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Federal Aviation Administration
Western Service Area
2200 S. 216th Street
Des Moines, WA 98198

Proposed Settlement Agreement Departure Procedure Amendments for Hollywood Burbank Airport

Draft Environmental Assessment

November 30, 2023

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CHAPTER 1 PROJECT BACKGROUND AND PURPOSE AND NEED FOR THE PROPOSED ACTION

1.1 Introduction

The Federal Aviation Administration (FAA) has prepared this Environmental Assessment (EA) to identify the environmental effects associated with the potential implementation of the Proposed Action at Bob Hope "Hollywood Burbank" Airport (BUR), which comprises two Alternatives that would result in the adoption of new procedures for Runway 15 departures at BUR. If implemented, the Proposed Action is intended to maintain the safety and efficiency of the National Airspace System (NAS) while meeting the terms of a Settlement Agreement the FAA executed with local homeowners' associations, which required consideration of alternative procedures.

Major Federal actions, such as implementation of amended departure procedures with the potential to cause environmental impacts, must comply with the National Environmental Policy Act (NEPA) of 1969 and other relevant laws. Requirements for considering environmental impacts of FAA actions are found in FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, which are based on the White House Council on Environmental Quality (CEQ) regulations for implementing NEPA promulgated under Title 40 of the Code of Federal Regulations (CFR) Parts 1500-1508.

The format of this EA is as follows: **Chapter 1** provides information on the project background and describes the Purpose and Need for the Proposed Action; **Chapter 2** presents the Alternatives; **Chapters 3** and **4** provide disclosure of the Affected Environment and Environmental Consequences, respectively, associated with implementation of the Proposed Action; **Chapter 5** provides a discussion of public involvement activities undertaken by the FAA; and **Chapter 6** provides a list of preparers of this document.

There are also several appendices that provide additional data and information related to the EA. **Appendix A** contains the Air Traffic Initial Environmental Review (IER) for the proposed departure procedures comprising Alternative A. **Appendix B** includes diagrams of Runway 15 departure procedures currently in use. **Appendix C** shows the settlement agreement between the Benedict Hills Homeowners Association (BHHA), Benedict Hills Estates Association, and the FAA ("Settlement Agreement"). **Appendix D** contains a memorandum documenting the recommendations of the Southern San Fernando Valley Airplane Noise Task Force (SSFVANTF), while **Appendix E** contains the FAA's responses to those recommendations. **Appendix F** contains the memorandum to the FAA detailing the mapping of proposed Alternatives to the recommendations of the SSFVANTF. **Appendix G** provides a table of State-listed threatened, endangered, critical habitat, and special concern species. **Appendix H** lists parks and recreational properties in the General Study Area (GSA)**. Appendix I** provides a list of properties within the GSA that were identified as historic, architectural, or cultural resources under Section

106 of the National Historic Preservation Act (NHPA) of 1966. **Appendix J** contains the Noise Modeling Technical Report detailing noise-related inputs and results from the Aviation Environmental Design Tool (AEDT) environmental model. **Appendix K** provides the final refined list of properties identified as historical, architectural, or cultural resources under Section 106 of the NHPA. **Appendix L** includes the NHPA Section 106 full report. Finally, **Appendix M** contains correspondence in support of the EA.

1.2 Purpose and Need

1.2.1 Background

BUR lies in a densely urbanized area of the San Fernando Valley of Southern California, with areas of high terrain located to the north, east, and southwest. In the immediate vicinity of BUR, dense development surrounds the airport on all sides, and the close proximity of this development has led the Burbank-Glendale-Pasadena Airport Authority (BUR owner and operator) to seek solutions to community concerns over environmental effects of arrival and departure aircraft. The air traffic volume in the area, combined with the terrain, creates challenges to the Air Traffic Control (ATC) environment which must safely balance operational air traffic requirements with the needs of other airports in the vicinity.

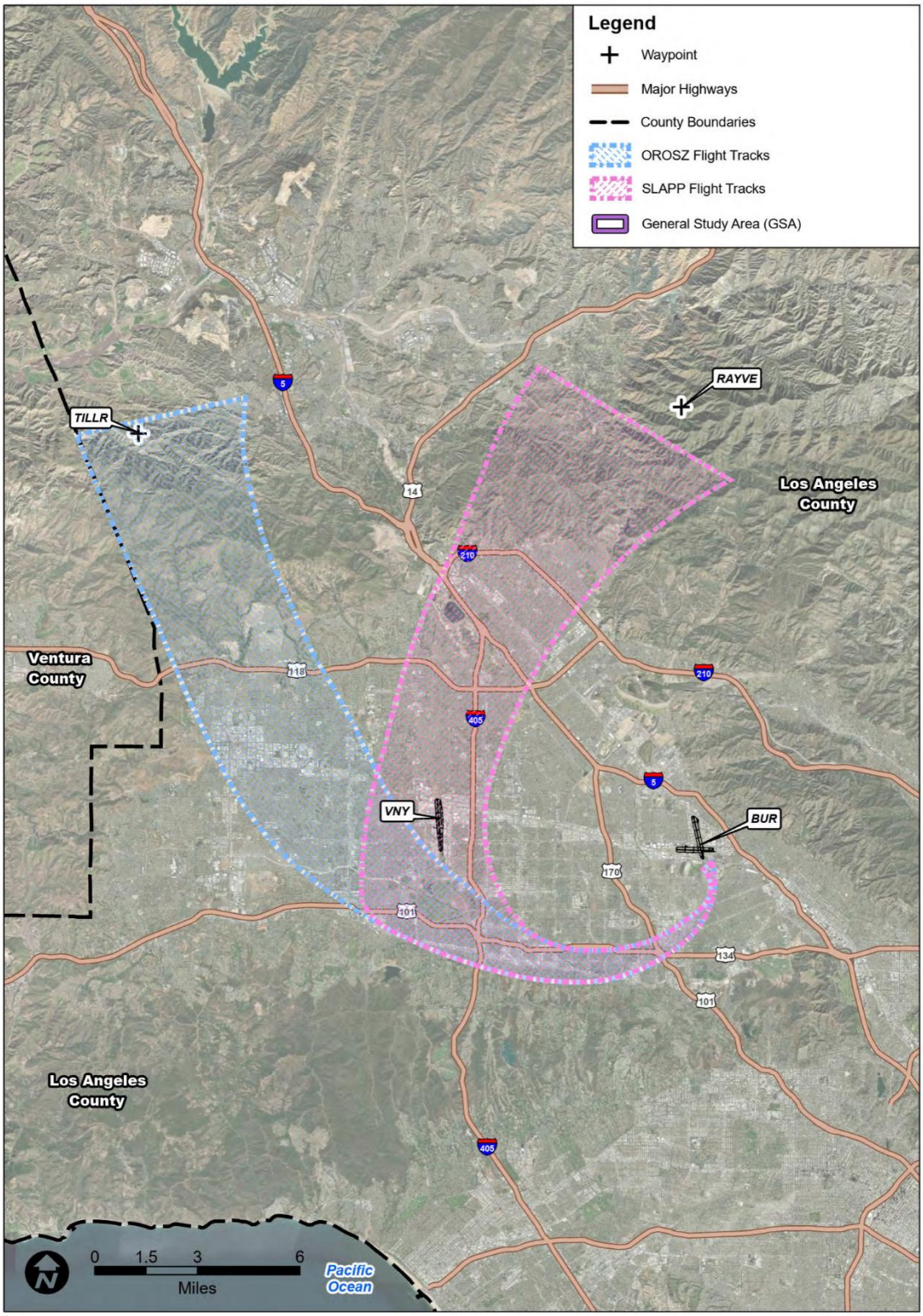
In August 2016, the FAA completed the Southern California Metroplex project and issued a Finding of No Significant Impact (FONSI)/Record of Decision (ROD). The stated purpose of the FONSI/ROD was to optimize air traffic procedures and airspace in Southern California on a regional scale by (a) developing flight procedures that take advantage of technological advances in navigation and (b) ensuring aircraft that do not have the latest navigation technology retain access to the NAS. Since the completion of the project, the FAA has received feedback from communities near BUR regarding the effects of changes in aircraft flight paths and increased overflights over some communities.. In 2018, the FAA entered into the Settlement Agreement with two communities from the Los Angeles area, BHHA and Benedict Hills Estates Association. In 2020, the community-driven SSFVANTF report recommended modifications to Runway 15 departure flight procedures that could mitigate noise concerns from departing aircraft overflights, while taking into consideration operational safety and efficiency of BUR airspace.

The flight procedure design concept specified in the Settlement Agreement is an Open Standard Instrument Departure (Open SID) flight procedure. This type of departure would start as a satellite-based route but then have an “open” segment, where air traffic controllers would vector aircraft before connecting with another satellite-based segment that would transition the aircraft to the enroute airway structure. Open SIDs had been explored in 2012, during the design phase of the Southern California Metroplex project and at several airports within the GSA, including BUR. However, the FAA had not yet established safety criteria for Open SID flight procedures which precluded their potential implementation at that time. In March 2016, safety criteria for Open SIDs was established with the issuance of FAA Order 8260.58A, *United States Standard for Performance Based Navigation (PBN) Instrument Procedure Design*. In the Settlement Agreement, the FAA agreed to design and examine the environmental impacts of two Open SID flight procedures. **Appendix A** contains the IER for those two flight procedures.

1.2.2 Purpose and Need

The FAA's continuing mission is to provide the safest, most efficient aerospace system in the world. The purpose of the Proposed Action is to maintain the safety and efficiency of the NAS while designing and developing two Open SID flight procedures at BUR. The FAA completed this environmental review to comply with the terms of the Settlement Agreement. The FAA also agreed to consider the sixteen recommendations set forth by the SSFVANTF in developing its alternatives, along with the No Action Alternative.

In addition to the No Action Alternative, where current procedures at BUR would continue to be utilized, the FAA is considering two additional alternatives. The first alternative (Alternative A) would result in the amendment of existing flight procedures to create two Open SID procedures, the SLAPP THREE DEPARTURE Area Navigation (RNAV) ("SLAPP THREE") and the OROSZ THREE DEPARTURE (RNAV) ("OROSZ THREE") procedures. These procedures were identified as being operationally feasible by air traffic controllers responsible for managing the region's complex terminal airspace. This type of Open SID procedure provides the precision and predictability benefits of satellite-based routes, while also giving ATC the flexibility to direct aircraft, as necessary, within the highly congested airspace surrounding BUR. The proposed Open SID procedures would enable ATC to more predictably direct Runway 15 departures to the west by utilizing two new airspace fixes. After reaching the second of the two fixes, aircraft would enter the "open" leg of the procedure, where ATC would provide vectors for aircraft to turn north toward the next charted fix. Upon reaching the next charted fix, aircraft would resume following the satellite-based portion of the departure procedure unless directed otherwise by ATC. RAYVE and TILLR, which represent fixes used to transition departing traffic into the enroute system, would be retained if the proposed Open SID procedures are implemented. This is conceptually shown in **Figure 1-1** below.



SOURCE: Esri; Prepared by Jacobsen Daniels, 2023

Proposed Settlement Agreement Departure Procedure Amendments at Bob Hope "Hollywood Burbank" Airport Environmental Assessment

Figure 1-1
BUR Flight Paths

The second alternative (Alternative B) is comprised of the modification of the current SLAPP TWO DEPARTURE (RNAV) ("SLAPP TWO") and OROSZ TWO DEPARTURE (RNAV) ("OROSZ TWO") procedures to require a higher climb gradient. This change would require aircraft to climb at a higher rate than the current procedure and has the potential to ensure aircraft gain altitude as quickly as practicable to their assigned altitude after departure from BUR. This modification was reviewed by ATC and deemed technically feasible, but operational feasibility has not been determined at the time of production of this EA. When compared to the No Action Alternative, functional differences in how aircraft are expected to depart BUR are modest in Alternative B, as most aircraft exceed the proposed increased climb gradient in current operations.

The proposed alternatives were advanced through the flight procedure design process in accordance with FAA Order 8260.58A, *United States Standard for Performance Based Navigation (PBN),* and have been deemed viable. They are fully described in **Chapter 2**.

CHAPTER 2 ALTERNATIVES

This section describes all Alternatives, including the No Action Alternative, and discusses the methodology used to identify alternatives that meet the Purpose and Need. In addition, it discusses alternatives that were considered, but did not meet the requirements of the Purpose and Need, and thus were not carried forward for analysis. FAA Order 1050.1F requires a discussion of alternatives in an EA that the approving official will consider. FAA Order 1050.1F, Chapter 6, Section 6-2.1(d) states the following:

> There is no requirement for a specific number of alternatives or a specific range of alternatives to be included in an EA. An EA may limit the range of alternatives to the proposed action and no action when there are no unresolved conflicts concerning alternative uses of available resources. Alternatives are to be considered to the degree commensurate with the nature of the proposed action and agency experience with the environmental issues involved. Generally, the greater the degree of impacts, the wider the range of alternatives that should be considered. The preferred alternative, if one has been identified, should be indicated. For alternatives considered but eliminated from further study, the EA should briefly explain why these were eliminated.

2.1 No Action Alternative

BUR is a commercial service airport in California, serving nearly 6 million enplanements and more than 140,000 aircraft operations in 2022.[1] The 555-acre airport is located approximately 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). It is one of the five airports in the Los Angeles metropolitan area offering regular passenger service and is considered a local airport for the San Fernando Valley area of Los Angeles. Two runways are available at BUR – Runway 8-26 and Runway 15-33. BUR is generally capable of accepting arrivals to and departures from any runway, but some operations may be restricted from some runways due to terrain or other factors. For example, arrivals to Runway 26 are extremely rare due to the high elevation of terrain located directly to the east. The most common runway usage configuration is for flights to depart from Runway 15 and arrive to Runway 8 except during light traffic when the weather or other conditions at the airport surface necessitate a different runway configuration, or when there is a low risk of potential air traffic conflicts. Runway 15 handles approximately 70% of all departures from BUR, while Runway 8 accounts for 80% of all arrivals.

BUR operations are affected by the congested airspace above the greater Los Angeles area; high air traffic volumes, complex air traffic flows, and nearby terrain limit arrival and departure operations. Departures from Runway 15 must turn to the west before proceeding to the north due to high terrain south and east of BUR and traffic to/from other airports. These same departures

[1] Federal Aviation Administration, Operations and Performance Data (OPSNET), CountOps Report, retrieved February 23, 2023.

must also maintain at least three nautical miles (nmi) separation from traffic arriving to Runway 8 at BUR, as well as maintaining separation with other aircraft in and near the San Fernando Valley, including southbound departures from Van Nuys Airport (VNY), arrivals into Santa Monica Municipal Airport, and aircraft climbing northbound out of Los Angeles International Airport (LAX). These constraints are largely responsible for the structure of Runway 15 departure procedures.

Five published departure procedures are used to safely route air traffic from BUR to the enroute air traffic structure. These five procedures are ELMOO NINE DEPARTURE ("ELMOO NINE"), OROSZ TWO, SLAPP TWO, VAN NUYS THREE DEPARTURE ("VNY3"), and VVERA TWO DEPARTURE (RNAV) ("VVERA TWO"). Three of these procedures (OROSZ TWO, SLAPP TWO, and VVERA TWO) require aircraft to have onboard RNAV capability. The ELMOO NINE and VNY3 are conventional procedures and do not require onboard RNAV capability. While each of these procedures have differences in how aircraft are handled after departing the immediate BUR environment; terrain and air traffic constraints limit how aircraft are able to be routed in the initial legs of the departure procedures. **Table 2-1** (below) details critical aspects of the five departure procedures, with a focus on Runway 15 departures. Departure procedure diagrams showing graphical representations of each procedure are available in **Appendix B**.

TABLE 2-1 – BURBANK AIRPORT DEPARTURE PROCEDURES FROM RUNWAY 15

Departure Procedure	Destination of Departures	Initial Departure Heading	Conventional/RNAV
ELMOO NINE	Southeast, east	113º	Conventional
OROSZ TWO	Northwest, north	210º	RNAV
SLAPP TWO	Northeast, east	210º	RNAV
VAN NUYS THREE (VNY3)	All except southeast	213º	Conventional
VVERA TWO	East, northeast	210º	RNAV

Source: Table prepared by RoVolus 2023.

ELMOO NINE is the only departure procedure that routes aircraft to the southeast, however it is generally limited to general aviation (GA) aircraft due to the challenges in minimizing air traffic conflicts with surrounding terrain and air traffic. The conventional procedure VNY3 is generally only used by aircraft that are not equipped for RNAV (i.e., older, GA aircraft types). Most aircraft departing Runway 15 use one of the three available RNAV procedures regardless of meteorological or traffic conditions at BUR.

2.2 Identification of Potential Alternatives

The FAA endeavored to identify reasonable alternatives to meet the Purpose and Need described in **Chapter 1**. A reasonable alternative is one that would accomplish the Purpose and Need for the Proposed Action and is an operationally safe and feasible action. Alternatives meriting consideration should maintain safety and increase efficiency while satisfying the terms of the Settlement Agreement in **Appendix C**. Airspace efficiency improvements associated with alternatives could include elements such as reduction of complexity for air traffic controllers and pilots, as well as providing a more predictable flight path for pilots to fly in an area of congested airspace with nearby high terrain. Efficiency improvements could come from reducing long vector legs associated with departures and from routing aircraft from the terminal area to the enroute airspace structure more quickly. Such efficiency benefits also often lead to environmental benefits due to less fuel burn and less time aircraft spend at low altitudes (where noise and emissions impacts are the most disruptive).

Alternatives that are considered in this EA examine ways to improve the safety and efficiency of RWY 15 departures while considering the noise impacts to overflown communities, in addition to satisfying the terms of the Settlement Agreement. As the vast majority of departures operate from Runway 15 and departures from other runways typically do not overfly the study area, alternatives that modify departures on other runways would not directly satisfy the Purpose and Need and are not considered. Likewise, alternatives that involve other modes of transportation, use of other airports, or result in changes in operations at BUR may have the potential to decrease air travel or shift traffic to other airports, but do not meet the Purpose and Need.

2.2.1 Alternative A – Implementation of SLAPP THREE and OROSZ THREE Procedures (specified in the Settlement Agreement)

Alternative A features two RNAV departure procedures at BUR, SLAPP THREE and OROSZ THREE. The proposed departure procedures would modify the existing departure procedures, SLAPP TWO and OROSZ TWO, by eliminating an open leg between BUR and the initial enroute waypoint for Runway 15 departures. Instead, SLAPP THREE and OROSZ THREE are designed as Open SIDs, with required initial segments followed by an open segment. This allows for variability in the tracks of departing aircraft, reduces ATC communication in the departure phase of flight, increases vertical and lateral guidance to pilots, and gives air traffic controllers additional operational flexibility in separating these departing aircraft from overflying traffic, as well as VNY traffic and traffic arriving to Runway 8 at BUR. Additional detail on each of these proposed departure procedures follows.

2.2.1.1 Procedure 1 - SLAPP THREE Departure

The new SLAPP THREE departure procedure would require aircraft departing Runway 15 to maintain the runway heading of 155º before executing a climbing right turn to intercept the 214º course to the JAYTE waypoint. Aircraft would pass JAYTE at or above 2,500 feet mean sea level (MSL) as well as at or below 240 knots indicated airspeed (KIAS). From JAYTE, aircraft would fly the 258º track to the TEAGN waypoint, which must be crossed at or above 4,000 feet MSL. Upon crossing TEAGN, aircraft would continue to fly the 258º track until receiving ATC routing to

RAYVE waypoint at an altitude at or above 7,000 feet MSL and on to the assigned transition. The segment from TEAGN to RAYVE represents the open leg of the departure procedure. Departures from all other runways would continue to fly as they do in the current SLAPP TWO departure procedure. **Figure 2-1** shows a graphical representation of the SLAPP THREE departure procedure (shown as SLAPP TWO due to additional revisions of the current procedure that have taken place since this procedure was designed):

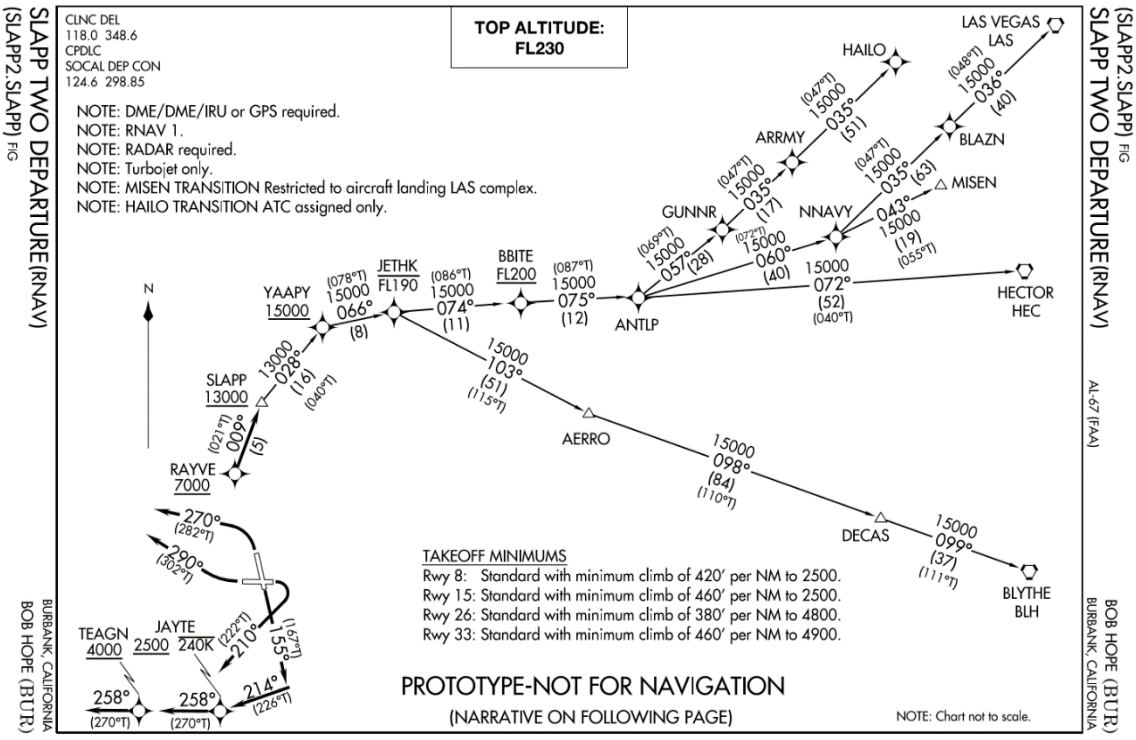


Figure 2-1 – Graphical procedure - SLAPP THREE Departure Procedure (notional)

2.2.1.2 Procedure 2 - OROSZ THREE Departure

The new OROSZ THREE departure procedure would require aircraft departing Runway 15 to maintain the runway heading of 155º before executing a climbing right turn to intercept the 213º course to JAYTE waypoint. Aircraft must pass JAYTE at or above 2,500 feet MSL as well as at or below 240 KIAS. From JAYTE, aircraft would fly the 259º track to TEAGN waypoint, which must be crossed at or above 4,000 feet MSL. Upon crossing TEAGN, aircraft would fly the 258º track until receiving ATC routing to TILLR waypoint at an altitude at or above 8,000 feet MSL and on to the assigned transition. The segment from TEAGN to TILLR represents the open leg of the departure procedure. Departures from all other runways would continue to fly as they do in the current OROSZ TWO departure procedure.

Figure 2-2 shows the graphical representation of the OROSZ THREE departure procedure.

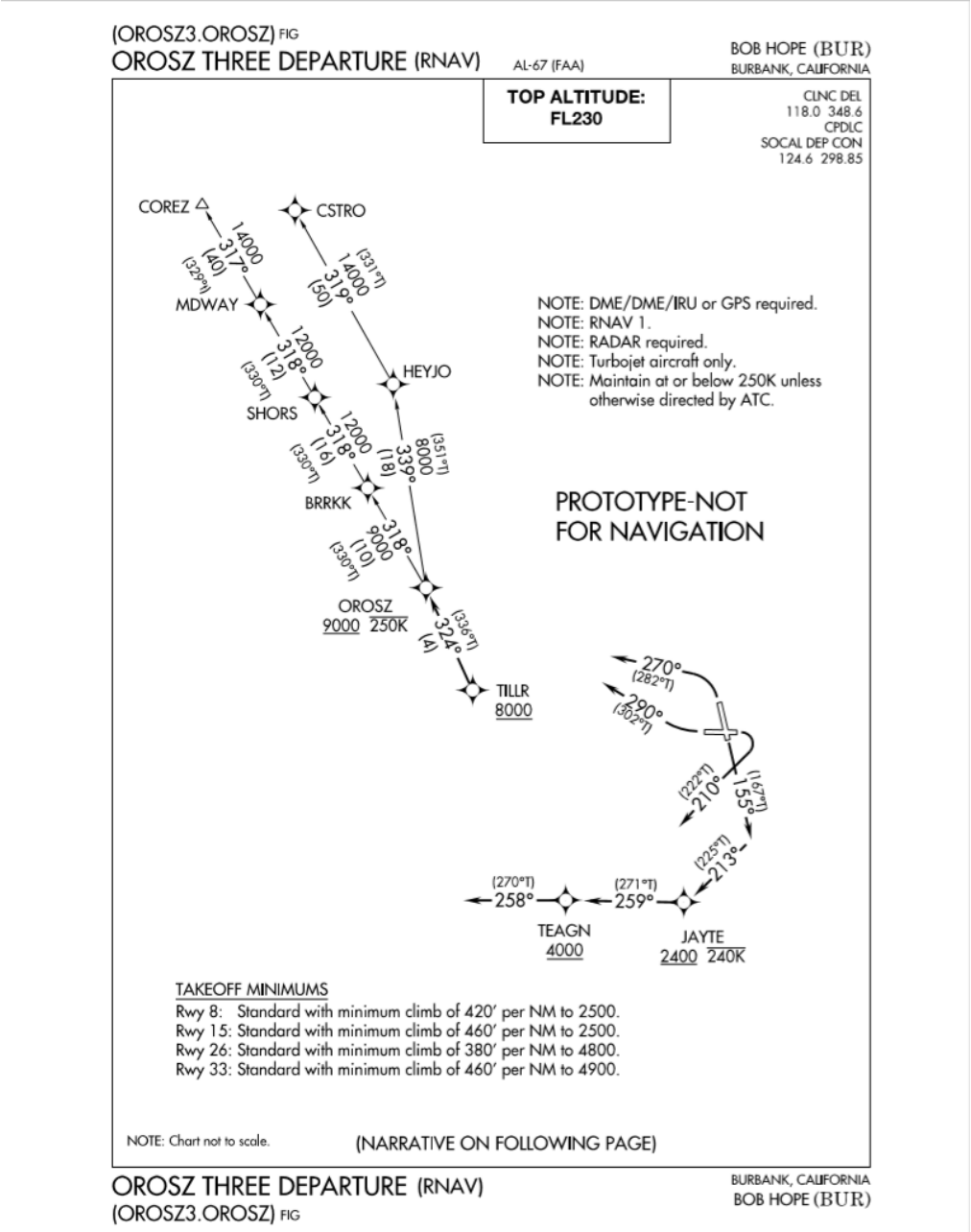


Figure 2-2 – Graphical procedure - OROSZ THREE Departure Procedure (notional)

2.2.2 Alternative B - Increase the Climb Gradient for Runway 15 Departures using SLAPP TWO and OROSZ TWO Departure Procedures

Runway 15 departures using the current SLAPP TWO and OROSZ TWO procedures must meet a minimum climb gradient of 340 feet per nmi on the initial departure segment. SLAPP THREE and OROSZ THREE would require a higher minimum climb gradient of 460 feet per nmi. An alternative is to increase the required minimum climb gradient on SLAPP TWO and OROSZ TWO from 340 feet per nmi to 600 feet per nmi to promote aircraft climbing out of BUR as rapidly as possible. A 600 feet per nmi climb gradient would require an FAA waiver for implementation, due to the fact that the increased climb gradient would be implemented primarily for noise abatement reasons rather than providing a further increase in safety and efficiency at BUR. Safety and efficiency at BUR would not be materially affected by an increase in climb gradient, as observed climb gradients achieved by most Runway 15 departures already significantly exceed 600 feet per nmi. FAA analysis of departure climb data at BUR indicates that Boeing 737s achieve an average climb gradient of 1,019 feet per nmi, while Airbus A320s achieve an average climb gradient of 1,075 feet per nmi. These two aircraft (along with derivatives with similar climb performance), comprise a considerable proportion of activity at BUR and indicate that the vast majority of aircraft utilizing BUR are already achieving the higher climb gradient included in this alternative.

Since most aircraft departing BUR already exceed this rate of climb, vertical and lateral profiles over the ground are not expected to materially change from current operations for most aircraft, as a result of this alternative. As this alternative would affect a small number of aircraft (typically older GA aircraft and/or aircraft that depart at a high proportion of their maximum takeoff weight) that do not have the performance to meet a 600-foot per nmi climb gradient, those aircraft would not be able to use Alternative B. The small proportion of aircraft (estimated at 3% of Runway 15 departures by ATC personnel that cannot use Alternative B would fly the VNY3 obstacle departure procedure (ODP). It is noted that the complexity of managing the airspace increases when additional traffic is moved from the normal departure procedure and required to fly the ODP, so the implementation of Alternative B would result in an increase in controller workload. This could result in a detrimental effect on safety within the BUR airspace.

Alternative B does not meet the terms of the Settlement Agreement, but has been evaluated because it is a technically feasible recommendation of the SSFVANTF that could meet the Purpose and Need. While Alternative B is technically feasible, limitations were identified by FAA in its response to the SSFVANTF recommendations, including but not limited to: operational constraints; AFS approval; financial feasibility to be determined; and that this recommendation may economically discriminate against air carriers and operators at the airport in violation of FAA Grant Assurance 22 because air carriers and operators currently operating aircraft at BUR might not be able to meet the required climb gradient. The FAA endeavors to be responsive to alternatives that could meet the Purpose and Need while decreasing noise impacts to neighboring communities. However, the potential for detrimental effects on safety due to the increased controller workload and safety concerns associated with Alternative B deem this alternative not to be responsive to the Purpose and Need.

2.2.3 Additional Alternatives Suggested by the Southern San Fernando Valley Airplane Noise Task Force

The FAA has performed a technical evaluation of the recommendations of the SSFVANTF and carefully aligned those recommendations to the alternatives considered in this EA. See **Appendices D**, **E,** and **F** for additional information about the SSFVANTF recommendations, FAA responses to those recommendations, and the FAA approach to modeling potentially feasible recommendations from the SSFVANTF.

2.2.4 Relocation of JAYTE and TEAGN to the U.S. Route 101 Highway Corridor

Alternative C would laterally move the proposed procedure segment between the JAYTE and TEAGN waypoints north to approximate the U.S. Route 101 highway corridor in the area. Moving this procedure segment would put it approximately three miles south of the Runway 8 final approach course. This would mean that any northerly deviation from the prescribed flight path of aircraft flying the segment between JAYTE and TEAGN, as well as any southerly deviation of those flying the Runway 8 final approach course, could potentially result in a failure to maintain required aircraft separation standards. This would create an unacceptable level of safety compared to the No Action Alternative and could have catastrophic consequences. Therefore, this alternative was consequently eliminated from further consideration.

2.2.5 Southerly Relocation of JAYTE and TEAGN

Alternative D is to laterally move the segment of SLAPP THREE and OROSZ THREE comprising the JAYTE and TEAGN waypoints further south of Ventura Boulevard. To maintain safe and efficient control of air traffic in the area, this segment must remain north of the LAX Class B controlled airspace. A shift of JAYTE and TEAGN to the south would encroach on LAX Class B airspace. In addition, a more southerly flight path would enter a portion of airspace where aircraft following Visual Flight Rules (VFR) routinely transit a narrow airspace corridor between the LAX Class B and BUR Class C controlled airspaces. This would increase the complexity of the airspace, reduce efficiency, and would potentially result in a failure to maintain safety standards. This would create an unacceptable level of safety compared to the No Action Alternative and could have catastrophic consequences. Therefore, this alternative was consequently eliminated from further consideration.

2.2.6 Change the Initial Departure Heading for SLAPP THREE and OROSZ THREE Procedures to Promote Additional Flight Track Dispersal

Alternatives E and F, which call for the modification of the SLAPP THREE and OROSZ THREE procedures near the departure end of Runway 15, were also considered. These proposed modifications would allow for aircraft to use different or diverse runway headings and routes to reach JAYTE, which is the first published waypoint for both departure procedures. There are multiple ways that diverse headings from the runway could be achieved, including having SLAPP THREE and OROSZ THREE use different procedures near Runway 15 and charting multiple dispersal headings. Specifically, the simultaneous use of 180°, 195°, and 210° headings were considered. However, the proposed dispersed procedures would not meet acceptable design

standards, and additional consultation with local ATC confirmed that such a procedure, regardless of final design, would significantly decrease efficiency and increase airspace complexity and would potentially result in a failure to maintain safety standards. This would create an unacceptable level of safety compared to the No Action Alternative and could have catastrophic consequences. Therefore, these alternatives were found not to meet the Purpose and Need and were eliminated from further consideration.

2.3 Alternatives Carried Forward for Evaluation

This section provides descriptions of the alternatives selected for analysis in the EA, including the No Action Alternative and Alternatives A and B.

2.3.1 No Action Alternative

The No Action Alternative comprises the current SLAPP TWO and OROSZ TWO departure procedures, where aircraft follow the flight path as currently published. Aircraft on the SLAPP TWO procedure departing Runway 15 perform a climbing right turn to a heading of 210º before being routed to RAYVE waypoint, where they proceed to the northeast/east on to the assigned transition. Aircraft on the OROSZ TWO procedure departing RWY 15 also perform a climbing right turn to a heading of 210º before being routed to TILLR waypoint, where they proceed to the northwest on to the assigned transition. The No Action Alternative does not meet the Purpose and Need of the Proposed Action. While it has been proven to be a safe and efficient operational regime, it is not an Open SID procedure, nor does it meet the objectives of the Settlement Agreement regarding departures from BUR.

2.3.2 Alternative A - Implementation of SLAPP THREE and OROSZ THREE Departure Procedures

Alternative A would implement the SLAPP THREE and OROSZ THREE departure procedures as described in **Section 2.2.1**. The new procedures meet the Purpose and Need of the project, as they provide (a) additional operational flexibility needed to manage air traffic in the area, and (b) are consistent with Exhibit “A” of the Settlement Agreement regarding departures at the Airport. As a result, Alternative A has been carried forward for further environmental analysis.

2.3.3 Alternative B - Increase of Climb Gradient for Runway 15 Departures Using SLAPP TWO and OROSZ TWO Departure Procedures

Alternative B would increase the climb gradient for Runway 15 departures using SLAPP TWO and OROSZ TWO to 600 feet per nmi as described in **Section 2.2.2**. This increased climb gradient alternative may meet the Purpose and Need of the project (pending evaluation of operational feasibility), but is not consistent with Exhibit “A” of the Settlement Agreement regarding departures at the Airport. However, since it is a technically feasible recommendation of the SSFVANTF and could result in a decrease in community noise impacts, Alternative B has been carried forward for further environmental analysis.

2.3.4 Summary

The FAA has determined that three alternatives (No Action Alternative, Alternative A, and Alternative B) represent a reasonable range of alternatives to be evaluated in this EA. In accordance with FAA Order 1050.1F, these alternatives represent the range of alternatives commensurate with the nature of the Proposed Action.

CHAPTER 3 AFFECTED ENVIRONMENT

This chapter describes the existing environmental conditions in those areas with potential to be affected by the Proposed Action. **Section 3.1** describes the GSA delineated for purposes of identifying potential environmental impacts. **Section 3.2** lists those environmental resource categories unlikely to be affected by the Proposed Action and **Section 3.3** describes the baseline conditions of the natural and human environment with potential to be impacted by the Proposed Action.

3.1 General Study Area

The GSA is delineated based on existing and future flight paths and a combination of physical and geographic boundaries. This adheres to the general area in which aviation activities related to the Proposed Action could reasonably be anticipated to affect the surrounding environment. The GSA was determined using radar data of existing flight paths, procedure flyability lines, and other attributes of future flight paths. The following sub-sections describe the setting and location where the Proposed Action could potentially have an impact. This GSA is different than the Area of Potential Effects (APE) for historic resource analysis as required by Section 106 of the National Historic Preservation Act (NHPA), which is discussed in detail in **Section 3.3.5.** The GSA is also different from the noise impact area which is discussed in **Section 3.3.3**.

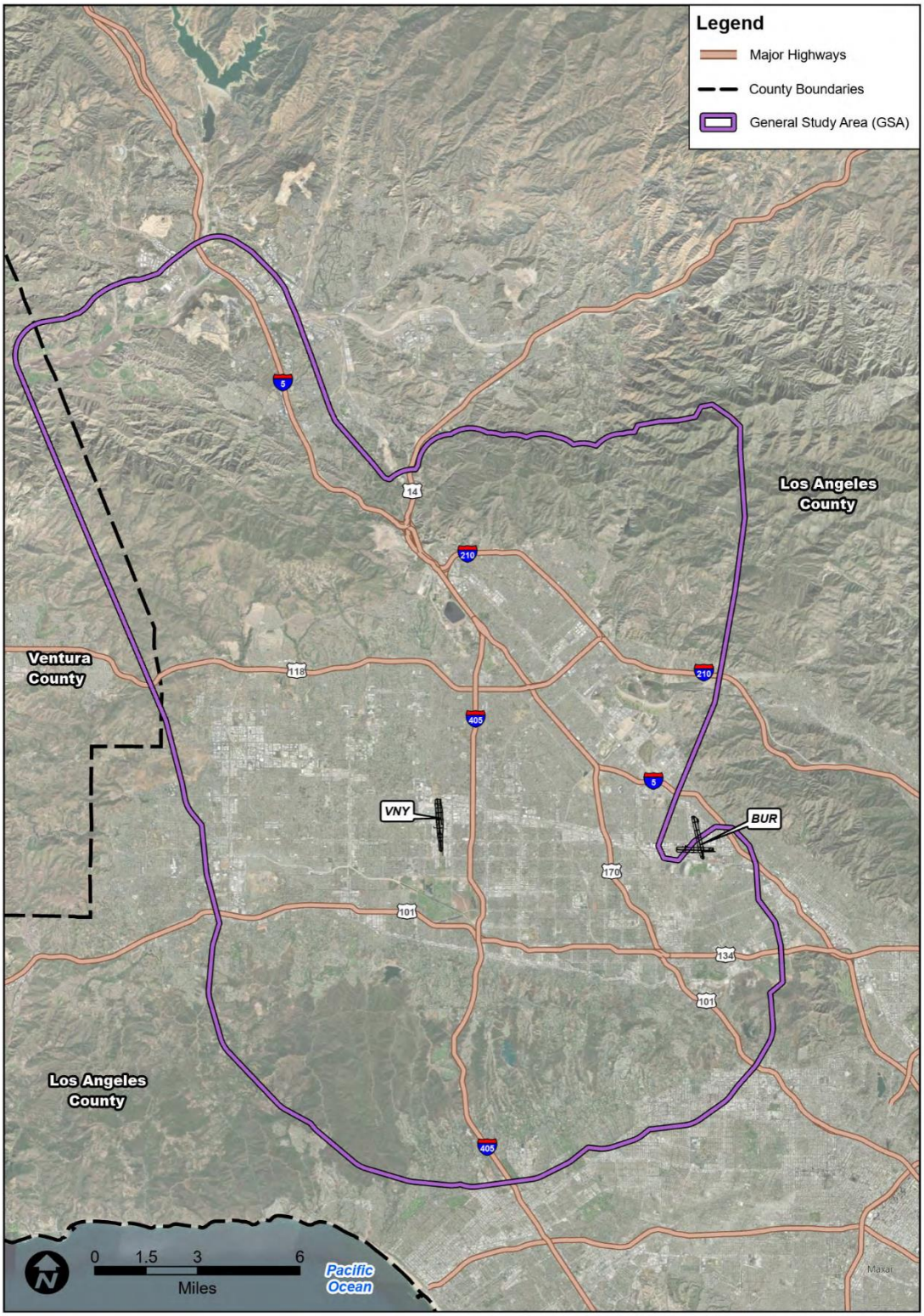
3.1.1 Setting and Location

As depicted in **Figure 3-1**, the GSA encompasses an area of 385 square miles in California. The GSA includes parts of Los Angeles and Ventura counties, parts of the cities of Los Angeles and Burbank, and the entirety of the city of San Fernando. Los Angeles neighborhoods underlying the GSA include Magnolia Park, Toluca Lake, Westwood, Sherman Oaks, Encino, North Hollywood, Van Nuys, Reseda, Lake Balboa, Sun Valley, Panorama City, Northridge, Lakeview Terrace, Granada Hills, Canoga Park, Chatsworth, and Twin Lakes. As neighborhoods have differing definitions, other neighborhoods are likely underlying the GSA that are not listed. Based on 2020 U.S. Census demographic data, the GSA has a population of 1,735,326 and includes 10,126 Census blocks.

An analysis of the Proposed Action and the historical flight paths of aircraft expected to be using the Proposed Action was performed. From that analysis, a GSA encompassing the geographic area where an aircraft flight path could be affected as a result of the Proposed Action (up to 10,000 feet above ground level [AGL]) was constructed in accordance with FAA Order 1050.1F.[3] BUR is located on the eastern edge of the GSA, within the northwest portion of the City of Burbank and three miles southwest of the Verdugo Mountains. The GSA extends to the south, north, and west of BUR since the Proposed Action would occur in the airspace above these areas. As shown in

[3] FAA Order 1050.1F, B-1.3, Affected Environment, https://www.faa.gov/documentLibrary/media/Order/FAA_Order_1050_1F.pdf,

Figure 3-1, there are two other airports in the GSA: VNY – eight miles west, and Whiteman Airport (WHP) – five miles northwest.



SOURCE: Esri; Prepared by Jacobsen Daniels, 2023

Proposed Settlement Agreement Departure Procedure Amendments at Bob Hope "Hollywood Burbank" Airport Environmental Assessment

Figure 3-1
BUR General Study Area

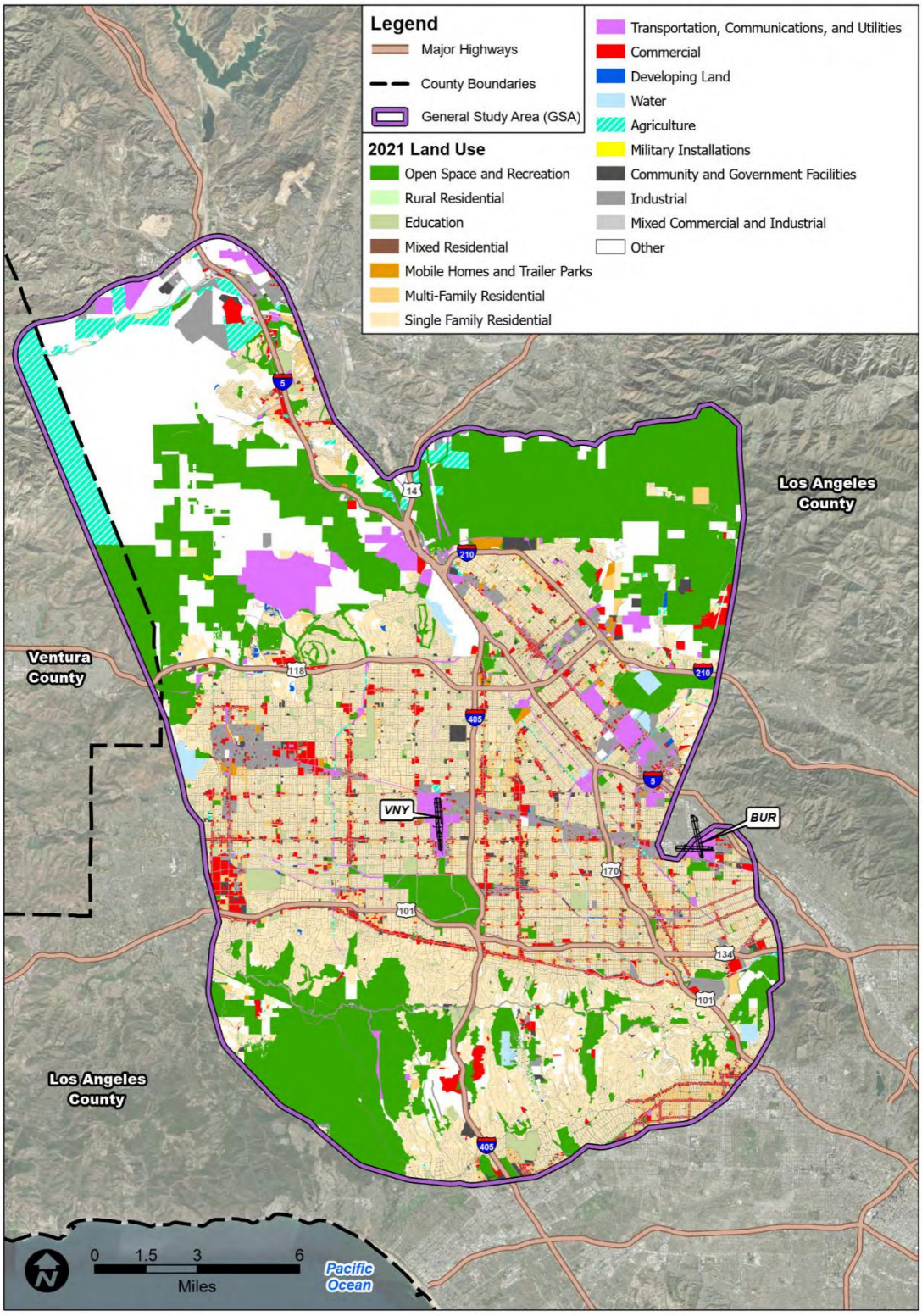
3.1.2 Bob Hope "Hollywood Burbank" Airport (BUR)

BUR is one of several air service facilities serving the Los Angeles metropolitan area, located twelve miles northwest of downtown Los Angeles and just three miles northwest of central Burbank. BUR primarily serves domestic carriers and GA aircraft and has a commercial terminal, a flight school, and multiple fixed-base operators (FBO). In 2022, there were 116,806 domestic flights, 334 international flights, and 25,259 GA flights, totaling 142,399 aircraft operations.[4] BUR has two intersecting runways. Runway 15/33 is oriented in a northwest/southeast direction and is 6,886 feet long, while Runway 8/26 is oriented in an east/west direction and is 5,802 feet long.

3.1.3 Existing Land Use

Figure 3-2 depicts generalized land use in the GSA. Near BUR, land use is dominated by single-family residential, multi-family residential, and commercial areas dotted by occasional parcels of vacant land. Looking at the larger GSA, **Figure 3-3** depicts existing land uses in proximity to BUR. The most notable features in the GSA are the large open spaces on the southern, eastern, and northern edges of the GSA, corresponding to the surrounding mountains. The southern San Fernando Valley is dominated by residential land use, with associated commercial land use. There are pockets of industrial land use, but this represents a relatively small fraction of the land use.

[4] FAA Operations and Performance Data, CountOps Report – retrieved August 2023, https://aspm.faa.gov/



SOURCE: Esri; Prepared by Jacobsen Daniels, 2023

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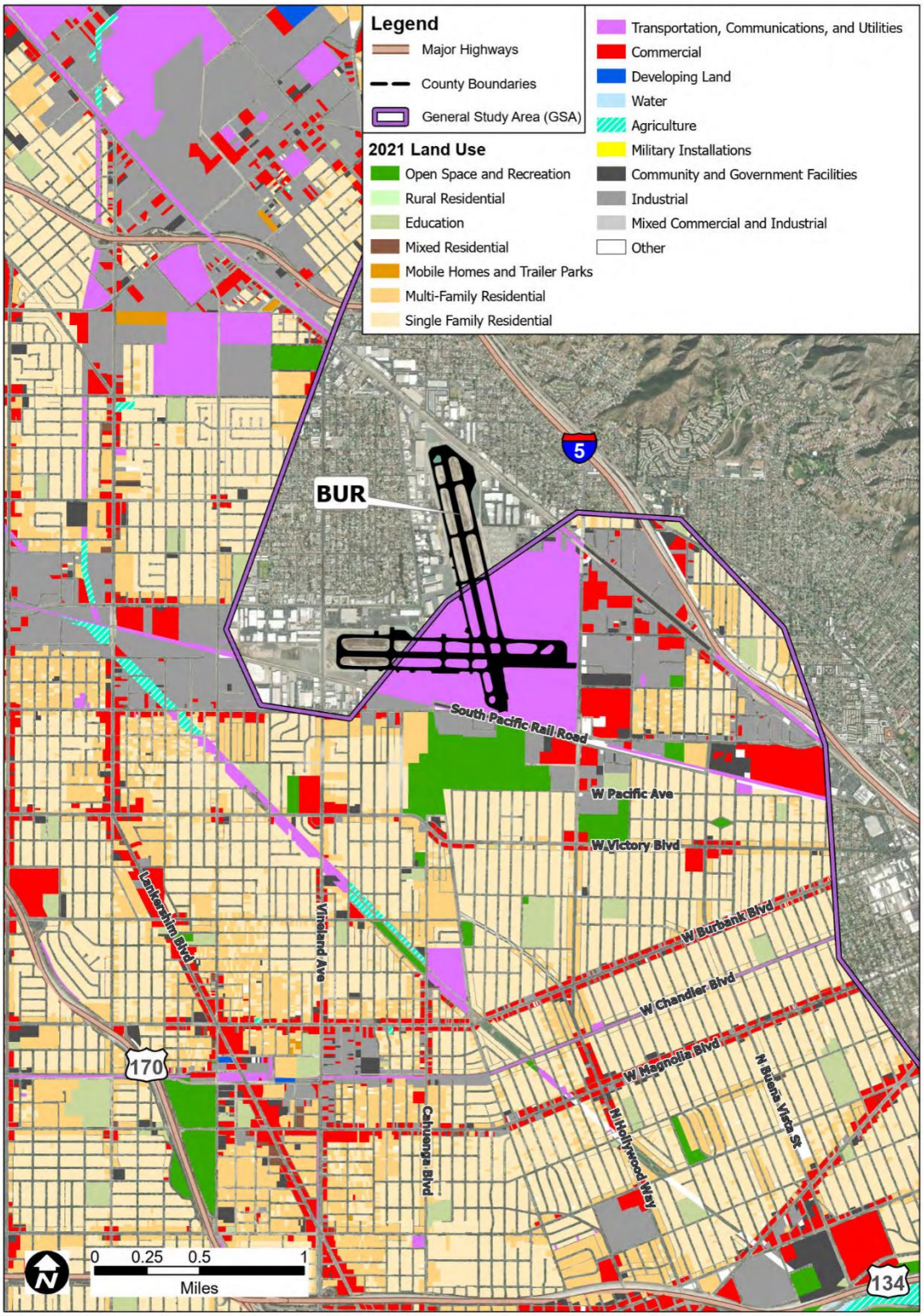
Figure 3-2
Generalized Land Use in the GSA



SOURCE: Esri; Prepared by Jacobsen Daniels, 2023

Proposed Settlement Agreement Departure Procedure Amendments at Bob Hope "Hollywood Burbank" Airport Environmental Assessment

Figure 3-3
Land Use in the Immediate Airport Environment

3.2 Environmental Resources Unlikely to be Affected by the Proposed Action

Because of the nature of the Proposed Action, none of the reviewed alternatives are anticipated to affect certain environmental resource categories identified in FAA Order 1050.1F. Accordingly, no further discussion of these environmental resource categories is warranted. These environmental resource categories include:

- **Biological Resources – Fish, Plants, and Terrestrial Species Only**: The Proposed Action would not result in ground-based disturbance and is, therefore, not expected to have impacts on any fish, plants, or terrestrial species considered as part of the Biological Resources impact category.
- **Coastal Resources**: The Proposed Action is an airspace action with no physical ground-based improvements and are thus not expected to have an impact on any coastal area or coastal ecosystem.
- **Farmlands**: The Proposed Action is an airspace action with no physical ground-based improvements and would not cause any conversion of farmlands into non-agricultural uses.
- **Hazardous Materials, Solid Waste, and Pollution Prevention**: The Proposed Action does not include construction or physical improvements and is not expected to have any impact on solid waste, hazardous waste, contaminated sites, as defined by FAA Order 1050.1F, and solid waste management.
- **Historical, Architectural, Archeological, and Cultural Resources – Archeological Resources Only**: The Proposed Action is an airspace action with no physical ground-based improvements and is not expected to have any impact on any archeological sites. Historical, Architectural, and Cultural resources are discussed below.
- **Natural Resources and Energy Supply**: The Proposed Action would not cause demand to exceed the availability of existing or future supplies of natural resources as there would be no increase in operations at BUR due to the Proposed Action.
- **Socioeconomics, Environmental Justice, and Children's Environmental Health – Socioeconomics Only**: The Proposed Action is not expected to cause any changes to a community tax base, or any disruption or relocation of any community business or houses. It should be noted that air quality impacts are being considered as part of the Air Quality impact category. Thus, socioeconomics was not considered.
- **Light Emissions and Visual Effects**: The Proposed Action is an airspace action only. Airspace actions are associated with low levels of light intensity; therefore, the Proposed Action is not expected to cause any changes to visual effects in the GSA. Furthermore, the Proposed Action would affect aircraft in areas that are already overflown by thousands of aircraft annually.
- **Water Resources (including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers):** The Proposed Action is an airspace action with no physical ground-based improvements and thus is not expected to cause any changes to water resources in the GSA.

3.3 Potentially Affected Environmental Resource Categories

This section describes current conditions in the GSA for those environmental resource categories or sub-categories that have the potential to be affected by the Proposed Action. These environmental resource categories or sub-categories include:

- Air Quality (**Section 3.3.1**)
- Climate (**Section 3.3.2**)
- Biological Resources (Wildlife Only) (**Section 3.3.3**)
- Department of Transportation Act, Section 4(f) Properties (**Section 3.3.4**)
- Historical, Architectural, Archeological, and Cultural Resources – Historic, Architectural, and Cultural Resources Only (NHPA Section 106) (**Section 3.3.5**)
- Noise and Noise-Compatible Land Use (**Section 3.3.6**)
- Socioeconomics, Environmental Justice, and Children's Environmental Health – Environmental Justice and Children's Environmental Health Only (**Section 3.3.7**)
- Cumulative Impacts (**Section 3.3.8**)

The following sections discuss each of these environmental resource categories in detail.

3.3.1 Air Quality

This sub-section describes the existing air quality conditions within the GSA, as related to national air quality standards. The Clean Air Act (CAA) is a federal law designed to control national air pollution, and requires the U.S. Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS) for ambient (i.e., outdoor) concentrations of the following criteria pollutants: carbon monoxide (CO), oxides of nitrogen (NO_x), ground-level ozone (O_3), oxides of sulfur (SO_x), lead (Pb), particulate matter with a diameter of 10 microns or less (PM_{10}), and particulate matter with a diameter of 2.5 microns or less ($PM_{2.5}$). The General Conformity Rule of the CAA ensures that the actions taken by federal agencies, such as approval of airport construction, do not interfere with a state's plans to attain and maintain national standards for air quality. States must identify geographic areas that do not meet the NAAQS for each criteria pollutant. These areas are then identified as non-attainment areas for the applicable criteria pollutants. States must develop a State Implementation Plan (SIP) for nonattainment areas that includes a variety of emission control measures that the state deems necessary to produce attainment of the applicable standard(s) in the future. If a SIP already exists, it must be revised if an area becomes nonattainment for a criteria pollutant.

An area previously designated non-attainment pursuant to CAA Amendments of 1990 and subsequently re-designated as attainment, is termed a maintenance area. A maintenance area must have a maintenance plan for 20 years following attainment to ensure the air quality standard is maintained.

The mixing height is defined by the EPA based on atmospheric turbulence and directly reflects the ability of pollutants emitted above the ground to impact people on the ground. Air traffic activities taking place above the mixing height are exempt from the General Conformity Rule, and criteria pollutants emitted above this height are not considered in the air quality analysis (see **Chapter 4**). The mixing height for this EA is assumed to be 3,000 feet AGL.

Los Angeles County is part of the South Coast Air Basin (SCAB), which is a regional area designated for air quality management and air pollution control. SCAB includes all of Orange County and the non-desert areas of Los Angeles County, Riverside County, and San Bernardino County. Ventura County is not a part of SCAB and the General Conformity Rule requires emissions in Ventura County to be evaluated for criteria pollutant emissions separately from emissions under the jurisdiction of SCAB. However, this is not expected to affect the analysis since all emissions in Ventura County would occur above the mixing height and are thus excluded from analysis under the General Conformity Rule.

Within the GSA, criteria pollutant emission levels associated with current flight operations at BUR are shown in **Table 3-1**.

TABLE 3-1
CRITERIA POLLUTANT EMISSIONS BELOW MIXING HEIGHT

Air Quality Pollutants	Short Tons Per Year
CO	14.8
Volatile Organic Compounds (VOCs)	6.3
NO_x	337.4
SO_x	22.8
$PM_{2.5}$	2.2
PM_{10}	2.2
Source: AEDT, Prepared by RoVolus, 2023.	

A summary of the attainment status of Los Angeles County within the GSA for applicable NAAQS is shown in **Table 3-2**. Further details about these NAAQS are presented in **Sections 3.3.1.1** through **3.3.1.4**.

TABLE 3-2
CRITERIA POLLUTANT DESIGNATIONS WITHIN GSA – SOUTH COAST AIR BASIN

NAAQS	Nonattainment	Maintenance
Ozone (1-hour, 1979) - Revoked	X	
Ozone (8-hour, 1997) - Revoked	X	
Ozone (8-hour, 2008) - Revoked	X	
Ozone (8-hour, 2015)	X	
PM_{10} (1987)		X
$PM_{2.5}$ (2012)	X	
CO (1971)		X
Source: RoVolus, 2023.		

The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the state to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practicable date. The CAAQS apply to the same criteria pollutants as the federal CAA but include these additional state-identified criteria pollutants: sulfates, visibility-reducing particles, hydrogen sulfide, and vinyl chloride. The California Air Resources Board (CARB) has the primary responsibility for ensuring CCAA implementation, responding to the federal CAA planning requirements applicable to the state and regulating emissions from motor vehicles and consumer products within the state. **Table 3-3** shows the CAAQS currently in effect for each of the criteria pollutants as well as the other pollutants recognized by the state.

TABLE 3-3
CAAQS CRITERIA POLLUTANTS

Air Quality Pollutant	Concentration
O_3 (1-hour)	0.09 ppm
O_3 (8-hour)	0.070 ppm
NO_2 (1-hour)	0.18 ppm
NO_2 (annual)	0.030 ppm
CO (1-hour)	20 ppm
CO (8-hour)	9.0 ppm
Sulfur dioxide (SO_2) (1-hour)	0.25 ppm
SO_2 (24-hour)	0.04 ppm
PM_{10} (24-hour)	50 µg/m^3
PM_{10} (annual)	20 µg/m^3
$PM_{2.5}$ (annual)	12 µg/m^3

Source: Prepared by RoVolus, 2023.

California law does not require that CAAQS be met by specified dates as is the case with NAAQS. Rather, it requires incremental progress toward attainment. However, attainment of the NAAQS has precedence over attainment of the CAAQS. Thus, the air quality significance determination in this EA shall be based on whether the Proposed Action, when compared to the No Action Alternative, would cause pollutant concentrations to exceed one or more of the NAAQS for any of the time periods analyzed, or would increase the frequency or severity of any such existing violations.

3.3.1.1 Ozone (O_3)

Ozone at ground level is a harmful air pollutant because of its effects on people and the environment, and it is the main ingredient in “smog." Ozone is not emitted directly into the air but is instead created by chemical reactions between NO_x and VOC. This happens when pollutants emitted by cars, power plants, industrial boilers, refineries, chemical plants, and other sources chemically react in the presence of sunlight.

The GSA is within SCAB's nonattainment area for ozone and contains part of the California counties of Los Angeles and Ventura, which are both designated as nonattainment areas for ozone under the 2015 8-hour NAAQS (the current standard). These counties were also designated as nonattainment under the 1979 1-hour, 1997 8-hour, and 2008 8-hour NAAQS before these standards were revoked. The 1-hour and 8-hour NAAQS refer to the amount of time over which ozone levels are averaged to meet each standard.

3.3.1.2 Particulate Matter (PM_{10})

Particulate matter is the term for a mixture of solid particles and liquid droplets found in the air. Some particles, such as dust, dirt, soot, or smoke, are large or dark enough to be seen with the naked eye. Others are so small they can only be observed using an electron microscope. Particles less than 10 microns in diameter pose problems because they can deposit deep into lungs, and some may even get into the bloodstream.

SCAB had previously been a serious nonattainment area for the 1987 standard for $PM_{10.}$ On July 26, 2013, air quality monitoring enabled EPA to re-designate the area as a maintenance area for the 1987 PM_{10} NAAQS.

3.3.1.3 Fine Particulate Matter ($PM_{2.5}$)

Fine particulate matter consists of fine, inhalable particles with diameters that are generally 2.5 microns and smaller. Exposure to such particles can affect human cardiovascular and respiratory systems. Numerous scientific studies have linked particle pollution exposure to a variety of problems, including:

- Premature death in people with heart or lung disease
- Nonfatal heart attacks
- Irregular heartbeat
- Aggravated asthma
- Decreased lung function
- Increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing

People with heart or lung diseases, children, and older adults are the most likely to be affected by fine particle pollution exposure.

SCAB is designated a nonattainment area for $PM_{2.5}$ under the 2012 NAAQS.

3.3.1.4 Carbon Monoxide (CO)

Carbon monoxide (CO) is a colorless, odorless, and poisonous gas produced by incomplete combustion of hydrocarbon fuels. Most CO emissions are from transportation sources, with the largest share from highway motor vehicles. CO molecules survive in the atmosphere for a period of approximately one month, eventually reacting with oxygen to form carbon dioxide (CO_2). CO levels found in ambient air may reduce the oxygen-carrying capacity of the blood. Health threats are most serious for those with angina or peripheral vascular disease. Exposure to elevated CO levels can cause impairment of visual perception, manual dexterity and learning ability as well as decreased performance of complex tasks.

SCAB had previously been a serious nonattainment area for CO under the 1971 standard. On June 11, 2007, air quality monitoring enabled EPA to re-designate the area as a maintenance area for CO under the 1971 NAAQS.

3.3.2 Climate

Greenhouse gases (GHG) are naturally occurring and man-made gases that can trap and disperse heat throughout the global atmosphere. These gases include CO_2, methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Combustion of fossil fuels is responsible for the majority of man-made GHG emissions. For airspace actions, the primary source of GHG is CO_2 emissions from aircraft fuel combustion. According to the International Energy Agency, the proportion of global CO_2 emissions attributable to the aviation sector was approximately 2% in 2023.[5]

CO_2 emissions for current flight operations within the GSA were calculated using AEDT. **Table 3-4** gives the current flight operations' CO_2 emissions along with the annual and statewide emissions totals for reference. In calendar year 2022, there were 142,399 aircraft operations at BUR. This inventory only includes emissions associated with aircraft operations below the mixing height and does not include ground-based emissions sources on BUR property.

[5] International Energy Agency, https://www.iea.org/energy-system/transport/aviation; retrieved September 2023.

TABLE 3-4
GREENHOUSE GAS EMISSIONS

Scale of Annual GHG Emissions	Annual Metric Tons of CO_2 Equivalent
Nationwide GHG Emissions (2021)	6,340,200,000[1]
California GHG Equivalent Emissions	369,200,000[2]
Hollywood Burbank Airport CO_2 Emissions	19,492[3]

[1]U.S. Environmental Protection Agency Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2021

[2]Current California GHG Emission Inventory Data (2000-2020), California Air Resources Board (https://ww2.arb.ca.gov/ghg-inventory-data, retrieved August 2023)

[3]AEDT 3e

Source: Prepared by RoVolus, 2023.

3.3.3 Biological Resources (Wildlife Only)

3.3.3.1 Regulatory Setting

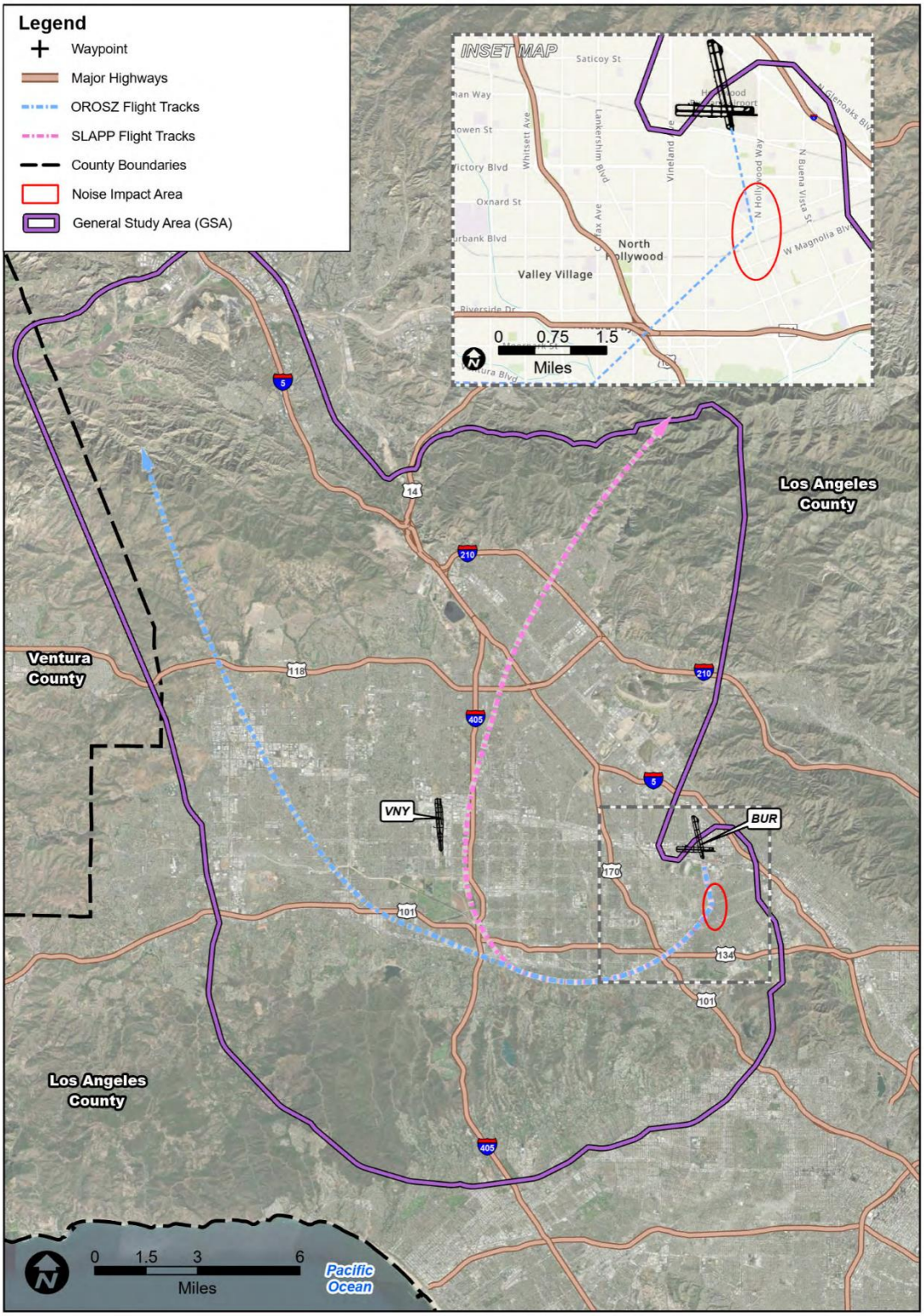
Regulations addressing biological resources are summarized in **Table 3-5**.

