Technical Report

LAX Master Plan EIS/EIR

16a. Public Services Fire Protection and Emergency Services

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Prepared for:

Los Angeles World Airports
Federal Aviation Administration
U.S. Department of Transportation

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1.0 INTRODUCTION

This report provides background information related to fire protection and emergency services in support of the Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the LAX Master Plan. This report includes a discussion of the regulatory framework for fire protection and emergency services and descriptions of the agencies which provide fire protection and emergency services within the vicinity of LAX.

2.0 GENERAL APPROACH AND METHODOLOGY

The potential effects of the proposed Master Plan alternatives on fire protection and emergency services were assessed, for the EIS/EIR, by comparing 1996 baseline environmental conditions with future conditions expected with implementation of the No Action/No Project Alternative and three build alternatives. Characterization of the environmental baseline includes a description of existing fire protection facilities, staffing, equipment levels, and response times. This information was obtained from the fire departments serving the fire protection study area.

The study area has been defined by fire protection service area boundaries and includes the LAX property as well as areas surrounding LAX that would be potentially directly affected by implementing the proposed Master Plan build alternatives. The geographic extent of the study area includes the proposed future boundaries of LAX under the Master Plan build alternatives, areas beyond that are largely defined by the service boundaries for fire stations serving LAX, and areas more remote where project-related traffic congestion could increase emergency response times. Although not within the study area, this background report includes information on fire protection and emergency service providers that could have secondary responsibilities in responding to a major incident at LAX.

The primary basis for establishing future fire protection needs on the airport was through direct consultation with the City of Los Angeles Fire Department (LAFD), the primary fire protection agency serving the study area. The LAFD was consulted during the EIS/EIR scoping period and during development of the Master Plan build alternatives. During the scoping period, the LAFD's response to the Notice of Intent/Notice of Preparation (NOI/NOP) for the EIS/EIR set forth their expectations regarding the potential impacts of the project on fire services and the need for Mitigation Measures. During the development of the Master Plan build alternatives, the LAFD was consulted to determine the location and size of proposed fire protection facilities at LAX.

The approach to evaluating impacts on fire services is largely based on whether conditions under the build alternatives would meet key criteria set forth by the LAFD and by Federal Aviation Regulations (FAR). As stated in their response to the NOI/NOP, the LAFD evaluates "fire protection for a given area based on required fire-flow, response distance from existing fire stations, and…Department's judgment for needs in the area."[1]

The LAFD criteria on response distances, fire flows, and maintenance of traffic flow have been specifically defined for the project and are used in the impact evaluation. Regarding response distance, the LAFD has indicated that for the proposed project, an engine company should be located within 1.0 mile and a truck company should be located within 1.5 miles of an emergency location while meeting fire flow requirements. LAFD fire flow requirements for the proposed project are 9,000 gallons per minute from six hydrants flowing simultaneously. A minimum residual water pressure of 20 pounds per square inch is required to remain in the water system while the 9,000 gallons of water per minute is flowing. The analysis on emergency access is based on how airport development, increases in traffic, and transportation improvements would affect key intersections within the study area. To support acceptable fire vehicle access and response times to emergency locations, LAFD has specified that before completion, the project should ensure that street intersections with levels of service of "E" or "F," the two poorest levels of standard traffic ratings, are remediated to a level of "D" or better. Effects on intersections were evaluated based on the transportation analysis provided in Section 4.3, *Surface Transportation*, of the EIS/EIR.

The analysis of emergency access and response times to airfield incidents is based on how the location and design of planned facilities would affect response times according to FAR 139.315-319. Specifically, FAR 139.319(i)(2)(i) states that at least one Air Rescue and Fire Fighting (ARFF) vehicle must reach the midpoint of the farthest runway from its assigned post within three minutes from the time an alarm is

[1] McMaster, Thomas E., Assistant Fire Marshal, Bureau of Fire Prevention and Public Safety, Los Angeles Fire Department, Letter, July 1, 1997.

sounded. All other on-airport fire fighting vehicles, not subject to ARFF requirements, must reach the same point as the ARFF vehicle within four minutes from the time an alarm is sounded (FAR 139.319(i)(2)(ii)) and comply with the minimum distances discussed above.

