Race Composition

One aspect of mitigation planning is the need to address the language (communications) needs of local populations. This includes the ability to distribute information and provide notification in the event of a regional emergency.

For Malibu, an estimated 4.2% of the population speaks languages other than English (including English and another language or non-English only) with nearly 20% of these speaking English "less than very well".

Race	Population	Percent of Total
Total Population	**12645**	**100.0%**
White Alone	11,046	87.4%
Hispanic or Latino (of any race)	769	6.1%
Black or African American alone	137	1.1%
American Indian and Alaska Native alone	17	0.1%
Asian alone	323	2.6%
Native Hawaiian and Other Pacific Islander Alone	15	0.1%
Some other race alone	18	0.1%
Two or more races	320	2.5%

US Census Bureau 2010 Census

Table 35: Malibu Race Composition

Languages Spoken at Home

Subject	Total Estimate	Speak English "very well" Estimate	Speak English less than "very well" Estimate
Population 5 years and over	**12,296**	**97.2%**	**2.8%**
Speak only English	85.8%	(X)	(X)
Speak a language other than English	4.2%	80.1%	19.9%
Spanish or Spanish Creole	6.1%	83.0%	17.0%
Other Indo-European languages	3.3%	90.1%	9.9%
Asian and Pacific Island languages	0.7%	57.0%	43.0%
Other languages	85.8%	85.2%	14.8%

Table 36: Malibu Languages Spoken at Home

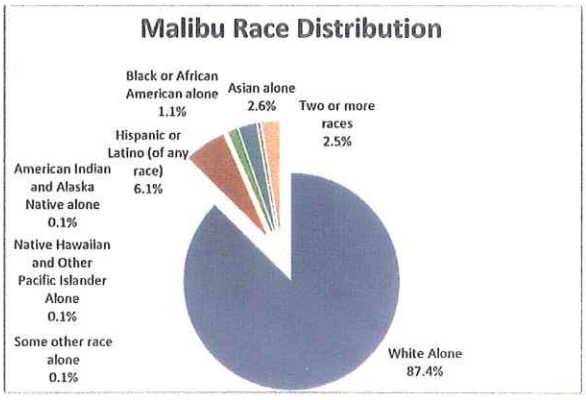


Figure 35: Malibu Race Distribution

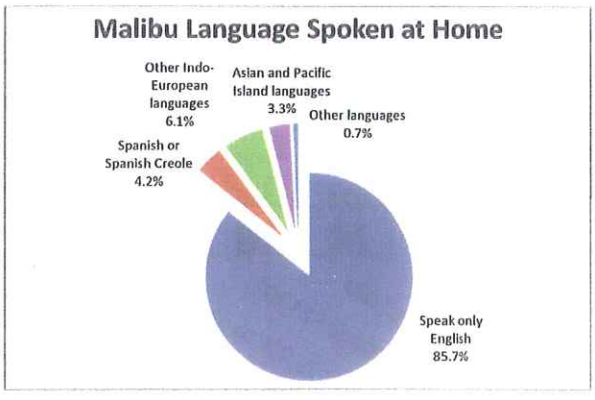


Figure 36: Malibu Languages Spoken at Home

Income Distribution

Household income is a factor for mitigation planning since population groups in lower income ranges are less able to cope with the impact of disasters.

Furthermore, the availability of household funds can have a direct impact on the level of individual and family hazard mitigation activities and emergency preparedness.

While the mean household income in Malibu is over $236,370, there are a limited number of households in Malibu with incomes less than $25,000, near the U.S. poverty level of $22,350 for a family of four as defined by the *2011 HHS Poverty Guidelines,* by the U.S. Department of Health & Human Services.

Income and Benefits (in 2009 Inflation-Adjusted Dollars)		
	Estimate	**Percent**
Total Household Income	4,673	**100.0%**
Less than $10,000	128	2.7%
$10,000 to $14,999	128	2.7%
$15,000 to $24,999	278	5.9%
$25,000 to $34,999	301	6.4%
$35,000 to $49,999	202	4.3%
$50,000 to $74,999	448	9.6%
$75,000 to $99,999	355	7.6%
$100,000 to $149,999	814	17.4%
$150,000 to $199,999	472	10.1%
$200,000 or more	1,547	33.1%
Median household income (dollars)	125,202	(X)
Mean household income (dollars)	236,370	(X)

Source U.S. Census Bureau 2006-2010 American Community Survey Estimate

Table 37: Malibu Income and Benefits (2009 Inflation Adjusted Dollars)

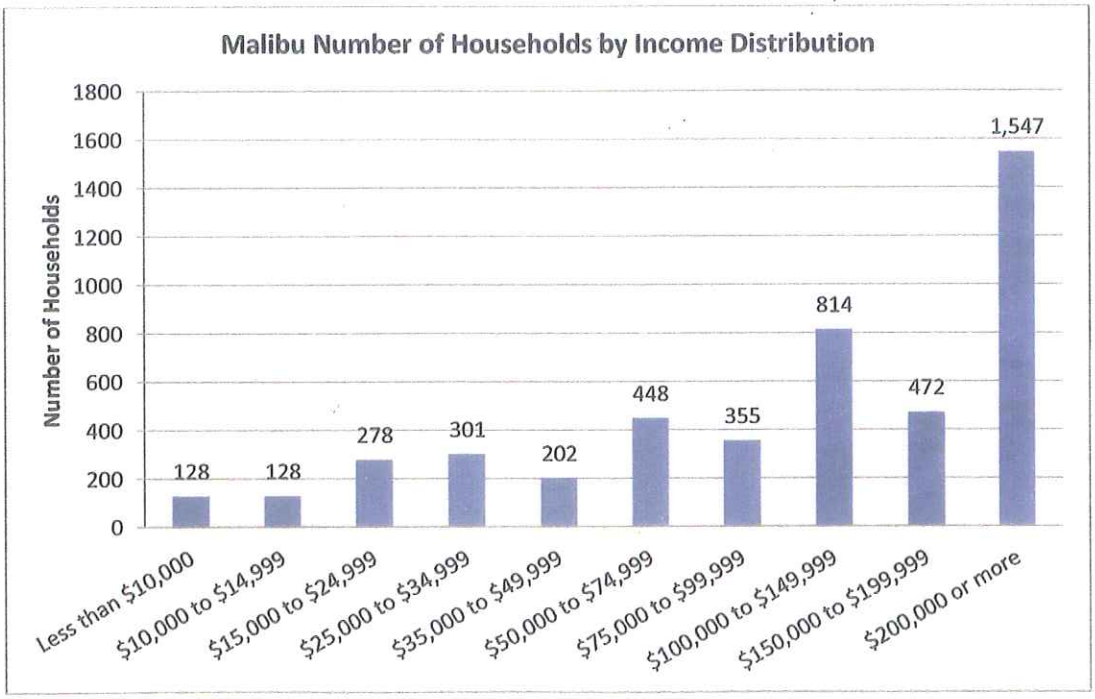


Figure 37: Malibu Income Distribution

Land Use

Malibu is a beachfront community with the majority of residents living along Pacific Coast Highway (PCH) or in small residential communities that gain primary access from PCH. Designated as State Route 1, PCH is the major four lane arterial roadway traversing the City from east to west. PCH is a major transportation corridor with thousands of daily commuters. Beach traffic substantially increases congestion along PCH during the summer months.

The Santa Monica Mountains serve as a natural boundary to the north. A number of residences are interspersed throughout the Santa Monica Mountains along canyons and hillsides within a mile or more inland. Furthermore, the City has experienced a great deal of 'in-fill' development, which has increased the population density, creating greater service loads on the existing infrastructure including roads, water supplies, sewer services and storm drains. In-fill development is defined as development of vacant or partially developed parcels which are surrounded by or in close proximity to areas that are substantially or fully developed.

Housing Characteristics

The following housing statistics provide a summary of the numbers and types of housing units that are at risk if a natural disaster or other catastrophic event were to occur in Malibu. Housing data includes: Housing Occupancy, Housing Unit Change from 2000 to 2009, Number of Structures Built by Year, Home Values, and Home Value Distribution. For Malibu, the number of multi-unit structures has increased while the number of single structures has decreased since 2000.

Housing Occupancy	Estimate	Percent
Total Housing Units	6,252	100.0%
Occupied housing units	4,673	74.7%
Vacant housing units	1,579	25.3%

Source U.S. Census Bureau 2006-2010 American Community Survey

Table 38: Malibu Housing Occupancy

Units In Structure	2010		2000		Change	
	Estimated Number	Percent of Units	Number	Percent of Units	Difference 2010-2000	Percent Change
Total Housing Units	6,252	100.0%	**6,955**	**100%**	**(703)**	-10.1%
1-unit, detached	4,351	69.6%	5,191	74.6%	(840)	-16.2%
1-unit, attached	491	7.9%	974	14.0%	(483)	-49.6%
2 units	47	0.7%	7	0.1%	40	571.4%
3 or 4 units	177	2.8%	168	2.4%	9	5.4%
5 to 9 units	145	2.3%	126	1.8%	19	15.1%
10 to 19 units	193	3.1%	140	2.0%	53	37.9%
20 or more units	355	5.7%	349	5.0%	6	1.7%
Mobile home	493	7.9%	0	0.0%	493	N/A
Boat, RV, van, etc.	0	0.00%	0	0.0%	-	0.0%

Source: US Census Bureau 2006 - 2010 ACS and US Census Bureau 2000 Census

Table 39: Malibu Units in Structure Change from 2000 to 2010

In terms of risk and disaster mitigation, older structures that have not been retrofitted or otherwise improved may be more susceptible to damage or destruction due to age and the fact that older building codes were less stringent than those required for newer structures. As a result, the inventory of older structures is a consideration when developing mitigation plans.

In Malibu, 84.4% of structures (5,276) were built prior to 1990 and 68.5% (4,283) before 1980.

Year Structure Built	Estimate	Percent
Total housing units	**6,252**	**100.0%**
Built 2005 or later	138	2.2%
Built 2000 to 2004	271	4.3%
Built 1990 to 1999	567	9.1%
Built 1980 to 1989	993	15.9%
Built 1970 to 1979	1,498	24.0%
Built 1960 to 1969	1,207	19.3%
Built 1950 to 1959	868	13.9%
Built 1940 to 1949	435	7.0%
Built 1939 or earlier	275	4.4%

Source: U.S. Census Bureau 2006-2010 American Community Survey

Table 40: Year Structures Built in Malibu

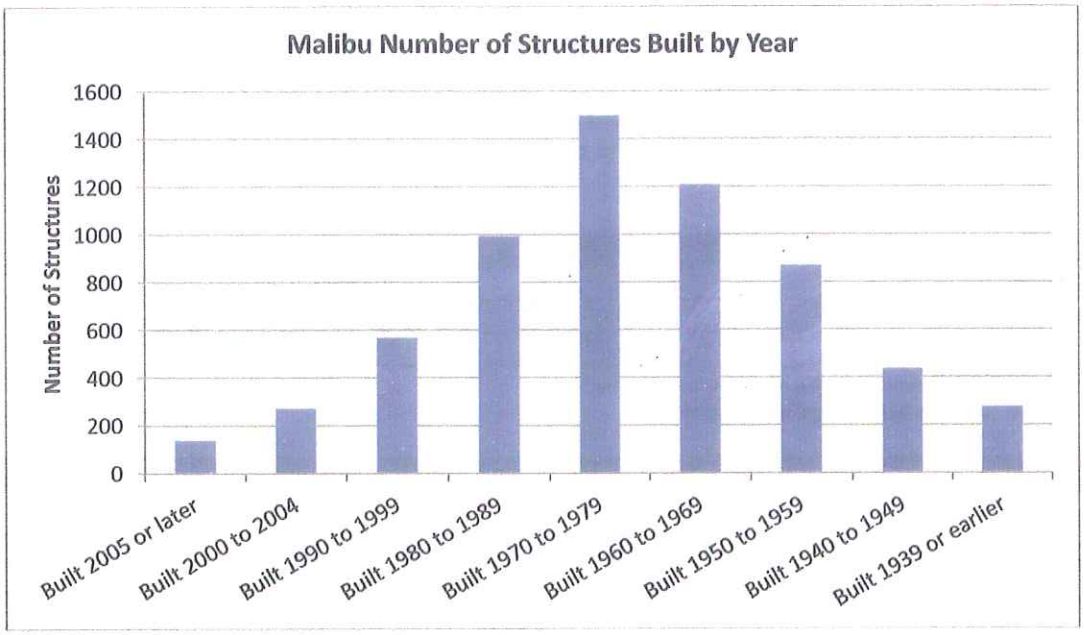


Figure 38: Malibu Number of Structures Built by Year

Home values are an important consideration when evaluating the potential dollar loss due to disasters. These values can also be used to assess the cost/benefit of mitigation activities and planning. In Malibu, the majority of Owner Occupied Units are valued over $1,000,000. Consequently the potential dollar losses from a disaster can rapidly escalate – illustrating the need for mitigation planning.