TABLE 3-5
REGULATORY POLICIES AND PLANS RELATED TO BIOLOGICAL RESOURCES

Regulation	Description
Endangered Species Act of 1973 (ESA), 16 U.S.C. § 1531, *et seq.*	Section 7 of the ESA requires federal agencies to examine projects for adverse impacts on federally listed endangered or threatened species. The ESA considers habitat loss an impact on the species. Critical Habitat is defined as specific geographic areas within a listed species' range that contains features considered essential for the conservation of the listed species. The ESA is under the jurisdiction of the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS).
Migratory Bird Treaty Act of 1918 (MBTA), 16 U.S.C. §§ 703-712	MBTA protects bird species, their nests, and their eggs from injury or death, and from any project-related disturbances during the nesting cycle.
Bald and Golden Eagle Protection Act (BGEPA), 16 U.S.C. § 668	BGEPA prohibits the "taking" of bald or golden eagles, including their parts, nests, or eggs.
California Endangered Species Act (CESA), § 2080	CESA prohibits the take of listed species except as otherwise provided in state law. Unlike the federal ESA, CESA applies the take prohibitions to species petitioned for listing (state candidates).
California State Fish and Game Code (FGC), §§ 3503 and 3503.5 – Resident and Migratory Birds	Sections 3503 and 3503.5 provide regulatory protection to resident and migratory birds and all birds of prey within the State of California, including the regulation of the taking of nests and eggs, unless otherwise provided for by the State FGC.
FGC §§ 3511, 4700, 5050, and 5515 – Fully Protected Species	Sections 3511, 4700, 5050, and 5515 state that Fully Protected species (birds, mammals, fish, reptiles, amphibians) or parts thereof may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.
Los Angeles County Code of Ordinances Chapter 22.102 – Significant Ecological Areas	Los Angeles County has designated several areas containing sensitive biological resources as Significant Ecological Areas (SEAs). SEAs are areas that warrant special management because they contain biotic resources that are rare or unique; are critical to the maintenance of wildlife; represent relatively undisturbed areas of Los Angeles County Habitat Types; or serve as linkages.
Ventura County 2040 General Plan Conservation and Open Space Element	The one code, one goal and 14 supporting policies provide protection to native trees, sensitive species and habitats, wildlife corridors, and locally important species/communities. They also seek coordination with the appropriate resource management agencies and interested groups to maintain the County's biological resources.
City of Burbank Municipal Code (BMC) 5-1-908	BMC 5-1-908 states that no person shall kill, destroy or rob the nest of any songbird.
City of Los Angeles Municipal Code (LAMC)--Section 53.48	LAMC Section 53.48 states that no person shall kill any songbird or destroy or rob the nest of any such bird.

Source: RoVolus, 2023

The study area for biological resources encompasses all areas affected directly or indirectly by the Proposed Action. In identifying the study area, the farthest reaching physical, chemical, and biotic effects of the action were considered, and their combined geographic area. The study area includes the entire GSA with particular emphasis on the noise impact area where noise impacts resulting from these Alternatives are expected to occur (**Figure 3-4, Alternatives Noise Impact Area**).



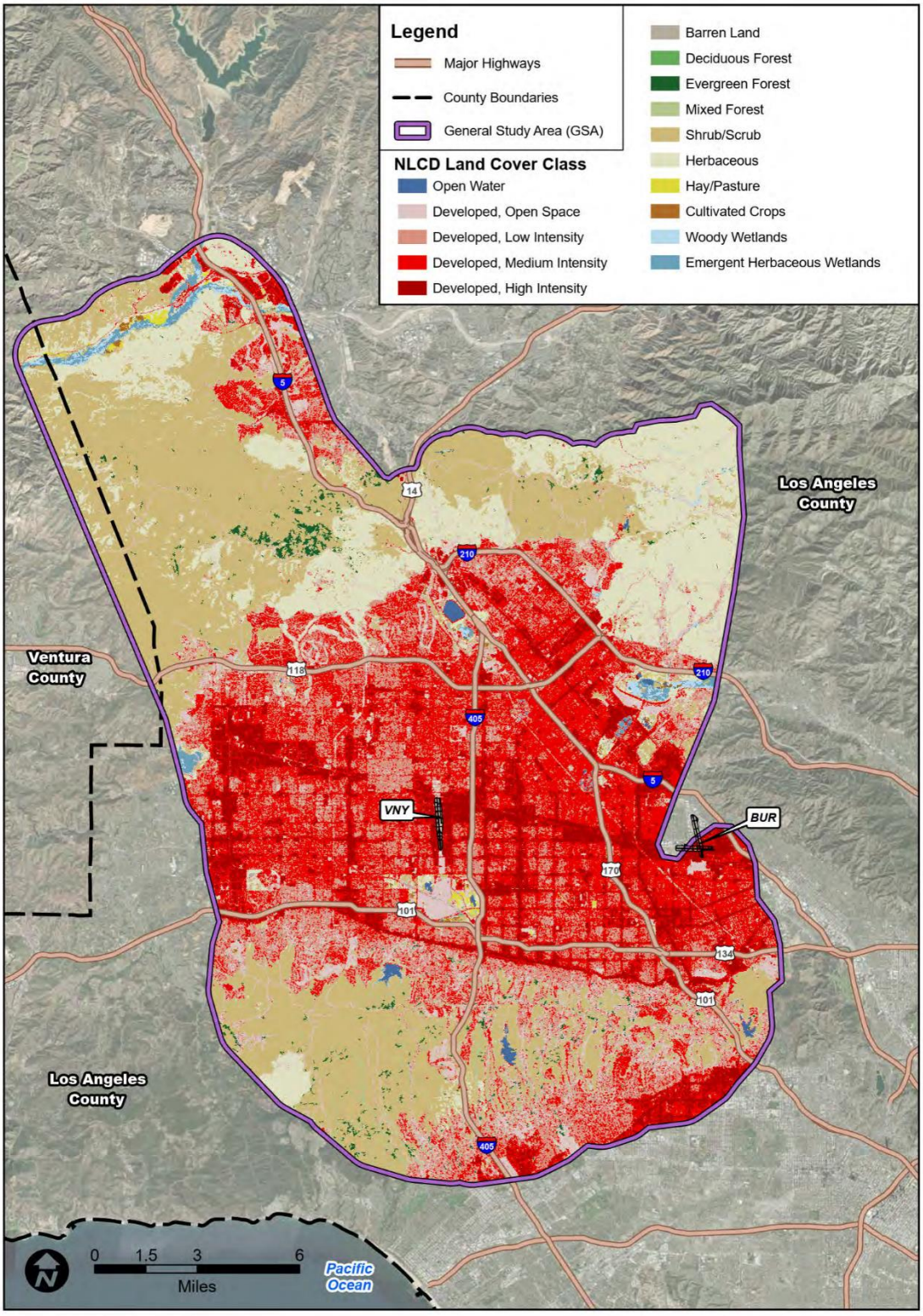
SOURCE: Esri; Prepared by Jacobsen Daniels, 2023

Proposed Settlement Agreement Departure Procedure Amendments at Bob Hope "Hollywood Burbank" Airport Environmental Assessment

Figure 3-4
Alternatives Noise Impact Area

3.3.3.2 Land Cover, Habitat Types, and Wildlife

The GSA encompasses much of the San Fernando Valley and is mostly located within Los Angeles County with a small portion in the northwest located in Ventura County. Although natural communities and land cover types were not characterized in the field within the GSA, it generally comprises 12 land cover types, including barren land, cultivated crops, deciduous forest, developed, emergent herbaceous wetlands, evergreen forest, hay/pasture, herbaceous, mixed forest, open water, shrub/scrub, and woody wetlands, based on mapping from the National Land Cover Database (**Figure 3-5, National Land Cover Database**). The San Fernando Valley, where BUR is located, is dominated by developed land cover. The Santa Monica Mountains along the southern end of the GSA and the Santa Susana and San Gabriel Mountains along the northern end of the GSA are dominated by shrub/scrub land cover.



SOURCE: Esri; Prepared by Jacobsen Daniels, 2023

Proposed Settlement Agreement Departure Procedure Amendments at Bob Hope "Hollywood Burbank" Airport Environmental Assessment

Figure 3-5
National Land Cover Database

Additionally, a field investigation was conducted at BUR in 2018 as part of the Bob Hope "Hollywood Burbank" Airport Proposed Replacement Terminal Project[6] (Terminal Project). Vegetation mapping resulting from the 2018 field investigation characterized and mapped two land cover types: developed and disturbed. The developed land cover type consists of a variety of impervious surfaces and non-native, ornamental vegetation throughout the BUR property. The disturbed land cover type supports minimal ruderal vegetation that is regularly mowed throughout BUR. Common wildlife observed during the field investigation included red-tailed hawk (*Buteo jamaicensis*), killdeer (*Charadrius vociferus*), common raven (*Corvus corax*), American kestrel (*Falco sparverius*), house finch (*Haemorhous mexicanus*), northern mockingbird (*Mimus polyglottos*), California ground squirrel (*Otospermophilus beecheyi*), cliff swallow (*Petrochelidon pyrrhonota*), Say's phoebe (*Sayornis saya*), western fence lizard (*Sceloporus occidentalis*), western meadowlark (*Sturnella neglecta*), and mourning dove (*Zenaida macroura*). Additionally, a large mammal burrow believed to be coyote (*Canis latrans*) was observed along with smaller burrows believed to be California ground squirrel.

A Wildlife Hazard Assessment (WHA) was completed for BUR in April 2011 and October 2012 resulting in preparation of a Wildlife Hazard Management Plan (WHMP).[7] Wildlife species observed during the WHA, or identified as occurring at BUR in the WHMP, include Swainson's hawk (*Buteo swainsonii*), coyote, killdeer, rock pigeon (*Columba livia*), common raven, Virginia opossum (*Didelphis virginiana*), American kestrel, house finch, California gull (*Larus californicus*), California ground squirrel, raccoon (*Procyon lotor*), European starling (*Sturnus vulgaris*), Audubon's cottontail (*Sylvilagus audubonii*), Botta's pocket gopher (*Thomomys bottae*), unnamed rats, unnamed mice, and various unnamed raptors.

[6] Final Environmental Impact Statement: Proposed Replacement Passenger Terminal Project for Bob Hope "Hollywood Burbank" Airport, Burbank, Los Angeles County, California. FAA, 2021 (https://bobhopeairporteis.com/documents-resources-and-reports/#reports)

[7] Bob Hope Airport Wildlife Hazard Management Plan. AMEC Environment & Infrastructure, Inc.), May 2014.

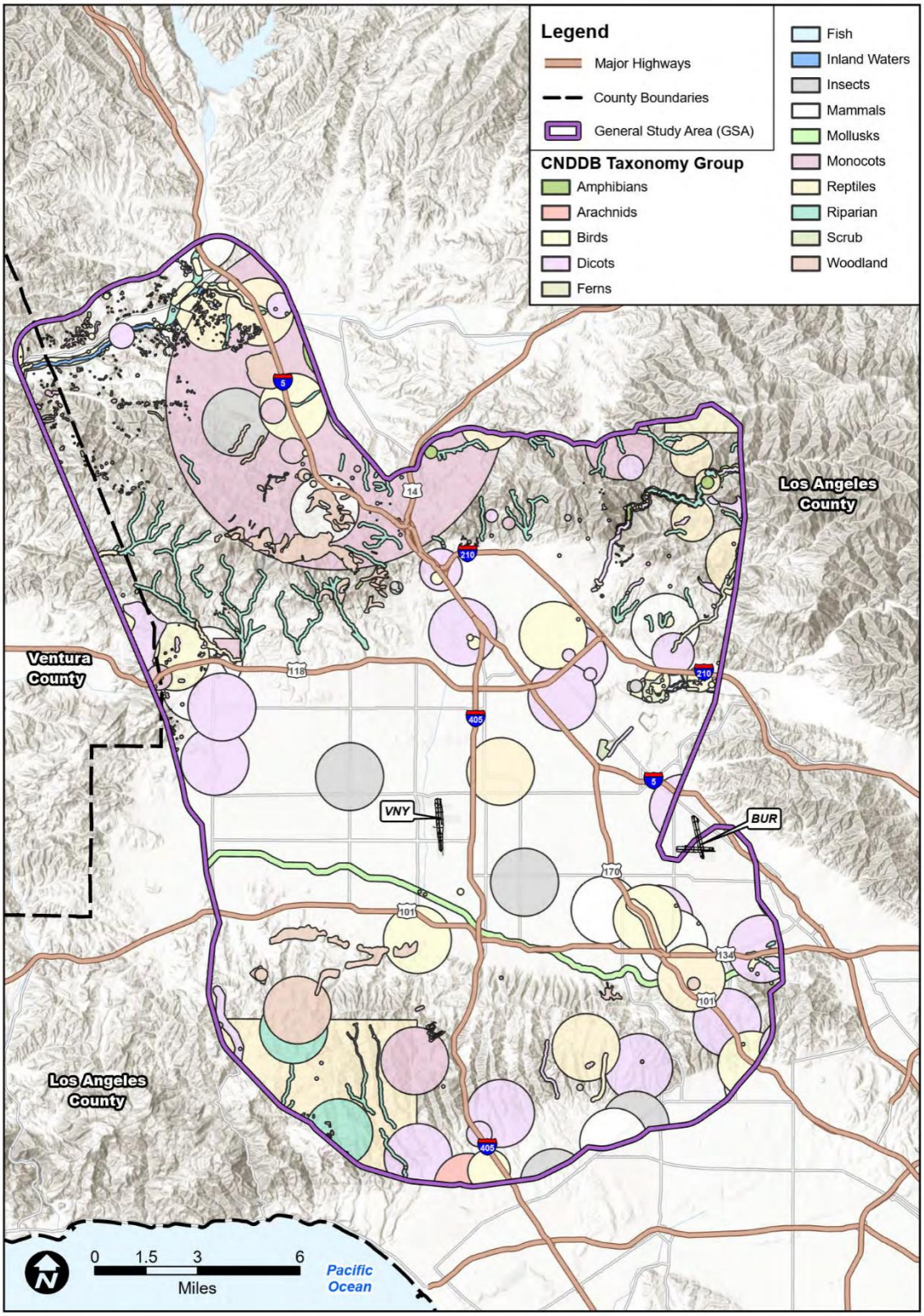
3.3.3.3
3.3.3.3 Protected Species and Critical Habitat

Protected species are those listed as candidate, threatened, or endangered under the federal and/or state ESA. A review of biological resource databases was conducted to identify biological resources potentially occurring within the GSA and noise impact area. The subsequent analysis of the potential for protected species and Critical Habitat to occur focuses on the noise impact area, where noise impacts resulting from the Alternatives are expected to occur within the GSA. The USFWS Information for Planning and Consultation (IPaC) website was used to identify species and Critical Habitat protected under the federal Endangered Species Act (FESA), which were evaluated in the EA. Additionally, the California Natural Diversity Database (CNDDB) was queried for information on special-status species and sensitive habitats protected under CESA in the GSA and noise impact area. The results of the query are in **Appendix G,** which includes protected wildlife species.

A review of the IPaC[8] and CNDDB[9] (CDFW 2023a) revealed that many protected wildlife species have been recorded within the GSA (see **Figure 3-6, Federally and/or State-Listed Species Reported for the GSA**). The potential for protected species to occur is based on existing vegetation and habitat quality, topography, elevation, soils, surrounding land uses, habitat preferences and geographic ranges. It was determined that many of the wildlife species generated in the database query have the potential to occur within the GSA. However, many of these wildlife species do not have any potential to occur or have a low potential to occur within the noise impact area. Such wildlife species are therefore omitted from further discussion.

[8] Information for Planning and Consultation (IPaC). USFWS, 2023. Accessed August 24, 2023. (https://ipac.ecosphere.fws.gov/)

[9] California Natural Diversity Database (CNDDB). California Department of Fish and Wildlife, 2023. Accessed August 24, 2023. (https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data)



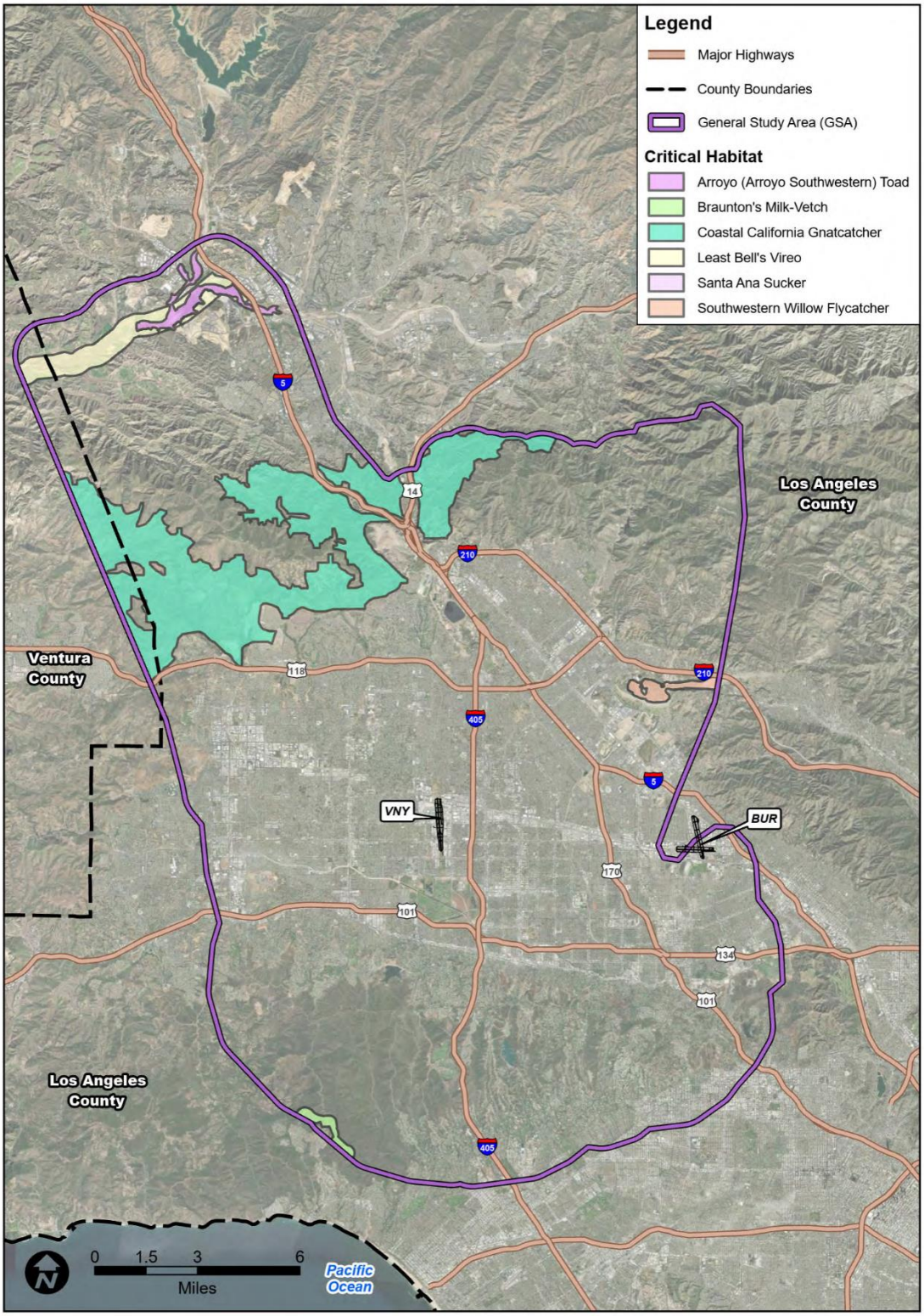
SOURCE: Esri; Prepared by Jacobsen Daniels, 2023

Proposed Settlement Agreement Departure Procedure Amendments at Bob Hope "Hollywood Burbank" Airport Environmental Assessment

Figure 3-6
Federally and/or State-Listed Species Reported for the GSA

It is determined that four protected wildlife species have a moderate to high potential to occur within the noise impact area. Additionally, designated Critical Habitat within the GSA included arroyo toad (*Anaxyrus californicus*), Braunton's milkvetch (*Astragalus brauntonii*), Santa Ana sucker (*Catostomus santaanae*), southwestern willow flycatcher (*Empidonax traillii extimus*) coastal California gnatcatcher (*Polioptila californica californica*), and least Bell's vireo (*Vireo bellii pusillus*) (See **Figure 3-7, Designated Critical Habitat in the GSA**). However, no designated Critical Habitat occurs within the noise impact area.

The four protected species determined to have a moderate or high potential to occur within the noise impact area include Cooper's hawk (*Accipiter cooperii*), turkey vulture (*Cathartes aura*), American kestrel (*Falco sparverius*), and hoary bat (*Lasiurus cinereus*). None of these wildlife species are protected under the FESA or CESA, although Cooper's hawk, turkey vulture, and American kestrel are protected under the MBTA, which is discussed in detail below.



SOURCE: Esri; Prepared by Jacobsen Daniels, 2023

Proposed Settlement Agreement Departure Procedure Amendments at Bob Hope "Hollywood Burbank" Airport Environmental Assessment

Figure 3-7
Designated Critical Habitat in the GSA

3.3.3.4 Bald and Golden Eagles

Based on the review of IPaC and CNDDB, there are no recorded eagle nests or occurrences in the GSA or noise impact area. Additionally, BUR was surveyed for bird species and nests during the 2018 field investigation for the Terminal Project and no eagles or eagle nests were observed.[10]

3.3.3.5 Migratory Birds

There are over 600 migratory bird species that live or migrate through California, with a large portion of those species having the potential to occur within the GSA and noise impact area. A list of species protected under the MBTA is provided in the Revised List of Migratory Birds. Birds of Conservation Concern (BCC), protected under the MBTA and could potentially occur in the vicinity of the GSA and noise impact area, were unavailable in the IPaC query. However, suitable breeding habitat occurs in the GSA and noise impact area for several species of BCC.

Four primary migratory bird corridors exist in North America: Atlantic Flyway, Mississippi Flyway, Central Flyway, and Pacific Flyway. The GSA and noise impact area occur along the Pacific Flyway, which extends along the west coast through Washington, Oregon, and California. Additionally, many smaller migration routes exist that cross these major north-south migratory flyways.[11] Migration occurs along the Pacific Flyway in the spring and fall. The FAA reports an increase in bird strike incidents resulting from migration during the months of March through April and August through November. Dolbeer[12] found that 74% of bird strikes occur at less than or equal to 500 feet AGL, 19% from 501–3,500 feet AGL, and 7% above 3,500 feet AGL. This study also found that passerines, gulls/terns (*Laridae*), doves (*Columbidae*), and raptors (including vultures) were the species groups most frequently struck.

3.3.4 Department of Transportation Act, Section 4(f) Properties

Section 4(f) of the Department of Transportation (DOT) Act of 1966 (codified at 49 U.S.C. Section 303(c)), commonly referred to as Section 4(f), provides, in part, that:

> …[the] Secretary of Transportation may approve a transportation program or project requiring the use of any publicly owned land from a public park, recreation area, or wildlife or waterfowl refuge of national, state, or local significance or land from a historic site of national, State, or local significance, only if there is no feasible and prudent alternative to the use of such land and the program or project includes all possible planning to minimize harm resulting from the use.

The word "use" includes both direct and indirect or "constructive" impacts to Section 4(f) properties. Direct use is the physical taking of a Section 4(f) property. An indirect impact, or "constructive" use, does not require a physical taking of a Section 4(f) property. A constructive

[10] Final Environmental Impact Statement: Proposed Replacement Passenger Terminal Project for Bob Hope "Hollywood Burbank" Airport, Burbank, Los Angeles County, California. FAA, 2021. (https://bobhopeairporteis.com/documents-resources-and-reports/#reports)

[11] Bird migration and areas with sensitive Fauna: migratory bird activity. FAA, 2023. (https://www.faa.gov/air_traffic/publications/atpubs/aip_html/part2_enr_section_5.6.html)

[12] USDA National Wildlife Research Center – Staff Publications. Height Distribution of Birds Recorded by Collisions with Civil Aircraft. Dolbeer, Richard A., 2006.

use would occur when a project would produce an effect, such as excessive noise, that would result in substantial impairment to a property to the degree that the activities, features, or attributes of the property, contributing to its significance or enjoyment, are substantially diminished. The determination of use must consider the entire property and not simply the portion of the property being used for a Proposed Action.

The FAA has established guidelines for aircraft noise and land use compatibility under Title 14 CFR Part 150. However, the applicability of 14 CFR Part 150 is limited when assessing noise impacts to areas where quiet and serenity are expected attributes. Accordingly, special consideration is given to parks and natural areas where a quiet setting is a generally recognized purpose and attribute. In these areas the FAA "must consult all appropriate Federal, State, and local officials having jurisdiction over the affected Section 4(f) resources when determining whether project-related noise impacts would substantially impair the resource[13]."

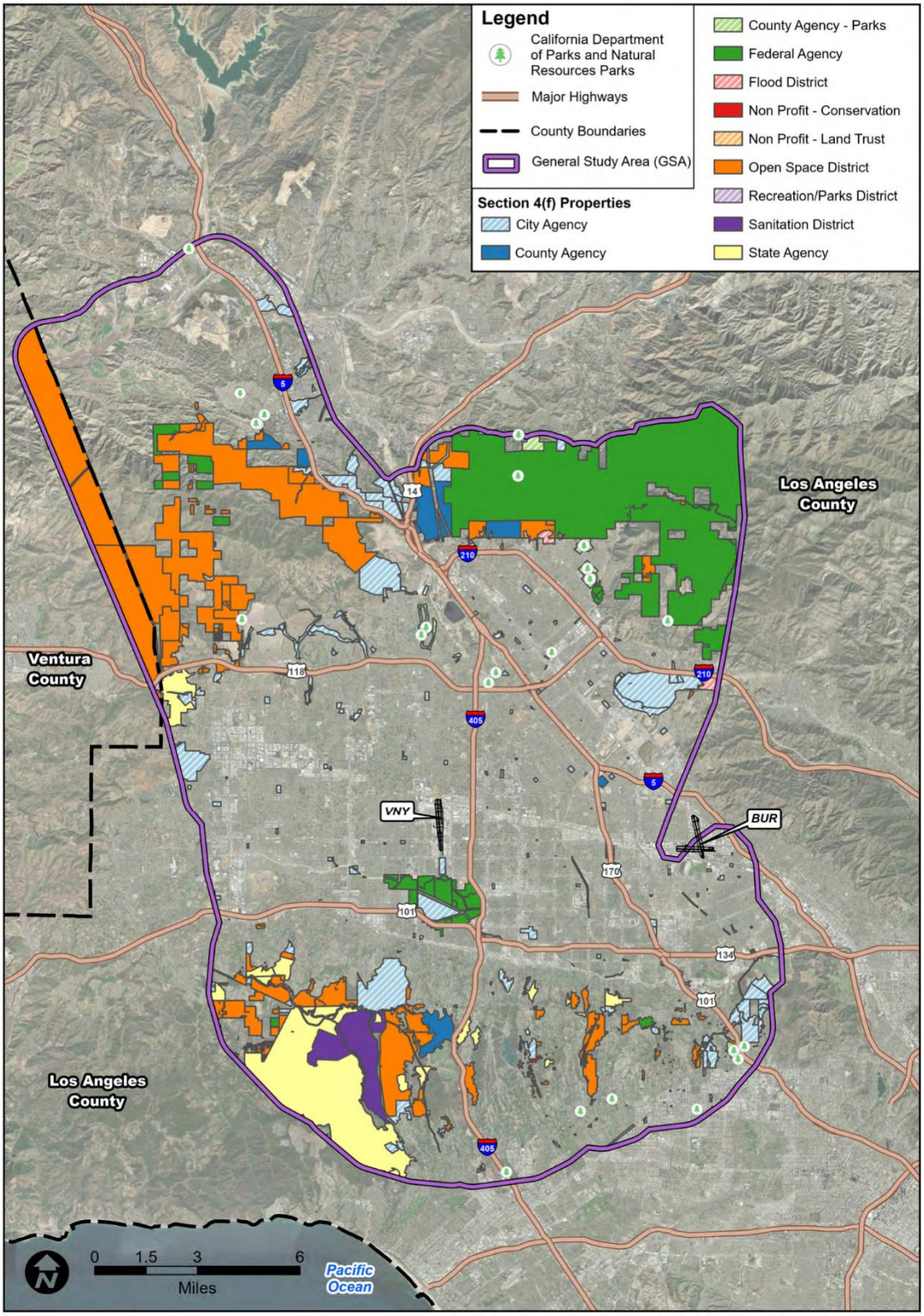
For this analysis, publicly owned natural areas are areas considered to have recreational or environmental significance and include national parks, wildlife refuges, forests, wildlife management areas, reserves, conservations areas, or other similar places. City, county, state, and federally maintained parks and natural areas within the GSA are subject to the requirements of Section 4(f). Privately-owned parks, recreation areas, and wildlife refuges are not subject to Section 4(f).

3.3.4.1 Section 4(f) Properties in the General Study Area

Section 4(f) properties within the GSA were inventoried using geospatial data from the California Protected Areas Database (CPAD) and the Mountains Recreation and Conservation Authority (MRCA). The CPAD includes an inventory of open space (e.g., habitat conservation, recreation, scenic, flood control, etc.) owned by federal, state, non-profits, and local government agencies. The MRCA database includes additional resources managed by that organization. A total of 632 Section 4(f) properties were identified within the GSA from the CPAD, while an additional 1,139 Section 4(f) properties were identified within the GSA from the MRCA database. CPAD resources are shown in **Figure 3-8** while MRCA resources are shown in **Figure 3-9**. Historic and cultural resources are addressed by both Section 4(f) and the National Historic Preservation Act (NHPA) of 1966 (16 U.S.C. § 470, as amended), and are discussed further in **Section 3.3.5**.

A comprehensive list of Section 4(f) properties located within the GSA is included in **Appendix H**.

[13] FAA Order 1050.1F, Section B-2.2.2.



SOURCE: Esri; Prepared by Jacobsen Daniels, 2023

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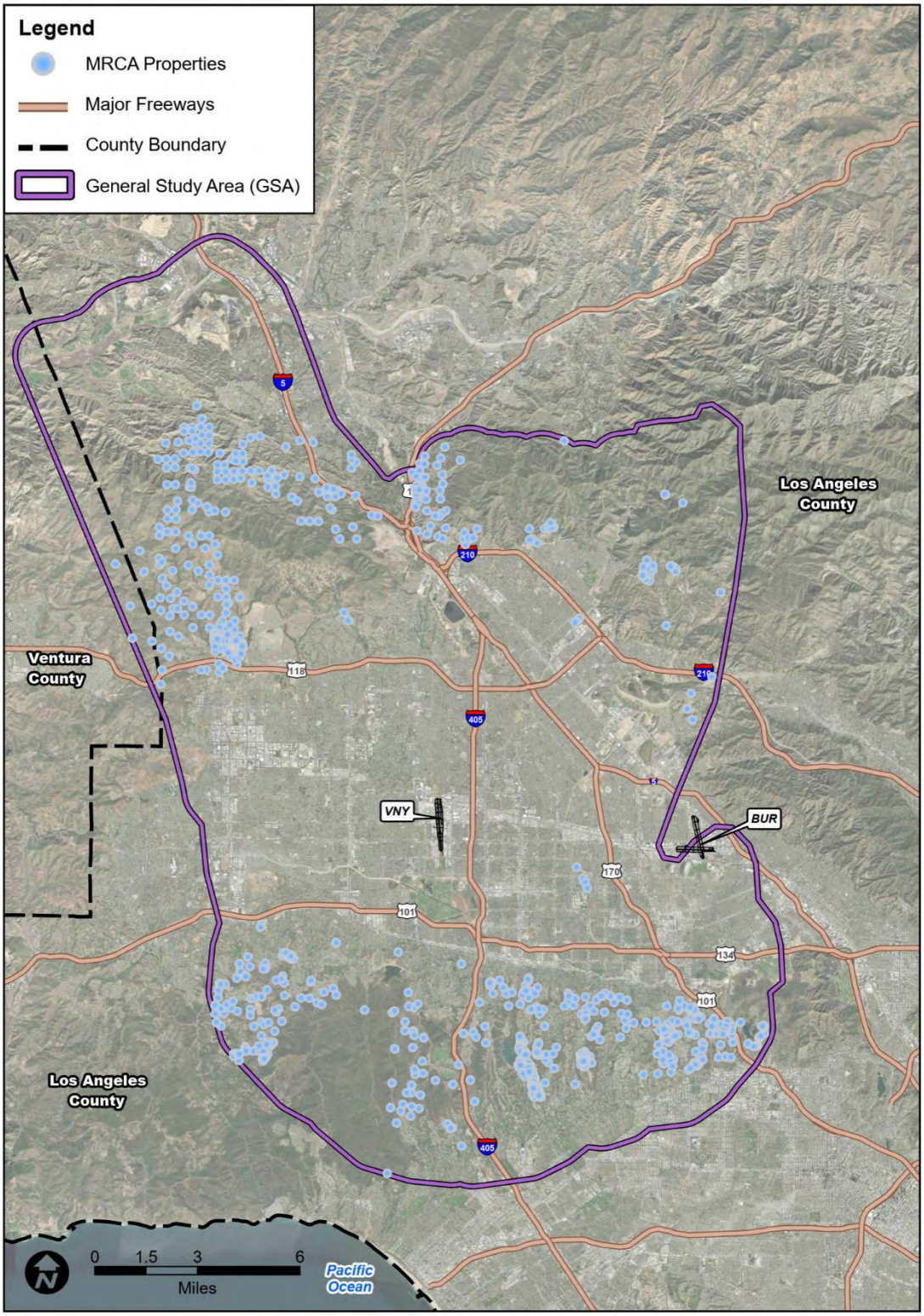
Figure 3-8
Map of CPAD Section 4(f) Properties



SOURCE: Esri; Prepared by Jacobsen Daniels, 2023

Proposed Settlement Agreement Departure Procedure Amendments at Bob Hope "Hollywood Burbank" Airport Environmental Assessment

Figure 3-9
Map of MRCA Section 4(f) Properties

3.3.5 Historical, Architectural, Archeological, and Cultural Resources – Historic, Architectural, and Cultural Resources Only

Under NEPA, the FAA is responsible for analyzing the impacts of its action on historical, architectural, archeological, and cultural resources as part of its broader review of the human environment. Because the NHPA is the principal statute concerning such resources, most of this analysis is conducted in coordination with the process under Section 106 of the NHPA, which requires federal agencies to consider the effects of their projects on properties listed, or eligible for listing, in the National Register of Historic Places (NRHP). Regulations related to this process are promulgated in 36 CFR Part 800, Protection of Historic Properties.

While FAA Order 1050.1F states in Exhibit 4-1 that there is no significance threshold for Historical, Architectural, Archeological, and Cultural Resources, the Order also states that a finding of adverse effect by the Proposed Action through the Section 106 process is a factor to consider.[14] A finding of "adverse effect," "no adverse effect," or "no historic properties affected" is made under 36 CFR Part 800 in consultation with the State Historic Preservation Officer (SHPO) and other consulting parties. Section 8.3.2 of the 1050.1F Desk Reference expands on the text in FAA Order 1050.1F, and says that while an adverse effect under Section 106 is not necessarily a significant impact under NEPA, the FAA's determination on the level of impact under NEPA may be informed by advice from the California SHPO.

The Proposed Action is the implementation of departure procedures at BUR. As such, the Proposed Action consists of aircraft departure procedures that are located entirely above the surface of the earth. Accordingly, they do not physically affect properties, alter properties in any way physically, remove properties from their historic locations, result in any neglect of a property, or result in the transfer of any property out of federal control or ownership. However, the FAA has initiated the Section 106 process to assess whether changes in aircraft flight routes associated with the Proposed Action would introduce or increase aircraft routing over historic properties that could result in potential adverse effects due to the introduction of atmospheric, audible or visual elements.[15] In particular, the FAA, in consultation with the SHPO and other consulting parties, is assessing whether the Proposed Action would diminish the integrity of the historic features that make the properties eligible for inclusion in the NRHP. Section 106 consultation with the California SHPO was initiated on June 23, 2020, and includes other consulting parties in that process pursuant to the Section 106 implementing regulations. Ongoing correspondence with the California SHPO has continued since that date.

3.3.5.1 Historic, Architectural, and Cultural Resources in the General Study Area

The NHPA defines historic properties as:

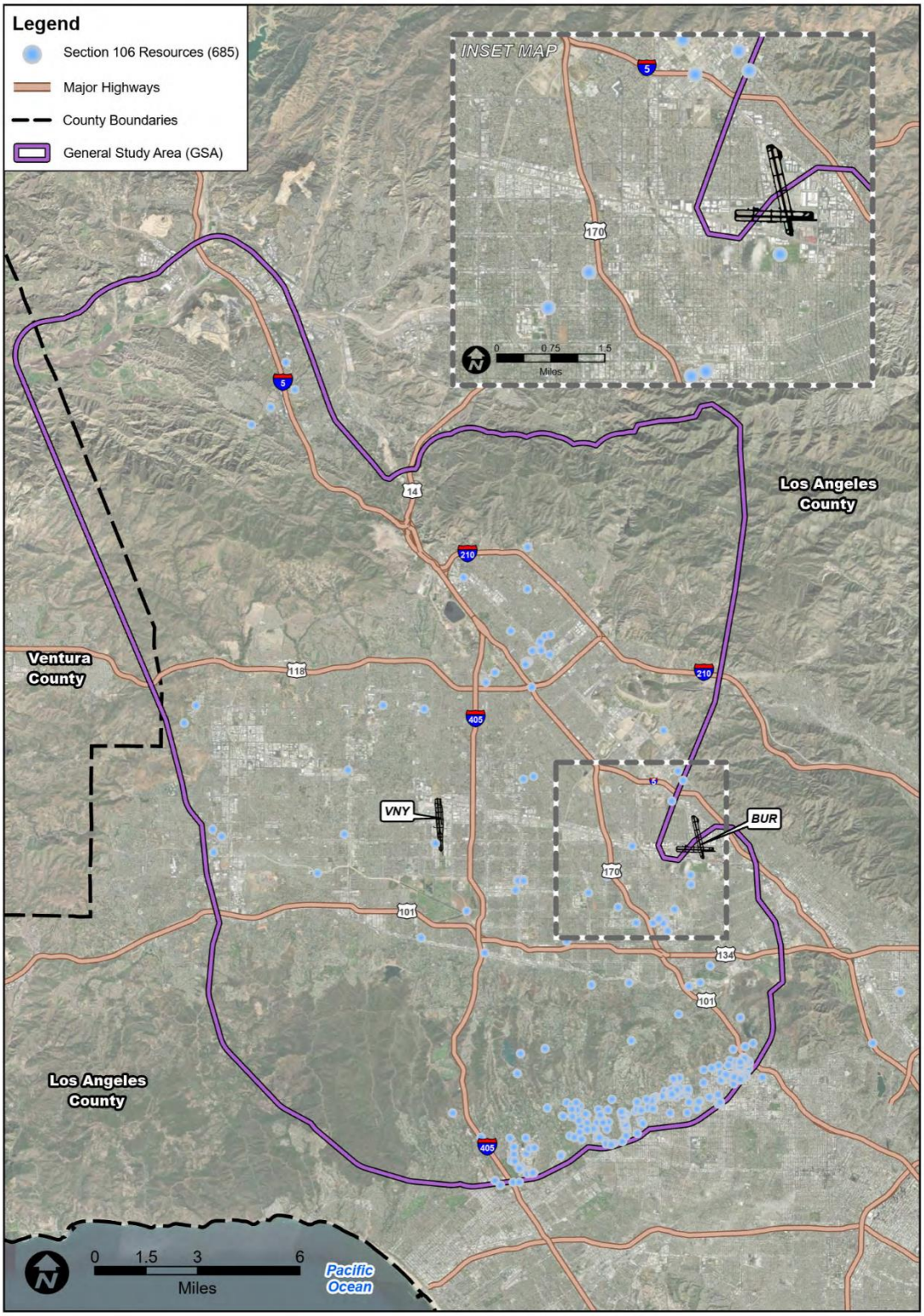
> …any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion on, the National Register, including artifacts, records,

[14] FAA Order 1050.1F, Exhibit 4-1, p. 4-8. https://www.faa.gov/documentLibrary/media/Order/FAA_Order_1050_1F.pdf
[15] 36 CFR 800.5(a)(2)(v), https://www.achp.gov/sites/default/files/regulations/2017-02/regs-rev04.pdf

> and material remains relating to the district, site, building, structure, or object and located within such properties.[16]

Figure 3-10 depicts the location of known historic properties within the APE that are listed in, or have been determined eligible, for listing in the NRHP. The APE for the project includes the area where flight departures from Runway 15 are most heavily concentrated and is described in more detail in **Section 4.5.2.1**. The NRHP database, the National Historic Landmark database, National Register Multiple Property Submission files, the Federal Determinations of Eligibility database, the Built Environment Resource Database for Los Angeles and Ventura counties, local municipal planning records, and information from the California Historic Resource Information Centers were used to gather a comprehensive directory of all known historic properties listed in or determined eligible for listing in the NRHP within the APE. A total of 685 historic properties were identified. This includes historic districts and their contributing properties, individual historic properties, sites, and objects in the APE. A comprehensive list of the historic properties identified within the APE, along with a detailed presentation of the analysis methodology used for assessment of effects is provided in **Appendix I**.

[16] 54 U.S.C. § 300308, https://www.govinfo.gov/content/pkg/USCODE-2016-title54/pdf/USCODE-2016-title54-subtitleIII-divsnA-app-chap3003-sec300308.pdf



SOURCE: Esri; Prepared by Jacobsen Daniels, 2023

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Figure 3-10
Section 106 Resources in the General Study Area

3.3.6 Noise and Noise-Compatible Land Use

This section includes a brief overview of aircraft noise, the noise analysis methodology used for this EA, and a discussion of the existing aircraft noise exposure levels in the GSA.

3.3.6.1 Noise Modeling Methodology

The FAA has developed specific guidance and requirements for the assessment of aircraft noise to comply with NEPA. This guidance, specified in FAA Order 1050.1F, requires that aircraft noise be analyzed in terms of the Day-Night Average Sound Level (DNL) metric. DNL values are calculated for the average annual daily operations for the year of interest. The noise analysis evaluated all aircraft arriving to and departing from BUR for the entire GSA. Noise modeling was based on fixed-wing aircraft and helicopter flight operations recorded by radar occurring in the baseline timeframe (January 1, 2022 – December 31, 2022).

Fleet information from the radar data was used to determine the number of operations and the types of aircraft to be modeled. Assumptions regarding fleet mix and operational considerations were verified by the Southern California Terminal Radar Approach Control (TRACON), herein referred to as SCT.

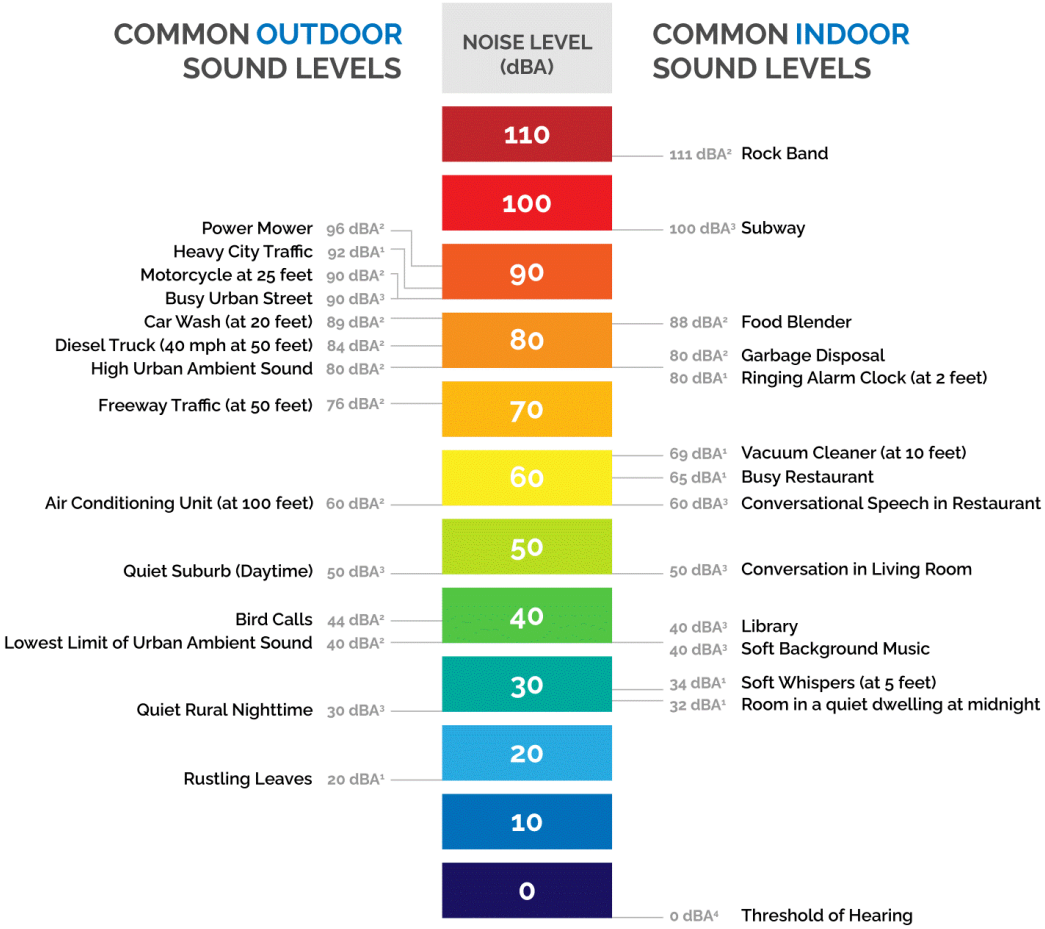
3.3.6.1.1 Noise Metric

Sound is energy transferred through the air that is detected by the ears as small changes in air pressure. The decibel (dB) is the unit used to measure the intensity of sound and is measured on a logarithmic scale. It is important to understand this logarithmic nature as it is counterintuitive to our regular understanding of numbers; for example, a sound of 40 dB combined with a second sound of 40 dB will only produce a combined sound of 43 dB. Another way of phrasing it, is a 10 dB increase or decrease in sound will be heard as a doubling or halving of a sound's loudness, respectively. In order to assist in the understanding of certain levels, **Figure 3-11** shows comparative indoor and outdoor noise levels. Noise is defined as sound that is unwanted. Perception of aircraft noise by people on the ground depends on a variety of factors, including background (environmental) noise, relative proximity to aircraft operations, aircraft type, aircraft operational mode (arrival, departure, or overflight), ambient weather, and terrain.[17]

Noise emitted from sources that are in motion (such as aircraft) will change over time relative to the person hearing the noise. While it can be useful to measure the maximum sound level of a single noise event, that does not account for the duration of the event.

[17] Environmental and perception factors, Toronto Pearson Airport. Retrieved November 20, 2023 (https://www.torontopearson.com/en/community/noise-management/understanding-airport-noise/environmental-perception-factors).

Comparative Noise Levels (dBA)



1 Aviation Noise Effects, FAA, AEE, March, 1985 (FAA-EE-85-2), Table 1.1
2 Federal Agency Review of Selected Airport Noise Analysis Issues (Federal Interagency Committee on Noise), August 1992, Table B.1
3 Children's health and the environment, A Global Perspective, World Health Organization, 2005. Table 15.1
4 OSHA Technical Manual, TED 01-00-015. Section III (Health Hazards), Chapter 5 (Noise, Updated 8/15/2013)

SOURCE: ESA, 2021

Figure 3-11
Comparative Noise Levels (dBA)

The DNL metric measures the sound level from aircraft operations for a 24-hour period that includes all time-varying aircraft sound energy within the period. DNL accounts for the noise levels of all individual aircraft events, the number of times those events occur, and the period of day/night in which they occur. Since people are more sensitive to noise events at night, DNL includes a 10-dB additional weight for night-time noise events (those that occur between 10:00:00 p.m. and 6:59:59 a.m.). Ambient (without aircraft) sound levels during nighttime are typically about 10 dB lower than during daytime hours.[18] FAA guidelines, established under 14 CFR Part 150, identify land uses that are generally considered compatible or incompatible with various DNL values.

As DNL values scale logarithmically, a 10 dB increase in DNL equates to a sound that is perceived as twice as loud. For example, a noise exposure increase from DNL 50 dB to DNL 60 dB is perceived as twice as loud by observers, while an increase from DNL 50 dB to DNL 70 dB would be perceived as four times as loud.

DNL is the metric prescribed in FAA Order 1050.1F and has been found to be the best measure of significant noise impact on the quality of the human environment. The DNL metric is based on a substantial body of scientific data on the reaction of people to noise. Federal interagency committees such as the Federal Interagency Committee on Urban Noise (FICUN) and the Federal Interagency Committee on Noise (FICON), which include the EPA, FAA, Department of Defense (DOD), Department of Housing and Urban Development (HUD), and Veterans Administration (VA), found DNL to be the best noise metric for representing aircraft noise resulting from approaches and application in land use planning.

3.3.6.1.2 Noise Model

The AEDT is the FAA's approved model for assessing noise and emissions at civilian airports. It has been used for environmental review of air traffic noise and emissions impacts since 2012 and is also used for 14 CFR Part 150 studies as well as EAs and Environmental Impact Statements (EIS). For these types of analyses, AEDT is used to estimate the long-term average changes in environmental impacts.

Detailed information on aircraft operations at BUR was entered into AEDT, including specific fleet mix information (such as aircraft type, arrival and departure times, trip distance), runway use, flight track location/usage, and weather conditions (e.g., temperature and humidity). Noise exposure from aircraft operations was calculated at the 10,126 Census blocks throughout the GSA. The locations consist of population centroids, representing the centers of 2020 Census blocks. Census blocks are the smallest geographic unit for which the U.S. Census Bureau tabulates 100% sample data, and are generally bounded by streets, legal boundaries, and other features. For this analysis, the Census block counts represent the maximum potential population within the Census block that could be exposed to the modeled DNL values, including family and non-family households, but excluding those residing in group quarters (often representing transient or temporary residential arrangements). The actual number of people impacted can be smaller than the total population represented by a single Census block because noise levels will vary throughout the Census block. More details on the specific inputs and assumptions used for modeling aircraft noise are included in **Appendix J**.

[18] FAA Order 1050.1F Appendix B, https://www.faa.gov/documentLibrary/media/Order/FAA_Order_1050_1F.pdf

3.3.6.2 Operational Inputs

Operational inputs (aircraft flows and operations) were developed by processing radar traffic data for the baseline timeframe (January 1, 2022 – December 31, 2022) into flight tracks and backbones. Flight tracks are created from radar data of individual flights and contain information about each flight, such as trajectory, speed, altitude, and aircraft type. Backbones consist of a group of between three and nine correlated flight tracks representing distinct traffic flows. While using flight tracks as operational data is simpler to model, backbones are useful to model operations that are expected to change in one or more alternatives, as these operations can be modeled as a group and directly compared to the same operations in the alternative(s). In this case, backbones were created for traffic flows correlating with northbound departures from Runway 15, while flight tracks were used for all other operations.

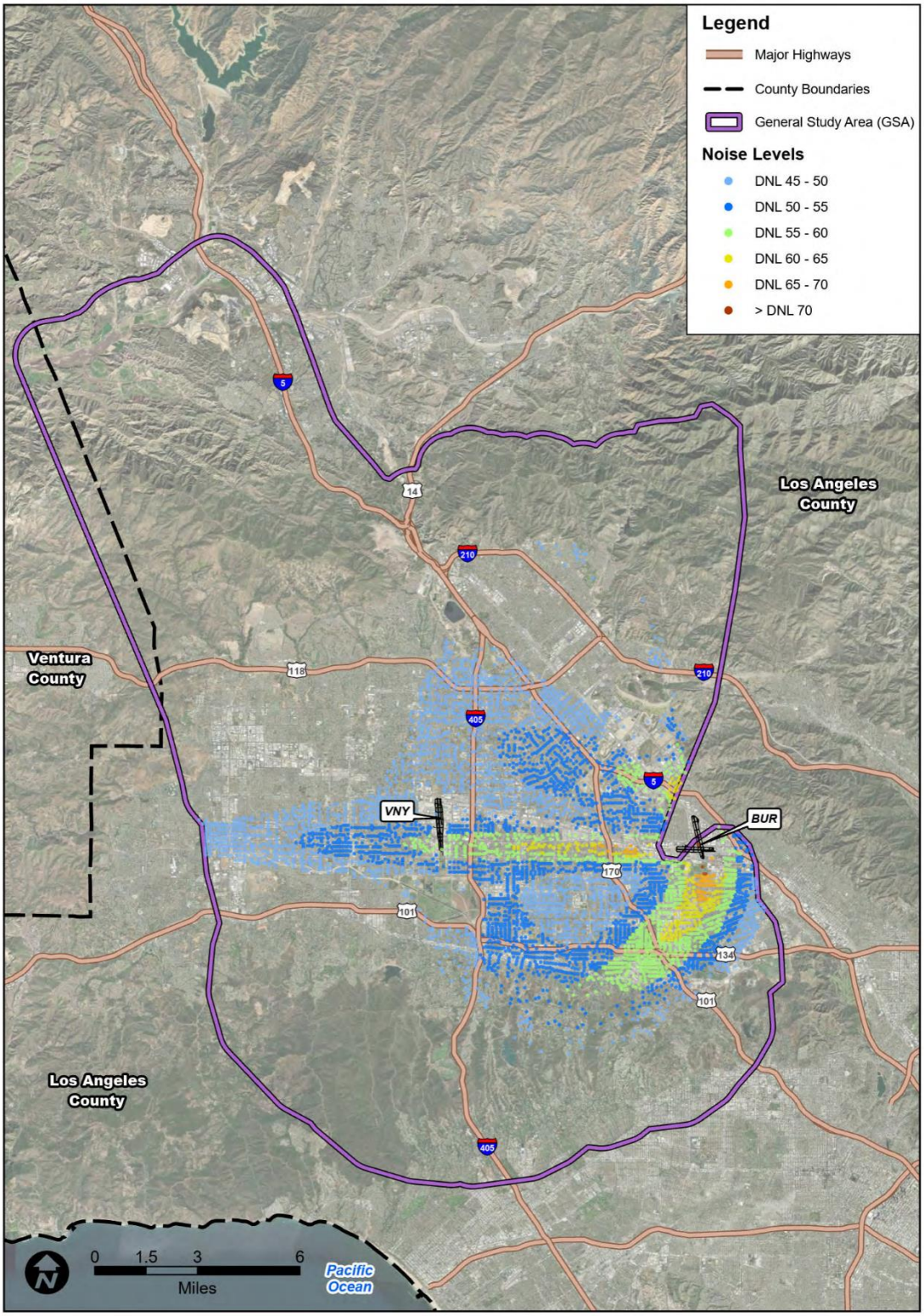
These flight tracks and backbones were then loaded with traffic event data, which includes information such as the number of operations on an average annual day, the type and frequency of aircraft operations, runway locations and use, and the time of day of operations (daytime or nighttime). The operations derived from radar data were uniformly scaled to be equivalent to the total reported operation count of 120,741 operations for this period from the FAA's Operations and Performance Data (OpsNet), the official source of FAA air traffic operations and delay data. This operation count also included helicopter operations that were not counted in OpsNet. The result was an average annual day count of 331 aircraft operations at BUR that was then reflected in the noise model.

This baseline noise analysis is the foundation upon which the noise modeling for the Proposed Action was developed. **Appendix J** provides additional details regarding noise model input data.

3.3.6.3 Existing Aircraft Noise Exposure at Population Centroids

Figure 3-12 shows the existing (2022) noise exposure levels at population centroids between DNL 45 dB and 75 dB. As would be expected, the areas closer to BUR are exposed to the highest DNL values. Noise exposure levels are not calculated for Census blocks that did not include any residential population.

As shown in **Table 3-6**, approximately 47% of people residing within the GSA are exposed to aircraft noise levels associated with BUR of less than DNL 45 dB. Noise levels between DNL 45 dB and 60 dB include another 51% of the GSA population. 37,266 people experience aircraft noise levels between DNL 60 dB and 65 dB and 6,043 people experience aircraft noise levels of DNL 65 dB or higher.



SOURCE: Esri; Prepared by Jacobsen Daniels, 2023

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Figure 3-12
Existing/No Action 2022 Noise Exposure at Population Centroids

TABLE 3-6
GSA POPULATION EXPOSED TO AIRCRAFT NOISE ASSOCIATED WITH BOB HOPE "HOLLYWOOD BURBANK" AIRPORT – EXISTING (2022) CONDITIONS

DNL Range (dB)	Population	Percentage of Total
Less than 45	764,619	46.65%
45 to less than 50	428,212	26.12%
50 to less than 55	282,090	17.21%
55 to less than 60	120,903	7.38%
60 to less than 65	37,266	2.27%
65 to less than 70	5,937	0.36%
70 to less than 75	80	0.01%
Greater than or equal to 75	26	<0.01%
Total	**1,639,133**	**100%**

Notes: Population values in this table represent only the population in the GSA exposed to noise associated with BUR, not the total GSA population. Percentage totals may not equal 100% due to rounding.

Sources: U.S. Census 2020 (population centroid data), August 2023; prepared by RoVolus, 2023.

3.3.7 Socioeconomics, Environmental Justice, and Children's Environmental Health – Environmental Justice and Children's Environmental Health Only

This section is limited to a discussion of Environmental Justice (EJ) and Children's Environmental Health as they pertain to potential aircraft noise impacts from BUR in the GSA. The EPA defines EJ as the "fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies."[19] An EJ analysis considers the potential of the alternatives to cause disproportionate and adverse effects on low-income or minority populations, while an analysis of children's environmental health considers the potential of the Alternatives to cause disproportionate and adverse effects on children. If adverse effects are determined, applicable mitigations will be explored to avoid or minimize disproportionate impacts.

3.3.7.1 Definition of Impact Category

Executive Order (E.O.) 14096, *Revitalizing Our Nation's Commitment to Environmental Justice for All* (Apr. 26, 2023), E.O. 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations* (Feb. 16, 1994), the accompanying Presidential Memorandum, and DOT Order 5610.2B, *Department of Transportation Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, provide guidance for the Federal government, including the FAA, regarding EJ compliance. The FAA must provide (1) meaningful public involvement by minority and low-income populations and (2) analysis, including demographic analysis, which identifies and addresses potential impacts on those populations that may be disproportionately high and adverse. The Presidential Memorandum encourages the consideration of EJ impacts in EAs, especially to determine whether the Federal action may cause a disproportionately high and adverse impact.

E.O. 14096 strengthens the provisions of E.O. 12898 by providing additional guidance for Federal agencies to be able to effectively respond to EJ concerns. Some of the guidance for agencies such as the FAA includes (1) identify, analyze, and address historical inequities, systemic barriers, or actions related to any Federal regulation, policy, or practice that impair the ability of communities with EJ concerns to achieve or maintain a healthy and sustainable environment, (2) identify, analyze, and address barriers related to Federal activities that impair the ability of communities with EJ concerns to receive equitable access to human health or environmental benefits, including benefits related to natural disaster recovery and climate mitigation, adaptation, and resilience, and (3) ensuring that agencies offer or provide information in a manner that provides meaningful access to individuals with limited English proficiency and is accessible to individuals with disabilities.

E.O. 14096 encourages consideration of additional aspects of EJ concern that were not addressed in E.O. 12898, including accessibility, additional avenues of community involvement, and barriers to participation. For this EA, the FAA defined Census block groups of EJ concern as those in which either the concentration of minority populations and/or the concentration of low-income population are higher than their respective averages of the GSA.

[19] Technical Guidance for Assessing Environmental Justice in Regulatory Analysis, U.S. Environmental Protection Agency, page 1, https://www.epa.gov/sites/production/files/2016-06/documents/ejtg_5_6_16_v5.1.pdf

E.O. 13045, *Protection of Children from Environmental Health Risks and Safety Risks (April 21, 1997)* makes it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children. EO 13045 established a Task Force that identified four priority areas of impacts to children: asthma, unintentional injuries, developmental disorders, and cancer. Impacts to children are considered separately because children may experience a different intensity of impact when compared to an adult exposed to the same action. As children's bodily systems are still under development, they are often more susceptible than adults to environmental hazards.

3.3.7.2 Existing Conditions

The socioeconomic and racial characteristics of the population within the GSA are based on data from the 2020 U.S. Census and 2020 American Community Survey's (ACS) 5-year dataset - the most recent available - to identify minority populations and low-income populations in the GSA. DOT Order 5610.2(a) defines "low-income" as "a person whose median household income is at or below the Department of Health and Human Services (HHS) poverty guidelines." The order defines "minority" as one of the following categories:

- Black – a person having origins in any of the black racial groups of Africa
- Hispanic or Latino – a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race
- Asian American – a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent
- American Indian and Alaskan Native – a person having origins in any of the original people of North America, South America (including Central America), and who maintains cultural identification through tribal affiliation or community recognition
- Native Hawaiian and Other Pacific Islander – persons having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands

The EJ module of AEDT was utilized to perform analysis of the GSA at the U.S. Census block group level, defining Census block groups for minority and low-income population as follows:

- A *disproportionate minority population Census Block Group* is a group having a minority population percentage greater than the average minority population percentage in the GSA. Based on the 2020 data, the average percentage of minority populations residing in the GSA was 61.5%. Therefore, every Census block group with a percentage of minority populations greater than 61.5% was identified as a Census block group of EJ concern.
- A *disproportionate low-income population Census Block Group* is a group having a low-income population percentage greater than the average low-income population percentage in the GSA. Based on the 2020 Poverty Guidelines identified by the HHS, the poverty threshold for a household of three persons was set at $21,720 for the 48 contiguous states, and therefore is applicable to the GSA. For the purposes of identifying low-income population census tracts, the HHS threshold of $21,720 was used. Based on 2020 data, the average percentage of low-income population residing in the GSA was

12.8%. Therefore, every Census block group with a percentage of low-income population greater than 12.8% is identified as a Census block group of EJ concern.

Table 3-7 presents the breakdown of minority and low-income population for the purposes of this EJ analysis.

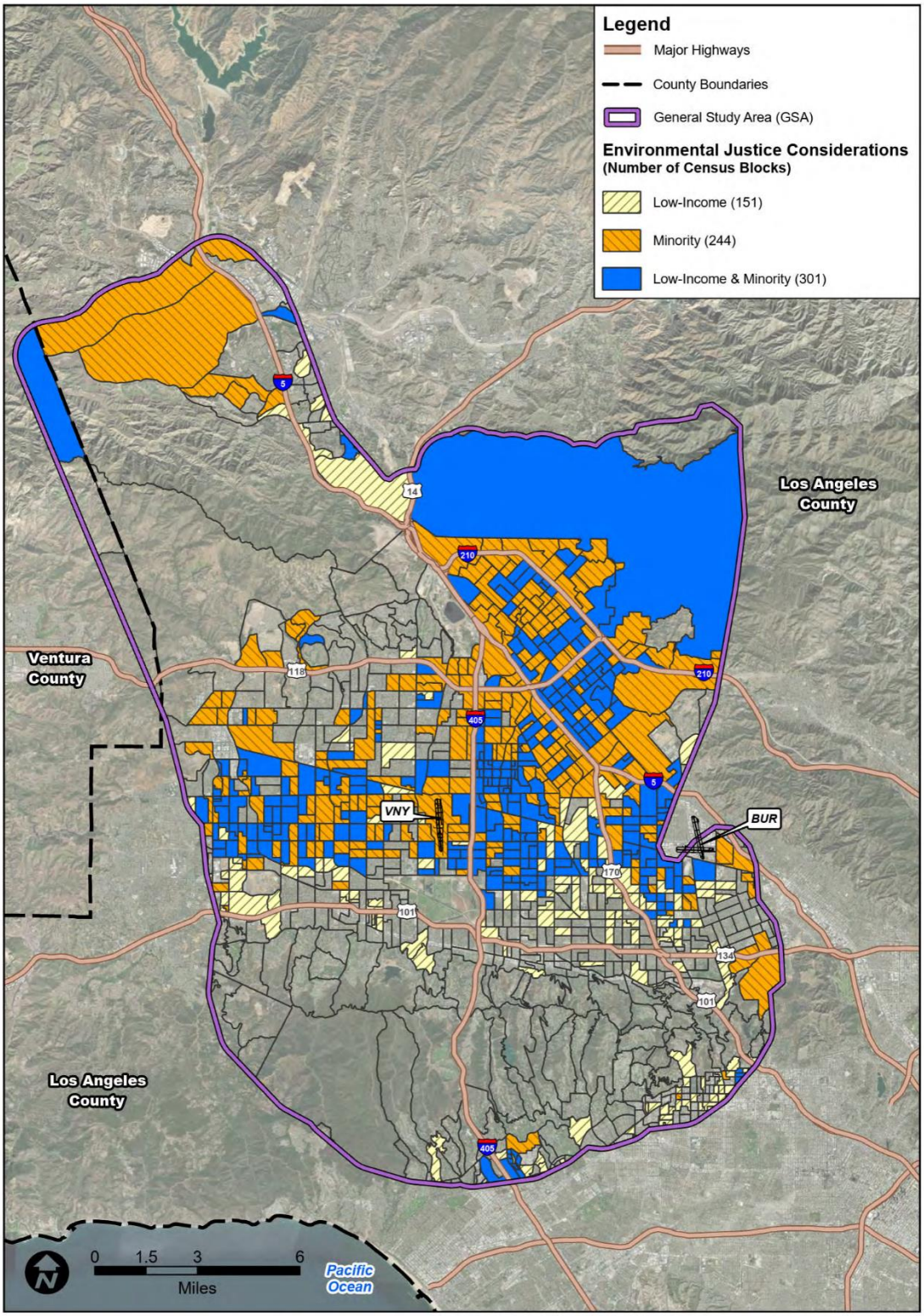
TABLE 3-7
STATISTICS ON LOW-INCOME AND MINORITY POPULATIONS WITHIN THE GSA

Demographic	Population	Percentage of Total
Total Population	1,735,326	100.0%
Minority Population[a]	**Population**	**Percentage of Total**
Total Minority Population[b]	1,067,868	61.5%
Hispanic or Latino (may be of any race)	746,705	43.0%
Black	99,086	5.7%
American Indian and Alaska Native	24,258	1.4%
Asian American	226,908	13.1%
Native Hawaiian and Pacific Islander	7,644	0.4%
Other or Two or More Races	391,408	22.6%
Low-Income Population	**Population**	**Percentage of Total**
Population Below Poverty Threshold of $18,310	222,183	12.8%
Census Block Groups	**Number of Census Block Groups**	**Percentage of Total**
Total Census Block Groups Intersecting GSA	1,120	100.0%
Census Block Groups Containing Disproportionate Minority Populations[c]	546	48.8%
Census Block Groups Containing Disproportionate Low-Income Populations[d]	466	41.6%
Census Block Groups Containing Disproportionate Minority and Low-Income Populations[e]	156	13.9%

Notes:
[a] Names as they appear in the U.S. 2020 Census data
[b] Includes all persons who qualify in one or more of the minority categories
[c] For EJ purposes, a disproportionate minority Census Block Group is defined as on that has a percentage of minority population greater than 61.5% (the minority population percentage of the GSA)
[d] For EJ purposes, a disproportionate low-income Census Block Group is defined as on that has a percentage of low-income population greater than 12.8% (the low-income population percentage of the GSA)
[e] A disproportionate minority and low-income Census Block Group is defined as a census block group in which both the percentage of minority population or the percentage of low-income population is higher than their respective percentages within the GSA.
Sources: Population Data Source: U.S. Census 2020 (population centroid data) accessed August 2023; prepared by RoVolus, 2023.

Figure 3-13 depicts the areas of EJ concern located within the GSA, derived from Census block groups. In examining **Figure 3-13**, it is important to note that population distribution is not necessarily uniform across a Census block group. For that reason, the actual number of minority or low-income persons impacted can be more or less than the total population represented by a single Census block group because impacts may vary throughout the Census block group. In addition, because EJ includes the entirety of Census block groups intersecting the GSA, the total population reported as part of EJ will not equal the total block-derived population located inside the GSA. The GSA contains many Census block groups that exceed EJ thresholds on all sides of BUR. However, these EJ Census block groups are particularly concentrated to the south and west of BUR, which are the primary areas of change due to the Alternatives.

Within these areas of change include Luther Burbank Middle School, which is directly off of the departure end of Runway 15. While today, most departures from Runway 15 turn westbound prior to overflying the school, the Alternatives change aircraft trajectories and could lead to additional overflights of the school. Given the high concentration of children at the school relative to other age groups, impacts associated with these additional overflights are evaluated relative to the study areas defined by the Task Force.



SOURCE: Esri; Prepared by Jacobsen Daniels, 2023

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Figure 3-13
Environmental Justice Census Block Groups Intersecting the General Study Area

3.3.8 Cumulative Impacts

Cumulative impacts refer to the impacts resulting from implementation of the Proposed Action that in tandem with other actions in the GSA would have the potential to affect the environment. The White House Council on Environmental Quality (CEQ) regulations define cumulative impacts as

> …effects on the environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.[20]

The CEQ regulations also state that cumulative impacts can result from individually minor, but collectively significant actions that take place over a period of time.

If implemented, the Proposed Action would be expected to change the departure paths for a subset of air traffic at BUR and has no effect on any activities occurring before the aircraft has taken off. The alternatives and related changes will be considered against past, present, and reasonably foreseeable future actions with direct or indirect effects on the human environment.

> For cumulative effects analysis to help the decision-maker and inform interested parties, it must be limited through scoping to effects that can be evaluated meaningfully. The boundaries for evaluating cumulative effects should be expanded to the point at which the resource is no longer affected significantly or the effects are no longer of interest to affected parties.[21]

Reasonably foreseeable future actions are considered projects included in planning documents that are expected to proceed (e.g., funding has been allocated) and are described with adequate detail to inform decision-makers and the public. While there is not a specific time frame defined as "reasonably foreseeable", actions that occur many years in the future are typically speculative and their details are not sufficiently defined for inclusion in a cumulative impacts analysis.

