

Chapter 12: Safety Element

II. Introduction

Development in Los Angeles County has extended into areas with environmental hazards, such as hillsides, floodplains, and seismic areas. If this pattern of growth continues, it will further increase the vulnerability of Los Angeles County residents to seismic, geotechnical, flood, and fire hazards. In addition, studies suggest that climate change will increase the risk of natural hazards, particularly related to wildland fires and flooding.

The purpose of the Safety Element is to reduce the potential risk of death, injuries, and economic damage resulting from natural and man-made hazards. The California Government Code requires the General Plan to address “the protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence, liquefaction, and other seismic hazards...; flooding; and wildland and urban fires.” The Safety Element addresses only limited aspects of man-made disasters, such as hazardous waste and materials management, in particular, those aspects related to seismic events, fires, and floods. In general, hazardous materials management is addressed in the Los Angeles County Integrated Waste Management Plan (California Code of Regulations (CCR) Section 18755.5).

The Safety Element works in conjunction with the Operational Area Emergency Response Plan (OAERP), which is prepared by County’s Chief Executive Office - Office of Emergency Management (CEO OEM). The OAERP strengthens short and long-term emergency response and recovery capability, and identifies emergency procedures and emergency management routes in Los Angeles County. To access the OAERP, and to find more information on the OEM, please visit the CEO’s web site at <http://lacoa.org/oaerp.htm>.

CEO OEM also prepares the All-Hazard Mitigation Plan, which provides policy guidance for minimizing threats from natural and man-made hazards in Los Angeles County. The All-Hazard Mitigation Plan, which has been approved by the Federal Emergency Management Agency (FEMA) and the California Emergency Management Agency (CalEMA), includes a compilation of known and projected hazards in Los Angeles County. The All-Hazard Mitigation Plan also includes information on historical disasters in Los Angeles County. For more information on the County All-Hazard Mitigation Plan, please visit the CEO web site at <http://lacoa.org/hazmit.htm>.

II. Seismic and Geotechnical Hazards

Background

Since 1800, over 90 significant earthquakes have occurred in the Los Angeles region. There are over 50 active and potentially active fault segments, an undetermined number of buried faults, and at least four blind thrust faults capable of producing damaging earthquakes in Los Angeles County.

The California Alquist-Priolo Earthquake Fault Zoning Act of 1972 and Section 113 of the County Building Code prohibits the location of most structures for human occupancy across the traces of active faults, and lessens the impacts of fault rupture. In addition, the California Seismic Hazards Mapping Act of 1990 regulates developments as defined by the Act. Seismic Hazard Zone maps depict areas where earthquake induced liquefaction or landslides have historically occurred, or where there is a high potential for such occurrences. Liquefaction is a process by which water

saturated granular soils transform from a solid to a liquid state during strong ground shaking. A landslide is a general term for a falling, sliding or flowing mass of soil, rocks, water and debris.

The main provisions of the Alquist-Priolo Earthquake Fault Zoning and Seismic Hazard Mapping Acts are to:

- Require the California Geological Survey to prepare maps depicting earthquake fault zones, liquefaction hazard zones and earthquake-induced landslide zones.
- Require property owners (or their real estate agents) to disclose that their property lies within identified hazard zones; and
- Prohibit new construction of projects within identified hazard zones until a comprehensive geotechnical study has been completed.

Figure 12.1 identifies the County's Seismic Hazard Zones. In addition to depicting faults within Alquist-Priolo Earthquake Fault Zones, Figure 12.1 also depicts faults that are considered active based on published and unpublished information. For more details on active faults in Los Angeles County, please refer to Appendix H.

Figure 12.1: Seismic and Geotechnical Hazard Zones Policy Map

Issues

1. Seismic Hazards

Earthquakes can cause ground rupture, liquefaction and landsliding. In addition, flooding in low-lying coastal areas can result from a tsunami that is generated by a large offshore earthquake or submarine landslides. Widespread and localized earthquake induced effects place structures or utility corridors at-risk, and if damaged, can result in fires, failure of large dams, or the release of toxic, flammable, or explosive materials. The General Plan prohibits new projects, as defined by the Alquist-Priolo Act and Seismic Hazards Mapping Acts, until a comprehensive geotechnical study has been completed.

2. Geotechnical Hazards

More than 50 percent of the unincorporated areas are comprised of hilly or mountainous terrain. The vast majority of hillside hazards include mud and debris flows, active deep seated landslides, hillside erosion, and man-induced slope instability. These geotechnical hazards include artificially-saturated or rainfall-saturated slopes, the erosion and undercutting of slopes, earthquake induced rock falls and shallow failures, and natural or artificial compaction of unstable ground. The County's Hillside Management Area Ordinance regulates development in hillsides that have natural slope gradients of 25 percent or steeper, and these potential hazards are analyzed as part of the permitting process.

