



# Technical Background Report to the Safety Element of the General Plan City of Glendale, California

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## Introduction to the Technical Background Report of the Safety Element for the City of Glendale

Welcome! The Safety Element of the General Plan is the disaster mitigation plan for Glendale. Its ultimate goal is to improve the safety of the community. However, for appropriate hazard management, including effective emergency preparedness and response, communities need to know in advance what are the potentially hazardous conditions specific to their area. A major part of this knowledge base is based on maps that identify the vulnerable areas in the community. This is covered in the Technical Background Report of the Safety Element.

Therefore, in this report you are going to read about your City. Natural geologic processes are responsible for much of the natural beauty that makes Glendale such a special place to live and work. Unfortunately, many of these processes are not gradual, but rather, are sudden and often violent. Periodic large earthquakes are responsible for the uplift and continued growth of the San Gabriel Mountains that form the spectacular backdrop to Glendale, and the steep bedrock highlands, such as the Verdugo Mountains and the San Rafael Hills, right in the heart of the City. Flooding, erosion, and sediment transport are responsible for forming the broad sloping surfaces in the Crescenta and San Fernando Valleys, as well as for carving the impressive Verdugo Canyon that connects the northern and southern portions of the City. When these geologic processes occur within an urban environment, they become hazards, and when they do occur, they can create a disaster for those impacted by them.

Most of the hazards covered in this report are “natural” hazards, such as earthquakes (Chapter 1), landslides (Chapter 2), floods (Chapter 3), and fire (Chapter 4). In reality, however, these natural conditions do not pose a hazard in the wild, and it is only when they interact with the built environment that they become an issue. For example, a landslide in an undeveloped area is just a landslide, no buildings or structures are damaged, and no one is hurt or killed. But when a landslide occurs in a developed residential area, it has the potential to cause extensive damage and monetary losses, frequently never recovered by the victims. This does not need to happen though. From past experience, we have learned how to correct slope instability, how to measure and contain flood waters, and how to design earthquake and fire resistant structures. We have also learned that avoidance is sometimes the best defense.

The last two chapters of this report cover other safety issues that are not “natural.” Chapter 5 discusses ways to reduce the harmful effects to our environment posed by many of the substances that we depend on for our every day comfort – substances such as gasoline, herbicides, fertilizers, and chemical compounds used to manufacture an amazing array of objects and products. Chapter 6 discusses crime, terrorism, and civil unrest and other safety issues of this type.

So, what is the best way to use this report? As the saying goes, “a picture is worth a thousand words.” Thus, we recommend that you first refer to the maps that accompany this report. If you are like almost everybody else, you will want to look for the area where you live or work, or where you are thinking of moving. These maps will show you at a glance whether the area you are interested in is located, for example, on or near an earthquake fault, an area susceptible to ground failure, or a highly hazardous fire area. Keep in mind, however, maps are by necessity

**TECHNICAL BACKGROUND REPORT to the 2003 SAFETY ELEMENT  
CITY of GLENDALE, CALIFORNIA**

generalized, and therefore, the boundaries shown on the map are only approximate – you do not want to be lulled into a false sense of security because your lot is across the street from where we have placed a contact between a hazardous and a non-hazardous zone. Or, alternatively, decide to move because you are currently living in an area zoned as hazardous. This is where reading the text comes in. Read about the specific hazards that you are concerned with, then apply that knowledge to your lot and house. How old is your house? Is it tied down to its foundation? Does it have a fire-resistant roof? There are specific actions that you can take to make your house specifically, or Glendale in general, a safer place.

Key paragraphs or sections in the text of special interest are identified with symbols along the right-hand margin of the pages. The three symbols used, and their significance, are as follows:

Datum of general interest -



Datum of interest to the City of Glendale -



Mitigation measures that could be implemented -  
to reduce a given hazard



The primary point of this document is to educate and inform the citizens, workers, and officials of Glendale of the potential hazards in the community. By doing so, you can take action to reduce the hazards specific to your area to a level that you, your family and your community are comfortable with. Through appropriate action, the hazard does not need to become a disaster.