Because the Proposed Action concerns departure paths, aviation-related projects associated with airports within the GSA were emphasized when assessing cumulative impacts; as these projects would be more likely to generate impacts similar to the Proposed Action. Aside from BUR, VNY and WHP are within the GSA. VNY modifications of their departure paths, to resemble the departure paths prior to implementation of the Southern California Metroplex airspace redesign, are currently scheduled for publication in 2024. WHP is currently undertaking a visioning plan to reduce impacts on the surrounding community and amplify its economic benefits. The airport projects identified as occurring in the GSA are listed in **Table 3-8**.

[20] 40 CFR §1508.1(g)(3), 2023.

[21] Considering Cumulative Effects Under the National Environmental Policy Act, Council on Environmental Quality, p. 8, https://ceq.doe.gov/docs/ceq-publications/ccenepa/sec1.pdf

TABLE 3-8
AIRPORT PROJECTS WITHIN THE GSA

Airport Name	Identification Code	Ongoing/Completed Projects
Bob Hope Airport	BUR	FAA Road Pavement Rehabilitation
Bob Hope Airport	BUR	Lot A Pavement Rehabilitation
Bob Hope Airport	BUR	South of Area 13 Pavement
Bob Hope Airport	BUR	Taxiway A Rehabilitation
Bob Hope Airport	BUR	Taxiway C and D and General Aviation Ramp Rehabilitation
Bob Hope Airport	BUR	FAA Air Traffic Organization (ATO) SLAPP Area Navigation (RNAV) Two Departure
Bob Hope Airport	BUR	Burbank Bob Hope Airport – Replacement Terminal Project
Van Nuys Airport	VNY	VNY Jet Aviation Tenant Improvement Project
Van Nuys Airport	VNY	Van Nuys Airport RNAV SID Modification
Whiteman Airport	WHP	Re-envisioning Whiteman Airport Report

Sources: Burbank-Glendale-Pasadena Airport Authority, Proposed Replacement Terminal Project Final EIS, 2021; Los Angeles World Airports, Van Nuys Airport Management Report on Aircraft Noise and Operations, June 3, 2021; Los Angeles World Airports, Jet Aviation Tenant Improvement Project CEQA Initial Study, August 2017; County of Los Angeles, Public Works Department, 2023.

Non-aviation projects and plans within the GSA were also identified for consideration in the assessment of cumulative impacts. Regional and local plans for jurisdictions and agencies in the GSA were reviewed to identify projects which could contribute to cumulative impacts. While these plans have been identified from across the GSA, the environmental consequences from the evaluated impact categories in this EA will be considered relative to these projects to determine if any cumulative impacts would result with respect to the Proposed Action. Given that the project is entirely within the airspace around BUR, the potential for cumulative impacts for non-aviation projects and plans will be judged relative to any significant or reportable impacts from the considered impact categories. Non-aviation projects that have recently occurred or are expected to occur in the reasonably foreseeable future within the GSA are listed in **Table 3-9.**

TABLE 3-9 NON-AVIATION PROJECTS WITHIN THE GSA			
Project Name	**Description**	**Time Frame**	**Source**
Recent Past Projects			
Van Nuys Fire Station No. 39 (E170094B)	Construction of a replacement fire station on two vacant lots located on the corner of Oxnard Street and Vesper Avenue in Van Nuys	2020	City of Los Angeles, Bureau of Engineering, 2023
The Old Road - 950' S/O Henry Mayo Drive to 1500' S/O Rye Canyon Road	Resurfacing of 1.5 miles of a major urban road to repair deteriorating pavement	2020	County of Los Angeles, Public Works Department, 2023
Castaic - Hillcrest Parkway, et al.	Micro-milling to improve road surface conditions and durability	2020	County of Los Angeles, Public Works Department, 2023
The Old Road - Royal Road to Oak Valley Road	Resurfacing of 0.7 miles of major urban roads	2021	County of Los Angeles, Public Works Department, 2023
Del Sur - Ralphs Ranch Road	Preservation of 7.3 miles of a major road	2021	County of Los Angeles, Public Works Department, 2023
Kagel Canyon Road, et al. (Phase II)	Micro-milling of 1.8 miles of residential roads to improve road surface conditions and durability	2021	County of Los Angeles, Public Works Department, 2023
Stevenson Ranch Tract Phase 3 - Stevenson Ranch Concrete Repair	Repairs to uplifted/damaged sidewalks, driveways, and curb & gutter; and ADA curb ramp upgrades	2021	County of Los Angeles, Public Works Department, 2023
Stevenson Ranch Tract (Phase II)	Micro-milling to improve road surface conditions and durability	2021	County of Los Angeles, Public Works Department, 2023
Brighton to Roxford Double Track Project	Addition of a second main line track to an 11-mile single track transportation corridor in east San Fernando Valley	2021	Metro, 2023
Avion Business Park Construction	Development of a 61-acre parcel of land adjacent to the northeast quadrant of BUR property into commercial/industrial use	2022	City of Burbank, 2023
Sierra Highway (Phase II) - Vasquez Canyon Road to 1200' N Davenport Road	Rehabilitate 2.7 miles of a rural major road to repair the deteriorating pavement	2022	County of Los Angeles, Public Works Department, 2023

TABLE 3-9 NON-AVIATION PROJECTS WITHIN THE GSA			
Big Tujunga Canyon Road	Big Tujunga Canyon Road	2022	County of Los Angeles, Public Works Department, 2023
Aliso Creek - Limekiln Creek Restoration Project	Implementation of water quality improvements including pretreatment devices; diversion and treatment of all dry weather and a portion of wet weather flows; construction of biofiltration basins; restoring vegetation, and subsurface irrigation.	2023	City of Los Angeles, Bureau of Engineering, 2023
Robertson Sidewalk and Tree Replacement Project	Tree removal and replacement and sidewalk repair along the length of Robertson Boulevard within the corporate limit of the City of Beverly Hills	2023	City of Beverly Hills, Public Works Department, 2023
Current Projects			
Interstate-5 Widening	Construction of new high-occupancy-vehicle lanes in each direction on I-5 between Magnolia Boulevard and Buena Vista Street	Ongoing	Burbank-Glendale-Pasadena Airport Authority
Empire Ave Interchange Project	Reconstruction of the I-5 interchange at Empire Ave	Ongoing	Burbank-Glendale-Pasadena Airport Authority
Burbank Airport South Metrolink Station Pedestrian Bridge	Construction of a pedestrian bridge over Empire Ave	Ongoing	Burbank-Glendale-Pasadena Airport Authority
Delta Ramp Expansion	Expansion of the Delta ramp at BUR north towards Sherman Way by 87,000 square feet	Ongoing	Burbank-Glendale-Pasadena Airport Authority
I-210 Connected Corridors Pilot Project	Integration of local jurisdiction traffic control systems and transit management systems, upgrades to various arterial signals, installation of vehicle detector stations, performance measure devices, communication lines, and cameras as well as the development of an advanced traveler information system	Ongoing	Caltrans District 7
Interstate 110 Comprehensive Multimodal Corridor Plan	Program to develop a strategy and identify a list of transportation projects that will reduce congestion, reduce greenhouse gas emissions, and improve livability through operational improvements, technological advancements, and increased multi-modal options along the 110 corridor	Ongoing	Caltrans District 7

TABLE 3-9 NON-AVIATION PROJECTS WITHIN THE GSA			
SR-2 Terminus Project	Program to develop a balanced transportation system that better serves local and regional transportation needs through improved management of traffic flow; enhanced pedestrian and non-motorized accessibility and safety at the SR-2 terminus; and creation of a context sensitive designed community open space in the immediate vicinity	Ongoing	Caltrans District 7
Interstate 210 Pavement Project	Replacement of pavement on 52 lanes miles of I-210 from State Route Wheatland Ave to Interstate 5	Ongoing	Caltrans District 7
US 101 Median Barrier Replacement Project	Replacement of the existing concrete median barrier between Pilgrimage Bridge in Hollywood and Valley Circle Boulevard in Woodland Hills	Ongoing	Caltrans District 7
Santa Monica Blvd Bike Lane Project	Bicycle lane project on Santa Monica Blvd (SR-2), in the West LA neighborhood of Los Angeles	Ongoing	Caltrans District 7
Safe Sidewalks LA	30-year, $1.4 billion program to construct sidewalks	Ongoing	City of Los Angeles, Bureau of Engineering, 2021
Sepulveda Basin Vision Plan Project	Long-term strategic plan for improvements to recreation and ecology as well as multi-modal access	Ongoing	City of Los Angeles, Bureau of Engineering, 2023
Hollywood Walk OF Fame Renovation Project	Renovations to the full extent of the Hollywood Walk of Fame	Ongoing	City of Los Angeles, Bureau of Engineering, 2023
LA River Valley Bikeway and Greenway Design Completion Project (Vanalden to Balboa)	Construction of a 2.9-mile bikeway and greenway facilities along the LA River in the West San Fernando Valley	Ongoing	City of Los Angeles, Bureau of Engineering, 2023
Lopez Canyon Hazardous Fuels Reduction	Brush clearance of approximately 40 acres of open space at Lopez Canyon Landfill to reduce wildfire risks	Ongoing	City of Los Angeles, Bureau of Engineering, 2023
Magnolia Boulevard (North) - Cahuenga Boulevard to Vineland Avenue Project	Streetscape and other pedestrian improvements	Ongoing	City of Los Angeles, Bureau of Engineering, 2023
WILSHIRE BLVD SUBWAY STREETSCAPE	Streetscape enhancements adjacent to subway stations	Ongoing	City of Beverly Hills, Public Works Department, 2023
STREET TREE REMOVAL AND REPLACEMENT	Ongoing removal and replacement of trees per the adopted Street Tree Master Plan due to the decline or damage of the existing stock	Ongoing	City of Beverly Hills, Public Works Department, 2023
Water Main Replacement Project on Coldwater Cañon Drive	Replacement of approximately 7,300 feet of aging water line, and installation of approximately 3,000 feet of a new transmission pipeline	Ongoing	City of Beverly Hills, Public Works Department, 2023

TABLE 3-9 NON-AVIATION PROJECTS WITHIN THE GSA			
Castaic - Hasley Hills South Concrete Repair	Repair uplifted/damaged sidewalk, driveways, curb & gutter, and ADA curb ramp upgrades	Ongoing	County of Los Angeles, Public Works Department, 2023
Re-envisioning Whiteman Airport Report	Environmental studies and community outreach to identify objectives that will reduce environmental impacts, realize economic benefits, and improve community relations	Ongoing	County of Los Angeles, Public Works Department, 2023
La Brea Av Bus Priority Lanes Project	Addition of bus priority lanes in both directions on La Brea Av, between Sunset Blvd and Olympic Blvd	Ongoing	Metro, 2023
Purple (D Line) Extension Transit Project	Seven new stations and a reliable, high-speed connection between downtown and the Westside	Ongoing	Metro, 2023
Sepulveda Bl (Line 234) Bus Lanes Project	Additional bus lanes for Metro Line 234	Ongoing	Metro, 2023
I-405 Comprehensive Multimodal Corridor Plan (CMCP)	Plan to integrate multiple modes of transportation to alleviate congestion in the I-405 corridor	Ongoing	Metro, 2023
I-5 North County Enhancements Project	Enhancements to augment freeway safety by increasing access for merging and offering trucks a separate lane from the general-purpose lanes	Ongoing	Metro, 2023
Planned Future Projects			
North San Fernando Valley Transit Corridor	BRT Network Improvements	2023	Metro, 2023
La Crescenta-Montrose - Prospect Avenue, et al. (Phase II)	Preservation of 7.4 miles of residential roads	2024	County of Los Angeles, Public Works Department, 2023
La Crescenta-Montrose - Alabama Av, et al	Preservation of 5.8 miles of residential roads	2024	County of Los Angeles, Public Works Department, 2023
East San Fernando Valley Light Rail Transit Project	A 6.7-mile at-grade alignment with 11 new transit stations, 10 traction power substations, and a new maintenance & storage facility	2024	Metro, 2023
K Line Northern Extension	Proposed K Line extension to connect the Crenshaw District, Mid-City, West Hollywood, and Hollywood	2024	Metro, 2023
G Line Improvements Project	Upgrade to the existing G Line with grade separations on major streets, improved signal technology, electronic bus connectivity and a four-quadrant gating system	2024	Metro, 2023
North Hollywood to Pasadena Transit Corridor	BRT connecting the cities of Los Angeles (North Hollywood and Eagle Rock communities), Burbank, Glendale, and Pasadena	2024	Metro, 2023

TABLE 3-9 NON-AVIATION PROJECTS WITHIN THE GSA			
Wilshire Boulevard et al	Improvements to 2.3 miles of roadway	2025	County of Los Angeles, Public Works Department, 2023
Little Tujunga Cyn Rd Over Buck Cyn 53C-0967	Bridge replacement	2025	County of Los Angeles, Public Works Department, 2023
Stevenson Ranch - Stevenson Ranch Parkway between Pico Canyon Road and The Old Road	Installation of plastic bollards along Stevenson Ranch Parkway between Pico Canyon Road and The Old Road where a buffered bike lane currently exists	2025	County of Los Angeles, Public Works Department, 2023
The Old Rd over Santa Clara River and SPT CO Bridge et al	Road improvements and a bridge replacement	2025	County of Los Angeles, Public Works Department, 2023
Foothill Boulevard Traffic Signal Synchronization Project	Upgrades to 26 traffic signals	2025	County of Los Angeles, Public Works Department, 2023
Castaic - Green Hill Drive et al	Reconstruction of 6.4 miles of residential roads	2027	County of Los Angeles, Public Works Department, 2023
La Crescenta-Montrose - La Crescenta Avenue, et al.	Rehabilitation of 4.1 miles of major roads	2028	County of Los Angeles, Public Works Department, 2023
California High Speed Rail (Proposed Station)	Construction of a station east of a proposed replacement passenger terminal building and proposed tunnel under the airport property	2029	Burbank-Glendale-Pasadena Airport Authority
Little Tujunga Cyn Rd over Pacoima Ck (53C0969)	Bridge replacement	2029	County of Los Angeles, Public Works Department, 2023
Los Angeles River Bike Path Phase 2	Construction of a bike path along the Los Angeles River between Lankershim Blvd and Barham Blvd.	2030	County of Los Angeles, Public Works Department, 2023
Sepulveda Transit Corridor Project	Introduction of transit options between the San Fernando Valley and the Westside	2033	Metro, 2023
Sources: Burbank-Glendale-Pasadena Airport Authority, 2023; Caltrans District 7, 2023; City of Beverly Hills, Public Works Department, 2023; City of Burbank, 2023; City of Los Angeles, Bureau of Engineering, 2023; County of Los Angeles, Public Works Department, 2023; Federal Aviation Administration, 2023; Los Angeles World Airports, 2023; Metro, 2023.			

CHAPTER 4 ENVIRONMENTAL CONSEQUENCES

This chapter describes the potential environmental consequences associated with the No Action Alternative and Alternatives A and B in accordance with FAA Order 1050.1F. The purpose of the Proposed Action is to maintain the safety and efficiency of the NAS while designing and developing the new procedures set forth in the Settlement Agreement. The potential impacts associated with the Proposed Action are determined by comparing Alternatives A and B with the No Action Alternative.

4.1 Air Quality

This section presents a summary of the analysis of air quality impacts within the GSA under the No Action Alternative and Alternatives A and B.

4.1.1 Overview of Impacts

Implementation of Alternative A would result in an increase of 0.7% in the amount of fuel burned and emissions emitted within the GSA below the mixing height compared to the No Action Alternative, while implementation of Alternative B would result in a very small decrease of less than 0.1%. Increased emissions of criteria pollutants would not reach the *de minimis* thresholds that the EPA defines in the General Conformity Rule.[22] As a result, implementation of either of Alternatives A and B would not have a significant impact on air quality.

4.1.2 Methodology

Emissions standards are set for criteria pollutants by the EPA, as directed in Section 108 of the CAA. Areas or regions where these emissions standards are not met for one or more criteria pollutants are considered to be in *nonattainment*. Areas that were formerly in nonattainment status, but have seen improvements in emissions levels that allow them to meet the standards, are considered to be in *maintenance* status. The nonattainment and maintenance status of the two counties in the GSA is described in **Section 3.3.1**. It is important to note that the two counties are in different nonattainment areas (NAA). In an abundance of caution, the analysis for General Conformity assumes all project-related emissions occur in Los Angeles County, which is the nonattainment area with the greater air quality challenges.

Section 176(c) of the CAA specifies that Federal actions taking place in locations that are nonattainment or maintenance for one or more NAAQS must conform to the conditions of the applicable SIP, which is known as the General Conformity Rule. 40 CFR 93.153(b)(1) and (2) specifies thresholds below which emission rates associated with a federal action are unlikely to cause or contribute to a violation of the NAAQS or delay timely attainment of the NAAQS. These thresholds are defined by EPA as *de minimis* thresholds.

[22] 40 CFR 93.150 (b) (1) and (2)

The SCAB is in nonattainment with CAA standards for ozone and $PM_{2.5}$, while for PM_{10} and CO, the region is in maintenance status. *De minimis* values are shown in **Table 4-1** for NAAs, and **Table 4-2** for maintenance areas.

TABLE 4-1
CRITERIA POLLUTANT *DE MINIMIS* LIMITS – NONATTAINMENT AREAS (NAA)

Criteria Pollutant	Tons per year
Ozone: Volatile organic compounds (VOC) or oxides of nitrogen (NOx):	
Serious NAAs	50
Severe NAAs	25
Extreme NAAs	10
Other ozone NAAs outside an Ozone Transport Region (OTR)	100
Other ozone NAA's inside an OTR:	
VOC	50
NO_X	100
Carbon Monoxide (CO):	100
Sulphur dioxide (SO_2) or nitrogen dioxide (NO_2):	100
Particulate matter with a diameter of 10 microns or less (PM_{10}):	
Moderate NAAs	100
Serious NAAs	70
Particulate matter with a diameter of 2.5 microns or less ($PM_{2.5}$) (direct emissions, SO_2, NO_X, VOC, and Ammonia):	
Moderate NAAs	100
Serious NAAs	70
Lead (Pb): All NAAs	25

Source: 40 CFR Subpart B 93.153(b)(1)--prepared by RoVolus, 2023

TABLE 4-2
CRITERIA POLLUTANT *DE MINIMIS* LIMITS – MAINTENANCE AREAS

Criteria Pollutants – Maintenance Areas	Tons per year
Ozone (NO_X), SO_2 or NO_2:	
All maintenance areas	100
Ozone (VOCs)	
Maintenance areas inside an OTR	50
Maintenance areas outside an OTR	100
CO: All maintenance areas	100
PM_{10}: All maintenance areas	100
$PM_{2.5}$ (direct emissions, SO_2, NO_X, VOC, and Ammonia)	100
Pb: All maintenance areas	25

Source: 40 CFR Subpart B 93.153(b)(1)--prepared by RoVolus, 2023

Additionally, Alternative A does not fall within the list published by the FAA of actions that are presumed to conform with the NAAQS.[23] As a result, *de minimis* thresholds were used to determine potential air quality impacts resulting from Alternative A.

4.1.3 Potential Impacts

AEDT analysis indicated that implementation of Alternative A would result in a 0.7% increase in fuel burn within the GSA when compared with the No Action Alternative. This is primarily due to Alternative A requiring aircraft fly a longer straight-out leg after passing the departure end of Runway 15 than is required with SLAPP TWO and OROSZ TWO. The two current RNAV procedures allow aircraft to begin the right turn upon reaching the departure end of Runway 15 or upon reaching 400 feet AGL (whichever occur latest). Conversely, SLAPP THREE and OROSZ THREE require aircraft to maintain the runway heading for longer, resulting in a slightly longer total track over the ground for most departures.

The impact of Alternative B on operations, when compared with the No Action Alternative, was very slight—only 3% of Runway 15 departures would be affected. Aircraft that do use the VNY3 departure in Alternative B are required to turn three degrees further to the west than aircraft flying SLAPP TWO and OROSZ TWO. Since most aircraft are unaffected and would continue to turn to the west and north, this results in only slightly shorter flight paths.

AEDT was also used to determine if the increase of emissions exceeded the *de minimis* thresholds. **Table 4-3** below shows a comparison of criteria pollution emissions below the mixing height within the GSA between the No Action Alternative, Alternative A, and Alternative B.

[23] 72 FR 41576, July 30, 2007

TABLE 4-3
COMPARISON OF CRITERIA POLLUTANT EMISSIONS
BELOW MIXING HEIGHT
(SHORT TONS PER YEAR)

Pollutant	No Action	Alternative A	Alternative B	Largest Increase
CO	114.78	114.79	114.78	+0.01 (Alt A)
VOC	6.27	6.29	6.27	+0.02 (Alt A)
NO_x	337.4	340.6	337.4	+3.2 (Alt A)
SO_x	22.83	22.94	22.83	+0.11 (Alt A)
$PM_{2.5}$	2.15	2.17	2.15	+0.02 (Alt A)
PM_{10}	2.15	2.17	2.15	+0.02 (Alt A)

Source: Prepared by RoVolus, 2023

The net change in pollutant emissions below the mixing height for the Proposed Action is below the *de minimis* thresholds for all criteria pollutants. Implementing either of the alternatives would not cause the *de minimis* thresholds applicable to the GSA for any pollutant to be exceeded. Based on the above analysis, adverse air quality impacts would not occur. Therefore, there would not be a significant adverse impact to air quality and a conformity determination is not required.

4.2 Climate

4.2.1 Overview of Impacts

While fuel burn would slightly increase under Alternative A when compared with the No Action Alternative (due to the longer initial departure leg), there is no significance threshold for GHG emissions set by FAA Order 1050.1F. Regardless of the lack of a threshold, this action is not anticipated to cause significant effects on climate. The corresponding increase in CO_2 emissions is minor in the context of current BUR emissions, as well as regional and nationwide GHG emissions. As a result, increases in GHG associated with increased fuel burn resulting from Alternative A would not be significant contributors to climate effects.

Fuel burn would remain essentially the same under Alternative B when compared to the No Action Alternative due to similarities in flight tracks that aircraft using the VNY3 departure would fly, as compared to those same aircraft flying SLAPP TWO or OROSZ TWO. Correspondingly, fuel burn would result in no major reduction in CO_2 emissions and would not significantly contribute to atmospheric GHG levels.

4.2.2 Methodology

In accordance with FAA guidance, AEDT was run to calculate fuel burn and CO_2 emissions for aircraft operations below the mixing height for the No Action Alternative, Alternative A, and Alternative B. As all emissions associated with the modeled Alternatives result from the direct aircraft emissions, CO_2-equivalent (CO_2e) emissions are assumed to be equivalent to direct CO_2 emissions.

4.2.3 Potential Impacts

The flight path changes in Alternative A cause a marginal increase in the total miles flown by aircraft and result in additional fuel required for each departure operation. Based on AEDT results, total annual fuel burn in Alternative A is 0.7% higher than in the No Action Alternative. This represents an increase of approximately 127 short tons of fuel on an annualized basis, with total fuel burn within the GSA rising from 19,492 tons in the No Action Alternative to 19,619 tons in Alternative A. In terms of CO_2 emissions, this increase in fuel burn corresponds with an annual increase of approximately 400 short tons (363 metric tons) of CO_2. This represents a small increase in estimated CO_2 emissions at BUR relative to area sources within the state of California (more than 369 million metric tons of CO_2 emissions annually).[24]

The flight path changes in Alternative B cause a marginal decrease in the total miles flown by aircraft arriving and departing at BUR. Based on AEDT results, total annual fuel burn in Alternative B is unchanged from the No Action Alternative. This lack of change in fuel burn corresponds with no annual change in CO_2 emissions.

4.3 Biological Resources – Wildlife Only

4.3.1 Overview of Impacts

Implementation of the Proposed Action takes place completely within BUR boundary, where there is no habitat suitable for protected species. Additionally, as the Proposed Action does not result in any change to surface conditions that could result in disturbance, there would be no impacts on territorial or waterborne species. The Proposed Action would not result in any disturbance of protected species habitat or habitat fragmentation, nor the take of any species. As a result, implementation of either Alternative A or Alternative B would not have a significant impact on biological resources.

4.3.2 Methodology and Significance Threshold

Exhibit 4-1 of FAA Order 1050.1F provides the FAA's significance threshold for biological resources (including fish, wildlife, and plants):

> The USFWS or the NMFS determines that the action would be likely to jeopardize the continued existence of a Federally listed threatened or endangered species, or would result in the destruction or adverse modification of federally-designated critical habitat.

The FAA has not established a significance threshold for non-listed species.

In addition to the above threshold, FAA Order 1050.1F outlines additional factors to consider in evaluating the context and intensity of potential environmental impacts for biological resources, including situations in which a proposed action would have the potential for:

[24] Current California GHG Emission Inventory Data (2000-2020), California Air Resources Board (https://ww2.arb.ca.gov/ghg-inventory-data, retrieved August 2023)

- A long-term permanent loss of unlisted plant or wildlife species, i.e., extirpation of the species from a large project area (e.g., a new commercial service airport).
- Adverse impacts on special status species (e.g., state species of concern, species proposed for listing, migratory birds, bald and golden eagles) or their habitats.
- Substantial loss, reduction, degradation, disturbance, or fragmentation of native species' habitats or their populations.
- Adverse impacts on species' reproductive success rates, natural mortality rates, non-natural mortality (e.g., road kills and hunting), or ability to sustain the minimum population levels required for population maintenance.

4.3.3 Potential Impacts

4.3.3.1 No Action Alternative (Maintain Current Operations)

Current operations utilizing SLAPP TWO and OROSZ TWO procedures would be maintained under this alternative; therefore, there would be no impacts to biological resources. Wildlife is actively managed at BUR through the Bob Hope Airport WHMP to reduce habitat suitability and maintain a safe operating environment (AMEC 2014). Based on the above, the No Action Alternative would have no short- or long-term effects on biological resources within the GSA and noise impact area.

4.3.3.2 Alternative A

Alternative A utilizes the SLAPP THREE and OROSZ THREE departure procedures, which require significant changes in horizontal trajectories in the initial segment relative to the current SLAPP TWO and OROSZ TWO procedures. While the current procedures (No Action Alternative) require the turn to 210° after reaching 400 feet AGL or the end of Runway 15 (whichever occurs latest), Alternative A requires a straight-out leg at 155° prior to intercepting the 214° course to JAYTE which occurs at or above 2,500 feet AGL. Therefore, this results in aircraft flying further east and south than they do under the No Action Alternative, as well as within a narrower flight path. Together, these two proposed changes result in noise impacts south and west of BUR (see **Section 4.6**). Although protected species and Critical Habitat are present within the GSA, Alternative A would not affect protected species and Critical Habitat within the noise impact area as the change in flight path and noise impacts would occur over a highly developed area with no suitable habitat for protected species. Furthermore, this alternative would have no impact on bald or golden eagles since there are no known nests and no known occurrences within the GSA or noise impact area.

As mentioned in **Section 3.3.3**, approximately 74% of all bird strikes occur below 500 feet AGL especially during the months of July through October when many birds have recently fledged[25]. As the flight paths for the No Action Alternative and Alternative A diverge at the departure end of the runway, Alternative A would require a change in flight paths below 500 feet AGL for most aircraft. However, as mentioned above, the change in flight path occurs over a highly developed

[25] Dolbeer, Richard A. 2006. Height Distribution of Birds Recorded by Collisions with Civil Aircraft. USDA National Wildlife Research Center - Staff Publications. 500.

area where there is no suitable habitat for protected species. Therefore, the change in flight path from this alternative is not expected to result in take of birds, eggs, or nests under the MBTA.

Additionally, birds are known to be sensitive to noise disturbance when exposed to repetitive aircraft overflights.[26] Research indicates that impacts to grebes, raptors, and waterfowl from low flying aircraft were brief and not detrimental to reproductive success[27,28,29]. Studies have documented the following effects from noise: altered vocal behavior to mitigate masking, reduced abundance in noisy habitats, changes in vigilance and foraging behavior, and impacts on individual fitness and the structure of ecological communities.[30] Although there would be noise impacts resulting from Alternative A, MBTA species with the potential to occur within the noise impact area are habituated to a highly urbanized environment with high ambient noise levels. One study found that birds that occur near major airports conduct their down singing time earlier in the morning to minimize overlap with periods of concentrated aircraft noise.[31] Therefore, the increased noise impact resulting from this alternative are not expected to result in take of birds, eggs, or nests under the MBTA.

Based on the above, Alternative A would have only minimal short- and long-term effects on biological resources within the GSA and noise impact area.

4.3.3.3 Alternative B

For Alternative B, 3% of Runway 15 departures currently flying SLAPP TWO and OROSZ TWO procedures would fly the VNY3 departure procedure, which has a very similar initial segment as SLAPP TWO and OROSZ TWO. However, in the initial segment of Alternative B, the VNY3 departure procedure requires an initial turn to 213° while the SLAPP TWO/OROSZ TWO departure procedures utilized in the No Action Alternative require a turn to 210°. Given the very minor change in heading direction, this change would only result in a significant noise impact contained generally within BUR property, which would have no impact to protected species and Critical Habitat. Therefore, Alternative B would have no effect on protected species and Critical Habitat within the GSA as there would be only a negligible change in the flight path over the ground and no significant noise impacts resulting from this alternative (see **Section 4.6, Noise and Noise-Compatible Land Use**). Similar to Alternative A, Alternative B would have no impact on bald or golden eagles since there are no known nests and no known occurrences within the GSA.

[26] Manci, K.M., D.N. Gladwin, R. Villella & M.G. Cavendish. 1988. Effects of aircraft noise and sonic booms on domestic animals and wildlife: A literature synthesis. U.S. Fish and Wildlife Service National Ecology Research Center, Ft. Collins, CO, NERC-88/29. 88 pp.

[27] Smith, D. G., D.H. Ellis, & T.H. Johnson. 1988. Raptors and aircraft. Pages 360-367 in R.L. Glinski, B.G. Pendleton, M.B. Moss, M.N. LeFranc, Jr., B.A. Millsap, & S.W. Hoffman, eds. Proceedings of the Southwest Raptor Management Symposium and Workshop. National Wildlife Federation, Washington, DC.

[28] Ellis, D.H., C. Ellis, & D. Mindell. 1991. Raptor Responses to Low-level Jet Aircraft and Sonic Booms. Environmental Pollution 74:53-83.

[29] Grubb, T.G. and W.W. Bowerman. 1997. Variations in Breeding Bald Eagle Responses to Jets, Light Planes and Helicopters. Journal of Raptor Research 31:213-222.

[30] Shannon, G., M.F. McKenna, L.M. Angeloni, K.R. Crooks, K.M. Fristrup, E. Brown, K.A. Warner, M.D. Nelson, C. White, J. Briggs, S. McFarland, & G. Wittermyer. 2016. A synthesis of two decades of research documenting the effects of noise on wildlife: Effects of anthropogenic noise on wildlife. Biological Reviews 91: 982–1005.

[31] Gil, D., M. Honarmand, J. Pascual, E. Perez-Mena, & C. M. Garcia. 2015. Birds living near airports advance their dawn chorus and reduce overlap with aircraft noise. Behavioral Ecology 26(2): 435-443.

The U.S. Department of Interior's legal opinion on the MBTA states, "the take [killing] of birds resulting from an activity is not prohibited by the Migratory Bird Treaty Act when the underlying purpose of that activity is not to take birds" (December 2017). Since there is no significant change in the flight path over the ground and no significant noise impact, Alternative B would not result in take of birds, eggs, or nests under the MBTA. Additionally, this alternative presents little potential for significant unintentional harm to MBTA bird populations since it does not involve removal of trees, riparian vegetation, or structures that would be expected to provide suitable nesting habitat. Additionally, as mentioned in **Section 3.3.3**, the majority of all bird strikes occur below 500 feet AGL, which is located in close proximity to BUR, and BUR is already managed for aircraft safety to minimize bird attractants. Based on the above, Alternative B would have no short- or long-term effects on biological resources within the GSA and noise impact area.

4.4 Department of Transportation Act, Section 4(f)

4.4.1 Overview of Impacts

In considering the potential impacts on Section 4(f) properties, the significance threshold defined in FAA Order 1050.1F says that a significant impact would occur when "[t]he Action involves more than a minimal physical use of a Section 4(f) resource or constitutes a 'constructive use' based on an FAA determination that the aviation project would substantially impair the Section 4(f) resource." As the Proposed Action is an airspace project and has no direct interaction with any resources on the ground, there are no physical use or direct impacts that are expected from the Proposed Action. As discussed in **Section 3.4**, a constructive use would occur when a project would produce an effect, such as excessive noise, that would result in substantial impairment to a property where the features of that property are substantially diminished. When considering constructive use impacts, special consideration must be made for any Section 4(f) resource where a quiet setting is a generally recognized purpose and attribute of the resource.

4.4.2 Methodology

The FAA considered the possibility of causing a constructive use in a Section 4(f) property by considering whether there were any significant or reportable increases in the noise at any property within the GSA. These properties were also evaluated with the same noise increase data for any noise sensitive areas within the Section 4(f) properties that have a quiet setting as an attribute. For each of the 627 Section 4(f) properties, a centroid at the center of each property was generated and the noise impact was calculated at each point for the No Action Alternative, Alternative A, and Alternative B. This noise impact was compared to the noise exposure levels identified in FAA Order 1050.1F, where a change of 1.5 dB in the DNL 65 dB or higher noise exposure level is considered significant, and a change of 3.0 dB in the DNL 60 to less than 65 dB noise exposure level or a change of 5.0 dB in the DNL 45 to less than 60 dB noise exposure level is considered as reportable.

For these Section 4(f) centroids, there were no significant noise impacts (increases of 1.5 dB in the DNL 65 or higher noise exposure level) or reportable noise impacts (increases of 3.0 dB in the DNL 60 to less than 65 dB noise level and increases of 5.0 dB in the DNL 45 to less than 60 dB noise exposure level) found within the GSA. This includes national, state, and local parks as well as state forests, and state and local refuges that were assessed as part of the analysis. The

detailed visual analysis described in **Section 3.4** also indicates that there would be only a limited visual impact throughout the GSA which would not substantially impair any Section 4(f) resource.

4.4.3 Potential Impacts

As a result, it is concluded that neither Alternative A nor Alternative B would cause a constructive use for any Section 4(f) property. As a result, neither Alternative A or Alternative B would cause a significant impact.

4.5 Historical, Architectural, Archeological, and Cultural Resources - Historic, Architectural, and Cultural Resources Only

4.5.1 Overview of Impacts

In considering the potential impact on Historical, Architectural, Archeological, and Cultural Resources, the significance threshold defined in the Desk Reference to FAA Order 1050.1F says that a significant impact would occur when the "… *project would:*

- *physically destroy or damage the property;*
- *alter the property in a way that is inconsistent with the Secretary of the Interior's Standards for Treatment of Historic Properties (see 36 CFR Part 68);*
- *remove the property from its historic location;*
- *change the character of the property's use, or of physical features within the property's setting that contribute to its historic significance;*
- *introduce an atmospheric, audible, or visual feature to the area that would diminish the integrity of the property's significant historic features (including its setting, provided the setting has been identified as a contributing factor to the property's historical significance);*
- *result in neglect of a property which would cause its deterioration; or*
- *result in the transfer, sale, or lease of a property out of federal ownership or control without adequate protection to ensure the long-term preservation of the property's historic significance.*"

As the Proposed Action is an airspace project and has no direct interaction with any resources on the ground, there are no physical use or direct impacts that are expected from the Proposed Action. As discussed in **Section 3.5**, a constructive use would occur when a project would produce an effect, such as excessive noise, that would result in substantial impairment to a property where the features of that property are substantially diminished. When considering constructive use impacts, special consideration must be made for any Section 106 resource where a quiet setting is a generally recognized purpose and attribute of the resource.

4.5.2 Methodology

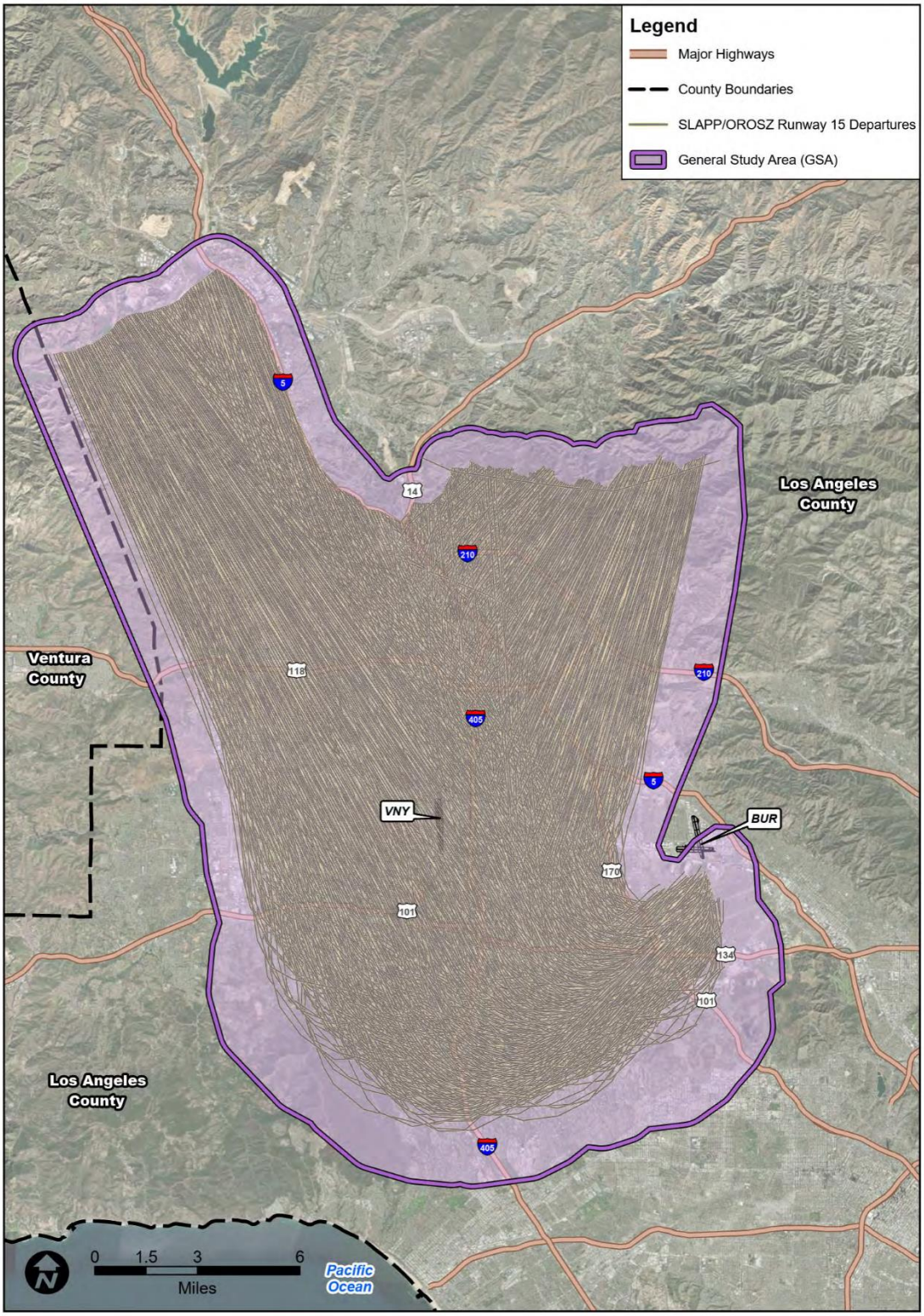
4.5.2.1 Area of Potential Effects

Pursuant to 36 CFR 800.4, the FAA is consulting with the California SHPO to develop an APE for the Proposed Action. An APE is defined as

> …the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.[32]

The proposed APE for the project includes the area where flight departures from Runway 15 are most heavily concentrated. **Figure 4-1** shows the Proposed Action APE. This APE considered the entire area where the concentration of overflights is likely to be altered by the Proposed Action, and considered where noise and visual impacts from the Proposed Action are expected to occur.

[32]36 CFR 800.16(d), https://www.achp.gov/sites/default/files/regulations/2017-02/regs-rev04.pdf



SOURCE: Esri; Prepared by Jacobsen Daniels, 2023

Proposed Settlement Agreement Departure Procedure Amendments at Bob Hope "Hollywood Burbank" Airport Environmental Assessment

Figure 4-1
Proposed APE Graphic

4.5.2.2 Identification of Historic Properties

After establishing the APE, national, state, and local databases were referenced to develop a list of known historic properties that are listed in or have been determined eligible for listing in the NRHP. Additionally, the FAA requested input from the California SHPO to identify additional listed or eligible historic properties not currently identified on the databases noted above. This analysis yielded 685 historic properties within the APE.[33] These properties are listed in **Appendix I.**

This list was further refined to identify those historic properties whose significance depends in whole, or in part, upon a setting that is sensitive to auditory or visual changes that could result from the Proposed Action. Examples of historic properties within this sensitive sub-group include:

- isolated properties where a cultural landscape is part of the property's significance;
- rural historic districts;
- outdoor spaces designed for meditation or contemplation;
- certain traditional cultural properties in continuous use;
- sacred spaces such as cemeteries, places of worship and sites of religious significance to tribes;
- parks and open recreational lands;
- historic properties that include designed or vernacular landscapes; and
- and areas culturally significant to tribes and other distinct populations.

The list of listed and eligible National Register properties was filtered to include property types that may be sensitive to changes in noise or overhead visual changes. This analysis yielded a sub-group of 515 potentially sensitive historic properties that are listed or are eligible for listing on the National Register and are located within the APE. These properties are listed by name along with their NRHP-designated area of significance and city in **Appendix K.**

4.5.3 Assessment of Effects

The Proposed Action would have an effect on a historic property if it alters the characteristics qualifying that property for the National Register (36 CFR §§ 800.16(i) and 800.5(a)). Such effects are considered "adverse" if they would diminish the integrity of a property's location, design, setting, materials, workmanship, feeling, or association (36 § CFR 800.5(a)(1)). The Proposed Action does not require land acquisition, construction, or ground disturbance, and the FAA anticipates no direct or physical effects to historic properties. However, the FAA recognizes that for certain types of historic properties, particularly those where the property's historical significance is especially reliant on its setting or feel, the introduction of visual, atmospheric, or audible elements could diminish the property's integrity. In such cases, changes in aircraft operations could result in indirect, non-physical effects.

Therefore, the FAA focused its assessment of effects on the potential for the Proposed Action to introduce visual or audible elements that would diminish the integrity of setting or feeling for

[33] This number includes historic districts, Multiple Property Submissions, and all their contributors.

historic properties where those are significant historical features. The FAA also considered the extent to which those aspects of integrity have already been diminished under existing conditions.

The assessment of effects also acknowledges that many of the historic resources within the APE were designated in the 1970s, 1980s, and 1990s. As such, they have been potentially subject to decades of change including the introduction of visual and audible elements. This includes incremental changes, such as the increase in surface and aircraft traffic throughout the APE, as well as large changes such as construction of Interstates 5, 405, and 210 in the second half of the 20th century. These changes may have diminished the integrity of the properties setting or feeling, although other aspects of integrity may be sufficient to convey the properties' significance, and none have been removed from the National Register. However, for the purposes of this analysis, the FAA looked specifically at whether the properties retain integrity of setting and feeling under existing conditions. Therefore, the FAA assumes that all retain sufficient integrity to be considered historic resources for the purposes of this study.

4.5.3.1 Assessment of Visual Effects

Recognizing that some types of historic properties may be affected by overflights due to visual impacts, the FAA also considered the potential for the introduction of visual elements that could diminish the integrity of the property's historical features. In order to assess the potential visual impacts on historic properties, the data for a year of overflights at BUR was overlain on the APE in ArcGIS.[34] The APE experiences 198 daily arrival overflights to BUR and 192 daily departure overflights from BUR. Looking at the APE as a whole, the undertaking (the Proposed Action) would not alter the number of overflights within the APE. This shows that the APE is already heavily overflown as a whole. However, existing flights are not evenly distributed over the APE but follow flight paths which converge close to and in line with the runways. To further assess the impact of the Proposed Action on individual historic resources within the APE, the FAA considered the possibility that the Proposed Action could increase flights over parts of the APE that are not heavily overflown under current conditions. Alternative A would concentrate departures along a narrower band of airspace, the changes in concentration are limited to those areas that already are exposed to the highest concentration of flights associated with BUR – the area immediately south of BUR where all departures from Runway 15 occur. This area is already extensively overflown and the numbers of flights would not change as a result of the Proposed Action. Alternative B does not result in a significant concentration of departures when compared to current operations and most aircraft would continue to depart as they do today in this scenario. The combined effect is that historic properties throughout the entire APE are heavily overflown under current conditions.

When considering the potential for introduction of visual elements to historic properties, the analysis compared the numbers and locations of existing overflights within the APE against the Proposed Action. Neither Alternative A nor Alternative B would result in an increase in overflights to the APE, but may instead alter the geographic location of some overflights. A visual analysis of the current flight tracks shows that the entire APE is densely overflown.

4.5.3.2 Assessment of Auditory Effects

[34] The year of overflight data used was from January 1, 2022 to December 31, 2022.

To assess the auditory impacts of the Proposed Action on historic properties, the FAA first modeled the projected noise attributable to additional arrivals using the DNL metric. DNL is the standard noise metric used for all FAA studies of aviation noise exposure in airport communities and was used to assess the potential noise exposure of each sensitive historic property within the APE. DNL is explained in additional detail in **Section 3.3.6.1.1**.

As presented in **Section 4.6**, the largest noise change at a historic resource in the APE is 3.23 dB at the El Portal Theatre, which is a change in noise that is at the lower threshold of what is perceptible to the human ear in areas with low to moderate noise exposure. See **Appendix L** for additional information on the El Portal Theatre.[35]

However, FAA's NEPA procedures also note that special consideration needs to be given to the evaluation of the significance of noise impacts on noise sensitive areas within historic sites, including traditional cultural properties, where the land use compatibility guidelines in 14 CFR Part 150 are not relevant to the value, significance, and enjoyment of the area in question. For example, the DNL 65 dB threshold may not adequately address the impacts of noise on areas where other noise is very low, and a quiet setting is a generally recognized purpose and attribute.

In order to assess the potential for incremental changes in noise levels or changes in the character of aircraft noise that may result in alteration of those characteristics of historic properties that qualify them for inclusion in the NRHP, the FAA considered the projected increase in noise that may result from concentration of overflights over these areas. The 515 potentially sensitive historic properties were further sorted to identify those properties that were especially sensitive to visual or auditory changes. This analysis yielded a list of 24 sensitive historic properties that were then used to demonstrate the potential effects of the Proposed Action on all historic properties in the APE. See **Appendix L** for a full presentation of the methods used for this analysis.

These 24 sensitive historic property examples represent types of historic properties that are most sensitive to changes in noise associated with aircraft overflights and are located where the effects of the Proposed Action would be the most pronounced. Although some of the 24 properties would experience additional noise exposure, on average as a result of Alternative A, each area is already directly overflown and is subjected to noise associated with those flights and the undertaking would not change the total overflights within the APE. Alternative B generally results in mildly decreased noise exposure over many receptors in the APE because departures flying the VNY3 procedure would no longer fly the same initial climb segment as those flying SLAPP TWO and OROSZ TWO procedures, which de-concentrates the initial segment and results in slightly lower overall flight noise at many of the sensitive historic properties. Overall, 83.3% of the sensitive properties would experience a decrease in average noise associated with the Proposed Action. Increased auditory exposure at the remaining 16.6% of historic properties would be at or below the lower threshold for human perception.

Because Alternative B would decrease noise at many sensitive properties, the negative potential effects of the project occur primarily with Alternative A. The incremental increase in noise caused

[35] World Health Organization. Hansen, Colin. (1951). *Fundamentals of acoustics*. American Journal of Physics - AMER J PHYS. 19. Accessed in December 2021 at https://www.who.int/occupational_health/publications/noise1.pdf?ua=1https://www.who.int/occupational_health/publications/noise1.pdf?ua=1

by Alternative A would not introduce any auditory elements that would diminish the integrity of these properties' significant historic features and therefore would not adversely affect the historic properties. This indicates that historic properties that are less sensitive to noise or visual intrusions would also not be adversely affected by the undertaking.

4.5.4 Summary of Analysis of Potential Auditory and Visual Effects on Representative Historic Properties

As noted in **Section 3.4.5**, the Proposed Action would not physically affect or alter any historic properties or other cultural resources. The Proposed Action also would not introduce aircraft overflights to resources that are not already overflown by aircraft. When considering the increases in auditory conditions compared to the No Action Alternative, the FAA anticipates being able to make a finding of no significant impact to these resources. However, this finding is preliminary pending further consultation with the California SHPO and other consulting parties in accordance with 36 CFR 800.5(c)(2).

4.6 Noise and Noise-Compatible Land Use

4.6.1 Overview

This section describes the operational input, the noise analysis methodology used in determining noise-related environmental impacts, and the environmental consequences by comparing forecast aircraft noise exposure levels in the GSA for the No Action Alternative and Alternatives A and B.

4.6.2 Noise Modeling Methodology

The noise modeling methodology described in **Section 3.3.6.1**, Affected Environment, is also used for modeling Alternative A and Alternative B. This methodology is consistent with noise modeling of aircraft operations as required by the FAA for consideration in airspace actions, such as changes to air traffic routes. Under FAA Order 1050.1F, noise impacts are analyzed in terms of the DNL metric in reference to specific impact thresholds as described further in this section.

4.6.3 Operational Input

Since the modeled Alternatives involve a set of procedures proposed for one runway, large parts of the input data developed to assess the Affected Environment remain the same and are effectively unchanged. However, for the analysis, the Runway 15 flight paths representing aircraft currently flying the SLAPP TWO and OROSZ TWO procedures are modified to capture the changes to those procedures associated with the Alternatives. In the case of Alternative A, the flight paths representing traffic flows of aircraft flying SLAPP TWO and OROSZ TWO were replaced with new flight paths characteristic of SLAPP THREE and OROSZ THREE traffic flows. In the case of the Alternative B, 3% of Runway 15 departure traffic currently flying SLAPP TWO and OROSZ TWO procedures was assumed to not be able to meet the higher climb gradient and was assigned to a new flight path representative of the VNY3 ODP. The aircraft fleet mix for the modeled alternatives remains identical to the No Action Alternative, as described in the Affected

Environment section. All other traffic is modeled identically to the No Action Alternative. **Appendix J** provides additional details pertaining to the noise modeling of all alternatives in **Section D.3.1**.

4.6.3.1 Noise Impact Criteria

Changes in noise exposure for each population centroid in the GSA were evaluated based on FAA requirements to determine the degree of change in noise exposure. FAA Order 1050.1F, requires that aircraft noise be evaluated in terms of the DNL metric. FAA Order 1050.1F further defines that a significant impact would occur if a proposed action would result in an increase of 1.5 dB or more in any noise sensitive area at or above the DNL 65 dB exposure level when compared to the No Action Alternative for the same timeframe.

Increases of 1.5 dB in the DNL 65 dB and above area are considered "significant". Increases of 3 dB between DNL 60 dB and less than DNL 65 dB are considered "reportable" and receive consideration when evaluating the environmental impacts of a proposed project, and will be identified regardless of whether a significant impact is identified. Increases of 5 dB or greater at levels between DNL 45 dB and less than DNL 60 dB are also considered "reportable" and are to be disclosed. The FAA noise level criteria are used to compare DNL changes at the population locations in the GSA. Population locations are evaluated under the following categories: (1) those showing an increase in noise exposure relative to the No Action Alternative; (2) those showing a decrease relative to the No Action Alternative; and (3) those having no change relative to the No Action Alternative. The criteria for defining the increase, categories, and the sources for each are presented in **Table 4-4**. Additionally, in accordance with FAA Order 1050.1F, special consideration has been given to the evaluation of the significance of noise impacts on noise sensitive areas within national parks, national wildlife refuges, and historic sites, as described in **Sections 4.3** and **4.4**, respectively. For example, the DNL 65 dB threshold does not adequately address the effects of noise on visitors to areas within a national park where other noise is low and a quiet setting is a recognized attribute of the area.

TABLE 4-4
CRITERIA FOR DETERMINING IMPACT OF CHANGES IN AIRCRAFT NOISE

DNL Noise Exposure with Proposed Action	Minimum Increase in DNL with Proposed Action	Level of Impact
DNL 45 to <60 dB	5 dB	Reportable Noise Increase (Information disclosed when evaluating air traffic actions)
DNL 60 to <65 dB	3 dB	Reportable Noise Increase (Considered when evaluating air traffic actions)
DNL 65 dB or higher	1.5 dB	Exceeds Threshold of Significance

Source: FAA Order 1050.1F, Appendix B, B-1.4, p.B-4—table prepared by RoVolus, 2023

4.6.4 Potential Impacts

Based upon the noise methodology described in **Section 4.6.1** and the noise impact criteria described in **Section 4.6.2**, a noise analysis was conducted to evaluate noise exposure levels using the applicable thresholds for the modeled Alternatives as compared to the No Action Alternative.

4.6.4.1 No Action Alternative

Under the No Action Alternative, the proposed SLAPP THREE and OROSZ THREE procedures would not be implemented. Given that it is important to clearly understand the environmental impacts from the Proposed Action, modeling parameters for the No Action Alternative were identical to the existing conditions. Noise exposure was calculated for 10,126 population centroids in the GSA with a population greater than zero for the No Action Alternative. **Table 4-5** presents the overall population exposed to various noise levels associated with BUR during the baseline timeframe. Noise exposure greater than DNL 45 dB at Census block centroids is depicted in **Figure 3-11**. Areas immediately to the north, south, and west of BUR have the highest noise exposure values in the GSA due to the close proximity to BUR operations.

TABLE 4-5
NO ACTION ALTERNATIVE POPULATION EXPOSED TO AIRCRAFT NOISE ASSOCIATED WITH BOB HOPE "HOLLYWOOD BURBANK" AIRPORT

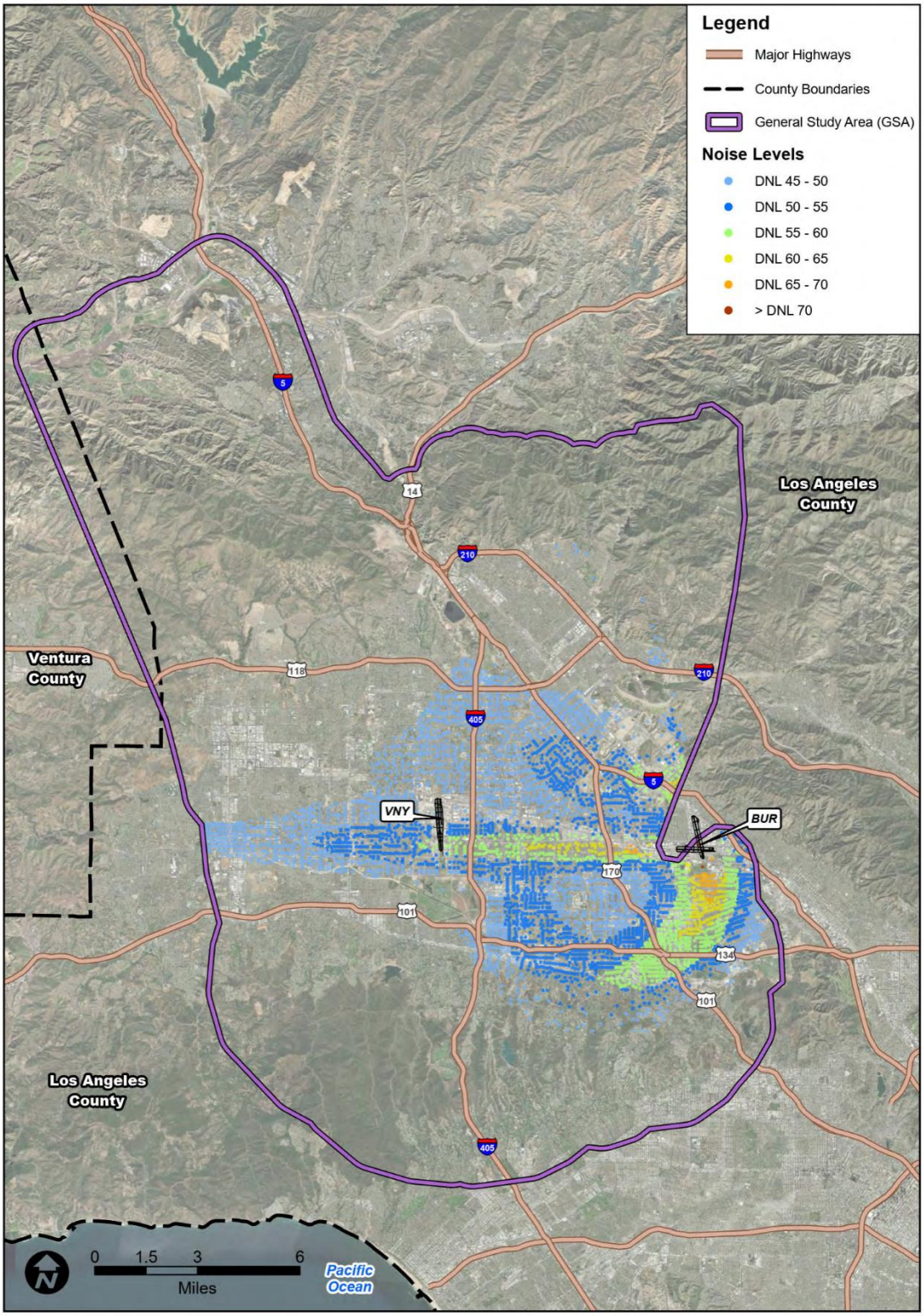
DNL Range (dB)	Estimated Population	Percentage of Total
Less than 45	764,619	46.7%
45 to less than 50	428,212	26.1%
50 to less than 55	282,090	17.2%
55 to less than 60	120,903	7.4%
60 to less than 65	37,266	2.3%
65 to less than 70	5,937	0.4%
Greater than or equal to 70	106	< 0.1%
Total	**1,639,133**	**100%**

Notes: Population values in this table represent only the population in the GSA exposed to noise associated with the Airport, not the total GSA population.
Percentage totals may not equal 100% due to rounding.
Source: U.S. Census 2020 (population centroid data), August 2023, and RoVolus.

4.6.4.2 Alternative A

Alternative A represents traffic at BUR during the same timeframe as the No Action Alternative but assumes that the SLAPP THREE and OROSZ THREE procedures are implemented. There is no change in fleet or operational activity in the modeling parameters for Alternative A relative to the No Action Alternative to ensure that all environmental impacts are a direct result of the changes caused by Alternative A. The noise analysis therefore reflects changes in noise exposure solely due to the implementation of the SLAPP THREE and OROSZ THREE procedures when compared to the No Action Alternative. A more detailed explanation of all of these modeling assumptions is available in **Appendix J**.

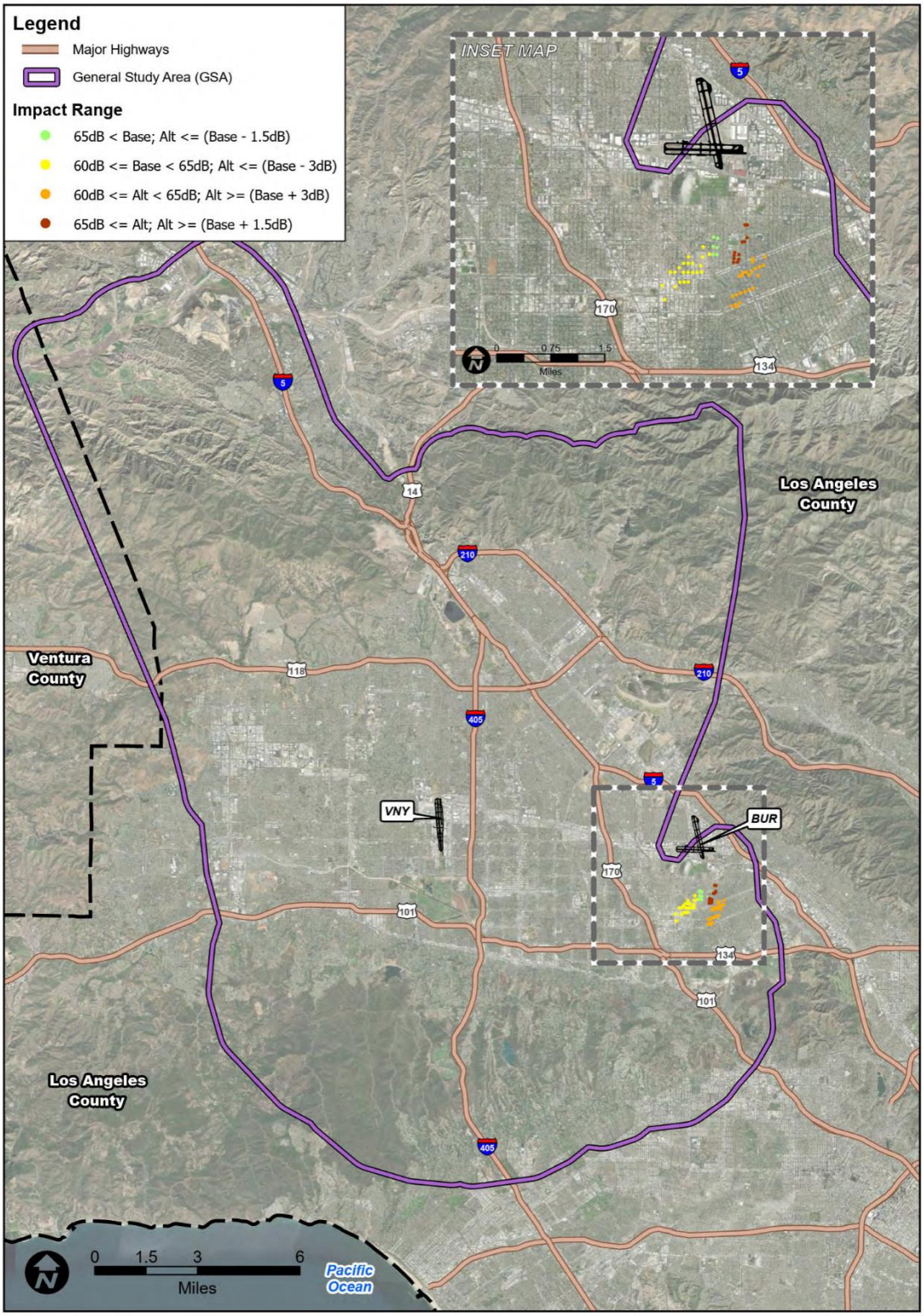
A comparison of noise exposure between the No Action Alternative and Alternative A indicates that there are multiple population centroids that would experience significant impacts (increases of DNL 1.5 dB in areas that would be exposed to DNL values of 65 dB or higher) within the GSA. Additionally, there are also multiple population centroids that would experience reportable increases of 3.0 dB or greater in centroids with a baseline exposure between DNL 60 dB and DNL 65 dB, or an increase of 5.0 dB or greater for population centroids with a baseline exposure between DNL 45 dB and DNL 60 dB. **Figure 4-2** depicts predicted noise exposure at population centroids due to the implementation of Alternative A. **Figure 4-3** depicts the centroids where either significant or reportable noise impacts (as well as corresponding noise reductions) would be experienced. The impacts would be experienced to the southwest of BUR, in the area where aircraft begin their rightward turn to the west after departure in both the No Action Alternative and Alternative A. However, in the case of Alternative A, aircraft must maintain the runway heading for longer, leading to a different flight path over the ground at low altitudes when compared with the No Action Alternative.



SOURCE: Esri; Prepared by Jacobsen Daniels, 2023

Proposed Settlement Agreement Departure Procedure Amendments at Bob Hope "Hollywood Burbank" Airport Environmental Assessment

Figure 4-2
Alternative A Noise Exposure at Population Centroids



SOURCE: Esri; Prepared by Jacobsen Daniels, 2023

Proposed Settlement Agreement Departure Procedure Amendments at Bob Hope "Hollywood Burbank" Airport Environmental Assessment

Figure 4-3
Alternative A Noise Impacts at Population Centroids

Table 4.6-4 depicts the population exposed to various levels of noise associated with BUR under the Alternative A. Approximately 44% of the GSA population would be exposed to levels between DNL 45 dB and DNL 55 dB, and slightly more than 10% (165,978 people) would be exposed to noise levels above DNL 55 dB. The population experiencing noise levels above DNL 55 dB is increased by 1,766 (0.1%) when compared with the No Action Alternative. The population experiencing noise levels above DNL 65 dB is 5.2% higher than that in the No Action Alternative. **Table 4.6-5** presents the changes in the population exposed to various levels of noise exposure for Alternative A compared to the No Action Alternative.

TABLE 4.6-4
POPULATION EXPOSED TO AIRCRAFT NOISE ASSOCIATED WITH BOB HOPE "HOLLYWOOD BURBANK" AIRPORT – ALTERNATIVE A

DNL Range (dB)	Estimated Exposed Population within GSA	Percentage of Total
Less than 45	757,899	46.2%
45 to less than 50	416,537	25.4%
50 to less than 55	298,719	18.2%
55 to less than 60	126,152	7.7%
60 to less than 65	33,472	2.0%
65 to less than 70	6,248	0.4%
Greater than or equal to 70	106	< 0.1%
Total	**1,639,133**	**100%**

Source: Population Data Source: U.S. Census 2020 (population centroid data) accessed June 2023, and RoVolus

TABLE 4.6-5
ESTIMATED CHANGE IN POPULATION BY DNL VALUES COMPARING ALTERNATIVE A TO NO ACTION ALTERNATIVE

DNL Range (dB)	Estimated Change in Population
Less than 45	Decrease of 6,720
45 to less than 50	Decrease of 11,675
50 to less than 55	Increase of 16,629
55 to less than 60	Increase of 5,249
60 to less than 65	Decrease of 3,794
65 to less than 70	Increase of 311
Greater than or equal to 70	No change

Source: Population Data Source: U.S. Census 2020 (population centroid data) accessed August 2023, prepared by RoVolus, 2023

Table 4.6-6 summarizes key results of the noise analysis for conditions under Alternative A. The results indicate that implementing Alternative A would result in 687 people that would be newly impacted by increases of 1.5 dB in areas exposed to DNL 65 dB or higher, 1,758 people that would be newly impacted by increases of 3 dB or higher in areas exposed to DNL between 60 dB and 65 dB, and no people newly impacted by increases of 5 dB or higher in areas exposed to DNL between 45 dB and 60 dB. In summary, there are significant and reportable noise impacts that would result from the implementation of Alternative A when compared to the No Action Alternative.

