

SAFETY ELEMENT

Prepared by:

Michael Baker

FINAL

SAFETY ELEMENT



Lead Agency:

CITY OF LAWNDALE

14717 Burin Avenue
Lawndale, California 90260
Contact: Perry Banner
Community Development Manager
310.973.3206

Prepared by:

Michael Baker International

14725 Alton Parkway Irvine, California 92618-2027 **Contact:** Ms. Starla Barker, AICP 949.472.3505

ADOPTED NOVEMBER 2015

JN 141884

This document is designed for double-sided printing to conserve natural resources.

TABLE OF CONTENTS

Purpose1			
Relations	ship to	Other General Plan Elements	.1
Context a	and Set	ting	.3
	•	c and Seismic Hazards	
	•	c Hazards	
		Hazards	
		azards1	
		ards	
		ous Materials	
		Operations	
EI	merge	ncy Services, Preparedness, and Response	.5
Goals and	d Polici	es	1
		e Safety	
	•	c and Seismic Hazards	
	_	ous Materials	
Fi	ire Haz	ards3	86
Eı	merge	ncy Services, Preparedness, and Response	6
EXHIB	<u> 3115</u>		
Exhibit SA	\F-1	Soils	5
Exhibit SA	AF-2	Fault Zones	9
Exhibit SA	AF-3	Seismic Zones for Ground Shaking1	.3
Exhibit SA	AF-4	FEMA Flood Zones	.5
Exhibit SA	AF-5	Oil Well Locations	!3
Exhibit SA	AF-6	Fire Station Locations	!7
Exhibit SA	AF-7	Emergency Staging Areas	13

	Lawndale Salety Elemen
This page intentionally left blank.	

Lawndale Safety Element

PURPOSE

The Safety Element describes the natural and human-induced public health and safety hazards that exist within the City of Lawndale and the measures that can be taken to reduce the potential risk to death, injuries, property damage, and economic and social dislocation. The Safety Element establishes preventative and responsive policies and programs to mitigate the potential impacts associated with hazards that may affect the City of Lawndale. This Element addresses natural hazards including geologic and seismic hazards, flood hazards, as well as man-made hazards such as wildland fires, urban and structure fires, handling of hazardous waste materials, aircraft operations hazards, and incidents that require emergency preparedness and response planning.

The Safety Element also includes policies on natural hazard mitigation planning that implement and support the City's Local Hazard Mitigation Plan (LHMP). The Federal Emergency Management Agency (FEMA) requires local agencies to adopt a LHMP in order to be eligible for pre-disaster mitigation funds. The Lawndale LHMP addresses several natural disasters that may affect the City: Earthquake (Geologic), Severe Weather, Drought, and Extreme Heat. The LHMP involves organizing resources; assessing potential risks; describing hazards; and identifying at-risk populations and assets; and setting goals, objectives, and tools to reduce the effects of these hazards, to minimize property and infrastructure damage, strengthen resources from local and regional public safety facilities, and increase education and awareness of hazard mitigation planning and emergency preparedness.

The City of Lawndale's LHMP is updated from time to time, and will continue to be integrated into the Safety Element. The Safety Element and LHMP are complementary planning documents designed to promote the public health, safety, and general welfare of the community and reduce the impacts on the community from a disaster.

RELATIONSHIP TO OTHER GENERAL PLAN ELEMENTS

The California Government Code requires internal consistency among the various elements of a general plan. While the Safety Element is affected by policies contained in other elements of the Lawndale General Plan including the Land Use, Housing, Circulation, Open-Space, Conservation, Economic Development, Air Quality, and Noise Elements, and may overlap with topical areas addressed in these elements, each is singularly important and collectively provide the framework for the overall long-term vision of Lawndale.

The Land Use Element establishes a policy framework to guide the physical development of the City, and is supported by the Safety Element as the policies and programs provide additional guidance on potential natural and man-made hazards associated with the development and siting of future development.

The Housing Element analyzes the City's demographics and characteristics to identify housing needs; reviews potential constraints to meeting the City's identified housing needs; evaluates developments of new housing opportunities; and establishes goals, policies, and programs to address Lawndale's identified housing needs. The Safety Element builds upon the Housing Element for safety and hazards considerations for existing and new housing developments and is required to include analysis and policies regarding flood hazard and management information.

The Circulation Element recognizes the importance of safety and security since an effective circulation system is vital to the community's quality of life. As the main policy tool to designate future road improvements, extensions, and special intersection design treatments, as well as opportunities for non-motorized travel such as walking and biking, the Circulation Element identifies the mobility needs and issues of the community and ensures available access for all users within the City.

The Open Space Element is related to the Safety Element as it manages and protects open space and recreational lands within Lawndale. The open space areas function as buffers between land uses to promote public health, safety, and overall quality of life for residents.

The Conservation Element is directly connected to the Safety Element as it promotes the protection, maintenance, and use of natural resources; prevents their destruction; and recognizes that natural resources must be maintained for their ecological value. Preservation and protection of mineral resources, water resources, air quality, energy resources, historical and cultural structures, and solid waste can be further protected when understanding how to minimize impacts to natural and man-made hazards (as it relates to reduction and recycling) identified in the Safety Element.

The Economic Development Element is tied to the Safety Element by focusing on the economic health in the City. The Economic Element aims to enhance the City's business climate, tax base, and economic provision of public services while maximizing the City's economic development potential. Lawndale's residential development drains municipal resources as more expenditures on health services, public safety, schools, etc., are required. Nonetheless, the City prioritizes public safety expenditures when appropriations are made in its annual budget.

The Air Quality Element affects the Safety Element as it involves reducing the health impacts of a growing population. The Air Quality Element influences the extent to which people sensitive to air pollution are exposed to air contaminants. Similarly, the Noise Element is related to the Safety Element in that it also serves to protect the public health and welfare in regards to noise safety. The Noise Element recognizes the relationship between noise and noise sensitive land uses; provides guidelines to achieve noise compatible land uses; and emphasizes the need to control, reduce, and mitigate the exposure of residents to excessive noise.



Lawndale City Hall

Section 65300.5 of the Government Code states that the general plan and the individual elements shall be integrated and internally consistent. The City will maintain this consistency as future General Plan amendments are processed by evaluating proposed amendments for consistency with all elements of the Lawndale General Plan.

CONTEXT AND SETTING

GEOLOGIC AND SEISMIC HAZARDS

Geologic and seismic hazards represent significant environmental hazards to residents of Lawndale and can result in substantial property and infrastructure damage. Geologic and soils hazards are comprised of subsidence, expansive soils, and steep slopes and landslides. Seismic hazards associated with earthquakes include primary seismic hazards, such as strong ground shaking and ground failures, and secondary seismic hazards such as liquefaction, lateral spreading, ground lurching, seiches, mudslides, landslides, and soil slumping.

GEOLOGIC HAZARDS

Soils

According to the Natural Resources Conservation Service, the soil types in Lawndale are primarily made up of Montezuma Clay Adobe, with some areas of Oakley Fine Sand, Ramona Sandy Loam, and Ramona Loam; refer to Exhibit SAF-1, Soils. The Montezuma soils consist of light gray, light brownish gray, and dark grayish brown moderately deep, somewhat excessively drained soils formed in ashy alluvium. The Oakley soils are characterized as red and reddish brown mixed fine-loam, sandy clay loam, or clay loam, consisting of very deep, well drained, moderately or moderately slowly permeable soils occurring in the southwest portion of Lawndale. The Ramona soils have brown, reddish-brown, and yellowish red, slightly and medium acid, sandy loam and fine sandy loam characteristics and are well drained, slow to rapid runoff and moderately slow permeability occurring in the southwest portion of the City.

Subsidence

Subsidence occurs when large amounts of groundwater have been withdrawn from certain types of rocks, such as fine-grained sediments. When the water is withdrawn, the rocks compact and fall in on themselves. It can also occur in unconsolidated soils during displacement of a large ground surface area in a downward movement, usually from the extraction of groundwater, oil, or natural gas. Areas with significant subsidence are typically associated with rapidly deposited alluvial material, or improperly compacted fill. Lawndale does not contain areas of rapidly deposited alluvial material, thus the risk for subsidence is low. Improperly compacted fill would be assessed on a site-specific basis.

Expansive Soils

Expansive soils contain significant amounts of clay particles that have the ability to give up water (shrink) or take on water (swell). Buildings, utilities, and roads can be damaged by clay rich soils which can swell each winter and shrink each summer depending upon rainfall. When these soils swell, the change in volume can exert significant pressures on loads such as buildings that are placed on them, and can result in gradual structural distress, cracking, settling, and/or damage. The type and amount of the silt and clay content in the soil will determine the amount of shrink or swell associated with the various levels of water content. Although there is clay content within the Montezuma and Ramona soils, these soils are well drained. In addition, Oakley soils are well drained and permeability is moderate to moderately slow, thus the risk for expansive soils is low. Soil conditions would be assessed on a site-specific basis.

¹ United States Department of Agriculture, *Montezuma Series*, August 2000.

² United States Department of Agriculture, *Oakley Series*, September 2002.

³ United States Department of Agriculture, *Ramona Series*, January 2003.

SEISMIC HAZARDS

Lawndale, along with most of California, is located within a seismically active region. Faults and earthquakes present primary effects from hazards including fault rupture and ground shaking, as well as secondary seismic hazards, as described further below.