Value	Estimate	Percent
Owner-Occupied Units	**3,340**	**100.0%**
Less than $50,000	44	1.3%
$50,000 to $99,999	10	0.3%
$100,000 to $149,999	0	0.0%
$150,000 to $199,999	11	0.3%
$200,000 to $299,999	23	0.7%
$300,000 to $499,999	151	4.5%
$500,000 to $999,999	537	16.1%
$1,000,000 or more	2,564	76.8%
Median (dollars)	$1,000,000+	

Source U.S. Census Bureau 2006--2010 American Community Survey

Table 41: Malibu Home Value Distribution

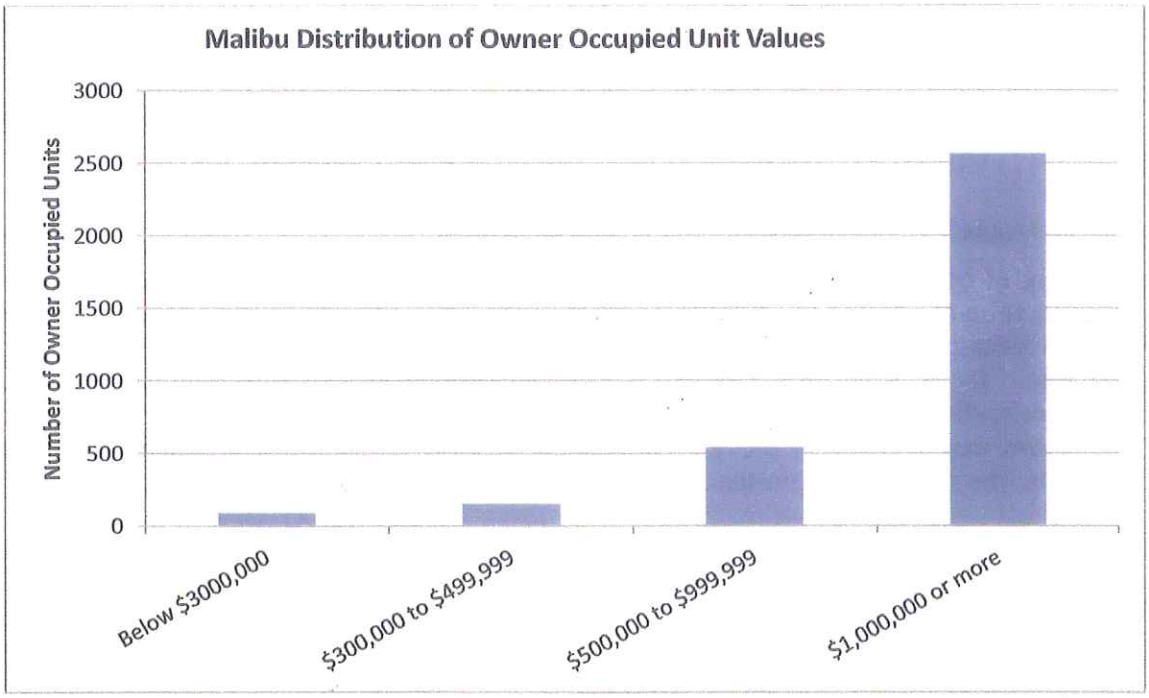


Figure 39: Malibu Distribution of Owner Occupied Unit Values

Emergency Preparedness

The potential impacts of natural hazards associated with Malibu's unique terrain makes its environment and population vulnerable to natural disasters. Earthquakes, landslides, winter storms and floods can take their toll on Malibu. However, the most dangerous and perennial of hazards is wildfire. Driven by the dry Santa Ana winds in the summer months, wind speeds can reach up to 70 mph. As a result, small spot fires can quickly explode into huge firestorms capable of consuming entire communities.

Emergency Preparedness Program

In response to the numerous floods, fires, and storms experienced during the first decade of incorporation, between 1991 and 2001, the City created an Emergency Preparedness Program to train personnel and to develop an emergency response protocol in preparation for future disasters.

Services conducted under the Emergency Preparedness program include an annual training exercise to familiarize staff and volunteers with the functions of the Malibu Emergency Operations Center (EOC) and their individual roles under various potential disaster scenarios. Under this program, the City has also implemented an emergency decal program for residents, designed to facilitate community access in the event of major road closures.

City of Malibu's Highway Advisory Radio System (HARS)

The City of Malibu is licensed by the FCC to operate a Highway Advisory Radio System (HARS) along the Pacific Coast Highway (PCH) in Malibu. The system provides a continuous radio broadcast which can be received on 1620 AM along the coastline and the Pacific Coast Highway. The intention of the system is to provide advisories of traffic conditions or other emergencies that may affect travelers along the PCH. In addition to emergency and road alerts, the system may be used to provide information on other public-safety related resources or incidents. The system is programmed by the City's Emergency Services Coordinator.

Through the Community TV program, the City of Malibu maintains Channel 3 as a Government access channel to bring the most current community information to local cable subscribers. Cablecasts include live City Council and Planning Commission meetings, as well as taped coverage of community events.

Public Involvement Groups

The City has over 60 homeowners associations that are very active in public services. In fact, residents sometimes hold Community Emergency Response Team (CERT) training meetings in their homes.

In addition, the City sponsors the Malibu Volunteer Patrol (MVP), a group of residents trained to assist law enforcement personnel. The volunteers work various assignments including patrolling the community, assisting with dissemination of information to the community and providing community services. The involvement of members of the community working alongside Sheriff's Department personnel improves the communication and understanding between the two groups.

The City participates in the Community Emergency Response Team Program (CERT). Under the CERT Program, volunteers are provided with a FEMA-approved 20 hour program that involves communication with authorities in the event of a large scale emergency. The system appoints neighborhood block captains and sector leaders who utilize radio communications systems to communicate with the City. The City holds CERT trainings four times per year.

Westlake Village

Westlake Village is a master-planned community located on the western edge of Los Angeles County in the Conejo Valley. It borders the City of Thousand Oaks and Ventura County to the west and the Santa Monica Mountains to the south. It is 40 miles west of downtown Los Angeles along the US Highway 101 corridor. With a total land area of 5.62 square miles, the community supports a population of approximately 8,270. Westlake Village is comprised of a mixture of residential and commercial areas with approximately 850 business and light industrial firms.

Brief History

The City of Westlake Village is located on a portion of the former Albertson Ranch, whose cattle-grazing operation on the land ended in the mid-1960's when construction of Westlake Village commenced. The ranch was a portion of the former El Conejo land grant, the original boundary lines that form the City's southern and eastern limits today. In 1966 the American Hawaiian Steamship Company developed Westlake Village as a master-planned community. Responsibilities subsequently passed to the Prudential Insurance Company.

The original community straddled the Los Angeles-Ventura County line. The Ventura portion was incorporated as part of the City of Thousand Oaks in 1968. However, the build-out of the two halves has proceeded in a coordinated and interlinked manner, relatively indifferent to the corporate limits which separate them.

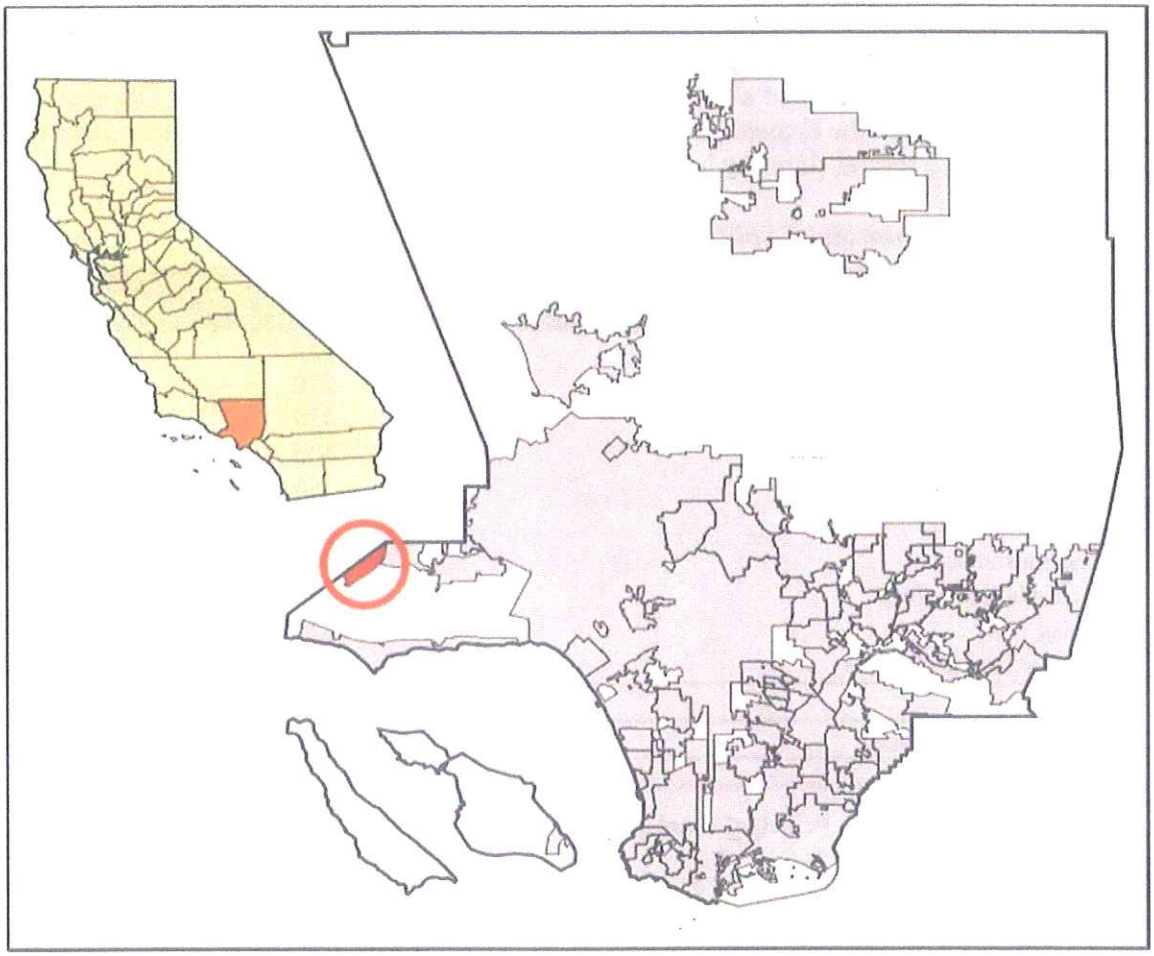
The City of Westlake Village was incorporated on December 11, 1981, as the 82nd city in Los Angeles County. As a master-planned community, Westlake Village is characterized by its wide, tree-lined boulevards, its cohesive, yet identifiable neighborhoods with interconnected greenbelts, its lakeside parks and promenades, and its diverse office and commercial centers.

The City of Westlake Village is a general law municipality, operating on a contract basis in which many of the day-to-day services of local government are provided by public and private agencies. The residents of Westlake Village elect a five-member City Council to oversee City operations and guide future development of the community. Council members are elected to serve a four-year term. Each year the Council selects one of its members to serve as Mayor and Mayor Pro Tem.

Climate/Topography

The climate in Westlake Village is characterized by mild winters with temperatures ranging from the low 40's to the high 60's, and warm summers with temperatures ranging from the low 60's to the high 90's. Average annual rainfall is 14.4 inches with the greatest portion of precipitation occurring in the winter months. The City averages 900 feet above sea level, and is framed by the Simi Hills to the north and the Santa Monica Mountains to the south.

General Coordinates	
Latitude	34° 8' 31" North
Longitude	118° 49' 10" West



Map 11: Westlake Village Location Map

Economic Activity

There are approximately 850 commercial and light industrial firms within the Westlake Village City limits. The city is located along the "Technology Corridor" that runs along US Highway 101 from Calabasas to the Oxnard plain. In addition, there are a number of business parks and the city is home to several company headquarters including the Dole Food Company.