TABLE 4.6-6
NOISE IMPACTS OF ALTERNATIVE A COMPARED TO NO ACTION SCENARIO

DNL Range (dB)	DNL Threshold	Pop Newly Impacted by Noise Exceeding Threshold
45 to less than 60	5 dB	0
60 to less than 65	3 dB	1,758
Greater than or equal to 65	1.5 dB	687

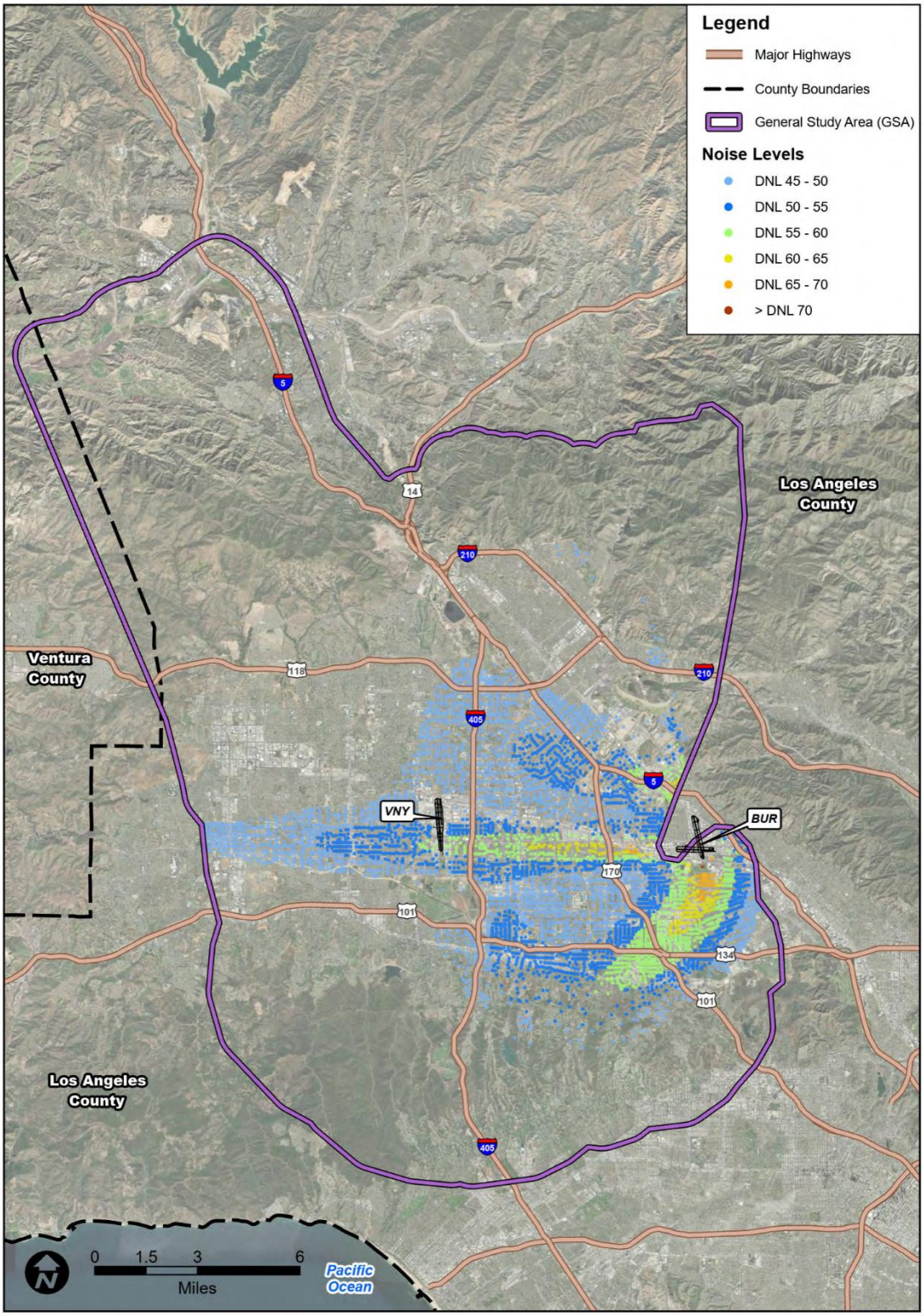
Source: Population Data Source: U.S. Census 2020 (population centroid data) accessed August 2023, prepared by RoVolus, 2023

4.6.6 Alternative B

Alternative B represents traffic at BUR during the same timeframe as the No Action Alternative but assumes that the SLAPP TWO and OROSZ TWO procedures would remain implemented with the requirement that aircraft are able to meet an increased climb gradient of 600 feet per nmi. In this scenario, aircraft assigned SLAPP TWO or OROSZ TWO procedure that could not reach the required climb gradient would be assigned VNY3, the ODP for BUR. However, as most aircraft can easily meet this climb gradient (and in fact, are exceeding the current climb gradient

of 340 feet per nmi, most aircraft would not require any change in departure procedure when departing using SLAPP TWO or OROSZ TWO procedure. However, a small number of low-performance light aircraft and heavy aircraft could struggle with this requirement, particularly on days with high density altitude values driven by high temperatures. Therefore, a conservative estimate of 3% of all Runway 15 departures are assumed not to be able to meet the required climb performance, and are assigned to the VNY3 ODP in Alternative B. All other operations remain identical to the No Action Alternative. The noise analysis therefore reflects changes in noise exposure solely due to the implementation of Alternative B when compared to the No Action Alternative. A more detailed explanation of all modeling assumptions is available in **Appendix J**.

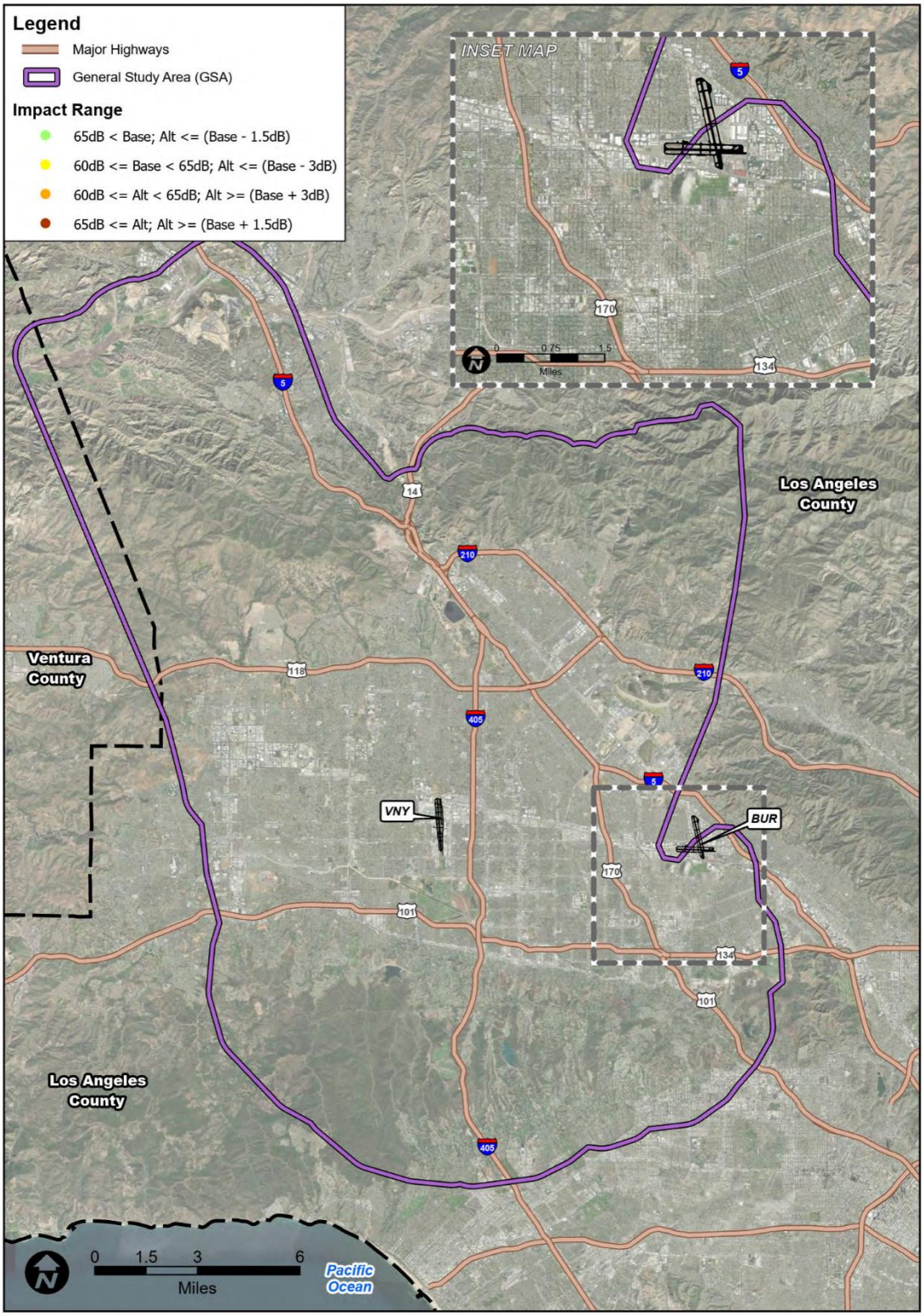
A comparison of noise exposure between the No Action Alternative and Alternative B indicates that there are no population centroids that experience significant impacts (increases of DNL 1.5 dB in areas that would be exposed to DNL values of 65 dB or higher) within the GSA. Additionally, there are no population centroids that experience reportable increases of 3.0 dB or greater in centroids with exposure between DNL 60 dB and DNL 65 dB in the No Action Alternative, nor an increase of 5.0 dB or greater for population centroids with a No Action Alternative exposure value between DNL 45 dB and DNL 60 dB. **Figure 4-4** depicts noise exposure at population centroids due to the implementation of Alternative B. **Figure 4-5** shows the noise impact map and corresponding lack of impacts due to the implementation of Alternative B.



SOURCE: Esri; Prepared by Jacobsen Daniels, 2023

Proposed Settlement Agreement Departure Procedure Amendments at Bob Hope "Hollywood Burbank" Airport Environmental Assessment

Figure 4-4
Alternative B Noise Exposure at Population Centroids



SOURCE: Esri; Prepared by Jacobsen Daniels, 2023

Proposed Settlement Agreement Departure Procedure Amendments at Bob Hope "Hollywood Burbank" Airport Environmental Assessment

Figure 4-5
Alternative B Noise Impacts at Population Centroids

Table 4.6-4 depicts the population exposed to various levels of noise associated with BUR under Alternative B. Approximately 43% of the GSA population would be exposed to levels between DNL 45 dB and DNL 55 dB, and approximately 10% (164,584 people) would be exposed to noise levels above DNL 55 dB. The population experiencing noise levels above DNL 55 dB is increased by 372 (<0.1%) when compared with the No Action Alternative. The population experiencing noise levels above DNL 65 dB is unchanged when compared with the No Action Alternative. **Table 4.6-5** presents the changes in the population exposed to various levels of noise exposure for Alternative B compared to the No Action Alternative.

TABLE 4.6-4
POPULATION EXPOSED TO AIRCRAFT NOISE ASSOCIATED WITH BOB HOPE "HOLLYWOOD BURBANK" AIRPORT – ALTERNATIVE B

DNL Range (dB)	Estimated Exposed Population within GSA	Percentage of Total
Less than 45	766,477	46.8%
45 to less than 50	422,660	25.8%
50 to less than 55	285,412	17.4%
55 to less than 60	121,352	7.4%
60 to less than 65	37,189	2.3%
65 to less than 70	5,937	0.3%
Greater than or equal to 70	106	< 0.1%
Total	**1,639,133**	**100%**

Source: Population Data Source: U.S. Census 2020 (population centroid data) accessed June 2023, and RoVolus

TABLE 4.6-5
ESTIMATED CHANGE IN POPULATION BY DNL VALUES COMPARING ALTERNATIVE B TO NO ACTION ALTERNATIVE

DNL Range (dB)	Estimated Change in Population
Less than 45	Increase of 1,858
45 to less than 50	Decrease of 5,552
50 to less than 55	Increase of 3,322
55 to less than 60	Increase of 449
60 to less than 65	Decrease of 77
65 to less than 70	No change
Greater than or equal to 70	No change

Source: Population Data Source: U.S. Census 2020 (population centroid data) accessed August 2023, prepared by RoVolus, 2023

Table 4.6-6 summarizes key results of the noise analysis for conditions under Alternative B. The results indicate that implementing Alternative B results in no new population that would be newly impacted by increases of 1.5 dB in areas exposed to DNL 65 dB or higher, and no population that would be newly impacted by increases of 3 dB or higher in areas exposed to DNL between 60 dB and 65 dB, or by increases of 5 dB or higher in areas exposed to DNL between 45 dB and 60 dB. In summary, there are no significant noise impacts that would result from the implementation of Alternative B.

TABLE 4.6-6
NOISE IMPACTS OF ALTERNATIVE B COMPARED TO NO ACTION ALTERNATIVE

DNL Range (dB)	DNL Threshold	Pop Newly Impacted by Noise Exceeding Threshold (PA)
45 to less than 60	5 dB	0
60 to less than 65	3 dB	0
Greater than or equal to 65	1.5 dB	0

Source: Population Data Source: U.S. Census 2020 (population centroid data) accessed August 2023, prepared by RoVolus, 2023

4.7 Socioeconomics, Environmental Justice, and Children's Environmental Health – Environmental Justice and Children's Environmental Health Only

4.7.1 Overview

This section is limited to a discussion of EJ and Children's Environmental Health as they pertain to the environmental consequences of aircraft noise impacts in the GSA. As outlined in **Section 3.4.7**, an EJ analysis considers the potential of the modeled alternatives to cause

disproportionate and adverse effects on low-income or minority populations, while an evaluation of children's environmental health considers the potential of those alternatives to cause disproportionate and adverse effects on children. If adverse effects are determined, applicable mitigation are considered to ensure that no minority or low-income populations bear a disproportionate burden of those effects.

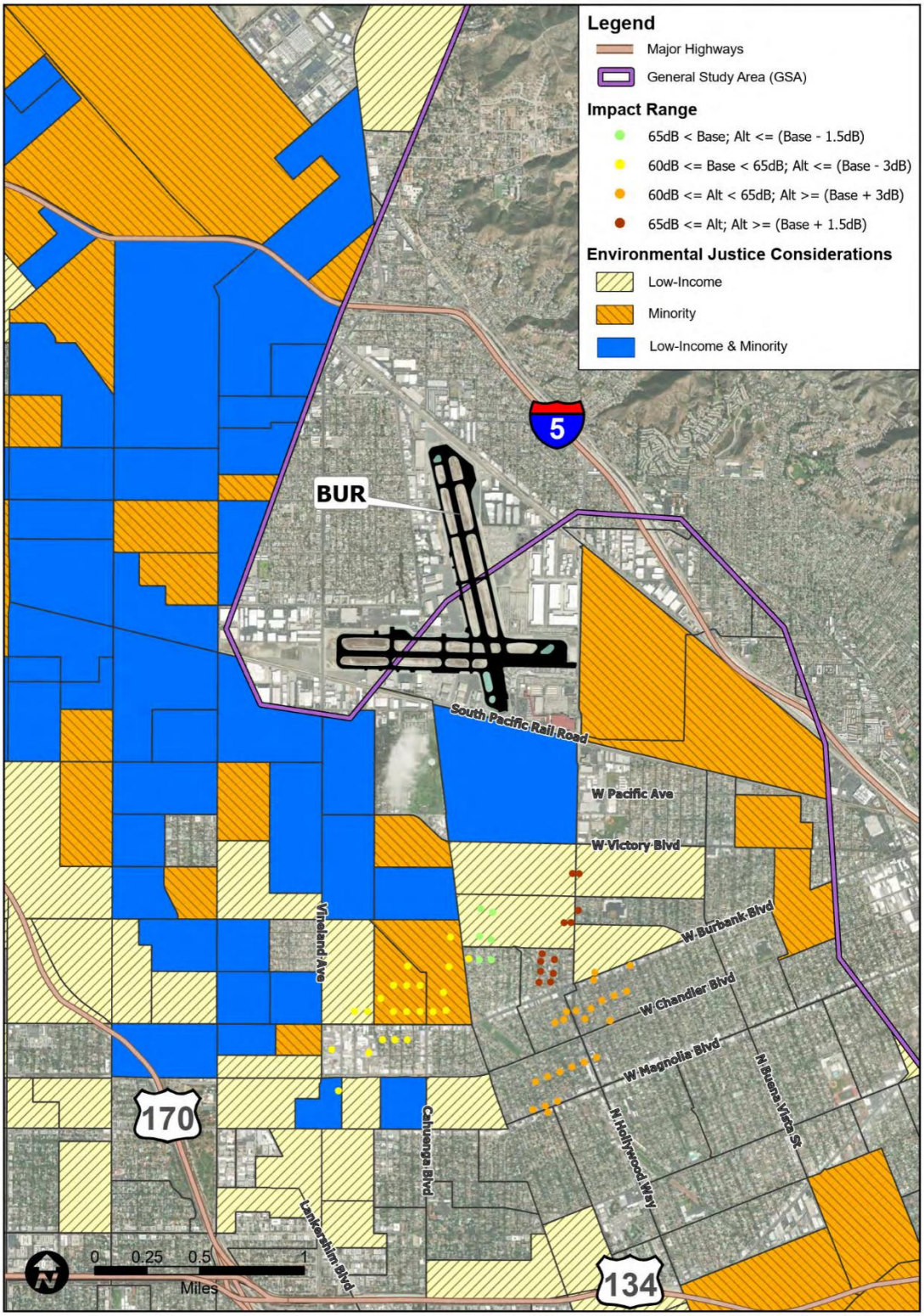
4.7.2 Methodology

Neither of the modeled alternatives would involve the construction of physical facilities. There would be no acquisition of real estate, no relocation of residents or community businesses, no disruption to local traffic patterns, no loss in community tax base, and no changes to the fabric of the community.

4.7.3 Potential Impacts

Under Alternative A, four Census blocks are located within low-income Census block groups where the proportion of low-income individuals exceeds the 12.8% threshold for the GSA experience significant noise impacts. These Census blocks have a total population of 500 people. Additionally, one Census block located within a low-income Census block group experiences reportable noise impacts. This Census block has a population of 21 people. There are no minority Census blocks that experience significant or reportable noise impacts under Alternative A.

There are noise impacts to low-income communities associated with Alternative A, and 57.9% of the people newly exposed to noise impacts above DNL 65 dB are located within low-income Census block groups. Given that the proportion of low-income residents within the GSA is 12.8%, these impacts are considered to be disproportionate EJ impacts relative to the low-income population. These impacts are shown in the context of EJ communities in **Figure 4-6** below.



SOURCE: Esri; Prepared by Jacobsen Daniels, 2023

Proposed Settlement Agreement Departure Procedure Amendments at Bob Hope "Hollywood Burbank" Airport Environmental Assessment

Figure 4-6
Alternative A Noise Impacts - Environmental Justice Communities

Significant noise impacts associated with Alternative A lie directly adjacent to Luther Burbank Middle School, to the school's south and east. This is a result of additional overflights that would take place due to the extended departure legs from Runway 15 associated with SLAPP THREE and OROSZ THREE operations under Alternative A. While these significant noise impacts would not directly overlie the school, the school itself would receive increased noise due to the implementation of Alternative A, at levels just below the significance threshold. Given the disproportionate effects of impacts on children when compared to adults, impacts associated with these additional overflights could have the potential to affect children's environmental health for the four categories defined in EO 13045, as described below:

Asthma – additional overflights mean additional emissions of particulate matter and other pollutants, which could exacerbate breathing issues for children with asthma.

Unintentional injuries – while the risk of injury due to aircraft overflights is low, airplane parts can fall from overflying airplanes (particularly at a stage of flight when flaps and landing gear are in motion), increasing the risk of unintentional injuries to children when compared with the No Action Alternative.

Developmental disorders – High levels of noise can increase the risk of developmental disorders for children, as well as having the potential to increase the severity of developmental disorders for children that have prior disorders. Alternative A, which would have significant noise increases in the vicinity of the school, could exacerbate these issues.

Cancer – As with asthma, increased exposure to emissions of particulate matter (and several other pollutants) has been thought to increase lifetime cancer risk. As Alternative A would result in increased overflights and corresponding aircraft emissions, exposure to these particulates represent a potential impact that would be disproportionate for children.

Under Alternative B, no Census blocks that are located within low-income Census block groups experience significant or reportable noise impacts.

There are no noise impacts to low-income or minority communities in Alternative B, so this alternative is not considered to have EJ impacts. As Alternative B does not result in differences in the horizontal extent of flight tracks and does not result in additional overflights of Luther Burbank Middle School when compared to the No Action Alternative, Alternative B is not considered to have significant impacts on children's environmental health.

4.8 Cumulative Impacts

4.8.1 Overview of Impacts

Recent and ongoing projects at the airports in the GSA, as well as other past, present, and reasonably foreseeable future non-aviation projects in the GSA were identified in the Affected

Environment Cumulative Impacts section (**Section 3.3.10**). When considering the potential for a proposed action to contribute to cumulative impacts, the CEQ provides the following guidance:

> Cumulative effects analysis should 'count what counts', not produce superficial analysis of a long laundry list of issues that have little relevance to the effects of the proposed action or the eventual decisions.
>
> Do other activities (whether governmental or private) in the region have environmental effects similar to those of the proposed action?[36]

The evaluation of this array of past, present, and reasonably foreseeable projects, was based on 40 CFR 1508.25 (a) (3), which instructs that the analysis consider:

> Similar actions, which when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography.

In following this guidance and based on the lack of environmental consequences for Alternative A and Alternative B for other resource categories, this analysis focuses on projects from the lists compiled within **Section 3.3.10** that could cumulatively affect noise and/or the impact on noise sensitive resources (e.g., Section 4(f), historic, architectural, and cultural resources, noise and noise compatible land use, and EJ communities). The potential for significant cumulative impacts to relevant resource categories are discussed below.

4.8.2 Air Quality

As discussed in **Section 4.1**, the Air Quality impacts of Alternative A and Alternative B are both well below the *de minimis* threshold. While many of the projects considered for cumulative impacts may have significant air quality impacts, neither Alternative A nor Alternative B, when combined with contemporaneous projects, are likely to create a significant impact that would otherwise not have occurred.

4.8.3 Climate Change

The climate change contribution resulting from either Alternative A or Alternative B is miniscule and thus are unlikely to become a significant impact when combined with contemporaneous projects, unless those contemporaneous projects already have significant impacts.

4.8.4 Department of Transportation Act, Section 4(f)

As discussed in **Section 4.4 Department of Transportation Act, Section 4(f),** neither Alternative A nor Alternative B would result in significant impacts to any Section 4(f) resources.

[36] Considering Cumulative Effects Under the National Environmental Policy Act, Council on Environmental Quality, p. 12 and p. 13, https://ceq.doe.gov/docs/ceq-publications/ccenepa/sec2.pdf

The Proposed Action would neither result in a permanent physical taking or temporary occupancy of Section 4(f) resources. The overflights and associated noise introduced by the Proposed Action would not produce any significant impacts in any Section 4(f) resources and would, not represent any constructive use of a Section 4(f) resource. Furthermore, aircraft noise associated with the Proposed Action would not significantly contribute to noise generated by any other projects occurring in the GSA. Therefore, no cumulative impacts to any Section 4(f) resources would be anticipated to occur upon implementation of Alternative A or Alternative B.

4.8.5 Historic, Architectural, and Cultural Resources

As discussed in **Section 4.5, Historical, Architectural, Archeological, and Cultural Resources - Historic, Architectural, and Cultural Resources Only,** Alternative A and Alternative B do not include construction activity or ground disturbance that would physically alter any cultural resources. The Proposed Action would introduce RNAV departure procedures that could potentially result in detectable overflights, but the audible and visual characteristics associated with these overflights are unlikely to compromise the integrity of any cultural resources. Thus, there is no potential for Alternative A or Alternative B to contribute to any cumulative degradation of cultural resources related to any other past, present, or future projects.

4.8.6 Noise and Noise-Compatible Land Use

As discussed in **Section 4.6, Noise and Noise-Compatible Land Use,** Alternative A would result in significant noise impacts. While these impacts are individually significant, other projects occurring in the GSA would either result in no significant impacts, temporary noise impacts, or impacts rendered less than significant through mitigation measures. Furthermore, significant increases in noise exposure would generally occur in heavily developed areas, where newly introduced aircraft noise would be part of a patchwork of ambient urban noise making it less discernable. More rural or undeveloped areas in the GSA would not be exposed to significant increases in aircraft noise due to the Proposed Action. In these areas, increases in aircraft noise would likely be imperceptible relative to the noise generated by other past, present, or reasonably foreseeable future projects. Thus, no cumulative impacts due to noise and noise compatible land use are anticipated with respect to Alternative A.

Alternative B does not result in significant noise impacts and would also not result in cumulative noise impacts.

4.8.7 Environmental Justice

As discussed in **Section 4.7, Socioeconomics, Environmental Justice, and Children's Environmental Health – Environmental Justice Only,** Alternative A could result in significant environmental impacts to environmental justice communities due to related increases in aircraft noise exposure in these communities. Most of the past, present, and future aviation and non-aviation projects identified in **Section 3.3.9** involve development of transportation improvements whose impacts are temporary in nature. Some projects, such as freeway enhancements and

transit line extensions, could negatively impact communities through increased exposure to noise. Nonetheless, these projects include measures to mitigate noise and occur in locations in the GSA where Proposed Action noise exposure increases would be negligible. Thus, aircraft noise introduced through implementation of either Alternative A or Alternative B, although potentially significant in isolation, is unlikely to exacerbate the noise associated with any past, present, or reasonably foreseeable future projects near the environmental justice communities identified in the GSA.

The significant impacts associated with the Proposed Action are associated with increased aircraft noise exposure. While these impacts may exceed thresholds of significance in some sensitive areas, the overall contribution to the GSA environment is minimal and would not be expected to have a compounding effect on noise resulting from other projects in the GSA. Therefore, no cumulative impacts would be anticipated under Alternative A or Alternative B.

CHAPTER 5 PUBLIC INVOLVEMENT

5.1 Summary of Public Outreach and Coordination

As outlined in FAA Order 1050.1F, information about the EA must be coordinated with various stakeholders including various government agencies, tribal communities, and the public. The FAA has initiated consultation regarding the Proposed Action under Section 106 and the ACHP's implementing regulations in August 2023 to satisfy the Section 106 public involvement requirements in conjunction with the NEPA process. The correspondence included notification of FAA's preparation of the EA and a request to help define the study area. This was sent to all consulting parties (e.g., local historical commissions, tribal parties, interested parties, and planning commissions). The correspondence developed by FAA during the consultation process for the assessment of adverse effects to historic resources from the Proposed Action, as prescribed in 36 CFR § 800.5, is included in **Appendix M**.

The FAA has also initiated consultation with relevant stakeholders under Section 4(f) of the Department of Transportation Act of 1966. Section 4(f) provides that the Secretary of Transportation may approve any transportation project that requires that the use of any referenced property only if there is no feasible and prudent alternative to the use and that a transportation project includes all possible planning to minimize harm from the use. Section 4(f) properties include publicly owned and/or publicly accessible land from a park, recreation area, or wildlife refuge of national, state, or local significance, or land from any publicly or privately owned historic site of national, state, or local significance.

Concurrent with completion of this document, the public will be notified of the availability of the EA via the *Federal Register* and four local newspapers. For 30 days following notification, FAA will accept comments and questions from the public regarding the document.

CHAPTER 6 LIST OF PREPARERS

6.1 List of Preparers

This chapter identifies the individuals assisting in the preparation and independent review of this EA along with each preparer's responsibilities. Table 6-1 includes FAA staff who are responsible for the preparation of the EA and/or who were involved in its review. Supporting the FAA in this effort are individuals from RoVolus, Environmental Science Associates (ESA), and Jacobsen/Daniels.

TABLE 6-1
LIST OF PREPARERS

Name	Organization	Project Role	Education/Registration
Ryan Weller	FAA	Project Manager/ Environmental Protection Specialist	FAA, Air Traffic Organization
Joseph Bert	FAA	Team Manager	FAA, Air Traffic Organization
Jeremy Robins	FAA	General Counsel	FAA, Office of the Chief Counsel
Lonnie Covalt	FAA	Lead Environmental Protection Specialist	FAA, Air Traffic Organization
Emily Sturnfield	FAA	Environmental Protection Specialist	FAA, Air Traffic Organization
Sara Massey	FAA	Environmental Protection Specialist	FAA, Air Traffic Organization
Darcy Zarubiak	RoVolus	Project Manager	M.S.E. Mechanical and Aerospace Engineering B. Eng. Mechanical Engineering P.E. Texas (87093), California (M 37656), and New Mexico (27001)
Donovan Johnson	RoVolus	Deputy Project Manager/Senior Technical Expert	B.S. Aviation/Flight Education, M.S. Community and Regional Planning
Stephen Augustine	RoVolus	Senior Technical Expert	B.S. Physics and Computer Science

Name	Organization	Project Role	Education/Registration
Don Maddison	RoVolus	Quality Control Expert and Operational SME	D.Eng, Civil Engineering
Allison LaFleur	RoVolus	Technical Expert	Ph.D. Atmospheric Sciences
Neal Wolfe	Environmental Science Associates (ESA)	Project Manager	M.S. Chemistry, Juris Doctor
Becky Urbano	ESA	Historic Resources and Archaeology Expert	B.A. Physics, M.S. Historic Preservation
Jeff Covert	ESA	Assistant Project Manager	B.S. Ecology and Environmental Biology, M.S. Environmental Science, Master of Public Affairs
Patrick Hickman	ESA	GIS Expert, Technical Research and Review	B.S. Landscape Architecture, M.S. Urban and Regional Planning
Amanda French	ESA	Biologist	B.S. Field Biology, Ecology and Organismal Biology
Jennifer Pyatkov	Jacobsen|Daniels (JD)	Project Manager	
James Mitchell	JD	Senior GIS and Mapping Expert	B.S. Geography, Geographic Information System
Donavan Snow II	JD	Senior Graphic Design Expert	B.S. Human Geography, Urban and Regional Planning

APPENDIX A – BURBANK AIR TRAFFIC INITIAL ENVIRONMENTAL REVIEW

Draft Environmental Review

Proposed Categorical Exclusion

For

The Proposed OROSZ THREE DEPARTURE (RNAV) and SLAPP TWO DEPARTURE (RNAV) Open Standard Instrument Departure Procedures at Hollywood Burbank Airport

October 2018

Prepared by:

United States Department of Transportation

Federal Aviation Administration

Des Moines, Washington

Table of Contents

Section 1: Background and Proposed Project Description

The Federal Aviation Administration (FAA) is proposing to implement two "Open" Standard Instrument Departure (SID) procedures at Hollywood Burbank Airport (Burbank), formerly known as Bob Hope Airport, in Burbank, California.

During the design phase of the SoCal Metroplex Project airspace procedures in 2012, the Metroplex design team had considered an Open SID at several airports, including Burbank. This type of departure would start as a satellite-based route but then have an "open" segment, where air traffic controllers would vector aircraft, before connecting with another satellite-based segment that would take aircraft up to higher altitudes. This "open departure" provides the precision and predictability benefits of satellite-based routes but also gives controllers the flexibility to direct aircraft as necessary in highly congested portions of the airspace around Burbank. However, when the procedures for the Southern California Metroplex project were being designed, the FAA had not yet established the safety criteria for open departures. As a result, we were unable to implement open departures for Burbank at that time. We tabled the open departures with the understanding that we would reexamine them when and if the FAA adopted new criteria allowing for these kind of routes.

In March 2016, the FAA Order 8260.58A, *United States Standard for Performance Based Navigation,* (PBN), changed to include flight procedure criteria for the Open SID concept based on recommendations from the FAA Performance Based Operations Aviation Rulemaking Committee.[1] The current OROSZ TWO Area Navigation (RNAV) SID (OROSZ TWO) and the SLAPP ONE RNAV SID (SLAPP ONE) procedures would be revised due to this change in criteria allowing embedded radar vector segments to be included in the departure procedure.

Because of the new criteria available, FAA proposed two Open SID procedures at Burbank to be named the *OROSZ THREE DEPARTURE (RNAV)* (OROSZ THREE) and the *SLAPP TWO DEPARTURE (RNAV)* (SLAPP TWO) as a way to address an air traffic operational need that had been requested by FAA Air Traffic Control (ATC) responsible for managing the complex terminal airspace in the local area. Additionally, implementation of the proposed procedures would fulfill the terms of a Settlement Agreement Between the Federal Aviation Administration, Benedict Hills Estates Association and Benedict Hills Homeowners Association (Settlement Agreement).[2] Thus,

[1] The Performance Based Operations Aviation Rulemaking Committee provides a forum for the United States (U.S.) aviation community to discuss, prioritize, and resolve issues, provide direction for U.S. flight operations criteria, support the NextGen implementation plan and produce U.S. consensus positions for global harmonization.

[2] On October 24, 2016, the Benedict Hills Estates Association and the Benedict Hills Homeowners Association (Petitioners) filed a petition for review challenging the FAA's *Finding Of No Significant Impact* and *Record Of Decision* for the Southern California Metroplex Project under 49 U.S.C. § 46110 in the United States Court of Appeals for the District of Columbia Circuit, Case No. 16-1366. The parties engaged in mediation to informally resolve their dispute and reached a settlement in March 2016. The court dismissed Petitioners from the case on March 29, 2018.

the proposed procedures address concerns regarding overflights while allowing the FAA to implement procedures that it had already contemplated were safe and improve efficiency of Burbank departures.

Under the proposed procedures, aircraft utilizing the proposed Open SID procedures would require radar vectors[3] turning to the north as soon as practicable after departing Burbank. The proposed Open SID procedures are the Proposed Action for this draft environmental review, and the details of the Proposed Action are discussed below.

This draft environmental review will provide basic information about the Proposed Action to better assist in preparing for the environmental analysis phase and inform the FAA's compliance with the National Environmental Policy Act of 1969 (NEPA) (42 United States Code [U.S.C.] Section 4321 et seq.; implementing regulations issued by the Council on Environmental Quality (CEQ) (40 Code of Federal Regulations (CFR), parts 1500-1508); FAA Order 1050 1F, *Environmental Impacts: Policies and Procedure*s (FAA Order 1050.1F); and FAA Order 7400.2L, *Procedures for Handling Airspace Matters*. FAA Order 7400.2L, *Procedures for Handling Airspace Matters,* provides guidance and establishes policy and procedures to assist air traffic personnel in applying the requirements of FAA Order 1050.1F. In addition, this draft environmental review and the associated public involvement has been guided the principles in the FAA's February 2016 *Community Involvement Manual.*

Once the FAA determines that NEPA applies to a proposed action, the FAA needs to decide on the appropriate level of review. The three levels of NEPA review are Categorical Exclusion (CATEX), Environmental Assessment (EA), and Environmental Impact Statement (EIS).[4] A CATEX refers to a category of actions that the FAA has determined, based on previous experience, do not individually or cumulatively have a significant effect on the human environment except in extraordinary circumstances. The presence of extraordinary circumstances preclude the use of a CATEX and would merit additional review in an EA or an EIS. A CATEX is not an exemption or a waiver from NEPA; it is a level of NEPA review and compliance. FAA Order 1050.1F, Section 5-6.5, *Categorical Exclusions for Procedural Actions* includes the list of CATEXs involving establishment, modification, or application or airspace and air traffic procedures.

3 Radar Vectors: Directional headings issued to aircraft to provide navigational guidance and to maintain separation between aircraft and/or obstacles.

4 An Environmental Assessment (EA) is prepared to determine whether or not the action has the potential to cause significant environmental effects. An Environmental Impact Statement (EIS) is prepared when one or more environmental impacts of a proposed action would be significant and mitigation measures would not reduce the impact(s) below significant levels. FAA Order 1050.1F

The FAA has determined that the Proposed Action would fall under one of the listed categorically excluded actions in FAA Order 1050.1F, specifically, Section 5-6.5.i: ". . . . *modifications to currently approved procedures conducted below 3,000 feet above ground level (AGL) that do not significantly increase noise over noise sensitive areas.*"

Specifically, the Proposed Action would only alter the beginning of the departure procedures, requiring planes to return to the RNAV procedures after the first legs of their departure. Based on noise screening analysis (described in more detail below), the FAA has determined that the proposed action amending currently approved procedures conducted below 3,000 feet AGL would not significantly increase noise over noise sensitive areas, and thus would be covered by this CATEX. However, before finalizing a decision to categorically exclude the proposed action, the FAA must consider the potential for extraordinary circumstances, pursuant to FAA Order 1050.1F, Paragraph 5-2.

Extraordinary circumstances are factors or circumstances in which a normally categorically excluded action may have a significant environmental impact that then requires further analysis in an EA or an EIS. For FAA proposed actions, extraordinary circumstances exist when the proposed action involves any of the circumstances described in Order 1050.1F, Paragraph 5-2(b) and has the potential for a significant impact. For the Proposed Action, the FAA is considering the following factors, which, if they result in a significant impact, would preclude use of a CATEX to satisfy NEPA requirements:

- An adverse effect on cultural resources protected under the National Historic Preservation Act of 1966, as amended, 54 U.S.C. §300101 et seq.
- An impact on properties protected under Section 4(f) of the Department of Transportation Act.
- An impact on natural, ecological, or scenic resources of Federal, state, tribal, or local significance.
- An impact on noise levels of noise sensitive areas.[5]
- An impact on air quality.

5 An area is noise sensitive if aircraft noise may interfere with the normal activities associated with the use of the land. Normally, noise sensitive areas include residential, educational, health, and religious structures and sites, and parks, recreational areas, areas with wilderness characteristics, wildlife refuges, and cultural and historical sites.

- Impacts on the quality of the human environment that are likely to be highly controversial on environmental grounds.[6]

- Likelihood to directly, indirectly, or cumulatively create a significant impact on the human environment.

This document describes how the CATEX applies to the Proposed Action, and analyzes extraordinary circumstances that could require more detailed NEPA review. The amount and type of documentation for a CATEX determination should be tailored to the type of action involved and the potential for extraordinary circumstances.[7] There is not a prescribed format for an environmental review of a CATEX. However, the documentation should "cite the CATEX(s) used, describe how the proposed action fits within the category of actions described in the CATEX, and explain that there are no extraordinary circumstances that would preclude the proposed action from being categorically excluded."[8]

Section 2: Purpose and Need

The complex air traffic flows and air traffic volume for the Los Angeles International Airport (Los Angeles), Santa Monica Municipal Airport, and Van Nuys Airport require ATC operational interaction in order to efficiently separate arrival and departure flight paths in the Burbank airspace between the terminal airspace structure and the en route airspace structure. The flight paths to and from Los Angeles, Santa Monica Municipal Airport, and Van Nuys Airport all interact with the Burbank airspace, creating the need to direct aircraft through certain congested areas on a more dynamic basis and then allowing the aircraft to proceed on a consistent course and re-join the RNAV SID as efficiently as possible.[9]

The FAA considered a procedure type that would allow departing aircraft to better travel along a departure path in order to turn sooner toward the en route airway structure, while ensuring that aircraft operations remain safe and efficient. An Open SID is a type of RNAV PBN departure starting and ending with a defined path but containing a variable ATC assigned vector leg within the procedure. The essence of these procedures is that they would require a pilot to resume the automated flight path once ATC vectoring is complete.

6 The term "highly controversial on environmental grounds" means there is a substantial dispute involving reasonable disagreement over the degree, extent, or nature of a proposed action's environmental impacts or over the action's risks of causing environmental harm. FAA Order 1050.1F. Section 5-2.b.(10).
7 FAA Order 1050.1F. Section 5-3.d.
8 FAA Order 1050.1F. Section 5-3.d.
9 FAA Order 8260.58A

As previously stated, at the time the OROSZ TWO and SLAPP ONE procedures were developed, criteria did not allow for the creation of an Open SID utilizing performance based navigation technology. This change in flight procedure criteria allows for the development of a more appropriate departure procedure for the Burbank airspace area that supports efficient management of air traffic.

The proposed Open SID procedure westbound turn directs aircraft away from the arrival operations into Los Angeles, and provides initial separation from the parallel arrival flight path into Burbank. Exit points from the terminal area airspace to the en route airway structure would be north of Burbank providing for aircraft to turn sooner toward the direction of their filed flight plan route, while gaining altitude in order to integrate with other area departure procedures and flows.

Section 2.1: Open SID Development Process

In developing the Open SID procedures near Burbank Airport, the FAA was responsible for following regulatory and technical guidance as well as meeting criteria and standards in three general categories:

1. RNAV Design Criteria and Air Traffic Control Regulatory Requirements - Flight procedure design is subject to requirements found in several FAA Orders and guidance documents, including FAA Order 8260.3C,[10] *United States Standard for Terminal Instrument Procedures,* FAA Order 8260.58B, *United States Standard for Performance Based Navigation Instrument Procedure Design*, FAA Order 8260.43B, *Flight Procedures Management Program*, FAA Order JO 7110.65X, *Air Traffic Control,* FAA Order JO 7100.41A, *Performance Based Navigation Implementation Process* and *The Guidelines and Updates for Implementing Terminal RNAV Procedures.* In addition, FAA Order JO 7110.65X *Air Traffic Control* includes requirements governing air traffic control procedures, air traffic management, and appropriate technical terminology.

2. Operational Criteria - To the maximum extent possible, PBN procedures are developed operationally to ensure aircraft departure and arrival lateral and vertical paths are procedurally separated. Air traffic controllers are responsible for aircraft separation; however, they use PBN procedures to assist with their operational responsibilities at Burbank and surrounding airports. Operational criteria were consistent with the Purpose and Need for the project.

3. Safety Risk Management Criteria - FAA evaluated air traffic procedures using the Air Traffic Organization's (ATO) Safety Management System (SMS). The SMS is the system for assessing and managing the safety of air traffic control and navigation services in the

[10] These procedures were developed before FAA Order 8260.D was issued on February 16, 2018.

National Airspace System. If a procedure introduced a new hazard or increased the severity and/or likelihood of an existing hazard, the design was adjusted or mitigated to reduce the hazard to acceptable levels. In compliance with SMS requirements, the procedures were evaluated by a Safety Risk Management Panel[11] following a five-step process: 1) describe the system; 2) identify the hazards in the system; 3) analyze the risks; 4) assess the risk; and, 5) treat the risk (if any).

Finally, FAA undertook validation exercises that further refined the procedures to ensure they were viable. Specifically, FAA took into account the limitations imposed by terrain, Controlled Airspace[12] and Special Use Airspace.[13] These factors resulted in restrictions to the design options for the proposed Open SID procedures.

Section 3: Alternatives

Section 3.1: Alternatives Analysis

The FAA considered four alternatives for the Open SID procedure design for Runway 15 at Burbank. They are the Proposed Action, the No Action Alternative and two additional alternatives. This alternatives analysis is consistent with CEQ regulations and FAA guidance provided in FAA Order 1050.1F.

Section 3.2: No Action Alternative

The No Action alternative comprises the current OROSZ TWO and the SLAPP ONE SID procedures from Runway 15. The current published procedure charts are provided in Appendix A. The procedure charts depict the altitudes on each procedure.

Aircraft on the OROSZ TWO procedure departing Runway 15 climb with a right turn to a heading of 210-degrees or as assigned by ATC. Aircraft navigate a southwesterly to westerly-dispersed flight path influenced by wind, aircraft weight, and air speed. Generally, the flight path crosses over land use transitioning from industrial, commercial, to residential along the flight path to the southwest, and west. The flight path continues turning to the northwest over land use transitioning from residential to mountainous terrain of the Santa Susana Mountains and United States Forest Service managed lands. Air traffic control vector aircraft to cross the OROSZ fix to join the RNAV procedure to connect to the en route airway structure for flights to the north and northwest.

[11] Safety Risk Management Panel Members or subject matter experts are selected based on their technical expertise or operational responsibilities for the facility or system under consideration and their authority to make decisions for their respective organizations. (FAA Air Traffic Organization Safety Management System Manuel, July 2017.)
[12] Classes of Airspace:
https://www.faasafety.gov/gslac/ALC/course_content.aspx?cID=42&sID=505&preview=true
[13] Special use airspace is used to designate airspace in which certain activities must be confined, or where limitations may be imposed on aircraft operations that are not part of those activities. See
https://www.faa.gov/uas/where_to_fly/airspace_restrictions/.

Aircraft on the SLAPP ONE SID procedure departing Runway 15 climb with a right turn to a heading of 210-degrees. Aircraft navigate a southwesterly to westerly-dispersed flight path influenced by wind, aircraft weight, and air speed. Generally, the flight path crosses over land use transitioning from industrial, commercial, to residential along the flight path to the southwest, and west. The flight path continues turning northeast over land use transitioning from residential to mountainous terrain of the San Gabriel Mountains and United States Forest Service managed lands. Air traffic control vector aircraft to the RAYVE fix to join the RNAV procedure to connect to the en route airway structure for flights to the east, northeast, and southeast.

Currently, aircraft depart Burbank on a heading of 210-degrees, which points aircraft towards the Los Angeles where approaching aircraft are on the downwind leg of the final approach. Additionally, the 210-degree heading puts departing aircraft in the opposite direction of the route filed per the aircraft's flight plan. The additional miles flown add time to completing the turn to the north, thereby adding to the time it takes the departing aircraft to cross the final approach path of arriving aircraft into Burbank, which adds to the complexity of managing Burbank operations.

The FAA Operations Network[14] reports 84,692 itinerant operations for the calendar year 2017 for Burbank. Table 1 below details the type of operations; grouped by aircraft operation and method of navigation.

Table 1. Burbank Itinerant Operations Data: January 2017 through December 2017

Operation Type	Air Carrier	Air Taxi	General Aviation	Military
IFR Itinerant[15]	51,478	18,809	14,430	243
VFR Itinerant	8	816	22,268	837

Note: IFR = Instrument Flight Rules, VFR = Visual Flight Rules

There are six categories -- (A) Heavy, (B) B757, (C) Large Jet, (D) Large Commuter, (E) Medium, (F) Small.[16]

- (A)Heavy: refers to any aircraft weighing more than 255,000 pounds such as the Boeing 747 or the Airbus A340;
- (B) B757: refers to the Boeing 757 all series;
- (C) Large Jet: refers to large jet aircraft weighing more than 41,000 and up to 255,000

[14] The FAA Operations Network (OPSNET) is the official source of FAA air traffic operations. https://aspm.faa.gov/opsnet/sys/Airport.asp, accessed June 01, 2018

[15] Airport Operations. The number of arrivals and departures from the airport at which the airport traffic control tower is located. There are two types of operations: local and itinerant. Local operations are those operations performed by aircraft that remain in the local traffic pattern, execute simulated instrument approaches or low passes at the airport, and the operations to or from the airport and a designated practice area within a 20−mile radius of the tower. Itinerant operations are operations performed by an aircraft, either IFR, Special VFR, or VFR, that lands at an airport, arriving from outside the airport area, or departs an airport and leaves the airport area.

[16] http://aspmhelp.faa.gov/index.php/Weight_Class, accessed June 01, 2018

pounds such as the Boeing 737 or the Airbus A320;

- (D) Large Commuter: refers to large non-jet aircraft (turbo propeller engine) and small regional jets, weighing more than 41,000 and up to 255,000 pounds;
- (E) Medium: refers to small commuter aircraft including business jets weighing more than 12,500 up to 41,000 pounds such as the Learjet 35; and
- (F) Small: refers to small single or twin-engine (piston) aircraft weighing 12,500 pounds or less such as the Beech 90 or the Cessna Caravan.
- No Data/Other: refers to unspecified equipment.

Table 2 details the approximate number of total departure operations at Burbank by typical aircraft fleet mix by weight class. [17]

Table 2. Burbank Total Departures by Aircraft Weight Class
January 2017 through December 2017

Aircraft Weight Class	Total Departure Operations At Burbank
Heavy Jet	933
B757 Jet	57
Large Jet	22,651
Large Commuter	5,798
Medium Commuter	8,198
Small	4,809
No Data/Other	40

Table 3 details the approximate number by runway of daily departures on the OROSZ TWO and SLAPP ONE SID.[18]

Table 3. Approximate Number of Daily Departure Operations by Runway

Runway Number	OROSZ TWO (RNAV) Procedure	SLAPP ONE (RNAV) Procedure
8	2	1
15	39	30
26	1	1
33	1	1

[17] FAA Traffic Flow Management System Count (TFMSC) Report contains data derived from the Air Traffic Airspace Lab's Traffic Flow Management System. Note: TFMSC does not represent the official traffic counts for the National Airspace System. https://aspm.faa.gov/tfms/sys/tfms-server-x.asp, accessed June 01, 2018

[18] TARGETS Environmental Plug-In aircraft track data , *Average Annual Day Addendum to the Guidance for Noise Screening of Air Traffic Actions*

There is a preferential runway use program in effect at Burbank. Approximately ninety-six percent of departure operations at Burbank utilize the Runway 8/Runway 15 configuration.[19] Runway 15 is the primary runway for departures that would utilize the current OROSZ TWO and the SLAPP ONE procedures. Burbank uses a "voluntary curfew" applicable to scheduled airlines that asks them to refrain from scheduling or operating between 10:00 p.m. and 7:00 a.m. daily. General aviation operators may participate in the "voluntary curfew," but they are otherwise restricted under pre-Airport Noise and Capacity Act of 1990 approved noise rules based on FAA Advisory Circulars pertaining to aircraft noise.[20]

Section 3.3: Alternatives Eliminated from Consideration

The FAA eliminated three alternatives to the proposed OROSZ THREE and SLAPP TWO Open SIDs from consideration:

- The No Action Alternative comprises the current OROSZ TWO and SLAPP ONE procedures, by which aircraft follow the published procedure current flight path. The No Action alternative does not meet the purpose and need of the Proposed Action. The No-Action alternative was eliminated, as amendments to the current OROSZ TWO and the SLAPP ONE are necessary to meet the change in procedure criteria that allow embedded radar vector segments to be included in the departure procedure**.**

- An alternative was suggested to laterally move the proposed procedure segment from the JAYTE waypoint to the TEAGN waypoint north to approximately follow Highway 101. This shift in procedure flight path would place aircraft on a flight path that would be in conflict with the final approach course to the primary arrival runway at Burbank, Runway 08. Therefore, this alternative was eliminated from consideration.

- An alternative was suggested to laterally move the proposed procedure segment from the JAYTE waypoint to the TEAGN waypoint south. To maintain safe and efficient control of air traffic in the area, the proposed procedure must remain north of the Los Angeles Class B controlled airspace. A shift of the proposed procedure flight path to the south would encroach on the Los Angeles Class B controlled airspace. Additionally, a more southerly flight path would enter a portion of airspace where VFR air traffic routinely transit a narrow airspace corridor between the Los Angeles Class B and Burbank Class C controlled airspaces. Therefore, this alternative was eliminated from consideration.

[19] PBN Dashboard Airport Metrics, https://pbn.mitre.org/pbnservices/pbn/FaaObserver.html, accessed June 01, 2018
[20] FAA Advisory Circular 36-1H or 36-2C

Section 3.4: Proposed Action

The proposed OROSZ THREE and SLAPP TWO SID procedures would replace the current OROSZ TWO and the SLAPP ONE SID. Due to a change in procedure design criteria, embedded radar vector segments would be included in the departure procedures. At the time the OROSZ TWO and SLAPP ONE SID were developed, procedure design criteria did not allow for the creation of an Open SID utilizing PBN technology**.**

Aircraft on the proposed OROSZ THREE and SLAPP TWO procedures would follow the runway heading for approximately 1.21 nautical miles prior to turning toward the JAYTE fix. The proposed procedures would follow a 215-degree heading to cross the JAYTE fix at approximately 1,622 feet AGL (or 2,400 feet mean sea level). From the JAYTE fix, aircraft would fly direct to the TEAGN fix on a heading of 260-degrees to cross the TEAGN fix at 3,822 feet AGL (or 4,000 feet mean sea level).

The proposed ATC assigned westbound turn flight path directs aircraft away from Los Angeles International Airport arrival operations and provides initial separation from parallel arrival flight paths to Burbank. Exit points from the terminal airspace structure to the en route airspace structure are north of the airport; and the ATC assigned flight path turns aircraft around sooner and pointing towards their filed route while gaining altitude in order to get above Van Nuys Airport and integrate with other area departure procedures and flows. Once departing aircraft are above approaching aircraft, ATC would utilize the proposed Open SID procedure and vector departing aircraft through the congested airspace to re-join the published RNAV departure route north of Burbank.

Airspace modelling was conducted using the Terminal Area Route Generation, Evaluation, and Traffic Simulation (TARGETS). The proposed procedures TARGETS Distribution packages are available in Appendix B. The summary of the output from the modelling is discussed below.

The number of aircraft operations at Burbank and the aircraft fleet mix are not expected to change as a result of the implementation of the proposed Open SID procedures. Aircraft operational use of the proposed procedures are subject to safety and operational restrictions and potential conflicts, including, but not limited to events, other air traffic, weather, and emergencies.

Given the complexity of air traffic in the Burbank airspace area as described above, the FAA determined the preferred alternative is the Proposed Action of implementing the OROSZ THREE and SLAPP TWO Open SID procedures. The preferred alternative would meet procedure design criteria to provide the safest and most efficient routing of aircraft departing Runway 15 at Burbank. Additionally, the dynamic nature of the proposed Open SIDs with the embedded vectored turn in conjunction with the initial RNAV segment will aid ATC in efficiently managing aircraft in the Burbank Airspace.

Section 4: Preliminary Environmental Impact Analysis

As explained above, the use of a CATEX to satisfy NEPA is precluded if the proposed action involves any of the circumstances described in Order 1050.1F, Paragraph 5-2(b) and has the potential for significant impact. The determination of whether a proposed action may have a significant environmental impact under NEPA is made by considering the relevant environmental impact categories and comparing impacts to the FAA's thresholds of significance, where applicable, as well as any other relevant federal laws and statutes, Executive Orders, and regulations as outlined in with FAA Order 1050.1F.[21]

There are 14 environmental impact categories identified in FAA Order 1050.1F. Only those areas where there may be significant environmental impacts caused by the Proposed Action, or where there are uncertainties which require evaluation are analyzed in this document. The Proposed Action does not involve land acquisition, physical disturbance, or construction activities. Given the limited scope of the Proposed Action, the following environmental impact categories were assessed and were considered to have negligible or non-existent effects from the Proposed Action, and in accordance with CEQ regulations, did not warrant further analysis:

- Biological resources (including fish, wildlife, and plants)
- Climate
- Coastal Resources
- Farmlands
- Hazardous Materials, Solid Waste, and Pollution Prevention
- Land Use
- Natural Resources and Energy Supply
- Socioeconomic Impacts and Children's Environmental Health and Safety Risks.
- Water Resources (Including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers)

The following remaining impact categories below will be analyzed to determine their impacts on the relevant study area for the affected environment;

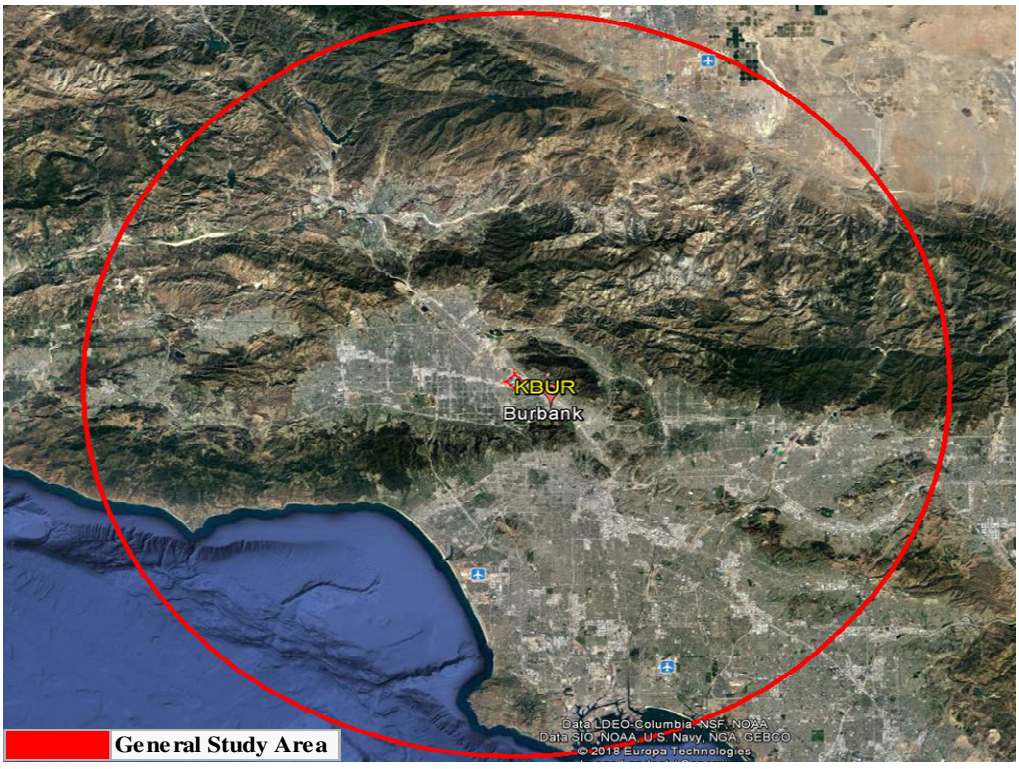
[21] The determination of whether a proposed action may have a significant environmental effect is made by considering any requirements applicable to the specific resource [see FAA Order 1050.1, paragraph 4-3. and Exhibit 4-1].

- Noise and compatible land use
- Air Quality
- Department of Transportation Act, Section 4(f)
- Historical, architectural, archeological, and cultural resources
- Environmental Justice (*This is a subcategory under the general heading of Socioeconomic Impacts*), and
- Visual impacts

Section 4.1: General Study Area

The preliminary environmental analysis considered potential impacts within the Proposed Action General Study Area (GSA), which encompasses roughly a 30 nautical mile radius around Hollywood Burbank Airport, where departing aircraft cross the GSA boundary at 10,000 feet AGL. The GSA, approximately 3,750 square miles in area, is shown in Figures 1 and Figure 2 below.

Figure 1. Depiction of the General Study Area[22]



[22] Figure 1 - Not to scale.

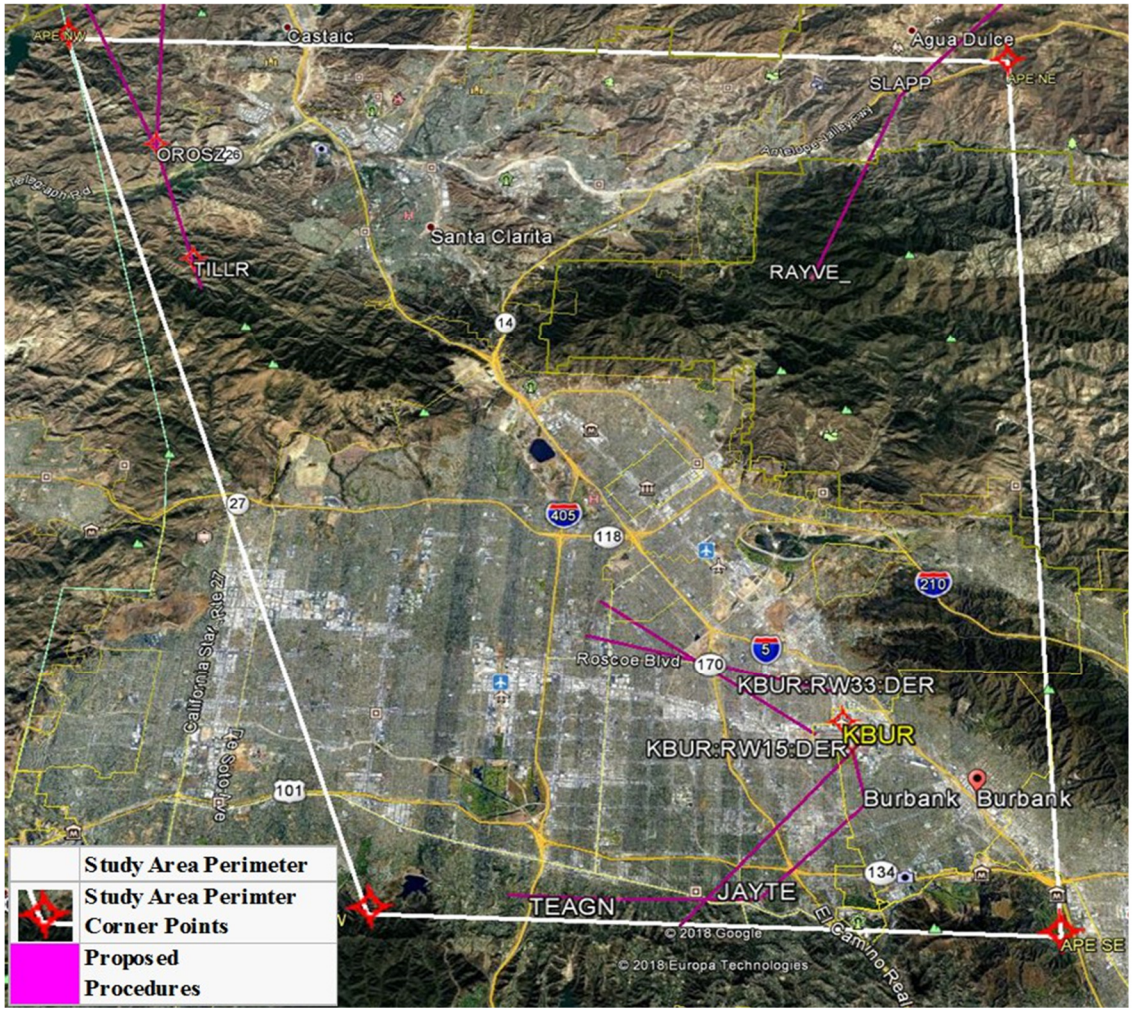
Figure 2. Depiction of Location of Burbank Airport within the General Study Area[23]

Section 4.1.2: Affected Environment Study Area

The study area for the Affected Environment was determined by evaluating the Proposed Action and identifying the area that contains the proposed OROSZ THREE and the SLAPP TWO procedures. The area is approximately 477 square miles. Figure 3 below depicts the proposed procedures within the Affected Environment Study Area.

[23] Figure 2 - Not to scale.

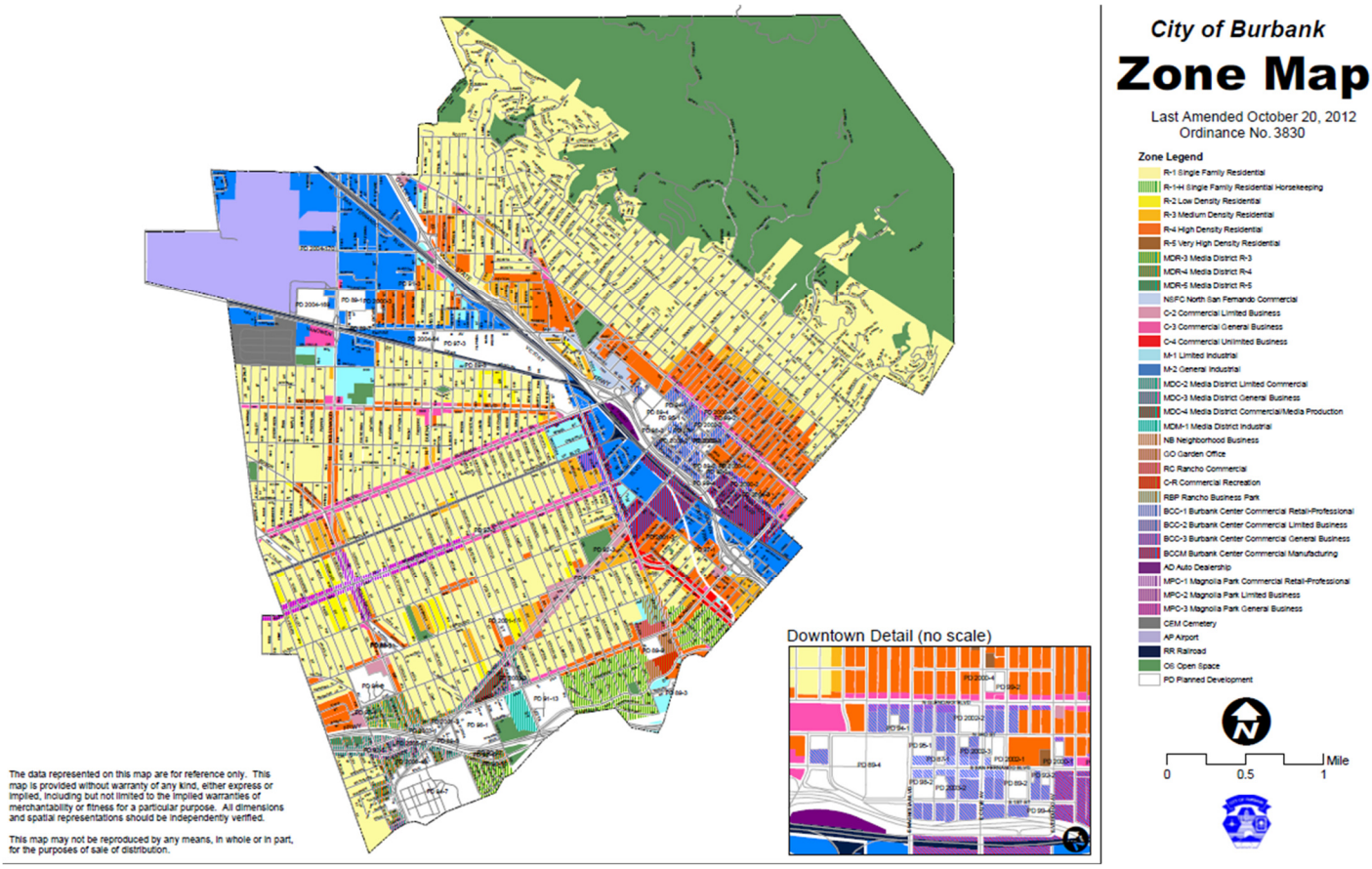
Figure 3. Affected Environment Study Area within the Burbank General Study Area[24]



Hollywood Burbank Airport is a public airport located approximately three miles northwest from the downtown area of the City of Burbank, in Los Angeles County, California. The City of Burbank extends to the east and to the south of the airport property. The City of Los Angeles extends to the north, and to the west of the airport property. The airport serves the northern, greater Los Angeles area. Land use in the immediate vicinity surrounding the airport is industrial. Surrounding the industrial areas are commercial and residential areas. The Verdugo Mountain Park and La Tuna Canyon Park are located approximately one nautical mile to the east of the airport at its closest point. The FAA reviewed the City of Burbank Planning and Development Department, City of Burbank Zoning Map, which identifies existing land use within the greater Burbank area.[25] Refer to Figure 4 below for City of Burbank zone map.

[24] Figure 3 – Not to scale.
[25] http://www.burbankca.gov/departments/community-development/planning/zoning-information. Accessed June 05, 2018.

Figure 4. Depiction of the City of Burbank Land Use Diagram[26]



The FAA further reviewed individual resources within this area, including parks and historic properties, to determine whether the Part 150 land use guidelines are relevant to their value, significance, and enjoyment.

Section 4.2: Noise and Noise-Compatible Land Use

The compatibility of existing and planned land uses with aviation actions is usually determined in relation to the level of aircraft noise by comparing the Day-Night Average Sound Level (DNL)[27] values to the land use compatibility guidelines in FAA's regulations at 14 CFR Part 150. Part 150 identifies a DNL level of 65 decibels (dB) and below as compatible with residential and most other uses (See Exhibit 11-3 of the FAA Order 1050.1F, Desk Reference).

[26] Figure 4 – Not to scale.

[27]DNL takes into account the noise level of each individual aircraft event, the number of times those events occur, and the time of day in which they occur. DNL includes a 10 dB noise penalty added to noise events occurring from 10:00 p.m. to 7:00 a.m., to reflect the increased sensitivity to noise and lower ambient sound levels at night. FAA Order 1050.1F requires use of the DNL metric in NEPA analyses, although DNL analysis may optionally be supplemented on a case-by-case basis to characterize specific noise impacts.

Ordinarily, actions that are categorically excluded from NEPA do not require detailed environmental analysis. To identify the potential for extraordinary circumstances involving impacts on noise levels of noise sensitive areas, the FAA conducts an initial noise analysis using a "screening tool." Screening tools use simplified but conservative modeling assumptions to quickly provide estimates of where noise increases may occur.[28] While a comprehensive modeling tool also needs detailed inputs, a noise screening tool is optimized to take advantage of simplified inputs to produce results for a more narrowly defined purpose, such as a preliminary assessment of potential noise impacts. This analysis enables the FAA to identify areas that may require additional consideration prior to determining that use of a CATEX is appropriate.

Section 4.2.1: Methodology for Assessing Noise Impacts

To determine whether aircraft noise impacts are significant under NEPA, the FAA considers whether predicted increase in noise associated with the proposed action exceed defined thresholds of significance. For aircraft noise, that threshold is an increase of DNL 1.5 dB or more for a noise sensitive area that is exposed to noise at or above the DNL 65 dB noise exposure level, or that will be exposed at or above the DNL 65 dB level due to a DNL 1.5 dB or greater increase, when compared to the no action alternative for the same timeframe.

Order 1050.1F notes that special consideration needs to be given to the evaluation of the significance of noise impacts on certain noise sensitive areas (including, but not limited to, noise sensitive areas within national parks; national wildlife and waterfowl refuges; and historic sites, including traditional cultural properties) where the land use compatibility guidelines in 14 CFR Part 150 are not relevant to the value, significance, and enjoyment of the area in question.

FAA's noise screening tool for projects involving air traffic changes over large areas and altitudes over 3,000 feet AGL uses features available within the Terminal Area Route Generation Evaluation and Traffic Simulation (TARGETS), a flight procedure design tool, combined with the Aviation Environmental Design Tool (AEDT) Environmental Plug-In. This noise screening tool identifies areas that may be exposed to significant noise impacts (i.e., an increase of DNL 1.5 dB or more in an area that is exposed to noise at or above the DNL 65 dB noise exposure level.)

The noise screening tool also identifies certain areas with potential increases in areas exposed to lower levels of noise, specifically:

[28] In general, modeling accuracy is dependent on a range of factors, including 1) how well the fundamental quantity to be modeled is understood and calculated, and 2) how accurately the inputs needed by the model are provided. All aircraft noise modeling tools must accurately account for the fundamentals of noise. However, while a comprehensive modeling tool also needs detailed inputs, a noise screening tool is optimized to take advantage of simplified inputs to produce results for a more narrowly defined purpose, such as a preliminary assessment of potential noise impacts. As a result, noise screening outputs are not suitable for reporting more detailed or precise noise results at specific locations.

1. For DNL 60 dB to less than 65 dB: ± 3 dB
2. For DNL 45 dB to less than 60 dB: ± 5 dB

The FAA refers to changes in noise exposure levels meeting these criteria as "reportable." Although they do not exceed the threshold of significance for most land uses where the Part 150 land use guidelines are not relevant to the value, significance, and enjoyment of the area in question, they are factors to consider in whether there are extraordinary circumstances rendering a CATEX inapplicable.

To determine the potential impact(s) from noise, the screening analysis compares the baseline scenario to an alternative scenario or scenarios. The baseline scenario typically represents the existing procedures as they are flown at the time of the modelling, or the No Action Scenario. The alternative scenario(s) represents the radar tracks assigned to the Proposed Action and any other alternatives being considered

Section 4.2.2: Noise Screening Analysis

Potential noise impacts were screened using the AEDT Environmental Plug-In for TARGETS. Two scenarios were evaluated for this noise screen.