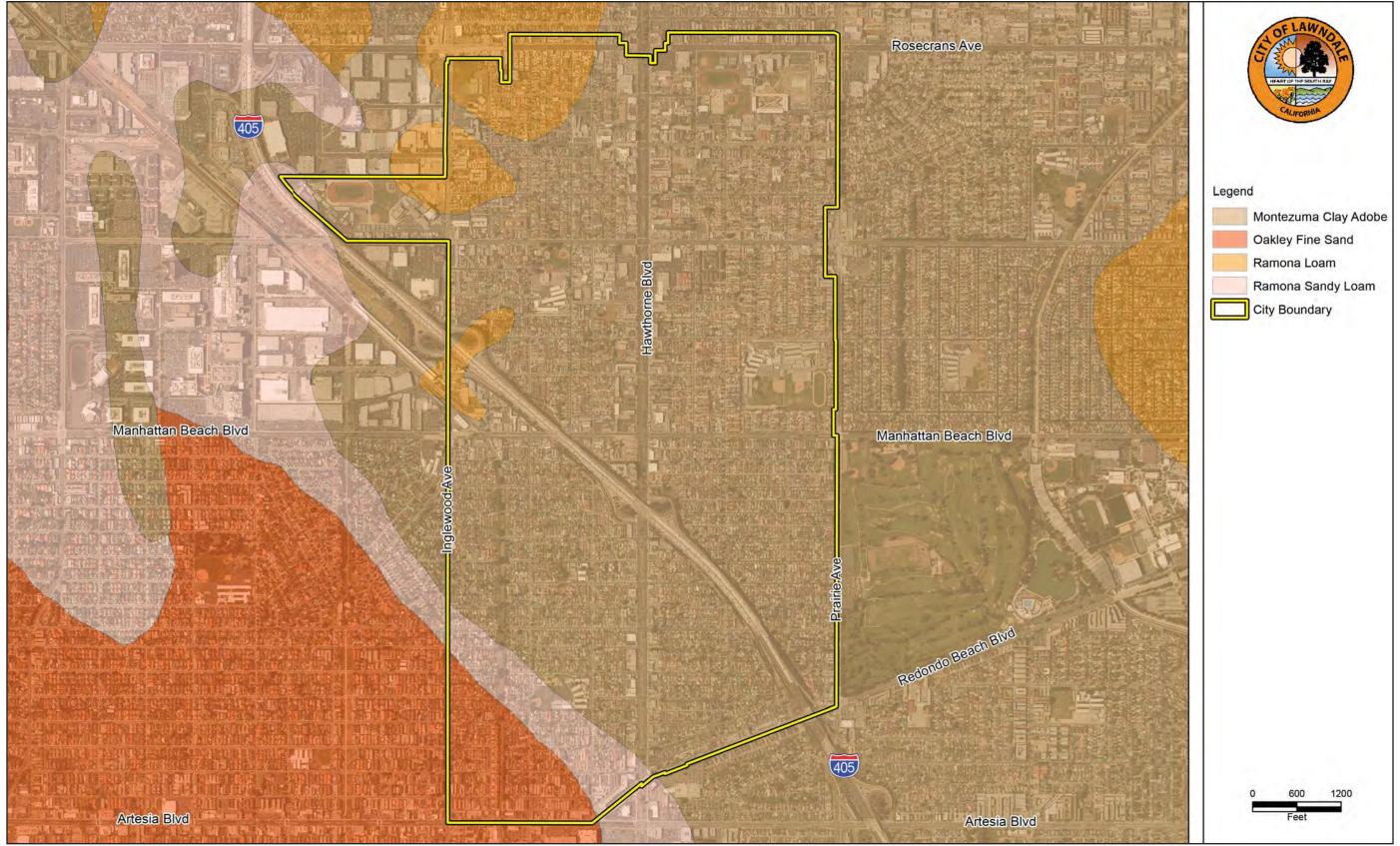
Earthquakes

An earthquake occurs when two blocks of the earth suddenly slip past one another. The surface where they slip is called the fault or fault plane. The size of an earthquake depends on the size of the fault and the amount of slip on the fault. The magnitude of an earthquake is determined from the logarithm of the amplitude of waves recorded by seismographs. On the Richter Scale, magnitude is expressed in whole numbers and decimal fractions. For example, a magnitude 5.3 might be computed for a moderate earthquake, and a strong earthquake might be rated as magnitude 6.3. Because of the logarithmic basis of the scale, each whole number increase in magnitude represents a tenfold increase in measured amplitude.

The Modified Mercalli (MM) Intensity Scale measures levels of intensity. Intensity measures the strength of shaking produced by the earthquake at a certain location. Intensity is determined from effects on people, human structures, and the natural environment and typically has a more meaningful measure of severity to the nonscientist than magnitude. The following is a comparison of magnitude and intensity.

Equivalent Richter Magnitude	Typical Maximum Modified Mercalli Intensity	Shaking	Abbreviated Modified Mercalli Intensity Scale
1.0 - 2.0	I	Not Felt	Felt by very few people; barely noticeable.
2.0 - 3.0	II	Weak	Felt by a few people, especially on upper floors.
3.0 - 4.0	Ш	Weak	Noticeable indoors, especially on upper floors, but may not be recognized as an earthquake. Standing motor cars may rock slightly.
4.0	IV	Light	Felt by many indoors, few outdoors. May feel like heavy truck passing by.
4.0 - 5.0	V	Moderate	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
5.0 - 6.0	VI	Strong	Felt by everyone. Difficult to stand. Some heavy furniture moved, some plaster falls. Chimneys may be slightly damaged.
6.0	VII	Very Strong	Slight to moderate damage in well built, ordinary structures. Considerable damage to poorly built structures. Some walls may fall.
6.0 - 7.0	VIII	Severe	Little damage in specially built structures. Considerable damage to ordinary buildings, severe damage to poorly built structures. Some walls collapse.
7.0	IX	Violent	Considerable damage to specially built structures, buildings shifted off foundations. Ground cracked noticeably. Wholesale destruction. Landslides.
7.0 - 8.0	X	Extreme	Most masonry and frame structures and their foundations destroyed. Ground badly cracked. Landslides. Wholesale destruction.
8.0	XI	Extreme	Total damage. Few, if any, structures standing. Bridges destroyed. Wide cracks in ground. Waves seen on ground.
8.0 and higher	XII	Extreme	Total damage. Waves seen on ground. Objects thrown up into the air.
	Sources: United States Geological Survey, Earthquake Hazards Program, The Modified Mercalli Intensity Scale, http://garthquake.usgs.gov/leam/tonics/marcalli.php.accessed August 10 2015 UPSeis Modified Mercalli Intensity Scale		

s: United States Geological Survey, Earthquake Hazards Program, The Modified Mercalli Intensity Scale, http://earthquake.usgs.gov/leam/topics/mercalli.php, accessed August 10, 2015. UPSeis, Modified Mercalli Intensity Scale, http://www.geo.mtu.edu/UPSeis/Mercalli.html, accessed August 10, 2015.



Source: NRCS, County of Los Angeles, ESRI, Eagle Aerial.



This page intentionally left blank.	-

Faults

Historical and geological records show that California has a long history of seismic events. Some of the better known fault zones within the area include the Newport-Inglewood fault zone (approximately two miles from the City), Charnock fault zone, Palos Verdes fault zone, Puente Hills fault zone, Malibu Coast-Santa Monica-Hollywood fault zone, and the Whittier fault zone; refer to Exhibit SAF-2, Fault Zones.⁴

Faults in southern California are categorized as active, potentially active, and inactive by the California Geological Survey (CGS). A fault is classified as active if it has either moved during the Holocene epoch (during the last 11,000 years) or is included in an Alquist-Priolo Earthquake Fault Zone (as established by CGS). A fault is classified as potentially active if it has experienced movement within the Quaternary period (during the last 1.6 million years). Faults that have not moved in the last 1.6 million years generally are considered inactive. There are also blind thrust faults, which are faults that are at a low to moderate angle and are not visible at the ground surface. Surface displacement can be recognized by the existence of cliffs in alluvium, terraces, offset stream courses, fault troughs and saddles, the alignment of depressions, sag ponds, and the existence of steep mountain fronts.

The most significant historically active and potentially active fault zones that are capable of seismic ground shaking and can impact Lawndale include:

Historically Active

- Newport-Inglewood
- Whittier-Elsinore
- San Fernando
- San Andreas
- San Jacinto

Potentially Active

- Charnock
- Palos Verdes
- Santa Monica
- Raymond Hill

The following faults are particularly significant to Lawndale because of their proximity to the community and high probability of occurrence.

• Newport-Inglewood: Although characterized as having an intermediate probability of fault movement over a 100-year period, the Newport-Inglewood fault zone is located approximately two miles from the City. The Newport-Inglewood Fault consists of a series of northwest-trending, generally right-lateral strike-slip fault segments.⁵ The largest instrumentally recorded earthquake in the Newport-Inglewood Fault was the Long Beach earthquake (M_L = 6.3) in 1933, followed by a large aftershock and earthquakes in the neighboring cities of Gardena and Torrance.

⁴ The Puente Hills fault and the Elysian Park fault are not identified by the United States Geological Survey Interactive Fault Map (http://earthquake.usgs.gov/hazards/qfaults/map/).

⁵ Strike-slip faults involve motion which is parallel to the strike of the fault -- frequently described as a "side-by-side" motion. Strike-slip faults are further described as "right-lateral" (dextral) or "left-lateral" (sinistral) depending if the block opposite the viewer moved to the right or left respectively.

• <u>San Andreas</u>: The closest segment of the San Andreas Fault is located approximately 46 miles from the City. However, the probability of fault movement over a 100-year period is characterized as likely. This fault system extends from Cape Mendocino in the north to the Salton Sea in the south and produces right-lateral offsets.⁶ The San Andreas system contains a number of distinct segments, each segment displaying a different mode of seismic behavior and hazards. The two largest earthquakes recorded along the San Andreas were located north of the Cajon Pass, approximately 65 miles from Lawndale. The Fort Tejon earthquake (M_L = 7.5-8.5) occurred in 1857 and the San Francisco earthquake (M_L = 8.3) occurred in 1906.

The following faults are significant to Lawndale because of their proximity and events that have occurred more recently.

- <u>Charnock</u>: The Charnock Fault is located approximately two miles northwest of the City. The Charnock Fault trends northwest-southwest, approximately parallel to the trend of the Newport-Inglewood Fault. Review of available geologic literature indicates the Charnock Fault has displaced Quaternary to Late Quaternary units; however, no offset of late Pleistocene or Holocene age alluvial deposits have been reported. Because no displacement of Holocene age alluvium has occurred, the Charnock fault is considered potentially active. The potential for surface rupture associated with the Charnock Fault is considered low.
- <u>Whittier-Elsinore</u>: The Whittier-Elsinore fault is located approximately 15 miles from the City, along the eastern edge of the Los Angeles Basin. This fault is a right-reverse slip fault.⁸ The Whittier Narrows Earthquake (ML = 5.9) on October 2, 1989, was one of the largest earthquakes in the Los Angeles Basin. It was recently thought to occur on the Whittier fault, but is believed to have occurred on the previously unidentified Elysian Park fault which underlies the Santa Monica Mountains.
- <u>San Fernando</u>: The San Fernando Fault is located 25 miles from the City. The fault zone is an eastward trending system of North-dipping reverse and thrust faults within the Transverse Range structural province and includes three segments.⁹ The San Fernando Fault was discovered in 1971 when it ruptured.