Goals and Policies for Seismic and Geotechnical Hazards

Goal S 1: An effective regulatory system that prevents or minimizes personal injury, loss of life and property damage due to seismic and geotechnical hazards.	
Topic	Policy
Geotechnical Hazards	Policy S 1.1: Discourage development in Seismic Hazard and Alquist-Priolo Earthquake Fault Zones.
	Policy S 1.2: Prohibit the construction of most structures for human occupancy adjacent to active faults until a comprehensive fault study that addresses the potential for fault rupture has been completed.
	Policy S 1.3: Require developments to mitigate geotechnical hazards, such as soil instability and landsliding, in Hillside Management Areas through siting and development standards.
	Policy S 1.4: Support the retrofitting of unreinforced masonry structures to help reduce the risk of structural and human loss due to seismic hazards.

III. Flood and Inundation Hazards

Background

Federal, state, and local agencies share and coordinate responsibilities for flood protection in Los Angeles County. The two main federal agencies include the U.S. Army Corps of Engineers, which implements federal flood protection policies, and the Federal Emergency Management Agency (FEMA). The California Department of Water Resources (DWR) is responsible for managing the state's waterways. Locally, the Los Angeles County Department of Public Works (DPW) and the Los Angeles County Flood Control District work to reduce flood risk in Los Angeles County. One way in which DPW and the Flood Control District manage flood risk is through the development of the Sediment Management Strategic Plan. For more information on the Sediment Management Strategic Plan, please visit <http://dpw.lacounty.gov/lacfd/sediment/Default.asp>.

For a comprehensive list of agencies responsible for flood management, protection, as well as financial assistance, please refer to Appendix H.

Flood Hazard Zones

Flood Hazard Zones are areas subject to moderate or minimal flood hazards that are identified on an official Flood Insurance Rate Map issued by FEMA. Flooding in Los Angeles County can be earthquake induced or can result from intense rainfall. Figure 12.2 shows the County's Flood Hazard Zones, which are 100-year and 500-year floodplains designated by FEMA.

In addition to the Flood Hazard Zones, DWR's Awareness Floodplain Mapping Program identifies potential flood hazard areas that are not part of the regulated floodplain. For the available awareness floodplain maps for the unincorporated areas, please refer to Appendix H.

Figure 12.2: Flood Hazard Zones Policy Map

Since 1980, the County has been a voluntary participant in the FEMA National Flood Insurance Program (NFIP). As a participant, the County is responsible for regulating development in Flood Hazard Zones and planning for floodplain management activities that promote and encourage the preservation and restoration of the natural state of the floodplain. As a compliance requirement of the NFIP, the County enforces regulations to ensure that buildings are erected at a safe elevation and to prevent potential damage to properties.

The County provides information on Flood Hazard Zones from FEMA's Flood Insurance Rate Maps to property owners for use in resolving flood insurance matters with insurance companies and lending institutions. The County conducts educational outreach to communities in the unincorporated areas on how to mitigate flooding impacts on properties. Through these and other efforts, the County reduces flood insurance costs for residents who are required to purchase flood insurance by lowering a community's overall rating system number.

For more information on flood hazards, please visit the DPW web site at <http://dpw.lacounty.gov/wmd/nfip>. Please also visit the U.S. Army Corps of Engineers National Levee Database at <http://nld.usace.army.mil>.

Issues

Flood Hazards and the Impacts of Climate Change

Large sub-marine landslides have the potential to generate destructive tsunamis along adjacent coastal areas in Southern California. The travel time for a locally generated tsunami, from initiation at the source to arrival at coastal communities, can be 5 to 30 minutes.

The likelihood for the catastrophic inundation of low-lying coastal areas as a result of a tsunami is low. However, the risk of losing vital commerce associated with the ports of Los Angeles and Long Beach warrants adequate risk reduction measures from tsunamis. The ports of Los Angeles and Long Beach have completed a Tsunami Hazard Assessment to guide disaster planning and mitigate damage from a potential tsunami at their facilities. In addition, the County All-Hazard Mitigation Plan includes risk reduction measures for the coastal areas.

Figure 12.3 identifies Tsunami Hazard Areas in Los Angeles County, which include Marina del Rey and portions of the Santa Monica Mountains Coastal Zone.