1. No Action Scenario: The scenario represents radar tracks as they are currently flown and is considered the baseline. Noise screening of the No Action Scenario modeled the noise impact(s) of Burbank arrivals and departures as they are currently flown. Assigned aircraft routes were unchanged.

2. Proposed Action Scenario: The scenario screened using the simplifying assumption that Burbank departure aircraft would be assigned to the proposed RNAV SID that most closely matched their flight track regardless of aircraft equipage or type. This also incorporates the simplifying assumption that all aircraft are equipped and capable of flying RNAV procedures.

Section 4.2.3: Noise Screening Track Data

To determine projected noise levels on the ground, it is necessary to determine the frequency of aircraft operations and the position of the aircraft in space laterally (i.e., ground tracks), and vertically (*i.e.*, altitude). Arrival and departure direction to and from an airport generally depend upon the geometry of the airport's runways and approved air traffic management procedures, but are primarily dictated by wind and weather conditions. Historical radar track data provides information regarding lateral path definitions, aircraft types, time of day operations, runway usage percentages for departure/arrival streams and day/night traffic ratios.

Historical radar track data was obtained from the FAA's National Offload Program[29]. Track data was collected for 90 randomly selected days (using a random day generator) during calendar year 2017 ("2017 Track Data").[30] The selection of 90 random days is considered to best represent average traffic counts and traffic flows accounting for seasonal variations and peak travel times for Burbank.

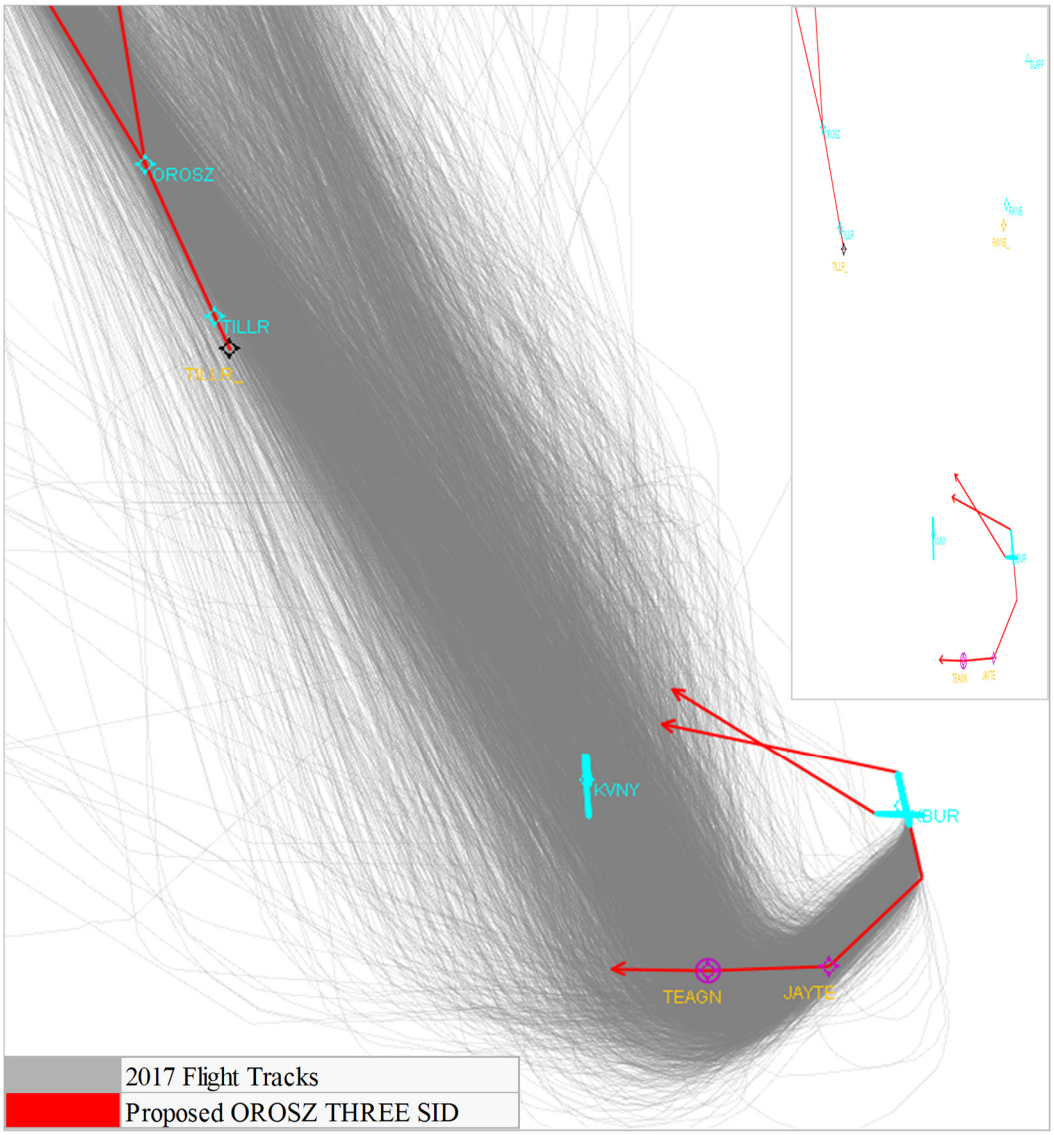
Using the AEDT Environmental Plug-In, backbones for each departure procedure were created, accounting for the typical dispersion of an Open SID procedures. To ensure a consistent number of operations and a consistent fleet mix across alternatives, the same flights that were used for the No Action scenario were applied to the Proposed Action scenario backbones. This ensured that differences across scenarios were attributable to flight path changes only.

A separate noise screening analysis was run for each scenario to establish the noise exposure levels for that scenario. Once the two scenarios were screened individually, the TARGETS AEDT Environmental Plug-In Tool was used to compare the Proposed Action Scenario to the No Action Scenario to evaluate whether implementing the Proposed Action is expected to result in significant noise impacts when compared to the No Action Scenario. Figure 5 and Figure 6 depict the proposed Open SID procedures with the 2017 flight tracks associated with each departure route.

[29] All traffic data was obtained using the FAA Southern California Terminal Radar Approach Control and the FAA Los Angeles Air Route Traffic Control Center as the radar source facilities.

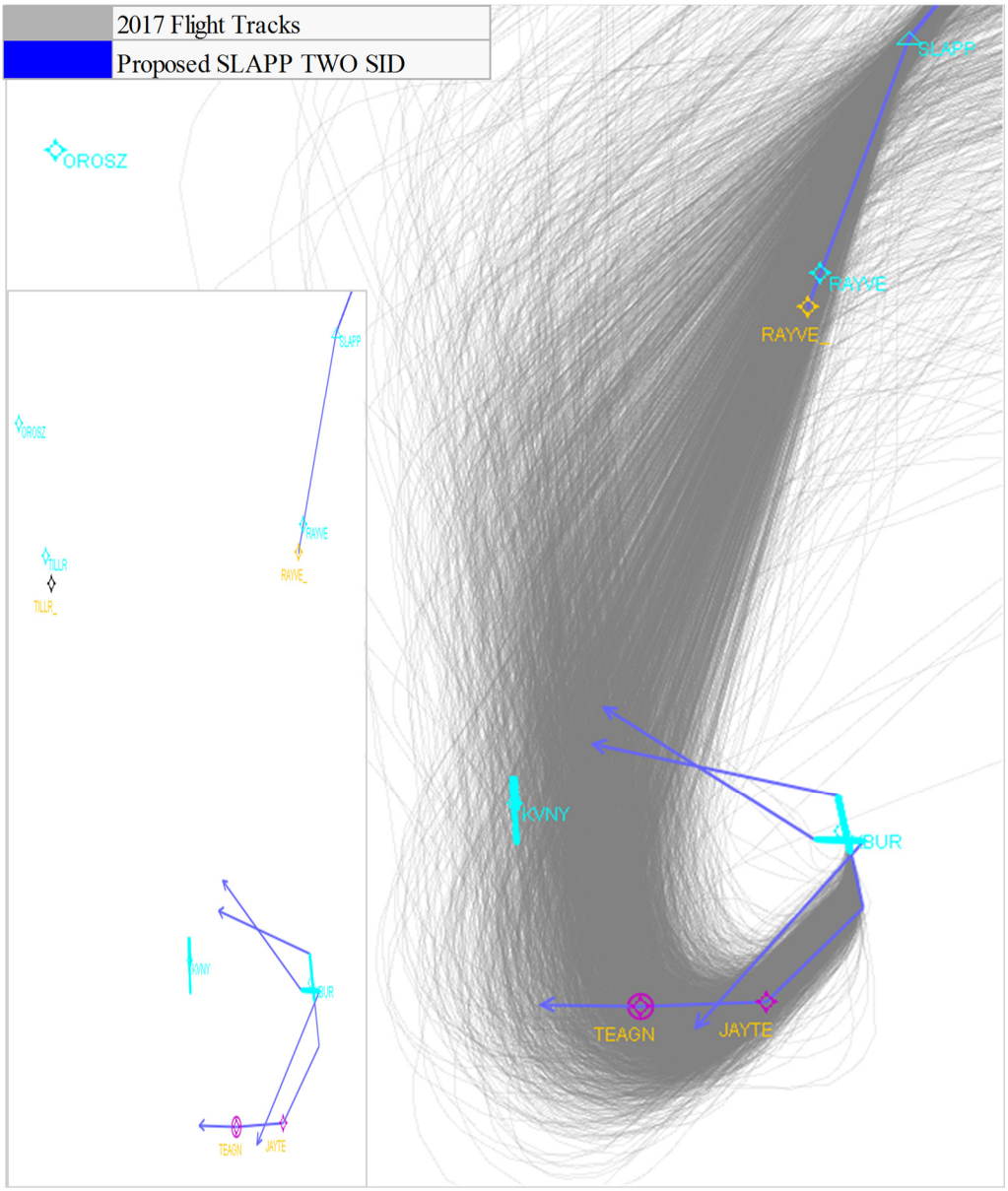
[30] An integral part of noise screening is the collection of average annual day (AAD) radar track data for noise modeling. The MITRE CAASD *Average Annual Day Addendum to the Guidance for Noise Screening of Air Traffic Actions* document prepared for the FAA proposes an objective method for determining the minimum subsample size of radar track data required and the sampling technique.

Figure 5. Proposed OROSZ THREE SID with
Overlay of 90 Random Days 2017 Flight Tracks[31]



[31] Figure 5 - Not to scale.

Figure 6. Proposed SLAPP TWO SID with
Overlay of 90 Random Days 2017 Flight Tracks[32]



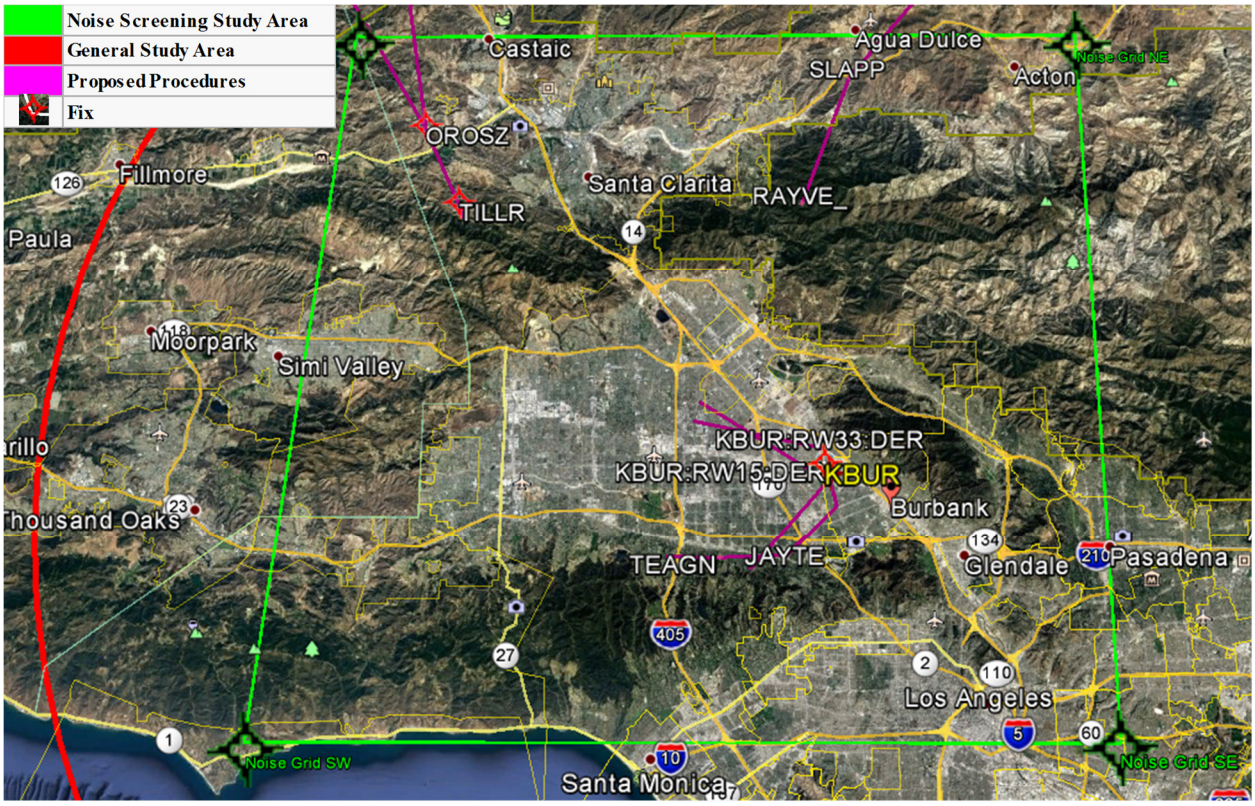
Section 4.2.4: Noise Screening Scenarios

The study area for the noise screening analysis is the geographic area that has the potential to be impacted by noise from the Proposed Action. The noise screening analysis focused on a change-in-exposure analysis, which examined the change in noise levels at a set of grid points. The noise study area, the area covered by the grid, was established to include all areas in which the No Action screening produced a DNL result of greater than DNL 45 dB. Refer to Figure 7 below. Noise exposure calculations were based on a rectangular grid (receptor set) at airport field elevation with

[32] Figure 6 - Not to scale.

evenly spaced grid points (receptors). Grid points were spaced evenly at 0.25 nautical mile (NM) intervals.

Figure 7. Depiction of the Noise Screening Study Area[33]



Two scenarios were evaluated for this noise screen. To determine the potential impact(s) from noise, the screening analysis compares the baseline scenario, or No Action scenario to the alternative scenario, or Proposed Action scenario.

1. No Action scenario: The scenario represents radar tracks as they are currently flown and is considered the baseline. Noise screening of the No Action scenario modeled the noise impact(s) of Burbank arrivals and departures as they are currently flown. Assigned aircraft routes were unchanged.

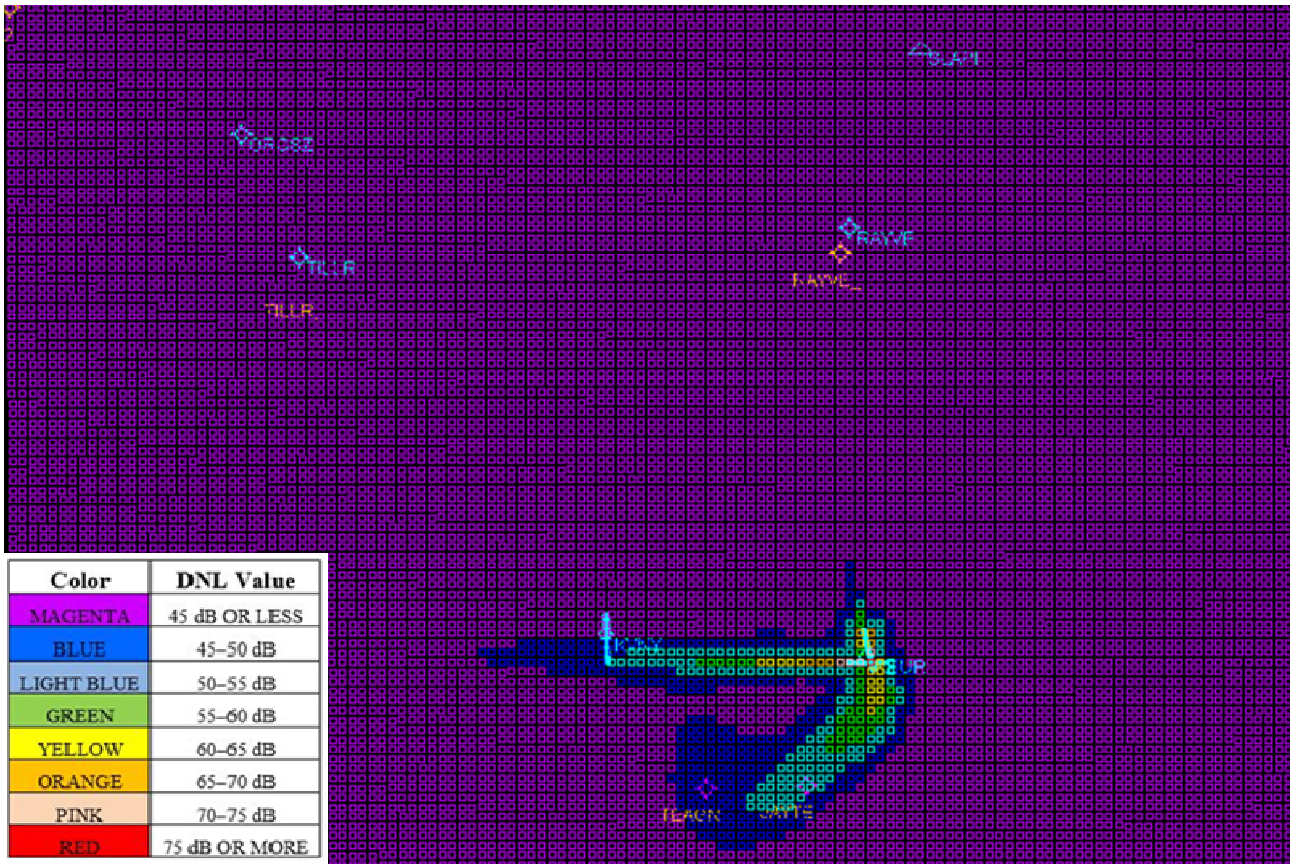
2. Proposed Action scenario: The FAA screened this scenario using the simplifying assumption that Burbank departure aircraft would be assigned to the proposed route that most closely matched their flight track regardless of aircraft equipage or type. This incorporates the simplified assumption that all aircraft are equipped and capable of flying RNAV procedures.

[33] Figure 7 - Not to scale.

Section 4.2.5: Noise Screening Analysis Results

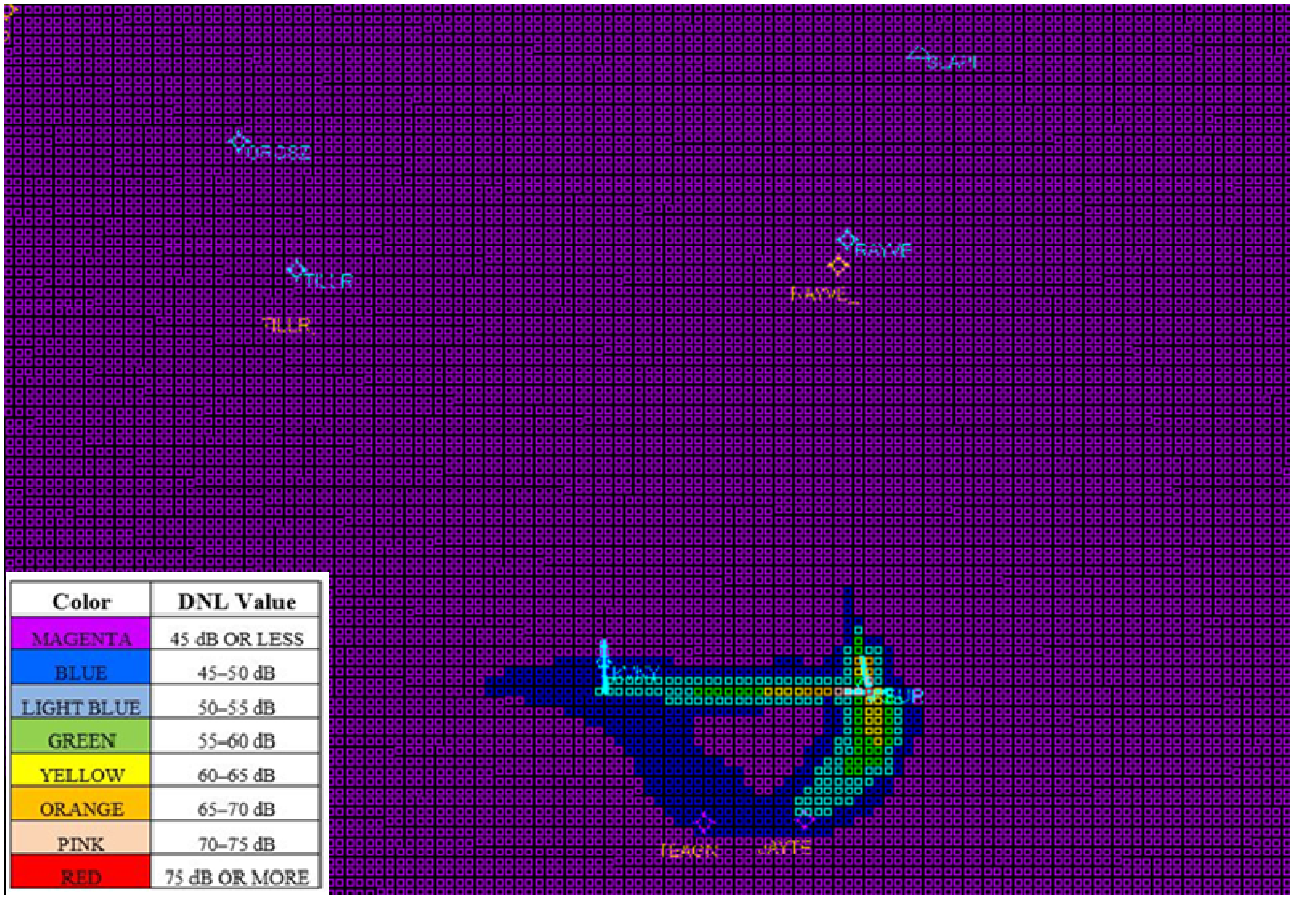
FAA conducted a separate noise screening analysis for each scenario. The TARGETS AEDT Environmental Plug-In graphically displays the noise exposure levels for each scenario in a grid point map. Figure 8 depicts the noise exposure grid point values for the No Action Scenario (the baseline). Figure 9 depicts the noise exposure grid point values for the Proposed Action Scenario.

Figure 8. Depiction of No Action Scenario (Baseline)
Grid Point Noise Exposure Results[34]



[34] Figure 8 – Not to scale.

Figure 9. Depiction of Proposed Action Scenario
Grid Point Noise Exposure Results[35]

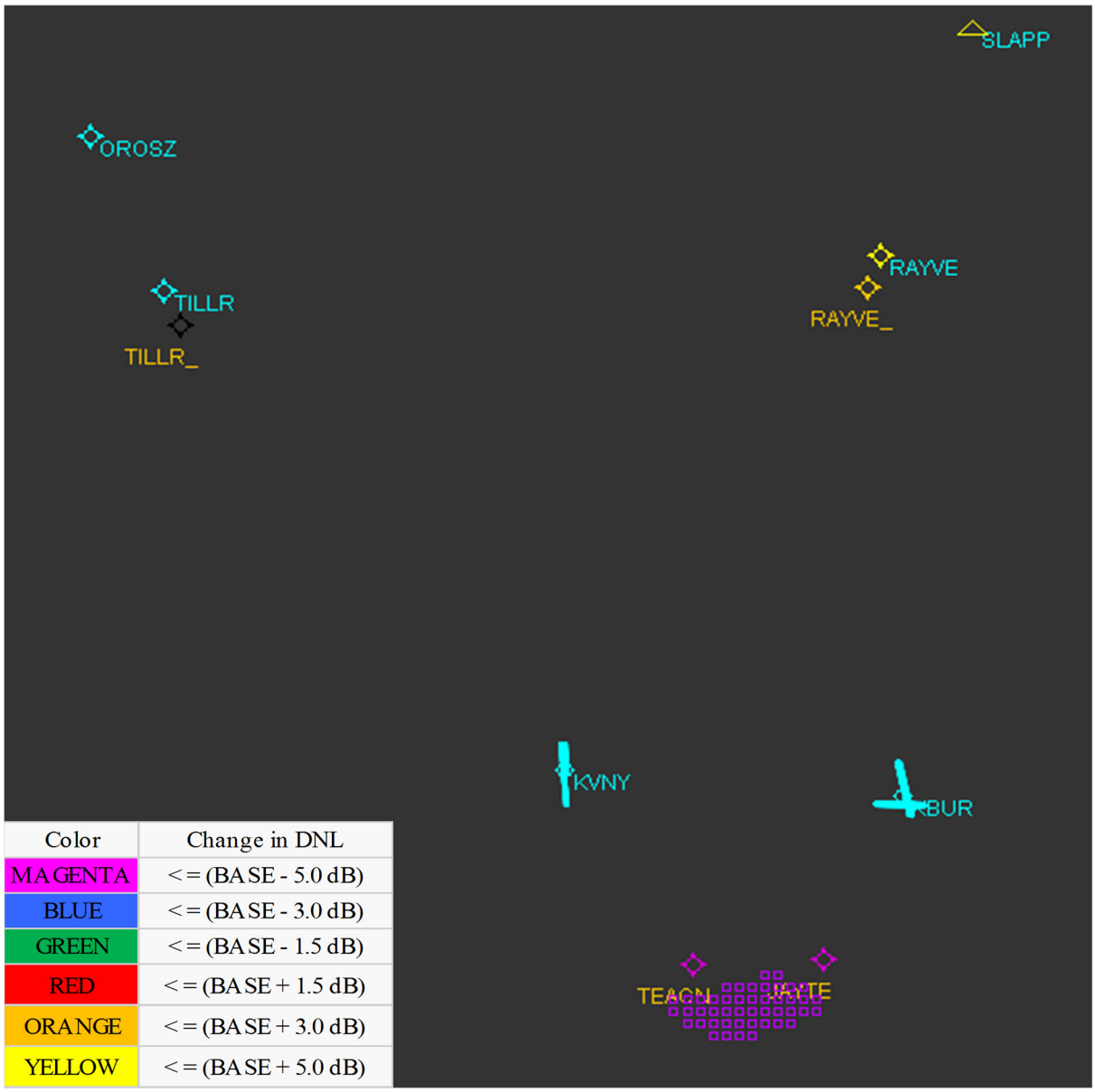


Once the scenarios were screened individually for potential noise impacts, the TARGETS AEDT Environmental Plug-In Tool was used to compare the Proposed Action scenario to the No Action scenario to evaluate whether implementing the Proposed Action is expected to result in significant noise impacts when compared to the No Action scenario. The change in noise exposure levels when comparing the Proposed Action scenario to the No Action scenario is illustrated in Figure 10 below.

The results of the noise screening analysis indicate that the Proposed Action would not result in significant noise impacts relative to the No Action scenario. (Refer to Section 4.2 above for the noise exposure level thresholds.) The magenta color grid points in Figure 10 below indicate a change in noise exposure of a DNL 5 dB decrease within the DNL 45-50 No Action noise exposure level. This change in noise exposure level is related to the modelled change in the proposed flight paths associated with the Open SID departures.

[35] Figure 9 - Not to scale.

Figure 10. Depiction of the Comparison of Proposed Action Scenario to No Action Scenario Grid Point Noise Exposure Results[36]



Color	Change in DNL
MAGENTA	<= (BASE - 5.0 dB)
BLUE	<= (BASE - 3.0 dB)
GREEN	<= (BASE - 1.5 dB)
RED	<= (BASE + 1.5 dB)
ORANGE	<= (BASE + 3.0 dB)
YELLOW	<= (BASE + 5.0 dB)

Section 4.3: Air Quality

This section considers the potential for the Proposed Action to have impacts on air quality that could preclude use of a CATEX. Any air quality impacts would be the result of increased emissions from aircraft using the amended procedures as compared to the No Action alternative. There are no other emissions sources associated with the Proposed Action.

[36] Figure 10 – Not to scale.

In the United States (U.S.), air quality is generally monitored and managed at the county or regional level. The U.S. Environmental Protection Agency (EPA), pursuant to mandates of the federal Clean Air Act, (42 U.S.C. § 7401 et seq. (1970)), has established the National Ambient Air Quality Standards (NAAQS) to protect public health, the environment, and quality of life from the detrimental effects of air pollution. Standards have been established for the following criteria air pollutants: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM), and sulfur dioxide (SO_2). Particulate Matter standards have been established for inhalable coarse particles ranging in diameter from 2.5 to 10 micrometers (µm) (PM_{10}) and fine particles less than 2.5 µm ($PM_{2.5}$) in diameter.

According to FAA Order 10501F, Exhibit 4-1, an emissions impact is significant if "[t]he action would cause pollutant concentrations to exceed one or more of the NAAQS, as established by the EPA under the Clean Air Act, for any of the time periods analyzed, or to increase the frequency or severity of any such existing violations."

Under section 176(c)(4)) of the Clean Air Act (42 U.S.C. 7506(c)) and EPA regulations at 40 CFR Parts 51 and 93 (commonly referred to as the General Conformity Rule), the FAA must ensure that its activities do not cause or contribute to new violations of the NAAQS; worsen existing violations of the NAAQS or delay attainment of the NAAQS. When developing the General Conformity Rule, the EPA recognized that many actions conducted by Federal agencies do not result in substantial increases in air pollutant emissions in nonattainment and maintenance areas. Therefore, the EPA established threshold levels (also referred to as *de minimis* levels) for emissions of each of the criteria pollutants. When the sum of the increases in direct and indirect emissions from a project would be less than the *de minimis* levels, a project would not require a general conformity determination.

The General Conformity Rule also allows Federal agencies to develop a list of actions that are presumed to conform to a State Implementation Plan (SIP).[37] This can be done by clearly demonstrating that the total of direct and indirect emissions from these types of activities would not cause or contribute to any new violation of any standard in any area; interfere with provisions in the applicable SIP for maintenance of any standard; increase the frequency or severity of any existing violation of any standard in any area; or delay timely attainment of any standard or any required interim emission reductions or other milestones in any area including emission levels specified in the applicable SIP. Alternatively, Federal agencies can establish actions that are presumed to conform by providing documentation that emissions from these types of actions are below the applicable *de minimis* levels. The FAA published a list of Presumed to Conform activities in the Federal Register on July 30, 2007.[38]

[37] A SIP is a collection of regulations and documents used by a state, territory, or local air district to reduce air pollution in areas that do not meet NAAQS.
[38] 72 Fed. Reg. 41565

Section 4.3.1: Air Quality Analysis

The FAA's Presumed to Conform list includes "Air Traffic Control Activities and Adopting Approach, Departure and Enroute Procedures for Air Operations." Air traffic control activities are defined for this purpose as "actions that promote the safe, orderly, and expeditious flow of aircraft traffic, including airport, approach, departure, and en route air traffic control. Airspace and air traffic actions (e.g., changes in routes, flight patterns, and arrival and departure procedures) are implemented to enhance safety and increase the efficient use of airspace by reducing congestion, balancing controller workload, and improving coordination between controllers handling existing air traffic, among other things."

FAA determined that project-related aircraft emissions released into the atmosphere below the inversion base for pollutant containment, commonly referred to as the ''mixing height,'' (generally 3,000 feet above ground level) can be presumed to conform when modifications to routes and procedures are designed to enhance operational efficiency (i.e., to reduce delay), increase fuel efficiency, or reduce community noise impacts by means of engine thrust reductions.[39] The Proposed Action falls within the FAA's Presumed to Conform list of covered air traffic related activities.

Section 4.4: Department of Transportation Act, Section 4(f)

Section 4(f) of the U.S. Department of Transportation Act of 1966 (now codified at 49 U.S.C. § 303) protects significant publicly owned parks, recreational areas, wildlife and waterfowl refuges, and public and private historic sites. Figure 11 depicts the location of Section 4(f) property boundaries within the Affected Environment Study Area. An impact on properties protected under Section 4(f) of the Department of Transportation Act is one of the factors FAA considers in determining whether there are extraordinary circumstances that would preclude use of a CATEX to satisfy NEPA requirements for a proposed action. Section 4(f), as amended and re-codified at 49 U.S.C. § 303(c), states that, subject to exceptions for *de minimis* impacts:

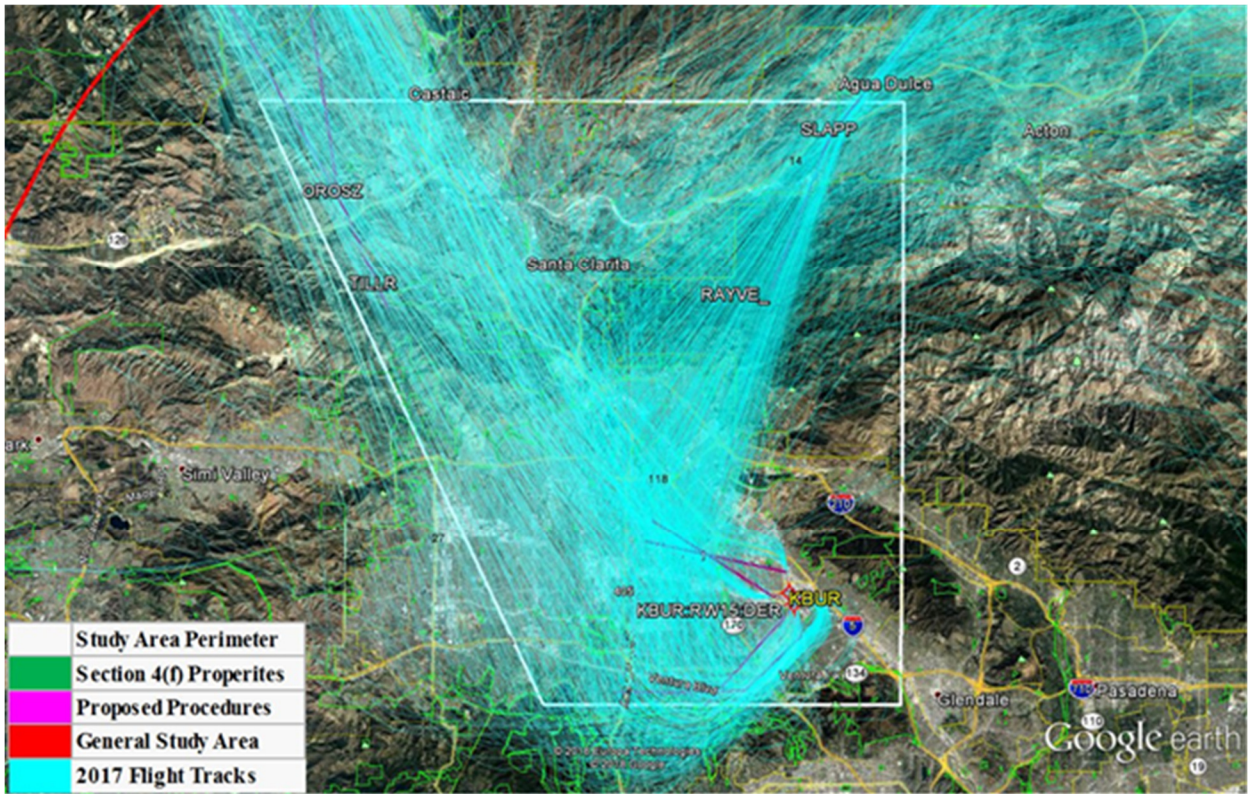
> … the Secretary [of Transportation] may approve a transportation program or project . . . requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance,[40] (as determined by the officials having jurisdiction over the park, area, refuge, or site) only if . . . there is no feasible and prudent alternative to the use of such land and the program or

[39] 72 Fed. Reg. 41578.

[40] There is no prescribed format; however, the documentation should cite the CATEX(s) used, describe how the proposed action fits within the category of actions described in the CATEX, and explain that there are no extraordinary circumstances that would preclude the proposed action form being categorically excluded." FAA Order 1050.1F. Section 5-3.d.

project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

Figure 11. Depiction of the Location of Section 4(f) Properties
With Overlay of 2017 Flight Tracks[41]



Civilian jet aircraft are currently overflying these areas, and would continue to overfly these areas. The number of aircraft operations and the aircraft fleet mix are not expected to change as a result of the implementation of the Proposed Action. As noted above, the Proposed Action would not result in noise levels at properties protected by Section 4(f) that would be incompatible with the land uses specified in the Part 150 guidelines. In addition, the results of the noise screening analysis indicated no significant changes in noise exposure levels as a result of the Proposed Action. Furthermore, the Proposed Action does not involve land acquisition, physical disturbance, or construction activities. Therefore, the FAA has concluded that the Proposed Action would not result in a constructive use of properties protected by Section 4(f).

[41] Figure 10 – Not to scale.

Section 4.5: Historical, Architectural, Archaeological and Cultural Resources

An adverse effect on cultural resources protected under Section 106 of the National Historic Preservation Act (NHPA) of 1966 (54 U.S.C. § 300101 et seq., as amended) that results in a significant impact is another extraordinary circumstance that would preclude use of a CATEX. Section 106 requires federal agencies to consider the effects of their undertakings on properties listed or eligible for listing in the National Register of Historic Places ("National Register"). For the purposes of Section 106 of the NHPA, the undertaking is the Proposed Action described above. Compliance with Section 106 requires consultation to identify historic properties that might be affected by the undertaking and the development of approaches to avoid, minimize or mitigate any adverse effects on those properties. The specific requirements for consultation are set forth in regulations of the Advisory Council on Historic Preservation at 36 CFR part 800.

Section 4.5.1: Definition of the Area of Potential Effect

Federal regulations define the Area of Potential Effect (APE) as the geographic area or areas within which an undertaking may directly or indirectly cause alternation in the character or use of historic properties, if any such properties are present. "Effects" are further defined by the regulations as alterations to the characteristics of a historic property qualifying it for inclusion in or eligibility for the National Register. The APE is influenced by the scale and nature of the undertaking and may vary for different kinds of effects caused by the undertaking.

For this undertaking, to delineate the proposed APE, the FAA applied the Study Area identified for the Affected Environment analysis in this environmental review. (See Section 4.1.2 above). Table 4 below details the location of the four corner points for the proposed APE perimeter as plotted on Google Earth.

Table 4. Burbank Proposed Area of Potential Effect Perimeter Corner Point Location

Perimeter Corner Point	Latitude	Longitude
APE NE Corner	34°28'51.33"N	118°16'50.25"W
APE SE Corner	34° 8'7.93"N	118°16'52.10"W
APE SW Corner	34° 8'7.93"N	118°31'41.93"W
APE NW Corner	34°28'51.33"N	118°43'46.43"W

The FAA initiated consultation in September 2018 with the California Office of Historic Preservation. A separate search of the United States Department of the Interior Bureau of Indian Affairs database was completed to determine the presence of traditional cultural properties within the APE. The search accessed through Google Earth indicated no federally recognized tribal lands identified within the proposed APE. Appendix C*, Consultation Correspondence*, summarizes and includes copies of correspondence with potential consulting parties to date. The consultation process is ongoing to address potential effects associated with the Proposed Action.

Section 4.5.2: Identification of Historic Properties

Section 106 regulations direct federal agencies to make reasonable and good faith efforts to identify historic properties within the APE (36 CFR § 800.4(b)(1)). A search of the National Register accessed through Google Earth identified properties listed on the National Register within the APE. Figure 12 below depicts the approximate location of the properties listed on the National Register.

Figure 12. Depiction of the Location of Properties Listed on the National Register With Overlay of Proposed Procedures[42]

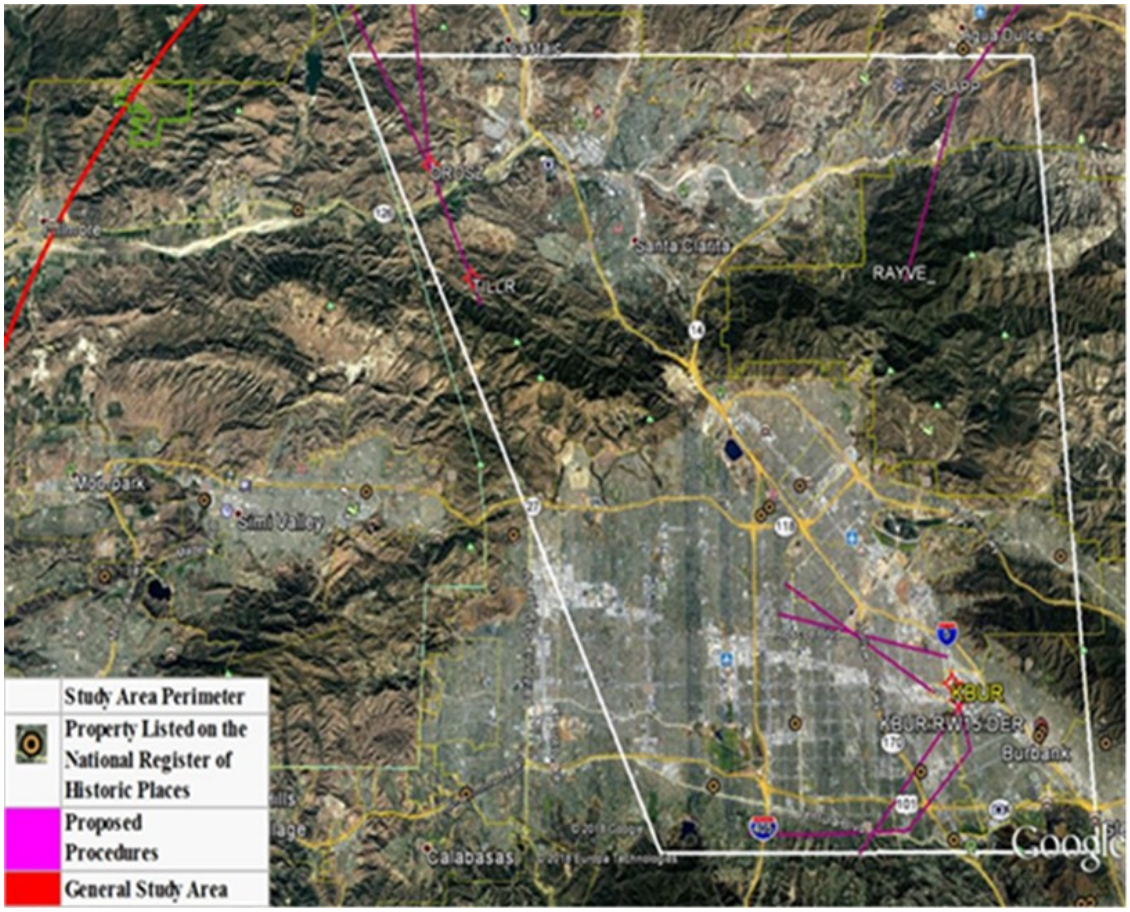


Table 5 below details the listed properties and identifies the applicable criteria for their eligibility to be listed in the National Register.

[42] Figure 12 – Not to scale.

Table 5. Listed Properties on the National Register

Listed Property Name	NRHP Applicable Criteria	National Park Service (NPS) Reference Number
Campo de Cahuenga	Architecture/Engineering	72001602
U.S. Post Office – Burbank Downtown Station	Architecture/Engineering	85000127
City Hall – City of Burbank	Architecture/Engineering	96000426
North Hollywood Branch Library	Architecture/Engineering	87001018
Van Nuys Branch Library	Architecture/Engineering	71000142
Bolton Hall	Architecture/Engineering	71000159
Pico, Romulo, Abode	Architecture/Engineering	66000211
Mission San Fernando Rey de Convento Building	Architecture/Engineering	88002147
Lopez Adobe	Architecture/Engineering	71000157

Section 4.5.3: **Determination of Adverse Effects**

Under National Environmental Policy Act (NEPA), impacts to historic properties and other cultural resources are evaluated. Federal agencies are to take into account the nature and extent of potential effects on historic properties, and the likely nature and location of historic properties within areas that may be affected. The Proposed Action would have an effect on a historic property if it altered the characteristics qualifying that property for the National Register. Such effects are considered "adverse" if they would diminish the integrity of a property's significant historic features (including its setting, provided the setting is a contributing factor to the property's historic significance). For this undertaking, no land acquisition, construction, or other ground disturbance would occur. Accordingly, there would be no direct effects on historic resources. [43] Therefore, potential effects are limited to effects from aircraft overflights, primarily noise.

The FAA proposes to assess the indirect effects to historic resources within the proposed APE that receive noise increases that could alter historic properties where a quiet setting is a characteristic that qualify it for the National Register. Additionally, the FAA considered that certain historic sites may be potentially sensitive to effects of overflights that introduce a visual, atmospheric, or auditory element. Therefore, consistent with this understanding, the FAA is proposing an assessment of overflight within the proposed APE to capture these potential effects.

[43] Note: Direct effects include the removal or alteration of historic resources. Indirect effects include changes in noise, vehicular traffic, light emissions, or other changes that could interfere substantially with the use or character of the resource.

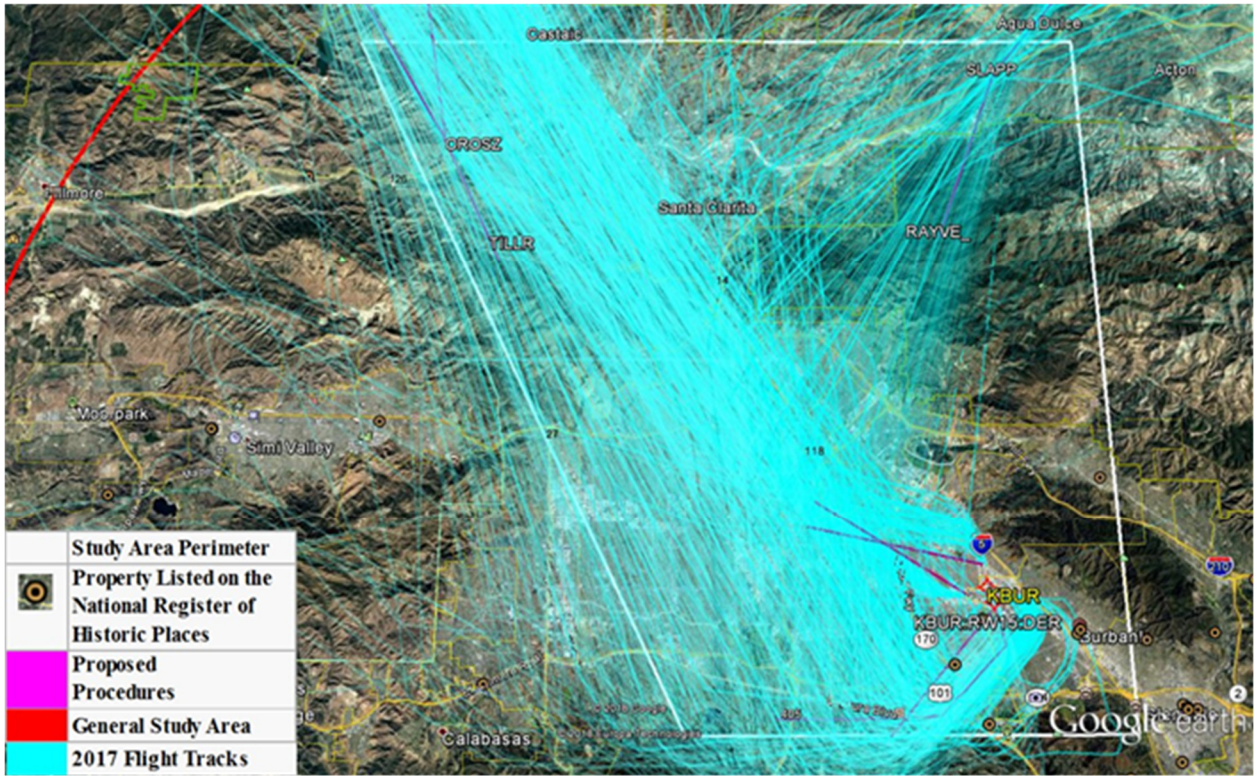
Section 4.5.3: **Assessment of Effects**

The FAA is proposing a finding of "no adverse effects" to historic properties for the proposed OROSZ THREE and the SLAPP TWO procedures. The FAA's noise screening analysis indicated that the undertaking would not result in changes to noise exposure that exceed the FAA's significant noise threshold.[44] The search of records for the National Register did not identify any historic properties within the APE for which a quiet setting is a characteristic that qualifies it for the National Register, and that therefore could be affected at a lower level of noise exposure. Implementation of the Proposed Action would involve changes to aircraft departure procedures, and would not include any project components that would touch or otherwise directly affect the ground surface. Consequently, the assessment of effects was limited to the introduction of atmospheric, audible or visual features resulting from aircraft overflights.

The FAA also considered the potential for overflights to introduce visual, atmospheric or auditory elements to historic properties. The FAA compared the proposed procedures with the 90 random days of 2017 flight tracks, as shown in Figure 13 below, and determined that there would be no new areas overflown and therefore no potential to introduce new visual, atmospheric or auditory elements that could diminish the integrity of a historic property.

[44] The FAA considers an increase of DNL 1.5 dB or more for a noise sensitive area that is exposed to noise at or above the DNL 65 dB noise exposure level, or that will be exposed at or above the DNL 65 dB level due to a DNL 1.5 dB or greater increase to be significant.

Figure 13. Depiction of Proposed Procedures in the Area of Potential Effect
With Overlay of 2017 Flight Tracks[45]



Section 4.6: Environmental Justice

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. *Fair treatment* means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental, and commercial operations or policies.

Section 4.6.1: Environmental Justice Analysis

An environmental justice analysis considers the potential of the Proposed Action to cause disproportionately high and adverse effects[46] on low-income or minority populations due to significant impacts in other environmental impact categories; or impacts on the physical environment that affect an environmental justice population in a way that FAA determines are unique to the environmental justice population and significant to that population. If these factors exist, there is not necessarily a significant impact; rather, the FAA must evaluate these factors in

[45] Figure 13 – Not to scale.

[46] "Adverse effects" means the totality of significant individual or cumulative human health or environmental effects, including interrelated social and economic effects. DOT Order 5610.2(a) provides the definition for the types of adverse impacts that should be considered when assessing impacts to environmental justice populations.

light of context and intensity to determine if there are significant impacts. The FAA has not established a significance threshold for Environmental Justice.

This section addresses the potential for impacts on minority[47] and low-income populations of the Proposed Action as compared with No Action alternative. In weighing whether the Proposed Action raises environmental justice concerns, the analysis draws on the findings of the other impact analyses, particularly noise, land use, and air quality.

Section 4.6.2: Environmental Justice Analysis Results

Aircraft have historically overflown the Affected Environment Study Area. Implementation of the Proposed Action would not adversely affect air quality or land use within the Affected Environment Study Area. Additionally, the results of the noise screening analysis when comparing the No Action alternative to the Proposed Action alternative indicate that changes in noise exposure level would be below the threshold of significance for implementation of the Proposed Action. The Proposed Action has no new social or economic effects on the Affected Environment Study Area. Therefore, there are no disproportionately or adverse impacts on minority, or low-income populations as a result of the Proposed Action as compared to the No Action Alternative.

Section 4.7: Visual Effects

There are no special purpose laws for light impacts and visual impacts. Impacts from light emissions are generally related to airport aviation lighting.

The FAA has not established a significance threshold for visual effects in FAA Order 1050.1F; however, the FAA has identified factors to consider when evaluating the context and intensity of potential environmental impacts for visual effects. As noted above, it was determined that there would be no new areas overflown and that the Proposed Action would not result in an introduction of new atmospheric, visual, or auditory elements that could diminish the integrity of historic and traditional cultural resources. The FAA has concluded that the Proposed Action would not have a significant visual effect on parks, wilderness areas, tribal lands and historic properties.

[47] DOT Order 5610.2(a) defines "minority" as a person who is Black: a person having origins in any of the black racial groups of Africa; Hispanic or Latino:a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race; Asian American:a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent; American Indian and Alaskan Native: a person having origins in any of the original people of North America, South America (including Central America) and who maintains cultural identification through tribal affiliation or community recognition; or Native Hawaiian and Other Pacific Islander: people having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. A minority population is any readily identifiable group of minority persons who live in geographic proximity, and if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who will be similarly affected by a proposed DOT program, policy or activity.

Section 4.8: Cumulative Impacts

The cumulative impacts analysis focuses on those resource areas that may be impacted by the Proposed Action in conjunction with the past, present, and reasonable foreseeable future actions. The likelihood that an action would cumulatively create a significant impact on the human environment is another extraordinary circumstance that the FAA must consider before categorically excluding an action from further NEPA review. In accordance with FAA Order 1050.1F, the significance of cumulative impacts should be determined in the same manner as the significance of direct and indirect impacts.[48]

The FAA has discretion to determine whether, and to what extent, information about past actions are useful for the analysis of the impacts of the proposed action and alternative(s). Present impacts of past actions that are relevant and useful are those that may have a significant cause-and-effect relationship with the direct and indirect impacts of the proposed action and alternative(s). Present actions occurring in the same general time frame as the proposal may have noise or other environmental concerns that should be considered in conjunction with those that would be generated by the FAA proposed action and alternative(s) under consideration. Reasonably foreseeable future actions are actions that may affect projected impacts of a proposal and are not remote or speculative.

Section 4.8.1: Cumulative Impacts Analysis - Noise and Noise-Compatible Land Use

As discussed in Section 4.2, analysis of the predicted noise levels in conjunction with the Proposed Action indicate that changes in noise exposure levels would be below the threshold of significance relative to the No Action alternative. No projects or proposals have been identified that, when combined with the Proposed Action would result in changes in noise exposure that exceed the noise exposure threshold criteria in accordance with FAA Order 1050.1F. Therefore, the Proposed Action would not incrementally contribute to a cumulative noise impact.

Section 4.8.2: Cumulative Impacts Analysis - Air Quality

No projects or proposals have been identified that, when combined with the Proposed Action, would violate any aspect of the current SIP or threaten the attainment status of the region. In addition, no projects or proposals have been identified that, when combined with the Proposed Action, would have substantial GHG emissions, or would lead to a violation of any Federal, state, or local air quality regulation. The cumulative impact of this Proposed Action on the global climate when added to other past, present, and reasonable foreseeable future actions is currently not scientifically predictable. Aviation has been calculated to contribute approximately three percent of global carbon dioxide (CO2) emissions; and this contribution may grow to five percent by 2050. Actions are underway within the U.S. and by other nations to reduce aviation's contribution to climate change. Such measures include new aviation related technologies to reduce emissions and

[48] FAA Order 1050.1F, Paragraph 15.3

improve fuel efficiency, renewable alternative fuels with lower a carbon footprint, more efficient air traffic management, market-based measures and environmental regulations including an aircraft CO_2 standard. At present, there are no calculations of the extent to which measures individually or cumulatively may affect aviation's CO_2 emissions. The FAA, with support from the U.S. Global Change Research Program and its participating federal agencies, (e.g., NASA, NOAA, EPA, and DOE), has developed the Aviation Climate Change Research Initiative (ACCRI) in an effort to advance scientific understanding of regional and global climate impacts of aircraft emissions, with quantified uncertainties for current and projected aviation scenarios under changing atmospheric conditions.

Section 5. Community Involvement

The National Environmental Policy Act of 1969 requires federal agencies to assess the environmental effects of their major federal actions prior to making decisions. There can be public involvement under NEPA, but this requirement is not fixed -- it can vary depending on the environmental impact of the action proposed. Additionally, NEPA requires agencies to develop their own NEPA implementing procedures. This includes establishing "categorical exclusions" for actions the agency has determined normally do not have significant environmental impact on the environment. Unless extraordinary circumstances exist, a categorically excluded action does not require an Environmental Assessment (EA) or Environmental Impact Statement (EIS) or the same public involvement as an EA or EIS. The FAA implements NEPA through FAA Order 1050.1F.

The FAA recognizes the importance and value of public input in the environmental and historic review process and uses community involvement methods that are appropriate for the types of actions it proposes.[49] In this case, the FAA action being proposed is to develop RNAV procedures that are shown to have little to no environmental impact. However, based upon comments and questions the FAA has received, there seems to be some misunderstanding about the development of the proposed procedures and their potential environmental impacts.

Therefore, even though the FAA has no statutory or legal obligation to do so, for this Proposed Action the FAA has selected a public involvement program that includes community outreach and public feedback through comments. Specifically, the FAA, with the assistance and cooperation of the City of Burbank, will hold public workshops in the greater Burbank metropolitan area to educate the public about the development and operation of the Open SID procedures. These workshops will also help the public better understand how the proposed procedures will operate near Burbank Airport. Representatives from the FAA will be available at the workshops to answer

[49] FAA Community Involvement Manual February, 2016.

questions. Materials presented at the workshops will be available online on the FAA's Community Involvement website for Burbank.[50]

In addition to the public workshops, the FAA will provide the public an opportunity to comment on the information presented in the workshops, information placed on the FAA's website, and the draft version of this document. The FAA will consider the comments in developing the final procedure designs and in making a final NEPA determination.

Section 6. Preparer(s)

The FAA Air Traffic Organization, Western Service Center, Operations Support Group is responsible for all or part of the information and representations contained herein.

[50] See https://www.faa.gov/nextgen/nextgen_near_you/community_involvement/bur/.

Section 7. Facility/Service Area Conclusions

Based on this initial review and analysis, there are no extraordinary circumstances or other reasons that would preclude the responsible federal official from selecting this documented Categorical Exclusion as the appropriate level of NEPA documentation for the Proposed Action. The undersigned have determined that the Proposed Action qualifies as a documented categorically excluded action in accordance with FAA Order 1050.1F and, on this basis, recommends that further environmental review need not be conducted before the Proposed Action is implemented.

Facility Manager Review/Concurrence

Signature: _____ **Date:** _____

Name: _____

Air Traffic Manager

Southern California Terminal Radar Approach Control

Service Area Environmental Specialist Review/Concurrence

Signature: _____ **Date:** _____

Name: _____

Environmental Protection Specialist, Operations Support Group,

Western Service Center, AJV-W25

Service Area Director Review/Concurrence, if necessary

Signature: _____ **Date:** _____

Name: _____

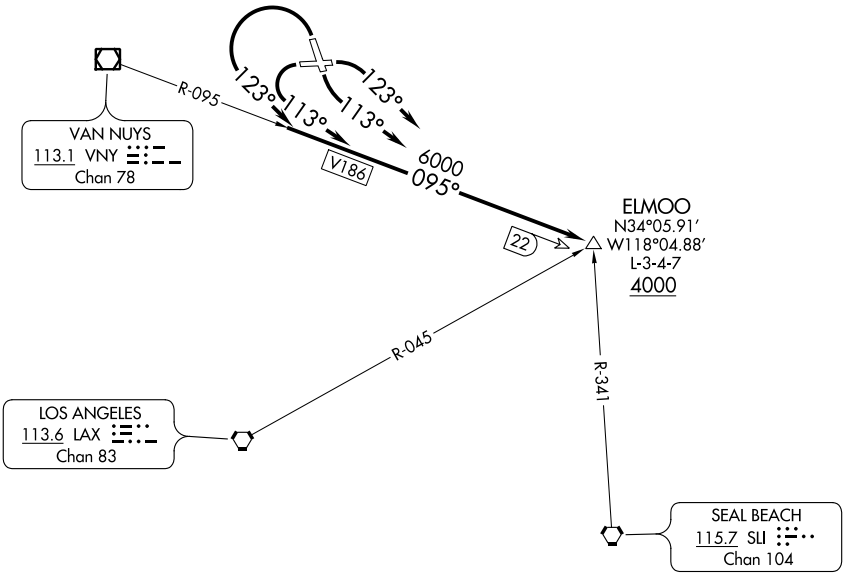
Acting Director, Air Traffic Operations

Western Service Area, AJT-W

APPENDIX B – LIST OF DEPARTURE PROCEDURES AT BOB HOPE "HOLLYWOOD BURBANK" AIRPORT

CLNC DEL
118.0 348.6
CPDLC
SOCAL DEP CON
135.05 317.5

TOP ALTITUDE: ASSIGNED BY ATC



TAKEOFF MINIMUMS
Rwy 8: Standard with minimum climb of 380′ per NM to 2500.
Rwy 15: Standard with minimum climb of 450′ per NM to 3000.
Rwy 26: Standard with minimum climb of 305′ per NM to 2600.
Rwy 33: 600-2¼ with minimum climb of 210′ per NM to 4000
or standard with minimum climb of 450′ per NM to 2600.

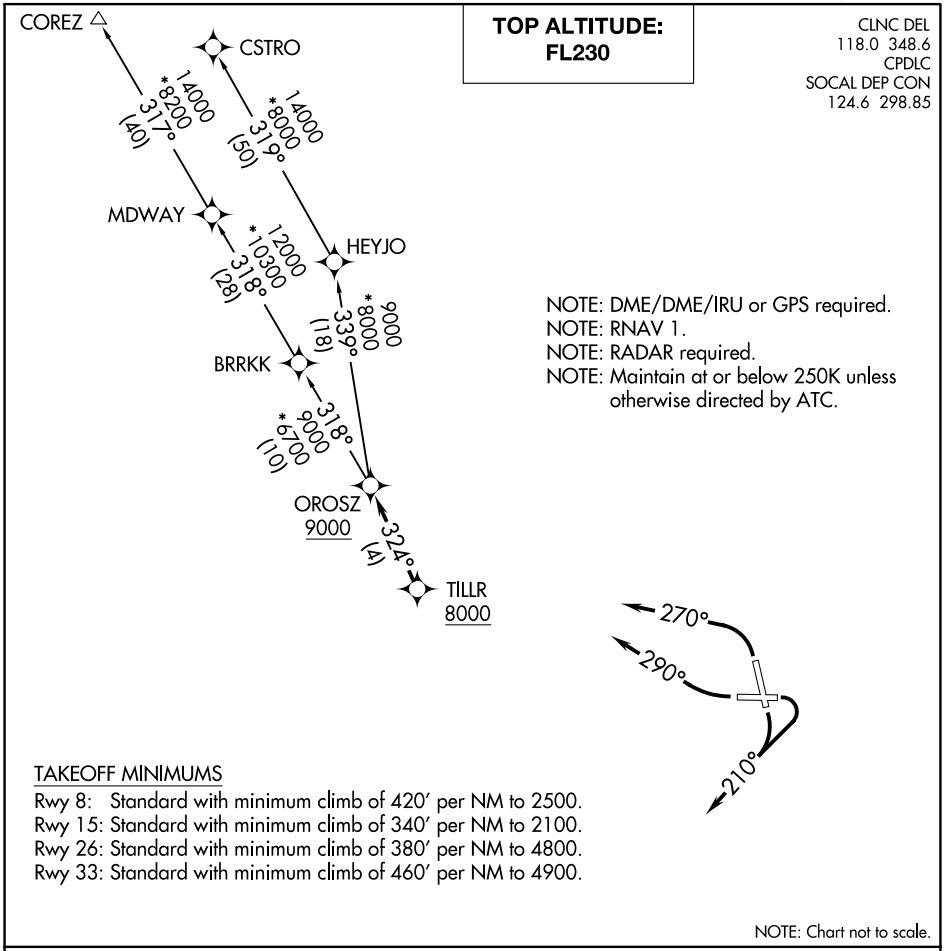
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 8: Climbing right turn heading 123° intercept VNY VOR/DME R-095 to ELMOO. . . .
TAKEOFF RUNWAY 15: Climbing left turn heading 113° intercept VNY VOR/DME R-095 to ELMOO. . . .
TAKEOFF RUNWAY 26: Climbing left turn heading 113° intercept VNY VOR/DME R-095 to ELMOO. . . .
TAKEOFF RUNWAY 33: Climbing left turn heading 123° intercept VNY VOR/DME R-095 to ELMOO. . . .

. . . .thence via assigned route. Maintain ATC assigned altitude.

SW-3, 05 OCT 2023 to 02 NOV 2023
SW-3, 05 OCT 2023 to 02 NOV 2023



TAKEOFF MINIMUMS

Rwy 8: Standard with minimum climb of 420′ per NM to 2500.
Rwy 15: Standard with minimum climb of 340′ per NM to 2100.
Rwy 26: Standard with minimum climb of 380′ per NM to 4800.
Rwy 33: Standard with minimum climb of 460′ per NM to 4900.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 8, 15: Climbing right turn heading 210° or as assigned by ATC, expect vectors to cross TILLR at or above 8000, then on track 324° to cross OROSZ at or above 9000, thence. . . .

TAKEOFF RUNWAY 26: Climbing right turn heading 290° or as assigned by ATC, expect vectors to cross TILLR at or above 8000, then on track 324° to cross OROSZ at or above 9000, thence. . . .

TAKEOFF RUNWAY 33: Climbing left turn heading 270° or as assigned by ATC, expect vectors to cross TILLR at or above 8000, then on track 324° to cross OROSZ at or above 9000, thence. . .

. . . .on (transition) maintain FL230. Expect filed altitude 10 minutes after departure.

COREZ TRANSITION (OROSZ2.COREZ)

CSTRO TRANSITION (OROSZ2.CSTRO)

SW-3, 05 OCT 2023 to 02 NOV 2023
SW-3, 05 OCT 2023 to 02 NOV 2023

SLAPP TWO DEPARTURE (RNAV)

(SLAPP2.SLAPP) 10SEP20

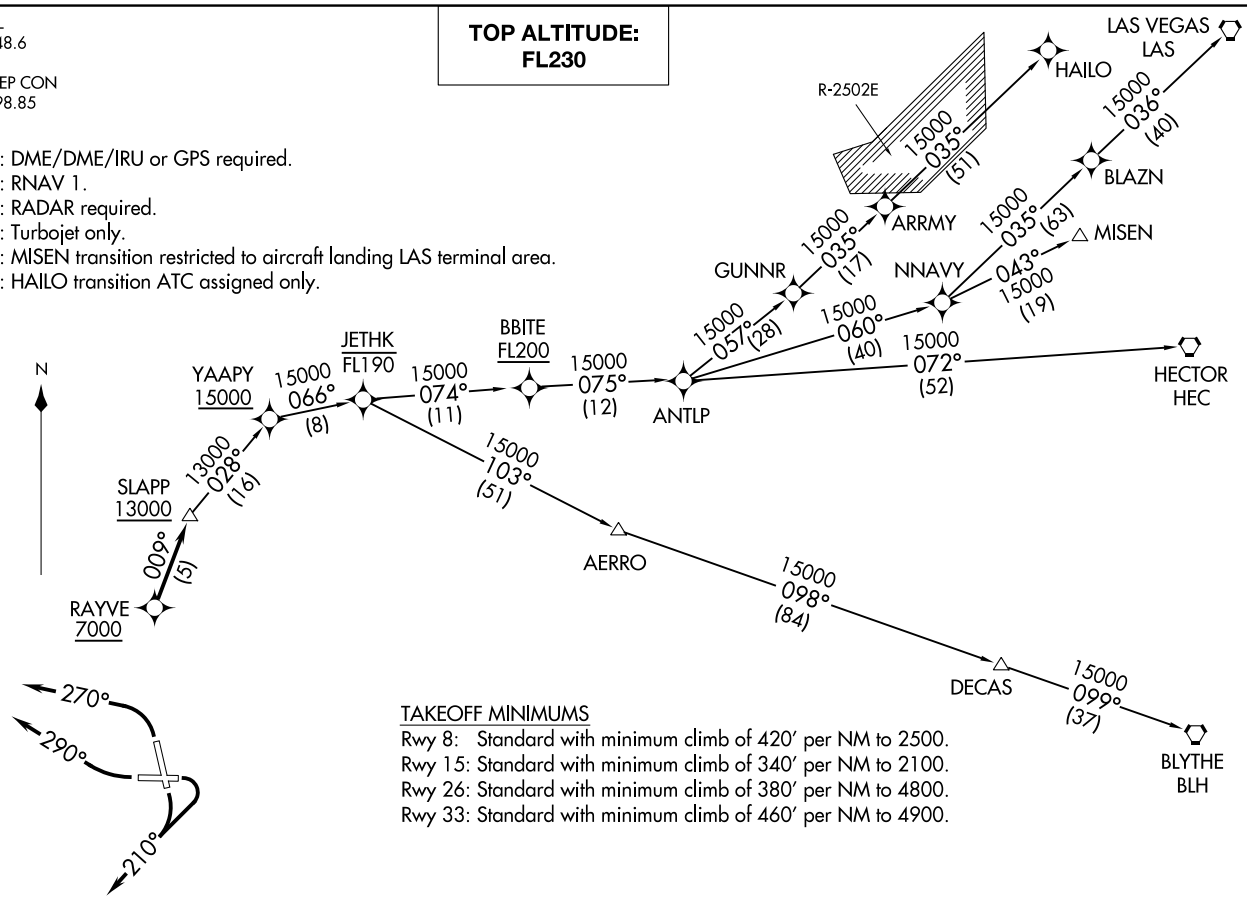
BURBANK, CALIFORNIA

BOB HOPE (BUR)

CLNC DEL
118.0 348.6
CPDLC
SOCAL DEP CON
124.6 298.85

TOP ALTITUDE: FL230

NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: Turbojet only.
NOTE: MISEN transition restricted to aircraft landing LAS terminal area.
NOTE: HAILO transition ATC assigned only.