Fault Rupture

In 1972, the Alquist-Priolo Fault Zoning Act was enacted with the purpose of mitigating the hazard of fault rupture by prohibiting buildings along all active fault lines. According to the California Department of Conservation's Alquist-Priolo Earthquake Fault Zone Maps, there are no active fault zones or regulatory fault zones located in the City of Lawndale. ¹⁰ Insert Exhibit SAF-2

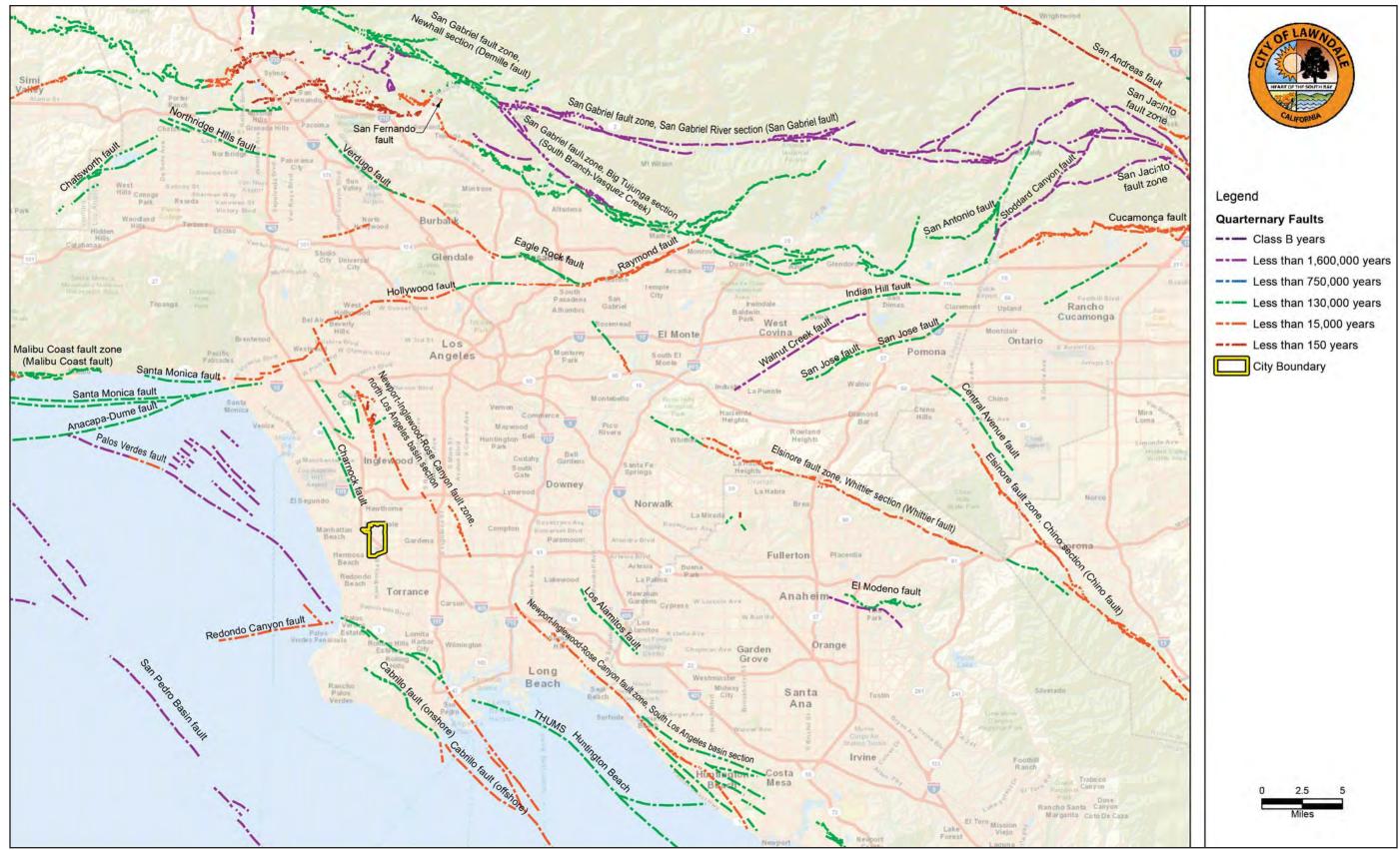
⁶ An offset is the horizontal component of displacement on a fault.

⁷ Camp Dresser & McKee Inc., Earth/Geology Technical Report LAX Master Plan EIS/EIR, January 2001.

⁸ In a reverse fault, the block above the fault moves up relative to the block below the fault. This fault motion is caused by compressional forces and results in shortening.

⁹ A reverse fault is called a thrust fault if the dip of the fault plane is small. Thrust and Reverse faults form by horizontal compressive stresses and so cause shortening of the crust. Most of these faults place older rocks over younger rocks. Younger over older relations can occur when previously deformed rocks are thrust faulted.

¹⁰ The Alquist-Priolo Earthquake Fault Zoning (AP) Act provides a mechanism for reducing losses from surface fault rupture on a statewide basis. The intent of the AP Act is to ensure public safety by prohibiting the siting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep.



Source: https://earthquake.usgs.gov/hazards/qfaults/map/, ESRI.



	Lavindare Safety	Licinon
This page intentionally left blank.		

Ground Shaking

Although there are no known active faults residing within or immediately adjacent to the City, the City could experience significant ground shaking associated with an earthquake on faults within the region. Ground shaking is the greatest source of earthquake damage. The amount of ground shaking depends on the magnitude of the earthquake, the distance from the epicenter, and the type of earth materials in between. Lawndale is located within an area identified as having low ground shaking probability. Lawndale experienced strong ground shaking from at least five earthquakes of magnitude 4.9 or larger that have been associated with the Newport-Inglewood Fault since 1920. According to the Probabilistic Seismic Hazards Map (PSHM), Lawndale has a four to six percent chance of experiencing an earthquake greater than Magnitude 7.2 within the next 20 years. 11 The lower the probability of an earthquake to occur, the further the area is away from known active faults. Ground shaking zones have been developed primarily on the characteristics of near surface soils and secondly on the distance to the Newport-Inglewood fault; refer to Exhibit SAF-3, Seismic Zones for Ground Shaking. The duration of ground shaking during a seismic event on the Newport-Inglewood fault would be the longest in Zone III due to soil conditions. Although less than Zone III, Zones I and II would experience similar ground shaking due to their closer proximity to the fault. Ground shaking hazards throughout the City will be highly site-specific. The City of Lawndale implements the most current California Building Codes, which regulate the design, construction, alteration, and maintenance of structures, including seismic design specifications.

Secondary Seismic Hazards

Ground shaking can result in secondary seismic hazards such as liquefaction, lateral spreading, subsidence, ground fissuring, and landslides.

Liquefaction typically occurs when loose saturated sediments primarily of sandy composition have a substantial loss of strength and behaves like a liquid when shaken by an earthquake, resulting in ground failure. The California Geological Survey identifies liquefaction zones where the stability of foundation soils must be investigated and countermeasures undertaken in the design and construction of buildings for human occupancy. Liquefaction potential is assessed by soil type in-situ density, initial confining pressure, ground shaking intensity, and duration of shaking. Liquefaction is not considered a significant risk in Lawndale as the City is not located within an area identified as having the potential for liquefaction.¹²

EARTHQUAKE-INDUCED LANDSLIDE AND SLOPE FAILURE

In addition to liquefaction, the California Geological Survey identifies landslide zones, which generally indicate steep hillslopes composed of weak materials that may fail when shaken by an earthquake. These areas are required to be investigated and countermeasures undertaken in the design and construction of buildings for human occupancy. Lawndale is not located within an area identified as having the potential for earthquake-induced landslides.¹³ As Lawndale is located in a relatively flat alluvial plain, several miles

¹¹ The 2008 United States Geologic Survey-National Seismic Hazard Mapping Project (NSHMP) update maps show the expected relative intensity of ground shaking and damage in California from anticipated future earthquakes. The shaking potential is calculated as the level of ground motion that has a 2% chance of being exceeded in 50 years, which is the same as the level of ground-shaking with about a 2500-year average repeat time. Although the greatest hazard is in areas of highest intensity as shown on the map, no region is immune from potential earthquake damage.

¹² Department of Conservation, State of California Seismic Hazard Zones Inglewood Quadrangle, March 25, 1999.

¹³ Department of Conservation, State of California Seismic Hazard Zones Inglewood Quadrangle, March 25, 1999.

from any hills or mountains, lateral spreading, mudslides, ground lurching, and soil slumping are unlikely to occur.

SEISMIC SEICHES

Seismic seiches are standing waves in an enclosed or partly enclosed body of water, such as rivers, reservoirs, ponds, and lakes. There are no large bodies of water that exist within or adjacent to the City. As such, the potential for seismic seiches is considered low.

TSUNAMIS

A tsunami is a large sea wave generated by any large-scale disturbance of the ocean floor that occurs in a short period of time, such as an earthquake, volcanic eruption, or coastal landslide, which can cause a sudden displacement of water. The City of Lawndale is located 3.5 miles from the Pacific Ocean and is not located within an area identified as being potentially affected by tsunami inundation.¹⁴

FLOOD HAZARDS

Flood Zones

Flooding can be a destructive natural hazard, and is a recurring event. Flooding is a direct response to the amount, distribution, and concentration of precipitation and can cause a significant amount of damage. Special Flood Hazard Areas (SFHA) identified by FEMA are referred to as the 100-year flood hazard areas. The 100-year flood hazard area is defined as an area that will be inundated by a flood event having a 1-percent chance of being equaled or exceeded in any given year. Lawndale is not located in a 100-year flood hazard area; refer to Exhibit SAF-4, FEMA Flood Zones. Lawndale is not located in a 100-year flood hazard area; refer to Exhibit SAF-4, FEMA Flood Zones.

Lawndale has experienced localized flooding conditions during heavy rain events as a result of storm drain failures. The Los Angeles County Department of Public Works maintains the City's storm drain system and performs inspection, maintenance, and repair, including cleaning blocked drains, and removing debris and trash.