The LAFD assesses and responds to staffing needs through ongoing evaluation;[2] there are no uniform methods or LAFD or FAR standards for projecting long-range staffing needs. As a result, the analysis, for the EIS/EIR, does not include qualitative estimates of demand for additional fire personnel. Staffing and facility needs for paramedics and fire prevention services (e.g., inspections) are included, in the EIS/EIR, within the overall analysis of fire protection needs under each alternative.

3.0 AFFECTED ENVIRONMENT/ENVIRONMENTAL BASELINE

3.1 Regulatory Context

Federal Regulations

Federal regulations include those setting the framework for fire protection, including the National Fire Protection Association (NFPA) Code, which provides the basis for fire protections and emergency services. Federal Agencies which have jurisdiction over activities at LAX or fire protection and emergency services for the LAX area also establish regulations, which must be consistent with the NFPA Code. These include the Federal Aviation Administration and the U.S. Coast Guard. **Table 1**, Federal Regulations, includes a partial list of Federal Regulations, a summary of its provisions, and a list of responsible federal agencies.

Table 1

Federal Regulations

Regulation	Summary of Provisions	Regulating Agency
National Fire Protection Association Code	Establishes fire safety provisions	
Federal Aviation Administration Regulations (FAR) 139.315 through 139.319	Air Rescue and Fire Fighting (ARFF)	Federal Aviation Administration
FAR 139.325 (f)	Requires Airport Emergency Plans to provide for Air/Sea Disaster Response	FAA/U.S. Coast Guard
FAR 139.325 (4)	Airport response to natural disasters	FAA

The National Fire Protection Association Code

The NFPA advocates consensus of codes and standards for fire and related safety issues and has developed the NFPA Code, which establishes safety provisions for fire prevention and fire-fighting regulatory structures. As these codes are adopted on a voluntary basis by individual communities into their own fire protection and emergency services operations, there are no legislative enforcement mechanisms.

Federal Aviation Administration Regulations

Federal Aviation Administration (FAA) Regulations serve as the basis for the LAWA Rules and Regulations Manual and Disaster Preparedness Plan discussed below. All of the fire and fire-related safety provisions found in these documents are also in accordance with applicable sections of the Uniform Fire Code and/or the National Fire Protection Association Codes and Standards.

FAA Regulations (FAR) mandate many aspects of emergency response services at LAX, including vehicle response times and readiness. Non-compliance with FAA regulations regarding fire safety could result in the loss of LAX's operating permit.

[2] McMaster, Thomas E., Assistant Fire Marshal, Bureau of Fire Prevention and Public Safety, Los Angeles Fire Department, Letter, July 1, 1997.

Air Rescue and Fire Fighting (ARFF)

Aircraft rescue and fire fighting (ARFF) is regulated under FAR Sections 139.315 through 139.319. Handling and storage of hazardous substances and materials which require fire safety training in fuel farm and storage areas, and required compliance with locally-adopted fire codes are provided for under FAR 139.321. Under FAR 139.325, airport safety plans require coordination with fire fighting services and provision of rescue vehicles large enough to handle the maximum persons carried aboard the largest aircraft that can be served. ARFF protocol requires apparatus to respond in three minutes or less from the position of the equipment to all areas within aircraft operating areas. Should equipment become inoperable for a period exceeding 48 hours, the FAA requires that airport operations be limited to the response capability of equipment in operative condition unless waived by the FAA.

The FAA-operated Control Tower at LAX activates the emergency telephone system which notifies airlines when they are involved in safety-related operations. In addition, the Control Tower coordinates runway assignments with the LAX Airfield Operations personnel and stops all aircraft traffic on runways and taxiways that are adjacent to the scene of an emergency response, as required.

Air/Sea Disaster Response

Due to its unique nature, an accident involving an aircraft over water requires a two-part command and control system. FAR 139.325(f) requires that airport emergency plans also provide a plan "for the rescue of aircraft accident victims from significant bodies of water or marsh lands adjacent to the airport . . . ." The Coast Guard is responsible for coordinating the search and rescue operations, including shore-side coordination and support with the assistance of representatives from the Los Angeles County Sheriff's Department (LACSD), Los Angeles County Lifeguards, Los Angeles County Fire Department (LACFD), LAWA, the Los Angeles Police Department (LAPD), Los Angeles Department of Airports Police Bureau (LADAPB), and airline representatives.