Glendale is a relatively mature city; many areas of the City are fully developed, and in these areas, nearly all mitigation will be through redevelopment. As a result, disaster mitigation in these sections of the City will require decades to complete. Other areas, primarily in or adjacent to the hillsides, are still in a fairly natural state, but slated for future development. In these areas, there are opportunities to develop sensibly, avoiding some hazards altogether, like active faults, and implementing mitigation measures to reduce other hazards to acceptable levels. Although hazard reduction is a moving target, it must be accomplished. Government is tasked with the responsibility for citizen health, safety, and welfare. In the end though, all mitigation is local. Without the support of the citizens of Glendale, no governmental programs will be successful. It is hoped that this document will assist you in understanding the issues and the risks you and Glendale face. Through such an understanding you will be ready to support and implement the programs necessary to reduce your risk to community-accepted levels.

We hope that you enjoy reading this document, and that the data presented herein provides you with the impetus to demand action of yourself and others in Glendale to make it an even safer City to live and work in.

TECHNICAL BACKGROUND REPORT to the 2003 SAFETY ELEMENT  
CITY of GLENDALE, CALIFORNIA

TABLE OF CONTENTS

<u>Section</u>	<u>Page No.</u>
<b>CHAPTER 1: SEISMIC HAZARDS</b> .....	<b>1-1</b>
<b>1.1 INTRODUCTION</b> .....	<b>1-1</b>
<b>1.2 EARTHQUAKE AND MITIGATION BASICS</b> .....	<b>1-1</b>
1.2.1 Definitions.....	1-1
1.2.2 Evaluating Earthquake Hazard Potential .....	1-4
1.2.3 Causes of Earthquake Damage.....	1-6
1.2.4 Choosing Earthquakes for Planning and Design .....	1-8
<b>1.3 LAWS TO MITIGATE EARTHQUAKE HAZARD</b> .....	<b>1-9</b>
1.3.1 Alquist-Priolo Earthquake Fault Zoning Act.....	1-9
1.3.2 Seismic Hazards Mapping Act.....	1-10
1.3.3 Real Estate Disclosure Requirements.....	1-10
1.3.4 California Environmental Quality Act .....	1-11
1.3.5 Uniform Building Code and California Building Code.....	1-11
1.3.6 Unreinforced Masonry Law .....	1-12
<b>1.4 NOTABLE HISTORIC EARTHQUAKES IN THE GLENDALE REGION</b> .....	<b>1-13</b>
1.4.1 Long Beach Earthquake of 1933 .....	1-13
1.4.2 San Fernando (Sylmar) Earthquake of 1971 .....	1-13
1.4.3 Malibu Earthquake of 1979.....	1-16
1.4.4 Whittier Narrows Earthquake of 1987 .....	1-16
1.4.5 Pasadena Earthquake of 1988.....	1-16
1.4.6 Malibu Earthquake of 1989.....	1-16
1.4.7 Sierra Madre Earthquake of 1991.....	1-16
1.4.8 Landers Earthquake of 1992.....	1-17
1.4.9 Northridge Earthquake of 1994.....	1-17
1.4.10 West Hollywood Earthquake of 2001 .....	1-18
<b>1.5 POTENTIAL SOURCES OF SEISMIC GROUND SHAKING</b> .....	<b>1-18</b>
1.5.1 San Andreas Fault Zone .....	1-22
1.5.2 Verdugo Fault.....	1-23
1.5.3 Hollywood Fault.....	1-24
1.5.4 Raymond Fault .....	1-25
1.5.5 Sierra Madre Fault.....	1-25
1.5.6 Elysian Park Fault .....	1-26
<b>1.6 POTENTIAL SOURCES OF FAULT RUPTURE</b> .....	<b>1-27</b>
1.6.1 Primary Fault Rupture.....	1-27
1.6.2 Secondary Fault Rupture and Related Ground Deformation.....	1-33
<b>1.7 GEOLOGIC HAZARDS RESULTING FROM SEISMIC SHAKING</b> .....	<b>1-34</b>
1.7.1 Liquefaction and Related Ground Failure .....	1-34
1.7.2 Seismically Induced Settlement .....	1-38
1.7.3 Seismically Induced Slope Failure .....	1-39
1.7.4 Deformation of Sidehill Fills.....	1-40
1.7.5 Ridgetop Fissuring and Shattering .....	1-40
1.7.6 Seiches.....	1-41
<b>1.8 VULNERABILITY OF STRUCTURES TO EARTHQUAKE HAZARDS</b> .....	<b>1-41</b>
1.8.1 Potentially Hazardous Building and Structures.....	1-42
1.8.2 Essential Facilities.....	1-45
1.8.3 Lifelines.....	1-46
<b>1.9 HAZUS EARTHQUAKE SCENARIO LOSS ESTIMATIONS FOR THE CITY OF GLENDALE</b> .....	<b>1-48</b>
1.9.1 Methodology, Terminology and Input Data Used in Earthquake Loss Estimations for the City .....	1-49
1.9.2 HAZUS Scenario Earthquakes for Glendale Area .....	1-54
1.9.3 Inventory Data Used in the HAZUS Loss Estimation Models for Glendale.....	1-55
1.9.4 Estimated Losses Associated with the Earthquake Scenarios .....	1-56