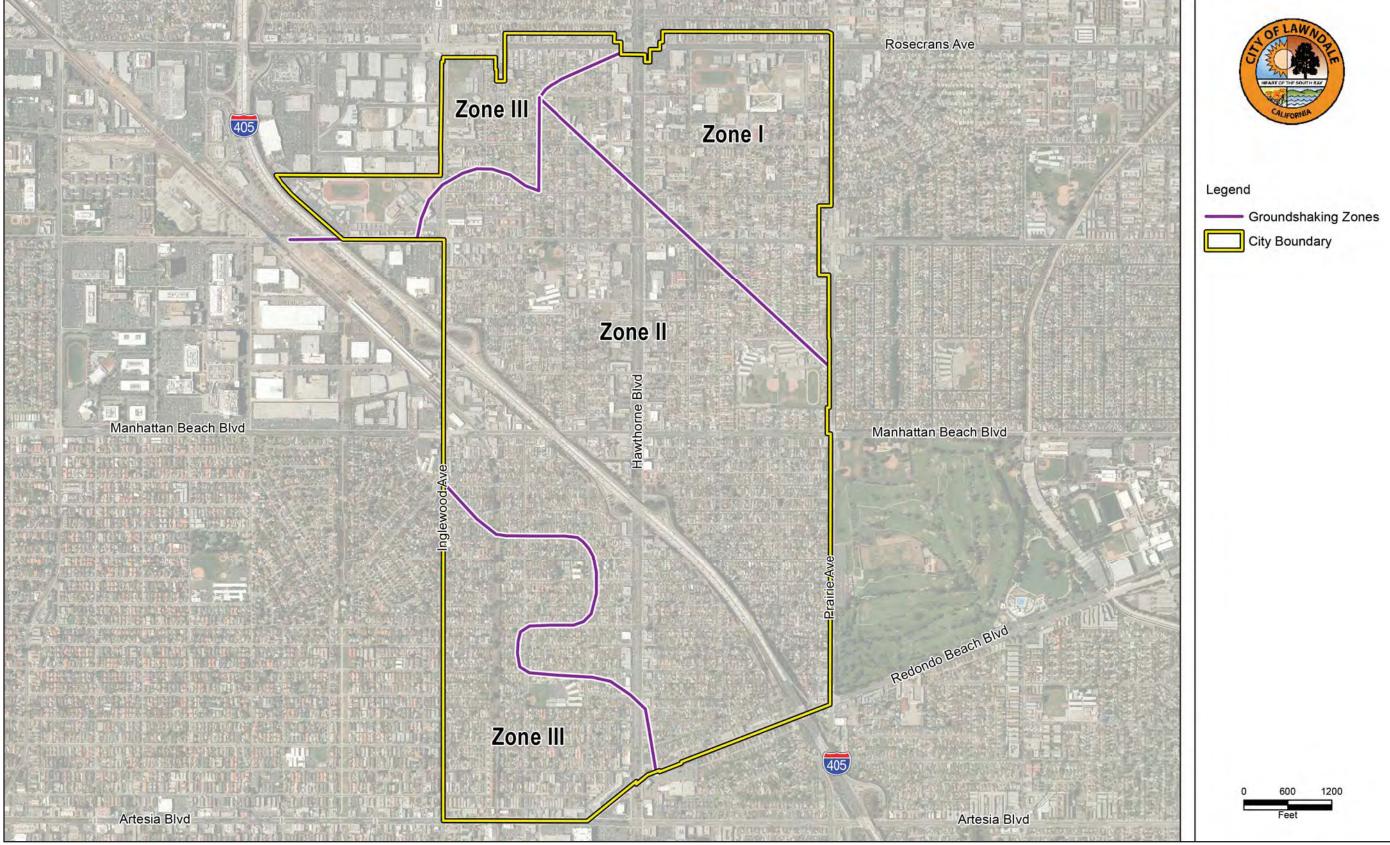
Dam Inundation

The City is not located within a dam inundation area and, therefore, no risks exist from dam failure.

¹⁴ Department of Conservation, *Los Angeles County Tsunami Inundation Quadrangles*, http://www.conservation.ca.gov/cgs/geologic_hazards/Tsunami/Inundation_Maps/LosAngeles/Pages/LosAngeles.aspx, accessed June 24, 2015.

¹⁵ Federal Emergency Management Agency, Flood Zones, https://www.fema.gov/flood-zones, accessed July 27, 2015.

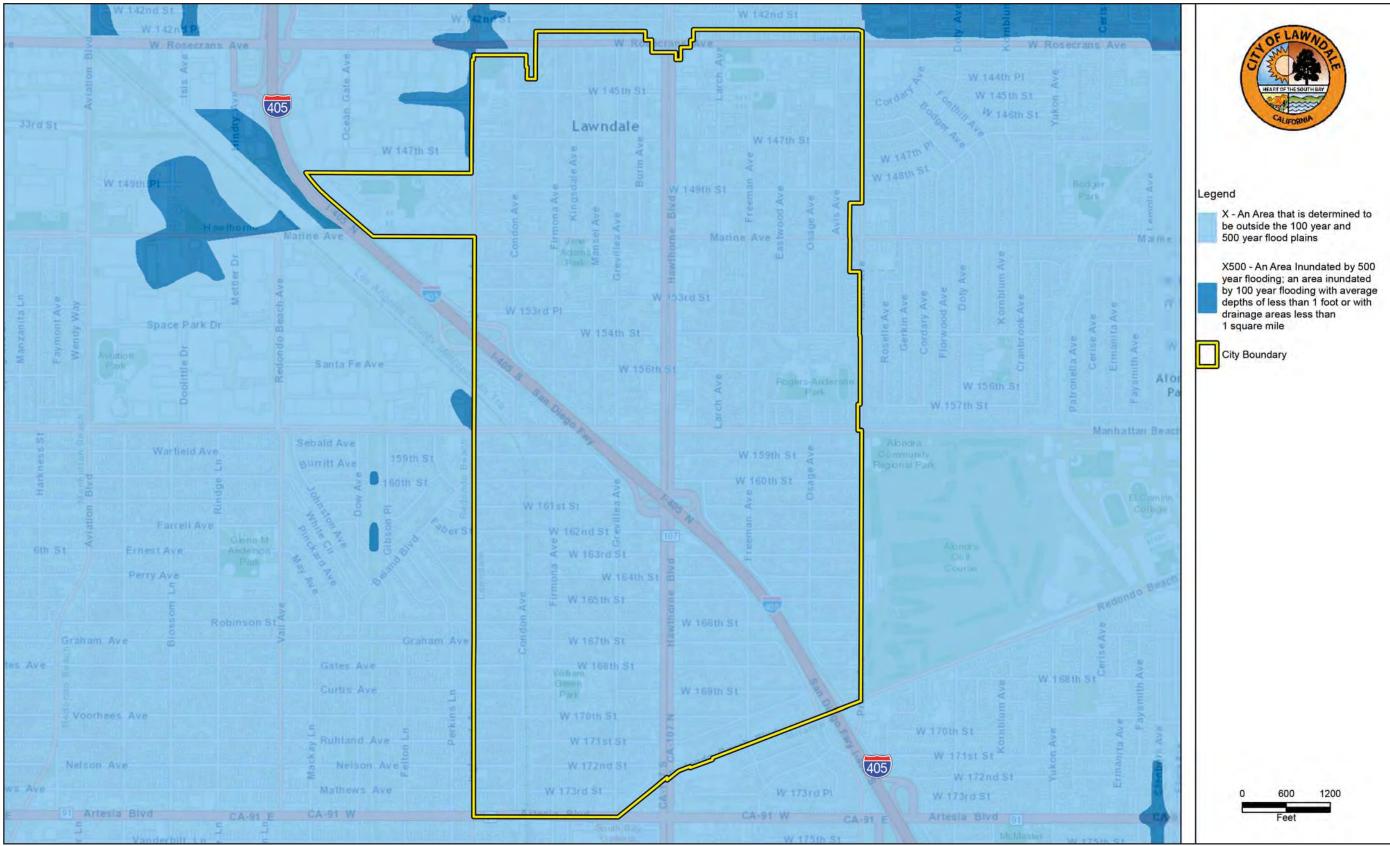
¹⁶ County of Los Angeles Office of Emergency Management, *County of Los Angeles 2014 All-Hazards Mitigation Plan*, February 24, 2014.



Source: City of Lawndale, Eagle Aerial.



	Lawndale Salety Elemen
This page intentionally left blank.	



Source: FEMA, ESRI.



	Lawnuale Safety Elemen
This page intentionally left blank.	

FIRE HAZARDS

Wildland Fires

A wildland fire is a large destructive fire that can spread quickly over woodland or brush. The California Department of Forestry and Fire Protection (CAL FIRE) conducts fire hazard severity mapping including mapping areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. These zones, referred to as Fire Hazard Severity Zones (FHSZ), define the application of various mitigation strategies and influence how people construct buildings and protect property to reduce risk associated with wildland fires. According to the Los Angeles County FHSZ map, there are no FHSZ zones located within Lawndale.¹⁷ Lawndale receives fire protection services from the Los Angeles County Fire Department (LACoFD). To reduce fire hazards, the LACoFD provides fire prevention planning strategies through the Brush Clearance Inspection Program and Vegetation Management Program. Strategies to respond to fire hazards include an ongoing effort to analyze the history and effects of wildland fires in Los Angeles County, development of fuel management projects with stakeholders, including cities, community groups, and other agencies, experimentation with different methods of reducing or removing fuels in fire prone areas as well as the evaluation of the environmental impacts and effects of these practices, and various methods of vegetation management.

Urban Fires

Due to the urbanized character of the City, fires would primarily be associated with structures, trash/debris, and vehicle fires. Structure fires, including homes, industrial and commercial buildings, and other facilities are of the greatest concern due to the potential for loss of life as well as property. Generally, the risk of injury and damage is greater for higher occupancy structures, such as condominiums, apartment buildings, hotels, hospitals, and churches. In addition, higher density areas are of increased concern due to the large number of people residing within a concentrated area and the potential for fires to spread from one structure to another. Lawndale is one of the highest density areas within Los Angeles County. Development of the City has resulted in small lot development with multiple structures on single lots and narrow streets. Emergency access is limited between the closely spaced structures and along the narrow streets that occur throughout the City. On-street parking, especially during the evening hours, further restricts the access and maneuverability of fire equipment. Due to the nature of the development that has occurred, many structures do not meet current emergency access requirements.

Fire Flow

The City of Lawndale is served by Golden State Water Company (GSWC) and is located within the Southwest water system. The Southwest water system has a total of approximately 463 miles of pipeline, of which 83 miles are four inches in diameter. The City has a total of approximately 42 miles of pipeline, of which 9.5 miles are four inches in diameter. Although Lawndale was originally planned for primarily single-family residential uses, which would be adequately served by 4-inch pipelines, the City has experienced additional growth comprised of multi-family, commercial, and industrial uses. GSWC's Pipeline Management Program identifies pipelines to be replaced based on specific criteria such as improving hydraulics, pipe age, pipe material, and leaks/breaks, as well as water quality issues. The California Public Utilities Commission (CPUC) does not allow pipelines to be replaced solely on improving fire flow. However, GSWC uses system-specific hydraulic models to determine hydraulic capacities,

¹⁷ CAL FIRE, Wildland Hazard & Building Codes, *Very High Fire Hazard Severity Zones in LRA, Los Angeles FHSZ Map,* September 2011.

including fire flow capacities in each system. GSWC designs all new mains to the fire flow standards in place at the time of installation. According to GSWC, fire flow requirements are continuing to be met by the 4-inch mains and fire flow in all newer mains is adequate to meet current demands and standards required by the Los Angeles County Fire Department Fire Prevention Division.¹⁸

Fire Prevention

Lawndale adopts the most current California Fire Code, as amended, as the City's fire code, which includes requirements for new construction. The fire code addresses access standards to ensure access of fire apparatus is provided for all newly constructed buildings. In addition, specific types of development projects (e.g., condominiums) are required to provide specific fire protection features, including clearly marked fire access ways, units equipped with fire sprinklers, water lines equipped with fire protection systems, and standards in accordance with current Building Codes and Fire Codes.