Westlake Village Principal Employers

Company	Employees	Percent of Total City Employment
Bank of America	755	8.95%
Four Seasons Hotel	570	6.76%
Homestore, Inc.	450	5.33%
Guitar Center, Inc.	400	4.74%
State Farm Insurance	350	4.15%
Dole Food Co., Inc.	312	3.70%
Farmers Insurance	300	3.56%
Costco Wholesale Corp	300	3.56%
K-Swiss, Inc.	225	2.67%
Securities Security Service	250	2.96%
Total	**3,912**	**46.37%**
Total City Employment	**8,436**	**100.00%**

Source Westlake Village 2010 Comprehensive Annual Financial Report and SCAG Profile of the City of Westlake Village May 2011

Table 42: Westlake Village Principal Employers

Westlake Village Principal Property Tax Payers

Company	Taxable Assessed Value	Percent of Total City Assessed Value
Dole Food Company	$173,545,792	5.87%
Westlake Wellbeing Properties	$67,152,759	2.27%
Lindero Headquarters Company, Inc.	$57,665,111	1.95%
Russell Ranch Road LLC	$56,607,542	1.91%
Teachers Insurance & Annuity Associates	$54,651,994	1.85%
Bank of America NA	$49,330,000	1.67%
Arden Realty Limited Partnership	$48,040,000	1.62%
CH Realty IV North Ranch Limited Partnership	$39,223,080	1.33%
Guitar Center, Inc.	$35,051,076	1.19%
First Security Bank	$26,505,380	0.90%
Total	**$607,772,734**	**11.73%**
Total Property Tax Assessed Value	$2,956,330,678	

Source Westlake Village 2010 Comprehensive Annual Financial Report

Table 43: Westlake Village Principal Property Tax Payers

Westlake Village Taxable Sales

Category	Taxable Sales (thousands)	Percent of Total
Business to Business	$256	10.53%
Construction	$181	7.44%
Food Products	$529	21.75%
General Retail	$1,281	52.67%
Miscellaneous	$25	1.03%
Transportation	$160	6.58%
Total	**$2,432**	**100.00%**

Source Westlake Village 2009 Comprehensive Annual Financial Report

Table 44: Westlake Village Taxable Sales

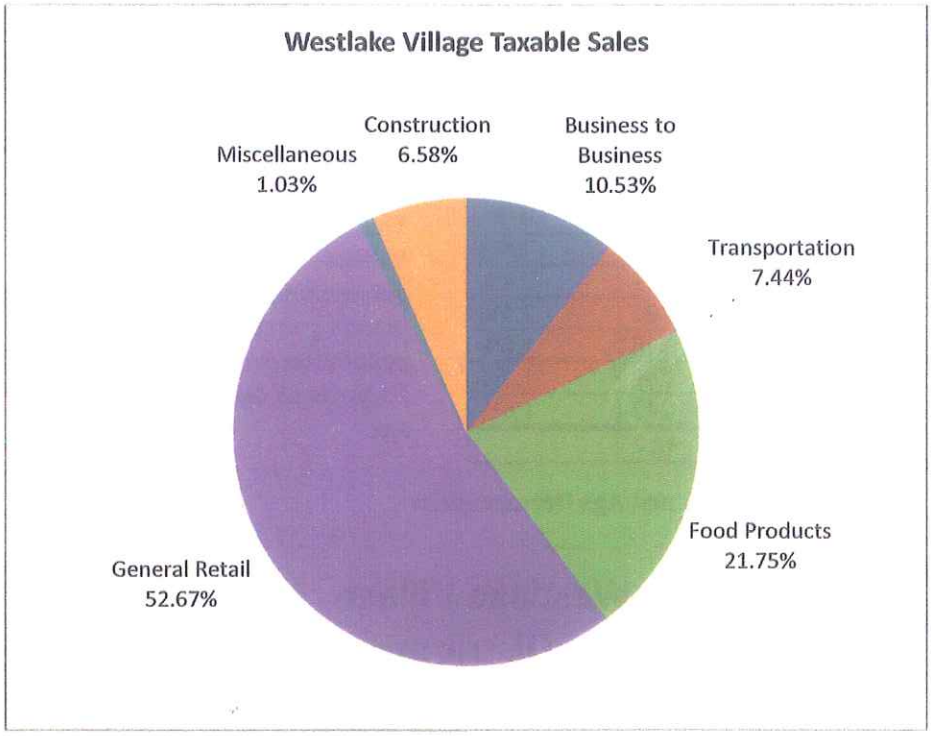


Figure 40: Westlake Village Taxable Sales Percentage by Category

Population and Demographics

The following tables summarize the population and demographic groups at risk from a disaster in Westlake Village.

Sex and Age Distribution

Demographic Estimates		
Sex and Age	**Estimate**	**Percent**
Total Population	**8,270**	**100.0%**
Male	4,025	48.7%
Female	4,245	51.3%
Under 5 years	295	4.4%
5 to 9 years	443	6.3%
10 to 14 years	611	7.8%
15 to 19 years	567	8.1%
20 to 24 years	300	5.2%
25 to 29 years	226	4.6%
30 to 34 years	235	4.5%
35 to 39 years	342	5.5%
40 to 44 years	577	7.3%
45 to 49 years	718	9.5%
50 to 54 years	780	9.5%
55 to 59 years	783	9.0%
60 to 64 years	636	7.0%
65 to 69 years	521	4.4%
70 to 74 years	407	2.5%
75 to 79 years	346	1.6%
80 to 84 years	241	1.2%
85 years and over	242	1.6%
Median age (years)	48.7	

Source U.S. Census Bureau 2010 Census

Table 45: Westlake Village Sex and Age Demographics

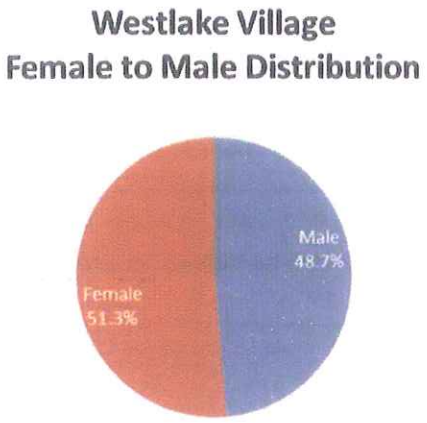


Figure 41: Westlake Village Female to Male Distribution

The average age of residents in Westlake Village is 48.7 with females (51.3%) outnumbering males (48.7%). Mitigation planning must consider the unique needs of population groups, for example those under 15 years of age and those over 70 years of age.

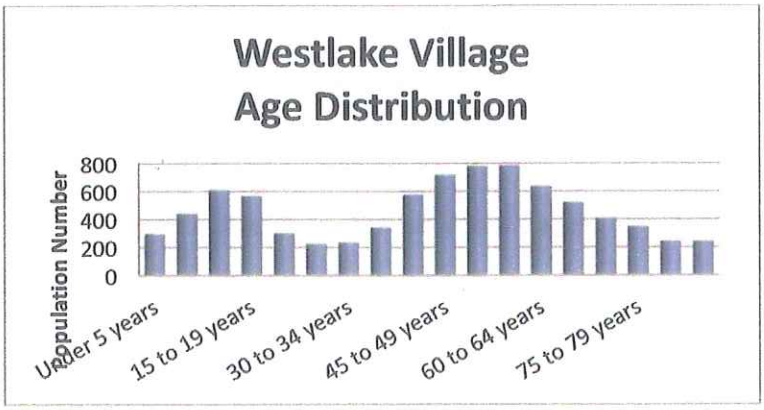


Figure 42: Westlake Village Age Distribution

Race Composition

One aspect of mitigation planning is the need to address the language (communications) needs of local populations. This includes the ability to distribute information and provide notification in the event of a regional emergency. For Westlake Village, an estimated 19% of the population speaks languages other than English (including English and another language or non-English only) with more than a quarter of these speaking English "less than very well".

Race	Population	Percent of Total
Total Population	**8270**	**100.0%**
White Alone	6940	83.9%
Hispanic or Latino (of any race)	533	6.4%
Black or African American alone	97	1.2%
American Indian and Alaska Native alone	9	0.1%
Asian alone	485	5.9%
Native Hawaiian and Other Pacific Islander Alone	11	0.1%
Some other race alone	21	0.3%
Two or more races	174	2.1%

US Census Bureau 2010 Census

Table 46: Westlake Village Race Composition

Languages Spoken at Home

Subject	Total Estimate	Speak English "very well" Estimate	Speak English less than "very well" Estimate
Population 5 years and over	**8,003**	**94.5%**	**5.5%**
Speak only English	81.0%	(X)	(X)
Speak a language other than English	19.0%	71.2%	28.8%
Spanish or Spanish Creole	5.9%	83.3%	16.7%
Other Indo-European languages	7.5%	61.7%	38.3%
Asian and Pacific Island languages	4.6%	67.2%	32.8%
Other languages	1.0%	88.9%	11.1%

Table 47: Westlake Village Languages Spoken at Home

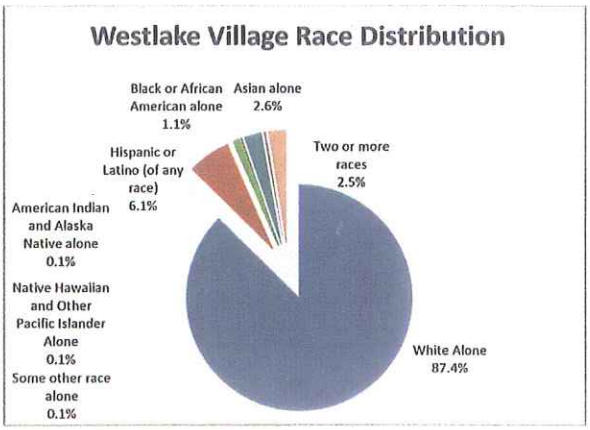


Figure 43: Westlake Village Race Distribution

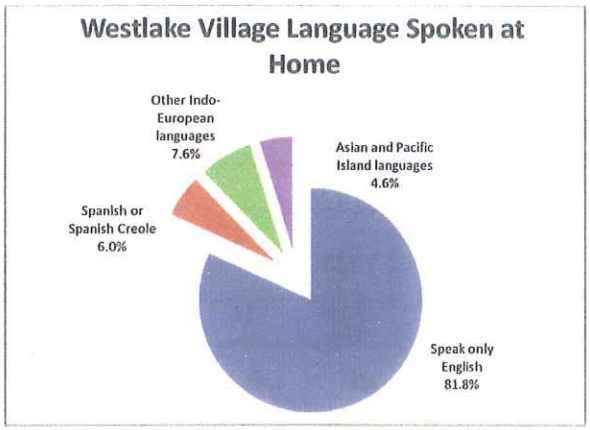


Figure 44: Westlake Village Languages Spoken at Home

Income Distribution

Household income is a factor for mitigation planning since population groups in lower income ranges are less able to cope with the impact of disasters.

Furthermore, the availability of household funds can have a direct impact on the level of individual and family hazard mitigation activities and emergency preparedness.

In Westlake Village, while the mean household income is over $162,246 there are a limited number of households with incomes less than $25,000, near the U.S. poverty level of $22,350 for a family of four as defined by the *2011 HHS Poverty Guidelines,* by the U.S. Department of Health & Human Services.

Income and Benefits (in 2009 Inflation-Adjusted Dollars)		
	Estimate	**Percent**
Total Household Income	3,189	100.0%
Less than $10,000	124	3.9%
$10,000 to $14,999	16	0.5%
$15,000 to $24,999	144	4.5%
$25,000 to $34,999	131	4.1%
$35,000 to $49,999	370	11.6%
$50,000 to $74,999	336	10.5%
$75,000 to $99,999	278	8.7%
$100,000 to $149,999	617	19.3%
$150,000 to $199,999	404	12.7%
$200,000 or more	769	24.1%
Median household income (dollars)	116,213	(X)
Mean household income (dollars)	162,246	(X)

Source U.S. Census Bureau 2006-2010 American Community Survey Estimate

Table 48: Westlake Village Income and Benefits (2009 Inflation Adjusted Dollars)

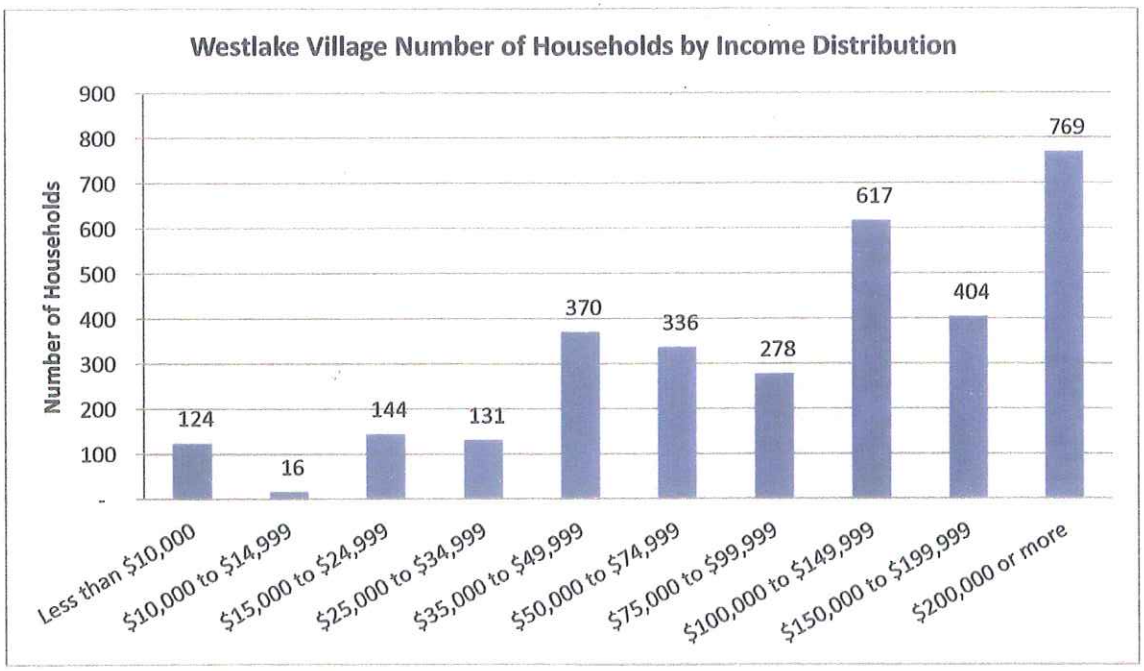


Figure 45: Westlake Village Income Distribution

Land Use

Westlake Village is a master-planned community which began development in 1966. The City is centered around a man-made lake which straddles the Los Angeles and Ventura County line. Westlake Village encompasses twenty individual neighborhoods, with active homeowners' associations to promote and maintain architectural standards. The City has an array of housing types including: townhomes, condominiums, mobile homes, single-family and lakefront residences, and view-oriented estates. In addition, within the Westlake Village city limits are approximately 850 commercial and light industrial businesses. There are a number of business parks and the city hosts several company headquarters.