**TECHNICAL BACKGROUND REPORT to the 2003 SAFETY ELEMENT  
CITY of GLENDALE, CALIFORNIA**

**TABLE OF CONTENTS (Continued)**

<b>Section</b>	<b>Page No.</b>
<b>1.10 REDUCING EARTHQUAKE HAZARDS IN THE CITY OF GLENDALE .....</b>	<b>1-70</b>
1.10.1 1997 Uniform Building Code Impacts on the City of Glendale .....	1-70
1.10.2 Retrofit and Strengthening of Existing Structures.....	1-73
<b>1.11 SUMMARY .....</b>	<b>1-75</b>
<b>CHAPTER 2: GEOLOGIC HAZARDS.....</b>	<b>2-1</b>
<b>2.1 PHYSIOGRAPHIC SETTING.....</b>	<b>2-1</b>
<b>2.2 GEOLOGIC SETTING .....</b>	<b>2-1</b>
<b>2.3 GEOLOGIC UNITS.....</b>	<b>2-3</b>
2.3.1 Surficial Sediments .....	2-3
2.3.2 Bedrock Units .....	2-7
<b>2.4 GEOLOGIC HAZARDS IN THE GLENDALE AREA.....</b>	<b>2-9</b>
2.4.1 Landslides and Slope Instability .....	2-9
2.4.2 Collapsible Soils .....	2-19
2.4.3 Expansive Soils.....	2-19
2.4.4 Ground Subsidence .....	2-20
2.4.5 Radon Gas.....	2-21
<b>2.5 SUMMARY .....</b>	<b>2-26</b>
<b>CHAPTER 3: FLOOD HAZARDS .....</b>	<b>3-1</b>
<b>3.1 STORM FLOODING .....</b>	<b>3-1</b>
3.1.1 Hydrologic Setting.....	3-1
3.1.2 Meteorological Setting.....	3-3
3.1.3 Historical Flows and Past Floods.....	3-4
3.1.4 National Flood Insurance Program .....	3-8
3.1.5 Bridge Scour .....	3-11
3.1.6 Existing Flood Protection Measures .....	3-11
3.1.7 Future Flood Protection .....	3-12
3.1.8 Flood Protection Measures for Property Owners.....	3-13
<b>3.2 SEISMICALLY INDUCED INUNDATION.....</b>	<b>3-14</b>
3.2.1 Dam Inundation .....	3-14
3.2.2 Inundation From Above-Ground Storage Tanks.....	3-16
<b>3.3 SUMMARY OF ISSUES AND PLANNING OPPORTUNITIES.....</b>	<b>3-16</b>
<b>CHAPTER 4: FIRE HAZARDS.....</b>	<b>4-1</b>
<b>4.1 WILDLAND FIRES .....</b>	<b>4-1</b>
4.1.1 Wildland Fire Susceptibility Mapping.....	4-2
4.1.2 Wildland Fire Susceptibility in the Glendale Area .....	4-5
4.1.3 Hazard Mitigation .....	4-10
4.1.3.1 Fire Prevention.....	4-10
4.1.3.2 Vegetation Management .....	4-11
4.1.3.3 Legislated Construction Requirements in Fire Hazard Areas .....	4-16
4.1.3.4 Access.....	4-18
4.1.3.5 Public Awareness.....	4-19
<b>4.2 STRUCTURAL FIRES IN URBAN AREAS .....</b>	<b>4-22</b>
4.2.1 Structural Target Fire Hazards and Standards of Coverage.....	4-23
4.2.2 Model Ordinances and Fire Codes.....	4-24
<b>4.3 FIRE SUPPRESSION CAPABILITIES .....</b>	<b>4-24</b>
4.3.1 Automatic and Mutual Aid Agreements .....	4-29
4.3.2 Standardized Emergency Management System (SEMS) .....	4-30
4.3.3 ISO Rating for the City of Glendale .....	4-31