The LACoFD Fire Prevention Division consists of 175 personnel in Regional Units located throughout the County of Los Angeles and divided into three geographical regions: North, Central, and East Regions. The City of Lawndale is located in the Central Region.¹⁹ The Fire Prevention Division focuses on educating the community about the benefits of proper safety practices and identifying and eliminating all types of hazardous conditions, which pose a threat to life, the environment, and property. LACoFD Fire Prevention Division covers a diverse range of responsibilities including inspection of activities and operations for commercial, industrial, and residential development, analyzing new processes and products, and updating codes and inspections. The division continues to investigate widespread fires and update information to ensure improvements in safety within the community. The LACoFD is also responsible for conducting new construction field inspections, annual business inspections and minor plan checks for building processes and fire extinguishing systems. Depending on the nature of the project, City staff sends project plans to LACoFD or the project applicant coordinates plan reviews with LACoFD. For projects involving a subdivision or multiple units, the LACoFD reviews for site access and fire flow availability. Prior to any building permits being issued, the Lawndale Building and Safety Plan Check Engineer would verify that any LACoFD required approvals have been given.

HAZARDOUS MATERIALS

The California Code of Regulations defines a hazardous material as a substance that, because of physical or chemical properties, quantity, concentration, or other characteristics, may either (1) cause an increase in mortality or an increase in serious, irreversible, or incapacitating illness or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of, or otherwise managed. Hazardous wastes are hazardous materials that no longer have practical



Hazardous materials incident training/ coordination between LACoFD and LACSD

¹⁸ Golden State Water Company, A Commitment to Quality Water Service, Lawndale Planning Commission Presentation, September 9, 2015.

¹⁹ County of Los Angeles Fire Department, *Fire Prevention Division*, http://www.fire.lacounty.gov/fire-prevention-division/, accessed May 20, 2015.

use, such as substances that have been discarded, discharged, spilled, contaminated, or are being stored prior to proper disposal. A hazardous materials incident involves the uncontrolled release of a hazardous substance during storage, use, or transport.

The State's Accidental Release Prevention Law provides for consistency with Federal laws (i.e., the Emergency Preparedness and Community Right-to-Know Act and the Clean Air Act) regarding accidental chemical releases and allows local oversight of both the State and Federal programs. State and Federal laws are similar in their requirements; however, the California threshold planning quantities for regulated substances are lower (stricter) than the Federal quantities. Local agencies may set lower reporting thresholds or add additional chemicals to the program. The Accidental Release Prevention Law is implemented by the Certified Unified Program Agencies (CUPAs) and requires that any business utilizing a greater quantity of a regulated substance than the specified threshold quantity, register with the responsible CUPA as a manager of regulated substances and prepare a Risk Management Plan.

A Risk Management Plan must contain an off-site consequence analysis, a five-year accident history, an accident prevention program, an emergency response program, and a certification of the truth and accuracy of the submitted information. Businesses submit their plans to the CUPA, which makes the plans available to emergency response personnel. The Business Plan must identify the type of business, location, emergency contacts, emergency procedures, mitigation plans, and chemical inventory at each location. Under CUPA, site inspections of these hazardous materials programs (above ground storage tanks, underground storage tanks, hazardous waste treatment, hazardous waste generators, hazardous materials management and response plans, and the California Fire Code) are consolidated and accomplished by a single inspection. In addition, this program provides emergency response to chemical

events to furnish substance identification; health and environmental risk assessment; air, soil, water, and waste sample collection; incident mitigation and cleanup feasibility options; and on-scene coordination for state superfund incidents. The program also provides for the oversight, investigation, and remediation of unauthorized releases from underground tanks.

The LACoFD serves as the CUPA for the City of Lawndale.²⁰ The CUPA program is designed to consolidate, coordinate, and consistently administer permits, inspection activities, and enforcement activities throughout the County. As a CUPA, the LACoFD is responsible for implementing the following six hazardous materials and hazardous waste programs: Hazardous Waste Generator and Onsite Hazardous Waste Treatment Programs (Tiered Permitting); Aboveground Petroleum Storage Tank Spill Prevention Control and Countermeasure Plan (SPCC); Hazardous Materials Release Response Plans and Inventory Program (Hazardous Materials Disclosure); California Accidental Release Prevention Program (Cal ARP); Underground Storage Tank (UST) Program; and Uniform Fire Code Plans



Petroleum Pipeline Signage and Emergency Information

_

²⁰ County of Los Angeles Fire Department, *CUPA Programs*, http://www.fire.lacounty.gov/hhmd/cupa-programs-2/, accessed May 27, 2015.

and Inventory Requirements. In addition, the LACoFD Health Hazardous Materials Division (HHMD) provides 24-hour emergency services in response to hazardous materials spills or releases and abandonment that occur in areas of HHMD CUPA jurisdiction. As LACoFD Health Hazardous Materials Division Deputy Health Officers, the Emergency Response Specialists perform multiple job duties at emergency incidents which include hazard materials categorization, technical advising, entry team participation, and evacuation and reoccupancy determination.

Furthermore, hazardous materials teams within and adjoining Los Angeles County are planning to meet, train together, and compare equipment and experiences. The multi-agency collaboration began with recent meetings between LACFD, City of Los Angeles Fire Department, Orange County Fire Authority, Santa Fe Springs, Vernon, Burbank, Ventura County, Torrance, Ontario, Anaheim, Downey Fire Departments, Jet Propulsion Laboratory, and the 9th Civil Support Team.²¹ These agencies understand and recognize the potential for a major hazardous materials incident, such as terrorism and in jurisdictions that have minimal hazardous materials response capability, which would require more resources than any one agency can handle. Team meetings will involve scheduled future drills and exercises with all involved agencies to ensure that when an incident occurs, each team understands each other's procedures and strengths.

Transportation of Hazardous Materials

Hazardous substance incidents could occur in Lawndale due to the presence of highways, railways, and pipelines. The transport of hazardous materials may occur along the Burlington Northern-Santa Fe (BNSF) Railway, which transects the southwest portion of the City. In the event of train derailment, hazardous materials transported on the rail line could be released impacting adjacent development and properties.

Lawndale has no designated truck routes for the transport of hazardous materials within and through the City. However, as volumes of truck traffic are minimal and there are relatively low speed limits within the City, the potential for hazardous materials spills are nominal.

Transportation of hazardous materials/wastes is regulated by California Code of Regulations (CCR) Title 26. The United States Department of Transportation (DOT) is the primary regulatory authority for the interstate transport of hazardous materials. The DOT establishes regulations for safe handling procedures (i.e., packaging, marking, labeling and routing). The CHP and Caltrans enforce Federal and State regulations and respond to hazardous materials transportation emergencies. Emergency responses are coordinated as necessary between Federal, State, and local governmental authorities and private persons through a State mandated Emergency Management Plan. In addition, the City's Emergency Operations Plan contains a Hazardous Materials Annex, which establishes polices, guidelines, and an organization for response to a hazardous materials incident in the City.

Hazardous Materials Sites

Hazardous materials can be found in certain businesses in Lawndale including production or service processes, which generate hazardous waste. These businesses include automotive services, gas stations, car washes, painting, tool and building materials companies, and retail services. Commercial land uses tend to be located along major corridors such as Hawthorne Boulevard, Redondo Beach Boulevard and Inglewood Avenue. Commercial manufacturing uses are generally located within the western portion of

_

²¹ County of Los Angeles Fire Department, *Hazardous Materials Teams Train Together to Improve Response*, February 17, 2015.

the City, south of I-405 and Manhattan Beach Boulevard; north and south of Marine Avenue, and west of Hawthorne Boulevard, north and south of Rosecrans Avenue. Light industrial uses are mainly concentrated south of I-405, north of Manhattan Beach Boulevard and east of Inglewood Avenue. Commercial manufacturing and commercial uses are located adjacent to residential areas.

There are currently several leaking underground storage tanks (LUST) sites in Lawndale. These sites are primarily associated with gas stations and/or automobile repair facilities. Many of the sites are undergoing site assessment and remediation. LUSTs pose environmental hazards by contaminating soil and groundwater. These tanks need to be replaced, the soil excavated and removed, and the groundwater cleaned, if contaminated, and monitored. The Los Angeles County Department of Public Works Environmental Programs Division (LACoDPW EPD) permits, inspects, and regulates USTs within the unincorporated areas, as well as Lawndale, through the UST Program. In accordance with the Los Angeles County Code Title 11, Division 4, the goal of the UST Program is to protect the public, the environment (air, soil and groundwater) and UST owners and operators by ensuring that UST facilities are permitted, designed, installed, modified, operating and eventually closed in compliance with local, state, and federal requirements. The UST Program's engineers evaluate each UST application to determine if the type of UST system being used, as well as the various components and monitoring devices that ensure the integrity of the system throughout its life, are compatible with the hazardous material being stored. The LACoDPW inspects UST facilities annually to verify that all monitoring devices are working and any needed repairs are done promptly. To protect against the harmful effects caused by leakage of hazardous materials, the UST Program inspects more than 4,400 USTs annually to verify the integrity of the tanks and monitoring devices within the County. In addition to protecting the health of residents, the UST Program helps to safeguard the underground aquifers that make up the 33 percent of the region's drinking water supply. The LACoDPW EPD is currently in the process of considering technical changes in incorporating State regulations to the UST program, as well as proposed fee increases and new fee adjustments.²²

Hazardous Waste

Hazardous waste is waste with properties that make it dangerous or potentially harmful to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed. Household Hazardous Wastes (HHW) are products purchased for use in or around the home labeled: toxic, poison, combustible, corrosive, flammable or irritant that when improperly discarded, may threaten human health or the environment. The following are examples of household hazardous products including lawn and garden products (fertilizer, pesticides, insecticides, herbicides, and weed killers), household cleaners, paint and related products, automotive fluids and batteries, personal hygiene products, beauty products and medicines, photographic chemicals and swimming pool chemicals.²³ In joint sponsorship with the Los Angeles County Sanitation Districts, Los Angeles County provides the HHW Collection Program, which allows Lawndale residents a cost-free way to dispose of unwanted household chemicals that cannot be disposed of in regular trash through permanent HHW collection centers, other recycling programs, and one-day HHW and electronic waste collection events. In addition, some cities in the County provide their own HHW collection events and services. The City of Lawndale collects used oil.²⁴

²² Los Angeles County Department of Public Works, *Underground Storage Tank Program,* http://dpw.lacounty.gov/epd/ust/, accessed May 27, 2015.

²³ Los Angeles County Department of Public Works, *Household Hazardous Waste*, http://dpw.lacounty.gov/epd/hhw/, accessed May 27, 2015.

²⁴ Los Angeles County Department of Public Works, *Household Hazardous Waste, Specific City Operated Programs* http://dpw.lacounty.gov/epd/hhw/local_city_collection.cfm, accessed May 27, 2015.

