CHAPTER 1

PURPOSE AND NEED

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1.1 INTRODUCTION

The Federal Aviation Administration (FAA) published a Notice of Intent (NOI) in the *Federal Register* on December 18, 2018, that announced its intention to prepare this Environmental Impact Statement (EIS) for the construction and operation of a replacement passenger terminal building and ancillary improvements (Proposed Action) at the Bob Hope "Hollywood Burbank" Airport (Airport). This EIS discusses potential environmental impacts associated with implementing the Proposed Action, a range of reasonable alternatives to the Proposed Action, and the No Action Alternative.[1]

The Proposed Action includes replacement of the existing 14-gate passenger terminal building located in the southeast quadrant of the Airport with a 14-gate replacement passenger terminal building in the northeast quadrant (also known as the former Lockheed-Martin B-6 Plant site) of the Airport. The existing passenger terminal building would be demolished, and parallel Taxiways A and C would be extended full length to the ends of Runways 15-33 and 8-26, respectively.

The FAA is the lead federal agency for the preparation of this EIS. This EIS has been prepared in compliance with the National Environmental Policy Act (NEPA), as amended, Council of Environmental Quality (CEQ) *Regulations for Implementing the Procedural Provisions of NEPA*,[2] FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, 1050.1F Desk Reference,[3] and FAA Order 5050.4B, *National Environmental Policy Act* (*NEPA) Implementing Instructions for Airport Actions*. The Burbank-Glendale-Pasadena Airport Authority (Authority), as the Airport Sponsor, provided the FAA with data needed to prepare this EIS.

1.2 BACKGROUND INFORMATION

The Authority owns and operates the Airport. The FAA and the Authority have discussed the need for a replacement passenger terminal building since January 1980 because its location does not comply with FAA airport standards. From 1981 to 2001, the FAA and the Authority have prepared several planning and environmental documents to determine the specific location for a replacement passenger terminal building that would meet those standards. These documents include a 1981 Draft Airport Master Plan Update prepared by the Authority, a 1984 Final EIS/Environmental Impact Report (EIS/EIR) jointly prepared by the FAA and the Authority, a 1987 Draft EIS/EIR jointly prepared by the FAA and the Authority,

[1] 40 CFR § 1502.
[2] 40 CFR § 1500-1508.
[3] The July 2015 version of the 1050.1F Desk Reference was used for this EIS.

a 1993 Final EIR prepared by the Authority, and a 1995 Final EIS prepared by the FAA.

Although these documents were completed, development of the replacement passenger terminal building was not pursued for various reasons. The project addressed in the 1984 Final EIS/EIR did not proceed because in 1985 the landowner where the Authority had planned to acquire property to build the replacement passenger terminal building, Lockheed Corporation, determined that the property was no longer available. The 1987 Draft EIS/EIR addressed a split passenger terminal building concept that was abandoned when Lockheed announced on May 8, 1990, that it planned to sell its various holdings and move out of Burbank, which eliminated the need for a split passenger terminal building concept. The split passenger terminal building concept is no longer a reasonable alternative due to subsequent aircraft hangar and fixed base operator development west of Runway 15-33 at the Airport. In July 1990, the Authority and the FAA initiated the preparation of a new EIR/EIS for the replacement passenger terminal building, which resulted in the 1993 Final EIR and 1995 Final EIS. The 1995 Final EIS analyzed a replacement passenger terminal building having initially 19 gates and expanding to 27 gates to accommodate 5 million annual forecasted enplanements. However, the replacement passenger terminal building was never constructed because the Authority lost litigation in State Court[4] that was based on a provision in state law[5] that requires the host city, City of Burbank, to approve of land acquisition for an airport.

In 2001, City of Burbank Ordinance No. 3541 was adopted to include a provision stating that any City approval or discretionary act, or agreement between the City and Authority related to the relocation or expansion of the Airport passenger terminal building would require voter approval at a City election.[6] This change in the Burbank Municipal Code is commonly referred to as Measure B.

In 2015, after decades of disagreements between the Authority and the City of Burbank, the two parties developed a Conceptual Term Sheet[7] for a replacement passenger terminal building that stipulated the following:

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[4] Superior Court of California County of Los Angeles. (1999, May 5). *City of Burbank v. Burbank-Glendale-Pasadena Airport Authority*. Second District, Division Seven. Retrieved October 2018, from Superior Court of California: http://www.lacourt.org/casesummary/ui/index.aspx?casetype=civil.

[5] State of California. (1979). California Code, Public Utilities Code, Article 3 – *Regulation of Airports*, Section 21661.6. Retrieved October 2018, from State of California: http://www.search-california-law.com/research/ca/PUC/21669.6./Cal-Pub-Util-Code-Section-21669.6/text.html.

[6] City of Burbank. (2001). Municipal Code, 2-3-112: *Airport Agreements*. Retrieved, October 2018, from City of Burbank: https://www.codepublishing.com/CA/Burbank/?burbankcr.html&?f.

[7] City of Burbank and Burbank-Glendale-Pasadena Airport Authority. (2015, December). City of Burbank and Burbank-Glendale-Pasadena Airport Authority, *Bob Hope Airport Replacement Terminal Conceptual Term Sheet*.

1. The Authority would receive a vested right to build a replacement passenger terminal building on an airport-zoned property, including the proposed former Lockheed B-6 Plant site.
2. The City of Burbank would receive certain governance protections to be created and documented in a Joint Powers Agreement (JPA) governing the Authority, and
3. A California Environmental Quality Act (CEQA) analysis must be completed by the Authority for the replacement passenger terminal building.

The Authority prepared an EIR for the replacement passenger terminal building and ancillary projects to comply with the requirements of CEQA and the JPA and issued a Notice of Determination certifying the EIR in July 2016. City of Burbank citizens then voted on the replacement passenger terminal building, as required by Measure B, in the November 2016 election.[8] Measure B passed in favor of the replacement passenger terminal building by roughly 70 percent.

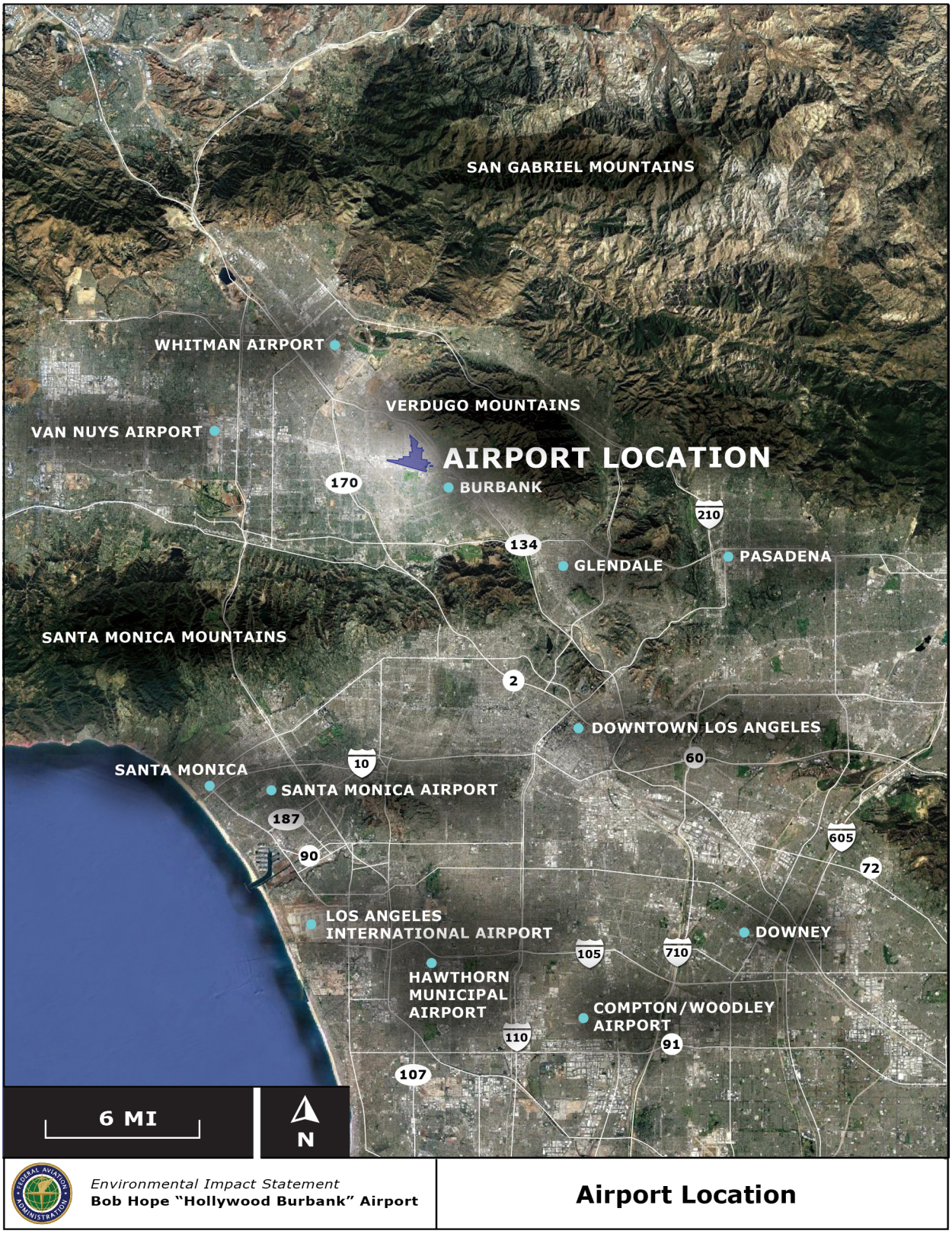
With the passage of Measure B, the provisions contained in the JPA between the Authority and the City of Burbank became effective. However, replacing the passenger terminal building will not occur until the completion of this EIS and the issuance of a decision by the FAA.