Figure 12.3: Tsunami Hazard Areas Map

The inundation of water caused by a catastrophic dam or aqueduct failure can devastate large areas and threaten residences and businesses. There are 103 dams in Los Angeles County that hold billions of gallons of water in reservoirs, and seismic activity can compromise dam structures and result in catastrophic flooding. The Division of Safety of Dams of the California Department of Water Resources has jurisdiction over large dams throughout the State and enforces strict safety requirements and annual inspections. Additionally, dam inundation areas have been mapped by dam owners and submitted to the California Office of Emergency Services (Cal/OES) to ensure effective emergency planning and adequate preparations in the event of a catastrophic event.

Climate change is expected to produce longer and more severe droughts due to higher average temperatures, as well as greater and more frequent floods. The water systems in Los Angeles County are designed to balance flood protection during the winter and spring months with water storage during the dry months. Increased rainfall and an earlier melting of the snowpack could result in overburdened facilities that cannot adequately protect communities from floods. In addition, consideration needs to be made for floods caused by sea level rise. Figure 12.4 shows the areas along the coastline that can potentially be impacted due to sea level rise flooding. While these impacts are likely to occur over a long period of time, sea level rise can affect and alter the impacts of flood inundation of low-lying coastal areas. Impacts related to sea level rise include the flooding of septic systems and the intrusion of salt water into the fresh water supply. Although coastal habitats can adapt to gradual changes in sea level, an accelerated rise in sea level will negatively impact coastal habitats. Wetlands, in particular, are at risk of being inundated.

Figure 12.4: Sea Level Rise Impact Areas Map

Goals and Policies for Flood and Inundation Hazards

Goal S 2: An effective regulatory system that prevents or minimizes personal injury, loss of life, and property damage due to flood and inundation hazards.	
Topic	Policy
Flood Hazards	Policy S 2.1: Discourage development in the County's Flood Hazard Zones.
	Policy S 2.2: Discourage development from locating downslope from aqueducts.
	Policy S 2.3: Consider climate change adaptation strategies in flood and inundation hazard planning.
	Policy S 2.4: Ensure that developments located within the County's Flood Hazard Zones are sited and designed to avoid isolation from essential services and facilities in the event of flooding.
	Policy S 2.5: Ensure that the mitigation of flood related property damage and loss limits impacts to biological and other resources.
	Policy S 2.6: Work cooperatively with public agencies with responsibility for flood protection, and with stakeholders in planning for flood and inundation hazards.
	Policy S 2.7: Locate essential public facilities, such as hospitals and fire stations, outside of Flood Hazard Zones, where feasible.

IV. Fire Hazards

Background

Fire Hazard Severity Zones

While all of California is subject to some degree of fire hazard, there are specific features that make some areas more hazardous. The California Department of Forestry and Fire Protection (CAL FIRE) is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. These zones, referred to as Fire Hazard Severity Zones (FHSZ), influence how people construct buildings and protect property to reduce risk associated with wildland fires.

Los Angeles County faces wildland fire threats due to its topography, rainfall patterns and fire-adapted vegetation. The at-risk areas are designated as FHSZs per Government Code Sections 51175–51189. FHSZs in the unincorporated areas are classified as Very High, High, and Moderate in State Responsibility Areas and Very High in Local and Federal Responsibility Areas. The Forestry Division of the Los Angeles County Fire Department (Fire Department) assists and supports the implementation of the CAL FIRE FHSZ model designation in Los Angeles County.

In an effort to reduce the threats to lives and property, the Fire Department has instituted a variety of regulatory programs and standards. These include vegetation management, pre-fire management and planning, the fuel modification Plan Review Program, and brush clearance inspection program. In addition to these programs, the Fire Department and DPW enforce fire and building codes related to development in FHSZs. The Fire Department implements the Title 32 (Fire Code) requirements in FHSZs.

Figure 12.5 identifies the FHSZs in Los Angeles County. For more information on the County's fire prevention and safety programs, please visit the Los Angeles County Fire Department's web site at <http://www.fire.lacounty.gov>.

Figure 12.5: Fire Hazard Severity Zones Policy Map

California Strategic Fire Plan

The State Board of Forestry and the California Department of Forestry and Fire Protection (CAL FIRE) have drafted a comprehensive document for wildland fire protection in California. The Fire Department Forestry Division's Fire Plan Unit is in charge of implementing the California Fire Plan in Los Angeles County. The planning process defines a level of service measurement, considers assets at risk, incorporates the cooperative inter-dependent relationships of wildland fire protection providers, provides for public stakeholder involvement, and creates a fiscal framework for policy analysis. The Fire Plan assessment process utilizes weather, assets at risk, fuels and input from the various regions, bureaus, divisions and battalions to help target critical areas and prioritize projects.