Housing Characteristics

The following housing statistics provide a summary of the numbers and types of housing units that are at risk if a disaster were to occur in Westlake Village. Housing data includes: Housing Occupancy, Units in Structure Change from 2000 to 2009, Number of Structures Built by Year, Home Values, and Home Value Distribution. In Westlake Village, there has been an overall decrease in structures since 2000 with the exception of single unit detached and mid-size 10 to 19 unit structures.

Housing Occupancy	Estimate	Percent
Total Housing Units	3,322	100.0%
Occupied housing units	3,189	96.0%
Vacant housing units	133	4.0%

Source U.S. Census Bureau 2006-2010 American Community Survey

Table 49: Westlake Village Housing Occupancy

Units In Structure	2010		2000		Change	
	Estimated Number	Percent of Units	Number	Percent of Units	Difference 2010-2000	Percent Change
Total Housing Units	3,322	100.0%	**3,423**	**100%**	**(101)**	-3.0%
1-unit, detached	2,326	70.0%	2,254	66%	72	3.2%
1-unit, attached	615	18.5%	622	18%	(7)	-1.1%
2 units	0	0.0%	21	1%	(21)	-100.0%
3 or 4 units	107	3.2%	141	4%	(34)	-24.1%
5 to 9 units	46	1.4%	114	3%	(68)	-59.6%
10 to 19 units	83	2.5%	68	2%	15	22.1%
20 or more units	20	0.6%	24	1%	(4)	-16.7%
Mobile home	125	3.8%	179	5%	(54)	N/A
Boat, RV, van, etc.	0	0.0%	0	0.00%	-	0.0%

Source: US Census Bureau 2006 - 2010 ACS and US Census Bureau 2000 Census

Table 50: Westlake Village Units in Structure Change from 2000 to 2010

In terms of risk and disaster mitigation, older structures that have not been retrofitted or otherwise improved may be more susceptible to damage or destruction due to age and the fact that older building codes were less stringent than those required for newer structures. As a result the inventory of older structures is a consideration when developing mitigation plans.

In Westlake Village, 81.1% of structures (2,694) were built prior to 1990 and 62.6% (2,081) before 1980.

Year Structure Built	Estimate	Percent
Total housing units	**3,322**	**100.0%**
Built 2005 or later	8	0.2%
Built 2000 to 2004	105	3.2%
Built 1990 to 1999	515	15.5%
Built 1980 to 1989	613	18.5%
Built 1970 to 1979	1,114	33.5%
Built 1960 to 1969	863	26.0%
Built 1950 to 1959	14	0.4%
Built 1940 to 1949	57	1.7%
Built 1939 or earlier	33	1.0%

Source: U.S. Census Bureau 2006-2010 American Community Survey

Table 51: Year Structures Built in Westlake Village

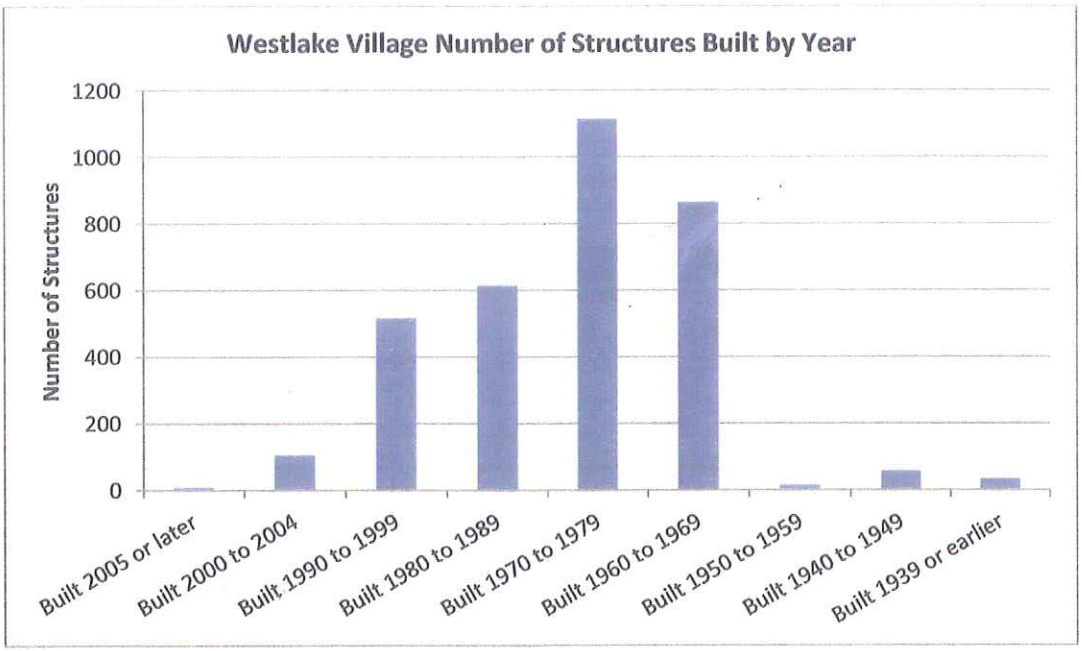


Figure 46: Westlake Village Number of Structures Built by Year

Home values are an important consideration when evaluating the potential dollar loss due to disasters. These values can also be used to assess the cost/benefit of mitigation activities and planning. In Westlake Village, the majority of Owner Occupied Units are valued over $1,000,000. Consequently the potential dollar losses from a disaster can rapidly escalate – illustrating the need for mitigation planning.

Value	Estimate	Percent
Owner-Occupied Units	**3,340**	**100.0%**
Less than $50,000	44	1.3%
$50,000 to $99,999	10	0.3%
$100,000 to $149,999	0	0.0%
$150,000 to $199,999	11	0.3%
$200,000 to $299,999	23	0.7%
$300,000 to $499,999	151	4.5%
$500,000 to $999,999	537	16.1%
$1,000,000 or more	2,564	76.8%
Median (dollars)	$1,000,000+	

Source U.S. Census Bureau 2006--2010 American Community Survey

Table 52: Westlake Village Home Value Distribution

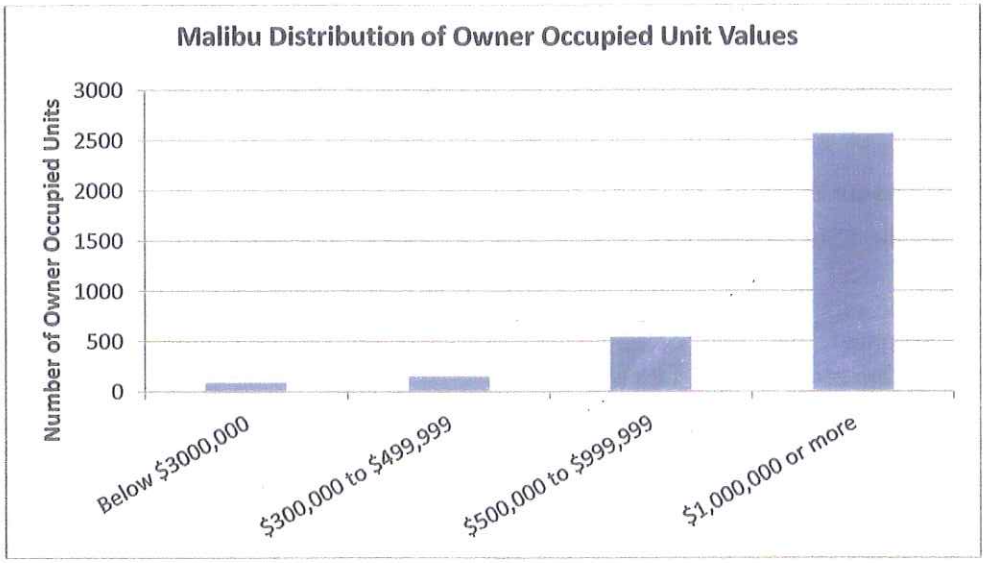


Figure 47: Westlake Village Distribution of Owner Occupied Unit Values

Emergency Preparedness

The City of Westlake Village contracts with the Los Angeles County Sheriff for local public safety services primarily through the Malibu/Lost Hills Sheriff Station. Fire protection is through the Los Angeles County Fire Protection District with Fire Station #144 providing suppression, rescue, and fire prevention services. Westlake Village also provides Emergency Preparedness information to the public via the Westlake Village website.

Standard Emergency Management System

The City of Westlake Village has adopted California's Standardized Emergency Management System (SEMS) for managing the response to a multi-agency and multi-jurisdiction emergency. SEMS also serves to facilitate communications and coordination among all levels of the response system and among all responding agencies.

Public Involvement Groups

Public input and participation plays an important role in Westlake Village's emergency preparedness efforts. Residents participate on advisory boards and committees (e.g., the Emergency Preparedness Event Committee) as well as the Westlake Village Disaster Response Team.

Disaster Response Team

Since 1994 the City of Westlake Village has maintained a volunteer disaster response team comprised of local residents. The Westlake Village Disaster Response Team (WLVDRT) is activated in the event of a disaster and functions to aid local neighborhoods and assist emergency response personnel. An order for activation can come from the City Council, the City Manager, the Sheriff's Department or the Fire Department.

The WLVDRT also provides community disaster preparedness education by conducting basic training classes for residents. Residents who attend the basic training are better prepared to protect themselves, their families, and their businesses in the event of a disaster. The intent is that for every person who attends this training there will be one less person who will need aid during a disaster.

Volunteers in Policing

The City of Westlake Village enhances local law enforcement services through the City's Volunteers in Policing Program. The program consists of a core group of volunteers who are sponsored by the City of Westlake Village and are trained by the Malibu/Lost Hills Sheriff's Station. Westlake Village provides a marked vehicle, uniforms, and specialized equipment. The program volunteers provide a variety of services including patrolling neighborhoods and shopping centers, performing patrol checks of businesses, checking on the homes of residents when they are on vacation, and responding to related civilian requests. In addition, the volunteer patrol members serve as a mobile Neighborhood Watch for the community.

Email Notifications and/or RSS Feeds

The City of Westlake Village provides the public with the opportunity to subscribe to an automated Email notification/RSS feed. The system allows the City to quickly disseminate information to the public.

WVTV

Westlake Village TV (Channel 10) provides a means for communicating to the public on a routine basis as well as during emergencies. Streaming (live and archived) media is available via the City's website.

SECTION 3. RISK ASSESSMENT

The goal of mitigation is to reduce the future impacts of hazards. Hazards can result in injuries and the loss of life, cause property damage, disrupt the local economy, and force the expenditure of large amounts of public and private funds to assist with recovery. In order to focus efforts on the most likely and highest impact scenarios, mitigation must be based on a comprehensive Risk Assessment.

A Risk Assessment measures the potential loss from a hazard event by evaluating 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. Risk Assessments consist of:

- Hazard Identification and Risk Analysis
- Vulnerability Analysis / Loss Estimates

Note: This Risk Assessment presents loss estimates and provides a foundation for evaluating mitigation measures should a real hazard event occur. The loss estimates are intended to support the decision making process for mitigation efforts.

It is important to note that the loss estimates calculated for this Risk Assessment used available data and methodologies and are approximate. These estimates should be used to understand the relative risk from hazards and potential losses and are not intended to be predictive of precise results.