1.2.1 Description of Existing Airport

The 555-acre Airport is located about 12 miles northwest of downtown Los Angeles and is primarily within the city of Burbank (about 455 acres) and partially within the city of Los Angeles (approximately 100 acres). **Exhibit 1.2-1** shows the regional location of the Airport. The Airport is close to the Verdugo and San Gabriel Mountains, which form the eastern boundary of the San Fernando Valley. The Santa Monica Mountains south of the Airport separate the San Fernando Valley from what is known as the Los Angeles Geological Plain. **Exhibit 1.2-2** illustrates the Airport's location within Burbank and Los Angeles. As shown in **Exhibit 1.2-2**, Hollywood Way, which is a north-south public thoroughfare between the Golden State Freeway (Interstate 5) northeast of the Airport and the Ventura Freeway (State Route 134) south of the Airport, serves as the primary route to and from the existing passenger terminal building. In addition to North Hollywood Way to the east, other streets near the Airport include West Empire Avenue and West Vanowen

[8] The text for this measure is as follows: "Shall Ordinance No. 16-3,882 be approved allowing no more than a 14-gate, 355,000 square foot replacement terminal and ancillary improvements to be built at the Bob Hope Airport meeting current safety, seismic standards and improving disabled access; demolishing the existing terminal; and modifying Adjacent Property easement and authorizing future agreements necessary to implement the project; in exchange for governance changes that provide Burbank a greater voice in the future of the airport?"

EXHIBIT 1.2-1
REGIONAL LOCATION OF AIRPORT

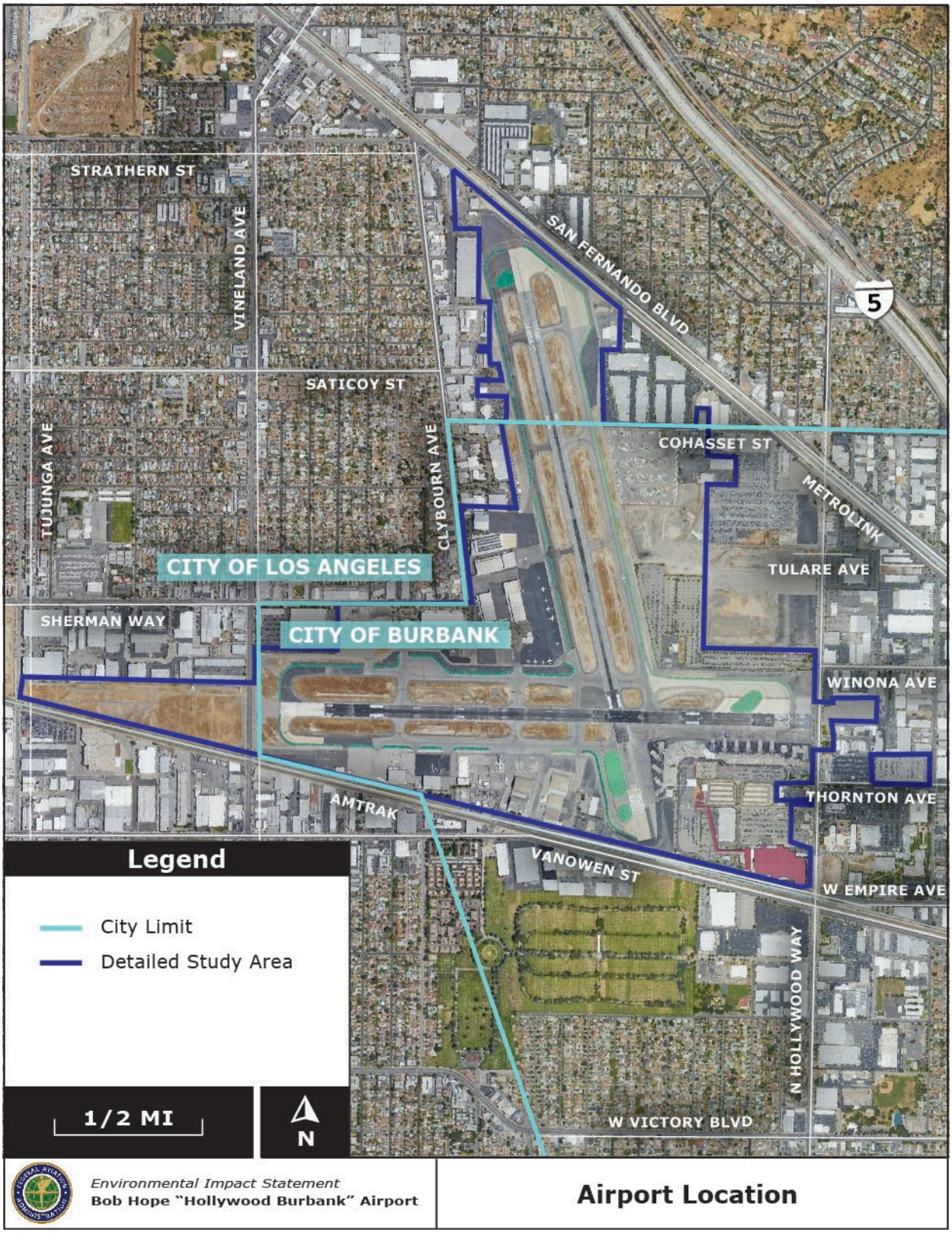


Environmental Impact Statement
Bob Hope "Hollywood Burbank" Airport

Airport Location

Source: RS&H, 2018.

EXHIBIT 1.2-2
AIRPORT LOCATION BY CITY



Source: RS&H, 2018.

Street to the south; Vineland Avenue, Sherman Way, and Clybourn Avenue to the west; and North San Fernando Road to the north.

The Airport is divided into quadrants by the intersecting runways, commonly referred to as the northeast, southeast, southwest, and northwest quadrants (see **Exhibit 1.2-3**).[9] The northeast quadrant of the Airport contains a 152-acre portion of the former Lockheed B-6 Plant site. This currently undeveloped property is used for airport passenger and employee automobile parking, movie equipment staging, and truck/recreational vehicle parking. The northeast quadrant of the Airport is the Authority's preferred location for the 14-gate replacement passenger terminal building. The existing 14-gate passenger terminal building is located in the southeast quadrant of the Airport. This quadrant is about 78 acres, and also contains the Regional Intermodal Transportation Center, an automobile parking structure, and surface parking lot. The approximately 118-acre southwest quadrant is used for general aviation hangars and aircraft parking aprons, and contains FAA maintenance and communication facilities, rental car storage, air freighter facilities (FedEx and UPS), and an air cargo building for commercial air carriers. The northwest quadrant of the Airport is about 161 acres and contains the Aircraft Rescue and Firefighting (ARFF) building, aircraft hangars, and fixed-base operators.

1.2.2 Existing Runways, Taxiways, and Passenger Terminal Building

1.2.2.1 Existing Runways

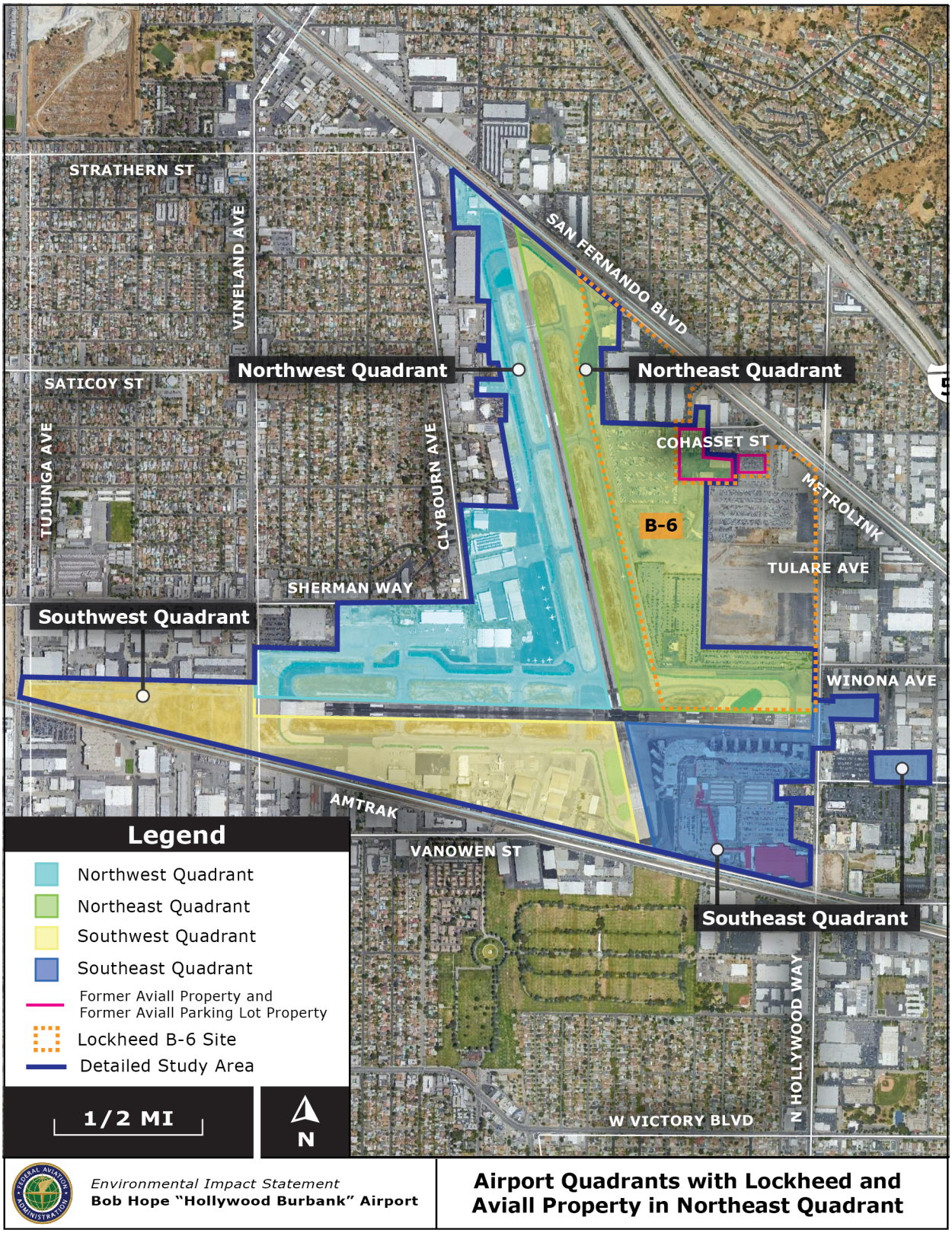
The Airport has two intersecting runways: Runway 15-33 is 6,886 feet long by 150 feet wide, and Runway 8-26 is 5,802 feet long by 150 feet wide (see **Exhibit 1.2-4**).[10] Runway 15-33 is oriented in a north-south direction, while Runway 8-26 is oriented in an east-west direction. Runway 15 is the Airport's primary departure runway, while Runway 8 is the Airport's primary arrival runway.[11] Both runways are paved with asphalt. The Runway 15 end has an elevation of 778 feet; the Runway 33 end has an elevation of 695 feet; the Runway 8 end has an elevation of 727 feet; and the Runway 26 end has an elevation of 697 feet. Departures on Runway 8 are limited to aircraft less than 12,500 pounds due to the proximity of the Verdugo Mountains and the aircraft arrival stream into Los Angeles International Airport (LAX). The Runway 15 end has a displaced threshold of 909 feet, and the Runway 33 end has a displaced

[9] The intersecting runways are not included in quadrant acreage. The runways account for about 46 acres of Airport property.