TAKEOFF MINIMUMS
Rwy 8: Standard with minimum climb of 420′ per NM to 2500.
Rwy 15: Standard with minimum climb of 340′ per NM to 2100.
Rwy 26: Standard with minimum climb of 380′ per NM to 4800.
Rwy 33: Standard with minimum climb of 460′ per NM to 4900.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

(SLAPP2.SLAPP) 20254

SLAPP TWO DEPARTURE (RNAV)

AL-67 (FAA)

BOB HOPE (BUR)

BURBANK, CALIFORNIA

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 8: Climbing right turn to heading 210°, expect vectors to RAYVE, then on track 009° to cross SLAPP at or above 13000, thence. . . .

TAKEOFF RUNWAY 15: Climbing right turn to heading 210°, or as assigned by ATC, expect vectors to RAYVE, then on track 009° to cross SLAPP at or above 13000, thence. . . .

TAKEOFF RUNWAY 26: Climbing right turn to heading 290°, expect vectors to RAYVE, then on track 009° to cross SLAPP at or above 13000, thence. . . .

TAKEOFF RUNWAY 33: Climbing left turn to heading 270°, expect vectors to RAYVE, then on track 009° to cross SLAPP at or above 13000, thence. . . .

. . . .on (transition) maintain FL230. Expect filed altitude 10 minutes after departure.

BLYTHE TRANSITION (SLAPP2.BLH)

HAILO TRANSITION (SLAPP2.HAILO)

HECTOR TRANSITION (SLAPP2.HEC)

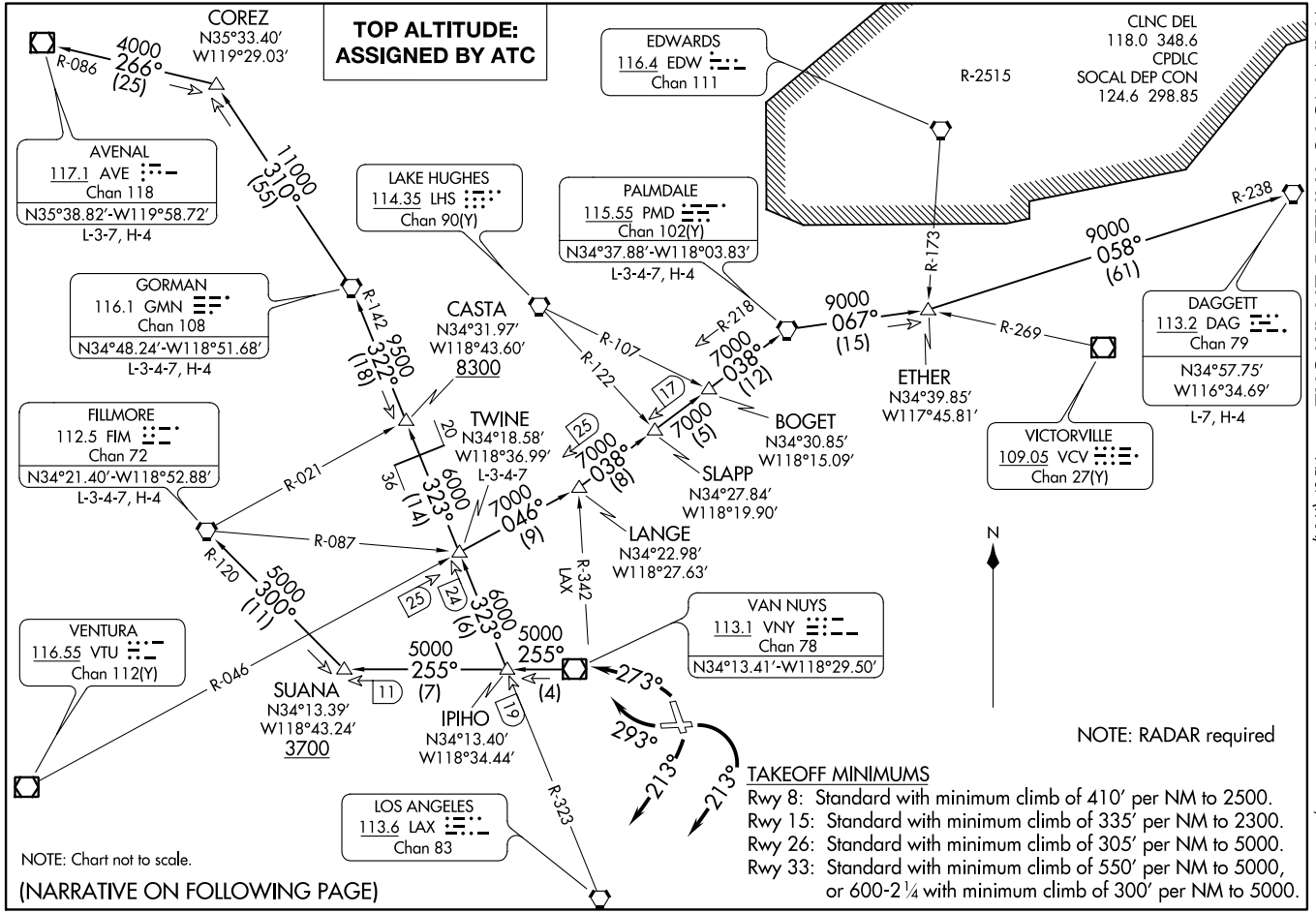
LAS VEGAS TRANSITION (SLAPP2.LAS)

MISEN TRANSITION (SLAPP2.MISEN)

SW-3, 05 OCT 2023 to 02 NOV 2023

VAN NUYS THREE DEPARTURE

(VNY3.VNY) 26MAY16



(VNY3.VNY) 23222

VAN NUYS THREE DEPARTURE

AL-67 (FAA)

BOB HOPE (BUR)
BURBANK, CALIFORNIA

BURBANK, CALIFORNIA
BOB HOPE (BUR)

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 8: Climbing right turn heading 213° . . . .
TAKEOFF RUNWAY 15: Climbing right turn heading 213° . . . .
TAKEOFF RUNWAY 26: Climbing right turn heading 293° . . . .
TAKEOFF RUNWAY 33: Climbing left turn heading 273° . . . .

. . . .expect RADAR vector to VNY VOR/DME. Thence via (transition) or (assigned route).

AVENAL TRANSITION (VNY3.AVE): From over VNY VOR/DME on VNY R-255 and LAX R-323 to TWINE, then on LAX R-323 and GMN R-142 to GMN VORTAC, then on GMN R-310 and AVE R-086 to AVE VOR/DME.
DAGGETT TRANSITION (VNY3.DAG): From over VNY VOR/DME on VNY R-255 and LAX R-323 to TWINE, then on VTU R-046 and PMD R-218 to PMD VORTAC, then on PMD R-067 and DAG R-238 to DAG VORTAC.
FILLMORE TRANSITION (VNY3.FIM): From over VNY VOR/DME on VNY R-255 and FIM R-120 to FIM VORTAC.
GORMAN TRANSITION (VNY3.GMN): From over VNY VOR/DME on VNY R-255 and LAX R-323 to TWINE, then on LAX R-323 and GMN R-142 to GMN VORTAC.
PALMDALE TRANSITION (VNY3.PMD): From over VNY VOR/DME on VNY R-255 and LAX R-323 to TWINE, then on VTU R-046 and PMD R-218 to PMD VORTAC.
TWINE TRANSITION (VNY3.TWINE): From over VNY VOR/DME on VNY R-255 and LAX R-323 to TWINE.

SW-3, 05 OCT 2023 to 02 NOV 2023

VVERA TWO DEPARTURE (RNAV)

(VVERA2.VVERA) 12OCT17

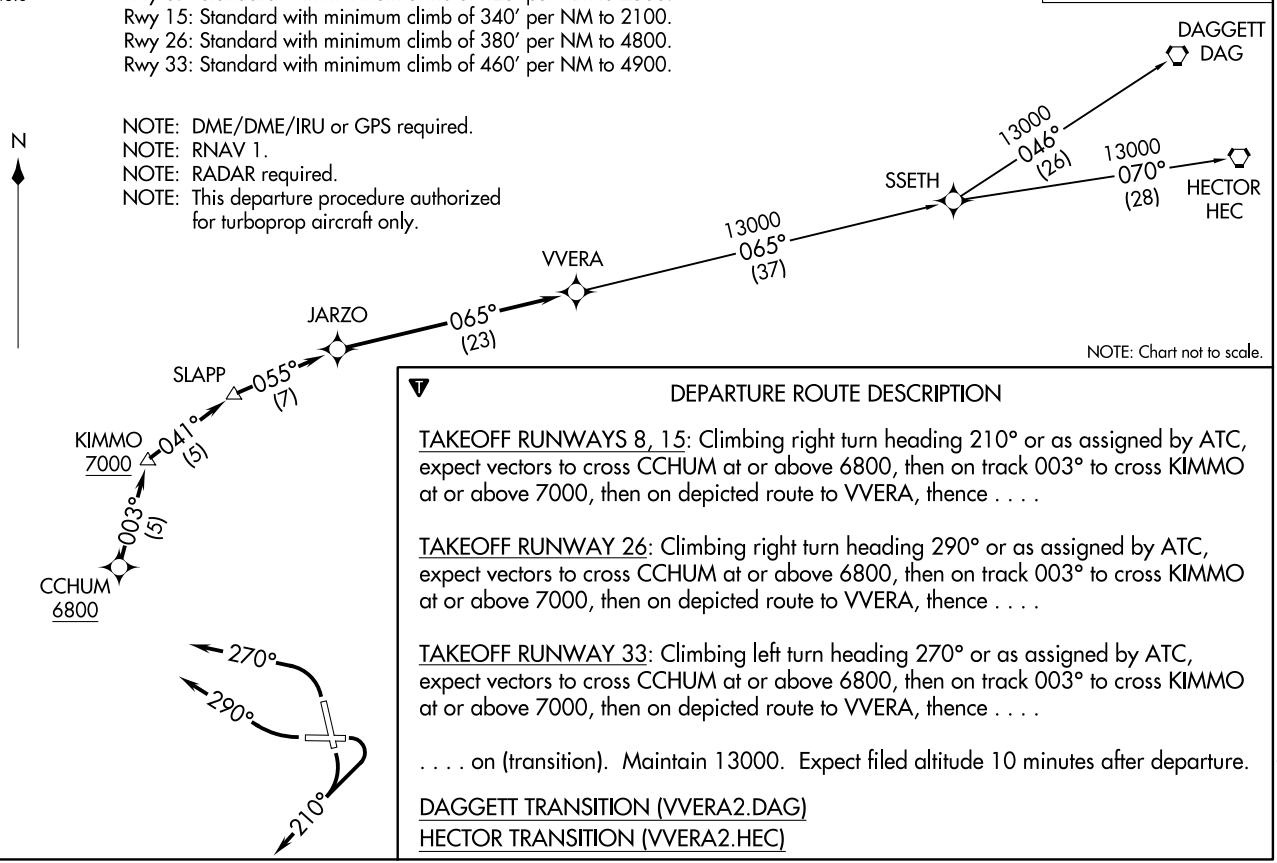
BURBANK, CALIFORNIA
BOB HOPE (BUR)

SOCAL DEP CON
124.6 298.85
CLNC DEL
118.0 348.6
CPDLC

TOP ALTITUDE: 13000

TAKEOFF MINIMUMS
Rwy 8: Standard with minimum climb of 420′ per NM to 2500.
Rwy 15: Standard with minimum climb of 340′ per NM to 2100.
Rwy 26: Standard with minimum climb of 380′ per NM to 4800.
Rwy 33: Standard with minimum climb of 460′ per NM to 4900.

NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: This departure procedure authorized for turboprop aircraft only.



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 8, 15: Climbing right turn heading 210° or as assigned by ATC, expect vectors to cross CCHUM at or above 6800, then on track 003° to cross KIMMO at or above 7000, then on depicted route to VVERA, thence . . . .

TAKEOFF RUNWAY 26: Climbing right turn heading 290° or as assigned by ATC, expect vectors to cross CCHUM at or above 6800, then on track 003° to cross KIMMO at or above 7000, then on depicted route to VVERA, thence . . . .

TAKEOFF RUNWAY 33: Climbing left turn heading 270° or as assigned by ATC, expect vectors to cross CCHUM at or above 6800, then on track 003° to cross KIMMO at or above 7000, then on depicted route to VVERA, thence . . . .

. . . . on (transition). Maintain 13000. Expect filed altitude 10 minutes after departure.

DAGGETT TRANSITION (VVERA2.DAG)
HECTOR TRANSITION (VVERA2.HEC)

VVERA TWO DEPARTURE (RNAV)

(VVERA2.VVERA) 17285

AL-67 (FAA)

BOB HOPE (BUR)
BURBANK, CALIFORNIA

APPENDIX C – SETTLEMENT AGREEMENT BETWEEN FAA AND BENEDICT HILLS HOMEOWNERS ASSOCIATION

Settlement Agreement
Between the Federal Aviation Administration, Benedict Hills Estates Association and Benedict Hills Homeowners Association

The United States of America, acting through the Federal Aviation Administration (FAA), and Benedict Hills Estates Association and the Benedict Hills Homeowners Association (together, the Associations) (collectively, the Parties) enter into this Settlement Agreement (Agreement), by and through their undersigned representatives, to resolve the disputes outlined below and pertaining to FAA's Southern California Metroplex (SoCal Metroplex) project which replaces dozens of existing conventional air traffic control procedures with new satellite-based procedures at twenty-one airports in Southern California.

Litigation

On October 24, 2016, the Associations filed a petition for review challenging the FAA's Finding Of No Significant Impact and Record Of Decision for the Southern California Metroplex Project under 49 U.S.C. § 46110 in the United States Court of Appeals for the District of Columbia Circuit, Case No. 16-1366.

The Parties have reached an agreement to settle and stipulate to the dismissal of Case No. 16-1366.

Agreement

NOW, THEREFORE, in consideration of the mutual covenants and other consideration described herein, the Parties agree it is in the interest of the public and civil aviation to AGREE as follows:

I. Complete Settlement of all Claims

The Parties agree that this Agreement upon execution shall resolve all claims by the Associations that have been brought, or could have been brought, in *Benedict Hills Estates Assoc. v. FAA*, No. 16-1366 (D.C. Cir.).

The Parties agree that within 30 days of this Agreement's execution, the Associations shall move to dismiss with prejudice their petition for review, No. 16-1366, in the United States Court of Appeals for the District of Columbia Circuit, which shall resolve all claims by the Associations that have been brought, or could have been brought, in *Benedict Hills Estates Assoc. v. FAA*, No. 16-1366 (D.C. Cir.).

II. Terms

The Parties agree to the following terms:

A. FAA will design and develop two open standard instrument departure procedures from Bob Hope Airport called SLAPP and OROSZ. Incorporated by reference and attached hereto is Exhibit "A," which depicts the proposed initial designs for these procedures. The parties acknowledge that aircraft departing Bob Hope Airport utilizing the SLAPP and OROSZ

procedures will be radar vectored by air traffic control north as soon as practicable after take-off and would depend on the circumstances described in paragraph F.

B. Implementation of the proposed open departure procedures SLAPP and OROSZ from Bob Hope Airport are subject to FAA compliance with and evaluation under the National Environmental Policy Act (NEPA) and any other required environmental analysis, including but not limited to the National Historic Preservation Act, Clean Air Act, and Section 4(f) of the Department of Transportation Act. Nothing in this agreement should be construed to commit FAA to a specific outcome of the NEPA environmental review process or require FAA to make any specific decision based on the NEPA environmental review process.

C. Implementation of the open departure procedures SLAPP and OROSZ from Bob Hope Airport are subject to FAA's safety risk management analysis. Nothing in this agreement should be construed to commit FAA to a specific outcome under FAA's safety risk management analysis.

D. If, at the conclusion of either the NEPA review or safety risk management analysis, the FAA determines that it will not proceed with implementing either the SLAPP or OROSZ procedures from Bob Hope Airport, the FAA will document that decision in an "order" subject to the provisions of 49 U.S.C. § 46110.

E. If the conditions in B and C are satisfied, FAA shall: (i) implement the open departure procedures SLAPP and OROSZ from Bob Hope Airport as shown in Exhibit "A" as soon as practicable; (ii) within 60 days of implementation, evaluate whether aircraft are flying the SLAPP and OROSZ procedures as proposed ; and (iii) if necessary and consistent with FAA policies and requirements, make adjustments to the SLAPP and OROSZ procedures to ensure aircraft fly the procedure as proposed and depicted in Exhibit "A."

F. The implementation and aircraft operational use of the open departure procedures SLAPP and OROSZ shown in Exhibit "A" will take place under normal air traffic conditions permitting their use. Aircraft operational use of the open departure procedures are subject to safety and operational restrictions and potential conflicts, including, but not limited to events, other air traffic, weather, and emergencies.

G. To the maximum extent practicable, the FAA agrees that it shall keep aircraft departing from Bob Hope Airport using the open departure procedures SLAPP and OROSZ shown in Exhibit "A" on the procedures. The parties acknowledge that aircraft departing Bob Hope Airport utilizing the SLAPP and OROSZ procedures will be radar vectored by air traffic control north as soon as practicable after take-off and would depend on the circumstances described in paragraph F.

H. The parties agree and understand that due to safety and efficiency it is impossible to restrict or otherwise limit an air traffic controller's options for vectoring aircraft at all times. Adherence to procedures is dependent on a variety of factors at any given time and depends on individual circumstances. Factors and circumstances include air traffic volume and complexity, weather, winds, pilot abilities, aircraft and equipment capabilities, and other flight and air traffic

dynamics. The parties understand that individual aircrew performance requirements are set forth in FAA Order 8260.58A, U.S. Standard for PBN Instrument Procedure Design, and FAA Advisory Circular 90-100A, Change 2, Terminal and En Route Area Navigation (RNAV) Operations. Therefore, FAA must be able to vector aircraft in controlled airspace for safety, separation, operational efficiency, sequencing, or other air traffic control purposes.

I. The FAA agrees to provide to Bob Hope Airport, for public dissemination, quarterly reports for one (1) year regarding the FAA's monitoring of the open departure procedures SLAPP and OROSZ shown in Exhibit "A" to evaluate deviations from expected flight paths. The FAA further agrees to provide copies of such reports to the Associations.

III. Miscellaneous Provisions

Notices. All notices required under this Agreement shall be in writing, and may be given either personally or by registered or certified mail (return receipt requested) or facsimile. Any Party may at any time, by giving 10 days' written notice to the other Party, designate any other person or address in substitution of the address to which such notice shall be given. Such notice shall be given to the Parties at their addresses set forth below:

Parties to identify those to receive future notifications

Benedict Hills Homeowners Association
640 S. San Vicente Blvd. #474
Los Angeles, CA 90048

Benedict Hills Estates Association
9903 Santa Monica Blvd. #355
Beverly Hills, CA 90212

Regional Administrator, Western-Pacific Region
Federal Aviation Administration
15000 Aviation Blvd
Lawndale, CA 90261

Enforcement. If one of the Parties alleges a breach of the terms or conditions of this Agreement, the Party alleging a breach must notify the other in writing prior to filing any legal action regarding this agreement. For purposes of this paragraph, the Associations agree to send written notice to the FAA Office of Regional Counsel, Western Pacific Region. For purposes of this paragraph, the FAA agrees to send written notice to counsel for the Associations, Steven M. Taber, Esq. Upon receipt of such written notice, the Parties shall confer and, as soon as possible, try to resolve the alleged breach. The Parties agree to attempt to resolve any such issues in good faith. Should those attempts be unsuccessful, the Parties agree to engage voluntarily in mediation overseen by the FAA's Office of Dispute Resolution for Acquisitions ("ODRA"). *See* 14 C.F.R. §17.3(q) (defining ODRA and its authority to provide dispute resolution services). The Parties understand that mediation may be terminated by any Party or the mediator at any time. If the

Parties cannot settle the entirety of the dispute in mediation, all unsettled elements shall be subject to the enforcement provision in Section III as stated below.

The Parties reserve the right to judicially enforce any terms or provisions of this Agreement. An action to enforce this Agreement must be brought and pursued in Federal court and shall be governed by and construed in accordance with Federal law.

Own Costs. Each Party shall bear its own costs, including any attorneys' fees, in connection with this Agreement and the litigation giving rise to this Agreement.

Authority. The representatives of each Party hereby certify that he or she is duly authorized to enter into the Agreement. The Associations represent that they have full authority to perform all of the acts and obligations they have agreed to perform under the terms of this Agreement.

The United States, acting though the Department of Justice and the FAA, represents that the FAA has the full authority to perform all of the acts and obligations it and the United States of America has agreed to perform under the terms of this Agreement. Nothing in this Agreement shall be construed to require any action in violation of the Anti-Deficiency Act, 31 U.S.C. § 1341.

Copies and Counterparts. It is contemplated that this Agreement may be executed in counterparts, each of which shall be deemed an original, and all of which together constitute one and the same document. Facsimiles, hard copies, and scanned electronic copies of signatures, including scanned electronic copies sent by email shall constitute acceptable, binding signatures for purposes of this Agreement.

Defense of this Agreement. The Parties agree to vigorously and actively defend this Agreement and all terms embodied herein as fair and reasonable and to vigorously and actively defend the same against any challenge by any individual or entity. The Parties further agree not to undermine directly or indirectly this Agreement or any terms set forth therein for so long as this Agreement remains in effect.

Modification. This Agreement may be supplemented or modified only by the mutual agreement of the Parties. No supplement, amendment, or modification of this Agreement shall be binding unless it is in writing and signed by all duly authorized representatives of each Party.

Successors or Assigns. This Agreement shall be binding upon and inure to the benefit of the Parties and their respective successors, transferees, licensees, agents, heirs, and assigns.

Precedent. Nothing in this Agreement shall constitute an admission concerning any allegation, claim, or defense at issue in *Benedict Hills Estates Assoc. v. FAA*, No. 16-1366 (D.C. Cir.) or related cases. This Agreement has no precedential effect as to any other dispute between the Parties or between either the Associations or the FAA and any third party. This Agreement is made in light of the unique circumstances of this case and the uncertainty of the specific matters resolved hereby. Nothing herein shall be construed to be an admission of liability or as an interpretation of the validity or terms or provisions of any other instruments or contracts.

Release. Upon dismissal of this matter (*Benedict Hills Estates Assoc. v. FAA*, No. 16-1366 (D.C. Cir.)), the Petitioners Benedict Hills Estates Association and the Benedict Hills Homeowners Association and all their heirs, administrators, representatives, attorneys, successors, and assigns, hereby release, waive, acquit, and forever discharge the FAA and all its respective officers, employees, and agents from, and are hereby forever barred and precluded from prosecuting, any and all claims, causes of action, and/or requests for relief asserted in *Benedict Hills Estates Assoc. v. FAA*, No. 16-1366 (D.C. Cir.), as well as any and all claims, causes of action, and/or requests for relief, whether or not made, against any Party that could have been raised in those matters, with the exception of proceedings to enforce this Agreement.

No Third Party Rights. This Agreement is not intended to create, and does not create, any third-party beneficiary rights, confer upon any non-party a right to enforce or sue for an alleged breach of the Agreement, or generate any other kind of right or privilege for any person, group, or entity other than the Parties.

Effective Date. This Agreement shall be effective upon the date of execution by all Parties.

Date: March 1, 2018

BENEDICT HILLS HOMEOWNERS ASSOCIATION

By: _____
David Herman
Its President

Date: _____, 2018

BENEDICT HILLS ESTATES ASSOCIATION

By: _____
Edward B. Brody
Its President

Date: _____, 2018

FEDERAL AVIATION ADMINISTRATION

By: _____
Maurice Hoffman
Acting Director, Airspace Services, AJV-1

Date: _____, 2018

UNITED STATES DEPARTMENT OF JUSTICE

By: _____
Lane McFadden
Attorney, Env't & Nat. Res. Division

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Effective Date. This Agreement shall be effective upon the date of execution by all Parties.

Date: _____, 2018

BENEDICT HILLS HOMEOWNERS ASSOCIATION

By: _____
David Herman
Its President

Date: 02/17, 2018

BENEDICT HILLS ESTATES ASSOCIATION

By: Edward B Brody
Edward B. Brody
Its President

Date: _____, 2018

FEDERAL AVIATION ADMINISTRATION

By: _____
Maurice Hoffman
Acting Director, Airspace Services, AJV-1

Date: _____, 2018

UNITED STATES DEPARTMENT OF JUSTICE

By: _____
Lane McFadden
Attorney, Env't & Nat. Res. Division

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Effective Date. This Agreement shall be effective upon the date of execution by all Parties.

Date: _____, 2018

BENEDICT HILLS HOMEOWNERS ASSOCIATION

By:_____
David Herman
Its President

Date: _____, 2018

BENEDICT HILLS ESTATES ASSOCIATION

By: _____
Edward B. Brody
Its President

Date: 3-12, 2018

FEDERAL AVIATION ADMINISTRATION

By: Maurice Hoffman
Maurice Hoffman
Acting Director, Airspace Services, AJV-1

Date: _____, 2018

UNITED STATES DEPARTMENT OF JUSTICE

By:_____
Lane McFadden
Attorney, Env't & Nat. Res. Division

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Effective Date. This Agreement shall be effective upon the date of execution by all Parties.

Date: _____, 2018 BENEDICT HILLS HOMEOWNERS ASSOCIATION

By: David Herman
Its President

Date: _____, 2018 BENEDICT HILLS ESTATES ASSOCIATION

By: Edward B. Brody
Its President

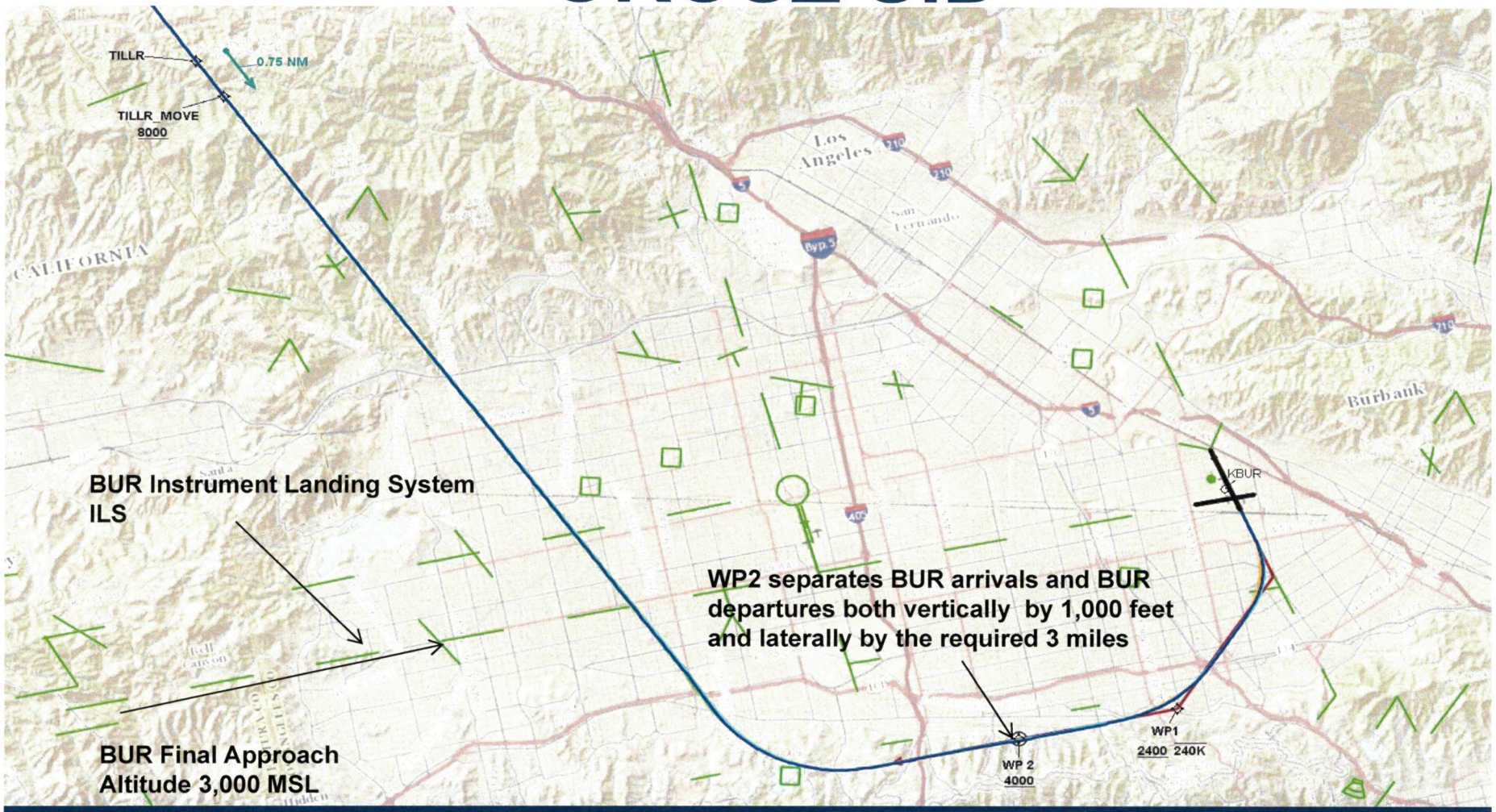
Date: _____, 2018 FEDERAL AVIATION ADMINISTRATION

By: _____
Maurice Hoffman
Acting Director, Airspace Services, AJV-1

Date: 3/16/18, 2018 UNITED STATES DEPARTMENT OF JUSTICE

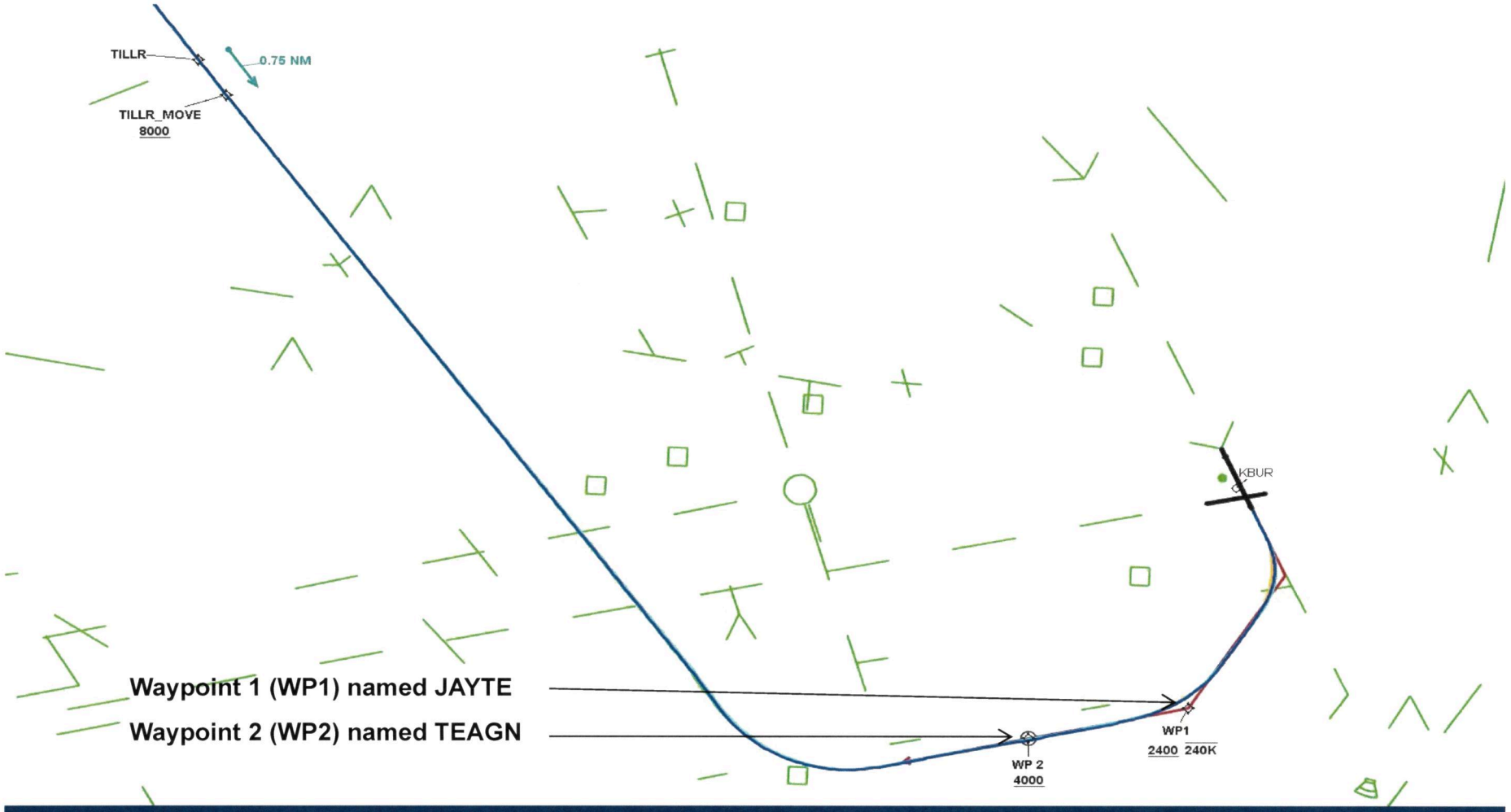
By: _____
Lane McFadden
Attorney, Env't & Nat. Res. Division

Benedict Hills Proposal
OROSZ SID



Federal Aviation Administration

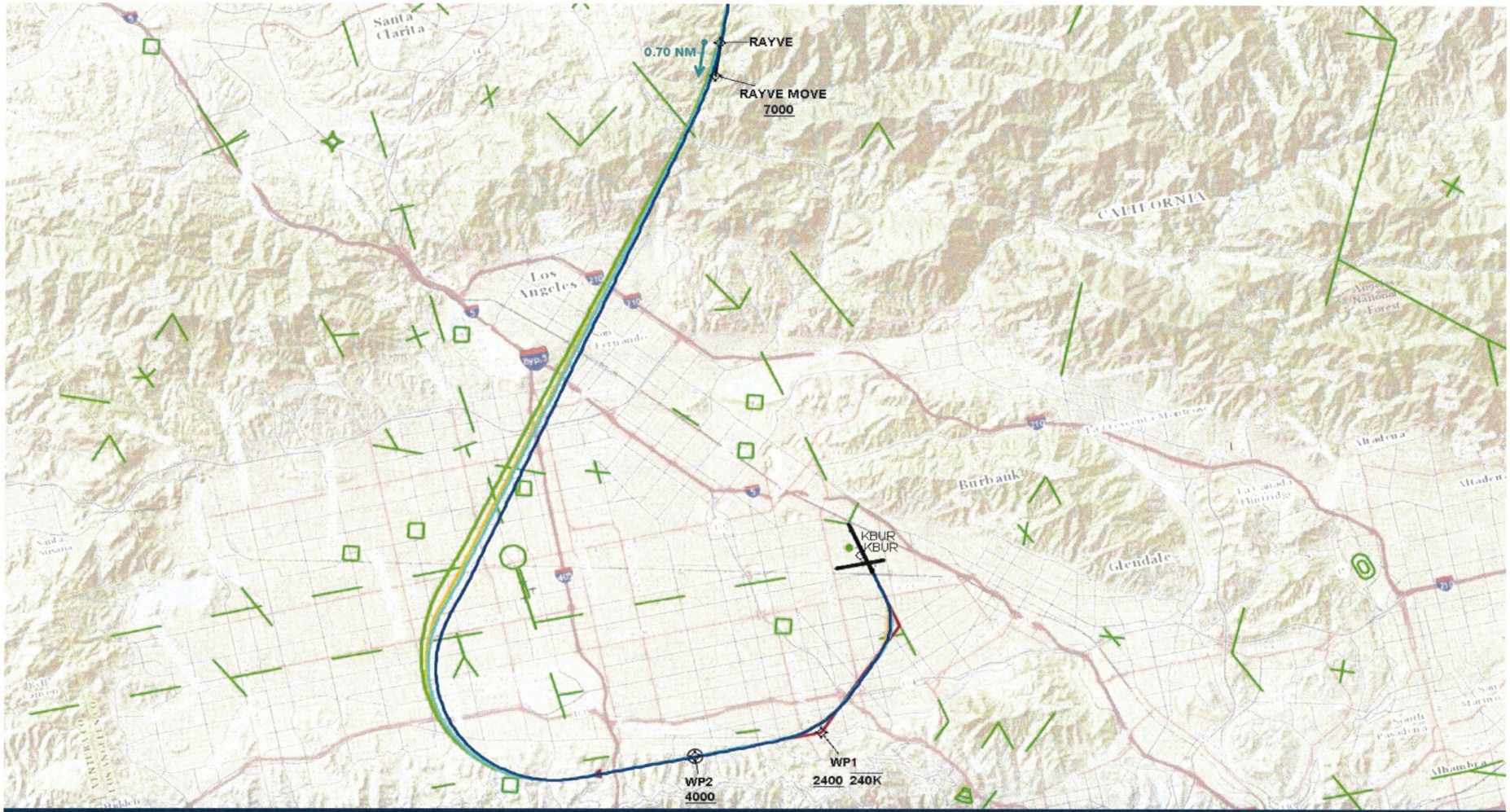
Benedict Hills Proposal
OROSZ SID



Federal Aviation Administration

* EXHIBIT A *

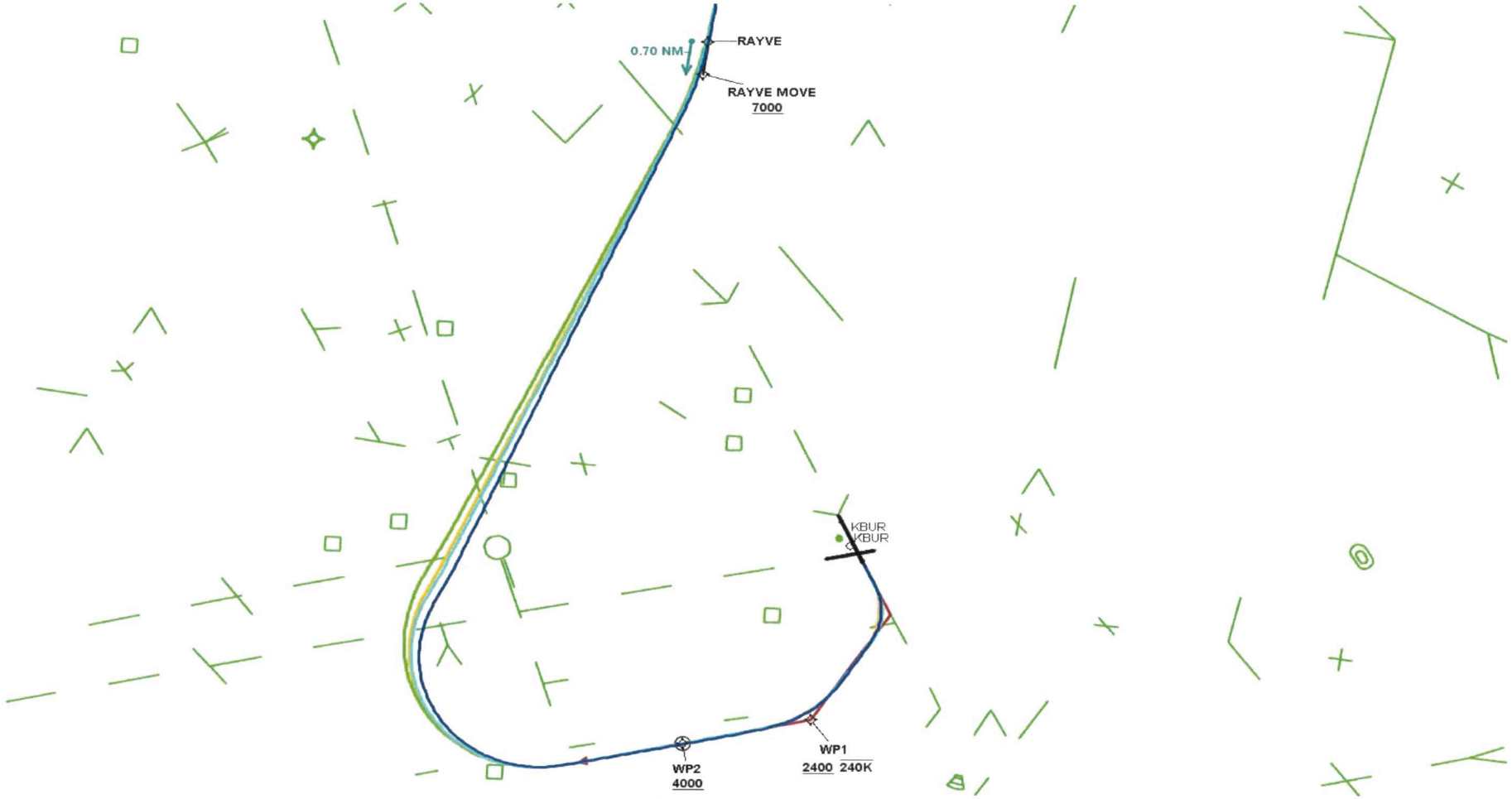
Benedict Hills Proposal
SLAPP SID



Federal Aviation Administration

* EXHIBIT A *

Benedict Hills Proposal
SLAPP SID



Federal Aviation Administration

OROSZ and SLAPP Technical Data

Runway Transition Data - KBUR:15_VI CF TF FM

DB	End Point	Latitude (D° M' S.ss")	Longitude (D° M' S.ss")	FO/FB	Leg	TC	MC	Distance	Altitude	Speed	MEA	MOCA	Arc Center Lat (D° M' S.ss")	Arc Center Lon (D° M' S.ss")	Arc Radius (NM)
AIRNAV2 r13 10-13-16 TO UNK	DER RW15	N34 11 38.06	W118 21 19.33												
					VI	167.08	155.08	1.21							
	JAYTE WP	N34 08 33.85	W118 23 20.20	FB	CF	225.93	213.93	2.70	+2400	-240					
	TEAGN WP	N34 08 34.83	W118 26 22.36	FO	TF	270.38	258.38	2.52	+4000						
	TEAGN WP	N34 08 34.83	W118 26 22.36		FM	270.38	258.38								

APPENDIX D – SOUTHERN SAN FERNANDO VALLEY AIRPLANE NOISE TASK FORCE RECOMMENDATIONS TO ADDRESS COMMUNITY NOISE

HMMH
1508 Eureka Road, Suite 190
Roseville, CA 95661
916.368.0707
www.hmmh.com

MEMORANDUM

To:	Patrick Lammerding Deputy Executive Director, Hollywood Burbank Airport
From:	Gene Reindel Task Force Facilitator
Date:	May 14, 2020
Subject:	Task Force Member Recommendations
Reference:	HMMH Project Number 310870

After seven meetings and over eight months, the Southern San Fernando Valley Airplane Noise Task Force successfully completed its objective to develop a set of recommendations to address community noise issues related to aircraft operations from Hollywood Burbank Airport (BUR) and Van Nuys Airport (VNY). At the end of the seventh meeting, which occurred over eight hours on May 6 and 7, 2020, the Task Force members ***approved a total of 16 recommendations*** to address the following six major community noise concerns:

1. Southern Shift of Flight Tracks (2 recommendations)
2. Low Altitude Departing Aircraft (2 recommendations)
3. Concentration of Flight Tracks (2 recommendations)
4. Unequal Distribution of Aircraft Noise (2 recommendations)
5. Nighttime Aircraft Noise (3 recommendations)
6. Insufficient Noise Mitigation (5 recommendations)

This memorandum, beginning on the next page, provides the 16 Task Force-approved high priority measures organized by community concern and the language of each recommendation as approved through the motions and voting procedures on May 7, 2020. These 16 approved recommendations were consolidated from the nearly 100 recommendations proposed by the individual members of the Task Force. The memorandum also provides the specific recommendations of the Task Force members within each community concern category along with their actual recommendation documents in the Appendix. The specific recommendations should be reviewed along with the approved recommendations for additional understanding of the consolidated recommendations approved May 7, 2020.

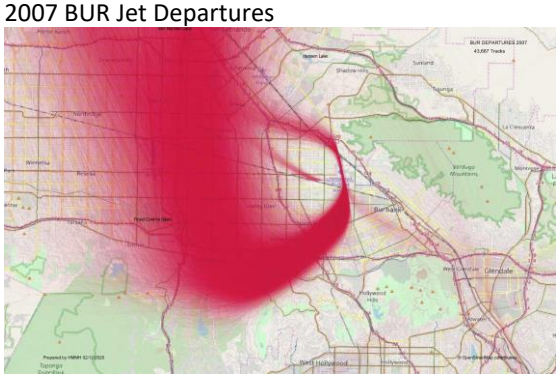
The Task Force rejected the Federal Aviation Administration request to prioritize the recommendations and voted unanimously to set the priority for all the approved recommendations to high.

Note: The recommendations provided in this memorandum have not been determined to be feasible. HMMH consulted as to potential issues with suggested alternatives through the course of the Task Force meetings. However, the entities responsible for implementation are to determine feasibility as part of their assessment and review processes.

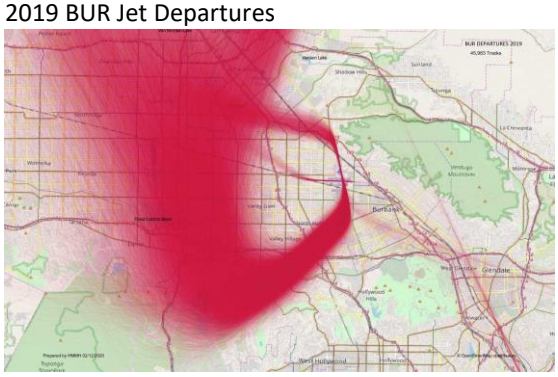
1. Community Concern: Southern Shift of Flight Tracks

The most discussed community concern conveyed to the Task Force during the six Task Force meetings was the shift of flight tracks to the south from aircraft departing both Hollywood Burbank Airport (BUR) and Van Nuys Airport (VNY). The figures and table below compare historical flight tracks to current 2019 flight tracks. Year 2007 was selected for the comparison year at BUR because there were more aircraft operations at both airports in 2007 than in 2019. However, data from VNY was not available for 2007, so 2010 was used as the comparison year for VNY operations. 2010 had a greater number of operations at VNY than 2019. As noticed by the communities and shown in the figures below, there has been a shift in departure flight tracks for both BUR and VNY aircraft departures. Also, as provided in the gate analysis results shown in the bottom figure and table, while the number of departures in the samples are essentially the same (see Gate 2 results in number of operations), the southernmost gate, Gate 4, shows four times the number of flight tracks implying four times more flights occurred to the southern edge of the flight tracks in 2019 than 2007.

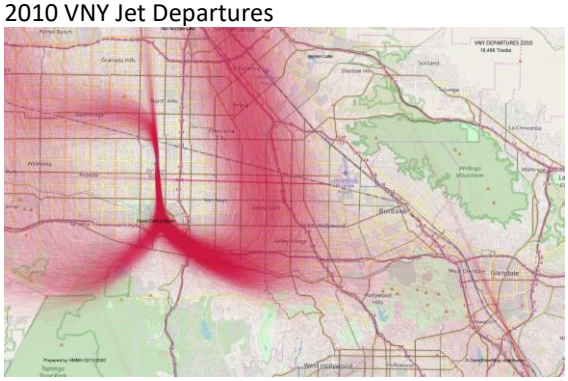
2007 BUR Jet Departures



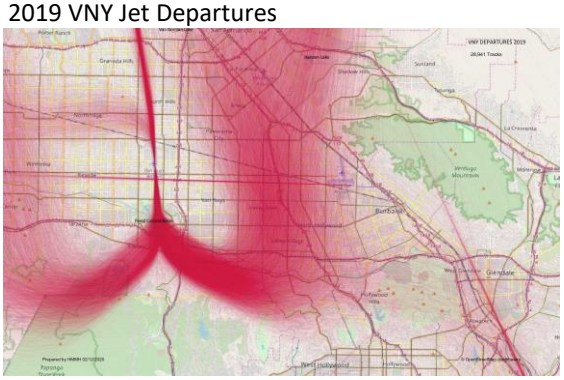
2019 BUR Jet Departures



2010 VNY Jet Departures

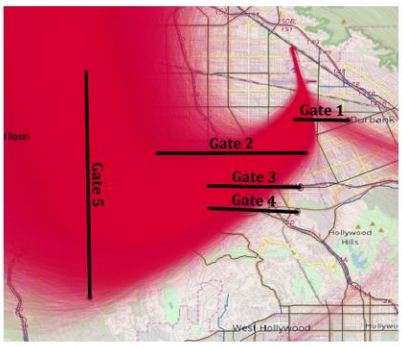


2019 VNY Jet Departures



Altitude Analysis: Hollywood Burbank Airport Runway 15 Jet Departures

Gate	2007 Total Tracks	2007 Avg. Altitude (Ft. MSL)	2010 Total Tracks	2010 Avg. Altitude (Ft. MSL)	2015 Total Tracks	2015 Avg. Altitude (Ft. MSL)	2019 Total Tracks	2019 Avg. Altitude (Ft. MSL)
1	28,937	1,773	19,629	1,782	24,467	1,884	40,544	1,868
2	41,176	2,752	28,822	2,887	29,718	2,758	42,413	2,618
3	25,766	3,364	16,806	3,492	22,428	3,384	39,492	3,298
4	5,302	3,659	3,469	3,680	7,572	3,748	20,514	3,704
5	28,390	6,093	17,908	6,413	20,739	6,247	35,706	6,202



- Gate Placement:
  - Gate 1: Jeffries Ave/Luther Burbank Middle School (east/west)
  - Gate 2: W. Magnolia Blvd (east/west)
  - Gate 3: Highway 101 (east/west)
  - Gate 4: Ventura Blvd (east/west)
  - Gate 5: Van Nuys Blvd to Stone Canyon Reservoir (north/south)

The following recommendations are provided to address community concerns related to the southern shift in flight tracks.

Recommendation 1:
Immediately restore the Hollywood Burbank Airport (BUR) Runway 15 departure flight tracks to 2007 conditions without implementing a new procedure.

Responsible Entity: Federal Aviation Administration

Passed by unanimous vote of 7-0 (City of Pasadena representative not present during the vote)

City of Burbank Mayor	City of Burbank Council Member	City of Glendale	City of Pasadena	Office of Council Member Nury Martinez	Office of Council Member Paul Krekorian	Office of Council Member Paul Koretz	Office of Council Member David Ryu
Ms. Springer	Ms. Gabel-Luddy	Mr. Najarian	Mr. Tornek	Mr. Sanchez	Mr. Krekorian	Mr. Koretz	Mr. Greif
Yes	Yes	Yes		Yes	Yes	Yes	Yes

Associated Task Force Member Recommendations:

1. Provide additional training, reviews and support for ATC. Below is a series of recommendations provided by an ATC consultant during a Task Force meeting. (Ms. Emily Gabel-Luddy, Ms. Sharon Springer and Mr. Terry Tornek)

- Conduct System Service Review (SSR) on resource management at both Southern California TRACON (SCT) and BUR Sector;
- Review how to manage workload at positions to maintain efficiency;
- Conduct Traffic Management Reviews (TMR) in the San Fernando Valley area to provide detailed analysis of impact of Traffic Management Initiatives (TMI);
- Provide refresher training on applying and administering TMIs for SCT and BUR Sector controllers;
- Conduct Operational Skills Assessments (OSAs) on how traffic restrictions are applied and communicated in the SCT and BUR Sector areas;
- Provide additional training on minimum requirements of radar separation;
- Focus on vectoring, radar separation minima, and aircraft characteristics;
- Conduct post-training OSAs on radar separation;
- Instruct tower supervisors to not combine sectors at peak traffic periods;
- Monitor Valley Sector for SOP compliance;
- Conduct training on using northerly airspace between BUR and VNY to gain altitude;
- Conduct System Service Review (SSR) on SOP compliance and resource management;
- Provide refresher training to Tower controllers on proper handoff procedures and impacts of non-compliance;
- Conduct post-training SSR on handoff procedures;

2. Stop combining ATC sectors, and ATC handoff of departures to SCT should occur within 1/2 mile of the Runway as per FAA guidelines. (Mr. Paul Krekorian)

3. Draft letter of agreement between SCT and BUR ATC that assigns responsibility to BUR ATC to apply visual separation on Runway 15 departures versus Runway 8 arrivals, enabling earlier turns with faster climbs. (Mr. Paul Krekorian)

4. Since both the southern shift and undue southern concentration of departures appear to be due in part to ATC workforce and related issues, FAA should initiate a system service review and workforce analysis to ensure adequate staffing levels to ensure safety and maximum efficiency. (Mr. Paul Krekorian)

5. In the near-term, improve the hand-off between Air Traffic Control Tower (ATCT) and SCT with additional FAA regulated training. (Mr. Paul Koretz)

6. In the long-term, aircraft using conventional procedures on Runway 15 should be vectored to the north by ATC before the 101 Freeway when there are no airspace conflicts with doing so. (Mr. Paul Koretz)

7. In the near-term, improve the hand-off between Air Traffic Control Tower (ATCT) and SCT with additional FAA regulated training. (Mr. Paul Koretz)

Recommendation 2:
Immediately stop the use of the procedure with the PPPRY Waypoint and design and implement a modified RNAV (Required Navigation) procedure for Van Nuys Airport (VNY) Runway 16R that results in earlier turns of departing flights and allow a greater percentage of the departing flight tracks to be over the uninhabited Sepulveda Basin as is the case when using the 2.2 DME departure procedure at VNY.

Responsible Entity: Federal Aviation Administration

Passed by majority vote of 7-1

City of Burbank Mayor	City of Burbank Council Member	City of Glendale	City of Pasadena	Office of Council Member Nury Martinez	Office of Council Member Paul Krekorian	Office of Council Member Paul Koretz	Office of Council Member David Ryu
Ms. Springer	Ms. Gabel-Luddy	Mr. Najarian	Mr. Tornek	Mr. Sanchez	Mr. Krekorian	Mr. Koretz	Mr. Greif
Yes	Yes	Yes	Yes	No	Yes	Yes	Yes

Associated Task Force Member Recommendations:

1. Change RNAVs/procedures to encourage earlier turns of departing flights and allow a greater percentage of the departing flight tracks to be over the uninhabited Sepulveda Basin (e.g., FAA should discontinue use of PPRRY at VNY and expedite turns by returning to 2.2 DME) (Mr. Paul Krekorian)

2. In the near-term for aircraft using conventional procedures on Runway 16, they should be vectored to the North by ATC before the 101 Freeway when there are no airspace conflicts in doing so. (Mr. Paul Koretz)

3. In the long-term for aircraft using conventional procedures on Runway 16, they should be vectored to the north by ATC before the 101 Freeway when there are no airspace conflicts in doing so. (Mr. Paul Koretz)

45. In the near-term for departures using Runway 16R, replace PPRRY in all RNAV procedures by returning to 2.2 DME. (Mr. Paul Koretz)

5. Eliminate the PPRRY waypoint and publish an open waypoint placed south of the airport runway near Victory Boulevard and the top of the Sepulveda Basin. An open waypoint will help with dispersion so no one community bears the brunt of aircraft flight tracks. (Mr. David Ryu)

6. In the near-term, improve the hand-off between ATCT and SCT with additional FAA regulated training. (Mr. Paul Koretz)

2. Community Concern: Low Altitude of Departing Aircraft

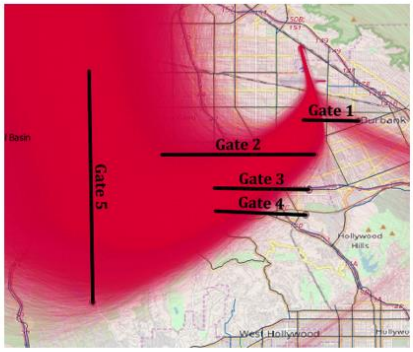
Across the United States, airports have implemented noise abatement departure profile (NADP) procedures. There are two types of NADPs, the first is used to alleviate noise in noise sensitive areas close to the airport and the second is to alleviate noise in an area further away. As an aircraft departs, its altitude has an effect on the associated ground noise level. For an aircraft to gain altitude quicker its thrust must increase. Increasing an aircraft's thrust in turn will increase the noise level. Many community members stated aircraft are lower in altitude now than in the past. However, lower altitude aircraft may be less noisy than an aircraft flying a NADP procedure.

HMMH conducted an altitude gate analysis for Runway 15 departures from BUR. The figure below shows the location of each gate, the number of aircraft passing through each gate and the average altitude. As shown below the analyses at all gates indicate a lower average an average lower altitude in 2019 as compared to 2015.

Altitude Analysis: Hollywood Burbank Airport Runway 15 Jet Departures

Gate	2007 Total Tracks	2007 Avg. Altitude (Ft. MSL)	2010 Total Tracks	2010 Avg. Altitude (Ft. MSL)	2015 Total Tracks	2015 Avg. Altitude (Ft. MSL)	2019 Total Tracks	2019 Avg. Altitude (Ft. MSL)
1	28,937	1,773	19,629	1,782	24,467	1,884	40,544	1,868
2	41,176	2,752	28,822	2,887	29,718	2,758	42,413	2,618
3	25,766	3,364	16,806	3,492	22,428	3,384	39,492	3,298
4	5,302	3,659	3,469	3,680	7,572	3,748	20,514	3,704
5	28,390	6,093	17,908	6,413	20,739	6,247	35,706	6,202

- Gate Placement:
  - Gate 1: Jeffries Ave/Luther Burbank Middle School (east/west)
  - Gate 2: W. Magnolia Blvd (east/west)
  - Gate 3: Highway 101 (east/west)
  - Gate 4: Ventura Blvd (east/west)
  - Gate 5: Van Nuys Blvd to Stone Canyon Reservoir (north/south)



The following recommendations are provided to address community noise concerns related to the low altitude of departing aircraft.

Recommendation 3:
Immediately increase the climb gradient for departure procedures at Hollywood Burbank Airport (BUR) and Van Nuys Airport VNY) to the maximum gradient allowable without waivers, expedite any waivers required to exceed a 500 foot per nautical mile climb gradient, and increase the climb gradient to above 500 feet per nautical mile.

Responsible Entity: Federal Aviation Administration

Passed by unanimous vote of 8-0

City of Burbank Mayor	City of Burbank Council Member	City of Glendale	City of Pasadena	Office of Council Member Nury Martinez	Office of Council Member Paul Krekorian	Office of Council Member Paul Koretz	Office of Council Member David Ryu
Ms. Springer	Ms. Gabel-Luddy	Mr. Najarian	Mr. Tornek	Mr. Sanchez	Mr. Krekorian	Mr. Koretz	Mr. Greif
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Associated Task Force Member Recommendations:

1. Mandate procedures that require airlines to use higher climb rates. (Mr. Terry Tornek)

2. Incorporate steeper minimum takeoff climb gradients at both to a minimum of 600 ft per nautical mile, or the closest rate to this that falls within safety guidelines, to help mitigate ground-level noise and concentrated jet exhaust particulate and request the FAA, LAWA, VNY, and BUR to work with and encourage pilots and air carriers to use the steepest departure profiles their aircraft can safely undertake. (Mr. David Ryu)

3. Increase the climb gradient on all departures at both, or on as many procedures and as many aircraft types as possible, and grant waiver for gradients above 500 feet per nautical mile. (Mr. Paul Krekorian)

4. In the near-term and long-term, increase the minimum climb gradients for all procedures; and/or encourage pilots/airlines to use steeper departure profiles at both. (Mr. Paul Koretz)

5. Because a more rapid rate of ascent would likely reduce noise impacts in all communities, adopt rules, procedures and/or ATC instructions that encourage pilots to increase altitude as rapidly as is safe when departing, including establishing altitude gates. (Mr. Paul Krekorian

6. The February 2017 letter of agreement between SCT and BUR ATC assigns all departures 4,000' MSL. If that agreement has the impact of preventing increase in climb, it should be changed. (Mr. Paul Krekorian)

Recommendation 4:
Conduct a study to determine how to obtain the lowest noise levels from aircraft departures from Hollywood Burbank Airport (BUR) Runway 15 and Van Nuys Airport (VNY) Runway 16R in the South San Fernando Valley communities through increased climb gradients, noise abatement departures profile (NADP) procedures, de-rated takeoff procedures, or a combination of the three alternatives.

Responsible Entities: Federal Aviation Administration, Burbank-Glendale-Pasadena Airport Authority and Los Angeles World Airports

Passed by unanimous vote of 8-0

City of Burbank Mayor	City of Burbank Council Member	City of Glendale	City of Pasadena	Office of Council Member Nury Martinez	Office of Council Member Paul Krekorian	Office of Council Member Paul Koretz	Office of Council Member David Ryu
Ms. Springer	Ms. Gabel-Luddy	Mr. Najarian	Mr. Tornek	Mr. Sanchez	Mr. Krekorian	Mr. Koretz	Mr. Greif
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Associated Task Force Member Recommendations:

1. Study the ability to encourage or require aircraft to ascend more rapidly through the use of voluntary noise abatement procedures and/or increasing the minimum climb over distance contained in the standard instrument departure procedures. (Ms. Emily Gabel-Luddy and Ms. Sharon Springer)

2. Conduct a technical analysis to establish new altitude rules for when aircraft arrive or depart over higher altitude topography with the goal of ensuring that planes ascend higher if they must fly over higher altitude areas. For example, if a plane's departure route over sea level would normally have it as 4,000 feet one mile from the airport, then the departure route over terrain of a 1,000 feet of elevation, would require that the aircraft ascend to 5,000 feet at the same distance. (Mr. David Ryu)

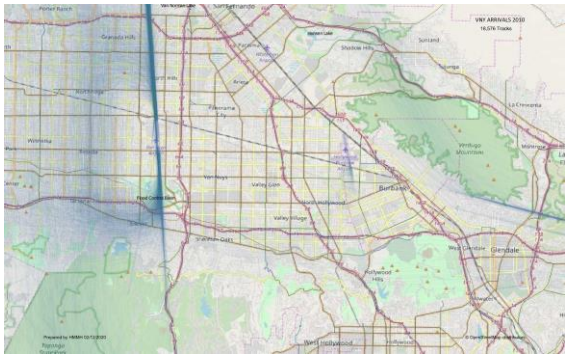
3. Community Concern: Concentration of Flight Tracks

As evidenced throughout the areas in the United States where the FAA has implemented NextGen aircraft procedures, such as the Southern California Metroplex, aircraft flight paths have become narrow and concentrated. The concentration of aircraft flight tracks results in exposing a narrow band of land to a large number of aircraft operations and associated noise to bear the full burden as opposed to dispersing the flight tracks over a wider area of land. The flight track density plots below show the concentration of arrival tracks in 2019 at Hollywood Burbank Airport (BUR) as compared to 2007, specifically to the south of BUR.

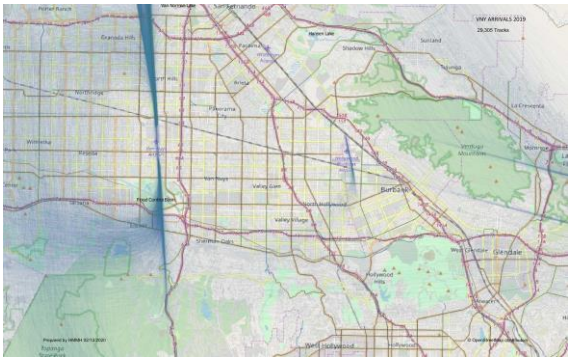
2007 BUR Jet Arrivals

2019 BUR Jet Arrivals

2010 VNY Jet Arrivals



2019 VNY Jet Arrivals



The following recommendations are provided to address community noise concerns related to the concentration of flight tracks.

Recommendation 5: The Task Force opposes the FAA's proposed changes to the SLAAP and OROSZ departure procedures and requests the FAA design and implement a procedure for maximum dispersion of departures from Runway 15 and Hollywood Burbank Airport (BUR).

Responsible Entity: Federal Aviation Administration

Passed by unanimous vote of 8-0

City of Burbank Mayor	City of Burbank Council Member	City of Glendale	City of Pasadena	Office of Council Member Nury Martinez	Office of Council Member Paul Krekorian	Office of Council Member Paul Koretz	Office of Council Member David Ryu
Ms. Springer	Ms. Gabel-Luddy	Mr. Najarian	Mr. Tornek	Mr. Sanchez	Mr. Krekorian	Mr. Koretz	Mr. Greif
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Associated Task Force Member Recommendations:

1. Regardless of the determination made by the Environmental Assessment (EA) to be conducted on the proposed amendments to incorporate the JAYTE and TEGAN waypoints into the SLAPP and OROSZ standard

instrument departure procedures, the Task Force recommends not amending the procedures to implement the use of waypoints. (Ms. Emily Gabel-Luddy, Ms. Sharon Springer and Mr. Terry Tornek)

2. Proposed procedures SLAPP TWO and OROSZ THREE should be rejected as written and reconsidered to ensure maximize noise reduction and safety for all communities and FAA-recognized noise-sensitive areas of the San Fernando Valley, without regard to any previous litigation settlement agreements, and they must not impose significant new impacts on new communities compared to pre-2017 conditions. (Mr. Paul Krekorian)

3. If the proposed procedures SLAPP TWO and OROSZ THREE must be used at all, all waypoints should be considered "fly-by" and NOT "fly-over" in order to reduce exact uniformity and encourage delay in pilots' use of autopilot on departures. (Mr. Paul Krekorian)

4. Discontinue use of JAYTE and TEAGN waypoints in all departure and arrival procedures. (Mr. Paul Krekorian)

5. If JAYTE and TEAGN must be used at all, they should be placed at locations that will maximize noise reduction and safety for all communities and FAA-recognized noise-sensitive areas of the San Fernando Valley, without regard to any previous litigation settlement agreements, and they must not impose significant new impacts on new communities compared to pre-2017 conditions. (Mr. Paul Krekorian)

6. In the near-term, change the initial departure headings for OROSZ, SLAPP, and the conventional procedures so that they better disperse the early part of the flight tracks. (Mr. Paul Koretz)

Recommendation 6: Replace current NextGen aircraft procedures at Hollywood Burbank Airport (BUR) and Van Nuys Airport (VNY) with procedures that provide better dispersion of flight tracks, such as "open" departures and diverse vector area (DVA) procedures.

Responsible Entity: Federal Aviation Administration

Passed by majority vote of 5-3

City of Burbank Mayor	City of Burbank Council Member	City of Glendale	City of Pasadena	Office of Council Member Nury Martinez	Office of Council Member Paul Krekorian	Office of Council Member Paul Koretz	Office of Council Member David Ryu
Ms. Springer	Ms. Gabel-Luddy	Mr. Najarian	Mr. Tornek	Mr. Sanchez	Mr. Krekorian	Mr. Koretz	Mr. Greif
No	No	Yes	Yes	No	Yes	Yes	Yes

Associated Task Force Member Recommendations:

1. Develop multiple waypoints and headings, whether RNAV or conventional, to create flight track dispersion for each departure direction from both. If this is not possible, request the FAA to design and implement the closest approximation to this goal to disperse flight tracks. (Mr. David Ryu)

2. Redesign RNAV arrival and departure procedures so that they mimic pre-Metroplex conventional dispersed procedures. During the technical review to complete this, suspend RNAV procedures and fly pre-Metroplex conventional procedures. (Mr. David Ryu)

3. Implement "open" procedures where possible and avoid "closed" procedures wherever technically feasible to limit the creation of narrow flight paths. (Mr. David Ryu)

4. Increase utilization of alternative departure headings on Runway 15 to achieve greater dispersal. (Mr. Paul Krekorian)

5. Utilize open Standard Instrument Departure (SID) procedures, at lower minimum vector altitude. (Mr. Paul Krekorian)

6. Utilize Diverse Vector Area (DVA) (see, e.g., FAA Order 7110.65). (Mr. Paul Krekorian)

7. FAA should integrate a small range of automated randomization into Air Traffic Control (ATC) software guiding the turn instructions for departures in order to produce more dispersal. (Mr. Paul Krekorian)

4. Community Concern: Unequal Distribution of Aircraft Noise

In Southern California it is typical for airports to operate predominantly in a single operation configuration that accommodate winds and the shoreline of the Pacific Ocean. For example, San Diego and Los Angeles International Airports predominantly operate in west flow condition since most aircraft are arriving from the east, winds have a predominant westerly component and the shoreline provides a place for aircraft to depart over non-populated areas. Since the Hollywood Burbank and Van Nuys Airports are not aligned predominantly east-west, likely due to prevailing wind direction in the area, and offer a north-south operating configuration, winds may provide an opportunity for the airports to depart to the north at greater numbers than currently operate, and possibly allow arrivals to arrive other runways more regularly. This would result in a more equaled distribution of aircraft noise to the communities that surround the airports on all sides.