Natural Disaster

Natural disasters are emergency situations declared by the President of the United States in response to, and in agreement with, a request from the Governor of the State of California. Emergency action plans are addressed in general by 29 CFR 1910.38, Employee Emergency Plans and Fire Prevention Plans. The requirement for preparation for airport response to a natural disaster is regulated by FAR 139.325(4). In the event of a natural disaster, it is the responsibility of the Control Tower to issue a Notice to Airmen (NOTAM) if it is determined that this is necessary. In the event that the condition of the airport or any part of the airport is determined to be unsafe for landings or takeoffs, a NOTAM is issued closing the airport or any of its parts. In addition, the Control Tower verifies that the Navigational Aids system is operating.

State Regulations

State of California Uniform Fire Code

State regulations include the Uniform Fire Code which sets the framework for fire protection and safety within the State of California. The Uniform Fire Code contains several sections which provide authority and standards that pertain to operations at airport facilities.

Fire Fighting Authority

Article 2 provides standards for the organization, authority, duties and procedures for fire fighting. Division I (Organization and Authority), Section 2.105 provides for the exercise of police powers by fire fighters. Division II (Duties and Procedures), Section 2.201 provides for fire inspection and characterizes what can be declared an unsafe building.

Fire Access

Article 10 (Fire Protection), Division II (General Provisions), Section 10.207 specifies access roadway requirements for fire apparatus. Article 12 (Maintenance of Exit Ways), Section 12.109, provides standards for stair, ramp, and escalator enclosures.

Air Service Operations

Article 24 provides standards for airports, heliports, and helistops in Division I (General), Sections 12.013 (Dispensing Flammables or Combustible Liquids), 12.104 (Transferring Fuel), 24.105 (Application of Flammable or Combustible Liquid), and Sections 24.111-24.116, which provide aircraft service and repair

standards. Provisions for safety standards of fuel system maintenance and use is provided in Article 24, Division II (Refueler Units), Section 24.202 (Operation Maintenance and Use of Aircraft Refueler), 24.203 (Fueling and Defueling), and Article 79 (Flammable and Combustible Liquids), Division I (General), Section 79.114 (Fire Protection), Division II (Container and Portable Tank Storage Inside Buildings), Section 79.205 (Fire Protection), and Division VI (Tank Storage Underground, Outside or Under Buildings), Section 79.511 (Fire Protection).

Materials Handling

Article 80 (Hazardous Materials), Section 80.103 (General Requirements) and Section 80.110 (Designation of Cargo) provide for the identification and handling of hazardous materials sent as air cargo.

Fuel Farm and Fuel Dispensing Systems

Portions of the fuel hydrant system are within the jurisdiction of the State Fire Marshal and are further discussed in the Hazardous Materials section. In addition, fuel farm siting, design, construction, and equipment is regulated under the Uniform Fire Code, Article 79 (Flammable and Combustible Liquids), Division V (Stationary Tank Storage, Above Ground, Outside of Buildings), with fire protection specifically addressed by Section 79.511.

County Regulations

The Mutual Aid Operations Plan

The Disaster Preparedness Section of the Los Angeles County Sheriff's Department, Emergency Operations Bureau conducts active disaster/emergency planning with other public and private organizations, all 88 incorporated cities within the County, the American Red Cross, and various public and private civil defense/disaster planning entities. The County of Los Angeles is required to organize a formal mutual aid agreement between all fire departments within its jurisdiction. Additional informal agreements may be made directly between the fire departments involved. The Mutual Aid Operations Plan is a reciprocal agreement between signatory agencies to provide personnel and resources to assist other member agencies during emergency and/or conditions of extreme peril. The Mutual Aid Operations Plan provides a structure of response should an emergency at LAX arise which requires immediate response by more law enforcement personnel than would be available to the LAFD using all other available resources.

City Regulations

The City of Los Angeles establishes fire protection and emergency services regulations for both on- and off-airport property. The on-airport areas fall under the direction of the LAX Rules and Regulations Manual and the Air/Sea Disaster Preparedness Plan, as well as the City Fire Code and the Fire Protection and Prevention Plan portion of the City of Los Angeles General Plan which consists of City-wide fire prevention regulations.