[10] FAA. (2018). Airport Diagram, Bob Hope (BUR). Retrieved July 2018, from FAA: https://www.faa.gov/air_traffic/flight_info/aeronav/digital_products/dtpp/search/results/.

[11] Burbank-Glendale-Pasadena Airport Authority. (2013, April). *Bob Hope Airport 14 CFR § 150 Noise Compatibility Study Noise Exposure Maps Update*, Burbank, California.

EXHIBIT 1.2-3
AIRPORT QUADRANTS WITH LOCKHEED AND AVIALL PROPERTY

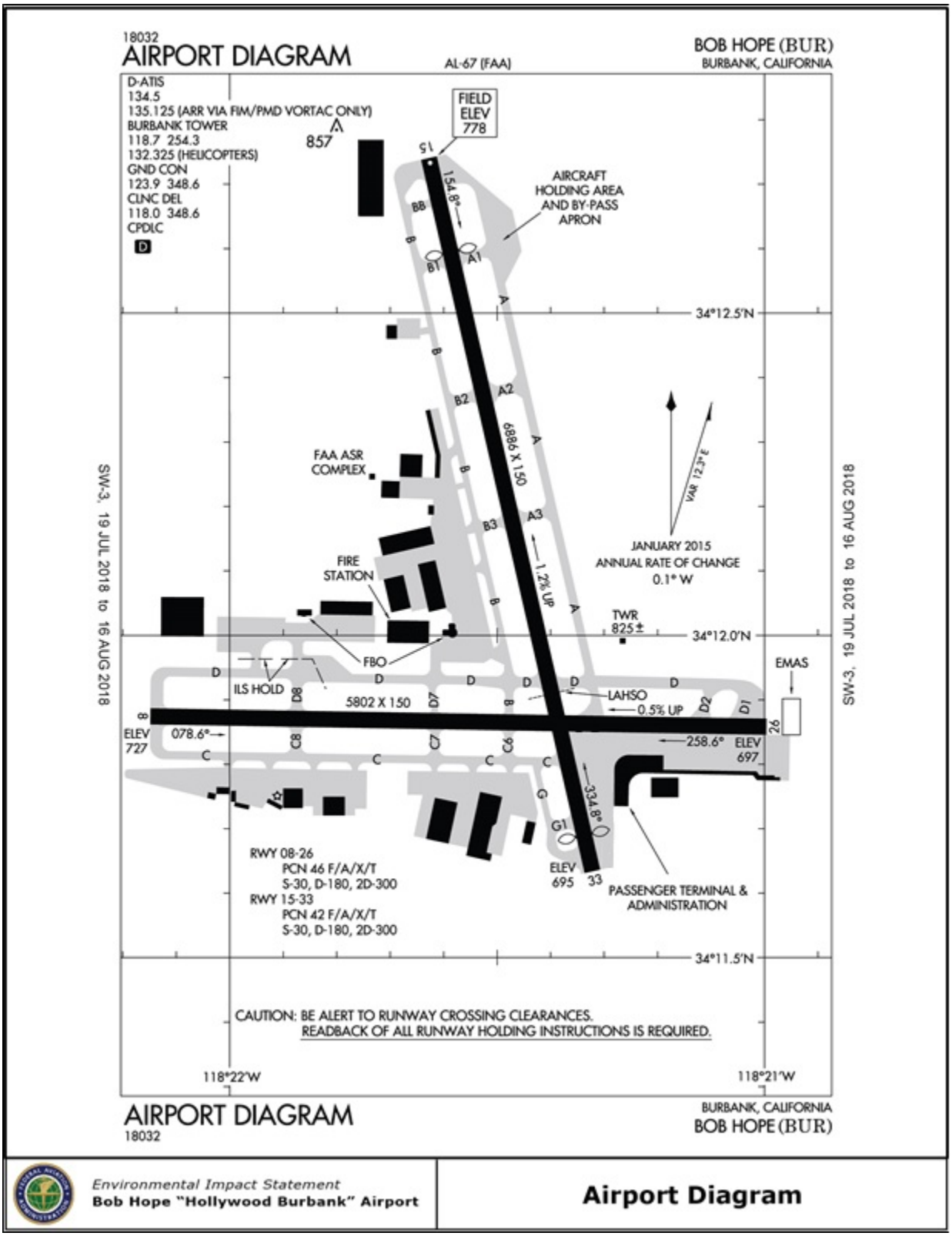


Environmental Impact Statement
Bob Hope "Hollywood Burbank" Airport

Airport Quadrants with Lockheed and Aviall Property in Northeast Quadrant

Source: RS&H, 2018.

EXHIBIT 1.2-4
FAA AIRPORT DIAGRAM



Source: FAA, 2018.

threshold of 350 feet, which translates into available departure lengths of 5,977 feet and 6,536 feet for Runways 15 and 33, respectively. East of Runway 8-26 there is an Engineered Materials Arresting System (EMAS).

1.2.2.2 Existing Taxiways

Airport taxiways are designed to allow for aircraft movement between runways and apron areas. Many airport runways have parallel taxiways that eliminate the need

to use the runway for taxiing purposes. Connector taxiways connect parallel taxiways to the runway and increase flexibility for aircraft movement among the runway, taxiways, and apron areas. The Airport has a parallel and connecting taxiway system that allows for aircraft movement from the two runways to all four quadrants of the Airport (see **Exhibit 1.2-4**).

Runway 15-33 has two parallel taxiways—Taxiway A to the east of the runway and Taxiway B to the west of the runway—both terminating at Runway 8-26. However, for the portion of Taxiway B north of Connector Taxiway B3, only those aircraft with a wingspan of 79 feet or less[12] can use the taxiway due to the proximity of existing development and larger aircraft must cross Runway 15-33 using Connector Taxiway A3 to Taxiway A to access the Runway 15 end. Taxiway G is the partial parallel taxiway on the west side of Runway 15-33 between the approach end of Runway 33 and Taxiway C.

Runway 8-26 has the Airport's only full-length parallel taxiway, Taxiway D, which parallels the north side of the runway. Taxiway C, located south of Runway 8-26, extends from the Runway 8 end to Runway 15-33.

1.2.2.3 Existing Passenger Terminal Building

The existing passenger terminal building is approximately 232,000 square feet situated in the southeast quadrant of the Airport (see **Exhibit 1.2-3**). The existing passenger terminal building has two concourses, Concourse A and Concourse B, with a total of 14 aircraft gates (Concourse A has nine gates and Concourse B has five gates). Each concourse has its own Transportation Security Administration (TSA) screening checkpoint. There are several food services, as well as retail shops, within the existing passenger terminal building. Additionally, the Authority offers many amenities, such as free Wi-Fi within the existing passenger terminal building, valet parking, and aircraft ground boarding, all of which are highly valued features by Airport passengers. The predominant aircraft used at the Airport is the

[12] AirNav. (2018, November). KBUR, Bob Hope Airport, Burbank, CA. Retrieved November 2018, from AirNav: https://www.airnav.com/airport/KBUR.

Boeing 737. Other aircraft being used include the Airbus 320, the Airbus 319, and regional jets.

1.2.3 Aviation Activity

The FAA publishes the annual Terminal Area Forecast (TAF) for each airport in the federal system.[13, 14, 15] TAF data is reported based on the FAA fiscal year, which is October through September.

The FAA released the 2018 TAF in January 2019, which was the most recent version when the preparation of this EIS began. The 2018 TAF contains aircraft operations and passenger enplanement data for the Airport for the years 1990 through 2045.

Table 1.2-1 provides the 2018 TAF historical aircraft operations and passenger enplanement data for years 2000–2018 and the 2018 TAF forecast aircraft operations for 2019 through 2029 (five years after the proposed opening of the replacement passenger terminal building). **Exhibit 1.2-5** illustrates the historical and forecast TAF aircraft operations data for the Airport. According to the 2018 TAF, aircraft operations peaked in 2006 at 191,483 and declined to 111,466 in 2009, representing an overall decline of about 42 percent. Aircraft operations are forecast to increase to 143,973 in 2024 (the proposed opening year of the replacement passenger terminal building) and to 151,656 in 2029 (five years after the passenger terminal building opens), which is about 24 and 20 percent lower, respectively, than the peak in 2006.

The Airport does not currently operate at or near its maximum theoretical operational capacity.[16] Airport capacity and aircraft delay, for the purpose of airport planning and design, is discussed and measured according to methods in FAA Advisory Circular 150/5060-5, *Airport Capacity and Delay*.[17] The operational capacity of the Airport is determined by its movement areas including its two runways, their length and strength, and their intersecting orientation. The capacity (hourly or annual throughput) of an airport is not determined by the non-movement areas (e.g., aircraft aprons).[18] The Purpose and Need of the Proposed Action does

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[13] FAA. (2018). *Federal Aviation Administration Terminal Area Forecast Summary, Fiscal Years 2017-2045*.

[14] It should be noted that the Proposed Action is not to address airport capacity, but rather to enhance airport safety and efficiency of the terminal. The current forecast and operational numbers show an increase yet are below those identified in the 1995 BUR Replacement Terminal EIS, which forecasted much higher operational and passenger levels.

[15] FAA. (2018). Terminal Area Forecast (TAF). Retrieved June 2018, from FAA: https://www.faa.gov/data_research/aviation/taf/.

[16] For comparison, New York LaGuardia (LGA) also features two intersecting runways and handled nearly 375,000 operations in 2019 or about two and a half times more operations than Bob Hope "Hollywood Burbank" Airport.

[17] FAA. (1983, September 23). Federal Aviation Administration, Advisory Circular 150/5060-5, *Airport Capacity and Delay*.