Business Hazardous Waste is generated during the course of operating a business. State and Federal laws require all businesses that generate or accumulate hazardous waste to comply with regulations for proper disposal of these wastes. The HHW collection events will not accept business hazardous waste. However, generators of small quantities of hazardous waste may be conditionally exempt from many of the regulations if they deliver the waste to permitted collection sites. The Conditionally Exempt Small Quantity Generator (CESQG) Program, administered by the LACoFD, allows eligible businesses to bring hazardous waste to one of the permitted waste facilities serving Los Angeles County. State and Federal laws limit the use of this type of program to businesses that qualify as a CESQG. Eligible businesses are required to register for the program, and provide a clear and complete description of the hazardous waste with company/organization information; Environmental Protection Agency Identification number; estimation of waste generated per month per year; chemical or trade name of waste; and size, type and number of containers.²⁵ Businesses generating larger amounts are required to use a licensed hazardous waste hauler to manifest and transport their waste.

Oil Wells

The California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR) oversees the drilling, operation, maintenance, and plugging and abandonment of oil, natural gas, and geothermal wells. Regulatory programs emphasize the development of oil, natural gas, and geothermal resources in the State through sound engineering practices that protect the environment, prevent pollution, and ensure public safety.

According to DOGGR, the City of Lawndale has 24 abandoned and capped oil wells. Of the 24, five are active oil wells within its boundaries; refer to Exhibit SAF-5, Oil Well Locations. DOGGR is responsible for implementing Public Resources Code (PRC) 3208.1, which authorizes DOGGR to order the reabandonment of a previously abandoned well when construction of any structure over or in proximity to a well could result in a hazard. DOGGR's Construction Site Well Review Program assists local permitting agencies in identifying and reviewing the status of oil or gas wells located near or beneath proposed structures. Before issuing building or grading permits, local permitting agencies review and implement DOGGR's preconstruction well requirements.

AIRPORT OPERATIONS

There are several private, public, and military airports that operate within Los Angeles County. The nearest airports to Lawndale are the Hawthorne Municipal Airport and the Los Angeles International Airport (LAX). According to the Los Angeles County Airport Land Use Commission, Lawndale is not located in the Hawthorne Airport Influence Area or the LAX Airport Influence Area.^{26,27} In 2004, the LAX Master Plan was adopted in order to address the pressing need for modernization and improved levels of service, as well as the very real demand for increased security. The LAX Master Plan is designed to protect critical airport infrastructure and provide for passenger safety and convenience, in balance with community demands.

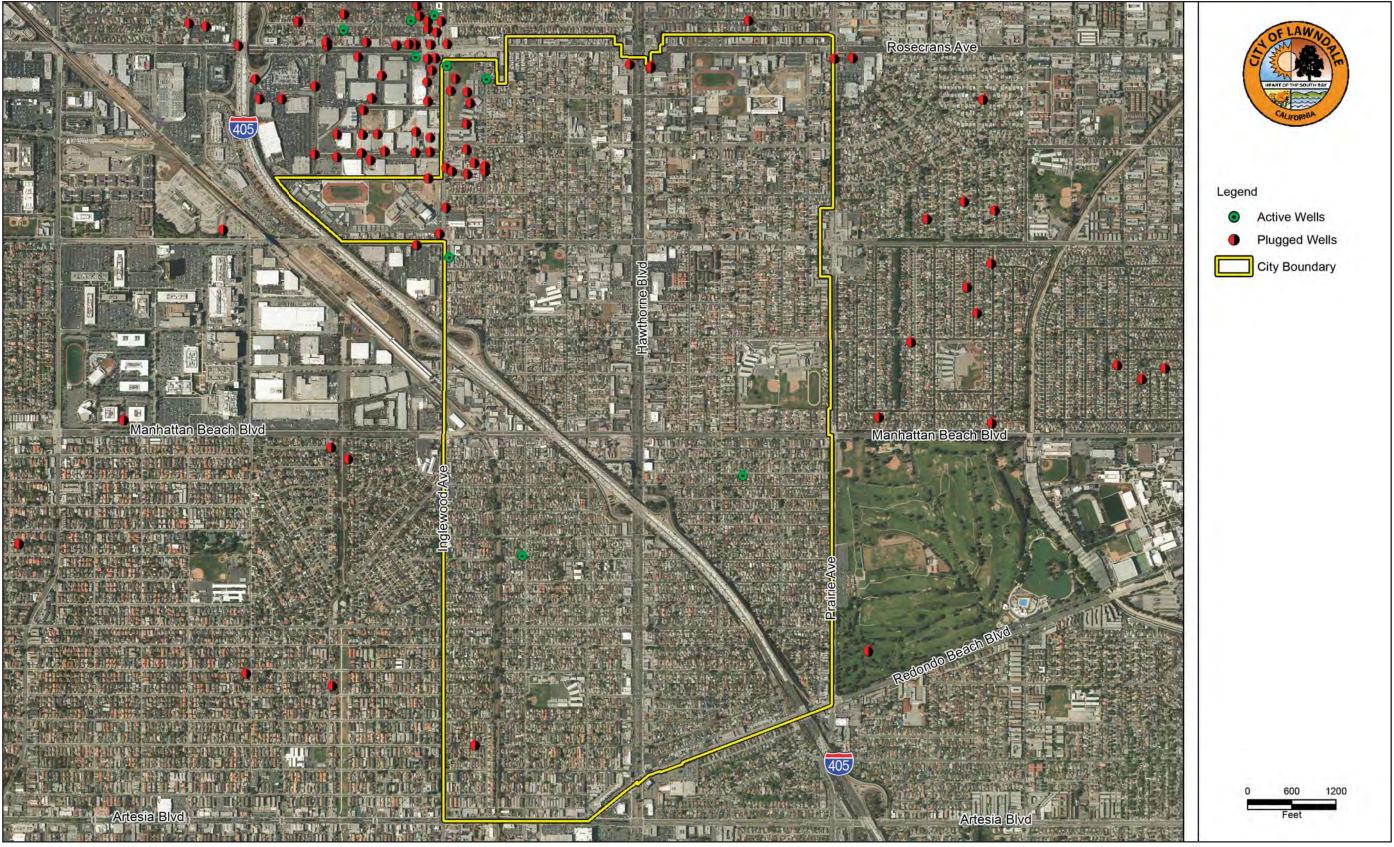
City of Lawndale

Adopted November 2015

²⁵ Los Angeles Sanitation, *Hazardous Waste for Business*, accessed May 27, 2015.

²⁶ Los Angeles County Airport Land Use Commission, *Los Angeles International Airport Influence Area Map,* May 13, 2003.

²⁷ Los Angeles County Airport Land Use Commission, Hawthorne Airport Influence Area Map, May 13, 2003.



Source: DOGGR, ESRI, Eagle Aerial.



	Lawndale Safety Elemen
This page intentionally left blank.	

EMERGENCY SERVICES, PREPAREDNESS, AND RESPONSE

Fire Protection Services



LACoFD fire truck serving Lawndale

The LACoFD provides fire protection services for the City of Lawndale. The LACoFD is comprised of 4,713 total personnel (emergency responders and business professionals) stationed at 167 fire stations throughout Los Angeles County. Of the 4,713 firefighters, 2,861 are trained in infectious disease response. With nine emergency operations divisions, each one includes a community services representative to serve as a liaison to local communities.²⁸ LACoFD serves to protect lives, the environment, and property by providing prompt, skillful, and cost-effective fire protection and life safety services. In addition, LACoFD developed the Emergency Medical Services (EMS) Strategic Plan, which includes work plans for recruitment and retention, training and education, continuous quality improvement, and

logistical support. LACoFD services include fire suppression, emergency medical services, hazardous materials mitigation, fire prevention, fire hazard reduction, training and public education, arson fire investigation, school and institution fire safety, public safety, and lifeguard duty.

Within the LACoFD Division I, the Kenny Hahn Memorial Lawndale Fire Station 21, located at 4312 West 147th Street, Lawndale, serves the City and surrounding area. The fire station is staffed with a Fire Captain, an engineer, and three firefighter paramedics and equipped with an engine and paramedic squad. The nearest available LACoFD fire stations are in the cities of Gardena (Fire Station #158, located at 1650 West 162nd Street and Fire Station #159, located at 2030 West 135th Street) and Hawthorne (Fire Station #160, located at 5323 West Rosecrans Avenue and Fire Station #161, located at 4475 West El Segundo Boulevard) and provide additional assistance when needed. Similarly, if surrounding areas require assistance, Lawndale's fire station would provide their services. ^{29, 30} Refer to Exhibit SAF-6, *Fire Stations Locations*, for the fire stations that serve Lawndale. Additionally, LACoFD is under California's Master Mutual Aid Agreement and has mutual aid agreements with every fire department throughout the state. ³¹ CAL FIRE assists other fire departments within the State when LACoFD resources are available, regardless of the type of disaster. In turn, CAL FIRE can access the local government fire departments through the same agreement.

_

²⁸ Los Angeles County Fire Department, Strategic Plan Annual Report 2012-2014.

²⁹ Telephone Communication, *Wayne Tinsley, Los Angeles County Fire Department Station 21 Firefighter Paramedic,* July 29, 2015.

³⁰ Written Communication, Laura Walters, Los Angeles County Fire Department Central Region, Division 1, Station 158 Community Services Liaison, August 10, 2015.

³¹ Ibid.

Emergency Services

The LACoFD Health Hazardous Materials Division (HHMD) performs inspections, emergency operations, special investigations, and administrative functions to protect Lawndale residents from accidental releases and improper handling, and disposal of, hazardous materials and wastes. The LACoFD HHMD provides 24-hour emergency services in response to hazardous materials spills or releases and abandonment that occur in these areas. During business hours, the LACoFD HHMD responds from 5825 Rickenbacker Road, Commerce and after business hours the on-duty personnel respond from their homes. Lawndale falls under the jurisdiction of the West County District Office located at 6167 Bristol Parkway, Suite 220, Culver City. In addition to its LACoFD's emergency operations within the County, the LACoFD dispatching facility is located at 1320 North Eastern Avenue, Los Angeles, which also serves as the Region I Emergency Coordination Center as part of the State of California's Office of Emergency Services. As one of his duties, the Fire Chief serves as the Region I Coordinator, and, as such, provides resource allocation coordination under the California Master Mutual Aid Plan for Los Angeles County as well as San Luis Obispo County, Santa Barbara County, Ventura County, and Orange County.