The Fire Department is one of six contract counties that maintain a contractual relationship with CAL FIRE and implements the California Fire Plan within Los Angeles County through the Strategic Fire Plan. The Strategic Fire Plan, which is prepared by the Fire Department, identifies and prioritizes pre- and post-fire management strategies and tactics to reduce loss of life, property, and natural resources. The Strategic Fire Plan is updated annually. This Safety Element incorporates the Strategic Fire Plan by reference and as amended annually. For more information, please visit the following web site: <http://www.fire.lacounty.gov>.

Regulations

Fuel Modification Plan Review Program

Fuel modification plans are required for development projects within areas designated as a Fire Hazard Severity Zone within the State Responsibility Areas or Very High Fire Hazard Severity Zone within the Local Responsibility Areas, as described in Title 32, Fire, Section 4908. The fuel modification plan identifies specific zones within a property that are subject to fuel modification. A fuel modification zone is a strip of land where combustible native or ornamental vegetation has been modified and/or partially or totally replaced with drought-tolerant, low-fuel-volume plants. The County of Los Angeles Fuel Modification Guidelines can be found at <http://www.fire.lacounty.gov>.

Fire prevention items addressed in the County Fire Code include provision of fire apparatus access roads, adequate road widths, requirements for all-weather access and fire flow, fire hydrant spacing, and clearance of brush around structures located in hillside areas that are considered primary wildland fire risk areas. Table 12.1 references fire-related land use and building regulations, including fuel modification, in the Los Angeles County Code.

Table 12.1. Fire-Related Land Use and Building Regulations in the Los Angeles County Code

Reference	Summary
Title 32, Fire, Section 4907.1	Defensible space around structures in State Responsibility Areas, per Title 14, Section 1270 of the California Code of Regulations
Title 32, Fire, Sections 4908, 1117.2.1	Fuel modification
Title 32, Fire, Section 325	Clearance of brush and vegetative growth
Title 20, Utilities, Section 20.16.060	Fire flow and fire hydrant requirements, including in Very High Fire Hazard Severity Zones.
Title 21, Subdivisions, Chapter 21.24, Part 1	Access road requirements for fire equipment access and public evacuation.
Title 21, Subdivisions, Section 21.44.250	Storm drain, sewer, or fire access easement designations on subdivision maps.
Title 21, Subdivisions, Section 21.24.220	Fire-protection access easements
Title 26, Building, Chapter 7A	Buildings within a Wildland-Urban Interface Fire Area.
Title 32, Fire, Section 105.7.9.1	Fire Department approval for land development projects.
Title 32, Fire, Section 328.10	Land development plan reviews located within VHFSZs.

Conservation and Wildland Areas

Significant Ecological Areas and Oak Woodlands

Many of the areas that contain biological resources in the unincorporated areas, including those within Significant Ecological Areas (SEAs) and Coastal Resource Areas (CRAs), as well as oak woodlands, overlap with fire hazard areas.

The Conservation and Natural Resources Element includes a map and goals and policies related to SEAs and CRAs. General descriptions of the biological resources and designation criteria for each SEA and CRA are contained in the Technical Appendix. The SEA Program also includes an implementing ordinance, the SEA Ordinance, which is part of the County's Title 22 planning and zoning code. The SEA Program Guide contains additional detail about the biological resources present in each SEA along with additional information to assist the County in managing resources within the SEAs.

In addition, as described in the Conservation and Natural Resources Element, DRP will work to expand documentation of oak woodlands as part of the implementation of the Oak Woodlands Conservation Management Plan. Oak woodlands play an important role in reducing risk of wildfires. The native understory of oak woodlands typically contains less flammable vegetation than other types of trees. Oak trees are also harder to ignite and not as prone to rapid combustion. Oak stands that are well maintained prevent slope failure, reduce erosion and can slow down a wildfire.

As part of the project planning review process, the Fire Department complies with the California Environmental Quality Act (CEQA), the CAL FIRE programmatic Environmental Impact Report for chaparral vegetation management programs, and the County's Oak Tree and Significant Ecological Areas ordinances to consider project impacts to wildlife habitats and endangered species.