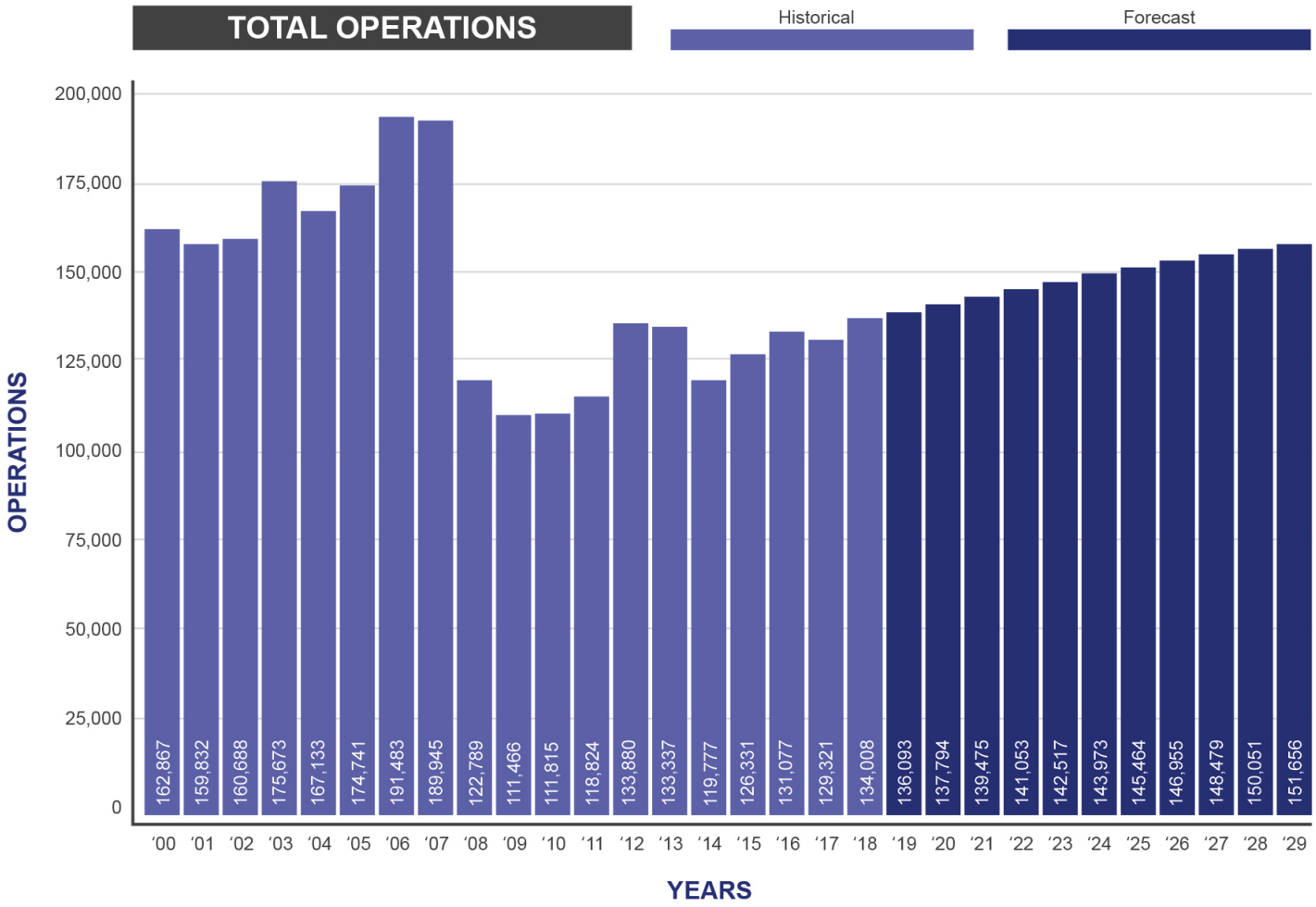
[18] FAA. (2014, February 26). Federal Aviation Administration, Advisory Circular 150/5300-13A, Change 1, *Airport Design*, Chapter 5.

TABLE 1.2-1
HISTORICAL AND FORECAST AIRCRAFT OPERATIONS AT THE AIRPORT

	Historic Aircraft Operations				
TAF Year	**Air Carrier**	**Air Taxi & Commuter**	**General Aviation**	**Military**	**Total Operations**
2000	58,366	29,944	74,205	352	162,867
2001	56,965	28,379	74,131	357	159,832
2002	55,857	29,601	74,806	424	160,688
2003	58,376	27,471	89,581	245	175,673
2004	58,005	26,993	81,817	318	167,133
2005	51,985	43,107	79,189	460	174,741
2006	55,613	33,892	101,398	580	191,483
2007	58,970	30,997	99,500	478	189,945
2008	60,347	26,955	35,233	254	122,789
2009	54,374	21,371	35,481	240	111,466
2010	51,332	22,130	38,097	256	111,815
2011	46,818	21,309	50,413	284	118,824
2012	45,603	21,067	66,649	561	133,880
2013	43,711	21,645	67,374	607	133,337
2014	39,699	21,570	57,767	741	119,777
2015	39,799	21,053	64,468	1,011	126,331
2016	42,935	20,085	66,949	1,108	131,077
2017	49,269	19,537	59,406	1,109	129,321
2018/a/	53,213	22,289	57,638	868	134,008
	Forecast Aircraft Operations				
TAF Year	**Air Carrier**	**Air Taxi & Commuter**	**General Aviation**	**Military**	**Total Operations**
2019	55,988	22,842	56,395	868	136,093
2020/b/	57,897	22,194	56,835	868	137,794
2021	59,288	22,041	57,278	868	139,475
2022	60,753	21,706	57,726	868	141,053
2023	62,299	21,173	58,177	868	142,517
2024/c/	63,336	21,137	58,632	868	143,973
2025	64,159	21,345	59,092	868	145,464
2026	64,977	21,555	59,555	868	146,955
2027	65,821	21,768	60,022	868	148,479
2028	66,707	21,983	60,493	868	150,051
2029/d/	67,620	22,200	60,968	868	151,656

Notes: /a/ Data for 2018 are actual.
/b/ Preparation of this EIS began in December 2018 and the forecasts that used in this EIS are based on those that existed at that time. Thus, the forecast for 2020 was prepared prior to the COVID-19 public health emergency.
/c/ Opening year for the replacement passenger terminal building.
/d/ Five years after the replacement passenger terminal building opens.
Source: FAA, 2019. TAF. Retrieved February 2020. https://www.faa.gov/data_research/aviation/taf/

EXHIBIT 1.2-5
HISTORICAL AND FORECAST AIRCRAFT OPERATIONS AT AIRPORT



Source: FAA, 2019. Terminal Area Forecast (TAF). Retrieved February 2020, from FAA: https://www.faa.gov/data_research/aviation/taf/

not include changing the maximum hourly, daily, or annual operational capacity of the Airport.

Table 1.2-2 provides the 2018 TAF historical passenger enplanement data for years 2000–2018 and the 2018 TAF forecast passenger enplanement data for 2019 through 2029 (five years after the proposed opening of the replacement passenger terminal building). **Exhibit 1.2-6** illustrates the historical and forecast TAF passenger enplanement data for the Airport. According to the 2018 TAF, passenger enplanements peaked in 2007 at 2,930,817 passengers and declined to 1,916,918 in 2014, but have rebounded to 2,620,798 in 2018, representing an overall decline of about 11 percent. The 2018 TAF forecasts passenger enplanements to exceed the 2007 peak level by 2022. Passenger enplanements are forecast to increase to 3,038,801 in 2024 (the proposed opening year of the replacement passenger terminal building) and to 3,243,118 in 2029 (five years after the replacement passenger terminal building opens), which is about 4 percent and 11 percent higher, respectively, compared to the peak in 2007.

The Airport does not currently operate at its maximum theoretical passenger terminal building capacity. Terminal building capacity is measured as the maximum rate of passengers (both enplaned and deplaned) over a given period and is typically measured hourly or annually. Key elements that influence passenger activity include economic and demographic characteristics, geographic attributes of the area where the airport is located, aviation-related factors such as local business activity, business developments in the airline industry (mergers, alliances and new market strategies), and other elements such as changes in air fares, changes in the level of local taxes, new environmental regulations, and attitudes of residents towards airport operations.[19] Replacement of existing facilities are not elements or factors affecting aviation activity.

Preparation of this EIS began in December 2018 and the forecasts used for analysis in this EIS are based on those that existed at that time and was prior to the COVID-19 public health emergency, which led to reduced demand for air travel at the Airport. The aviation activity forecast included in this EIS is based on the best available data and valid assumptions. The forecast assumes that temporary downturns or upswings may occur during the forecast period. In the past, aviation activity has undergone significant, although temporary, reductions in response to economic downturns or security events such as the recession in 2008, the terrorist attacks on September 11, 2001, and the Persian Gulf War.