In 2014, the LACoFD emergency operations included 22 battalions, 171 fire stations, 169 engine companies, 32 truck companies, four hazardous materials squads, four emergency support teams, and associated equipment. The LACoFD provided three response teams dedicated to HHMD emergencies.³² However, all of LACoFD's personnel, equipment, and operations are available to resolve incidents in Lawndale if necessary.³³ From October to December 2014, first-arrival units responded to a total of 591 incidences within Lawndale at an average response time of 4.46 minutes and an average duration of 13.78 minutes. Of the 591 incidences, 454 incidences were considered to be rescue and emergency medical incidences with an average response time of 4.61 minutes and average duration of 14.76 minutes.³⁴

Protection Services



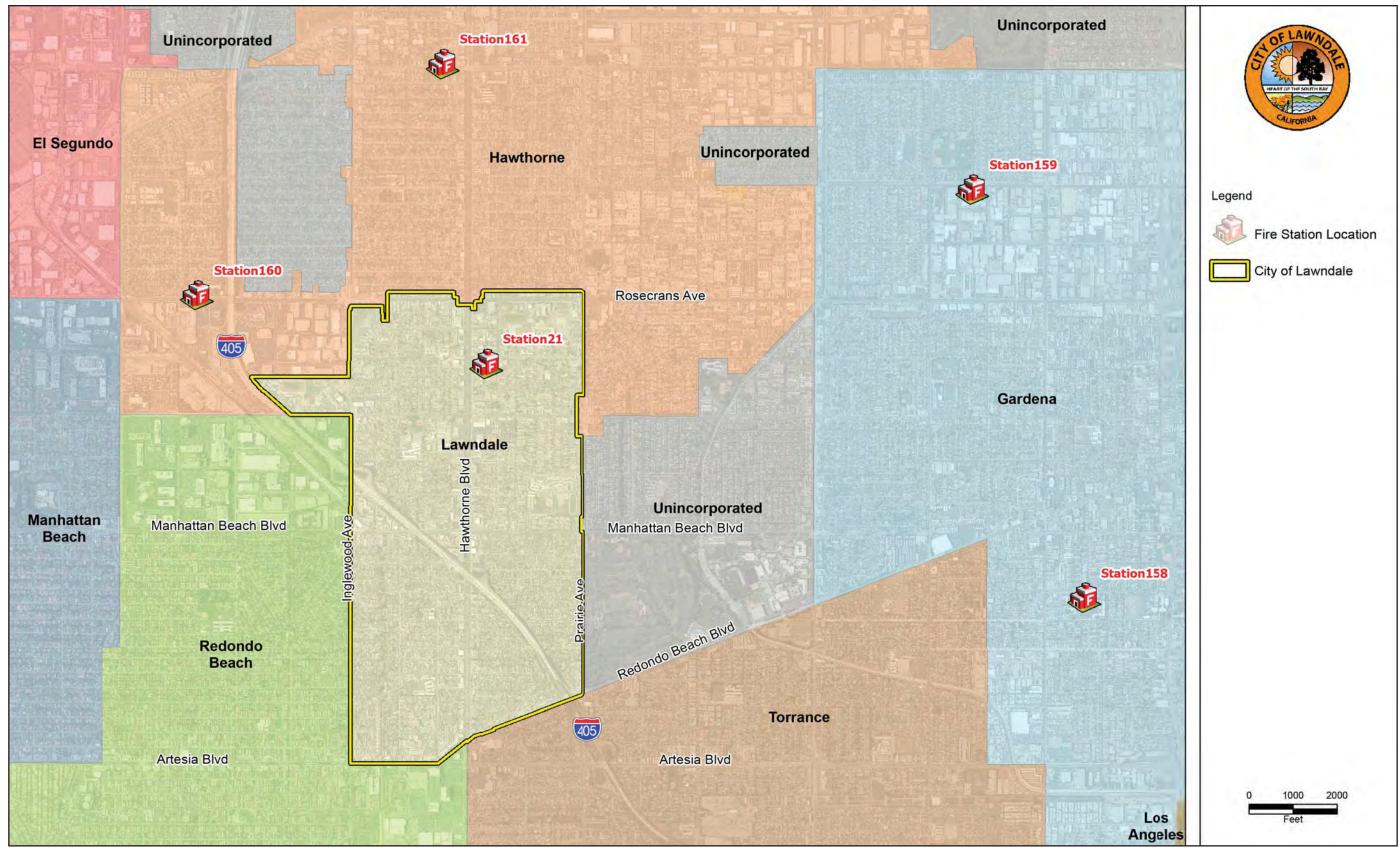
LACSD Police Officer and K-9 in Lawndale Photo Courtesy Lt. Hocking, LACSD

The Los Angeles County Sheriff's Department (LACSD) provides police protection, crime prevention, public safety, and other specialized services (Detective Bureau, Narcotics Bureau, Commercial Crimes Bureau, Family Crimes Bureau, and Special Weapons Teams) to the City of Lawndale through the Central Patrol Division, South Los Angeles station, located at 1310 West Imperial Highway, Los Angeles. The LACSD serves to enforce the law fairly, be proactive in crime prevention; enhance public trust through accountability; maintain a constitutionally sound and rehabilitative approach to incarceration; provide a safe and secure court system; maintain peace and order; and work in partnership with

³² Los Angeles County Fire Department, 2014 Statistical Summary.

³³ Written Communication, Laura Walters, Los Angeles County Fire Department Central Region, Division 1, Station 158 Community Services Liaison, August 10, 2015.

³⁴ Los Angeles County Fire Department, *Quarterly Incident and Response Information 4th Quarter 2014 (October Thru December 2014)*, January 8, 2015.



Source: City of Lawndale, Eagle Aerial.



This page intentionally left blank.		

communities to ensure the highest possible quality of life. Additionally, the City of Lawndale provides general law enforcement services including field patrol duties, supervision, and traffic services through the Lawndale Sheriff's Center. The Lawndale Sheriff's Center is located at 15331 Prairie Avenue and staff includes the Lawndale Area Managing Lieutenant, Supervising Sergeants, Operations Staff, the Special Assignment Team, Traffic Investigations office, Gang Detective, School Resource Officers, and all Field Patrol Deputies assigned to the City of Lawndale. For long term, on-going, or special community problems, the citizens of Lawndale are able to contact the Special Assignment Team consisting of four deputies to help resolve the problem. This Team works closely with businesses and residents to address local safety concerns with proactive approaches to solving problems. The Lawndale Sheriff's Center serves to maintain the overall reduction of crime in the City and continue or expand neighborhood and community programs (e.g., Neighborhood Watch Program, Community Oriented Policing Program, Bicycle Patrol Program, Business Watch Program, and a school traffic circulation program) aimed at improving public safety and crime reduction.

Emergency Preparedness

COMMUNITY EMERGENCY RESPONSE TEAM



In partnership with the LACoFD, the City offers Community Emergency Response Team (CERT) training to residents. The CERT program provides education about hazards and training in basic disaster response skills, such as fire safety, light search and rescue, and disaster medical operations. With CERT training, community members would be able to assist others in

the neighborhood or the workplace immediately following a disaster or an emergency, before professional responders arrive. Trained CERT members can offer effective first-response capability, helping to reduce emergency needs and taking actions such as extinguishing small fires, turning off natural gas inlets to damaged homes, performing light search and rescue, and rendering basic medical treatment. CERT members are also encouraged to support emergency response agencies by taking a more active role in emergency preparedness projects in their community.

LOS ANGELES COUNTY DISASTER COMMUNICATIONS SERVICE

The Los Angeles County Disaster Communications Service (DCS) is a volunteer organization administered by the Los Angeles County Sheriff's Department Emergency Operations Bureau. The DCS provides disaster relief communication to residents across Los Angeles County. The DCS operates at each sheriff's station and in emergency operations centers in 56 cities, fire stations and other agencies throughout the county. The DCS that serves Lawndale is the South Los Angeles Sheriff's Station located at 1310 West Imperial Highway, Los Angeles. During major incidents, DCS volunteer members serve as a critical communications link (secondary communication system) to help direct resources to where they are needed. They coordinate, transmit and receive command and liaison traffic while staffing locations and shadowing key personnel. This allows county and city governments, law enforcement, fire agencies, and other disaster relief agencies to coordinate and communicate their efforts.

NEIGHBORHOOD WATCH/COMMUNITY PROGRAMS

Working with neighbors and community members in an emergency can help save lives and property. The City in conjunction with the Los Angeles County Sheriff's Department has established neighborhood watch groups within the community. The Neighborhood Watch Program consists of a series of activities designed to improve the safety of the City through the participation of its residents. The activities include Neighborhood Watch Meetings, Business Watch, and the Community Awareness Program.

In 2013, deputies from the Los Angeles County Sheriff's Department, South Los Angeles Station/ Lawndale Service Center conducted their first



Coffee with a Cop Photo Courtesy Lt. Hocking, LACSD

"Coffee with a Cop" event. These informal meetings allow community members to interact directly with the Sheriff's Department to express concerns regarding crime in their community, ask questions, get to know their neighbors and the law enforcement personnel serving the community.

SHAKEY-QUAKEY PROGRAM

Through schools and community organizations within Los Angeles County, the LACoFD established the Shakey-Quakey program to educate children about how to prepare for and stay safe during an earthquake. Currently not all schools in Lawndale have requested the Shakey-Quakey program. However, the program is provided at school and community events as requested.³⁵ Participants enter trailer-mounted simulators and are guided through an exercise in which they experience a virtual earthquake including shaking, falling objects and sounds. Earthquake preparedness information is provided for students and children to take home and share with their families and communities.



Shakey-Quakey classroom trailer at the Lawndale Health, Safety, and Pet Fair

Emergency Operations Plan

Since its preparation in April 2011, the Emergency Operations Plan (EOP) has helped to protect persons and property in Lawndale by ensuring adequate preparedness along with rapid and appropriate response to emergency situations. The EOP addresses the City's planned response to natural or human-caused disasters, provides an overview of operational concepts, and identifies components of the City's emergency/disaster management organization within the Standardized Emergency Management System (SEMS), the National Incident Management System (NIMS) and the Incident Command System (ICS). In

City of Lawndale Adopted November 2015

³⁵ Written Communication, Laura Walters, Los Angeles County Fire Department Central Region, Division 1, Station 158 Community Services Liaison, August 10, 2015.

addition, the EOP describes the organizational structures, roles, responsibilities, policies and protocols for providing emergency support. The EOP has been recently updated (2015) to address some changes in the areas of threats, vulnerabilities, and key agency and association guidance on content and capability standards. A Hazardous Materials Annex to the EOP has been prepared in order to minimize the adverse effects on the population and the environment resulting from the release of, or exposure to, hazardous materials. The Hazardous Materials Annex identifies specific responsibilities among federal, state, and local resources during emergency or disaster events that may result in the release of hazardous materials.

Emergency Staging Areas

Staging areas for apparatus, equipment, and manpower include the Lawndale City maintenance yard, Lloyde High School, Alondra Park, Jane Addams Park, Leuzinger High School, El Camino College, and the Los Angeles County Public Works Yard, refer to Exhibit SAF-7, Emergency Staging Areas. Helispots are identified by the Fire Protection District as either primary or secondary. Lloyde High School is the primary location with El Camino College, Alondra Park, and Leuzinger High School as secondary locations.

Temporary care facilities are Lloyde High School as well as El Camino College and Alondra Park. Actual evacuation routes and staging areas are dependent upon the level and location of the emergency.

GOALS AND POLICIES

This section contains goals and policies that provide for the safety and protection of life and property from the occurrence of a natural or manmade hazard. Citywide safety goals and policies apply generally to any potential hazardous event, which may be addressed further in topic-specific goals and policies.