LAX Rules and Regulations Manual

LAX fire protection services operate under the requirements and guidelines of the LAFD, as well as the guidelines and requirements of the LAX Rules and Regulations Manual, the Air/Sea Disaster Preparedness Plan, and the Fire Protection and Prevention Plan portion of the City of Los Angeles General Plan.

The Airport Fire Inspector is required to inspect all buildings, structures, and premises periodically, as well as, enforce all applicable laws, rules and regulations regarding fire protection, including the Uniform Fire Code, National Fire Protection Association Codes and Standards, and the LAX Air/Sea Disaster Preparedness Plan.

All of the fire and fire-related safety provisions of the LAX Rules and Regulations Manual and the LAX Air/Sea Disaster Preparedness Plan are in accordance with FAA Regulations, the Uniform Fire Code, the National Fire Protection Association Code, and the LAFD Fire Code.

Los Angeles International Airport Air/Sea Disaster Preparedness Plan

The Los Angeles International Air/Sea Disaster Preparedness Plan was approved by the FAA on November 26, 1991, with sections approved on August 19, 1991. The Air/Sea Disaster Response Plan is "established to provide a course of action to be followed in the event an accident involving an air carrier occurs in the immediate vicinity of Los Angeles International Airport (LAX) over water." During an aircraft

incident over water (accidents at sea) or elsewhere, the LAFD provides the following personnel, aircraft, and nautical equipment as needed:

- Management and staff personnel to manage the incident, and treat and transport victims;
- Paramedic operated rescue ambulances for emergency treatment and transport;
- Fire companies staffed with personnel trained in emergency medical techniques (EMT);
- Four 15 person helicopters equipped to transport injured victims;
- Two five person helicopters for command and observation; and
- One small fireboat (34' Drake Craft) with two scuba divers available within one hour.

City of Los Angeles Fire Code

The City of Los Angeles Fire Code has established standards for fire fighting and fire protection which are periodically reviewed.

City of Los Angeles Fire Protection and Prevention Plan

The City of Los Angeles Fire Protection and Prevention Plan, adopted by the City Council on January 16, 1979, is an element of the General Plan of the City of Los Angeles. The Fire Protection and Prevention Plan specifies policy and establishes standards for the distribution, design, construction, and location of fire protection facilities in order to safeguard life, property, and the environment. The Fire Protection and Prevention Plan specifies general location requirements to minimize response time and is dependent on the type of fire company responding (i.e., engine or truck company) and the type of land use. Generally, commercial and industrial uses require a truck company response distance of 1 mile and an engine company response distance of ¾ mile. However, higher density uses would require truck and engine company response distances of 1½ and 1 mile, respectively. Neighborhood uses, such as residential neighborhoods, require a truck company response distance of 2 miles and an engine company response distance of 1½ miles.

3.2 Existing Conditions

Federal Jurisdiction

Pursuant to Federal regulations, the federal agencies which are most visible related to fire protection and emergency services at LAX and in the vicinity include the FAA and the U.S. Coast Guard.

Federal Aviation Administration

The Federal Aviation Administration (FAA) is the element of the U.S. government with primary responsibility for the safety of civil aviation. The FAA issues and enforces regulations and minimum standards relating to the manufacture, operation, and maintenance of aircraft. The agency is responsible for the rating and certification of airmen and for certification of airports serving air carriers. It also regulates a program to protect the security of civil aviation, and enforces regulations under the Hazardous Materials Transportation Act applicable to shipments by air.

The FAA operates the Control Tower at No. 1 World Way. The FAA has its Western Pacific Regional Headquarters located at 15000 Aviation Boulevard in Lawndale, and a flight service station at 12111 S. Crenshaw Boulevard in Hawthorne.

U.S. Coast Guard

The U.S. Coast Guard is given primary notification in cases of potential or actual overwater emergency. The U.S. Coast Guard maintains a 24-hour District Operations Center, which plans, coordinates, and oversees group operations and assumes command for any major search and rescue operation in Santa Monica Bay. If needed for an air/sea disaster the Coast Guard has ships, patrol boats, small boat stations, and air stations available. The Coast Guard's Los Angeles facilities include two small boat stations with six 82-foot patrol boats. One station is located on Terminal Island at the Coast Guard Support Center in San Pedro and one at Channel Islands Harbor. The Coast Guard's Air Station is located at LAX, and includes three HH-65 Dolphin helicopters.

