessary	Enforce Code
Residential Code Compliance	Property Maintenance Standards	Residential Code Compliance	Updated as necessary	Enforce Code
Fire Department Building Inspections	Fire and Life Safety	Fire Department	Annual inspections	Enforce Code