Integrated Vegetation Management Program

Vegetation management, as it relates to wildland fire, refers to the total or partial removal of high fire hazard grasses, shrubs, or trees. This includes thinning to reduce the amount of fuel and modification of vegetation arrangement and distribution to disrupt fire progress. In addition to fire hazard reduction, vegetation management has other benefits. These include increased water yields, habitat restoration and improvement, reduction of invasive exotic plant species, and open access for recreational purposes.

The Vegetation Management Program (VMP) is a cost-sharing program that focuses on the use of prescribed fire, hand crews, mechanical, biological and chemical means, for addressing wildland fire fuel hazards, habitat restoration and other resource management issues on State Responsibility Area and Local Responsibility Area lands.

VMP allows private landowners, state and conservancy entities to enter into a contract with CAL FIRE to accomplish a combination of fire protection and resource management goals, including in open space areas. The Fire Department Forestry Division's Vegetation Management Unit and the Air and Wildland Division's Prescribed Fire Office implement VMP projects.

Pest, Disease and Other Forest Health Issues

The County of Los Angeles Department of Agricultural Commissioner / Weights and Measures (ACWM) maintains a vast network of insect traps throughout much of Los Angeles County. The network is designed to serve as an early warning system for some of California's most feared insect

pests, including species such as the gypsy moth, which have the potential to damage fragile wildland and watershed areas. The County of Los Angeles Fire Department Forestry Division assists the ACWM with detection and mitigation of insect and plant diseases, pests, and invasive species.

The County also collaborates with state, local and educational agencies on the detection, management and mitigation of insect and plant diseases, pests, and invasive species such as the golden spotted oak borer and polyphagous shot hole borer.

Circulation and Access

The Fire Department Strategic Fire Plan includes a map of existing Fire Department helispot fuel reduction projects, water resources, motorway maintenance maps, and a description of the road and fuel maintenance functions of the Fire Department.

Section 503 of Title 32 provides additional specifications for fire access roads in developed areas, including dimensions and markings.

Issues

1. The Increasing Costs of Wildland Fires

Although fires are a natural part of the wildland ecosystem, development in wildland areas increases the danger of wildfires to residents, property, and the environment. Increased fire frequency is the primary threat to wildland ecosystems, which are adapted to an infrequent fire return interval. Frequent fires cause habitat type conversion and the presence of invasive species.

Wildland fire threats are increasing, in part due to climate change. The rise in temperatures and prolonged periods of drought increase the fire ignition potential and may increase the frequency and duration of wildfires. Wildfires also have negative impacts on air quality. As exposure to smoke and particulate matter has immediate and long-term public health impacts, populations may suffer from eye irritations, respiratory problems, and complications to existing lung and heart conditions. Wildfires also have major economic impacts and have the potential to cost the County millions of dollars every year.

Although multiple regulations are in place to ensure that adequate infrastructure, such as peak load water supplies and necessary disaster routes are incorporated into new developments, older communities with aging and substandard infrastructure may face greater risks from wildland fires. In addition, current regulations cannot ensure that all developments that locate in FHSZs are protected from wildland fire threats.

For a timeline of recent fires and their countywide impacts, as well as their impacts on the unincorporated areas, please refer to Appendix H.

2. Urban Fire Considerations

Due to the intensity of development, population density, and the difficulties of containment, the County must also devote major resources to controlling potential fire hazards in its urbanized areas. Fire safety and suppression are especially critical in industrial areas and highrise buildings. The County must also consider performance standards and use exemptions that minimize urban fire risks, such as regulating certain commercial uses that have high fire risks in mixed use developments.

3. Fire Prevention, Response and Recovery

Appendix H references the relevant County codes, as well as programs and functions of the Fire Department and other agencies in fire prevention, fire/emergency response and recovery as required by CAL FIRE. Additional information can be found in the Strategic Fire Plan, which is updated annually.