**TECHNICAL BACKGROUND REPORT to the 2003 SAFETY ELEMENT  
CITY of GLENDALE, CALIFORNIA**

**TABLE OF CONTENTS (Continued)**

<b>Section</b>	<b>Page No.</b>
<b>4.4 EARTHQUAKE INDUCED FIRES .....</b>	<b>4-31</b>
4.4.1 Earthquake-Induced Fire Scenarios for the Glendale Area Using HAZUS .....	4-32
<b>4.5 SUMMARY OF FINDINGS .....</b>	<b>4-34</b>
<b>CHAPTER 5: HAZARDOUS MATERIALS MANAGEMENT .....</b>	<b>5-1</b>
<b>5.1 INTRODUCTION.....</b>	<b>5-1</b>
<b>5.2 AIR QUALITY.....</b>	<b>5-2</b>
5.2.1 National Ambient Air Quality Standards.....	5-2
5.2.2 Air Quality Index.....	5-5
<b>5.3 DRINKING WATER QUALITY .....</b>	<b>5-6</b>
<b>5.4 REGULATIONS GOVERNING HAZARDOUS MATERIALS AND GLENDALE’S ENVIRONMENTAL     PROFILE .....</b>	<b>5-8</b>
5.4.1 National Pollutant Discharge Elimination System (NPDES).....	5-9
5.4.2 Comprehensive Environmental Response, Compensation and Liability Act.....	5-10
5.4.3 Emergency Planning and Community Right-To-Know Act (EPCRA).....	5-11
5.4.4 Resources Conservation and Recovery Act.....	5-12
5.4.5 Hazardous Materials Disclosure Program.....	5-13
5.4.6 Hazardous Materials Incident Response.....	5-15
5.4.7 Hazardous Material Spill/Release Notification Guidance.....	5-15
<b>5.5 LEAKING UNDERGROUND STORAGE TANKS (LUST).....</b>	<b>5-18</b>
<b>5.6 GLENDALE FIRE DEPARTMENT, ENVIRONMENTAL MANAGEMENT CENTER AND GLENDALE     FIRE OFFICE OF EMERGENCY SERVICES .....</b>	<b>5-18</b>
<b>5.7 HOUSEHOLD HAZARDOUS WASTE AND RECYCLING .....</b>	<b>5-19</b>
<b>5.8 OIL FIELDS.....</b>	<b>5-20</b>
<b>5.9 HAZARD ANALYSIS .....</b>	<b>5-20</b>
5.9.1 Earthquake-Induced Releases of Hazardous Materials.....	5-21
5.9.2 Chemical Fires.....	5-22
5.9.3 Hazards Overlays.....	5-24
<b>5.10 SUMMARY OF FINDINGS .....</b>	<b>5-24</b>
<b>CHAPTER 6: OTHER SAFETY ISSUES.....</b>	<b>6-1</b>
<b>6.1 INTRODUCTION.....</b>	<b>6-1</b>
<b>6.2 TERRORISM AND CIVIL UNREST .....</b>	<b>6-1</b>
6.2.1 Definitions.....	6-1
6.2.2 Hazard Analysis.....	6-2
6.2.3 Hazard Response.....	6-2
<b>6.3 CRIME.....</b>	<b>6-4</b>
<b>6.4 MAJOR ACCIDENT RESPONSE .....</b>	<b>6-8</b>
<b>6.5 DANGEROUS ANIMALS.....</b>	<b>6-8</b>
6.5.1 Coyotes.....	6-9
6.5.2 Mountain Lions.....	6-10
6.5.3 Bears.....	6-12
6.5.4 Raccoons.....	6-13
6.5.5 Ground Squirrels.....	6-14
6.5.6 Bees, Wasps, Hornets, and Yellow Jackets.....	6-14
6.5.7 Spiders.....	6-14
6.5.8 Snakes.....	6-15
<b>6.6 DANGEROUS PLANTS .....</b>	<b>6-15</b>