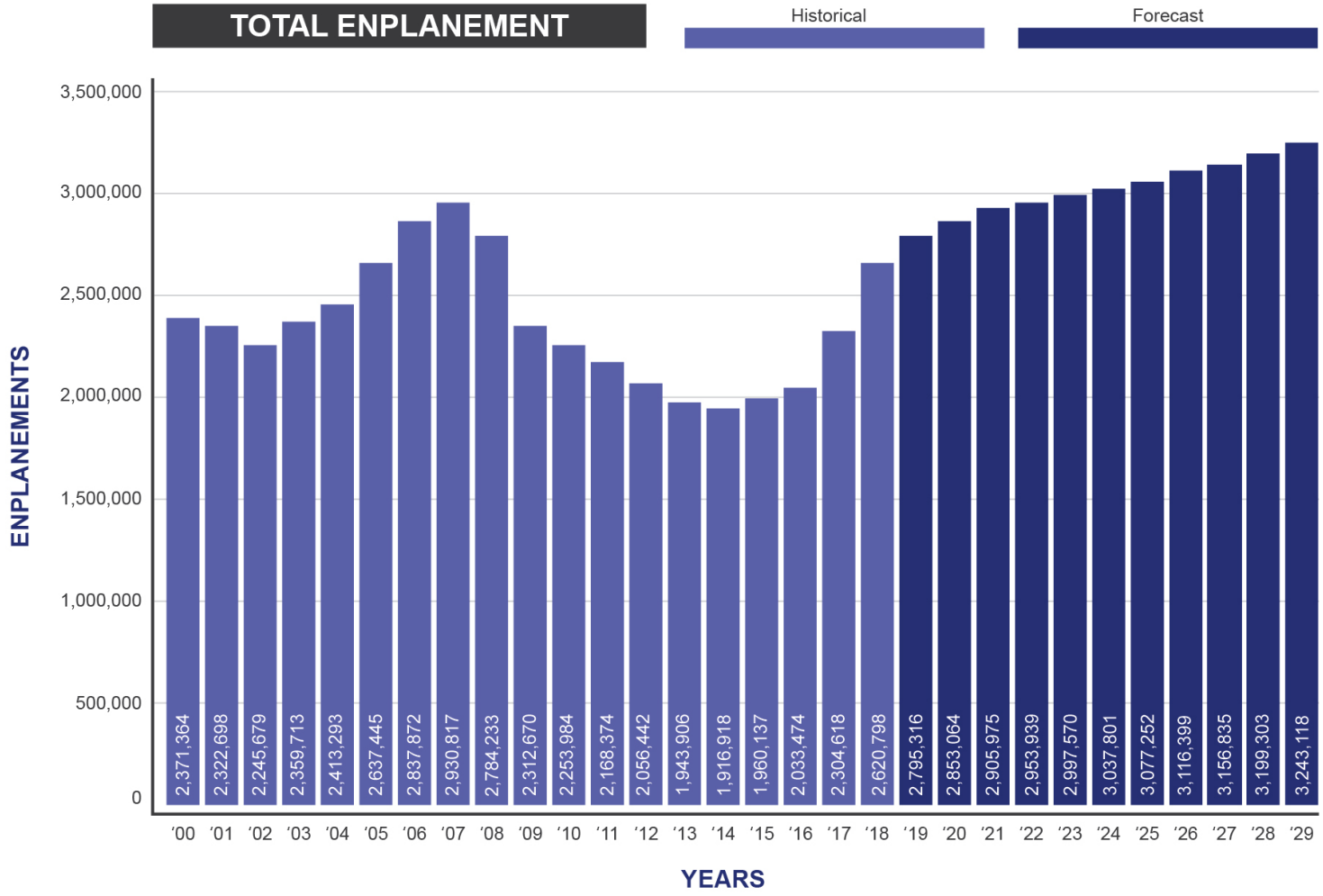
[19] FAA Advisory Circular 150/5070-6B, Chapter 7, Section 703, *Factors Affecting Aviation Activity*.

TABLE 1.2-2
HISTORICAL AND FORECAST PASSENGER ENPLANEMENTS AT THE AIRPORT

	Historic Passenger Enplanements		
TAF Year	**Air Carrier**	**Commuter**	**Total Enplanements**
2000	2,371,364	0	2,371,364
2001	2,322,698	0	2,322,698
2002	2,224,982	20,697	2,245,679
2003	2,297,167	62,546	2,359,713
2004	2,265,172	148,121	2,416,293
2005	2,358,594	278,851	2,664,445
2006	2,533,529	304,343	2,837,872
2007	2,655,670	275,147	2,930,817
2008	2,511,176	273,057	2,784,233
2009	2,027,447	285,223	2,312,670
2010	1,986,884	267,100	2,253,984
2011	1,880,842	287,532	2,168,374
2012	1,738,795	317,647	2,056,442
2013	1,628,914	314,992	1,943,906
2014	1,611,163	305,755	1,916,918
2015	1,652,853	307,284	1,960,137
2016	1,706,036	327,438	2,033,474
2017	1,940,611	364,007	2,304,618
2018/a/	2,249,847	370,951	2,620,798
	Forecast Passenger Enplanements		
TAF Year	**Air Carrier**	**Commuter**	**Total Enplanements**
2019	2,258,393	436,923	2,795,316
2020/b/	2,407,386	445,678	2,853,064
2021	2,452,277	453,698	2,905,975
2022	2,493,017	460,922	2,953,939
2023	2,530,043	467,527	2,997,570
2024/c/	2,564,163	473,638	3,037,801
2025	2,597,641	479,611	3,077,252
2026	2,630,839	485,560	3,116,399
2027	2,665,135	491,700	3,156,835
2028	2,701,162	498,141	3,199,303
2029/d/	2,738,314	504,804	3,243,118

Notes: /a/ Data for 2018 are actual.
/b/ Preparation of this EIS began in December 2018 and the forecasts that used in this EIS are based on those that existed at that time. Thus, the forecast for 2020 was prepared prior to the COVID-19 public health emergency.
/c/ Opening year for the replacement passenger terminal building.
/d/ Five years after the replacement passenger terminal building opens.
Source: FAA, 2019. TAF. Retrieved February 2020. https://www.faa.gov/data_research/aviation/taf/

EXHIBIT 1.2-6
HISTORICAL AND FORECAST PASSENGER ENPLANEMENTS AT AIRPORT



Source: FAA, 2019. Terminal Area Forecast (TAF). Retrieved February 2020, from FAA: https://www.faa.gov/data_research/aviation/taf/

1.3 PROJECT PURPOSE AND NEED

CEQ regulations for implementing the procedural provisions of NEPA state that the purpose and need for a proposed action "*shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action*."[20] According to FAA Order 1050.1F, Section 6-2.1(c), the purpose and need statement briefly describes the underlying purpose and need for the federal action and provides the foundation for identifying reasonable alternatives to a Proposed Action. The purpose and need statement identifies the problem facing the airport sponsor (i.e., the "need" for the action) and the proposed solution to the problem (i.e., the "purpose" of the action). The FAA developed this Purpose and Need Statement to address FAA's statutory mission as well as the Airport Sponsor's goals and objectives.[21]

The Proposed Action stems from several problems with the existing passenger terminal building. The existing passenger terminal building does not meet current FAA standards related to runway separation and object free areas. It is also obsolete in terms of contemporary passenger terminal design and efficient utilization standards. Further, it does not meet current State building requirements. The purpose of the Proposed Action is to provide a passenger terminal building that meets all current FAA standards, passenger demand, and building requirements as well as improve utilization and operational efficiency of the passenger terminal building. FAA's need is defined by the statutory requirement to decide whether to approve the Proposed Action as depicted on the Airport Layout Plan (ALP) developed by the Authority, pursuant to USC § 47107(a)(16).

While the Airport is considered safe, the location of the existing passenger terminal building does not meet the current FAA standards. It is located within the Airport's designated object free areas which exist to enhance safety by reducing the risk of aircraft colliding with vehicles, objects, and buildings at an airport. The existing passenger terminal building also penetrates the Title 14 Code of Federal Regulations (CFR) Part 77 primary surfaces. The Proposed Action, as described below, would enhance airport safety at the Airport by meeting FAA standards consistent with the FAA Advisory Circular 150/5300-13A, Change 1, *Airport Design*, and the FAA's regulations on the Safe, Efficient Use and Preservation of the Navigable Airspace, described in, Title 14 CFR Part 77. The proposed replacement passenger terminal building would be properly separated from the runways and taxiways and maintain adequate Runway Object Free Area (ROFA), Taxiway Object

[20] 40 CFR § 1502.13.

[21] FAA. (2006, April 28). *Federal Aviation Administration Order 5050.4B, National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*, Section 502.

Free Area (TOFA) and Building Restriction Line (BRL) standards which reduces collision risk in the event that an aircraft deviates from the runway or taxiway.

The existing passenger terminal building site dates back to 1930 when the original central portion of the existing passenger terminal building was constructed. The structure burned in 1966 and was subsequently rebuilt by Lockheed, the airport owner and operator at the time, in the same location. The airport was acquired by the Authority in 1978 from Lockheed.

Over time, the FAA's separation design standards for runways and taxiways have changed to enhance safety, with the most recent design standards established in 2014. Currently, the existing passenger terminal building does not meet the following FAA standards:

- the ROFA identified in FAA Advisory Circular 150/5300-13A, Change 1, *Airport Design*, for Runways 15-33 and 8-26;
- the primary and transitional surfaces that protect imaginary surfaces around runways for the safe operation of aircraft, as designated in Title 14 CFR Part 77 for Runway 8-26 and Runway 15-33;
- the BRL identified on the FAA-approved Airport Layout Plan; and
- the TOFA.

Portions of the existing passenger terminal building as well as the aircraft parked on the adjoining apron are not consistent with the FAA's separation design standards for runways and taxiways. **Table 1.3-1** and **Exhibit 1.3-1** show how the existing passenger terminal does not meet current FAA ROFA, BRL, and TOFA design standards.