Goals and Policies for Fire Hazards

Goal S 3: An effective regulatory system that prevents or minimizes personal injury, loss of life, and property damage due to fire hazards.	
Topic	Policy
Fire Hazards	Policy S 3.1: Discourage high density and intensity development in VHFHSZs.
	Policy S 3.2: Consider climate change implications in fire hazard reduction planning for FHSZs.
	Policy S 3.3: Ensure that the mitigation of fire related property damage and loss in FHSZs limits impacts to biological and other resources.
	Policy S 3.4: Reduce the risk of wildland fire hazards through the use of regulations and performance standards, such as fire resistant building materials, vegetation management, fuel modification and other fire hazard reduction programs.
	Policy S 3.5: Encourage the use of low-volume and well-maintained vegetation that is compatible with the area's natural vegetative habitats.
	Policy S 3.6: Ensure adequate infrastructure, including ingress, egress, and peak load water supply availability for all projects located in FHSZs.
	Policy S 3.7: Site and design developments located within FHSZs, such as in areas located near ridgelines and on hilltops, in a sensitive manner to reduce the wildfire risk.
	Policy S 3.8: Support the retrofitting of existing structures in FHSZs to help reduce the risk of structural and human loss due to wildfire.
	Policy S 3.9: Adopt by reference the County of Los Angeles Fire Department Strategic Fire Plan, as amended.
	Policy S3.10: Map oak woodlands in Los Angeles County as part of implementation of theOak Woodlands Conservation Management Plan.
	Policy S 3.11: Support efforts to address unique pest, disease, exotic species and other forest health issues in open space areas to reduce fire hazards and support ecological integrity.
	Policy S 3.12: Support efforts to incorporate systematic fire protection improvements for open space, including facilitation of safe fire suppression tactics, standards for adequate access for firefighting, fire mitigation planning with landowners and other stakeholders, and water sources for fire suppression.

V. Emergency Response

Background

Emergency Responders

Office of Emergency Management (OEM)

The Office of Emergency Management is responsible for organizing and directing the preparedness efforts of the Emergency Management Organization of Los Angeles County. OEM is the day-to-day Los Angeles County Operational Area coordinator for the County. The emergency response plan for the unincorporated areas is the Operational Area Emergency Response Plan (OAERP), which is prepared by OEM. The OAERP strengthens short and long-term emergency response and recovery capability, and identifies emergency procedures and emergency management routes in Los Angeles County. To access the OAERP, and to find more information on the OEM, please visit the CEO's web site at <http://lacoa.org>.

Disaster Response

Figure 12.6 shows the County's disaster routes. For more information on disaster response, please refer to the County OAERP.

Figure 12.6: Disaster Routes Map

Los Angeles County Fire Department

The Fire Department provides fire, safety, and emergency medical services to the unincorporated areas. The Strategic Fire Plan includes the County of Los Angeles Fire Department Operations Bureau Map, which indicates that emergency services are available in all unincorporated areas of the County. Additionally, many cities within Los Angeles County utilize Fire Department services. There are three major geographic regions in the Fire Department service area, which are divided into nine divisions and 22 battalions, as seen in Figure 12.7.

Figure 12.7: Fire Department Battalions and Stations Map

The Fire Department operates multiple divisions including Air and Wildland, Fire Prevention, and Forestry. In addition, the Health Hazardous Materials Division's mission is to "protect the public health and the environment...from accidental releases and improper handling, storage, transportation, and disposal of hazardous materials and wastes through coordinated efforts of inspections, emergency response, enforcement, and site mitigation oversight."

The Fire Department is a special district and receives most of its revenue from the unincorporated areas from a portion of the ad valorem property tax paid by the owners of all taxable properties. This revenue source varies from one tax rate area to another, and is specifically earmarked for the Fire Department. The Fire Department's Special Tax, which was approved by voters in 1997, is a supplemental revenue source that pays for essential fire suppression and emergency medical services. In addition, in 1990, the Board of Supervisors adopted a Los Angeles County Developer Fee Program to fund the acquisition, construction, improvement, and equipping of fire station facilities in the high growth areas of the unincorporated areas.

The County of Los Angeles Fire Department has one of the premier firefighter training programs in the nation. The Class Specifications can be found at

http://dhrdcap.co.la.ca.us/classspec/index.cfm?fuseaction=search.detail&cs_id=22. For wildland firefighters, the Department follows the National Wildfire Coordination Group (NWCG) qualifications for operational, logistical, planning and financial positions. For more information, please visit <http://www.nwcg.gov/>.

For more information on the Fire Department's programs and divisions, please visit their web site at <http://fire.lacounty.gov>.

Los Angeles County Sheriff's Department

The Los Angeles County Sheriff's Department (LASD) is the largest sheriff's department in the country. In addition to specialized services, the LASD is divided into 10 divisions, including the Office of Homeland Security, which focuses on potential threats related to local homeland security issues, such as terrorism or bioterrorism. The LASD provides law enforcement services to more than one million people living within 90 unincorporated communities, as well as to more than four million residents living within 40 contract cities. In addition, LASD provides law enforcement services to nine community colleges, Metro, and 48 Superior Courts. In addition to proactive enforcement of criminal laws, the LASD also provides investigative, traffic enforcement, accident investigation, and community education functions.