The Coast Guard's San Diego-area resources can also be utilized 24 hours a day, if required. The San Diego Air Station maintains four HH-65 Dolphin helicopters and three HU-25 Falcon Jets. Also, one 82-foot patrol boat is based in Oceanside, while an 82-foot patrol boat and a 110-foot patrol boat are based in San Diego.

In addition, any Coast Guard or Navy units in transit that are within the proximity of a crash site can be called upon to assist.

County Jurisdiction

Los Angeles County agencies responsible for fire protection and emergency services within the vicinity of LAX include the Los Angeles County Fire Department (LACFD) and Los Angeles County Sheriff's Department.

Los Angeles County Fire Department

LACFD has jurisdiction over five stations within the Study Area, including stations in the cities of Inglewood and Hawthorne. The Fire Department does not employ standard formulas for defining needs for additional resources, and has no plans for new station construction in the study area. LACFD facilities serving the area surrounding the airport are identified in **Table 2**.

Table 2

Los Angeles County Fire Stations

Fire Station #	Address	Equipment
14	401 West 108th Street, Los Angeles	1 4-person paramedic engine 1 3-person engine 1 squad
18	4518 West Lennox Blvd., Inglewood	1 4-person paramedic engine
160	5323 West Rosecrans Ave., Hawthorne	1 3-person engine
161	1215 South Crenshaw Blvd., Hawthorne	1 3-person engine 1 squad
162	9001 South Crenshaw Blvd., Inglewood	1 triple combination pumper 1 paramedic ambulance

During an aircraft accident at sea, the LACFD has the following equipment and personnel available for response:

- Two fire boats, staffed by two company commanders, three fire fighter specialists, four fire fighters, and one paramedic certified specialist. All personnel are EMT certified.
- Two 15-person helicopters with lights and hoist lifting capabilities, equipped to transfer injured victims.
- On-shore medical emergency service resources for transported victims designed to handle any medical emergency.

The Los Angeles County Lifeguards are under the authority of the Los Angeles County Fire Department and have resources available for rescue operations as well. These include:

- Nine rescue boats, which are designed for easy access from water level and are equipped with medical equipment and scuba gear.
- Twenty-five divers, divided into 4 units. A minimum of 8 divers are assigned daily for emergency response.
- Four inflatable rescue boats, staffed 24 hours a day.

Los Angeles County Sheriff's Department (LASD)

Aircraft are maintained and operated at the LASD's Aero Bureau at the Long Beach Airport. The LASD's marine equipment is maintained and operated at the Marina del Rey Station. There also is a special unit of the LASD known as the Emergency Services Detail, located in East Los Angeles, capable of responding to any aircraft emergency. The LASD Emergency Services Detail maintains a staff of 17 rescue scuba divers, all certified paramedics. The Emergency Services Detail also maintains a dive support van, which can refill dive tanks from any shoreside location.

The LASD has equipment and personnel available for rescue involving aircraft accidents at sea, including the following:

- Three 29-foot rescue/patrol boats;
- Two 20-foot patrol boats;
- One 30-foot patrol boat;
- One 28-foot rescue vessel; and
- One two-person rescue/patrol boat.

Three boats are equipped with EMT medical equipment, scuba gear, and firefighting equipment.

The Marina del Rey Station has 87 sworn personnel, of whom 20 are trained boat operators and the remainder can be utilized as deckhands and for land support. The boat operators are trained in emergency medical techniques and in the use of scuba equipment. As of January 1998, 50 ten-man emergency life rafts owned by LAX were stored at the Marina del Rey LASD Station.

The Aero Bureau has the following aircraft available an estimated 15 minutes from Long Beach to Santa Monica Bay, depending upon conditions:

- Two overwater equipped rescue helicopters;
- Five helicopters, equipped with an infrared camera, designed to locate heat sources, thus making it easier to locate a crash site and victims at night; and
- Eight additional helicopters.

City Jurisdictions

Municipal agencies responsible for fire protection and emergency services within the vicinity of LAX include the LAWA Fire Inspector's office and the Fire Departments of the City of Los Angeles and the cities of El Segundo and Inglewood. The City of Hawthorne is served by the LACFD and has no municipal fire department.