**TECHNICAL BACKGROUND REPORT to the 2003 SAFETY ELEMENT  
CITY of GLENDALE, CALIFORNIA**

**TABLE OF CONTENTS (Continued)**

<b>Section</b>	<b>Page No.</b>
<b>6.7 DISEASE AND VECTOR CONTROL .....</b>	<b>6-18</b>
6.7.1 Lyme Disease.....	6-18
6.7.2 Plague .....	6-19
6.7.3 Arboviral Encephalitides .....	6-21
6.7.4 Rabies .....	6-22
6.7.5 Hantavirus Pulmonary Syndrome .....	6-23
<b>6.8 SUMMARY OF FINDINGS .....</b>	<b>6-23</b>

**FIGURES, TABLES AND PLATES**

Figure 1-1: Regional Fault Map.....	1-3
Figure 1-2: Regional Seismicity Map .....	1-14
Figure 1-3: Local Active and Potentially Active Faults.....	1-21
Figure 1-4: Generalized Flow Chart Summarizing the HAZUS Methodology.....	1-50
Figure 1-5: Building Inventory, by Occupancy Type, in the Glendale Area .....	1-56
Figure 2-1: Radon Construction Mitigation.....	2-25
Figure 3-1: Drainage Area for Stream Gaging Station F252-R ion Glendale .....	3-5
Figure 3-2: Historical Peak and Total Discharge Measurements for Verdugo Wash .....	3-8
Figure 4-1: September 2002 Fire in Glendale.....	4-5
Figure 4-2: Slopes Burnt During the September 9-11, 2002 Fire in Glendale .....	4-7
Figure 4-3: Glendale’s Hillside Planting Zones .....	4-13
Figure 4-4: Example of Vegetation Management at the Urban-Wildland Interface .....	4-14
Figure 4-5: Firefighters putting out the September 2002 “Mountain Incident” Fire in Glendale ....	4-19
Figure 4-6: Command Post During the September 2002 “Mountain Incident” Fire in Glendale.....	4-22
Figure 4-7: 20-Year History of Incidents in the City of Glendale Responded to by the Fire Department.....	4-27
Figure 6-1: Crime Index in California for the Years 1952-2000.....	6-4
Figure 6-2: Crime Trends in the City of Glendale for the Years 1993-2001 .....	6-5
Figure 6-3: Crime Rate in Glendale vs. Adjacent Counties .....	6-5
Figure 6-4: Crime Rate in Glendale and Neighboring Cities .....	6-6
Figure 6-5: Mountain Lion Range in Southern California .....	6-11
Figure 6-6: Approximate Distribution of Predicted Lyme Disease Risk in the United States .....	6-19
Figure 6-7: World Distribution of Plague, 1998 .....	6-20
Figure 6-8: West Nile Virus Cases in the United States as of November 2002 .....	6-22
Table 1-1: Abridged Modified Mercalli Intensity Scale.....	1-5
Table 1-2: Estimated Horizontal Peak Ground Accelerations and Seismic Intensities in the Glendale Area.....	1-20
Table 1-3: Injury Classification Scale.....	1-53
Table 1-4: HAZUS Scenario Earthquakes for the City of Pasadena.....	1-54
Table 1-5: Number of Buildings Damaged, by Occupancy Type.....	1-58
Table 1-6: Number of Buildings Damaged, by Construction Type .....	1-60
Table 1-7: Estimated Casualties .....	1-63
Table 1-8: Estimated Economic Losses .....	1-64
Table 1-9: Estimated Shelter Requirements.....	1-66
Table 1-10: Expected Damage to Transportation Systems.....	1-68
Table 1-11: Expected Performance of Potable Water and Electricity Services .....	1-69
Table 1-12: UBC Soil Profile Types.....	1-71
Table 1-13: Seismic Source Type.....	1-73
Table 2-1: General Slope Instability Potential within the City of Glendale .....	2-16
Table 2-2: Radon Health Risk If You Smoke or if You Have Never Smoked .....	2-22
Table 3-1: Average Annual Rainfall by Month for the Glendale Area.....	3-3
Table 3-2: Average Annual Rainfall by Month for the La Crescenta Area .....	3-3