Uncertainties are inherent in any loss estimation methodology arising in part from incomplete scientific knowledge concerning natural hazards and their effects on the built environment. Uncertainties also result from approximations and simplifications that are necessary in developing vulnerability estimates (e.g., risk of loss projections and relative likelihood of occurrence). These factors can result in a range of uncertainty in loss estimates produced by this analysis.

Disaster History

Emergencies and disasters can cause damage to the Las Virgenes-Malibu Region and its residents, businesses, infrastructure and the environment. These disasters can cause fatalities or injuries and expense in terms of response and recovery dollars.

The cities that comprise the Las Virgenes-Malibu Council of Governments have experienced natural disasters in the past and continue to have the potential for future events. While the risk of disasters cannot be eliminated, the effects can be reduced through a well-organized public education and awareness effort, preparedness and mitigation. In addition, communities must be prepared to provide efficient and effective response and recovery. Furthermore careful planning and collaboration among public agencies, private sector organizations, and citizens within the community can minimize the losses that result from disasters.

In order to illustrate the potential hazards to the region, a review of historical events can provide indicators for future threats to the area. The table below provides a summary of major disasters occurring in Los Angeles County since 1995.

Incident Period	Hazard Type	Disaster #	Counties Declared	Federal Declaration	Total Public Assistance Grants
January 16 - February 6, 2010	Severe Winter Storms, Flooding, and Debris and Mud Flows	FEMA-1884-DR	Calaveras County, Imperial County, Los Angeles County, Riverside County, San Bernardino County, Siskiyou County.	3/8/2010	$15,604,176
November 13 - 28, 2008	Wildfire	FEMA-1810-DR	Los Angeles County, Orange County, Santa Barbara	11/18/2008	$35,044,374
October 21, 2007 - March 31, 2008	Wildfire, flooding, mud flows, and debris flows directly related to the wildfires	FEMA-1731-DR	Los Angeles, Orange, Riverside, San Bernardino, San Diego, Santa Barbara, Ventura	10/24/2007	$170,094,288
January 11-17, 2007	Severe Freeze	FEMA-1689-DR	Fresno, Imperial, Kern, Los Angeles, Monterey, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, Tulare, Ventura	3/13/2007	approx. $23,000,000
February 16 - 23, 2005	Severe Storms, Flooding, Landslides, and Mud and Debris Flows	FEMA-1585-DR	Los Angeles, Orange, Riverside, Ventura	4/14/2005	$74,826,845
February 2, 1998 - April 30, 1998	California Severe Winter Storms and Flooding	FEMA-1203-DR	Los Angeles and 40 additional counties	2/9/1998	not listed
February 13 - April 19, 1995	Severe Winter Storms, Flooding, Landslides, Mud Flows	FEMA-1046-DR	Los Angeles and 57 additional counties	3/12/1995	not listed

Table 53: Los Angeles County Federal Declared Disasters from 1995-2010

Source: FEMA

Federal Requirements for Risk Assessments

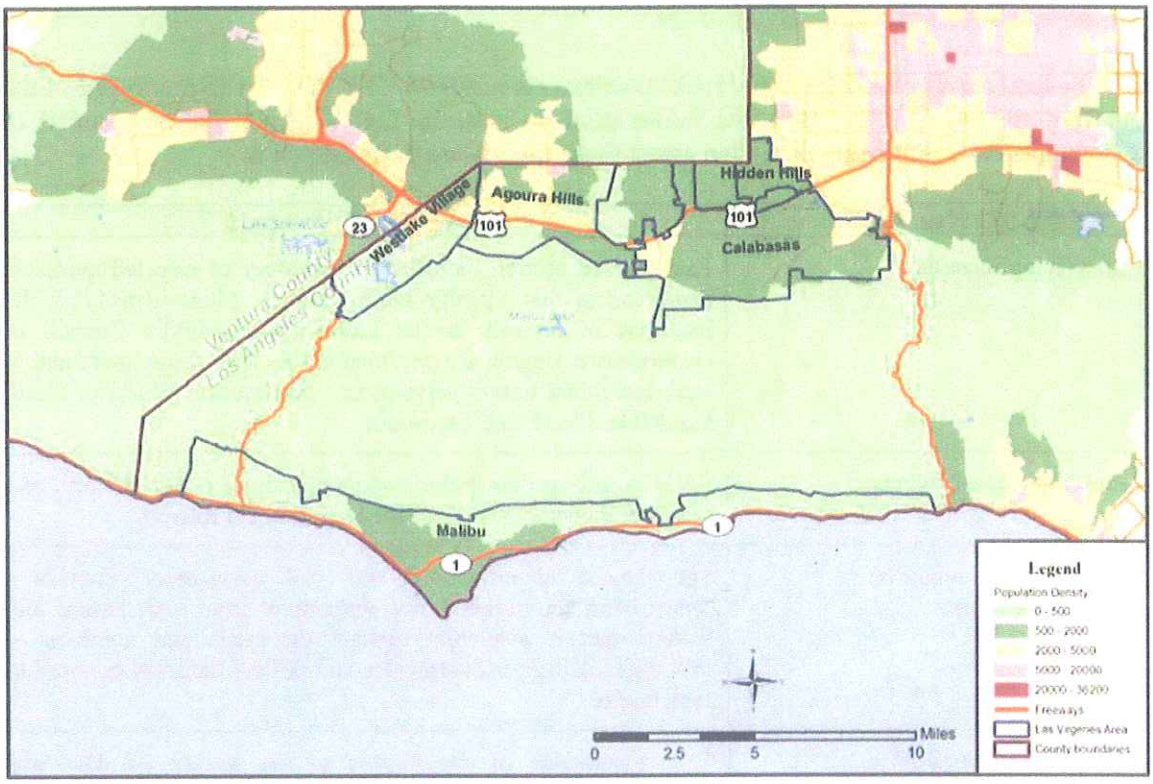
Federal regulations for hazard mitigation plans outlined in 44 CFR Part 201 include a requirement for conducting a Risk Assessment. This Risk Assessment requirement is intended to provide information that will help communities identify and prioritize mitigation activities that will reduce losses from the identified hazards. The hazards profiled in this mitigation plan, include: earthquakes, earth movement (including landslide), flooding, fires (including wildland and structural), windstorms and terrorism.

The Federal criteria for conducting Risk Assessments under 44 CFR Part 201 (Section 322 of the Stafford Act, 42 U.S.C. 5165) and information on how the Las Virgenes-Malibu Council of Governments Hazard Mitigation Plan meets those criteria are outlined below.

Section 322 Plan Requirement	How is this addressed?
Identifying Hazards	Each hazard section includes an inventory of selected available data sources that identify hazard areas. Maps identifying the locations of hazards in the Las Virgenes-Malibu Council of Governments Region are provided in this Risk Assessment and in each individual hazard section, i.e., Earthquake, Wildfire, Wind, Landslide, Flood, and Terrorism.
Profiling Hazard Events	Each hazard section includes documentation of the history, and causes and characteristics of the hazard in the Region.
Assessing Vulnerability: Identifying Assets	The "hazard identification" and "risk assessment" provide a summary of the vulnerability assessment from each hazard and (where data is available) contain the types and numbers of existing buildings, infrastructure and critical facilities exposed to each hazard.
Assessing Vulnerability: Estimating Potential Losses	The calculations of the impact of the hazard (if data was available), the economic exposure, and physical losses, are discussed in this Risk Assessment and under each hazard of this Hazard Mitigation Plan. Vulnerability assessments were completed for the hazards addressed in the plan, and quantitative estimates were made (when data was available) for each hazard.
Assessing Vulnerability: Analyzing Development Trends	The Community Profile Section of this plan provides a description of the development trends in the Region, including the geography and environment, population and demographics, land use and development, housing and community development, employment, business-base, and transportation data.

Hazard Identification and Risk Analysis

Hazard identification consists of (1) defining the study area in terms of scale and coverage; and (2) collecting and compiling a list of prevalent hazards in the study area to help narrow the focus of the analysis. The figure below depicts the study area and population density (Las Virgenes-Malibu COG jurisdictions and nearby communities).



Map 12: LVMCOG Study Area and Population Density

Hazard Identification Process

Input on the types of hazards and relative risk was solicited from the Steering Committee and Planning Group (see Annex D). In addition, members of the community were asked for their feedback and participation in a Disaster Preparedness Risk Survey (see Annex C) that asked questions regarding the public's general preparedness for disasters as well as which hazards were most likely to impact the local area. The following sections describe the process and results obtained.

Steering Committee and Planning Group

The Steering Committee and Planning Group participated in rating the hazards by taking the Hazard Rating Survey. In addition, in order to get a more comprehensive rating of the hazards, a Planning Group was created to assess the risk and vulnerability of the hazards. This method of tabulation considers the probability, magnitude/severity, the duration and warning time for each hazard and then produces a risk index.

Community

The cities of Agoura Hills, Calabasas, Hidden Hills, Malibu and Westlake Village posted the Disaster Preparedness Risk Survey (see Annex C) on their city websites. Based on the results of the survey, community participants felt that earthquake and fire were the most likely hazard events to affect the area. These responses were based on magnitude, impact and probability.

Risk Survey

The Planning Group along with the Steering Committee completed a hazard Risk Survey (see Annex D) to rank identified hazards according to probability, magnitude/severity, warning time, and duration using the following values.

Probability

Description	Value
Highly Likely: Frequent events with a well-documented history of occurrence OR an annual probability that is greater than 0.1.	4
Likely: Occasional occurrences with at least two or more documented historic events OR an annual probability that is between 0.1 and 0.01.	3
Possible: Rare occurrences with at least one documented or anecdotal historic event OR an annual probability between 0.01 and 0.001.	2
Unlikely: Extremely rare with no documented history of occurrence or events OR an annual probability less than 0.001.	1
Not Applicable	0

Magnitude/Severity

Description	Value
Catastrophic: Severe property damages (greater than 50% of critical and non-critical facilities and infrastructure). Injuries or illnesses result in permanent disability and multiple deaths. Shut down of critical facilities for more than 1 month.	4
Critical: Moderate property damages (greater than 25% and less than 50% of critical and non-critical facilities and infrastructure). Injuries or illnesses result in permanent disability and at least one death. Shut down of critical facilities for more than 1 week and less than 1 month.	3
Limited: Slight property damages (greater than 5% and less than 25% of critical and non-critical facilities and infrastructure). Injuries or illnesses do not result in permanent disability and there are no deaths. Moderate quality of life lost. Shut down of critical facilities for more than 1 day and less than 1 week.	2
Negligible: Negligible property damages (less than 5% of critical and non-critical facilities and infrastructure). Injuries or illnesses are treatable with first aid and there are no deaths. Negligible quality of life lost. Shut down of critical facilities for less than 24 hours.	1
Not Applicable	0

Warning Time

Description	Value
Less than 6 hours or no warning	4
6 to 12 hours	3
12 to 24 hours	2
More than 24 hours	1
Not Applicable	0

Duration

Description	Value
More than 1 week	4
Greater than 24 hours, up to 1 week	3
Greater than 6 hours, up to 24 hours	2
Less than 6 hours	1
Not Applicable	0

The following table summarizes the results using the following equation and weighting factors:[2]

Risk = 0.45 * Probability + 0.3 * Magnitude/Severity + 0.15 * Warning Time + 0.1 * Duration

Hazard	Average Probability	Weighted Probability	Average Magnitude	Weighted Magnitude	Average Warning Time	Weighted Warning Time	Average Duration	Weighted Duration	Risk
Earthquake (Greater than Magnitude 6)	3.25	**1.46**	2.25	**0.68**	4.00	**0.60**	3.75	**0.38**	**3.11**
Wildfire	3.25	**1.46**	1.75	**0.53**	3.50	**0.53**	2.25	**0.23**	**2.74**
Severe Windstorm	2.67	**1.20**	1.33	**0.40**	3.33	**0.50**	3.00	**0.30**	**2.40**
Terrorism	1.33	**0.60**	2.00	**0.60**	4.00	**0.60**	2.67	**0.27**	**2.07**
Landslide	1.25	**0.56**	1.25	**0.38**	3.00	**0.45**	2.75	**0.28**	**1.66**
Flood	1.50	**0.68**	1.25	**0.38**	2.00	**0.30**	2.25	**0.23**	**1.58**

Table 54: Hazard Rating Survey

Identified Hazards

Based on the risk ratings for each hazard to the region, the Steering Committee and Planning Group chose to incorporate the following events into the Hazard Mitigation Plan:

- Section 6 Earthquake
- Section 7 Wildfire
- Section 8 Windstorm
- Section 9 Landslide
- Section 10 Flood
- Section 11 Terrorism

Each of these disasters can have widespread effects that include loss of life and property, disruption to critical infrastructure (utilities, communications, transportation, etc.), and long term economic loss to the area. Specific event scenarios are provided in the Vulnerability and Loss Estimates section of this Risk Assessment.