Los Angeles Fire Department (LAFD)

The City of Los Angeles Fire Department is responsible for providing services during emergencies both on and off airport property. The four City of Los Angeles Fire Department (LAFD) stations serving LAX and the surrounding vicinity are shown in **Figure 1**, Los Angeles Fire Department Stations Serving LAX. While LAFD stations have jurisdiction and primary responsibility for serving LAX, both the State Master Mutual Aid Agreement and the County of Los Angeles Mutual Aid Operations Plan ensure that LAX would receive supplemental personnel and resources during a major emergency and conditions of extreme peril. Currently, the City of El Segundo is the only jurisdiction adjacent to LAX that provides mutual aid support to the airport through an additional mutual aid agreement. The City of El Segundo provides fire response backup and emergency medical services to LAX and, in turn, LAX provides fire trucks and personnel to the City in the event of a major incident.[3]

The LAFD is responsible for providing services on and off airport property within the study area. Three LAFD fire stations (Stations 51, 80, and 95) have direct responsibility for fire protection and emergency services within the airport boundaries. These stations are located on the airport. A fourth station (Station 5), located one and one-half miles to the north, provides structural fire backup to the on-airport fire stations, while also serving areas off the airport.

Fire Station 80 is the only on-airport fire station that is mandated to meet the 3-minute response times to airfield emergencies in accordance with ARFF requirements and, for that reason, serves the airport exclusively. Other FAR 139.315-319 requirements include, sufficient rescue and firefighting personnel capable of meeting response times, minimum fire suppressant agent discharge rates, and maintenance of emergency access roads. Fire Station 80 currently meets all ARFF requirements in compliance with FAR 139.315-319.

Fire Stations 5, 51, and 95 provide fire protection services in compliance with the Los Angeles Fire Code (Los Angeles Municipal Code, Section 57.09.01-11). Stations 51 and 95 are not mandated to respond in accordance with ARFF required response times to airfield incidents.[4] Fire Station 51 serves a 4.64 square mile area, including a majority of the LAX property. Fire Station 95 serves a 2.34 square mile area, including the Manchester Square and Belford residential areas and the eastern portion of the airport property. The average response times for Fire Stations 51 and 95 to emergencies within their service

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[3] Letter of Agreement for the Implementation of the Automatic Aid Agreement for Exchange of Fire Protection Between the City of El Segundo Fire Department and the City of Los Angeles Fire Department, December 26, 1984.

[4] Bowen, Gary, Chief, Los Angeles Fire Department, Telephone Communication, February 3, 1998.