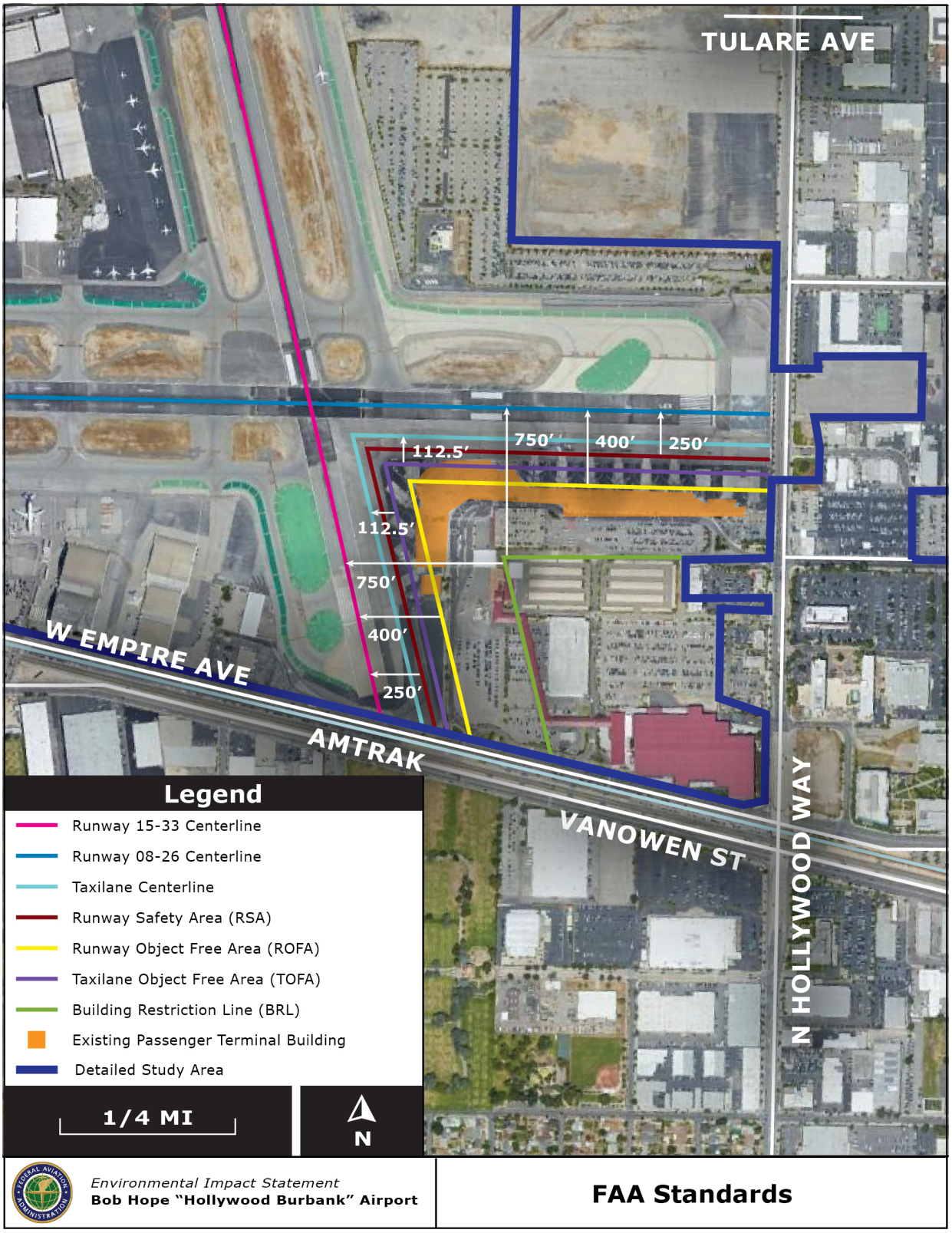
Title 14 CFR Part 77, *Safe, Efficient Use and Preservation of the Navigable Airspace*, protects the navigable airspace by requiring the FAA to receive "notice of any proposed construction or alteration of existing structures" at an airport. The FAA conducts airspace studies of proposed development and determines if temporary and/or permanent structures (i.e., obstructions) pose a hazard to navigable airspace. Imaginary surfaces are established at each airport in relation to that airport's runway approach category to protect the navigable airspace. There are five types of imaginary surfaces as defined further in Title 14 CFR Part 77; horizontal surface, conical surface, primary surface, approach surface, and transitional surface. The existing passenger terminal building and parking structure penetrate the primary and transitional surfaces of Title 14 CFR Part 77 (see **Exhibits 1.3-2** and **1.3-3**).

TABLE 1.3-1
FAA STANDARDS

FAA Standard	Standard (distance from centerline)	Existing Passenger Terminal Building from Runway 8-26 Centerline	Existing Passenger Terminal Building from Runway 15-33 Centerline
Runway Object Free Area (ROFA)	400 feet/a/	About 255 feet/a/	About 375 feet/a/
Building Restriction Line (BRL)	750 feet/a/	About 255 feet/a/	About 375 feet/a/
Taxilane Object Free Area (TOFA)	112.5 feet/b/	About 85 feet/b/	About 110 feet/b/

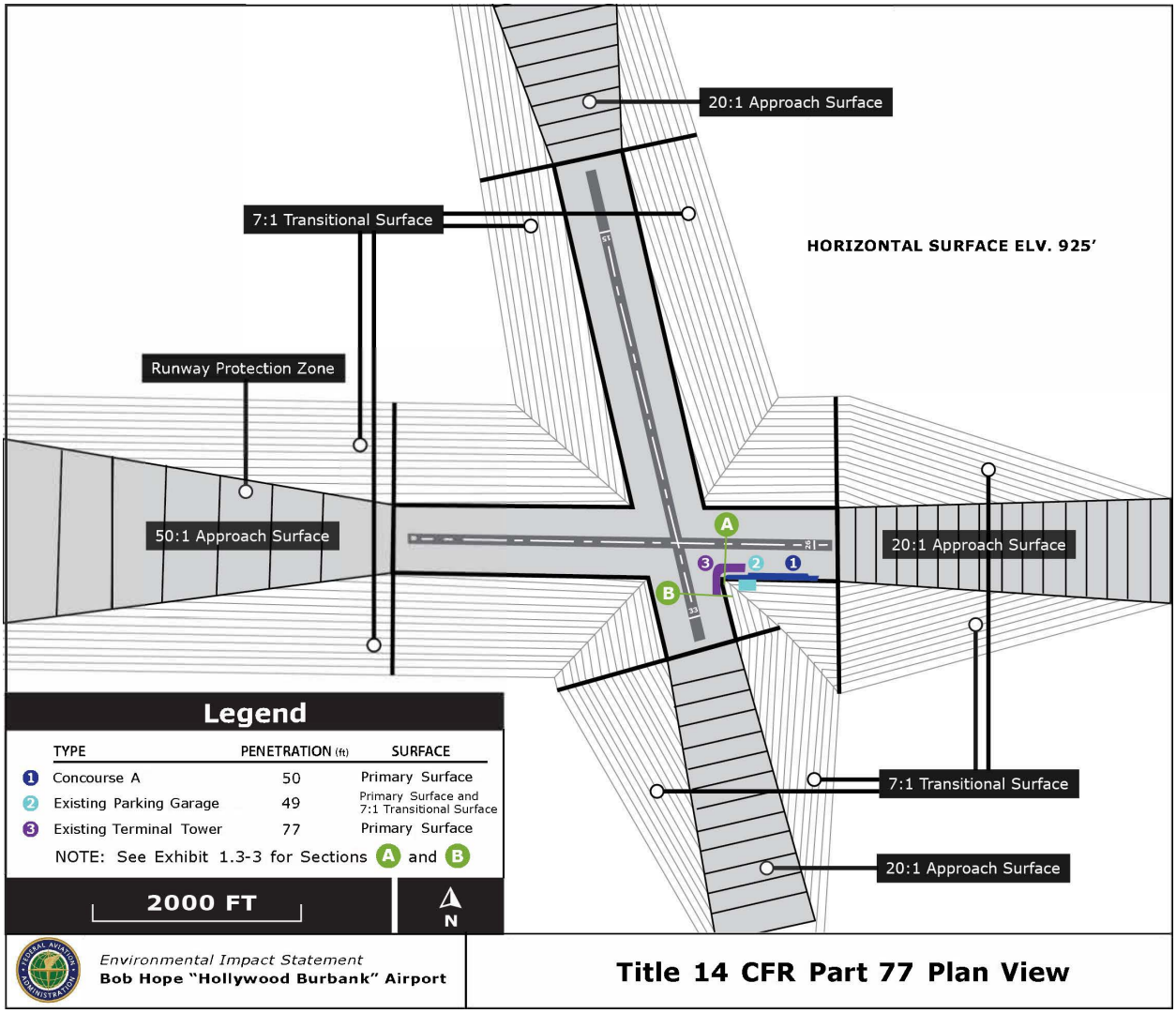
Notes:
/a/ Distance from runway centerline.
/b/ Distance from taxilane centerline.
Source: FAA, 2014.

EXHIBIT 1.3-1
FAA STANDARDS



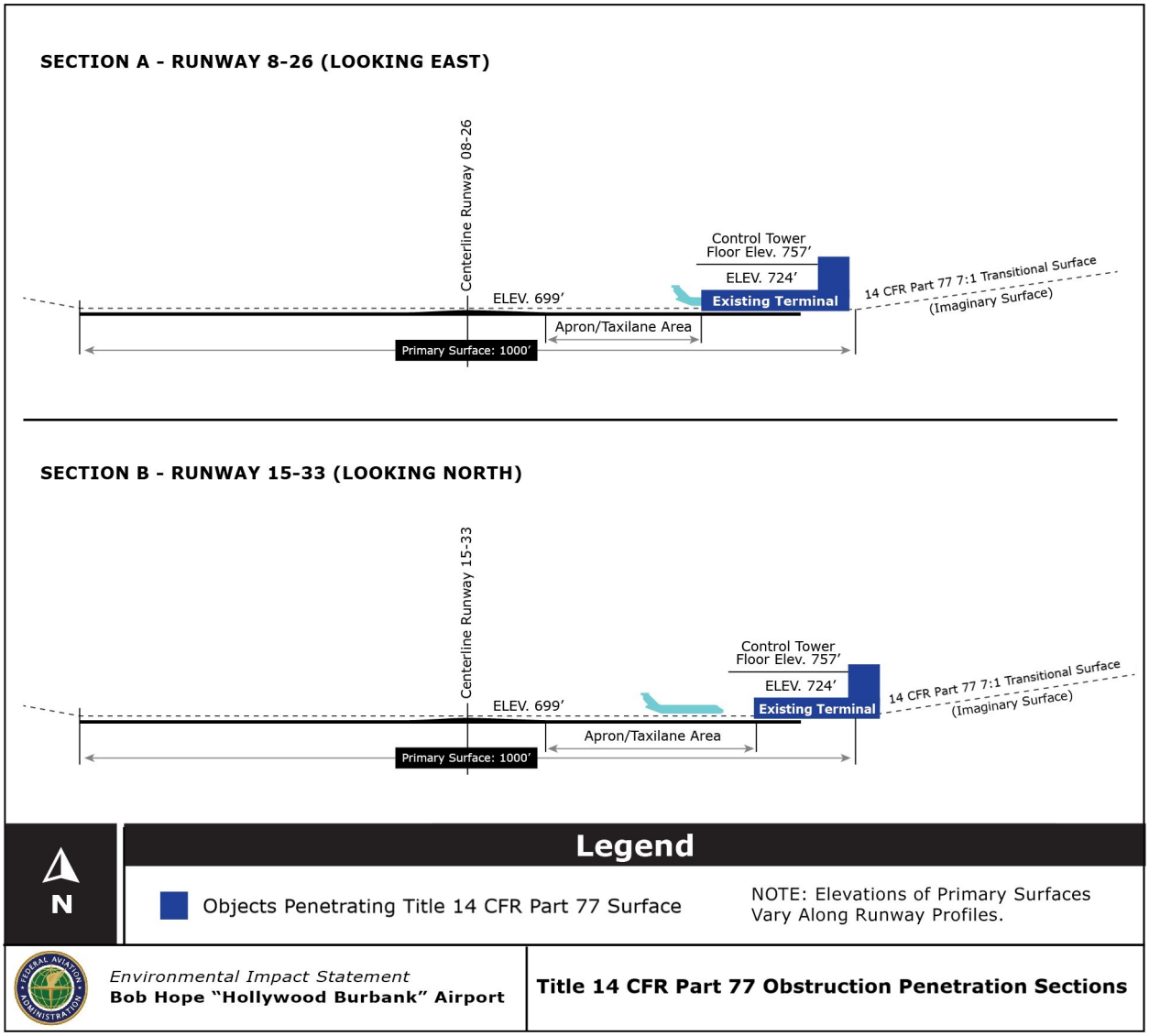
Sources: Authority, 2016; RS&H, 2018.