Note: The only human generated disaster included in the plan for the Las Virgenes-Malibu Council of Governments is terrorism. Although this threat is viewed as unlikely, the lack of warning time raises the overall risk score.

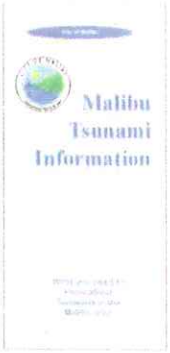
Other Natural Disasters

Tsunami and drought are natural disasters that are not ruled out as possibilities but are categorized as unlikely to occur or will have limited impact to the region as a whole. Also, while coastal erosion is an issue in the City of Malibu, overall responsibility is through the State of California and the California Coast Commission. The following sections provide brief summaries of each of these threats.

[2] Formula published by the Arizona Division of Emergency Management (2008)

Tsunami

A tsunami has never occurred within the Las Virgenes-Malibu Region. Although the City of Malibu is in close proximity to the Pacific Ocean, there is no record of a tsunami or repercussions of such an event. State data shows that although the City of Malibu would sustain some water inundation if a tsunami hits the Southern California Coast, it would have little to no impact on the LVMCOG region as a whole.



To further mitigate the impact of a tsunami to the general public, the City of Malibu has developed a tsunami information brochure and has designated several Tsunami Safe Areas and evacuation routes.

Tsunami Safe Areas	Evacuation Routes
• Malibu Bluffs Park • Malibu Creek State Park • Point Dume (Neighborhood and Elementary School) • Salvation Army Camps (behind Tapia Park)	• Topanga Canyon Blvd. • Malibu Canyon Road • Kanan Road • Encinal Canyon Road • Mulholland Highway

Figure 48: Malibu Coastline
Photo by: D. Searls

Coastal Erosion

Erosion is an issue along the Malibu coast. In general, mitigation is the responsibility of the State of California and the California Coastal Commission though the City of Malibu has implemented a Local Coastal Program Local Implementation Plan (adopted by the California Coastal Commission 9/13/2002) and Coastal Zone ordinance to reduce the threat of coastal erosion. Per City of Malibu, Code §10.4:

Figure 49: Malibu Coast

> §10.4 A. Siting and design of new shoreline development and shoreline protective devices shall take into account anticipated future changes in sea level. In particular, an acceleration of the historic rate of sea level rise shall be considered and its potential impact on beach erosion, shoreline retreat, and bluff erosion rates shall be evaluated.
>
> §10.4 B. New development on a beach or oceanfront bluff shall be sited outside areas subject to hazards (beach or bluff erosion, inundation, wave run-up) at any time during the full projected 100 year economic life of the development. If complete avoidance of hazard areas is not feasible, all new beach or oceanfront bluff development shall be elevated above the base Flood Elevation (as defined by FEMA) and sited as far landward as possible to the maximum extent practicable. All development shall be setback a minimum of 10 feet landward of the most landward surveyed mean high tide line. Whichever setback method is most restrictive shall apply. Development plans shall consider hazards currently affecting the property as well as hazards that can be anticipated over the life of the structure.

See City of Malibu, Code §10.4 for additional erosion control requirements.

Drought

Historical records of the last century do not show any significant loss of life or property to the Las Virgenes-Malibu Region because of a drought occurrence. The last devastating drought to hit Southern California was from 1862-1864, when the state lost nearly a quarter of its earnings and 40% of its livestock, mostly because of the dry Southern Region. (Leonard Pitt, *Decline of the Californios: A Social History of the Spanish-Speaking Californias, 1846-1890*, pg.247)

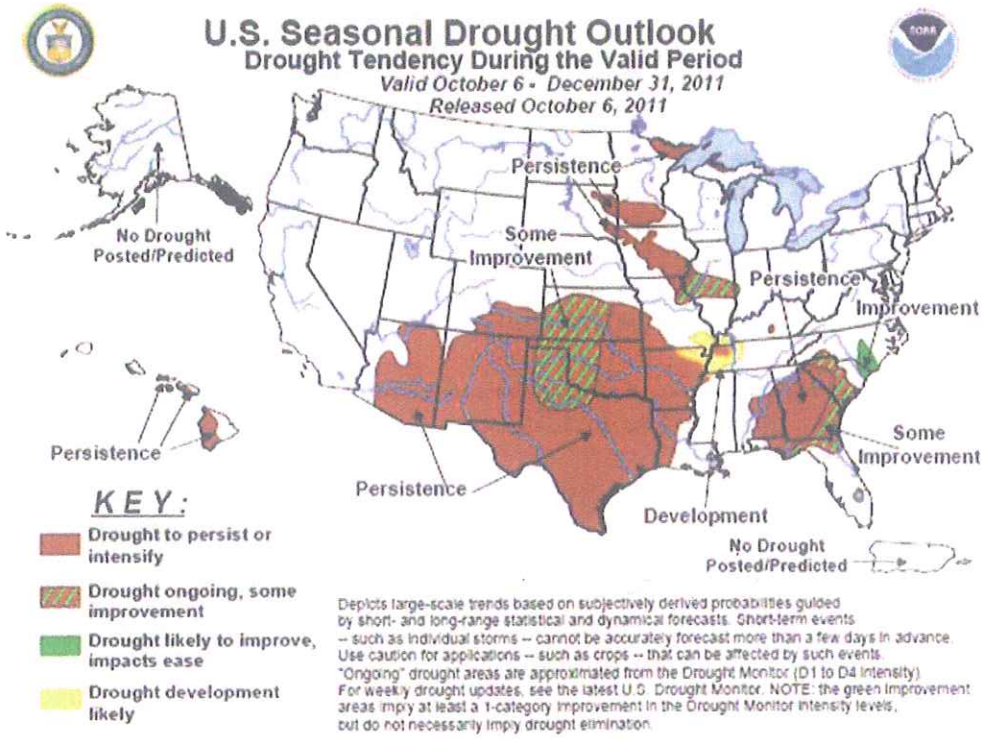


Figure 50: U.S. Seasonal Drought Outlook

Although Southern California is under constant threat of drought, there is no indication that a serious threat to life or property exists. Furthermore, recent conditions and predictions do not show drought to be a major near-term concern in the Las Virgenes-Malibu Region (see U.S. Seasonal Drought Outlook figure above).

Nevertheless it is important to note that drought can have a secondary impact to the hydro-electric power generation capabilities of the entire western U.S. As a result, drought remains a concern for the entire region.

Human Generated and Technology Disasters

Power Outage

Power outages do occur occasionally so the risk of occurrence is somewhat likely. Electrical power is supplied to the Las Virgenes-Malibu Region by Southern California Edison (SCE). Power outages can occur whenever there is a severe disruption to power generation facilities or distribution network (for instance during a severe storm, an earthquake, or wildfire).

In addition, human error is a potential risk. On September 8, 2011 an Arizona Public Service (APS) employee is believed to have caused a major power outage that included Arizona and portions of Southern California including San Diego, Orange, and Imperial Counties. The outage impacted more than 5 million people. While the Las Virgenes-Malibu Region was not impacted, this event demonstrates the potential for widespread power disruptions.

Finally, there is an ongoing risk of cyber-attack to the nation's critical infrastructure. On August 14, 2003, the MSBLAST worm (Blaster) and SoBig worms were suspected of causing a massive blackout in the Northeastern Interconnect impacting 50 million customers from the mid-west to the east coast.

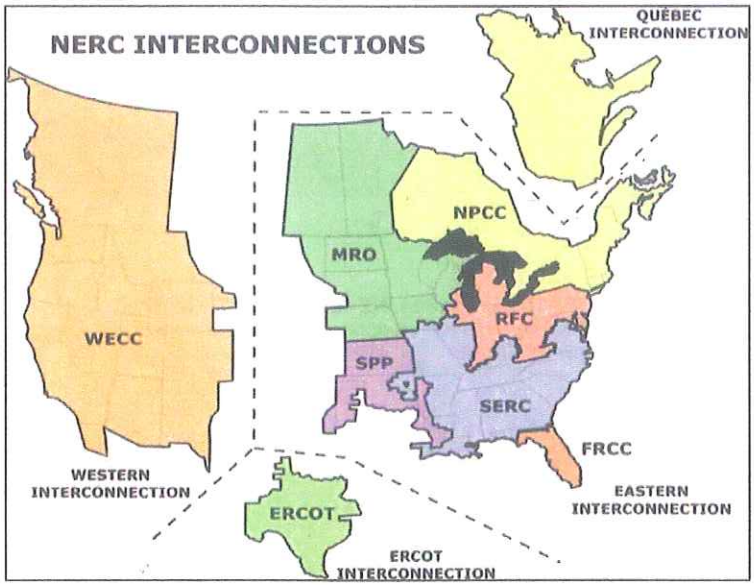


Figure 51: NERC Interconnections

To mitigate the threat of power outage, SCE has an emergency preparedness program in place to address pre- and post-disaster planning needs. Additionally, they have included in their plans the need to communicate with the Region during an outage. Finally, SCE continually assesses the vulnerability of their system to hazards and takes steps to mitigate the risk.

Pipeline Rupture / Explosion

Natural gas transmission and hazardous liquid pipelines are present within the Las Virgenes-Malibu Region and there is a conceivable risk from rupture and/or explosion. Portions of Agoura Hills, Calabasas and Hidden Hills including areas of US 101 (Ventura Freeway), Ventura Boulevard, and surrounding neighborhoods have underground pipelines that pose a potential risk to discrete locations in the community.