**TECHNICAL BACKGROUND REPORT to the 2003 SAFETY ELEMENT  
CITY of GLENDALE, CALIFORNIA**

**TABLE OF CONTENTS (Continued)**

**FIGURES, TABLES AND PLATES (Continued)**

Table 3-3:	Peak Flow Records for Station F252-R at Estelle Avenue in Glendale .....	3-6
Table 4-1:	Fire Stations in the City of Glendale .....	4-25
Table 4-2:	Earthquake Induced Fire Losses in Glandale based on Hazus Scenario Earthquake ....	4-33
Table 5-1:	National Ambient Air Quality Standards .....	5-3
Table 5-2:	Year 2000 Peak Air Quality Statistics for Criteria Pollutants in the Los Angeles- Long Beach Metropolitan Area .....	5-4
Table 5-3:	Air Quality Index (a measure of community-wide air quality) .....	5-5
Table 5-4:	Air Quality in the Glendale Area in 1999.....	5-6
Table 5-5:	Facility with EPA Permits to Discharge to Water in the Glendale Area.....	5-8
Table 5-6:	CERCLIS Sites in the Glendale Area.....	5-10
Table 5-7:	Toxic Release Inventory of Facilities in the Glendale Area.....	5-12
Table 5-8:	EPA-Registered Large-Quantity Generator (LQG) Facilities in the Glendale Area ....	5-13
Table 5-9:	Sites in the Glendale Area with Leaking Underground Storage Tanks.....	5-19
Table 5-10:	Significant Hazardous Materials Sites in Glendale .....	5-21
Table 6-1:	Poisonous Plants Common in Ornamental Gardens.....	6-17
Plate 1-1:	Historical Seismicity Map (1855-2002) Glendale, California.....	1-15
Plate 1-2:	Fault Map Glendale, California.....	1-28
Plate 1-3:	Seismic Hazards Map Glendale, California .....	1-37
Plate 1-4:	Critical Facilities Map Glendale, California.....	1-47
Plate 1-5:	Residential Buildings with at Least Moderate Damage > 50% (Based on Three Earthquake Scenarios) Glendale, California .....	1-59
Plate 1-6:	Commercial Buildings with at Least Moderate Damage > 50% (Based on Three Earthquake Scenarios) Glendale, California .....	1-61
Plate 1-7:	Schools with at Least Moderate Damage > 50% (Based on Three Earthquake Scenarios) Glendale, California .....	1-65
Plate 1-8:	Bridge Damage (Based on Three Earthquake Scenarios) Glendale, California .....	1-67
Plate 1-9:	Engineering Soil types in Accordance with 1997 Uniform Building Code Glendale, California.....	1-72
Plate 2-1:	Geologic Map Glendale, California .....	2-4
Plate 2-1a:	Explanation of Geologic Map .....	2-5
Plate 2-2:	Slope Distribution Map Glendale, California.....	2-11
Plate 2-3:	Engineering Geologic Materials Map Glendale, California .....	2-12
Plate 2-4:	Slope Instability Map Glendale, California.....	2-17
Plate 3-1:	Geomorphic Map Glendale, California .....	3-2
Plate 3-2:	Damage Caused by the January 1, 1934 Flood Glendale, California .....	3-9
Plate 3-3:	Dam Inundation Pathways.....	3-15
Plate 4-1:	Historical Wildland Fire Map of the Glendale Area .....	4-6
Plate 4-2:	High Fire Hazard Areas, City of Glendale .....	4-9
Plate 4-3:	Non-compliant Roads in the City of Glendale, California .....	4-20
Plate 4-4:	Fire Station Location Map, Glendale, California .....	4-26
Plate 5-1:	Hazardous Materials Site Map Glendale, California.....	5-14
Plate 6-1:	Crime Rate per 100,000 by Census Tract, Glendale, California .....	6-7

- APPENDIX A: REFERENCES**  
**APPENDIX B: USEFUL WEB SITES**  
**APPENDIX C: HAZUS EARTHQUAKE SCENARIO REPORTS**  
**APPENDIX D: GLOSSARY**



**TECHNICAL BACKGROUND REPORT to the 2003 SAFETY ELEMENT  
CITY of GLENDALE, CALIFORNIA**

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