The following recommendations are provided to address community noise concerns related to the unequal distribution of aircraft noise.

Recommendation 7:
Provide for Instrument Flight Rules (IFR) procedures for aircraft to arrive all runways at Hollywood Burbank Airport (BUR).

Responsible Entities: Federal Aviation Administration and Burbank-Glendale-Pasadena Airport Authority

Passed by unanimous vote of 8-0

City of Burbank Mayor	City of Burbank Council Member	City of Glendale	City of Pasadena	Office of Council Member Nury Martinez	Office of Council Member Paul Krekorian	Office of Council Member Paul Koretz	Office of Council Member David Ryu
Ms. Springer	Ms. Gabel-Luddy	Mr. Najarian	Mr. Tornek	Mr. Sanchez	Mr. Krekorian	Mr. Koretz	Mr. Greif
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Associated Task Force Member Recommendations:

1. Request that the FAA publish instrument approaches for Runways 15, 33, and 26. (Mr. David Ryu)

Recommendation 8:
Create "open" Standard Instrument Departure (SID) Procedures at Hollywood Burbank Airport (BUR) for Runway 8, Runway 26 and Runway 33 mimicking the ELMOO NINE conventional procedure.

Responsible Entity: Federal Aviation Administration

Passed by majority vote of 7-1

City of Burbank Mayor	City of Burbank Council Member	City of Glendale	City of Pasadena	Office of Council Member Nury Martinez	Office of Council Member Paul Krekorian	Office of Council Member Paul Koretz	Office of Council Member David Ryu
Ms. Springer	Ms. Gabel-Luddy	Mr. Najarian	Mr. Tornek	Mr. Sanchez	Mr. Krekorian	Mr. Koretz	Mr. Greif
Yes	Yes	No	Yes	Yes	Yes	Yes	Yes

Associated Task Force Member Recommendations:

1. Increase utilization of the existing ELMOO NINE departure procedure from Runway 15 by, among other things: (a) establishing ELMOO NINE as an RNAV procedure to conform its utilization with NextGen implementation; and (b) creating an enforceable requirement to encourage FAA to increase use of ELMOO NINE, such as constraining all other departure procedures to reduce their volume to their pre-2009 levels. (Mr. Paul Krekorian)

2. In the long-term for RNAV departures with destinations to the east and northeast when Runway 15 is used, it is recommended that a new RNAV procedure be established similar to ELMOO NINE conventional procedure that sends aircraft east through the San Gabriel Valley. If an eastern departure routing is not feasible, the SLAPP concept proposed by Advocates for Viable Airport Solutions to the west and then north is proposed instead. (Mr. Paul Koretz)

3. Support recommendations that will provide relief from airplane noise for all residents of the San Fernando Valley. This includes upgrading technology so that flights leaving BUR can utilize the ELMOO NINE route. (Ms. Nury Martinez)

5. Community Concern: Nighttime Aircraft Noise

Noise levels from nighttime aircraft operations are more intrusive with the community noise levels diminishing during the night from lower volume of activities and with indoor activities diminishing to allow for people to sleep. With this in mind, the Environmental Protection Agency (EPA) and the Federal Aviation Administration (FAA) have recommended and required, respectively, the use of the Day-Night Average Sound Level (DNL or LDN) to assess community noise exposure as the DNL metric applies a 10-decibel (dB) weighting to all noise levels that occur between the hours of 10 pm and 7 am. The 10-dB weighting results in the noise levels at night being calculated at 10 decibels higher than actual. An increase of 10 decibels is often perceived as being twice as loud.

The following recommendations are provided to address community noise concerns related to nighttime aircraft noise.

Recommendation 9: Restrict aircraft from operating during the night at both Hollywood Burbank Airport (BUR) and Van Nuys Airport (VNY) and penalize and identify publicly aircraft operators that violate the mandatory curfew.

Responsible Entities: Federal Legislative Representatives

Passed by unanimous vote of 8-0

City of Burbank Mayor	City of Burbank Council Member	City of Glendale	City of Pasadena	Office of Council Member Nury Martinez	Office of Council Member Paul Krekorian	Office of Council Member Paul Koretz	Office of Council Member David Ryu
Ms. Springer	Ms. Gabel-Luddy	Mr. Najarian	Mr. Tornek	Mr. Sanchez	Mr. Krekorian	Mr. Koretz	Mr. Greif
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Associated Task Force Member Recommendations:

1. Support Congressional legislation imposing a mandatory nighttime curfew at each airport similar to the Authority's Part 161 curfew request submitted on February 2, 2009 and denied by the FAA. (Ms. Emily Gabel-Luddy and Ms. Sharon Springer)

2. In effort to decrease the total volume of late-night flights (which cause particularly egregious disruption), the FAA should authorize a mandatory curfew at both between the hours of 10 pm and 7 am. This curfew should apply to all non-emergency operations and it should be enforced with fines for violators. (Mr. Brad Sherman)

3. Adopt new legislation prohibiting operations between 10 pm and 7 am. (Mr. Terry Tornek)

4. Noise guidelines should be implemented on both commercial and general aviation operators (using John Wayne Airport penalties as a model). (Mr. Paul Krekorian)

5. The FAA should look at the impact and feasibility of curfews for all airports in the San Fernando Valley. (Ms. Nury Martinez)

6. A new Part 161 study should be initiated to provide for a mandatory curfew, with the full understanding that the position taken by surrounding communities regarding a replacement terminal may well depend on whether a mandatory curfew and other effective noise impact reduction strategies are in place. (Mr. Paul Krekorian)

7. Request Los Angeles World Airports (LAWA) implement a nighttime curfew for departures and arrivals of all aircraft to help mitigate community noise disturbances between 10 pm and 7 am on weekdays and 10 pm to 9 am on weekends and to be enforced in part by publishing the names of the aircraft management companies responsible and contact information for complaints to be directed to as well as the tail numbers and any other publicly available information related to the offending flight, pilots, and company or individual who owns or rents the aircraft. (Mr. David Ryu)

Recommendation 10:
Restrict the hours of the Customs and Border Protection Office at Van Nuys Airport (VNY).

Responsible Entities: Department of Homeland Security (DHS) and Los Angeles World Airport (LAWA)

Passed by unanimous vote of 8-0

City of Burbank Mayor	City of Burbank Council Member	City of Glendale	City of Pasadena	Office of Council Member Nury Martinez	Office of Council Member Paul Krekorian	Office of Council Member Paul Koretz	Office of Council Member David Ryu
Ms. Springer	Ms. Gabel-Luddy	Mr. Najarian	Mr. Tornek	Mr. Sanchez	Mr. Krekorian	Mr. Koretz	Mr. Greif
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Associated Task Force Member Recommendations:

1. Request LAWA to work with Department of Homeland Security (DHS) to restrict the hours at the Customs and Border Protection Office to close by 10 pm on all days in line with the proposed curfew hours. (Mr. David Ryu)

Recommendation 11:
Increase enforcement of the existing voluntary curfew at Hollywood Burbank Airport (BUR).

Responsible Entities: The Burbank-Glendale-Pasadena Airport Authority

Passed by unanimous vote of 8-0

City of Burbank Mayor	City of Burbank Council Member	City of Glendale	City of Pasadena	Office of Council Member Nury Martinez	Office of Council Member Paul Krekorian	Office of Council Member Paul Koretz	Office of Council Member David Ryu
Ms. Springer	Ms. Gabel-Luddy	Mr. Najarian	Mr. Tornek	Mr. Sanchez	Mr. Krekorian	Mr. Koretz	Mr. Greif
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Associated Task Force Member Recommendations:

1. FAA must work with BUR to ensure that the existing voluntary curfew is vigorously enforced (using John Wayne Airport penalties as a model). (Mr. Paul Krekorian)

2. FAA and BUR must enforce compliance with operating procedures during curfew hours. (Mr. Paul Krekorian)

6. Community Concern: Insufficient Noise Mitigation

Through Part 150 Airport Noise and Land Use Compatibility Planning projects, airports use federal funds via the Federal Aviation Administration (FAA) to provide noise mitigation to noise-sensitive properties within the 65 decibels (dB) Day-Night Average Sound Level (DNL) or Community Noise Equivalent Level (CNEL) in California. Noise mitigation as allowed under Title 14 of the Code of Federal Regulations Part 150 (Part 150) and the Airport Improvement Program (AIP) Handbook (FAA Order 5100.38) includes: land acquisition and sound insulation.

The following recommendations are provided to address community noise concerns related to insufficient noise mitigation.

Recommendation 12:
Increase the eligibility area for noise mitigation programs in communities near airports, which requires federal funding to implement.

Responsible Entity: Federal Legislation Representatives

Passed by unanimous vote of 8-0

City of Burbank Mayor	City of Burbank Council Member	City of Glendale	City of Pasadena	Office of Council Member Nury Martinez	Office of Council Member Paul Krekorian	Office of Council Member Paul Koretz	Office of Council Member David Ryu
Ms. Springer	Ms. Gabel-Luddy	Mr. Najarian	Mr. Tornek	Mr. Sanchez	Mr. Krekorian	Mr. Koretz	Mr. Greif
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Associated Task Force Member Recommendations:

1. Support changes to FAA regulations or Congressional legislative changes to broaden the applicability of noise attenuation programs and funding to serve the greatest number of residents. This would encompass expanding the current federal criteria for use of such funds. For example, changing the definition of noise impacted areas to include levels less than the 65 DNL. (Ms. Emily Gabel-Luddy and Ms. Sharon Springer)

Recommendation 13:
Require the use of the Environmental Analysis (EA) as the minimum standard to meet the requirements of the National Environmental Policy Act (NEPA) for implementing any FAA proposed change to aircraft flight procedures.

Responsible Entities: Federal Legislation Representatives *and the Federal Aviation Administration*

Passed by unanimous vote of 8-0

City of Burbank Mayor	City of Burbank Council Member	City of Glendale	City of Pasadena	Office of Council Member Nury Martinez	Office of Council Member Paul Krekorian	Office of Council Member Paul Koretz	Office of Council Member David Ryu
Ms. Springer	Ms. Gabel-Luddy	Mr. Najarian	Mr. Tornek	Mr. Sanchez	Mr. Krekorian	Mr. Koretz	Mr. Greif
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Associated Task Force Member Recommendations:

1. Conduct a full EA and robust community outreach prior to any future flight path changes, procedure changes, or flight volume changes. (Mr. David Ryu)

2. Any changes to routes must include an environmental review and analysis that includes a thorough study of noise and air quality. This review must take into consideration existing environmental justice issues and utilize measures of environmental hazards, such as CalEnviroscreen. (Ms. Nury Martinez)

Recommendation 14:
Maintain and update when and if necessary the Noise Exposure Map (NEM) and Noise Compatibility Program (NCP) at Hollywood Burbank Airport (BUR) and Van Nuys Airport (VNY) in order to continue to provide noise mitigation to all potentially eligible property owners and continue to monitor the aircraft operations and associated noise levels throughout the San Fernando Valley communities. The NCPs will specifically consider preferential runway use programs in a coordinated approach at both airports to determine whether more northerly flow provides noise benefits. The NCP at BUR will also analyze Runway 33 arrivals to limit the use of the flight path some operators use to arrive over the Santa Monica Mountains.

Responsible Entities: The Burbank-Glendale-Pasadena Airport Authority and Los Angeles World Airports

Passed by unanimous vote of 8-0

City of Burbank Mayor	City of Burbank Council Member	City of Glendale	City of Pasadena	Office of Council Member Nury Martinez	Office of Council Member Paul Krekorian	Office of Council Member Paul Koretz	Office of Council Member David Ryu
Ms. Springer	Ms. Gabel-Luddy	Mr. Najarian	Mr. Tornek	Mr. Sanchez	Mr. Krekorian	Mr. Koretz	Mr. Greif
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Associated Task Force Member Recommendations:

1. Conduct studies compliant with 14 CFR Part 150 in order to establish updated Noise Exposure Maps and Noise Compatibility Programs. The updates may include new or revised noise abatement programs for aircraft operators. The studies should evaluate the applicability of noise abatement departure procedures, preferential runway use and other best practices for aircraft operators. (Ms. Emily Gabel-Luddy, Ms. Sharon Springer and Mr. Terry Tornek)

2. Revamp its sound insulation program by conduction a new Part 150, Airport Noise Compatibility Planning Study, which will result in an updated Noise Exposure Map. (Mr. Tony Cardenas)

3. Allow more northerly departures during “calm” wind conditions. (Mr. Terry Tornek)

4. Conduct a technical study to eliminate the substantial overlap of departing flight tracks over the San Fernando Valley. In particular, flights departing VNY south and turning east and flights departing BUR south and turning west, creating a substantially overlapping flight tracks vortex with impacted communities suffering from airport departures from two airports. (Mr. David Ryu)

5. In effort to decrease the concentration of flights over any one community, consider the following: the feasibility of eastbound take-offs from BUR, this should include consideration of adjusting flight paths at other airports (Los Angeles International Airport (LAX), BUR, etc.); the feasibility of northbound take-offs from both when there is little to no wind. (Mr. Brad Sherman)

6. Adopt all actions necessary to reduce the number of Runway 15 departures, including runway and directional rotation. (Mr. Paul Krekorian)

7. Allow eastbound departures using Runway 8 and adopt an enforceable process to ensure a meaningful reduction in Runway 15 departures. (Mr. Paul Krekorian)

8. Any policies, procedures or practices relating to safety considerations for departures regarding proximity to the Verdugo Mountains should equitably be applied regarding proximity to the Santa Monica Mountains. (Mr. Paul Krekorian)

9. Discontinue arrivals using Runway 33 except when required due to significant wind conditions. (Mr. Paul Krekorian)

10. In the near-term, increase departures heading directly north by designating Runway 33 the preferred operating scheme on days of clam wind (less than 5 knots) and when prevailing winds are from the West, Northwest, North, and Northeast. (Mr. Paul Koretz)

11. In the long-term, increase departures heading directly north by designating Runway 33 the preferred operating scheme on days when the prevailing winds are from the West, Northwest, North and Northeast and on days when winds are less than 5 knots from the south. This northern derapture route would follow the I-5 Freeway. Cross Runway 8 should be used for all arrivals on those days. (Mr. Paul Koretz)

12. Conduct a technical analysis to establish fair share arrival and departure flight paths with the goal of flights departing North, South, East, and West roughly 25% in each direction and arriving North, South, East, and West roughly 24% in each direction. If the FAA determines this is not technically feasible, the FAA is requested to design arrival/departure procedures that as closely create fair share arrivals and departures as possible. (Mr. David Ryu)

13. Conduct a technical analysis to establish fair share arrival and departure flight paths with the goal of flights departing South and turning West, South and turning East, North and turning West, and North and turning East roughly 25% in each direction and arriving North and South roughly split 50% annually. If the FAA determines this is not technically feasible, the FAA is requested to design arrival/departure procedures that as closely create fair share arrivals and departures as possible. (Mr. David Ryu)

14. In the near-term, increase departures heading directly north by designating Runways 34L and 34R the preferred operating scheme on days when the prevailing winds are from the North, Northwest, West, and Northeast and on days when the winds are stagnant or less than 5 knots from the south. All arrivals should be from the west using Runway 16 on those days. (Mr. Paul Koretz)

15. In the long-term, increase departures heading directly north by designating Runway 34 the preferred operating scheme on days when the prevailing winds are from the North, Northwest, West, and Northeast and on days when the winds are stagnant or less than 5 knots from the south. All arrivals should be from the west using Runway 16 on those days. (Mr. Paul Koretz)

16. Evaluate and provide new noise mitigation measures for apartments, homes, and businesses based on average decibel level, including consideration of topographical features such as noise reverberations from canyon walls, and not merely proximity to the airports. (Mr. David Ryu)

17. Commit to all mitigation measures to relieve the impacted communities, including but not limited to soundproofing. (Mr. Paul Krekorian)

18. Conduct a formal noise study of actual (not modeled) noise patterns and impacts surrounding both, and commit to regular renewals, and should install and maintain noise monitoring equipment in the City of Los Angeles. (Mr. Paul Krekorian)

Recommendation 15:
Create a Citizen's Advisory Committee at Hollywood Burbank Airport (BUR) to address community concerns throughout the San Fernando Valley.

Responsible Entity: The Burbank-Glendale-Pasadena Airport Authority

Passed by majority vote of 5 in favor and 3 abstentions

City of Burbank Mayor	City of Burbank Council Member	City of Glendale	City of Pasadena	Office of Council Member Nury Martinez	Office of Council Member Paul Krekorian	Office of Council Member Paul Koretz	Office of Council Member David Ryu
Ms. Springer	Ms. Gabel-Luddy	Mr. Najarian	Mr. Tornek	Mr. Sanchez	Mr. Krekorian	Mr. Koretz	Mr. Greif
Abstain	Abstain	Abstain	Yes	Yes	Yes	Yes	Yes

Associated Task Force Member Recommendations:

1. A Citizens' Advisory Board should be created, including representatives from the impacted communities of Los Angeles. (Mr. Paul Krekorian)

2. Monitor potential changes to regulations pertaining to noise, particularly those which may result from the Airport Cooperative Research Program's (ACRP) study Research Methods for Understanding Aircraft Noise Annoyances and Sleep Disturbance conducted by the National Academies of Sciences, Engineering, and Medicine in 2014. (Ms. Emily Gabel-Luddy, Ms. Sharon Springer and Mr. Terry Tornek)

Recommendation 16:
Require the Federal Aviation Administration (FAA) to immediately respond to community and Airport requests and provide post implementation results from NextGen aircraft procedures including the implementation of the Southern California Metroplex and future implementations and all supporting documents, the Noise Screen that was provided to Benedict Hills in about January 2018, and all documents requested under the Freedom of Information Act (FOIA).

Responsible Entities: The Federal Aviation Administration and Federal Legislative Representatives

Passed by unanimous vote of 8-0

City of Burbank Mayor	City of Burbank Council Member	City of Glendale	City of Pasadena	Office of Council Member Nury Martinez	Office of Council Member Paul Krekorian	Office of Council Member Paul Koretz	Office of Council Member David Ryu
Ms. Springer	Ms. Gabel-Luddy	Mr. Najarian	Mr. Tornek	Mr. Sanchez	Mr. Krekorian	Mr. Koretz	Mr. Greif
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Associated Task Force Member Recommendations:

1. FAA must provide the Task Force with its post implementation study and all supporting documents, the Noise Screen that was provided to Benedict Hills in about January 2018, all documents requested previously by Task Force members, and all documents requested by the City of Los Angeles under the Freedom of Information Act. (Mr. Paul Krekorian)

Appendix – Copies of the Recommendations Submitted by Task Force Members

SOUTHERN SAN FRENANDO VALLEY AIRPLANE NOISE TASK FORCE

RECOMMENDATIONS OF TERRY TORNEK – PASADENA MAYOR 3.2.20

Recommendations for the Federal Aviation Administration

PROBLEM: Reduce Southerly "Drift" in flight paths

Recommendation #1- Provide additional training, reviews, and support for Air Traffic Control

This is a series of recommendations provided by an Air Traffic Control consultant during the Task Force. They are being grouped into this recommendation as they are all applicable to the Air Traffic Organization within the FAA:

- Conduct System Service Review (SSR) on resource management at both SCT and BUR Sector
- Review how to manage workload at positions to maintain efficiency
- Conduct Traffic Management Reviews in the San Fernando Valley area to provide detailed analysis of impact of Traffic Management Initiatives
- Provide refresher training on applying and administering TMIs for SCT and BUR Sector controllers
- Conduct Operational Skills Assessments (OSAs) on how traffic restrictions are applied and communicated in the SCT and BUR Sector areas
- Provide additional training on minimum requirements of radar separation
- Focus on vectoring, radar separation minima, aircraft characteristics
- Conduct post-training Operational Skills Assessments (OSAs) on radar separation
- Instruct Tower Supervisors to not combine sectors at peak traffic periods
- Monitor Valley Sector for SOP compliance
- Conduct training on using northerly airspace between BUR and VNY to gain altitude
- Conduct System Service Review (SSR) on SOP compliance and resource management
- Provide refresher training to Tower controllers on proper handoff procedures and impacts of non-compliance
- Conduct post-training System Service Review (SSR) on handoff procedures

The intent of this recommendation is to request that the FAA assess the processes and procedures used by Air Traffic Control to determine if changes to the way aircraft are handled has changed over time, leading to the southerly drift in flight paths from BUR, and to make changes or improvements that could return the flight paths to their original areas.

Recommendation #2 – Allow more Northerly departures during "calm" wind conditions

Recommendation #3 – Mandate procedures that require airlines to use higher climb rates

PROBLEM: Avoid overconcentration of flight paths

Recommendation #4- Do not implement the proposed amendments to the SLAPP and OROSZ departure procedures.

Regardless of the determination made by the Environmental Assessment to be conducted on the proposed amendments to incorporate the JAYTE and TEAGN waypoints into the SLAPP and OROSZ standard instrument departure procedures from BUR, do not amend the procedures to implement the use of the waypoints.

The purpose of this recommendation is to prevent changes to procedures that would cause concentration of flight paths. The current flight paths associated with these two departure procedures are widely dispersed south of the airport due to the method of aircraft navigation and separation and should remain so until the FAA has a method of implementing lateral track variations or dispersal headings as part of any proposed procedural amendment.

Recommendations for Van Nuys Airport and Hollywood Burbank Airport

PROBLEM: Reduce aircraft noise impacts in residential areas

Recommendation #5 - Conduct new Part 150 studies at both VNY and BUR

Both airports should conduct studies compliant with 14 CFR Part 150 in order to establish updated Noise Exposure Maps and Noise Compatibility Programs. The updates may include new or revised noise abatement programs for aircraft operators. The studies should evaluate the applicability of noise abatement departure procedures, preferential runway use, and other best practices for aircraft operators.

The intent of this recommendation is to ensure that the airports are operating with the most up-to-date information for residential sound insulation, compatible land use, and noise abatement procedures for aircraft operators. A review of a preferential runway use system would also evaluate the feasibility and effects of increased variation in runway use.

Recommendation #6 - Monitor changes to regulations pertaining to noise

The airports should monitor potential changes to regulations pertaining to noise, particularly those which may result from the Airport Cooperative Research Program's study *Research Methods for Understanding Aircraft Noise Annoyances and Sleep Disturbance* conducted by the National Academies of Sciences, Engineering, and Medicine in 2014.

The intent of this recommendation is to direct the airports to remain aware of changes to regulations which may affect noise compatibility programs. An example of this would be changing the definition of noise impacted areas to beyond the 65 DNL noise contour.

LEGISLATIVE Recommendation

PROBLEM: Eliminate after hours flight operations

Recommendation #7: Adopt new legislation prohibiting operations between 10PM and 7AM

Answers to “Questions for the Task Force”

1. NO. Dispersion is better.
2. NO
3. YES
4. NO. New regulations are required.
5. More equitable distribution.

Committees:

Chair
Personnel & Animal Welfare

Vice Chair
Energy, Climate Change & Environmental Justice
Ad Hoc Committee on Police Reform

Member
Budget and Finance
Transportation

Website: http://cd5.lacity.org
Email: Paul.Koretz@lacity.org

PAUL KORETZ
Councilmember, Fifth District

City Hall Office:
200 N. Spring Street
Room 440
Los Angeles, CA 90012
(213) 473-7005
(213) 978-2250 Fax

Valley Office:
15760 Ventura Blvd.
Suite 600
Encino, CA 91436
(818) 971-3088
(818) 788-9210 Fax

West L.A. Office:
6380 Wilshire Blvd.
Suite 800
Los Angeles, CA 90048
(323) 866-1828
(323) 852-1129 Fax

March 6th, 2020

Federal Aviation Administration
Mr. Eugene Reindel, HMMH Vice President,
and Task Force Facilitator
Mr. Justin W. Cook, Principal Consultant

Re: Southern San Fernando Valley Airplane Noise Task Force

Dear FAA, Mr. Reindel, and Mr. Cook:

First, I would like to thank the FAA, HMMH, Hollywood Burbank Airport, Van Nuys Airport, and my fellow Task Force Members for coming together as a group with the common goal of addressing the airplane noise, environmental impacts, health concerns, and safety risks that have plagued our community for far too long. Second, I would like to thank the community for joining together to put forward some very impressive solution-oriented proposals. I understand that this is a very complex problem, but working together, we can create solutions that benefit everyone impacted by Southern California air traffic. Any interim measures that can be implemented to benefit the communities which are impacted should be enacted immediately. Below are proposals that I would like the Federal Aviation Administration to evaluate and report back on within 60 days.

Van Nuys Airport
Proposed Near-Term Solutions

1. **Problem:** Regardless of the direction of the flight paths, planes flying at low altitudes create noise pollution, negative environmental impacts, and health concerns.
    a. **Recommendation**: Increase the minimum climb gradients for all procedures; and/or encourage pilots/airlines to use steeper departure profiles.

2. **Problem:** Before the RNAV procedures were implemented at VNY, Conventional procedures were used with 2.2 DME and it allowed turns to occur over the Sepulveda basin which is not residential land. There were minimal complaints about this procedure.

   a. **Recommendation:** For departures using Runway 16R, replace PPRRY in all RNAV procedures by returning to 2.2 DME.

3. **Problem:** There is a need to deconflict the increasing air traffic volumes in an already congested airspace.
   a. **Recommendation:** Improve the hand-off between Tower ATC's and SCT ATC's with additional FAA regulated training.

4. **Problem:** There is a need for a fairer distribution of planes. Cumulative and significant post-SoCal Metroplex environmental, health, and noise impacts must be addressed.
   Goal: 30%-50% increase in northern departures.
   a. **Recommendation:** Increase departures heading directly north by designating Runways 34L & 34R the preferred operating scheme on days when the prevailing winds are from the North, Northwest, West, & Northeast and on days when the winds are stagnant or less than 5 knots from the south. All arrivals should be from the west using Runway 16 on those days.

5. **Problem:** Flight tracks over the Santa Monica Mountains and foothills. (Keep flight path noise over existing noise corridors.)
   a. **Recommendation:** For aircraft using Conventional procedures on Runway 16, they should be vectored to the North by ATC before the 101 freeway when there are no airspace conflicts in doing so.

Van Nuys

Proposed Long-Term Solutions

1. **Problem:** Regardless of the direction of the flight paths, planes flying at low altitudes create noise pollution, negative environmental impacts, and health concerns.
   a. **Recommendation:** Increase the minimum climb gradients for all procedures; and/or encourage pilots/airlines to use steeper departure profiles.

2. **Problem:** There is a need for a fairer distribution of planes. Cumulative and significant post-SoCal Metroplex environmental, health, and noise impacts must be addressed.
   Goal: 30%-50% increase in northern departures.
   a. **Recommendation:** Increase departures heading directly north by designating Runway 34 the preferred operating scheme on days when the prevailing winds are from the North, Northwest, West, & Northeast and on days when the winds are stagnant or less than 5 knots from the south. All arrivals should be from the west using Runway 16 on those days.

3. **Problem:** Flight tracks over the Santa Monica Mountains and foothills. (Keep flight path noise over existing noise corridors.)
   a. **Recommendation:** Aircraft using Conventional procedures on Runway 16 should be vectored to the north by ATC before the 101 freeway when there are no airspace conflicts in doing so.

4. **Problem:** Flight tracks over the Santa Monica Mountains and foothills. (Keep flight path noise over existing noise corridors.)
    a. **Recommendation:** On days when Runway 16R is being used, the Advocates for Viable Airport Solutions proposed "open departure" RNAV concept that adds new waypoints along the 101 freeway should be used.

Burbank

Proposed Near-Term Solutions

1. **Problem:** Regardless of the direction of the flight paths, planes flying at low altitudes create noise pollution, negative environmental impacts, and health concerns.
    a. **Recommendation:** Increase the minimum climb gradients for all procedures; and/or encourage pilots/airlines to use steeper departure profiles.

2. **Problem:** There is a need to deconflict the increasing air traffic volumes in an already congested airspace.
    a. **Recommendation:** Improve the hand-off between Tower ATC's and SCT ATC's with additional FAA regulated training.

3. **Problem:** Flight tracks over the Santa Monica Mountains and foothills. (Keep flight path noise over existing noise corridors.)
    a. **Recommendation:** Aircraft using Conventional procedures on Runway 15 should be vectored to the north by ATC before the 101 freeway when there are no airspace conflicts in doing so.

4. **Problem:** The early minutes of a southern deparutre out of VNY has the most impact and we need to find a better solution for flight path distribution.
    a. **Recommendation:** Change the initial departure headings for OROSZ, SLAPP, and the Conventional procedures so that they better disperse the early part of the flight tracks.

5. **Problem:** There is a need for a fairer distribution of planes. Cumulative and significant post-SoCal Metroplex environmental, health, and noise impacts must be addressed.
   Goal: 30%-50% increase in northern departures.
    a. **Recommendation:** Increase departures heading directly north by designating Runway 33 the preferred operating scheme on days of clam wind (less than 5 knots) and when prevailing winds are from the West, Northwest, North, & Northeast.

Burbank

Proposed Long-Term Solutions

1. **Problem:** Regardless of the direction of the flight paths, planes flying at low altitudes create noise pollution, negative environmental impacts, and health concerns.

   a. **Recommendation:** Increase the minimum climb gradients for all procedures; and/or encourage pilots/airlines to use steeper departure profiles.

2. **Problem:** There is a need for a fairer distribution of planes. Cumulative and significant post-SoCal Metroplex environmental, health, and noise impacts must be addressed. Goal: 30%-50% increase in northern departures.
   a. **Recommendation:** Increase departures heading directly north by designating Runway 33 the preferred operating scheme on days when the prevailing winds are from the West, Northwest, North, & Northeast and on days when winds are less than 5 knots from the south. This northern departure route would follow the I-5 freeway. Cross Runway 8 should be used for all arrivals on those days.

3. **Problem:** Flight tracks over the Santa Monica Mountains and foothills. (Keep flight path noise over existing noise corridors.)
   a. **Recommendation:** Aircraft using Conventional procedures on Runway 15 should be vectored to the north by ATC befire the 101 freeway when there are no airspace conflicts with doing so.

4. **Problem:** Flight tracks over the Santa Monica Mountains and foothills. (Keep flight path noise over existing noise corridors.)
   a. **Recommendation:** On days when Runway 15 is used. The RNAV "open departure" concept proposed by Advocates for Viable Airport Solutions that has waypoints along the 101 freeway should be used for those departures whose destinations are towards the north (OROSZ.)

5. **Problem:** Currently, there are no departures that fly East out of Burbank Airport. We need to address the distribution of these flights.
   a. **Recommendation:** For RNAV departures with destinations to the east and northeast when Runway 15 is used, it is recommended that a new RNAV procedure be established similar to ELMOO NINE Conventional procedure that sends aircraft east through the San Gabriel Valley. If an eastern departure routing is not feasible, the SLAPP concept proposed by Advocates for Viable Airport Solutions to the west and then north is proposed instead.

Overarching Goals

I stongly believe that this issue is causing great damage to the lives of my fellow Angelenos and I request immediate action be taken to resolve these disastrous impacts. My priorities are as follows:

1. Avoid flight tracks over mountainous regions and other terrains that pose high-fire hazard risks and noise magnification due to echo effects.

- The Santa Monica Mountains are in a High-Fire Severity Zone.

- The low altitudes at which these planes are flying does not allow for proper jet fuel dispersion, the remains of which we are seeing on our trees, our plants, and our wildlife.
- These mountains are also home to our multijurisdictional Wildlife Habitat Connectivity Project. The dangers of low-flying aircraft in this region could have devastating impacts on not only the community but also the wildlife that we have fought so hard to protect.
- The aircraft noise reverberates loudly throughout the canyons. This noise has produced tremendous physical and mental health concerns which are devastating our residents.
- When aircraft are flying at a certain altitude, the impacts on the community become much more apparent when those planes are flying over homes at higher elevations.

2. Disperse departure flight tracks in multiple directions in a safe manner rather than concentrating them over any single community.

3. Continue use of "open" departure navigation procedures so that flight tracks along each of the multiple directions are not narrow bands.

4. Use existing noise corridors for routings (i.e those that already have high background noise levels) such as freeways and industrial zones, while avoiding areas that are used for outdoor solitude.

5. Increase the minimum climb gradients for all procedures; and/or encourage pilots/airlines to use steeper departure profiles. The FAA has stated, "There is no standard climb rate. Per FAA Order 8260.3, the standard climb gradient for departures procedures is 200 feet per NM, although most aircraft are able to meet a steeper climb gradient."

6. Have the FAA's technical staff evaluate each community proposal. Even though HMMH has evaluated the community proposals, we ask that the FAA's technical staff review each proposal to ensure that no possible solution is overlooked.

7. Request the FAA to look into the feasibility of changing federal air traffic night-time curfew mandates. Night-time curfews are an absolutely essential part of this overall solution and will be impactful in various locales throughout the United States.

I encourage the FAA to thoughtfully and thoroughly review these proposals and report back on progress by June 1st, 2020. Thank you for your continued involvement in this issue.

Sincerely,

Paul Koretz

Council District 4 - BUR VNY FAA Task Force Recommendations

- **Problem to solve:** Low altitude aircraft noise
    - **Recommendation:** Request the FAA incorporate steeper minimum takeoff climb gradients at VNY and BUR to a minimum of 600 ft per nautical mile, or the closest rate to this that falls within safety guidelines, to help mitigate ground-level noise and concentrated jet exhaust particulate and request the FAA, LAWA, VNY and BUR to work with and encourage pilots and air carriers to use the steepest departure profiles their aircraft can safely undertake.
- **Problem to solve:** Noise impacts on communities
    - **Recommendation:** Request the FAA to evaluate and provide new noise mitigation measures for apartments, homes, and businesses based on average decibel level, including consideration of topographical features such as noise reverberations from canyon walls, and not merely proximity to the airports.
- **Problem to solve:** Overconcentration of flights over certain homes
    - **Recommendation:** Request the FAA to develop multiple waypoints and headings, whether RNAV or conventional, to create flight track dispersion for each departure direction from VNY and BUR. If this is not possible, request the FAA to design and implement the closest approximation to this goal to disperse flight tracks.
- **Problem to solve:** Overconcentration of flights over certain homes
    - **Recommendation:** Request the FAA to redesign RNAV arrival and departure procedures so that they mimic pre-Metroplex conventional dispersed procedures. During the technical review to complete this, request the FAA to suspend RNAV procedures and fly pre-Metroplex conventional procedures.
- **Problem to solve:** Overconcentration of flights over certain homes
    - **Recommendation:** Request the FAA to implement “open” procedures where possible and avoid “closed” procedures wherever technically feasible to limit the creation of narrow flight paths.
- **Problem to solve:** Overconcentration of flights over certain neighborhoods
    - **Recommendation:** Request the FAA conduct a technical study to eliminate the substantial overlap of departing VNY and BUR flight tracks over the San Fernando Valley. In particular, flights departing VNY south and turning east and flights departing BUR south and turning west, creating a substantially overlapping flight tracks vortex with impacted communities suffering from airport departures from two airports.
- **Problem to solve:** Overconcentration of flights over certain neighborhoods

    - **Recommendation:** Request that the FAA publish instrument approaches for BUR runways 15, 33, and 26.
- **Problem to solve:** Overconcentration of flights over certain neighborhoods
    - **Recommendation:** Request that the FAA conduct a technical analysis to establish fair share arrival and departure flight paths for VNY with the goal of flights departing from VNY South and turning West, South and turning East, North and turning West, and North and turning East roughly 25% in each direction and arriving North and South roughly split 50% annually. If the FAA determines this is not technically feasible, the FAA is requested to design arrival/departure procedures that as closely create fair share arrivals and departures as possible.
- **Problem to solve:** Overconcentration of flights over certain neighborhoods
    - **Recommendation:** Request that the FAA conduct a technical analysis to establish fair share arrival and departure flight paths for BUR with the goal of flights departing from BUR North, South, East, and West roughly 25% in each direction and arriving North, South, East, and West roughly 25% from each direction. If the FAA determines this is not technically feasible, the FAA is requested to design arrival/departure procedures that as closely create fair share arrivals and departures as possible.
- **Problem to solve:** Relative lower altitude flight tracks when aircraft overfly higher altitude topography
    - **Recommendation:** Request that the FAA conduct a technical analysis to establish new altitude rules for when aircraft arrive or depart over higher altitude topography with the goal of ensuring that planes ascend higher if they must fly over higher altitude areas. For example, if a plane's departure route over sea level would normally have it at 4,000 feet one mile from the airport, then the departure route over terrain of a 1,000 feet of elevation, would require that the aircraft ascend to 5,000 feet at the same distance.
- **Problem to solve:** Southern shift at Burbank airport
    - **Recommendation:** Request that the FAA vector aircraft using conventional procedures on Runway 15 to the north by Air Traffic Control prior to the 101 freeway when there are no airspace conflicts with doing so.
- **Problem to solve:** Late turns out of Van Nuys airport
    - **Recommendation:** Request the FAA to eliminate the PPRRY waypoint and publish an open waypoint placed south of the airport runway near Victory Blvd and the top of the Sepulveda Basin. An open waypoint will help with dispersion so no one community bears the brunt of aircraft flight tracks.
- **Problem to solve:** Aircraft operations at VNY disturbing people's sleep

    - **Recommendation:** Request LAWA implement a Nighttime Curfew for departures and arrivals of all aircraft at VNY to help mitigate community noise disturbances between 10:00pm and 7:00am on weekdays and 10:00pm to 9:00am on weekends and to be enforced in part by publishing the names of the aircraft management companies responsible and contact information for complaints to be directed to as well as the tail numbers and any other publicly available information related to the offending flight, pilots, and company or individual who owns or rents the aircraft.
- **Problem to solve:** International aircraft operations at VNY disturbing people's sleep
    - **Recommendation:** Request LAWA to work with DHS to restrict the hours at the VNY Customs & Border Protection Office to close by 10pm on all days in line with the proposed curfew hours.
- **Problem to solve:** Lack of community input
    - **Recommendation:** Request the FAA conduct a full Environmental Assessment and robust community outreach prior to any future flight path changes, procedure changes, or flight volume changes.

COMMITTEE ON
ENERGY AND COMMERCE
SUBCOMMITTEES:
HEALTH
COMMUNICATIONS AND TECHNOLOGY
DIGITAL COMMERCE AND CONSUMER PROTECTION

WASHINGTON OFFICE:
2438 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515
P (202) 225-6131
F (202) 225-0819

DISTRICT OFFICE:
9612 VAN NUYS BOULEVARD, SUITE 201
PANORAMA CITY, CA 91402
P (818) 221-3718
F (818) 221-3801

Tony Cárdenas
Congress of the United States
29th District, California

March 6, 2020

Hollywood Burbank Airport
2627 N. Hollywood Way
Burbank, CA 91505

Attn: Honorable Emily Gabel-Luddy

Dear Chair Gabel-Luddy:

I thank the constituents, neighborhood councils, and environmental organizations of the 29th Congressional District for their active engagement with the Southern San Fernando Valley Airplane Noise Task Force (Task Force). I encourage the Task Force to take their input seriously when finalizing a vote on recommended guidelines to send to the Federal Aviation Administration (FAA).

That said, I applaud the FAA's efforts to disperse the noise of flights as evenly as possible. No single community should bear the burden more than another. Recommendations for airport operators to fly over new neighborhoods voluntarily is not wise, or a solution. FAA determines and establishes navigational waypoints once it is determined efficient, resulting in less pollution, and most importantly, safe.

The Task Force should focus on direct local solutions that benefit all parties involved. I recommend Hollywood Burbank Airport revamp its sound insulation program by conducting a new Part 150, Airport Noise Compatibility Planning Study, which will result in an updated Noise Exposure Map. This study provides a structured and fair approach for the airport industry, all-neighboring communities, and the FAA to work together to reduce the number of people who live in noise-impacted areas –helicopter industry is eligible to participate, too. The last study posted was in March 2016.

As local efforts continue to move forward, I will work with my Congressional colleagues to keep FAA on track in publishing their various noise mitigation studies and support the appropriate FAA funding programs and issue gaps that help further address this matter.

Thank you.

Sincerely,

TONY CÁRDENAS
Member of Congress

CITY OF BURBANK
OFFICE OF THE CITY COUNCIL

March 6, 2020

Gene Reindel, Task Force Facilitator
HMMH
1508 Eureka Road, Suite 190
Roseville, CA 95661

Re: Recommendations for the Federal Aviation Administration (FAA)

Dear Mr. Reindel,

To lessen the impacts of noise from the Hollywood Burbank (BUR) and Van Nuys (VNY) Airports, Task Force Members Mayor Springer and Council Member Gabel-Luddy are submitting the following recommendations for the Task Force's consideration on April 1, 2020.

Recommendation #1 – Provide additional training, reviews, and support for Air Traffic Control.

This is a series of recommendations provided by an Air Traffic Control consultant during a Task Force meeting. They are being grouped into this recommendation as they are all applicable to the Air Traffic Organization within the FAA:

- Conduct System Service Review (SSR) on resource management at both SCT and BUR Sector;
- Review how to manage workload at positions to maintain efficiency;
- Conduct Traffic Management Reviews in the San Fernando Valley area to provide detailed analysis of impact of Traffic Management Initiatives;
- Provide refresher training on applying and administering TMIs for SCT and BUR Sector controllers;
- Conduct Operation Skills Assessments (OSAs) on how traffic restrictions are applied and communicated in the SCT and BUR Sector areas;
- Provide additional training on minimum requirements of radar separation;
- Focus on vectoring, radar separation minima, and aircraft characteristics;
- Conduct post-training Operational Skills Assessments (OSAs) on radar separation;
- Instruct Tower Supervisors to not combine sectors at peak traffic periods;
- Monitor Valley Sector for SOP compliance;
- Conduct training on using northerly airspace between BUR and VNY to gain altitude;

275 E. Olive Avenue • P.O. Box 6459 • Burbank, California 91510-6459 • (818) 238-5751 • FAX (818) 238-5757

- Conduct System Service Review (SSR) on SOP compliance and resource management;
- Provide refresher training to Tower controllers on proper handoff procedures and impacts of non-compliance;
- Conduct post-training System Service Review (SSR) on handoff procedures;

The intent of this recommendation is to request that the FAA assess the processes and procedures used by Air Traffic Control to determine if changes to the way aircraft are handled has changed over time, leading to the southerly drift in flights paths from BUR, and to make changes or improvements that could result in equitable and greater dispersion of flights and/or result in more timely turning.

Recommendation #2 – Do not implement the proposed amendments to the SLAPP and OROSZ departure procedures.

Regardless of the determination made by the Environmental Assessment to be conducted on the proposed amendments to incorporate the JAYTE and TEAGN waypoints into SLAPP and OROSZ standard instrument departure procedures from BUR, the Task Force recommends not amending the procedures to implement the use of the waypoints.

The purpose of this recommendation is to prevent changes to procedures that would cause concentration of flight paths. The current flight paths associated with these two departure procedures are widely dispersed south of the airport due to the method of aircraft navigation, separation and headings, and should not be considered as part of any proposed procedural amendment.

Recommendation #3 – Conduct new Part 150 studies at both VNY and BUR.

Both airports should conduct studies compliant with 14 CFR part 150 in order to establish updated Noise Exposure Maps and Noise Compatibility Programs. The updates may include new or revised noise abatement programs for aircraft operators. The studies should evaluate the applicability of noise abatement departure procedures, preferential runway use, and other best practices for aircraft operators.

The intent of this recommendation is to ensure that the airports are operating with the most up-to-date information for residential sound insulation, compatible land use, and noise abatement procedures for aircraft operators. A review of a preferential runway use system would also evaluate the feasibility and effects of increased variation in runway use.

Recommendation #4 – Monitor changes to regulations pertaining to noise.

BUR and VNY airports should monitor potential changes to regulations pertaining to noise, particularly those which may result from the Airport Cooperative Research Program's study *Research Methods for Understanding Aircraft Noise Annoyances and Sleep Disturbance* conducted by the National Academies of Sciences, Engineering, and Medicine in 2014.

The intent of this recommendation is to direct the airports to remain aware of changes to regulations which may affect noise compatibility programs. And provide quarterly advice to respective Commissions and City Councils to make them aware of opportunities to support and lobby for changes.

Recommendation #5 – Changes to current regulations by FAA or through legislation (Congress) to expand use of noise attenuation funds and programs to serve more residents.

The airports should support changes to FAA regulations or Congressional legislative changes to broaden the applicability of noise attenuation programs and funding to serve the greatest number of residents. This would encompass expanding the current federal criteria for use of such funds. For example, changing the definition of noise impacted areas to include levels less than the 65 DNL noise contour.

The purpose of this recommendation is to provide sound relief to more residents.

Recommendation #6 – Congressional authorization for the imposition of the mandatory nighttime curfew.

Both BUR and VNY airports should support Congressional legislation imposing a mandatory nighttime curfew at each airport similar to the Authority's Part 161 curfew request submitted on February 2, 2009, and denied by the FAA (a copy is attached as Exhibit A).

The intent of this recommendation is to bring permanent night time noise relief to all members of the public affected by BUR and VNY airports.

Recommendation #7 Increase the rate or angle of climb of aircraft departing BUR

The FAA should study the ability to encourage or require aircraft to ascend more rapidly through the use of voluntary noise abatement procedures and/or increasing the minimum climb over distance contained in the standard instrument departure procedures.

The intent of this measure is to study the feasibility of such measure to mitigate noise impacts.

Sincerely,

Mayor Sharon Springer
City of Burbank

Council Member Emily Gabel-Luddy
City of Burbank

Enc.

EXHIBIT A

Language of Mandatory Curfew

A. Except as provided in Paragraphs (B) and (C), between the hours of 10:00 p.m. and 6:59 a.m.:

1. No Landings at Bob Hope Airport shall be permitted.
2. No take-offs from Bob Hope Airport shall be permitted.

B. The following aircraft shall be permitted to land at or takeoff form Bob Hope Airport between the hours of 10:00 p.m. and 6:59 a.m.:

1. Law enforcement aircraft, firefighting aircraft, disaster relief aircraft and military aircraft.
2. Medical flight aircraft engaged in active emergency operations for the transportation of patients or human organs.

C. Aircraft other than those specified in Paragraph (B) shall be permitted to land at or takeoff from Bob Hope Airport between the hours of 10:00 pm. and 6:59 a.m. only under the following circumstances:

1. In the event such landing or takeoff results from the existence of a declared emergency.
2. In the even such landing or takeoff results from the use of Bob Hope Airport as weather alternate.
3. In the even such landing or takeoff results from a weather, mechanical, or air traffic control delay; provided, however, this exception shall not authorize any landing or takeoff between the hours of 11:00 p.m. and 6:59 a.m.

D. Upon request of the Authority, the aircraft operator shall document or demonstrate: (i) the precise emergency condition(s) resulting in a landing or takeoff between the hours of 10:00 p.m. and 6:59 a.m.; or (ii) the precise weather, mechanical, or air traffic control condition(s) resulting in a landing or takeoff between the hours of 10:00 p.m. and 11:00 p.m.

E. Any aircraft operator violating the provisions of this Rule shall, in addition to any other available remedies (including injunctive remedies), be subject to civil penalties for each unauthorized landing and unauthorized takeoff as follows:

1. For the first violation within a 12-month period – Three Thousand, Six Hundred, Seventy-One Dollars ($3,671) (or as amended for a CPI adjustment).
2. For the second violation within a 12-month period – Seven Thousand, Three Hundred, Forty-Two Dollars ($7,342) (or as amended for a CPI adjustment).
3. For the third violation within a 12-month period – Eleven Thousand, Thirteen Dollars ($11,013) (or as amended for a CPI adjustment).
4. For the fourth violation within a 12-month period – Fourteen Thousand, Six Hundred, Eighty-Four Dollars ($14,484) (or as amended for a CPI adjustment) and mandatory action to ban the aircraft operator’s flight operations at Bob Hope Airport for a twelve (12) month period.

Justin W. Cook

To: Amanda Parise; Eugene M. Reindel
Cc: Heather A. Bruce; Patrick Lammerding; John Anderson
Subject: RE: Reminder: Task Force Recommendations Due Tomorrow

From: Alford, John <John.Alford@mail.house.gov>
Sent: Friday, March 6, 2020 4:47 PM
To: Amanda Parise <AParise@bur.org>
Subject: RE: Reminder: Task Force Recommendations Due Tomorrow

Hello Amanda,

In addition to the several proposed recommendations submitted by the respective community groups, please include the following recommendations for consideration:

In effort to decrease the total volume of late-night flights (which cause particularly egregious disruption), the FAA should authorize a mandatory curfew at both BUR and VNY between the hours of 10:00 pm and 7:00 am. This curfew should apply to all non-emergency operations and it should be enforced with fines for violators.

In effort to decrease the concentration of flights over any one community, the FAA should consider the following:

- The feasibility of eastbound take-offs from BUR. This should include consideration of adjusting flight paths at other airports (LAX, BUR, ect).
- The feasibility of northbound take-offs from both VNY and BUR when there is little or no wind.

Many thanks,

John Alford
Office of Congressman Brad Sherman
818-501-9200
5000 Van Nuys Blvd. #420
Sherman Oaks, CA 91403-1791

From: Amanda Parise <AParise@bur.org>
Sent: Thursday, March 5, 2020 4:56 PM
To: egabel-luddy@burbankca.gov; Sahag Yedalian <sahag.yedalian@lacity.org>; sspringer@burbankca.gov; Terry Tornek <ttornek@cityofpasadena.net>; Ara Jame Najarian (anajarian@ci.glendale.ca.us) <anajarian@ci.glendale.ca.us>; Nicholas Greif <nicholas.greif@lacity.org>; Justin Orenstein <justin.orenstein@lacity.org>; jarrett.thompson@lacity.org; Marcos Sanchez <marcos.sanchez@lacity.org>; Marcello, Pamela <Pamela.Marcello@mail.house.gov>; Aguilera, Michael <Michael.Aguilera@mail.house.gov>; Brodtke, John <John.Brodtke@mail.house.gov>; Alford, John <John.Alford@mail.house.gov>; Gonzalez, Lea <Lea.Gonzalez@mail.house.gov>; Peter_Muller@feinstein.senate.gov; brent_robinson@harris.senate.gov; Rodriquez, Nicolas <Nicolas.Rodriquez@mail.house.gov>; Apodaca, Joey <Joey.Apodaca@mail.house.gov>
Cc: George, Sandra <SGeorge@burbankca.gov>; Mastrangelo, Danny <DMastrangelo@burbankca.gov>; 'Hess, Justin' <JHess@burbankca.gov>; McFarland, Simone <SMcFarland@burbankca.gov>; Hayrapetian, Hourik <HHayrapetian@Glendaleca.gov>; ybeers@glendaleca.gov; smermell@cityofpasadena.net; David Reich (David.Reich@lacity.org) <David.Reich@lacity.org>; Alexander Ponder <alexander.ponder@lacity.org>; Frank Miller <FMiller@bur.org>; Patrick Lammerding <PLammerding@bur.org>; SCHWARTZ, MICHELLE D. <MSchwartz@lawa.org>; BRICKER, SAMANTHA J. <SBRICKER@lawa.org>; MARGHERITIS, FLORA O. <FMargheritis@lawa.org>; PANTOJA, KATHRYN R. <KPantoja@lawa.org>; Mark Hardyment <MHARDYMENT@bur.org>; madams2@lawa.org; Diana Sanchez

(dsanchez@lawa.org) <dsanchez@lawa.org>; Eugene (Gene) Reindel <ereindel@hmmh.com>; Justin W. Cook <jcook@hmmh.com>; John Anderson <john@cerrell.com>
Subject: Reminder: Task Force Recommendations Due Tomorrow

Dear Task Force Members,

Just a reminder, proposed recommendations to the FAA should be submitted to me by tomorrow, Friday, March 6, 2020.

Thank you,

Amanda Parise
Administrative Assistant

O: 818.729.2203
E: aparise@bur.org

Hollywood Burbank Airport

hollywoodburbankairport.com
2627 N Hollywood Way, Burbank, CA 91505

PAUL KREKORIAN
LOS ANGELES CITY COUNCILMEMBER

March 9, 2020

Mr. Eugene M. Reindel
Vice President, Director of Aviation Services
HMMH
300 South Harbor Blvd. Suite 516
Anaheim, California 92805

Dear Mr. Reindel:

In 2017, many neighborhoods that I represent in the Southeast San Fernando Valley began experiencing a sudden and dramatic increase in disruptive noise from aircraft departing from the Hollywood Burbank Airport. That escalated noise impact continues to this day, and it has materially and adversely impacted the people who live, work, attend school and seek recreation in those communities.

The Southern San Fernando Valley Airplane Noise Task Force ("Task Force") was created by the Hollywood Burbank Airport Authority to provide a forum for community input relating to these impacts. It has been our goal to develop actionable, community-driven recommendations to the Federal Aviation Administration ("FAA"), and to encourage the FAA to implement solutions to these adverse impacts and provide relief to the communities that are suffering because of airport operations.

As the Vice-Chair of the Task Force, I am pleased that it has drawn very broad public participation. To date the Task Force has conducted six public meetings, heard nine extended presentations from community-based organizations, and taken public comments from hundreds of individual speakers. We have also heard comments from a variety of technical experts in various facets of aviation.

Based on the input that we have received, and on the extraordinary amount of communication I have had with my constituents on this issue, I would request that HMMH prepare a number of recommendations for consideration by the Task Force as a whole, as specified below. This set of proposed recommendations should not be considered an exhaustive list, as I may propose additional recommendations before the Task Force completes its final report.

REDUCING TOTAL OVERFLIGHT IMPACTS IN THE RESIDENTIAL COMMUNITIES OF THE SOUTHEAST SAN FERNANDO VALLEY

1. Increase utilization of the existing ELMOO NINE Departure Procedure from BUR runway 15 by, among other things: (a) establishing ELMOO NINE as an RNAV procedure to conform its utilization with NextGen implementation; and (b) creating an enforceable requirement to encourage FAA to increase use of ELMOO NINE, such as constraining all other departure procedures to reduce their volume to their pre-2009 levels.

2. Allow eastbound BUR departures using runway 8, and adopt an enforceable process to ensure a meaningful reduction in runway 15 departures.

3. Change RNAVs/procedures for VNY to encourage earlier turns of departing flights and allow a greater percentage of the departing flight tracks to be over the uninhabited Sepulveda Basin (e.g., FAA should discontinue use of PPRRY at VNY and expedite turns by returning to 2.2 DME)

4. Any policies, procedures or practices relating to safety considerations for BUR departures regarding proximity to the Verdugo Mountains should equitably be applied regarding proximity to the Santa Monica Mountains.

REDUCING NOISE IMPACTS FOR ALL SAN FERNANDO VALLEY COMMUNITIES

5. Because a more rapid rate of ascent would likely reduce noise impacts in all communities, FAA should adopt rules, procedures and/or Air Traffic Control (ATC) instructions that encourage pilots to increase altitude as rapidly as is safe when departing from BUR, including establishing altitude gates.

6. FAA should increase the climb gradient on all BUR and VNY departures, or on as many procedures and as many aircraft types as possible, and grant waiver for gradients above 500ft per nautical mile.

7. The February 2017 letter of agreement between Southern California TRACON (SCT) and BUR ATC assigns all departures 4,000' MSL. If that agreement has the impact of preventing increase in climb, it should be changed.

8. FAA must work with Hollywood Burbank Airport to ensure that the existing voluntary curfew is vigorously enforced (using SNA penalties as a model).

9. FAA and BUR must enforce compliance with BUR operating procedures during curfew hours.

10. Noise guidelines should be imposed at BUR and VNY on both commercial and general aviation operators (using SNA guidelines as model).

11. A new Part 161 study should be initiated to provide for a mandatory curfew at BUR, with the full understanding that the position taken by surrounding communities regarding a replacement terminal at BUR may well depend on whether a mandatory curfew and other effective noise impact reduction strategies are in place.

DIFFUSING FLIGHT TRACKS TO AVOID INEQUITABLE FOCUSED NOISE IMPACTS

12. FAA should adopt all actions necessary to reduce the number of BUR runway 15 departures, including runway and directional rotation.

13. FAA should increase utilization of alternative departure headings on BUR runway 15 departures to achieve greater dispersal.

14. FAA should utilize open SID departures, at lower minimum vector altitude, at BUR.

15. FAA should utilize Diverse Vector Area (see, e.g., FAA Order 7110.65), at BUR.

16. FAA should discontinue use of JAYTE and TEAGN waypoints in all departure and arrival procedures for BUR.

17. If JAYTE and TEAGN must be used at all, they should be placed at locations that will maximize noise reduction and safety for all communities and FAA-recognized noise-sensitive areas of the San Fernando Valley, without regard to any previous litigation settlement agreements, and they must not impose significant new impacts on new communities compared to pre-2017 conditions.

18. Proposed procedures SLAPP TWO and OROSZ THREE should be rejected as written and reconsidered to ensure maximize noise reduction and safety for all communities and FAA-recognized noise-sensitive areas of the San Fernando Valley, without regard to any previous litigation settlement agreements, and they must not impose significant new impacts on new communities compared to pre-2017 conditions.

19. If they must be used at all, all waypoints should be considered “fly-by” and NOT “fly-over” in order to reduce exact uniformity and encourage delay in pilots’ use of autopilot on departures.

20. FAA should integrate a small range of automated randomization into ATC software guiding the turn instructions for BUR departures in order to produce more dispersal.

21. FAA should discontinue BUR arrivals using runway 33 except when required due to significant wind conditions.

22. Since both the southern shift and undue southern concentration of BUR departures appear to be due in part to ATC workforce and related issues, FAA should initiate a system service review and workforce analysis to ensure adequate staffing levels to ensure safety and maximum efficiency.

23. FAA should stop combining ATC sectors, and ATC handoff of BUR departures to SCT should occur within 1/2 mile of the runway as per FAA guidelines.

24. FAA should draft letter of agreement between SCT and BUR ATC that assigns responsibility to BUR ATC to apply visual separation on runway 15 departures versus runway 8 arrivals, enabling earlier turns with faster climbs.

ONGOING TRANSPARENCY, ACCOUNTABILITY AND MONITORING

25. FAA must conduct a formal noise study of actual (not modelled) noise patterns and impacts surrounding VNY and BUR, and commit to regular renewals, and should install and maintain noise monitoring equipment in the City of Los Angeles.

26. FAA must commit to all mitigation measures to relieve the impacted communities, including but not limited to soundproofing.

27. A Citizens' Advisory Board for BUR should be created, including representatives from the impacted communities of Los Angeles.

28. FAA must provide the Task Force with its Post Implementation Study and all supporting documents, the Noise Screen that was provided to Benedict Hills in about January 2018, all documents requested previously by Task Force members, and all documents requested by the City of Los Angeles under the Freedom of Information Act.

Thank you for your continuing assistance to the Task Force as we endeavor to protect the communities we represent.

Very truly yours,

PAUL KREKORIAN
Los Angeles City Councilmember

NURY MARTINEZ
COUNCILWOMAN, SIXTH DISTRICT

March 6, 2020

The Honorable Stephan Dickson,
Administrator
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

RE: Southern San Fernando Valley Airplane Noise Task Force Recommendations

Dear Administrator Dickson,

As President of the Los Angeles City Council and Councilwoman representing District 6, I am writing you to ask for your support for our proposed recommendations to reduce airplane noise in the San Fernando Valley.

Both Hollywood Burbank Airport and Van Nuys Airport are critical economic drivers for the Los Angeles region. However, these facilities are located in a heavily urbanized area and their operations must take into account the effects they have on surrounding communities. My office has worked closely with the Southern San Fernando Valley Airplane Noise Task Force and understands the concerns raised by residents regarding flight paths in and out of Van Nuys and Hollywood-Burbank Airport.

However, the communities that I represent, notably Sun Valley, Arleta, Panorama City, and Van Nuys have bared the burden of poor and unfair public health, environmental, and quality-of-life impacts, such as airplane noise and worse for decades. Many of these communities are designated as being some of the most environmentally impacted in the entire state based on the CalEnviroscreen tool created by the California Office of Environmental Health Hazard Assessment.

The primary goal of the Task Force should be relieving the burden of frontline communities, such as the ones in my district, not adding to it. With this is mind, below are some recommendations for improving operations at Hollywood-Burbank and Van Nuys Airport.

CD6.LAcity.org
City Hall Office • 200 N. Spring Street, Suite 470, Los Angeles, CA 90012 • (213) 473-7006 • Fax: (213) 473-7779
Van Nuys Office • 14410 Sylvan Street, Suite 215, Van Nuys, CA 91401 • (818) 778-4999 • Fax: (818) 778-4998
Sun Valley Office • 9300 Laurel Canyon Blvd., 2nd Floor, Sun Valley, CA 91331 • (818) 771-0236 • Fax: (818) 767-7821

NURY MARTINEZ
COUNCILWOMAN, SIXTH DISTRICT

Van Nuys Airport:

We recommend that departures from Van Nuys Airport continue to go from the south. Through doing this, planes will continue to make their turns after Victory Boulevard and over the Sepulveda Basin, a large open space, as opposed to flying over dense urban neighborhoods to the north.

We are strongly opposed to changing the current flight path and having planes depart from the north or having planes turn before crossing over Victory and into the Sepulveda Basin. If any changes do occur to the route out of Van Nuys Airport, they must include an environmental review and analysis that includes a thorough study of noise and air quality.

Burbank-Hollywood Airport:

We strongly support recommendations that will provide relief from airplane noise for all residents of the San Fernando Valley. This includes upgrading technology so that flights leaving Burbank-Hollywood Airport can utilized the ELMOO NINE route.

We are strongly opposed to any proposal that would send additional departures northbound from Burbank-Hollywood Airport. These route would take planes over some of the most environmentally contaminated communities in the state of California. This is not simply a matter of sharing airplane noise, but would layer on an additional environmental hazard onto a community that already suffers from negative health and other ill effects from landfills, quarries, freeways, and industrial uses.

Any change in routes to Burbank-Hollywood or Van Nuys Airport must include an environmental review and analysis that includes a thorough study of noise and air quality. This review must take into consideration existing environmental justice issues and utilize measures of environmental hazards, such as CalEnviroscreen.

I also ask the FAA to please look at the impact and feasibility of curfews for all airports in the San Fernando Valley.

CD6.LAcity.org
City Hall Office • 200 N. Spring Street, Suite 470, Los Angeles, CA 90012 • (213) 473-7006 • Fax: (213) 473-7779
Van Nuys Office • 14410 Sylvan Street, Suite 215, Van Nuys, CA 91401 • (818) 778-4999 • Fax: (818) 778-4998
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NURY MARTINEZ
COUNCILWOMAN, SIXTH DISTRICT

The Taskforce has stated that they are seeking fairness, and I agree. I would argue there is nothing fairer than providing relief to neighborhoods in my District that have had to fight for it for decades. My communities would also continue to suffer if, as some have suggested, the flight paths are changed back to the northern, eastern routes mentioned earlier while my constituents wait for years for a lengthy environmental study. This is not fair, right or just.

I thank you for your consideration of these recommendations.

If you have any questions or concerns, please contact my District Director, Marcos Sanchez, at (818) 778-4999 or at marcos.sanchez@lacity.org.

Sincerely,

NURY MARTINEZ
Councilwoman, Sixth District

CD6.LAcity.org
City Hall Office • 200 N. Spring Street, Suite 470, Los Angeles, CA 90012 • (213) 473-7006 • Fax: (213) 473-7779
Van Nuys Office • 14410 Sylvan Street, Suite 215, Van Nuys, CA 91401 • (818) 778-4999 • Fax: (818) 778-4998
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APPENDIX E – FAA RESPONSE TO SOUTHERN SAN FERNANDO VALLEY AIRPLANE NOISE TASK FORCE RECOMMENDATIONS TO ADDRESS COMMUNITY NOISE

U.S. Department
of Transportation
**Federal Aviation
Administration**

Western-Pacific Region
Office of the Regional Administrator

777 S. Aviation Blvd., Suite 150
El Segundo, CA 90245

September 1, 2020

Patrick Lammerding
Deputy Executive Director
Hollywood Burbank Airport
2627 N Hollywood Way
Burbank, CA 91505

Flora Margheritis
Airport Manager
Van Nuys Airport
16461 Sherman Way, Ste. 300
Van Nuys, CA 91406

Dear Mr. Lammerding and Ms. Margheritis:

Thank you for forwarding the memorandum from the Southern San Fernando Valley Airplane Noise Task Force (Task Force) dated May 14, 2020, which we received on June 1, 2020. As described in our preliminary response letter dated June 11, 2020, the Federal Aviation Administration (FAA) completed a feasibility analysis for the 16 Task Force-approved recommendations and their associated recommendations.

Our responses are organized as follows: Appendix A contains responses to the 16 Task Force-approved recommendations, and Appendix B contains responses to the associated recommendations. We also reviewed the recommendations in Appendix B as a starting point for potential alternatives that we will analyze further and possibly include as a reasonable alternative in the Environmental Assessment (EA) for the proposed SLAPP THREE and OROSZ THREE procedures. The associated recommendations that we will assess further are identified in the Next Steps section. We carried the numbering from the memorandum for both the Task Force-approved and associated recommendations, and assigned a letter alphabetically to each of the bulleted recommendations. Appendix C lists the definitions of abbreviations used in this response. FAA Orders referenced throughout this document can be found at https://www.faa.gov/air_traffic/publications/.

With regard to the feasibility analysis, we considered two types in our review of the recommendations:

- Technical Feasibility
    - Can the aircraft's flight management system, pilots, and air traffic controllers execute the proposed procedure safely?

    - Does the proposed procedure meet flight procedure safety and design criteria, as well as other FAA requirements for airspace and air traffic control?
- Operational Feasibility
    - Will the proposed procedure allow aircraft to fly safely through the airspace, considering traffic flows from other airports?

If we found a recommendation to be technically and operationally feasible, we added "ST" or "LT" to denote either feasible in the short term (two years or less) or long term (more than two years). For those recommendations, we would also need to consider financial and environmental feasibility.

- Financial Feasibility
    - What are the anticipated FAA costs associated with the proposed procedure? Some examples of cost considerations are design, flyability, the level of environmental review that must be done (e.g., Categorical Exclusion [CATEX], EA, or Environmental Impact Statement [EIS]), community outreach, review of public concerns, and the number of procedures that require modification.
    - Are the necessary funds available to execute the work and, if not, can we secure funding?
- Environmental Feasibility
    - Is the proposed procedure in compliance with FAA Order 1050.1F, which serves as the FAA's policy and procedures for compliance with the National Environmental Policy Act (NEPA)? Is the proposal in compliance with implementing regulations issued by the Council on Environmental Quality (CEQ)? The provisions of this Order and the CEQ regulations apply to actions directly undertaken by the FAA.
        - An environmental feasibility determination was only applicable if the proposed procedure is considered a federal action that requires analysis under FAA Order 1050.1F and NEPA.
        - If an environmental review is required, the final determination of Environmental Feasibility would be a product of that review and, therefore, determined at a later date. Any cursory determination of Environmental Feasibility without following the complete process would be pre-decisional and not in compliance with Agency policy and federal regulations.

It is important to note that potential future implementation of recommendations determined to be technically, operationally, financially and environmentally feasible would not necessarily provide noise relief, and/or could shift noise from one community to another.

Please also note the following clarifying definitions as they apply to the departure procedures at Hollywood Burbank (BUR) and Van Nuys (VNY) airports.

- Standard Instrument Departure (SID): A printed departure procedure that air traffic control (ATC) uses to reduce pilot/controller workload. SIDs take into consideration noise abatement, airspace management guidelines, terrain, and obstacle avoidance. A SID essentially formalizes how air traffic controllers manage departures. Open and radar vector are two types of SIDs.

- Open SID: An open SID begins with a defined RNAV route, has an "open" portion in the middle where ATC vectors aircraft, and then ends with a defined RNAV route. Open SIDs enable more precise and predictable flight paths at lower altitudes and are, therefore, less conducive to providing dispersion at these altitudes. This means that any Task Force recommendations for an open SID would not meet the objective of achieving greater **initial** dispersion.
- Radar vector SID: A departure procedure that ATC uses to provide radar navigation guidance to a filed or assigned route or fix. Assigned headings can also be affected by factors such as wind, temperature, and aircraft performance characteristics. Because of these factors, radar vector SIDs provide the greatest opportunity for initial aircraft dispersion. As an example, the SLAPP ONE and OROSZ TWO departures (currently in use at BUR) use radar vector SIDs, which begin with an assigned compass heading. This heading can vary within defined departure procedure criteria and facility policies, and when accompanied by the phrase "or as assigned by ATC."
- In this document, where the Task Force recommendation referred to the proposed SLAPP procedure as SLAPP TWO, we have corrected the name to SLAPP THREE. A separate SLAPP TWO procedure is currently scheduled for September 10, 2020. The changes occurring in that amendment are clerical changes to clarify instructions for pilots and ATC and will not cause ground track changes.