LACSD and City of Lawndale presenting to students
Photo Courtesy Lt. Hocking, LACSD

Citywide Safety

Goal SAF-1:	A community protected from and prepared for natural and man-made hazards.
Policy SAF-1.1:	Support projects, programs, policies, and regulations to mitigate potential impacts associated with natural and man-made hazards.

- Policy SAF-1.2: Regularly maintain and update natural hazard information relevant to the Lawndale Local Hazard Mitigation Plan.
- Policy SAF-1.3: Support programs that promote greater public awareness of disaster risks, personal and business risk reduction, and personal and neighborhood emergency response.
- Policy SAF-1.4: Investigate and pursue available funding sources to fund safety programs, provide services, upgrade/construct facilities, and purchase equipment.

Geologic and Seismic Hazards

Goal SAF-2: A community protected from loss of life or injury and damage to property due to geologic and seismic hazards.

Policy SAF-2.1: Continue to incorporate geotechnical hazard data in future land use decision-making, site design, and construction standards.

Policy SAF-2.2: Adopt the latest version of the building codes adopted by the State of California and ensure implementation in all new construction and renovations.

Policy SAF-2.3: Require site-specific soils and/or geologic reports for development in areas where potentially serious geologic risks exist.

Policy SAF-2.4: Monitor and enforce mitigation measures to reduce risks for projects where seismic and geologic hazards can be mitigated and prohibit development in areas where seismic and geologic hazards cannot be mitigated.

Policy SAF-2.5: Promote the upgrade, retrofitting, and/or relocation of all existing critical facilities (e.g., police and fire stations, hospitals, schools, community centers, water facilities, public works yard, emergency access routes) and other important public facilities that do not meet current building code standards and are within areas of seismic or geologic hazard risks.

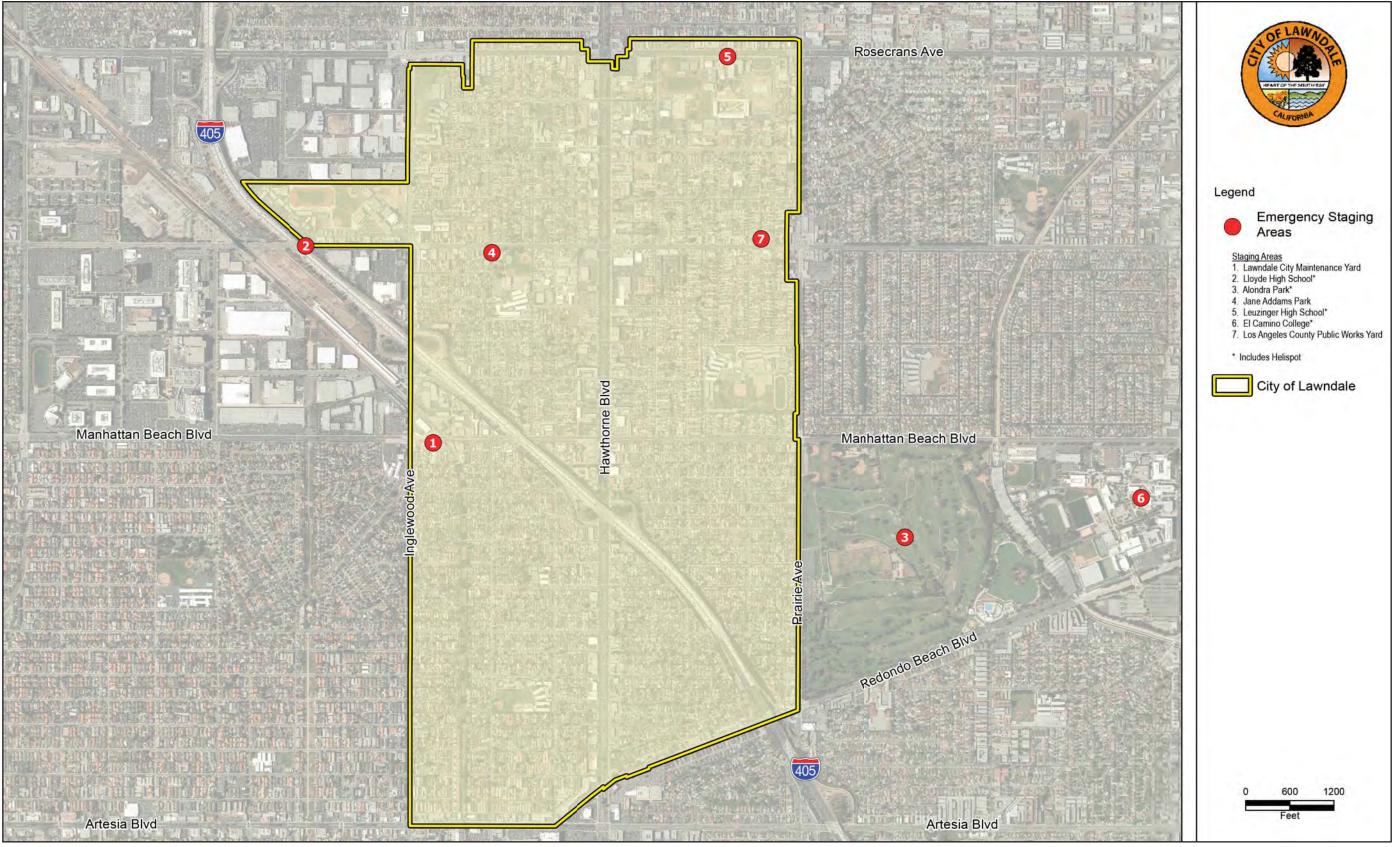
Policy SAF-2.6: Investigate and implement a program to reduce damage to multi-unit wood-frame soft-story buildings in the event of an earthquake. The program could involve a variety of options/techniques, including but not limited to, notifying property owners of the potential hazard, requiring detailed building evaluations, identifying financial mechanisms or incentives for property owners to implement structural improvements, and/or providing technical assistance and information.

Policy SAF-2.7: Continue to seek out opportunities to educate and encourage the community on ways to implement measures to mitigate potential injury and damage associated with earthquakes.

Hazardous Materials

Goal SAF-3: A community protected from the harmful effects of hazardous materials, hazardous waste, and environmental contamination.

Policy SAF-3.1: Ensure that land uses involved in the production, storage, transportation, handling, or disposal of hazardous materials are located and operated to reduce risk to neighboring land uses.



Source: City of Lawndale, Eagle Aerial.



	Lawndale Safety Elemen
This page intentionally left blank.	

- Policy SAF-3.2: Discourage the development of residential uses adjacent to or near potentially hazardous land uses.
- Policy SAF-3.3: Review and update, as appropriate, the City's Emergency Operations Plan Hazardous Materials Annex to ensure it adequately addresses and responds to potential hazardous materials incidents within the City.
- Policy SAF-3.4: When approving new development, ensure that the site:
 - Is sufficiently surveyed for contamination and remediation, particularly for sensitive uses near existing or former toxic or industrial sites.
 - Is adequately remediated to meet all applicable laws and regulations, if necessary.
 - Is suitable for human habitation.
 - Is protected from known hazardous and toxic materials.
 - Does not pose higher than average health risks from exposure to hazardous materials.
- Policy SAF-3.5: Monitor the operations of businesses and individuals that handle hazardous materials through the planning and business permit processes.
- Policy SAF-3.6: Work with the appropriate Federal, State, regional, and local agencies to identify previously unidentified contaminated sites in the City, particularly on sites with a high likelihood of past contamination, such as old gas stations or industrial sites, and work with the property owners and applicable agencies to remediate them.
- Policy SAF-3.7: Ensure the safe transport of hazardous materials through the City by:
 - Restricting transport of hazardous materials within Lawndale to designated routes
 - Prohibiting the parking of vehicles transporting hazardous materials on City streets.
 - Requiring new pipelines or other facilities that would transport hazardous materials to avoid locating within residential areas to the greatest extent possible.
 - Coordinating with Metro and Burlington Northern and Santa Fe Rail (BNSF) on opportunities to maintain and improve safety along the rail corridor.
- Policy SAF-3.8: Support Caltrans and California Highway Patrol efforts to ensure safe transportation of hazardous materials on I-405.
- Policy SAF-3.9: Educate residents and businesses on how to reduce or eliminate the use of hazardous materials and products, and encourage the use of safer, nontoxic, environmentally friendly equivalents.
- Policy SAF-3.10: Raise public awareness of appropriate disposal for household hazardous waste, and publicize collection events and locations.

Policy SAF-3.11: Continue to coordinate with the California Department of Conservation Division of Oil, Gas, and Geothermal Resources for any development proposed to occur near oil wells.

Fire Hazards

Goal SAF-4:	A community protected from loss of life or injury and damage to property due to
	fire hazards.

Policy SAF-4.1: Continue to coordinate fire protection services with Los Angeles County Fire Department to ensure sufficient capacity, stations, personnel, and equipment are available to meet needs in Lawndale for fire protection and related emergency services.

Policy SAF-4.2: Continue to involve the Los Angeles County Fire Department in the development review process to ensure fire safety is addressed in new and modified developments.

Policy SAF-4.3: Continue to enforce fire prevention and suppression requirements for water supply and water flows throughout the City for firefighting purposes.

Policy SAF-4.4: Ensure all new development provides adequate access for emergency vehicles and evacuation.

Policy SAF-4.5: Regularly update and consistently enforce all building and fire codes and ordinances.

Policy SAF-4.6: Promote public safety education programs to reduce accidents, injuries, and fires, as well as to train members of the public to respond to emergencies.

Emergency Services, Preparedness, and Response

Goal SAF-5: A community prepared to provide effective response and recovery efforts in the event of an emergency.

Policy SAF-5.1: Continue to implement emergency preparedness and response measures in coordination with Los Angeles County's Emergency Operations Plan and the Lawndale Emergency Operations Plan.

Policy SAF-5.2: Conduct periodic trainings with staff and/or participate in Los Angeles County trainings on emergency operations procedures and response.

Policy SAF-5.3: Support policies and programs that ensure adequate resources are available to respond to health, fire, and police emergencies.

Policy SAF-5.4: Investigate and seek out opportunities to improve emergency access and circulation throughout the community.

Policy SAF-5.5: Provide residents and businesses with information about local safety hazards and emergency plans, including evacuation plans and procedures to accommodate special needs populations and efficient post-disaster recovery.

Policy SAF-5.6: Support policies and programs to involve and educate the community in emergency preparedness and disaster response skills such as fire safety, light search and rescue, and disaster medical operations.

Policy SAF-5.7: Collaborate with the school district, businesses, nonprofit organizations, and community members/groups to maintain safety throughout the City.

Policy SAF-5.8: Involve the Los Angeles County Sherriff's Department in the development review process to address safety concerns, access issues, and potential traffic conflicts, and identify opportunities to apply Crime Prevention Through Environmental Design (CPTED) principles.

	Lawndale Safety Elemen
This page intentionally left blank.	