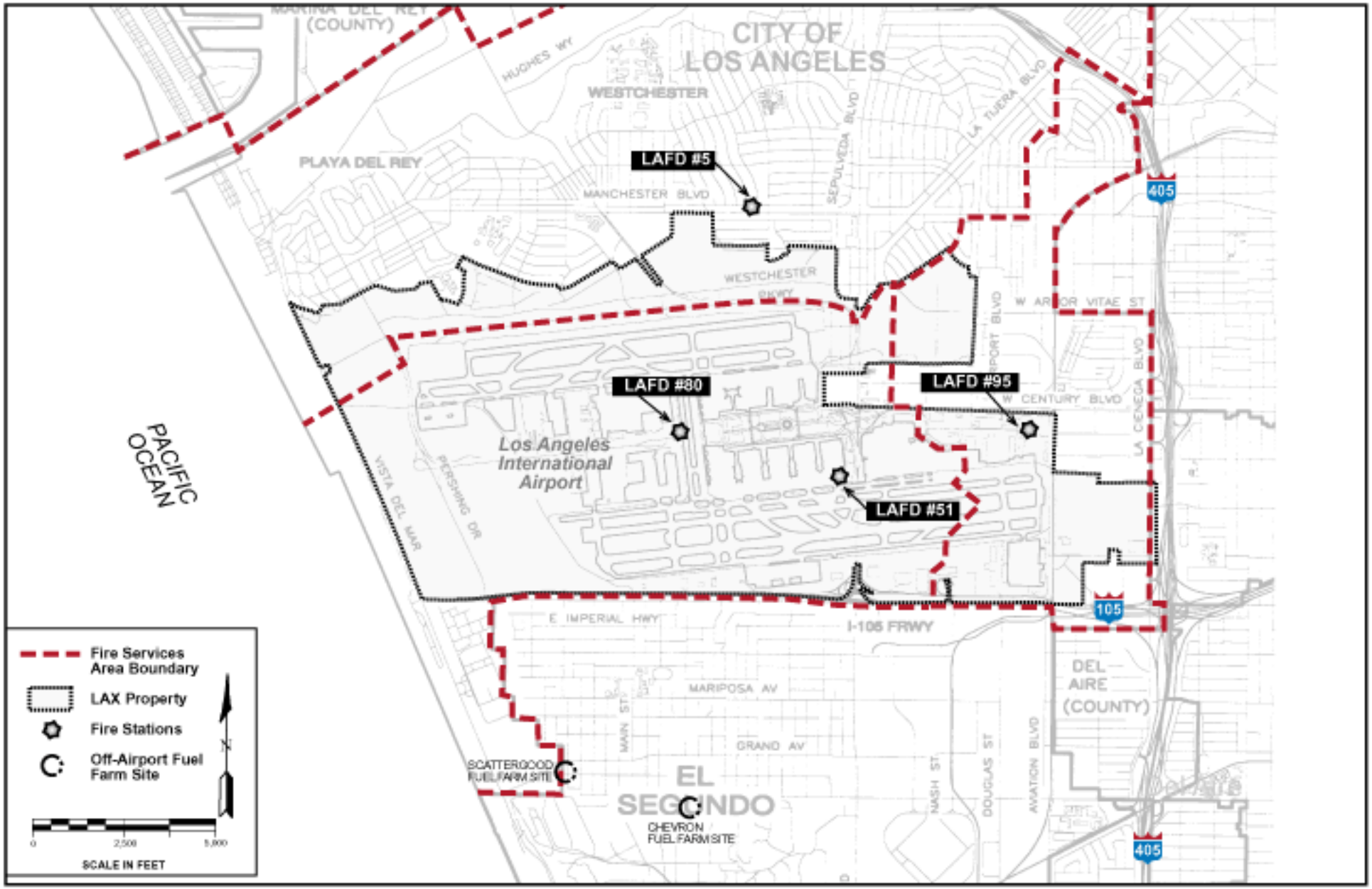
areas is less than three minutes. Fire Station 5, located just outside of the airport property, serves a 7.23 square mile area, including the proposed Westchester Southside Project site, the community of Playa del Rey, and a portion of the community of Westchester. The average response time for Fire Station 5 is less than five minutes.[5]

Maximum response distances are 1.0 mile for an engine company and 1.5 miles for a truck company. Based on correspondence with the LAFD, response distance is calculated from the intersection of World Way and Sepulveda Boulevard. Fire Stations 51 and 95 each contain engine companies that are within 1.0 mile, and Fire Station 95 contains a truck company that is within 1.5 miles of the intersection of World Way and Sepulveda Boulevard. Fire Station 5, which provides backup to the on-airport stations, contains both a truck company and an engine company and is 1.7 miles from the intersection of World Way and Sepulveda Boulevard. According to the LAFD, these distances are adequate to serve the existing fire protection needs at LAX.[6]

According to the Los Angeles Fire Code, 6,000 to 9,000 gallons per minute of fire flow is required from six hydrants flowing simultaneously for industrial and commercial uses, which include airport uses. The existing fire flow at LAX is approximately 7,090 gallons per minute from four hydrants, well within the Los Angeles Fire Code fire flow requirements.[7]

Throughout LAX and the service areas covered by Fire Stations 80, 51, 95, and 5, the LAFD considers fire protection services to be adequate.[8] All four fire stations maintain adequate equipment and personnel to meet the response times and agent discharge rates required to support LAX air carrier operations under baseline conditions.[9] A summary of existing facilities, equipment, and personnel for these stations is provided in **Table 3**, City of Los Angeles Fire Department Stations Serving LAX.

5 Reagan, Michael D., Battalion Chief, Los Angeles City Fire Department, Letter, March 10, 2000.
6 McMaster, Thomas E., Assistant Fire Marshal, Bureau of Fire Prevention and Public Safety, Los Angeles Fire Department, Letter, July 1, 1997.
7 Spear, Roger, LAX Plumbing Supervisor, Telephone Communication, October 10, 1995.
8 Reagan, Mike, Battalion Chief, Los Angeles Fire Department, Personal Communication, March 3, 2000.
9 McMaster, Thomas E., Assistant Fire Marshal, Bureau of Fire Prevention and Public Safety, Los Angeles Fire Department, Letter, July 1, 1997.