EXHIBIT 1.3-2
TITLE 14 CFR PART 77 PLAN VIEW



Sources: FAA, 1995; RS&H, 2018.

EXHIBIT 1.3-3
TITLE 14 CFR PART 77 OBSTRUCTION PENETRATION SECTIONS



Sources: FAA, 1995; RS&H, 2018.

The ROFA must be free of "objects non-essential for air navigation or aircraft ground maneuvering.[22] The TOFA clearing standards prohibit service vehicle roads, parked aircraft, and other objects, except for objects that need to be located in the TOFA for air navigation or aircraft ground maneuvering purposes.[23] The ROFAs and TOFAs exist to enhance safety at the Airport. Primary and transitional surfaces are used to identify objects that may impact airport plans for aircraft departure/arrival procedures or routes.[24]

An additional safety concern is the number of runway crossings an aircraft must make when taxiing to take-off on a runway or taxiing after landing to the passenger terminal building at an airport. FAA standard practice is to reduce or limit the amount of runway crossings a taxiing aircraft must make because this reduces the opportunity for incursions on the airfield and maintains operational airfield capacity.[25] To do so, the FAA recommends avoiding intersections in the middle third of runways, known as "high energy" intersections, keeping runway crossings to the outer third of runways. The location of the existing passenger terminal building at the Airport limits the number of runway crossings for taxiing aircraft, in accordance with FAA practice. Therefore, a replacement passenger terminal building's location is expected to avoid the need for departing or arriving aircraft to perform additional runway crossings.[26]

While the FAA has determined the existing passenger terminal building is safe to use, the existing passenger terminal building is obsolete in terms of contemporary passenger terminal building design and efficient utilization standards. The L-shaped, narrow configuration of the existing passenger terminal building and its close proximity to the two runway systems at the airport was developed as an expedient, temporary measure and not as part of a long-range master plan prepared to satisfy FAA requirements.[27] Moreover, the 1966-rebuilding of the existing passenger terminal building does not meet the subsequent 1990 Americans with Disabilities Act standards or current seismic (earthquake) design requirements of the California Building Code (CBC).[28] In 2003, the Authority installed 19-inch-thick blast resistant concrete walls on the south face of Concourse A to meet

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[22] FAA. (2014, February 26). Federal Aviation Administration Advisory Circular (AC) 150/5300-13A, Change 1, *Airport Design,* paragraph 309.

[23] FAA. (2014, February 26). Federal Aviation Administration Advisory Circular (AC) 150/5300-13A, Change 1, *Airport Design,* paragraph 404(b).

[24] Title 14 CFR Part 77 *Objects Affecting Navigable Airspace,* Section 77.19.

[25] FAA. (2014, February 26). Federal Aviation Administration Advisory Circular (AC) 150/5300-13A, Change 1, *Airport Design,* paragraph 401(b)5(c).

[26] FAA. (2014, February 26). Federal Aviation Administration Advisory Circular (AC) 150/5300-13A, Change 1, *Airport Design*. Section 401(5) C and D.

[27] FAA. (1995, September). *Land Acquisition and Replacement Terminal Project Final Environmental Impact Statement,* Volume 1, Section 2.2.1.

[28] California Code of Regulations, Title 24. (2016). California Building Code, § 2, Volume 2, Chapter 16, *Structural Design*, Section 1613, *Earthquake Loads*. Retrieved November 2018, from International Code Council: https://codes.iccsafe.org/content/chapter/1832/?site_type=public.

Transportation Security Administration (TSA) standards. The existing passenger terminal building contains non-ductile concrete and unreinforced masonry and although part of the existing passenger terminal building was subject to retrofit efforts to satisfy the City of Burbank Unreinforced Masonry Ordinance, the overall existing passenger terminal building does not meet the CBC requirements for seismic design. The purpose of the Proposed Action is to provide a passenger terminal building that meets all current FAA standards, passenger demand, and building requirements, as well as improve utilization and operational efficiency of the passenger terminal building.

The Proposed Action, as described below, would enhance airport safety at the Airport by meeting FAA standards consistent with the FAA Advisory Circular 150/5300-13A, Change 1, *Airport Design*, and the FAA's regulations described in, Title 14 CFR Part 77, *Safe, Efficient Use and Preservation of the Navigable Airspace*. The proposed replacement passenger terminal building would be properly separated from the runways and maintain adequate ROFA, TOFA and BRL standards.

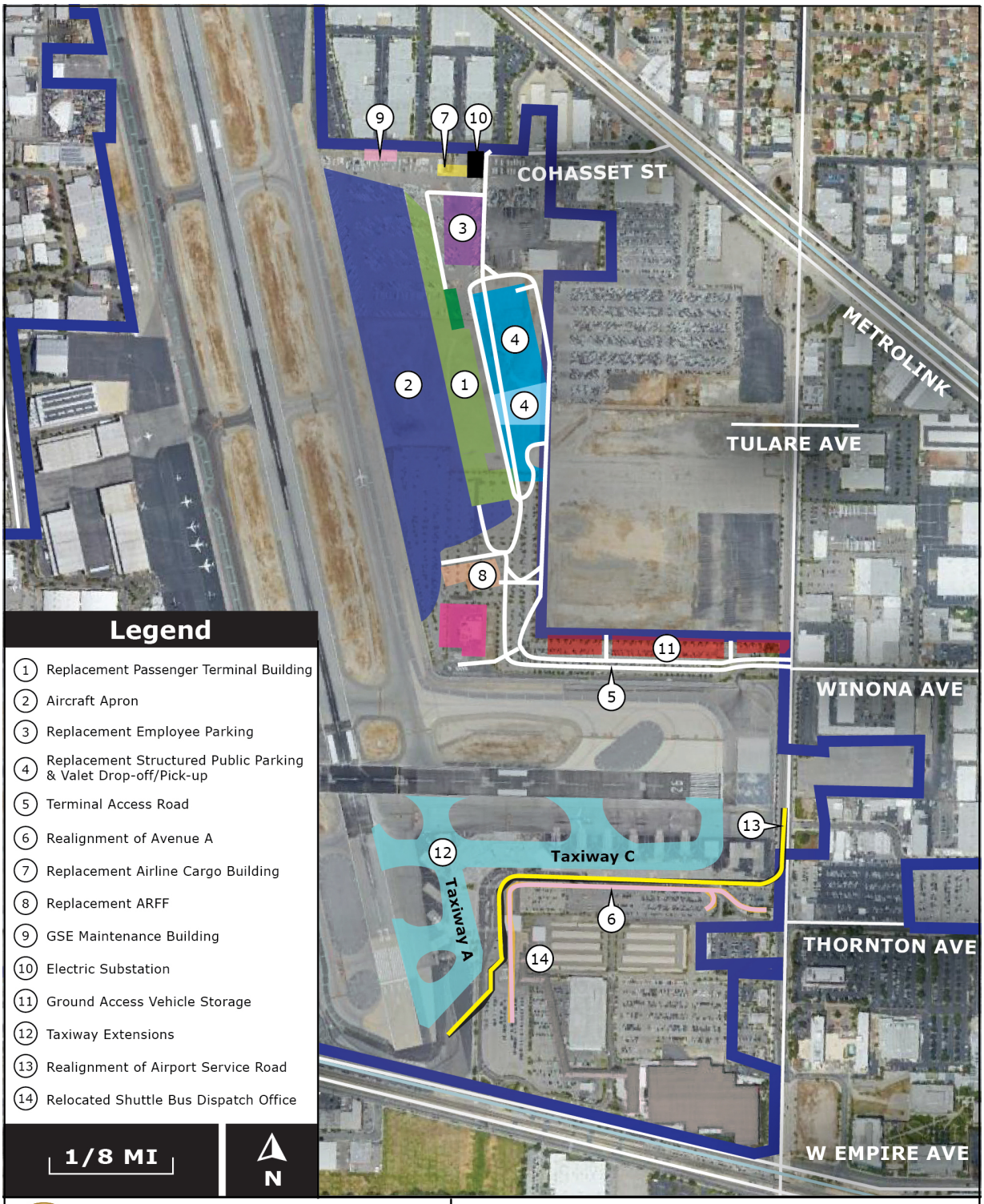
Moreover, the proposed replacement passenger terminal building and associated facilities would provide space and facilities to better meet the current passenger demand at the airport and the future projected increases in passengers indicated in the forecast. The Authority's specific objectives to meet the goal of modernizing the passenger terminal building and to meet the expectations of the current and future travelling public are to:

- Have a replacement passenger terminal building that meets Americans with Disabilities Act standards, as well as the latest seismic (earthquake) design requirements of the California Building Code (California Code of Regulations, Title 24, Chapter 16).
- Have a replacement passenger terminal building that consolidates air facilities (including passenger, tenant, and Authority facilities) into a single passenger terminal building.
- Provide an energy-efficient passenger terminal building with the same number of aircraft gates and the same number of public parking spaces as the existing facilities for commercial passengers.
- Maintain intermodal connectivity between the replacement passenger terminal building and the various fixed-rail and bus options located near the Airport.

1.4 DESCRIPTION OF PROPOSED ACTION

The Proposed Action shown on **Exhibits 1.4-1** and **1.4-2** includes the following project components:

EXHIBIT 1.4-1
PROPOSED ACTION CONSTRUCTION



Environmental Impact Statement
Bob Hope "Hollywood Burbank" Airport

Proposed Action (Construction)

Sources: Authority, 2016; RS&H, 2018.

EXHIBIT 1.4-2
PROPOSED ACTION DEMOLITION

Sources: Authority, 2016; RS&H, 2018.