The Training Bureau consists of seven different programs which are designed to provide academy recruits and in-service personnel with the most up-to-date, innovative, creative and realistic learning experiences available to present day law enforcement. The featured programs are:

- Recruit Training Unit
- Advanced Officer Training Unit
- Weapons of Mass Destruction Detail
- Field Operations Training Unit
- Education-Based Discipline Unit
- Weapons Training
- Tactics and Survival Training Unit (Laser Village)
- Emergency Vehicle Operations Center
- Professional Development Unit

The LASD budget is approved by the Board of Supervisors through the utilization of state and local tax dollars. These funds are augmented by revenue generating contracts and grant allowances.

The passage of tax limitation measures, decline in the popular support for bond measures, and reductions in state and federal assistance, has hampered the capability of local governments to fund public safety. The LASD partnered with the City of Santa Clarita and the Board of Supervisors to establish the Law Enforcement Facilities Fee. The Law Enforcement Facilities Fee is a fee program that applies to certain projects in the Santa Clarita Valley and aims to mitigate project impacts on law enforcement service and facilities.

Figure 12.8 identifies the location of LASD's service areas. The Field Operation Regions are centered on 25 patrol stations that are dispersed throughout Los Angeles County.

For the location and detailed information of each station, and further information on the LASD Office of Homeland Security, please visit the LASD web site at <http://www.lasd.org>.

Figure 12.8: Sheriff's Department Service Areas Map

Emergency Response Across County Agencies

Emergency response is handled in the field through incident command posts, As described in the OAERP, the County's Emergency Operations Center provides centralized support to field responders to coordinate overall County response.

Cross-Jurisdictional Emergency Response

In emergency services, mutual aid is an agreement among emergency responders to lend assistance across jurisdictional boundaries. This may occur due to an emergency response that exceeds local resources, such as a disaster or a multiple-alarm fire. Mutual aid may be ad hoc, requested only when such an emergency occurs. It may also be a formal standing agreement for cooperative emergency management on a continuing basis, such as ensuring that resources are dispatched from the nearest fire station, regardless of which side of the jurisdictional boundary the incident is on. Agreements that send closest resources are regularly referred to as "automatic aid agreements." Current agreements are:

- Los Angeles County Operational Area Mutual Aid Plan;
- California Fire Master Mutual Aid Agreement;
- California Master Cooperative Wildland Fire Management (CFMA) and Stafford Act Response Agreement; and
- California Fire Assistance Agreement.

Over the last several decades an expansion of communities, homes and other improvements into wildland areas has created a significant challenge for the fire service agencies responsible for providing fire protection in those areas.

Wildland-urban interface fires often overtax the local fire agency resulting in the activation of mutual aid and automatic aid agreements to augment jurisdictional resources. Nearly every wildland-urban interface fire includes responses from a variety of wildland and municipal fire agencies. Los Angeles County's Operational Area Emergency Response Plan conforms to California's Standardized Emergency Management System (SEMS), which is intended to facilitate communication and coordination among all responding agencies. The system unifies all elements of California's emergency management community into a single integrated system and standardizes key elements. SEMS incorporates the use of the Incident Command System (ICS), California Disaster and Civil Defense Master Mutual Aid Agreement, and other forms of multi-agency or inter-agency coordination.

Los Angeles Regional Interoperable Communication System (LA-RICS)

The Los Angeles region's first responders currently use a patchwork of often incompatible radio technologies and frequencies. This uncoordinated system means that neighboring agencies and systems cannot easily communicate with one another.

The Los Angeles Regional Interoperable Communication System (LA-RICS) is a modern, integrated wireless voice and data communication system designed and built to serve law enforcement, fire service and health service professionals throughout Los Angeles County. The new system will provide day-to-day communications within agencies and allow seamless interagency communications for responding to routine, emergency and catastrophic events. LA-RICS will replace the patchwork system with a single countywide network, improve overall traffic capacity and coverage, and provide a dedicated broadband network for first responders. More information about LA-RICS is available at <http://www.la-rics.org/>.

Homeland Security

The Fire Department's Homeland Security/Hazardous Materials Section was created in 1995 in response to Presidential Decision Directive 39, outlining the need for the Fire Department to plan, organize and direct its members in preparing and responding to any large scale terrorist incident in the Los Angeles County Operational Area.

The Homeland Security Section was born out of necessity in response to the community's concerns that emergency responders need to be fully equipped and trained to deal with a chemical, biological, radiological, nuclear or explosive event. Today, all County firefighters and other emergency responders have the necessary personnel protective equipment and the training to respond safely and effectively to an event of this type. The Fire Department is also represented on the Federal Bureau of Investigations' Los Angeles Joint Terrorism Task Force.