Los Angeles International Airport Master Plan	**Los Angeles Fire Department Stations Serving LAX**	Figure 1

Table 3

City of Los Angeles Fire Department Stations Serving LAX

Fire Station #	Address	Floor Area (SF)	Personnel[1]	Equipment
51	10435 Sepulveda Blvd.	8,600	12	1 Triple Combination Pumper 1 Crash Fire Reserve Apparatus 1 Crown Fire engine 1 Ford Reserve Ambulance
80	6911 World Way West	14,000	36	2 Crash Rescue Vehicles
95	10010 International Road	26,000	33	1Truck with 100' ladder 1 Fire Engine Pumper 1 Paramedic Rescue Ambulance 1 Rescue Air Cushion
5	6621 W. Manchester Blvd.	105,000	42	1 Hook & Ladder 2 Fire Engine Pumpers 1 Ford Rescue Ambulance
Totals		153,600	123	

[1] Indicates total staff over three shifts. Staffing for each shift equals one third of the total staff for each station.

Source: PCR, 2000.

The eleven stations with secondary responsibilities for the area surrounding LAX are listed below in **Table 4**.

Table 4

Secondary City of Los Angeles Fire Stations Serving the Area Surrounding the Airport

Fire Station #	Address
15	915 West Jefferson Blvd., Los Angeles, CA 90007
34	3661 7th Avenue, Los Angeles, CA 90018
43	10234 National Blvd., Los Angeles, CA 90034
46	4370 South Hoover Street, Los Angeles, CA 90037
57	7800 South Vermont Avenue, Los Angeles, CA 90044
58	1356 South Robertson Blvd., Los Angeles, CA 90035
62	3631 Centinela Avenue, Los Angeles, CA 90066
63	1930 Shell Avenue, Venice, CA 90291
66	1909 West Slauson Blvd., Los Angeles, CA 90047
68	5073 West Washington Blvd., Los Angeles, CA 90019
79	18030 South Vermont Avenue, Gardena, CA 90247

City of El Segundo

The City of El Segundo is served by two fire stations. The El Segundo Fire Department headquarters is located at 314 Main Street, with a second station located at 2161 East El Segundo Boulevard. The City employs 54 sworn staff (all EMT trained), including 13 paramedics who serve on three work shifts. Three fire engines, one truck, two rescue ambulances, and one technical rescue vehicle serve the area.

City of Inglewood

The Inglewood Fire Department has four fire stations, shown in **Table 5**, City of Inglewood Fire Department. The Inglewood Fire Department employs one battalion chief, 12 fire fighters, and 8 paramedic/fire fighters at its facilities. In addition, the City of Inglewood is served by LACFD.

Table 5

City of Inglewood Fire Department

Fire Station #	Address	Floor Area (SF)	Personnel	Equipment
1	141 West Regent St.	21,300	1 Battalion Chief 3 Fire Fighters 2 Paramedic/Fire Fighters	1 1,500 Gpm Pumper 1 95' Aerial Ladder Truck 1 Paramedic Ambulance
2	801 Centinela	6,060	3 Fire Fighters 2 Paramedic/Fire Fighters	1 Triple Combination Pumper 1 Paramedic Ambulance
3	9001 S. Crenshaw Blvd.	6,000	3 Fire Fighters 2 Paramedic/Fire Fighters	1 Triple Combination Pumper 1 Paramedic Ambulance
4	10701 S. Crenshaw Blvd.	4,300	3 Fire Fighters 2 Paramedic/Fire Fighters	1 Triple Combination Pumper 1 Paramedic Ambulance
Totals		**37,660**	**21**	

Planning for fire protection and emergency services is performed based on expected growth within a community. It is assumed that existing fire protection and emergency services provision is generally

adequate for the level of development within the study area and surrounding jurisdictions, given staffing, equipment, the number of fire stations, and mutual aid agreements. However, as properties are redeveloped for more intense uses and population and employment growth occurs within the area, additional staffing and equipment would be required to accommodate growth.