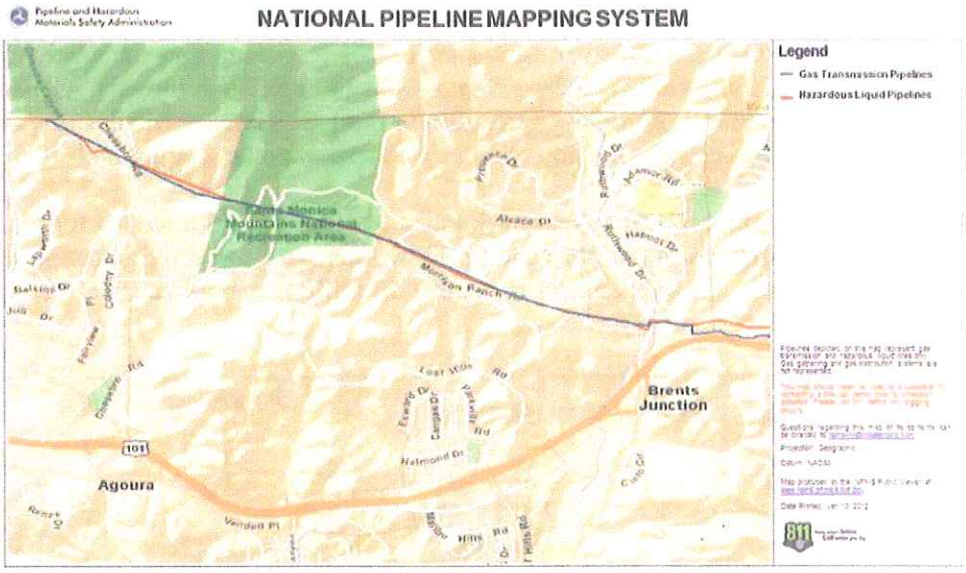


Figure 52: Pipelines - Agoura Hills

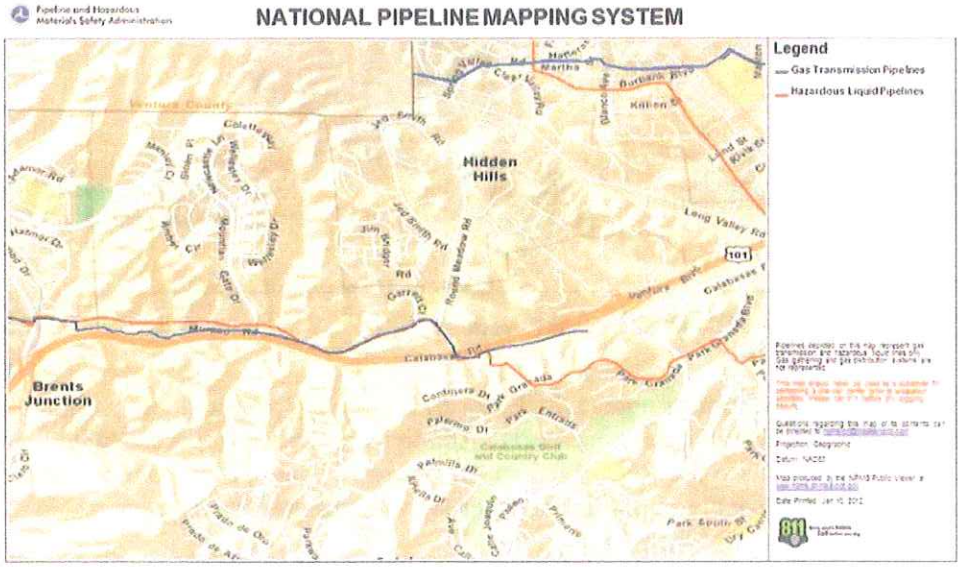


Figure 53: Pipelines - West Calabasas and Hidden Hills

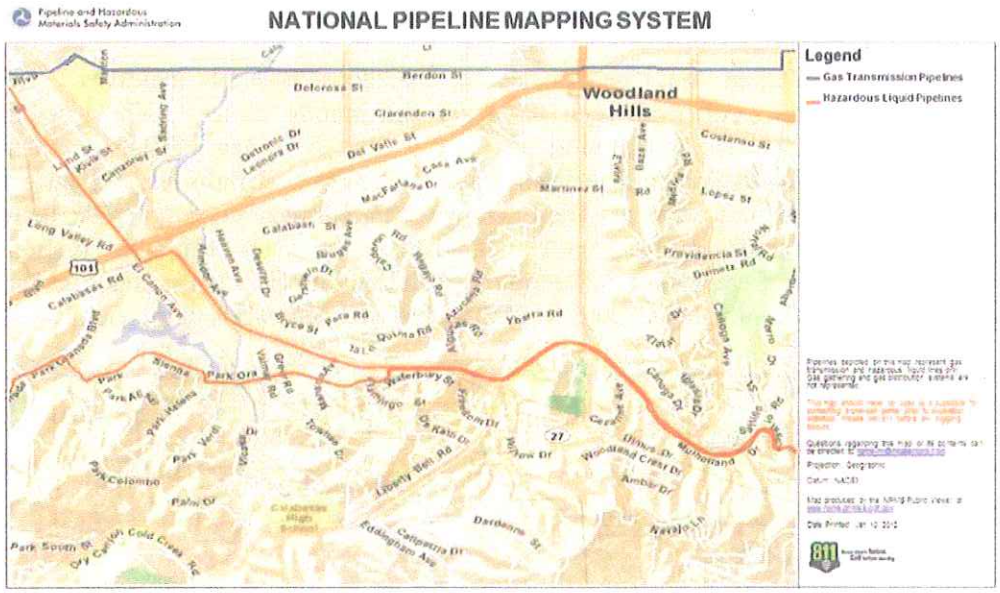


Figure 54: Pipelines - East Calabasas

The San Bruno, California natural gas transmission pipeline rupture and fire on September 9, 2010 demonstrated the impact of this type of disaster to local populations. The pipeline operated by Pacific Gas and Electric Company ruptured releasing 47.6 million standard cubic feet of natural gas and produced a crater 72 feet long and 26 feet wide.

The explosion and resulting fire killed 8 people, left numerous injuries, destroyed 38 homes and damaged 70.[3] In addition, people in the surrounding neighborhood had to be evacuated until the danger subsided. While catastrophic in terms of lives and property loss, a pipeline rupture and/or explosion would be a localized event and not impact the Las Virgenes-Malibu Region as a whole. In terms of regional impact, the most widespread disruption would occur if there were significant damage to US 101. This would cause transportation issues for the entire area.

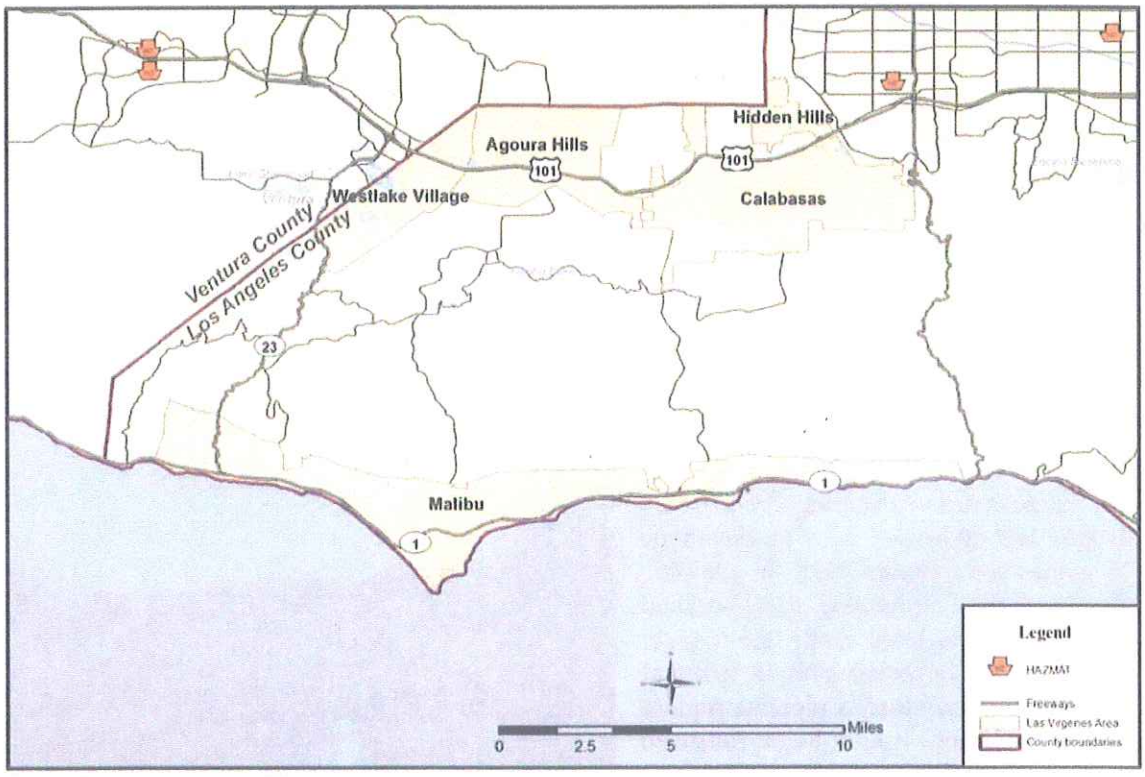
Figure 55: San Bruno Pipeline Explosion

Source: CalEMA

[3] NTSB Pipeline Accident Report, Pacific Gas and Electric Company Natural Gas Transmission Pipeline Rupture and Fire, San Bruno, California, September 9, 2010 (NTSB Number: PAR-11-01, NTIS Number: PB2011-916501, Adopted: August 30, 2011).

Hazardous Material Accidents

The Las Virgenes-Malibu Region could be affected by hazardous materials incidents. The spills/releases of material can result from both stationary and mobile sources. The level of exposure from stationary sources is considered to be very low, due to the types of business and industry conducted within the Region (traffic from major highways and railways still pose a risk). Although there are sites in the general vicinity known to harbor hazardous materials, there is no record of a major hazardous material spill or incident in the cities within the Region. Because of this low historical frequency, the Steering Committee did not address this disaster. The following map identifies minimal hazardous waste handlers and generators in the vicinity.



Map 13: Hazardous Materials Sites

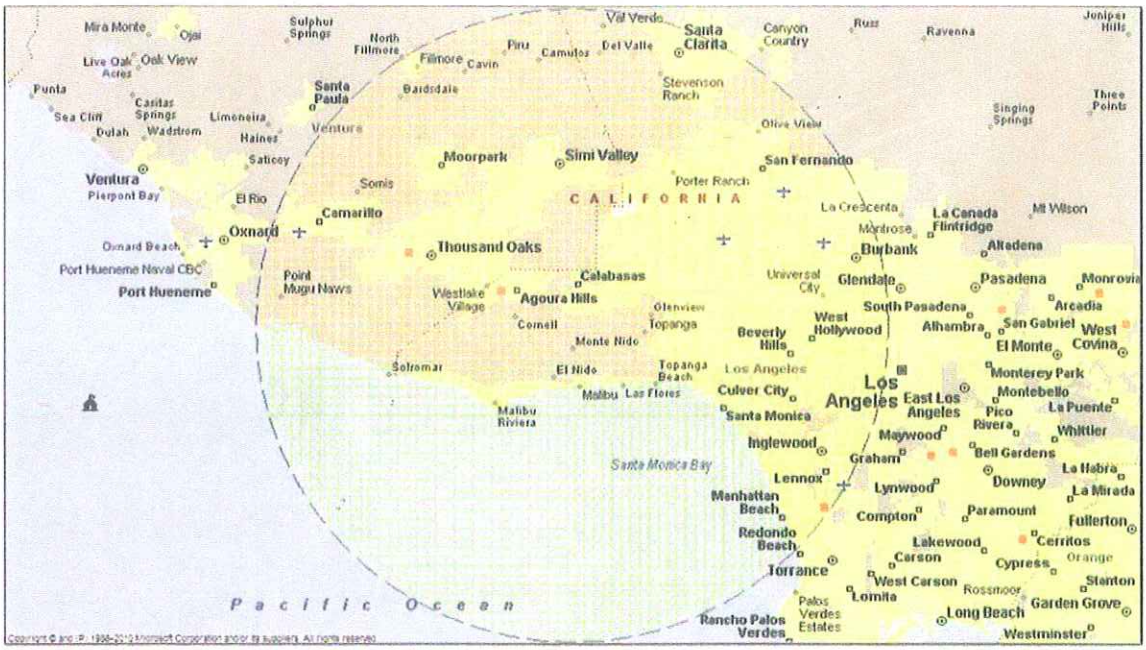
Aircraft Crash

The airports nearest to the Las Virgenes-Malibu Region which handle the greatest amount of air traffic that could cause a risk to the area are Los Angeles International Airport and Burbank Bob Hope Airport. There are also multiple general aviation airports, military airports, and heliports that support air traffic in the Los Angeles region.

The airports within 25 miles of the Las Virgenes-Malibu Region are:

- Los Angeles International Airport
- Santa Monica Municipal Airport
- Van Nuys Airport
- Whiteman Airport (including Los Angeles County Fire Department operations from Barton Heliport)
- Burbank (Bob Hope) Airport
- Camarillo Airport
- Hawthorne Municipal Airport

There is a small but existing risk of an aircraft crash in the Las Virgenes-Malibu Region. Nevertheless, if an aircraft were to crash, the impact would be limited to a localized area and would not disrupt the entire region.



Map 14: Airports within 25 miles

Civil Unrest/Riot

Los Angeles County experienced the Los Angeles Civil Unrest in 1992 and the Watts Riots in 1965. During these periods, the Las Virgenes-Malibu Region suffered no loss of life or property.

Similarly, during 2011"Occupy LA" and other civil protests were staged in Los Angeles County and across the U.S. While somewhat disruptive to the immediate vicinities and targeted sites, the Las Virgenes-Malibu Region was unaffected. As a result the actual risk of a riot or major civil disturbance is considered minimal.

Vulnerability and Loss Estimates

Assessing vulnerability is a three step process. The first step is to identify existing structures and critical facilities that are located within the hazard area. Government critical facilities are of particular concern because these buildings provide essential products and services to the general public that are necessary to preserve the welfare and quality of life in the region and fulfill important public safety, emergency response, and/or disaster recovery functions (see Critical Facilities and Infrastructure Matrix for a listing of key sites).

Once existing structures and critical facilities are identified, the next step is to include an estimate of losses for the identified asset. Estimating potential loss involves assessing the damage, injuries, and financial costs likely to be sustained in a geographic area over a given period of time. This level of analysis involves using mathematical models.

The two measurable components of risk analysis are magnitude of the harm that may result and the likelihood of the harm occurring. Describing vulnerability in terms of dollar losses provides the community and the state with a common framework in which to measure the effects of hazards on assets. The last step in assessing the Region's vulnerability to hazards is to analyze development trends in the Region.

Critical Facilities and Infrastructure Overview

Critical facilities and infrastructure are resources that are vital to the continued delivery of key government services or that may significantly impact the public's ability to recover from an emergency. For example, each city within the Las Virgenes-Malibu Council of Governments maintains and operates separate City Halls and departments. In order to provide Continuity of Operations (COOP) and Continuity of Government (COG) each city has also developed their own Emergency Operations Centers (EOCs). The following lists are provided to illustrate the critical and essential facilities within the LVMCOG area:

- Los Angeles County Sherriff's Stations
- Los Angeles County Fire Stations
- Las Virgenes Water District
- Critical Facilities and Infrastructure Matrix

Los Angeles County Sheriff's Station

The LVMCOG region's Malibu/Lost Hills Sheriff's station is located in Calabasas. This station serves the western portion of Los Angeles County, which is a blend of residential, rural, mountain, beach and recreational areas. The cities served by this station include Agoura Hills, Calabasas, Hidden Hills, Malibu, and Westlake Village as well as the unincorporated communities of Chatsworth Lake Manor, Malibu Lake, Topanga, and West Hills.