1. **Construction of a replacement passenger terminal building:** The 355,000-square-foot replacement passenger terminal building would have 14 gates and would meet FAA standards. The replacement passenger terminal building would be developed in accordance with modern passenger terminal design standards to provide enhanced passenger amenities, security screening facilities that meet the latest TSA requirements and adequate space for other airport facilities including holdrooms, baggage claim areas, and public areas that are designed for the aircraft that airlines routinely operate. Additionally, the replacement passenger terminal building would be designed to meet California Building Code seismic design standards for a new building.[29] Because the type of aircraft used at the Airport is dictated by the length of the runways and because the length of the runways would not change, the aircraft that would be used by the airlines would be the same as that being currently used (e.g., Boeing 737, Airbus 320, Airbus 319, and regional jets).
2. **Construction of a 45,900-square-yard aircraft apron:** The aircraft apron would accommodate 14 aircraft.
3. **Construction of replacement employee automobile parking:** About 200 spaces would be provided for employee parking in a surface parking lot north of the proposed replacement passenger terminal building. Additional employee parking would be provided by converting existing public parking facilities in the southeast quadrant to employee parking.
4. **Construction of a public automobile parking structure:** The public automobile parking structure would be at least five levels, but not more than seven levels, and would include a valet drop-off and pickup area. The total number of public parking spaces at the Airport would not exceed 6,637 spaces, per the Conceptual Term Sheet agreed upon by the Airport and the City of Burbank.[30] The 6,637 parking spaces is consistent with the current number of public parking spaces that exists at the Airport.
5. **Construction of a new passenger terminal access road:** A new multi-lane road extending from the intersection of North Hollywood Way and Winona Avenue would be constructed. This road would loop around the proposed parking structure to provide vehicle access to the replacement passenger terminal building and parking structure, thus allowing curb-front access to the replacement passenger terminal building and recirculation around the Airport. A secondary point of access would connect the passenger terminal access road with Cohasset Street and Lockheed Drive,

[29] California Code of Regulations, Title 24. (2016). California Building Code, Chapter 16 – *Structural Design*. Retrieved October 2018, from International Code Council: https://codes.iccsafe.org/content/chapter/1832/?site_type=public.

[30] City of Burbank. (2016, November 8). *Bob Hope Airport Replacement Terminal Conceptual Term Sheet*.

providing access to North San Fernando Road from both Cohasset Street and Lockheed Drive.

6. **Realignment of Avenue A:** Avenue A, the existing passenger terminal loop road in the southeast quadrant of the Airport would be realigned. The east-west segment of Avenue A would be shifted to the south to permit the extension of Taxiway C, and the north-south segment of Avenue A would be shifted to the east to permit the extension of Taxiway A. The realigned Avenue A would continue to provide access to the Regional Intermodal Transportation Center and long-term parking in the southeast quadrant of the Airport.
7. **Construction of replacement airline cargo building:** An 8,000-square-foot replacement airline cargo building would be constructed adjacent to the north of the replacement passenger terminal building.
8. **Construction of replacement Aircraft Rescue and Firefighting (ARFF) station:** The existing ARFF station is in a hangar in the northwest quadrant of the Airport. A new ARFF station would be constructed south of the replacement passenger terminal building, and existing ARFF operations would be relocated. Vehicle access to the new ARFF station would be provided via the new passenger terminal access road. The existing ARFF hangar in the northwest quadrant of the Airport would become available for general aviation uses.
9. **Construction of a ground support equipment (GSE) and passenger terminal maintenance building:** A new 8,000-square-foot GSE and passenger terminal maintenance building would be constructed adjacent to the north side of the replacement passenger terminal building just south of Cohasset Street. About 2,000 square feet would be used for equipment and tool storage in addition to office space for maintenance staff.
10. **Construction of a central utility plant:** A new central utility plant would be constructed adjacent to the north side of the replacement passenger terminal building in an area just south of Cohasset Street.
11. **Construction of ground access vehicle storage and staging area:** A ground access vehicle storage and staging area for taxis, shared vans, and transportation network companies (e.g., Uber, Lyft, etc.) would be constructed on the north side of the new passenger terminal access road west of the North Hollywood Way / Winona Avenue entrance.
12. **Taxiway A and Taxiway C Extensions:** Taxiway A would be extended from Runway 8-26 south to the Runway 33 threshold, and Taxiway C would be extended between Taxiway G and the Runway 26 threshold. Thus, both Taxiways A and C would be extended to provide full-length parallel taxiways.

13. **Realignment of the Airport service road:** The Airport service road in the southeast quadrant of the Airport would be relocated.
14. **Relocation of Shuttle Bus Dispatch Office:** The shuttle bus dispatch office and staging area would be relocated to the southeast quadrant near the existing valet parking structure.
15. **Demolition of existing passenger terminal building:** The existing 232,000-square-foot passenger terminal building would be demolished.
16. **Removal of commercial aircraft apron and adjacent taxilanes:** The existing commercial aircraft apron and adjacent taxilanes would be demolished.
17. **Removal of parking booth:** The existing parking booth would be removed to allow for vehicle storage and staging.
18. **Removal of employee parking lot:** The existing employee surface parking lot in the southeast quadrant would be removed.
19. **Removal of Parking Lot A:** Existing Parking Lot A would be closed and all structures would be removed.
20. **Removal of Parking Lot B:** Existing Parking Lot B would be closed and all structures within Parking Lot B would be removed.
21. **Removal of Parking Lot E:** Existing Parking Lot E would be closed and all structures within Parking Lot E would be removed.
22. **Removal of public parking structure:** The existing public parking structure adjacent to the existing passenger terminal building would be demolished.
23. **Removal of tenant lease area:** The existing pavement for the tenant-leased property would be removed to allow for the development of the replacement passenger terminal building.
24. **Demolition of airline cargo and GSE maintenance building and associated pavement:** The existing 16,000-square-foot airline cargo and GSE maintenance building would be demolished.
25. **Removal of shuttle bus dispatch office and staging area:** The existing shuttle bus dispatch office and staging area would be removed from the northeast quadrant.

1.5 REQUESTED FEDERAL ACTIONS

The Authority is seeking the following federal actions and approvals from the FAA. The FAA must grant these approvals to the Authority prior to implementation of the Proposed Action.

- Unconditional approval of the Airport Layout Plan (ALP) to depict the proposed improvements pursuant to 49 U.S.C. §§ 40103(b) and 47107(a)(16); Title 14 CFR Part 77 *Objects Affecting Navigable Airspace*; and Title 14 CFR Part 157, *Notice of Construction, Alteration, Activation, and Deactivation of Airports*.
- Determinations under 49 U.S.C. §§ 47106 and 47107 that are associated with the eligibility of the Proposed Action for federal funding under the Airport Improvement Program and under 49 U.S.C. § 40117, as implemented by Title 14 CFR § 158.25, to use passenger facility charges collected at the Airport for the Proposed Action to assist with construction of potentially eligible development items from the Airport Layout Plan.

1.6 ENVIRONMENTAL REVIEW PROCESS AND TIMEFRAME OF THE PROPOSED ACTION

The FAA's environmental review process complies with environmental regulations and requirements, including NEPA, the CEQ's *Regulations of Implementing the Procedural Provisions of NEPA* (§§ 1500–1508), and FAA Orders 1050.1F and 5050.4B.

The EIS process was initiated when the FAA published the Notice of Intent in the *Federal Register* on December 18, 2018, which was circulated for 30 days. A copy of the Notice of Intent is included as **Appendix A**.

Two scoping meetings, one for agencies and one for the public, were held on January 29, 2019, at the Buena Vista Library in Burbank, California. A scoping report is presented in **Appendix B**. The report describes the format of the agency and public scoping meetings and contains the comments received during both the agency and public scoping meetings as well as the responses to those comments.

1.7 EIS DOCUMENT ORGANIZATION

This EIS was prepared in accordance with FAA Orders 1050.1F and 5050.4B, which are based on the CEQ's Regulations.[31] The EIS is organized into chapters, as outlined below.

Executive Summary

This section provides an overview of the contents of the EIS, including the purpose and need for the Proposed Action, alternatives considered, and potential environmental effects and associated mitigation measures.

Table of Contents / Acronyms and Abbreviations / Index

The table of contents identifies the chapters and their subsections, exhibits, and tables that are contained in the EIS, along with the associated page numbers. Appendices are also listed in the table of contents. Acronyms and abbreviations define terms that are shortened throughout the EIS after their initial use. The index identifies potential terms of interest and their associated page numbers.

Chapter 1: Purpose and Need

This chapter provides an overview of the Airport and aviation activity at the Airport, discusses the purpose of this EIS and the Proposed Action, provides a detailed description of the Proposed Action, explains the environmental review process, and presents the organization of this EIS.

Chapter 2: Alternatives

This chapter provides an overview of the identification and screening of alternatives considered, the process used to screen and evaluate reasonable alternatives, the alternatives carried forward for detailed environmental evaluation, and brief description of those alternatives considered but dismissed. This chapter also includes a listing of all federal laws and statutes, executive orders, U.S. Department of Transportation and FAA orders, FAA Advisory Circulars, and other federal guidance considered during preparation of this EIS.

Chapter 3: Affected Environment

This chapter describes the physical and social environmental conditions in the potentially affected geographic area or areas. This chapter describes the existing conditions within the project study areas including a definition and description of the resource, regulatory setting, and region of influence. This chapter also identifies past, present, and reasonably foreseeable future actions that might

[31] 40 CFR § 1502.10.

contribute to cumulative impacts when considered in combination with those of the Proposed Action.

Chapter 4: Environmental Consequences and Mitigation Measures

This chapter forms the scientific and analytical basis for comparing potential environmental impacts of the proposed action, the no action alternative, and other alternatives retained for detailed analysis. This chapter describes any mitigation that must be implemented by the FAA or appropriate authority to minimize harm from the Proposed Action. This chapter also includes cumulative impacts of the Proposed Action and alternatives when added to the impacts of past, present, and reasonably foreseeable future projects in the vicinity of the Airport. Lastly, this chapter includes Unavoidable Adverse Impacts, Relationship between Short-term and Long-term Impacts, and Irreversible and Irretrievable Commitment of Resources.

Chapter 5: Agency Coordination and Public Involvement

This chapter identifies the public outreach efforts that were conducted for this EIS, as well as the agencies and persons consulted as part of the preparation of this EIS.

Chapter 6: List of Preparers

This chapter presents the names and qualifications of the FAA staff that were primarily responsible for preparing the EIS or significant background material, and contractors who assisted FAA in preparing the EIS or associated environmental studies.

Chapter 7: References

This chapter provides a list of references and sources used in this EIS.

Appendices

Appendices present relevant material and technical reports that were developed as part of the preparation of this EIS. The appendices contain detailed information about formal and informal consultation conducted, and related agreement documents prepared, pursuant to other special purpose laws and requirements. Appendices also contain a variety of technical reports that support the analysis of anticipated impacts.

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