Issues

1. The Need for Adequate Emergency Response Services

A catastrophic natural or man-made disaster has the potential to severely strain the emergency response and recovery capabilities of federal, state and local governments, and profoundly impact the regional and state economy. It is imperative that there are adequate resources available for emergency response. For example, to effectively and efficiently fulfill all of its functions, the Fire Department requires a staff level of one deputy sheriff per each 1,000 population.

Effective emergency response requires that the County provide public alerts and warnings for disasters. In addition, there is a need for preparedness communications about threats that face communities throughout Los Angeles County.

2. Creating Efficiencies Through Collaboration and Coordination

Continued growth and development in Los Angeles County will significantly affect the Fire Department and LASD operations. Coordination among various County departments is necessary to ensure adequate emergency response. Collaboration can also ensure that development occurs at a rate that keeps pace with service needs. In order to maintain an adequate emergency response system, it is important for the County to discourage development in hazardous areas, including Very High Fire Hazard Severity Zones, Flood Hazard Zones, and Seismic and Geotechnical Hazard Zones.

Goals and Policies for Emergency Response

Goal S 4: Effective County emergency response management capabilities.	
Topic	Policy
Emergency Response	Policy S 4.1: Ensure that residents are protected from the public health consequences of natural or man-made disasters through increased readiness and response capabilities, risk communication, and the dissemination of public information.
	Policy S 4.2: Support County emergency providers in reaching their response time goals.
	Policy S 4.3: Coordinate with other County and public agencies, such as transportation agencies, and health care providers on emergency planning and response activities, and evacuation planning.
	Policy S 4.4: Encourage the improvement of hazard prediction and early warning capabilities.
	Policy S 4.5: Ensure that there are adequate resources, such as sheriff and fire services, for emergency response.
	Policy S 4.6: Ensure that essential public facilities are maintained during natural disasters, such as flooding.

VI. Safety Element Implementation Programs

- Debris Management Plan
- At-Risk Properties Hazard Fund and Strategies
- Floodplain Management Plan Implementation and Update

For descriptions of these programs, please refer to Chapter 16: General Plan Implementation Programs.

[Text Boxes]

Wildland Fires and Climate Change

Recent studies indicate that climate change has resulted in wildland fires that last longer and occur more frequently. In 2007 and 2008 alone, wildland fires burned over 147,000 acres, destroyed 570 residences, and damaged an additional 42 residences in the unincorporated areas. In 2009, the Station Fire broke out in the Angeles National Forest, which burned nearly 160,000 acres and destroyed approximately 76 residences. This fire, the largest in recorded history for Los Angeles County, occurred months before the Santa Ana winds, which often exacerbate wildland fires in the fall and spring months. Appendix H contains descriptions of these and more recent wildfires in Los Angeles County.

Wildfire Preparedness Programs and Evacuation Guides

The following are guidelines for wildfire readiness for a variety of development and occupancy types:

County of Los Angeles Fire Department “Ready, Set, Go” Program

Santa Monica Mountains Fire Safe Alliance, “A Road Map to Fire Safety”

For more information, please visit the Fire Department web site at <http://www.fire.lacounty.gov>.

Community Wildfire Protection Plans

Community Wildfire Protection Plans are community-based collaborative plans developed by local stakeholders that identify and prioritize areas for hazardous fuel reduction treatments to protect natural resources, communities and infrastructure from wildfire. Applicable local governments, local fire departments, state forestry, and federal land management agencies agree to the plans, which are established under the umbrella of the County’s Strategic Fire Plan. The County of Los Angeles Fire Department’s Fire Plan Unit provides fire hazard reduction project design, development, planning and implementation for communities in Los Angeles County. Los Angeles County CWPPs include the following:

Santa Monica Mountains Community Wildfire Protection Plan:
http://www.nps.gov/samo/parkmgmt/upload/SMM_CWPP_02MAY2012_FINAL_v3.pdf

Community Emergency Response Team (CERT) Program

The Community Emergency Response Team (CERT) Program educates people about disaster preparedness for hazards that may impact their area, and trains them in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations. Using the training learned in the classroom and during exercises, CERT volunteers can assist others in their neighborhood or workplace following an event when professional responders are not immediately available to help. CERT members are also encouraged to support emergency response agencies by taking a more active role in emergency preparedness projects in their community.

For more information on the CERT Program, please visit the Fire Department web site at [http://www.fire.lacounty.gov/index.php/cert-program/..](http://www.fire.lacounty.gov/index.php/cert-program/)