LOS ANGELES COUNTY SHERIFF	
Malibu/Lost Hills Station	27050 Agoura Road, Calabasas, CA 91301

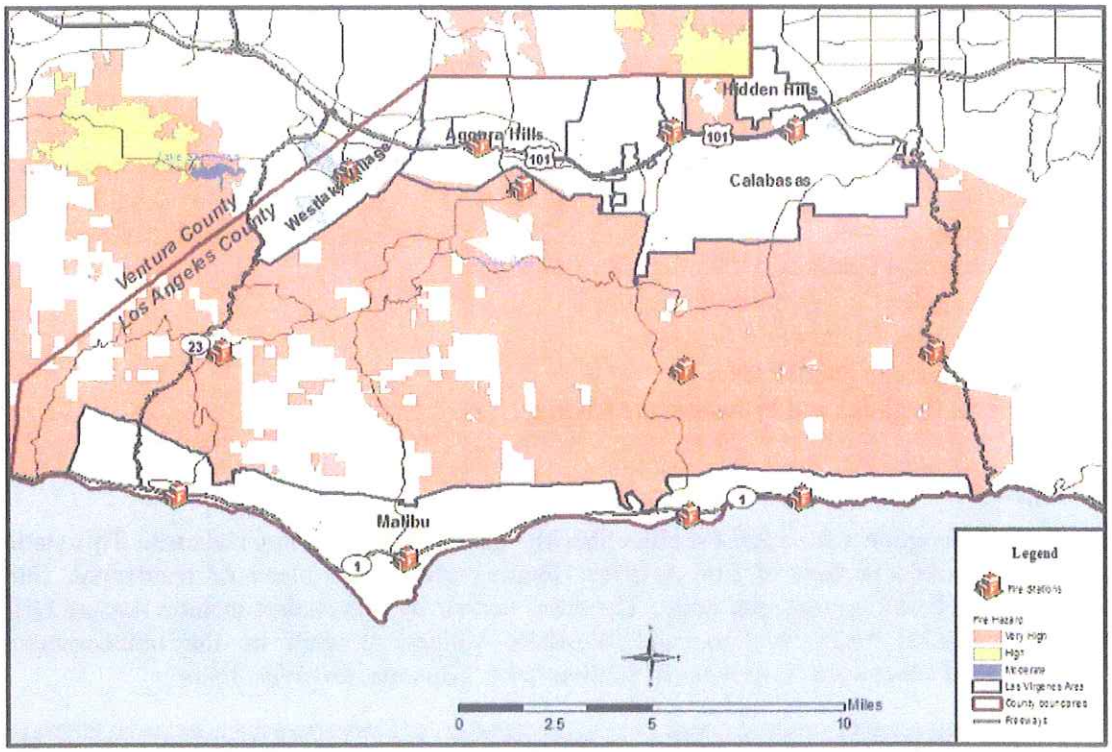
Table 55: Las Virgenes-Malibu COG Area Sheriff's Station

Los Angeles County Fire Stations

The following fire stations are located within the Las Virgenes-Malibu COG Region.

LOS ANGELES COUNTY FIRE DEPARTMENT BATTALION 5	
Fire Station #65	4206 N Cornell Rd, Agoura, 91301
Fire Station #67	25801 Piuma Rd, Calabasas, 91302
Fire Station #68	24130 Calabasas Rd, Calabasas, 91302
Fire Station #69	401 S Topanga Cyn Blvd, Topanga, 90290
Fire Station #70 - Headquarters	3970 Carbon Cyn Rd, Malibu, 90265
Fire Station #71	28722 W Pacific Coast Hwy, Malibu, 90265
Fire Station #72	1832 Decker Canyon Rd, Malibu, 90265
Fire Station #88	23720 W Malibu Rd, Malibu, 90265
Fire Station #89	29575 Canwood St., Agoura Hills, 91301
Fire Station #99	32550 Pacific Coast Hwy, Malibu, 90265
Fire Station #125	5215 N Las Virgenes Rd, Calabasas, 91302
Fire Station #144	31981 Foxfield Dr, Westlake Village, 91361

Table 56: Las Virgenes-Malibu COG Area Fire Stations



Map 15: Las Virgenes-Malibu COG Fire Hazard Areas and Fire Station Locations

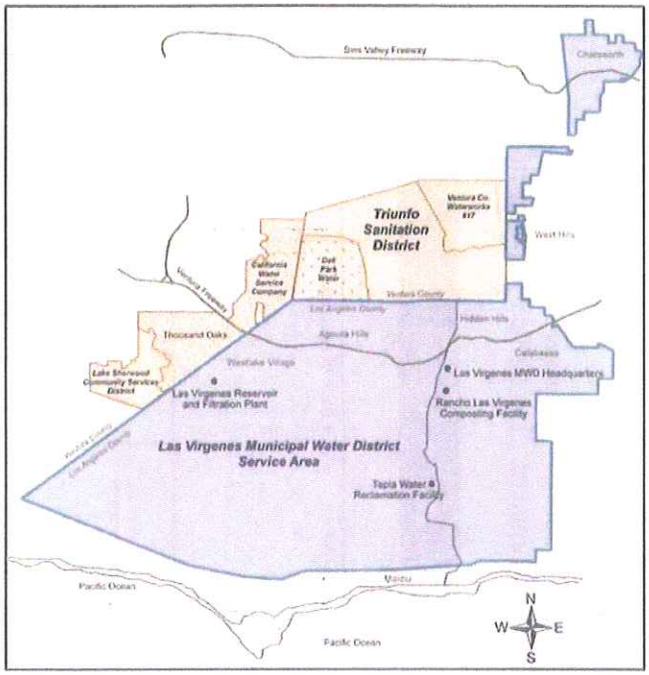
Las Virgenes Municipal Water District

The Las Virgenes Municipal Water District (LVMWD) serves the cities of Agoura Hills, Calabasas, Hidden Hills and Westlake Village (the City of Malibu is served by Los Angeles County Water District 29) They have 24 water tanks and 24 pumping stations, 10,000 acre-foot Las Virgenes Reservoir, and the Westlake Village Filtration Plat.

The Las Virgenes Reservoir dam is located at 2860 Three Springs Drive, Westlake Village. The water filtration plant is located at 32601 Torchwood Place, Westlake Village. Water is also purchased from the Metropolitan Water District of Southern California (MWD).

The LVMWD takes precautions to secure their facilities including fencing sites and securing facilities with alarms. Major facilities have security access gates locked 24/7 and a security company monitors and responds to alarms.

The district has operating and response procedures to ensure that any potential interruption of services will be as short as possible. Further, the district has completed a Vulnerability Assessment as required by federal law to assess and mitigate any potential security issues.



Map 16: Las Virgenes Municipal Water District Service Area

The Critical Facilities and Infrastructure Matrix on the following page provides a summary of key governmental, utility, commercial, cultural, and historical sites in the region. An understanding of critical facilities and infrastructure provides a basis for modeling current and future events and assists in focusing mitigation efforts.

Critical Facilities and Infrastructure Matrix

The following locations have been identified by the individual cities within the Las Virgenes- Malibu COG as essential due to the impact of a disaster on the public (e.g., large public meeting places), economy, or key infrastructure. The Critical Infrastructure Sectors listed are based on Homeland Security Presidential Directive 7 (HSPD-7).

Critical Infrastructure Sectors	Description	Agoura Hills	Calabasas	Hidden Hills	Malibu	Westlake Village
Agriculture and Food	Farming, livestock, poultry, food distribution, etc.	N/A	N/A	N/A	N/A	• Dole Foods
Banking and Finance	Banks, thrifts, credit unions, insurers, securities brokers/dealers, investment companies, financial services, etc. Includes Bank / Financial headquarters, loan processing centers, credit card processing centers, data centers	N/A	• Bank of America	N/A	N/A	• Bank of America
Chemical Industry	Chemical manufacturers, pharmaceutical, consumer products, agricultural chemicals, etc.	N/A	N/A	N/A	N/A	N/A
Commercial Facilities	Public Assembly (e.g., arenas, stadiums, aquariums, zoos, museums, convention centers), Sports Leagues (e.g., professional sports leagues and federations) Gaming (e.g., casinos), Lodging (e.g., hotels, motels, conference centers), Outdoor Events (e.g., theme and amusement parks, fairs, campgrounds, parades), Entertainment and Media (e.g., motion picture studios, broadcast media), Real Estate (e.g., office/apartment buildings, condominiums, mixed-use facilities, self-storage) and, Retail (e.g., retail centers and districts, shopping malls)	• Civic Center • Recreation Center	• Auto Row • Civic Center • The Commons (retail, food, entertainment)	• Community Center (not city owned)	• Civic Center • Zuma Beach Evacuation Area	• Civic Center • Costco • Four Seasons Hotel and Longevity Center • Residence Inn • Westlake Market Place • Westlake Village Inn
Communications	Terrestrial, satellite, and wireless transmission systems (major hubs, transmission/reception centers, etc.)	• Charter Communications • LVUSD & City Antennas • City CERT Antenna (Kimberly Peak)	N/A	N/A	N/A	• Time Warner Building Agoura Road. Fiber Optics trunk Line parallel to 101 freeway and La Tienda

Critical Infrastructure Sectors	Description	Agoura Hills	Calabasas	Hidden Hills	Malibu	Westlake Village
Critical Manufacturing	Primary metal manufacturing (iron and steel mills, ferro-alloys, aluminum, nonferrous metal production and processing), machinery manufacturing (engine, turbine, power transmission), electrical equipment (electrical equipment, appliance, and component manufacturing), transportation equipment manufacturing (motor vehicle, aerospace, railroad, etc.)	N/A	N/A	N/A	N/A	N/A
Dams	Dams, navigation locks, levees, hurricane barriers, mine tailings impoundments, or other similar water retention and/or control facilities	N/A	N/A	N/A	N/A	• Banning Dam • Three Springs Dam • Westlake Dam
Defense Industrial Base	Department of Defense (DoD), government, and the private sector worldwide industrial complex with the capabilities of performing research and development, design, production, delivery, and maintenance of military weapons systems, subsystems, components, or parts to meet military requirements	N/A	N/A	N/A	• HRL Laboratories	N/A
Emergency Services	First-responder disciplines that include: emergency management, emergency medical services, fire, hazardous material, law enforcement, bomb squads, tactical operations/special weapons assault teams, and search and rescue	• LA County Fire Station #89	• LA County Fire Stations: #68 and #125 • LA County Sheriff Lost Hills Station	• Hidden Hills EOC	• LA County Fire Station #70: Battalion HQ • LA County Fire Stations: #71, #72, #88, #99	• LA County Fire Station #144
Energy	Electricity, petroleum, natural gas	• Natural Gas Pipelines • Oil Pipelines • Edison Substation	• Natural Gas Pipelines • Oil Pipelines	• Oil Pipelines	N/A	N/A
Government Facilities	General-use office buildings and special-use military installations, embassies, courthouses, national laboratories, and structures that may house critical equipment and systems, networks, and functions as well as cyber elements that contribute to the protection of sector assets (e.g., access control systems and closed-circuit television systems) and the protection of individuals who possess tactical, operational, or strategic knowledge or perform essential functions	• City Hall • Library	• City Hall • Library	• City Hall	• City Hall	• City Hall

Critical Infrastructure Sectors	Description	Agoura Hills	Calabasas	Hidden Hills	Malibu	Westlake Village
Information Technology	Public and private sector information systems including the Internet	N/A	N/A	N/A	•City Hall	N/A
National Monuments and Icons	Listed in the National Register of Historic Places, List of National Historic Landmarks, icons, or other recognized physical structures, objects, or geographic sites	• Reyes Adobe Historical Site	N/A	N/A	N/A	N/A
Nuclear Reactors, Materials, and Waste	Nuclear power plants; non-power nuclear reactors used for research, testing, and training; nuclear materials used in medical, industrial, and academic settings; nuclear fuel fabrication facilities; decommissioning reactors; and the transportation, storage, and disposal of nuclear material and waste	N/A	N/A	N/A	N/A	N/A
Postal & Shipping	High volume processing facilities, delivery units, collection locations, retail operations, transport vehicles, postal/delivery information and communications networks	N/A	N/A	N/A	N/A	N/A
Healthcare and Public Health	Public and private hospitals and healthcare facilities	N/A	N/A	N/A	N/A	N/A
Transportation	Aviation, highways, maritime transportation, mass transit, pipeline systems, and rail	•101 Freeway •Pipelines (see Energy)	•101 Freeway •Natural Gas and Oil Pipelines (see Energy)	•101 Freeway	•Highway 1 PCH	•101 Freeway
Water	Drinking water and waste water	•Water Storage Tanks	•Las Virgenes Malibu WD HQ	N/A	•Water Storage Tanks	•Three Springs Reservoir
Other	Other locations not otherwise defined	N/A	•Round Meadow Elementary School (not city owned)	N/A	N/A	N/A

Table 57: Critical Facilities and Infrastructure Matrix