For recommendations that refer to the Instrument Flight Procedures (IFP) Information Gateway in the Next Steps, the Task Force can coordinate with the appropriate airport to begin the IFP Request Process by completing a request form located on the FAA IFP Information Gateway website. This ensures the appropriate FAA parties review every request. All technical requests are treated the same during the standard FAA review process and, if appropriate, the FAA will complete a feasibility study and environmental review of the request. This process, from start to implementation, can take more than two years. You will receive updates throughout the process on the status. The link to submit your request is https://www.faa.gov/air_traffic/flight_info/aeronav/procedures/.

Lastly, the FAA notes our commitment to consider comments about the feasibility of dispersal heading or other lateral track variations during the EA process for the proposed SLAPP THREE and OROSZ THREE procedures, relating to the request of the president of the Burbank-Glendale-Pasadena Airport Authority on March 27, 2019.

If we can be of further assistance, please contact my office at (424) 405-7000.

Sincerely,

Raquel Girvin
Regional Administrator

Enclosures (3)
Appendix A: Task Force-Approved Recommendations

Appendix B: Associated Recommendations
Appendix C: Abbreviations

Cc w/Enclosures:

Senator Dianne Feinstein
Senator Kamala Harris
Congressman Adam Schiff
Congressman Brad Sherman
Congressman Ted Lieu
Congressman Tony Cardenas

Honorable Emily Gabel-Luddy, Chair Southern San Fernando Valley Airplane Noise Task Force
Honorable Paul Krekorian, Vice Chair, Southern San Fernando Valley Airplane Noise Task Force

APPENDIX A

Task Force-Approved Recommendations

Recommendation 1: Immediately restore the Hollywood Burbank Airport (BUR) Runway 15 departure flight tracks to 2007 conditions without implementing a new procedure.

Adjustment Type	Track
Adjustment Detail	Immediately return to 2007 flight tracks
Evaluation	The conditions that resulted in the 2007 BUR departure flight tracks no longer exist. Changed circumstances prevent a return to those conditions. To give an example, the number of air carrier operations at BUR increased by 22.4 percent between 2016 and 2018. Maintaining the necessary separation of aircraft within the airspace above the San Fernando Valley with this increased volume of traffic (which continued until the onset of the COVID-19 public health emergency) prevents ATC from regularly turning aircraft to the north more quickly without potentially causing conflicts. Another example is the fleet mix. It has changed to include more jets, which often make wider turns than piston or turbo-prop aircraft (depending on various factors like load and the type of jet). As part of the Southern California Metroplex Project, the FAA in March 2017 implemented two new satellite-based departure routes for BUR – the SLAPP and the OROSZ. However, the satellite-based portions of the routes do not begin in the immediate airport environment. Rather, they begin significantly north and northwest of the airport: SLAPP at the RAYVE waypoint and OROSZ at the TILLR waypoint. RAYVE is approximately 11 NM north of BUR, and TILLR is approximately 17 NM northwest of BUR. The initial segments of the SLAPP and OROSZ are radar vector SIDs, as were the procedures that existed prior to the Metroplex implementation. The FAA will not cancel the satellite-based portions of the SLAPP and OROSZ and return to the routine use of conventional departure procedures for these departures. The current RNAV segments of the procedures are designed to fly hundreds of miles and to transition from terminal airspace to en route airspace (and vice versa). Removing these procedures (by flying the older conventional procedures) would impact operations at several different facilities and add complication through the National Airspace System. Removing current RNAV procedures would require additional air traffic controller involvement, especially with the aircraft after they depart from BUR, adding unnecessary

	complexity to an already congested system and reducing aircraft flight predictability. Metroplex RNAV procedures provide built-in separation with other Burbank area procedures that conventional procedures cannot provide. With conventional procedures, additional separation between departures from BUR would be required to ensure the required distance between aircraft as they leave terminal airspace and enter the higher-altitude en route airspace (FAA en route airspace requires 5 NM of separation whereas SCT only requires 3 NM). Due to available ramp space and other factors, delays at BUR would be expected. Because RNAV procedures in the surrounding airspace were designed in concert, use of a conventional departure procedure at BUR would significantly impact aircraft departing LAX and BUR simultaneously. Thus, delays at LAX are possible as well. Additionally, Congress has required the FAA to prioritize the expeditious implementation of PBN procedures nationwide, of which the SLAPP and OROSZ procedures are part. FAA Modernization and Reform Act of 2012, Pub. L. No. 112-95, § 213(a)(1)(A), 126 Stat. 11, 47.
Feasibility Assessment	Not operationally feasible
Feasibility Justification	Although the FAA cannot restore the BUR Runway 15 departure flight tracks as they existed in 2007, the FAA does intend to modify these departure procedures. The FAA has proposed the SLAPP THREE and OROSZ THREE departure procedures, which are discussed below. The FAA firmly believes that, once implemented, these new procedures will help address local concerns about aircraft overflights. The FAA is currently preparing an Environmental Assessment of these proposals and that document is the most appropriate vehicle to consider proposals to address a shift in departure tracks to the south. The Environmental Assessment will also provide the FAA an opportunity to more fully review requests for dispersion of flight tracks for those departures.
Next Steps	No further FAA action on this specific recommendation

Recommendation 2: [a)] Immediately stop the use of the procedure with the PPPRY Waypoint and [b)] design and implement a modified RNAV (Required Navigation) procedure for Van Nuys Airport (VNY) Runway 16R that results in earlier turns of departing flights and allow a greater percentage of the departing flight tracks to be over the uninhabited Sepulveda Basin as is the case when using the 2.2 DME departure procedure at VNY.

Adjustment Type	Track
Adjustment Detail	Modify track and location of waypoint
Evaluation	a) Immediately stopping the use of the procedures using the PPRRY waypoint would require the return to conventional procedures and would increase complexity in Southern

	California airspace. RNAV procedures are designed with procedural separation built in. Changing these procedures would, at a minimum, affect the RNAV procedures into LAX. These RNAV procedures are designed to fly hundreds of miles and transition from terminal to en route airspace, and vice versa. b) LAWA and the Los Angeles City Council had submitted a similar request to the FAA in March 2019. They specifically requested that the waypoint be moved back to the 2.2 DME location. At the time, the FAA explored a number of options that led to the design of an operationally feasible notional procedure that best met the intent of that request. That notional procedure also best meets the intent of this recommendation. The FAA presented that notional procedure at the Van Nuys Citizens Advisory Council (VNY CAC) meeting on August 6, 2019. Because of various concerns expressed by the community, City Councilmembers have not taken any action to request that the FAA move forward with this proposal. Since there was no community consensus for the FAA's proposed notional procedure presented at the VNY CAC in August 2019, and it seemed that many residents wanted to address both BUR and VNY airports together, the VNY issue was referred to the Task Force. Implementing this change would take more than two years to complete. It would require complex environmental reviews and community engagement, and the FAA would need to convene a procedure review board to issue waivers and approval letters for this design.
Feasibility Assessment	a) Not operationally feasible b) Operationally feasible (LT), financial feasibility to be determined
Feasibility Justification	a) Returning to conventional procedures, even if temporarily, will impact operations at other facilities. RNAV procedures are designed with procedural separation built in. Changing these procedures would, at a minimum, affect the RNAV procedures into LAX. While we understand community concerns about departures in close proximity to VNY, these RNAV procedures are designed to fly hundreds of miles and transition from terminal to en route airspace, and vice versa. b) See evaluation section.
Next Steps	a) No further FAA action b) Airport authority submits IFP Information Gateway request following its internal approval process for making such a request.

Recommendation 3: Immediately increase the climb gradient for departure procedures at Hollywood Burbank Airport (BUR) and Van Nuys Airport (VNY) to the maximum gradient

allowable without waivers, expedite any waivers required to exceed a 500-foot per nautical mile climb gradient, and increase the climb gradient to above 500 feet per nautical mile.

Adjustment Type	Aircraft Performance
Adjustment Detail	Increase climb gradient
Evaluation	Non-piston aircraft generally climb at or above 500 feet per NM, and one possible FAA notification such as a Notice to Airmen (NOTAM) would only be effective to 500 feet above the airport per FAA Order 8260.46, 2-1-1.e.(2)(a-c). Anything higher must be for an obstacle. The FAA analyzed two weeks of departure climb data from BUR for the Boeing 737 family of aircraft and Airbus 320 family of aircraft commonly used by scheduled air carriers at BUR. The FAA found the average climb gradient was approximately 1,019 feet per NM for Boeing 737 aircraft and 1,075 feet per NM for Airbus 320 aircraft. If procedural climb gradients are increased beyond the rate aircraft are currently climbing, the higher thrust required might increase noise in the immediate area around the airport. The FAA doesn't build procedures outside of criteria unless an equivalent level of safety can be achieved. The FAA's Office of Flight Standards (AFS) sets the standards, and only they can determine if the equivalent level of safety is sufficient and waive the criteria. Furthermore, a determination under the applicable airport sponsor grant assurances as to whether an access restriction is reasonable must consider safety, since a restriction that is unsafe is also unreasonable. There are concerns with regard to safety and a potential conflict with the pilot-in-command (PIC) authority and safety of flight. See *FAA 2014 LAX Part 161 Decision*, effective November 7, 2014, 79 FR 70267. Furthermore, ATC workload may increase because aircraft that are unable to meet the higher climb gradient would need to be re-cleared/amended. Climb gradient procedures only apply to instrument flight rules (IFR) aircraft.
Feasibility Assessment	Not operationally feasible
Feasibility Justification	Most non-piston aircraft are already climbing at a rate greater than 500 feet per NM. A NOTAM is not feasible due to the constraints of temporary NOTAMs, per FAA Order 7930.25, 7-3-1, which states, "If the

	condition cannot be corrected within 224 days, the NOTAM issuing authority must obtain Flight Standards approval from AFS−400 for the NOTAM to remain in effect beyond the 224−day limitation. It is important that NOTAMs not be allowed to remain active for excessive periods of time; therefore, an FDC IFP NOTAM must not be canceled and re-issued without Flight Standards approval."
Next Steps	No further FAA action

Recommendation 4: Conduct a study to determine how to obtain the lowest noise levels from aircraft departures from Hollywood Burbank Airport (BUR) Runway 15 and Van Nuys Airport (VNY) Runway 16R in the South San Fernando Valley communities through increased climb gradients, noise abatement departures profile (NADP) procedures, de-rated takeoff procedures, or a combination of the three alternatives.

Adjustment Type	Conduct study
Adjustment Detail	
Evaluation	While this recommendation goes beyond the scope of FAA actions authorized and described in 14 CFR Part 150, several aspects of this recommendation could potentially be accomplished by LAWA and the Burbank-Glendale-Pasadena Airport Authority through the processes described Part 150. Therefore, please see responses to Recommendation 14 and associated Task Force member recommendations. The FAA does not conduct this type of study for airports.
Feasibility Assessment	N/A
Feasibility Justification	N/A
Next Steps	N/A
Additional FAA Response	This recommendation may economically discriminate against air carriers and operators at the airport in violation of FAA Grant Assurance 22 because air carriers and operators currently operating aircraft at the airport might not be able to meet the requested climb gradient. An airport proprietor is primarily liable for aircraft noise in the vicinity of an airport. *Griggs v. County of Allegheny, PA*, 369 U.S. 84 (1962). Because it is primarily liable for aircraft noise, an airport proprietor is permitted to impose some regulation of aircraft at the airport. This is called the proprietor exception. Under its proprietor exception, an airport proprietor may impose airport use restrictions that do not unjustly discriminate against a particular type of aviation activity, do not impede safety and the management of the airspace, and do not unreasonable interfere with interstate or foreign commerce. A determination under the grant assurances as to whether such an access restriction is reasonable will consider the safety, since a restriction that is unsafe is also unreasonable. There are concerns with regard to safety and a potential conflict with the PIC

	authority and safety of flight. See FAA 2014 LAX Part 161 decision effective November 7, 2014, 79 FR 70267.

Recommendation 5: The Task Force opposes the FAA's proposed changes to the SLAPP and OROSZ departure procedures and requests the FAA design and implement a procedure for maximum dispersion of departures from Runway 15 and Hollywood Burbank Airport (BUR).

Adjustment Type	Track
Adjustment Detail	New procedure to increase dispersion
Evaluation	As we proceed with the EA for the proposed SLAPP THREE and OROSZ THREE procedures, we are considering adjusting the originally proposed procedures as an alternative (please see our response to 5.2 in Appendix B). We are also considering the feasibility of dispersal heading or other lateral track variations during the EA process for the proposed SLAPP THREE and OROSZ THREE procedures, as requested by the Burbank-Glendale-Pasadena Airport Authority. (Any dispersion of aircraft departing runway 15 would have to occur to the south and east of a 213° initial heading. The resultant flight paths would likely be farther south than those currently flown.)
Feasibility Assessment	Will be assessed in the EA
Feasibility Justification	Not applicable
Next Steps	The FAA proceeds with the EA process that includes considering alternatives and the feasibility of dispersal headings or other lateral track variations.

Recommendation 6: Replace current NextGen aircraft procedures at Hollywood Burbank Airport (BUR) and Van Nuys Airport (VNY) with procedures that provide better dispersion of flight tracks, such as [a)] "open" departures and [b)] diverse vector area (DVA) procedures.

Adjustment Type	Track
Adjustment Detail	Disperse departure flight tracks
Evaluation	All BUR and VNY RNAV departure procedures are open SIDs or contain vectors in their initial segments, i.e., are radar vector SIDs.
Feasibility Assessment	a) Operationally feasible (ST) b) Not operationally feasible
Feasibility Justification	a) The current VNY and proposed BUR RNAV departures are open SIDs, offering a range of headings after an initial RNAV track. The current BUR RNAV departures are radar vector departures that have an allowable range of headings. Aircraft departing on these SIDs will fly the initial heading published on the procedure (210°) or a heading assigned by ATC, until receiving additional instruction. This type of departure allows for the most

	initial dispersion of any of the departures currently available. If the objective of the recommendation for an open SID is better initial dispersion at BUR and VNY, open SIDs would not meet this objective. Please see the main body of this letter for definitions and Recommendation 1 for further information on RNAV departure procedures. b) The FAA's use of DVAs and radar vector SIDs already provides for the maximum degree of dispersion possible by promoting efficiency and allowing ATC to turn aircraft on-course as soon as possible. However, the FAA's use of DVAs and radar vector SIDs must be solely for the purpose of maintaining the safety and efficiency of the NAS. The use of a DVAs and/or radar vector SIDs for the purpose of dispersion cannot be mandated and would not be operationally feasible. NOTE: Due to a pending national policy change, ATC's use of DVAs will be changing to disallow the concurrent use of DVAs and SIDs, and to eliminate the existence of both DVAs and SIDs at the same airport. However the functional use of a DVA will remain available to ATC, if desired. The new policy will allow ATC to request conversion of the DVA to a SID with a clearly defined range of possible headings, assignable by ATC. This change will remove ambiguity and increase pilot understanding of all departure requirements. Please see Recommendation 6.4 for an example. The DVA is rarely used in the immediate area of the airport. The dispersion could be achieved by creating radar vector SIDs. The FAA's Office of Environment and Energy is currently studying dispersion off the end of the runway for RNAV departure procedures beyond what can be achieved with radar vector. The FAA is studying ways to use PBN technology to create systematic dispersal of flight tracks while maintaining safety and efficiency. It is important to understand, however, that it is not possible to replicate the kind of random dispersal that occurs when planes are flying using ground based navigation—in other words, introducing systematic dispersal using satellite based routes would not achieve the outcome of "going back to the way it was." That type of dispersal is no longer possible.
Next Steps	a) The FAA has proposed open SIDs (SLAPP THREE and OROSZ THREE) to replace the current radar vector SIDs at

	BUR and is evaluating them together with reasonable alternatives in the ongoing EA. The FAA proceeds with EA process that includes considering alternatives and the feasibility of dispersal headings or other lateral track variations. b) No further FAA action

Recommendation 7: Provide for Instrument Flight Rules (IFR) procedures for aircraft to arrive all runways at Hollywood Burbank Airport (BUR).

Adjustment Type	Procedures
Adjustment Detail	Add BUR IFR arrival procedures
Evaluation	Due to constraints caused by higher terrain to the north through the southeast, the required descent gradients on straight-in procedures would exceed the maximum allowed by current design criteria, in accordance with FAA Order 8260.58 and FAA Order 8260.3.
Feasibility Assessment	Not technically feasible
Feasibility Justification	Current instrument procedures allow aircraft to circle to other runways in visual conditions. Additionally, visual flight rules (VFR) aircraft can land on other runways. However, due to higher terrain to the north, east, and south, straight-in procedures to Runways 15, 26, and 33 cannot be designed without exceeding maximum descent gradient criteria, in accordance with FAA Order 8260.58 and FAA Order 8260.3.
Next Steps	No further FAA action

Recommendation 8: Create "open" Standard Instrument Departure (SID) Procedures at Hollywood Burbank Airport (BUR) for Runway 8, Runway 26 and Runway 33 mimicking the ELMOO NINE conventional procedure.

Adjustment Type	Track
Adjustment Detail	Mimic ELMOO NINE conventional procedure for BUR Runways 8, 26, and 33.
Evaluation	Higher terrain surrounding the airport and FAA Order 8260.58 (Chapters 1 and 5) criteria would not allow open SIDs for Runways 8 and 33. Open SIDs require an initial RNAV segment that would take the aircraft into terrain north and east of the airport and are not feasible from runways other than Runways 15 and 26. In addition, use of Runway 26 for departures would create conflicts when Runway 8 is being used for landing. Other constraints involve aircraft type/size. Departures on Runway 8 are restricted to aircraft weighing 12,500 lbs. or less.
Feasibility Assessment	Not technically feasible
Feasibility Justification	Not possible due to terrain and other constraints
Next Steps	No further FAA action

Recommendation 9: Restrict aircraft from operating during the night at both Hollywood Burbank Airport (BUR) and Van Nuys Airport (VNY) and penalize and identify publicly aircraft operators that violate the mandatory curfew.

Adjustment Type	Modification of BUR and VNY Noise Rules
Adjustment Detail	14 C.F.R. Part 161, *Notice and Approval of Airport Noise and Access Restrictions*.
Evaluation	While the Task Force directed this recommendation to the Federal legislative representatives, the FAA offers the following background information for context: Neither BUR nor VNY has a mandatory curfew. BUR's noise rules were grandfathered under the Airport Noise and Capacity Act of 1990 (ANCA) and only prohibits the loudest and noisiest jets. VNY has had a partial nighttime departure curfew in place since 1981 (grandfathered with ANCA) to prohibit the oldest and noisiest jets from operating during the nighttime hours. Today, any new proposed local restrictions or changes must comply with ANCA and FAA grant assurances Title14, C.F.R. Part 161, *Notice and Approval of Airport Noise and Access Restrictions* establishes the process and more detailed criteria for an airport to propose (and for FAA to evaluate) proposed restrictions. ANCA limits airport sponsors' ability to implement new restrictions including new fines on aircraft operating into or out of their airport after 1990. ANCA also phased out Stage II aircraft (i.e., 727, 737-200, etc.) over 75,000 lbs., on December 31, 1999. The FAA Modernization and Reform Act of 2012 phased out Stage II (i.e., Lear 24's, Gulfstream II, etc.) aircraft under 75,000 lbs., on December 31, 2015. FAA grant assurances review is also critical because it impacts non-stage aircraft. The assurances prevent unjust discrimination to all types, kinds, classes of aeronautical activities. A noise or access restriction on the operation of stage 3 aircraft is only allowed in 3 circumstances: 1. FAA approves it after an airport sponsor applies for such approval. The procedures and substantive standard governing FAA's reviewing and approval, if applicable, are provided for in 14 CFR part 161. 2. The restriction is pre-existing and meets the grandfather criteria under ANCA. 3. The restriction is passed with the unanimous consent of the sponsor and all aircraft operators. Therefore, a vast majority of the airlines and cargo carriers at BUR and general aviation aircraft at BUR and VNY can operate 24/7 365 days a year without violating noise rules. It is important to note that (a) Burbank's ordinance imposing a nighttime curfew

	at BUR was struck down by the Supreme Court. *City of Burbank v. Lockheed Air Terminal*, 411 U.S. 624 (1973) and (b) there is an existing ANCA/Part 161 record for BUR (2009). See FAA 2009 BUR Part 161 decision effective October 30, 2009, 74 FR 66397.
Preliminary Assessment	N/A
Feasibility Justification	N/A
Next Steps	N/A
Additional FAA Response	Neither BUR nor VNY currently has a mandatory curfew. If the Burbank-Glendale-Pasadena Airport Authority (BGPAA) or Los Angeles World Airports (LAWA) wish to pursue FAA's approval to establish and enforce a mandatory curfew at BUR or VNY pursuant to Airport Noise and Capacity Act of 1990 (ANCA), it may request such authorization as prescribed in 14 CFR Part 161, *Notice and Approval of Airport Noise and Access Restrictions*. Should this occur, the FAA will consider the request and provide a formal determination after reviewing the proposal according to the requirements of 14 CFR Part 161 and compliance with grant assurances.

Recommendation 10: Restrict the hours of the Customs and Border Protection Office at Van Nuys Airport (VNY).

Evaluation	Non-FAA response required

Recommendation 11: Increase enforcement of the existing voluntary curfew at Hollywood Burbank Airport (BUR).

Evaluation	Non-FAA response required
Adjustment Type	Modification of BUR's Noise Rules
Adjustment Detail	14 C.F.R. Part 161 *Notice and Approval of Airport Noise and Access Restrictions*.
Evaluation	While the Task Force directed this recommendation to BGPAA, the FAA offers the following background information for context: Depending on the nature of the "voluntary" curfew, it may or may not be enforceable under ANCA and airport grant assurances. Unless operators and an airport sponsor agreed to access restrictions as part of an agreement pursuant to part 161, the voluntary curfew is not enforceable. BUR's noise rules were grandfathered under Airport Noise and Capacity Act of 1990 (ANCA) and only prohibits the loudest and noisiest jets. A vast majority of the airlines and general aviation aircraft can operate anytime without violating BUR's noise rules.

Preliminary Assessment	Not permissible unless the airport goes through the Part 161 process to establish an enforceable curfew and meets the grant assurances.
Feasibility Justification	14 C.F.R. § 161.305 - Required analysis and conditions for approval of proposed restrictions. (Please note that section 161.305 applies to Stage 3 aircraft. Although theoretically there are no stage 2 airplanes flying, the Reauthorization Act of 2018 authorized some limited operation of Stage 2 aircraft.)
Next Steps	No further FAA action unless BGPAA pursues a part 161 process.
Additional FAA Response	A voluntary curfew is not enforceable. Enforcing a voluntary curfew would violate ANCA. Depending on the nature of the "voluntary" curfew, it may or may not be enforceable under ANCA and airport grant assurances. Unless operators and an airport sponsor agreed to access restrictions as part of an agreement pursuant to part 161, the voluntary curfew is not enforceable. BUR's noise rules were grandfathered prior to the implementation of ANCA and only prohibits the loudest and noisiest jets. Therefore, a vast majority of the airlines and general aviation aircraft are able to operate at BUR anytime without violating its noise rules. In addition, the recommendation would have to be considered from a grant assurances perspective which is critical because it impacts non-stage aircraft. See Chap. 13 of FAA Order 5190.6B.

Recommendation 12: Increase the eligibility area for noise mitigation programs in communities near airports, which requires federal funding to implement.

Evaluation	Non-FAA response required
Adjustment Type	Adjusting Local Land Use Compatibility Requirements in surrounding cities and update of Federal Noise Mitigation Eligibility Requirements
Adjustment Detail	
Evaluation	While the Task Force directed this recommendation to the Federal legislative representatives, the FAA offers the following background information for context: FAA Order 5100.38D, *Airport Improvement Program Handbook* defines eligibility requirements for federal funding. The FAA's ability to award AIP grants and approve PFC funds would require that the residential land uses in question be classified as non-compatible with, or adversely affected by, airport noise. Non-compatibility and adverse effects are defined as either being (a) within the CNEL 65 dB or higher noise contour, as shown on a current FAA-accepted Noise Exposure Map or (b) as reflected in a final National Environmental Policy Act (NEPA) document. A

	local jurisdiction may use a lower local noise standard (i.e., CNEL 60 dB) for mitigation if the respective jurisdiction formally adopts the standard for all local land use compatibility, not just for airport noise mitigation purposes. However, federally- funded noise mitigation in such areas would be a lower priority than in areas that meet the standard for significant noise, and the community would be expected to rezone such areas for non-residential (and thus less noise-sensitive) purposes.
Preliminary Assessment	Technically feasible. Though BUR's existing 4th Quarter 2019 Noise Contour is based on measured noise surrounding the airport and submitted to Los Angeles County and the State of California as part of its State noise variance requirements, because of a successful noise abatement and mitigation program BGPAA has reduced its noise impact area from approximately 400-acres 70 dB CNEL to a 65 dB incompatible impact area of 13.73 acres.
Feasibility Justification	Technically feasible but would require local changes across all local land use compatibility, not just for airport noise mitigation purposes.
Next Steps	Would require local changes across all local land use compatibility, not just for airport noise mitigation purposes.
Additional FAA Response	Current FAA policy, generally limits federally-funded noise mitigation, such as property acquisition or the installation of sound insulation, to impacted properties within the 65 dB CNEL (or higher) noise contours, provided the land uses meet the requirements prescribed under FAA Order 5100.38D, *Airport Improvement Program Handbook*. FAA's policy applies to noise mitigation funded by both Airport Improvement Program (AIP), Passenger Facility Charge funding (PFC), and airport revenue. Under FAA policy, a local jurisdiction may adopt a lower local noise standard (i.e. CNEL 60 dB) for mitigation if the standard is formally adopted by the respective jurisdiction for all local land use compatibility, not just for airport noise mitigation purposes. Such communities would also be expected to modify the zoning for such areas to eliminate residential land use and other noise-sensitive areas. From a grant compliance perspective, any noise restriction should incorporate a "balanced approach" as discussed in Section 13.8 of FAA Order 5190.6B

Recommendation 13: Require the use of the Environmental Analysis (EA) as the minimum standard to meet the requirements of the National Environmental Policy Act (NEPA) for implementing any FAA proposed change to aircraft flight procedures.

Adjustment Type	Environmental Assessment

Adjustment Detail	Create minimum standard
Evaluation	This request is contrary to FAA policy requiring compliance with NEPA, documented in FAA Order 1050.1F. The CEQ regulations establish procedures for complying with NEPA. In accordance with 40 CFR § 1507.3 of the CEQ regulations, FAA Order 1050.1F contains the FAA's implementing procedures, which supplement those regulations. (This request is inconsistent with FAA environmental policy and Executive Orders, which emphasize using categorical exclusions and other environmental review streamlining tools to reduce delay.)
Feasibility Justification	FAA Order 1050.1, 3-1.2.a.-b.
Next Steps	No further FAA action

Recommendation 14: Maintain and update when and if necessary the Noise Exposure Map (NEM) and Noise Compatibility Program (NCP) at Hollywood Burbank Airport (BUR) and Van Nuys Airport (VNY) in order to continue to provide noise mitigation to all potentially eligible property owners and continue to monitor the aircraft operations and associated noise levels throughout the San Fernando Valley communities. The NCPs will specifically consider preferential runway use programs in a coordinated approach at both airports to determine whether more northerly flow provides noise benefits. The NCP at BUR will also analyze Runway 33 arrivals to limit the use of the flight path some operators use to arrive over the Santa Monica Mountains.

Evaluation	Non-FAA response required
Adjustment Type	Noise Study
Adjustment Detail	Update 14 C.F.R Part 150 Airport Noise Compatibility Planning (NCP) program
Evaluation	While the Task Force directed this recommendation to BGPAA and LAWA, the FAA offers the following background information for context: Preparation of a Part 150 by an airport sponsor is voluntary and is NOT a requirement of the FAA, nor is it a grant agreement obligation requirement (unless the airport has requested and received an AIP grant to fund a Part 150 program). Part 150 NEM's requires only the existing condition and 5-year forecast maps. The NCP is the sponsor's proposed program, subject to regulatory process requirements and FAA approval. It can evaluate numerous noise compatibility alternatives including, but not limited to, preferential runway programs. The NCP reviews and analyzes Noise Abatement Measures (actions that reduce sound at the source i.e. routing arrival and departure flight paths over less noise sensitive areas), Noise Mitigation Measures – (actions that reduce noise at the receptor, i.e. sound insulation), Land-Use

	Measures (i.e. zoning or other controls) and Continuing Program Measures (i.e. housekeeping measures for periodic review and maintenance of the NCP itself) on how to reduce the number of people affected by noise of 65 DNL (CNEL in California) or greater and how to prevent the introduction of new non-compatible land uses within the 65 DNL (CNEL) noise contour.
Feasibility Assessment	Conducting a Part 150 is feasible if the airport sponsors choose to do so. It is premature to assess the feasibility of any specific measure(s) that may be included in the resulting Noise Compatibility Program.
Feasibility Justification	14 C.F.R Part 150
Next Steps	BGPAA and LAWA may initiate a Part 150 Update if they choose to do so.
Additional FAA Response	FAA points out that the preparation of a Part 150 Study (or update) by an airport sponsor is voluntary and is NOT a requirement of the FAA. Part 150 provides a structured process for a collaborative approach to reducing incompatible land uses, and includes the airport(s), airlines and other user groups, community representatives, and the FAA. Part 150 requires development of current and forecast Noise Exposure Maps, and development of a Noise Compatibility Program (NCP). The Part 150 process may consider a broad range of measures, including (but not limited to) preferential use runways. The FAA's review of the measures included in the NCP include an evaluation of whether the measures can be safe to operate and meet all requirements prescribed by ANCA and is consistent with the applicable federal obligations.

Recommendation 15: Create a Citizen's Advisory Committee at Hollywood Burbank Airport (BUR) to address community concerns throughout the San Fernando Valley.

Adjustment Type	Create Citizen' Advisory Committee
Adjustment Detail	Monitoring of Noise Research Methods
Next Steps	Non-FAA response required.

Recommendation 16: Require the Federal Aviation Administration (FAA) to immediately respond to community and Airport requests and provide post implementation results from NextGen aircraft procedures including the implementation of the Southern California Metroplex and future implementations and all supporting documents, the Noise Screen that was provided to Benedict Hills in about January 2018, and all documents requested under the Freedom of Information Act (FOIA).

Adjustment Type	Amendment of U.S.C.
Adjustment Detail	Change 5 U.S.C. § 552
Evaluation	Regarding your recommendation that the FAA respond immediately to requests under FOIA for all documents, please note that the FAA follows the FOIA and applicable U.S. DOT and

	FAA FOIA policies. FAA Order 1270.1A provides guidance governing the processing of requests for agency records under the FOIA, Title 5 of the U.S.C. § 552, and implements DOT regulations found in Part 7, Title 49 of the Code of Federal Regulations. In implementing the FOIA, it is the DOT's policy to make information available to the public uniformly and consistently and to provide the maximum allowable disclosure of records to the greatest extent possible in keeping with the spirit of the statute. The FOIA directs each FAA office and employee to cooperate fully by making records available to the public in a timely manner to the fullest extent consistent with this policy. A FOIA request should contain a sufficient description of the records being sought to enable an agency employee who is familiar with the subject area to locate the records with a reasonable amount of effort. Further, in accordance with U.S. Department of Justice guidance, a FOIA request for records is considered as a perfected request when it adequately describes the records sought, is received by the FOIA office of the agency or agency component in possession of the records, and for which there is no remaining question about the payment of applicable fees. Some individuals and the City of Los Angeles have submitted requests under FOIA for records related to the BUR Runway 15 departures. The City of Los Angeles has specifically submitted two FOIA requests. The first request, identified by FOIA No. 2019-001114WS, is currently on appeal in the U.S. District Court for the Central District of California. The FAA cannot comment on pending litigation, but it is working with the City of Los Angeles on disclosing additional potentially releasable records subject to that FOIA request. The FAA is in the process of responding to the second request, identified by FOIA No. 2020-003909WS, and is in frequent communication with the City of Los Angeles regarding it. The City of Los Angeles did not respond to the FAA FOIA office's fee waiver request clarification for approximately two months, which caused a delay in the process. Additionally, the FAA has provided the following information or responses: On Jan. 14, 2020, the FAA responded to a Sept. 27, 2019 request containing 25 questions from the Task Force. On Feb. 20, 2020, the FAA wrote the Task Force to address four points made by HMMH during their briefing to the Task Force and the FAA also provided BUR Air Carrier OPS 2007-2019.

	On Feb. 29, 2020, the FAA responded to a Jan. 2020 request containing answers to various questions from the Task Force and provided a copy of the 2018 SoCal Post Implementation Analysis Briefing by MITRE.
Supporting Analysis	5 U.S.C. § 552
Feasibility Assessment	N/A
Next Steps	FAA continuing to process current FOIA requests

APPENDIX B

Associated Recommendations

1.1	Provide additional training, reviews and support for ATC. Recommendations 1.1a-n are a series of recommendations provided by an ATC consultant during a Task Force meeting.

1.1.a Conduct System Service Review (SSR) on resource management at both Southern California TRACON (SCT) and BUR Sector. [This recommendation was also submitted by Senators Feinstein and Harris in a letter dated May 6, 2020.]	
Adjustment Type	Review
Adjustment Detail	Conduct SSR
Evaluation	FAA Order 7210.634 requires a continual review of services provided and initiation of SSRs on a regular basis. The intent of an SSR is to review the air traffic services provided in any situation at any time under any circumstances. In accordance with FAA Order 7210.634, 3-2.e.(2)(h), resource management is already considered as part of the data reviewed in an SSR.
Feasibility Assessment	Feasible – existing FAA requirement
Feasibility Justification	SSRs are conducted in accordance with FAA Order 7210.634, Chapter 3.
Next Steps	No additional FAA action, due to required periodic reviews in accordance with FAA Order 7210.634, Chapter 3.

1.1.b Review how to manage workload at positions to maintain efficiency.	
Adjustment Type	Resource Management
Adjustment Detail	Managing traffic volume/flow
Evaluation	FAA Order 7210.3, 2-6, addresses watch supervision requirements, including monitoring and managing traffic volume/flow and position assignments.

Feasibility Assessment	Feasible – existing FAA requirement
Feasibility Justification	Operationally feasible and a required part of Operations Supervisor/Controller in Charge duties.
Next Steps	Already being conducted - no further FAA action

1.1.c Conduct Traffic Management Reviews (TMR) in the San Fernando Valley area to provide detailed analysis of impact of Traffic Management Initiatives (TMI). [This recommendation was also submitted by Senators Feinstein and Harris in a letter dated May 6, 2020.]	
Adjustment Type	Review
Adjustment Detail	Conduct a TMR analysis of the San Fernando Valley area
Evaluation	SCT can conduct a TMR of TMIs involving BUR/VNY aircraft, in accordance with FAA Order 7210.634.The source data is only retained for 45 days. With the current decrease in flights caused by the COVID-19 public health emergency, there are very few, if any, flight delays affecting BUR or VNY and, therefore, no relevant information available. TMIs affecting BUR and VNY only keep the aircraft grounded; they do not impact how aircraft fly the departure procedures once airborne.
Feasibility Assessment	Feasible – existing FAA requirement
Feasibility Justification	Facilities having a TMU, such as SCT, must ensure that services provided are continually reviewed and initiate TMRs on a regular basis.
Next Steps	Existing FAA requirement - no further FAA action

1.1.d Provide refresher training on applying and administering TMIs for SCT and BUR Sector controllers.	
Adjustment Type	Training
Adjustment Detail	TMI training for SCT and BUR sector controllers
Evaluation	Sector controllers do not create TMIs, and must comply with TMIs as issued by the overlaying ARTCC.
Feasibility Assessment	Feasible – existing FAA requirement when operationally warranted
Feasibility Justification	Non-compliance would be immediately identifiable and addressed.
Next Steps	Existing FAA requirement when operationally warranted - no further FAA action

1.1.e Conduct Operational Skills Assessments (OSAs) on how traffic restrictions are applied and communicated in the SCT and BUR Sector areas.	
Adjustment Type	Review

Adjustment Detail	OSAs on traffic restrictions
Evaluation	OSAs are performed in sufficient quantity to provide a valid quality control sample of the various positions and functions.
Feasibility Assessment	Feasible – existing FAA requirement
Feasibility Justification	OSAs are conducted in accordance with FAA Order 7210.634, 2-2.b, "Reviewers are expected to identify potential systemic issues associated with training, efficiency, airspace, procedures, directives, and equipment. Potential systemic issues are addressed through the systemic issue review (SYSIR) process." Also, all controllers must comply with TMIs as issued by the overlaying ARTCC. Non-compliance would be immediately identifiable and addressed.
Next Steps	Existing FAA requirement - no further FAA action

1.1.f Provide additional training on minimum requirements of radar separation. [This recommendation was also submitted by Senators Feinstein and Harris in a letter dated May 6, 2020.]	
Adjustment Type	Training
Adjustment Detail	Radar separation training
Evaluation	ATC turns aircraft for efficiency and safety, which does not always equate to minimum separation. Separation standards are designed as the minimum—not the absolute—to keep aircraft safely apart. A quality control process is in place for a systematic approach to safety risk analysis, which includes identifying and addressing issues.
Feasibility Assessment	Feasible – existing FAA requirement
Feasibility Justification	Reviews are required periodically in accordance with FAA Order 7210.634, 2-2.
Next Steps	Existing FAA requirement – no further FAA action

1.1.g Focus on vectoring, radar separation minima, and aircraft characteristics.	
Adjustment Type	Training
Adjustment Detail	Controller proficiency training
Evaluation	Vectoring, radar separation minima, and aircraft characteristics are all taken into account by ATC when turning aircraft. ATC turns aircraft for efficiency and safety. See response to Recommendation 1.1.f
Feasibility Assessment	See response to Recommendation 1.1.f
Feasibility Justification	See response to Recommendation 1.1.f
Next Steps	Existing FAA requirement - no further FAA action

1.1.h Conduct post-training OSAs on radar separation.	
Adjustment Type	Review
Adjustment Detail	Post-training OSAs
Evaluation	On-the-job training quality control checks are conducted in accordance with FAA Order 7210.634, Chapter 5, Section 2.
Feasibility Assessment	Feasible – existing FAA requirement
Feasibility Justification	Part of the FAA Quality Control Program
Next Steps	Existing FAA requirement - no further FAA action
1.1.i Instruct tower supervisors to not combine sectors at peak traffic periods. [This recommendation was also submitted by Senators Feinstein and Harris in a letter dated May 6, 2020.]	
Adjustment Type	Resource Management
Adjustment Detail	Peak traffic sector management
Evaluation	FAA Order 7210.3, Chapter 2, Section 6, addresses watch supervision requirements, including monitoring and managing traffic volume/flow and position assignments. See response to Recommendation 1.1.b
Feasibility Assessment	Not operationally feasible
Feasibility Justification	Staffing at ATC facilities is structured to ensure the correct amount of resources are available throughout each shift to meet typical traffic demand. Facility watch schedules take into account normal traffic flow, thereby permitting the posting of a continuing schedule for an indefinite period of time. Watch supervisors are required to maintain situational awareness of traffic activity and operational conditions in order to provide timely assistance to ATC and ensure that the available resources are deployed for optimal efficiency. Watch supervisors monitor and, when needed, initiate actions to manage traffic volume/flow through a variety of means. Personnel are already assigned to positions as required by activity, equipment, and facility function, and positions may be consolidated in consideration of activity and the qualifications of the personnel involved.
Next Steps	No further FAA action

1.1.j Monitor Valley Sector for SOP compliance.	
Adjustment Type	Review
Adjustment Detail	SOP compliance
Evaluation	FAA Order 7210.632, Air Traffic Organization Occurrence Reporting, provides compliance monitoring in an internal searchable database. Non-compliance would be immediately identifiable and addressed. Also, controller performance is

	reviewed during quality control monitoring through a quality control OSA. OSAs are conducted in accordance with FAA Order 7210.634, Chapter 2. Quality control monitoring collects technical performance data. This data supports other quality control processes that assess training, procedures, airspace, directives, equipment, and the technical performance of personnel.
Feasibility Assessment	Feasible – existing FAA requirement
Feasibility Justification	Required per SCT SOP 7110.65B para 2-3-1b.(2).
Next Steps	Existing FAA requirement - No further FAA action

1.1.k Conduct training on using northerly airspace between BUR and VNY to gain altitude.	
Adjustment Type	Training
Adjustment Detail	Northerly airspace altitude gain
Evaluation	ATC turns aircraft for efficiency and safety, which does not always equate to minimum separation. Higher terrain and crossing traffic inhibit northerly turns.
Feasibility Assessment	Not operationally feasible
Feasibility Justification	Because the terrain is significantly higher to the north of BUR and VNY, aircraft must be at a higher altitude than south-southwest departures before ATC can vector them. Additionally, turns to the north cannot occur until aircraft are above the MVA, which ranges from 3,000 to 4,300 feet MSL around BUR and VNY. Therefore, aircraft departing to the south have to travel a certain distance to gain this altitude before turning north. Also, departing aircraft must be safely separated from the arrivals to BUR Runway 8, which often prevents ATC from issuing early northbound turns.
Next Steps	No further FAA action

1.1.l Conduct System Service Review (SSR) on SOP compliance and resource management.	
Adjustment Type	Review
Adjustment Detail	SSR on SOP compliance and resource management
Evaluation	See response to Recommendation 1.1.a
Feasibility Assessment	See response to Recommendation 1.1.a
Feasibility Justification	See response to Recommendation 1.1.a
Next Steps	See response to Recommendation 1.1.a

1.1.m Provide refresher training to Tower controllers on proper handoff procedures and impacts of noncompliance.	
Adjustment Type	Training
Adjustment Detail	Training on proper handoff procedures

Evaluation	Handoffs are automated between the towers and SCT. Therefore, there is no need for refresher training. FAA Order 7110.65, 3-9-3.b.1., does instruct a frequency change of aircraft to departure control "at about ½ mile beyond the runway end." However, aircraft are climbing on the issued departure procedure regardless of whether they are on the tower frequency or departure control frequency.
Feasibility Assessment	Not applicable as the procedure is automated.
Feasibility Justification	Not applicable as the procedure is automated.
Next Steps	Not applicable as the procedure is automated.
1.1.n Conduct post-training SSR on handoff procedures.	
Adjustment Type	Review
Adjustment Detail	SSR on handoff procedures
Evaluation	See response to Recommendation 1.1.a
Feasibility Assessment	See response to Recommendation 1.1.a
Feasibility Justification	See response to Recommendation 1.1.a
Next Steps	See response to Recommendation 1.1.a

1.2 [a)] Stop combining ATC sectors, and [b)] ATC handoff of departures to SCT should occur within 1/2 mile of the Runway as per FAA guidelines. [This recommendation was also submitted by Senators Feinstein and Harris in a letter dated May 6, 2020.]	
Adjustment Type	Procedures, Training
Adjustment Detail	Change in procedures, conduct training
Evaluation	a) FAA Order 7210.3, 2-6, addresses watch supervision requirements, including monitoring/managing traffic volume/flow and position assignments. b) FAA Order 7110.65, 3-9-3.b.1., instructs a frequency change of aircraft to departure control "at about ½ mile beyond the runway end."
Feasibility Assessment	Not feasible
Feasibility Justification	a) Staffing at ATC facilities is structured to ensure the correct amount of resources are available throughout each shift to meet typical traffic demand. Facility watch schedules take into account normal traffic flow, thereby permitting the posting of a continuing schedule for an indefinite period of time. Watch supervisors are required to maintain situational awareness of traffic activity and operational conditions in order to provide timely assistance to specialists and ensure that the available resources are deployed for optimal efficiency. Watch supervisors monitor and, when needed, initiate actions to manage traffic volume/flow through a variety of means. Personnel are already assigned to positions as required by activity, equipment, and facility function, and positions may be

	consolidated in consideration of activity and the qualifications of the personnel involved. b) FAA Order 7110.65, 3-9-3.b.1., does instruct a frequency change of aircraft to departure control "at about ½ mile beyond the runway end." However, aircraft are climbing on the issued departure procedure regardless of whether they are on the tower frequency or departure control frequency. Additionally, handoffs are conducted in accordance with Section 6, Paragraph d.(2)(i), of the SCT-BUR LOA dated November 21, 2019.
Next Steps	No further FAA action

1.3 Draft letter of agreement between SCT and BUR ATC that assigns responsibility to BUR ATC to apply visual separation on Runway 15 departures versus Runway 8 arrivals, enabling earlier turns with faster climbs.	
Adjustment Type	Procedures
Adjustment Detail	LOA that BUR will apply visual separation on Runway 15 departures.
Evaluation	Visual separation responsibility is already contained within the existing SCT-BUR LOA, Section 6, Paragraph e.2.(b), dated November 21, 2019. Due to converging course rules, departures cannot be turned sooner until another form of separation is established. Visual separation rules would require the BUR controller to keep control of the departure aircraft until vertical separation is established. Since BUR airspace ends at 2,500 feet above ground level, additional coordination with SCT would increase controller workload.
Feasibility Assessment	Not feasible
Feasibility Justification	An initial divergence of 45° or greater is required from Runway 15 departures and Runway 8 arrivals, in accordance with FAA Order 7110.65, 1-2-2.
Next Steps	No further FAA action

1.4 Since both the southern shift and undue southern concentration of departures appear to be due in part to ATC workforce and related issues, FAA should initiate a system service review and workforce analysis to ensure adequate staffing levels to ensure safety and maximum efficiency.	
Adjustment Type	Review
Adjustment Detail	Conduct SSR
Evaluation	FAA Order 7210.634 requires a continual review of services provided and initiation of SSRs on a regular basis. The intent of an SSR is to review the air traffic services provided in any situation at any time under any circumstances. In accordance with FAA Order

	7210.634, 3-2.e.(2)(h), resource management is already considered as part of the data reviewed in an SSR.
Feasibility Assessment	Feasible – existing FAA requirement
Feasibility Justification	SSRs are conducted in accordance with FAA Order 7210.634, Chapter 3.
Next Steps	Existing FAA requirement - no further FAA action

1.5 In the near-term, improve the hand-off between Air Traffic Control Tower (ATCT) and SCT with additional FAA regulated training.	
Adjustment Type	Training
Adjustment Detail	Handoff training
Evaluation	Aircraft are climbing on the issued departure procedure regardless of whether they are on the tower frequency or departure control frequency. Additionally, handoffs are automated and conducted in accordance with SCT-BUR LOA 6.d.(2)(i). Also, see response to 1.2 above.
Feasibility Assessment	Not applicable
Feasibility Justification	Not applicable
Next Steps	No further FAA action

1.6 In the long-term, aircraft using conventional procedures on Runway 15 should be vectored to the north by ATC before the 101 Freeway when there are no airspace conflicts with doing so.	
Adjustment Type	Track
Adjustment Detail	Vector aircraft north on Runway 15, before the 101 Freeway
Evaluation	It is technically feasible when the climb performance of aircraft allows it to be at or above the MVA prior to the 101 Freeway. This requires aircraft climb gradients in excess of 1,000 feet per NM. ATC vectors aircraft to the north when aircraft meet the lateral and vertical separation requirements with other aircraft and when workload permits.
Feasibility Assessment	Not applicable.
Feasibility Justification	Departure turns to the north are dependent on a variety of factors, such as aircraft capabilities, pilot training, weather, wind, and traffic volume. Vectors cannot be issued until aircraft are at or above the MVA and all traffic conflicts have been resolved.
Next Steps	No further FAA action

1.7 In the near-term, improve the hand-off between Air Traffic Control Tower (ATCT) and SCT with additional FAA regulated training.

Adjustment Type	Training
Adjustment Detail	Improve handoffs between the tower and SCT
Evaluation	See response to Recommendation 1.5
Feasibility Assessment	Not applicable
Feasibility Justification	Not applicable
Next Steps	No further FAA action

2.1 Change RNAVs/procedures to encourage earlier turns of departing flights and allow a greater percentage of the departing flight tracks to be over the uninhabited Sepulveda Basin (e.g., FAA should discontinue use of PPRRY at VNY and expedite turns by returning to 2.2 DME).	
Adjustment Type	Track
Adjustment Detail	Change departure procedures
Evaluation	RNAV and conventional instructions (turning at 2.2 DME) cannot be mixed on the same procedure per criteria. The FAA designed a notional procedure that simulates this turn as closely as possible, and presented it to the Van Nuys Citizens Advisory Council on August 6, 2019 (see Recommendation 2). The Council did not ask the FAA to proceed with the design.
Feasibility Assessment	Technically feasible
Feasibility Justification	See response to Recommendation 2
Next Steps	No further FAA action

2.2 In the near-term for aircraft using conventional procedures on Runway 16, they should be vectored to the North by ATC before the 101 Freeway when there are no airspace conflicts in doing so.	
Adjustment Type	Track
Adjustment Detail	Vector aircraft departing Runway 16 to the north by the 101 Freeway
Evaluation	It is technically feasible when the climb performance of aircraft allows it to be at or above the MVA prior to the 101 Freeway. This requires aircraft climb rates in excess of 1,000 feet per NM. ATC routinely vector aircraft to the north when aircraft meet the lateral and vertical separation requirements.
Feasibility Assessment	Not applicable
Feasibility Justification	Departure turns to the north are dependent on a variety of factors, such as aircraft capabilities, pilot training, weather, wind, and traffic volume. Vectors cannot be issued until aircraft are at or above the MVA and all traffic conflictions have been resolved.
Next Steps	No further FAA action

2.3 In the long-term for aircraft using conventional procedures on Runway 16, they should be vectored to the north by ATC before the 101 Freeway when there are no airspace conflicts in doing so.	
Adjustment Type	Track
Adjustment Detail	Vector aircraft on Runway 16 to the north before the 101 Freeway
Evaluation	See responses to Recommendations 1.6 and 2.2
Feasibility Assessment	See responses to Recommendations 1.6 and 2.2
Feasibility Justification	See responses to Recommendations 1.6 and 2.2
Next Steps	No further FAA action

2.4 In the near-term for departures using Runway 16R, replace PPRRY in all RNAV procedures by returning to 2.2 DME.	
Adjustment Type	Track
Adjustment Detail	Cancel and replace RNAV procedures
Evaluation	RNAV and conventional instructions (turning at 2.2 DME) cannot be mixed on the same procedure per FAA criteria.
Feasibility Assessment	Not operationally feasible
Feasibility Justification	See response to Recommendation 2.1
Next Steps	No further FAA action

2.5 Eliminate the PPRRY waypoint and publish an open waypoint placed south of the airport runway near Victory Boulevard and the top of the Sepulveda Basin. An open waypoint will help with dispersion so no one community bears the brunt of aircraft flight tracks.	
Adjustment Type	Waypoint
Adjustment Detail	Eliminate and replace waypoint
Evaluation	"Open waypoint" is not a defined term for flight procedures. The RNAV departures at VNY are currently designed as open SIDs, and the PPRRY waypoint is located at the earliest location to place a waypoint and meet criteria in accordance with FAA Order 8260.58, Appendix B.
Feasibility Assessment	Not technically feasible
Feasibility Justification	The PPRRY waypoint is located at the earliest location to place a waypoint and meet criteria.
Next Steps	No further FAA action

2.6 In the near-term, improve the hand-off between ATCT and SCT with additional FAA regulated training.

Adjustment Type	Training
Adjustment Detail	Additional handoff training
Evaluation	Handoffs are conducted in accordance with FAA Order 7110.65, 3-9-3.b.1, which instructs a frequency change of aircraft from the tower frequency to departure control frequency "at about ½ mile beyond the runway end." Aircraft are climbing on the issued departure procedure regardless of whether they are on the tower frequency or changed to the departure control frequency. Additionally, handoffs are automated and conducted in accordance with SCT-BUR LOA 6.d.(2)(i).
Feasibility Assessment	Not applicable
Feasibility Justification	Not applicable
Next Steps	No further FAA action

3.1 Mandate procedures that require airlines to use higher climb rates.	
Adjustment Type	Aircraft Performance
Adjustment Detail	Higher climb rates
Evaluation	See response to Recommendation 3
Feasibility Assessment	See response to Recommendation 3
Feasibility Justification	See response to Recommendation 3
Next Steps	See response to Recommendation 3
Additional FAA Response	This recommendation may economically discriminate against air carriers and operators at the airport in violation of FAA Grant Assurance 22 because air carriers and operators currently operating aircraft at the airport might not be able to meet the requested climb gradient. An airport proprietor is primarily liable for aircraft noise in the vicinity of an airport. *Griggs v. County of Allegheny, PA*, 369 U.S. 84 (1962). Because it is primarily liable for aircraft noise, an airport proprietor is permitted to impose some regulation of aircraft at the airport. This is called the proprietor exception. Under its proprietor exception, an airport proprietor may impose airport use restrictions that do not unjustly discriminate against a particular type of aviation activity, do not impede safety and the management of the airspace, and do not unreasonable interfere with interstate or foreign commerce. Such a determination under the grant assurances as to whether an access restriction is reasonable will consider the safety, since a restriction that is unsafe is also unreasonable. There are concerns with regard to safety and a potential conflict with the PIC authority and safety of flight. See FAA 2014 LAX Part 161 decision effective November 7, 2014, 79 FR 70267.

3.2 Incorporate steeper minimum takeoff climb gradients at both to a minimum of 600 ft per nautical mile, or the closest rate to this that falls within safety guidelines, to help mitigate

ground-level noise and concentrated jet exhaust particulate and request the FAA, LAWA, VNY, and BUR to work with and encourage pilots and air carriers to use the steepest departure profiles their aircraft can safely undertake.	
Adjustment Type	Aircraft Performance
Adjustment Detail	Steeper minimum takeoff climb gradient
Evaluation	See responses to Recommendations 2 and 3
Feasibility Assessment	See responses to Recommendations 2 and 3
Feasibility Justification	See responses to Recommendations 2 and 3
Next Steps	See responses to Recommendations 2 and 3
Additional FAA Response	This recommendation may economically discriminate against air carriers and operators at the airport in violation of FAA Grant Assurance 22 because air carriers and operators currently operating aircraft at the airport might not be able to meet the requested climb gradient. An airport proprietor is primarily liable for aircraft noise in the vicinity of an airport. *Griggs v. County of Allegheny, PA*, 369 U.S. 84 (1962). Because it is primarily liable for aircraft noise, an airport proprietor is permitted to impose some regulation of aircraft at the airport. This is called the proprietor exception. Under its proprietor exception, an airport proprietor may impose airport use restrictions that do not unjustly discriminate against a particular type of aviation activity, do not impede safety and the management of the airspace, and do not unreasonable interfere with interstate or foreign commerce. Such a determination under the grant assurances as to whether an access restriction is reasonable will consider the safety, since a restriction that is unsafe is also unreasonable. There are concerns with regard to safety and a potential conflict with the PIC authority and safety of flight . See FAA 2014 LAX Part 161 decision effective November 7, 2014, 79 FR 70267.

3.3 Increase the climb gradient on all departures at both, or on as many procedures and as many aircraft types as possible, and grant waiver for gradients above 500 feet per nautical mile.	
Adjustment Type	Aircraft Performance
Adjustment Detail	Increase climb gradients
Evaluation	See responses to Recommendations 2 and 3
Feasibility Assessment	See responses to Recommendations 2 and 3
Feasibility Justification	See responses to Recommendations 2 and 3
Next Steps	See responses to Recommendations 2 and 3
Additional FAA Response	This recommendation may economically discriminate against air carriers and operators at the airport in violation of FAA Grant Assurance 22 because air carriers and operators currently operating aircraft at the airport might not be able to meet the requested climb

	gradient. An airport proprietor is primarily liable for aircraft noise in the vicinity of an airport. *Griggs v. County of Allegheny, PA*, 369 U.S. 84 (1962). Because it is primarily liable for aircraft noise, an airport proprietor is permitted to impose some regulation of aircraft at the airport. This is called the proprietor exception. Under its proprietor exception, an airport proprietor may impose airport use restrictions that do not unjustly discriminate against a particular type of aviation activity, do not impede safety and the management of the airspace, and do not unreasonable interfere with interstate or foreign commerce. Such a determination under the grant assurances as to whether an access restriction is reasonable will consider the safety, since a restriction that is unsafe is also unreasonable. There are concerns with regard to safety and a potential conflict with the PIC authority and safety of flight. See FAA 2014 LAX Part 161 decision effective November 7, 2014, 79 FR 70267.

3.4 In the near-term and long-term, increase the minimum climb gradients for all procedures; and/or encourage pilots/airlines to use steeper departure profiles at both.	
Adjustment Type	Aircraft Performance
Adjustment Detail	Increase minimum climb gradients
Evaluation	See responses to Recommendations 2 and 3
Feasibility Assessment	See responses to Recommendations 2 and 3
Feasibility Justification	See responses to Recommendations 2 and 3
Next Steps	See responses to Recommendations 2 and 3
Additional FAA Response	This recommendation may economically discriminate against air carriers and operators at the airport in violation of FAA Grant Assurance 22 because air carriers and operators currently operating aircraft at the airport might not be able to meet the requested climb gradient. An airport proprietor is primarily liable for aircraft noise in the vicinity of an airport. *Griggs v. County of Allegheny, PA*, 369 U.S. 84 (1962). Because it is primarily liable for aircraft noise, an airport proprietor is permitted to impose some regulation of aircraft at the airport. This is called the proprietor exception. Under its proprietor exception, an airport proprietor may impose airport use restrictions that do not unjustly discriminate against a particular type of aviation activity, do not impede safety and the management of the airspace, and do not unreasonable interfere with interstate or foreign commerce. Such a determination under the grant assurances as to whether an access restriction is reasonable will consider the safety, since a restriction that is unsafe is also unreasonable. There are concerns with regard to safety and a potential conflict with the PIC authority and safety of flight. See FAA 2014 LAX Part 161 decision effective November 7, 2014, 79 FR 70267.

3.5 Because a more rapid rate of ascent would likely reduce noise impacts in all communities, adopt rules, procedures and/or ATC instructions that encourage pilots to increase altitude as rapidly as is safe when departing, including establishing altitude gates.	
Adjustment Type	Aircraft Performance
Adjustment Detail	Increase altitude as rapidly as is safe
Evaluation	If procedural climb gradients are increased beyond the rate aircraft are currently climbing (non-piston aircraft generally climb at or above 500 feet per NM), the higher thrust required might increase noise in the immediate area around the airport. Per FAA Orders 8260.3 and 8260.58 criteria, climb gradients in excess of 500 feet per NM are nonstandard and require the FAA's Office of Flights Standards (AFS) approval. If AFS approval is given, the climb gradients would be published as crossing altitudes/gates since they would not be driven by obstacles. Pilots would have the prerogative to reject them and climb at only that rate required for obstacles. We analyzed two weeks of departure climb data from BUR for the Boeing 737 family of aircraft and Airbus 320 family of aircraft used by scheduled air carriers at BUR. We found the average climb gradient was approximately 1,019 feet per NM for Boeing 737 aircraft and 1,075 feet per NM for Airbus 320 aircraft. Since aircraft that can make a climb rate greater than 500 feet per NM already appear to do so, and aircraft that cannot will reject the crossing altitude/gate, making this change is unlikely to produce any change in aircraft profiles from existing procedures.
Feasibility Assessment	Technically feasible (LT) pending AFS approval Financial feasibility to be determined
Feasibility Justification	AFS approval would be needed. Due to the large number of aircraft already climbing at a higher rate, we determined that it would be operationally feasible.
Next Steps	Airport authorities to submit IFP Information Gateway request; however, we note that making this change is unlikely to produce any change in aircraft profiles from existing procedures.
Additional FAA Response	This recommendation may economically discriminate against air carriers and operators at the airport in violation of FAA Grant Assurance 22 because air carriers and operators currently operating aircraft at the airport might not be able to meet the requested climb gradient. An airport proprietor is primarily liable for aircraft noise in the vicinity of an airport. *Griggs v. County of Allegheny, PA*, 369 U.S. 84 (1962). Because it is primarily liable for aircraft noise, an airport proprietor is permitted to impose some regulation of aircraft

	at the airport. This is called the proprietor exception. Under its proprietor exception, an airport proprietor may impose airport use restrictions that do not unjustly discriminate against a particular type of aviation activity, do not impede safety and the management of the airspace, and do not unreasonable interfere with interstate or foreign commerce. Such a determination under the grant assurances as to whether an access restriction is reasonable will consider the safety, since a restriction that is unsafe is also unreasonable. There are concerns with regard to safety and a potential conflict with the PIC authority and safety of flight. See FAA 2014 LAX Part 161 decision effective November 7, 2014, 79 FR 70267.

3.6 The February 2017 letter of agreement between SCT and BUR ATC assigns all departures 4,000' MSL. If that agreement has the impact of preventing increase in climb, it should be changed.	
Adjustment Type	Procedures
Adjustment Detail	Change the LOA between SCT and BUR
Evaluation	4,000 feet MSL is used to procedurally vertically separate BUR departures from other air traffic in the vicinity.
Feasibility Assessment	Not operationally feasible
Feasibility Justification	4,000 feet MSL is the lowest initial climb altitude due to the MVA. (MVAs are the lowest MSL altitude at which an IFR aircraft will be vectored by a radar controller. The altitude meets IFR obstacle clearance criteria.) This altitude (4,000 feet MSL) is also used to provide separation from traffic transitioning eastbound and westbound on a route called V-186 at 5,000/6,000/7,000/8,000/ 9,000/10,000/11,000/12,000 feet MSL.
Next Steps	No further FAA action
Additional FAA Response	This recommendation may economically discriminate against air carriers and operators at the airport in violation of FAA Grant Assurance 22 because air carriers and operators currently operating aircraft at the airport might not be able to meet the requested climb gradient. An airport proprietor is primarily liable for aircraft noise in the vicinity of an airport. *Griggs v. County of Allegheny, PA*, 369 U.S. 84 (1962). Because it is primarily liable for aircraft noise, an airport proprietor is permitted to impose some regulation of aircraft at the airport. This is called the proprietor exception. Under its proprietor exception, an airport proprietor may impose airport use restrictions that do not unjustly discriminate against a particular type of aviation activity, do not impede safety and the management of the airspace, and do not unreasonable interfere with interstate or foreign commerce. Such a determination under the grant assurances as to whether an access restriction is reasonable will consider the safety, since a restriction that is unsafe is also unreasonable. There

	are concerns with regard to safety and a potential conflict with the PIC authority and safety of flight. See FAA 2014 LAX Part 161 decision effective November 7, 2014, 79 FR 70267.

4.1 Study the ability to encourage or require aircraft to ascend more rapidly through the use of voluntary noise abatement procedures and/or increasing the minimum climb over distance contained in the standard instrument departure procedures.	
Adjustment Type	Procedures
Adjustment Detail	Noise abatement procedures
Evaluation	See response to Recommendation 4
Feasibility Assessment	See response to Recommendation 4
Feasibility Justification	See response to Recommendation 4
Next Steps	See response to Recommendation 4
Additional FAA Response	This recommendation may economically discriminate against air carriers and operators at the airport in violation of FAA Grant Assurance 22 because air carriers and operators currently operating aircraft at the airport might not be able to meet the requested climb gradient. An airport proprietor is primarily liable for aircraft noise in the vicinity of an airport. *Griggs v. County of Allegheny, PA*, 369 U.S. 84 (1962). Because it is primarily liable for aircraft noise, an airport proprietor is permitted to impose some regulation of aircraft at the airport. This is called the proprietor exception. Under its proprietor exception, an airport proprietor may impose airport use restrictions that do not unjustly discriminate against a particular type of aviation activity, do not impede safety and the management of the airspace, and do not unreasonable interfere with interstate or foreign commerce. Such a determination under the grant assurances as to whether an access restriction is reasonable will consider the safety, since a restriction that is unsafe is also unreasonable. There are concerns with regard to safety and a potential conflict with the PIC authority and safety of flight. See FAA 2014 LAX Part 161 decision effective November 7, 2014, 79 FR 70267.

4.2 Conduct a technical analysis to establish new altitude rules for when aircraft arrive or depart over higher altitude topography with the goal of ensuring that planes ascend higher if they must fly over higher altitude areas. For example, if a plane's departure route over sea level would normally have it as 4,000 feet one mile from the airport, then the departure route over terrain of a 1,000 feet of elevation, would require that the aircraft ascend to 5,000 feet at the same distance.	
Adjustment Type	Review
Adjustment Detail	Technical analysis to account for topography in establishing altitudes

Evaluation	A technical analysis can be conducted to determine if departure criteria could be altered to increase minimum and maximum allowable climb gradients. AFS continuously re-evaluates criteria for optimization and safety. Current criteria includes the option to increase a climb gradient for terrain and obstructions up to 500 feet per NM. Climb gradients greater than this require AFS approval due to safety.
Feasibility Assessment	Not operationally feasible
Feasibility Justification	Due to air density and aircraft performance, aircraft cannot climb as quickly at higher altitudes. It is not operationally feasible to require aircraft to climb steeper in these situations.
Next Steps	No further FAA action
Additional FAA Response	This recommendation may economically discriminate against air carriers and operators at the airport in violation of FAA Grant Assurance 22 because air carriers and operators currently operating aircraft at the airport might not be able to meet the requested climb gradient. An airport proprietor is primarily liable for aircraft noise in the vicinity of an airport. *Griggs v. County of Allegheny, PA,* 369 U.S. 84 (1962). Because it is primarily liable for aircraft noise, an airport proprietor is permitted to impose some regulation of aircraft at the airport. This is called the proprietor exception. Under its proprietor exception, an airport proprietor may impose airport use restrictions that do not unjustly discriminate against a particular type of aviation activity, do not impede safety and the management of the airspace, and do not unreasonable interfere with interstate or foreign commerce. Such a determination under the grant assurances as to whether an access restriction is reasonable will consider the safety, since a restriction that is unsafe is also unreasonable. There are concerns with regard to safety and a potential conflict with the PIC authority and safety of flight. See FAA 2014 LAX Part 161 decision effective November 7, 2014, 79 FR 70267.

5.1 Regardless of the determination made by the Environmental Assessment (EA) to be conducted on the proposed amendments to incorporate the JAYTE and TEGAN waypoints into the SLAPP and OROSZ standard instrument departure procedures, the Task Force recommends not amending the procedures to implement the use of waypoints.	
Adjustment Type	Waypoint
Adjustment Detail	Decline to incorporate JAYTE and TEGAN waypoints
Evaluation	This would require no action, and the use of the procedure that is currently published.
Feasibility Assessment	Feasible (ST)
Feasibility Justification	No operational impact

Next Steps	The No Action alternative will be considered in the ongoing BUR EA.

5.2 Proposed procedures SLAPP [THREE] and OROSZ THREE should be rejected as written and reconsidered to ensure maximize noise reduction and safety for all communities and FAA-recognized noise-sensitive areas of the San Fernando Valley, without regard to any previous litigation settlement agreements, and they must not impose significant new impacts on new communities compared to pre-2017 conditions.	
Adjustment Type	Track
Adjustment Detail	Reject and reconsider proposed SLAPP THREE and OROSZ THREE
Evaluation	The FAA has already begun preparing an environmental assessment for the proposed SLAPP THREE and OROSZ THREE amendments (also referred to as the proposed action). As part of the environmental assessment of the proposed action, the FAA will consider reasonable alternatives, **including consideration of adjusting the originally proposed procedures.** The purpose and need of the proposed project includes designing and implementing flight procedures which are operationally efficient and safe while considering the local communities' overflight concerns to the greatest extent possible. Neither NEPA nor other applicable federal noise statutes require the FAA to "maximize noise reduction." Nonetheless, the EA will analyze the potential environmental effects of the proposed action and reasonable alternatives. The FAA's environmental review must comply with NEPA and the FAA's policies and procedures implementing NEPA (FAA Order 1050.1F). NEPA requires a federal agency to compare environmental consequences using existing conditions between the proposed action and the no action alternative at the very minimum. Here, the no action alternative comprises of the current SLAPP ONE and OROSZ TWO RNAV departure procedures; not pre-2017 conditions.
Feasibility Assessment	Will be assessed in the EA
Feasibility Justification	Not applicable
Next Steps	The FAA proceeds with the EA process that includes considering alternatives and the feasibility of dispersal headings or other lateral track variations.

5.3 If the proposed procedures SLAPP [THREE] and OROSZ THREE must be used at all, all waypoints should be considered "fly-by" and NOT "fly-over" in order to reduce exact uniformity and encourage delay in pilots' use of autopilot on departures.

Adjustment Type	Waypoint
Adjustment Detail	"Fly-by" and not "fly-over"
Evaluation	Fixes on the proposed SLAPP THREE and OROSZ THREE, south of the airport, are fly-by waypoints except for TEAGN.
Feasibility Assessment	Feasible (ST)
Feasibility Justification	Changing the proposed TEAGN waypoint to a fly-by waypoint could be done but, since no procedural turn occurs at TEAGN, the aircraft will perform the same regardless of waypoint designation.
Next Steps	Fly-by waypoints already part of procedures in the EA

5.4 Discontinue use of JAYTE and TEAGN waypoints in all departure and arrival procedures.	
Adjustment Type	Waypoint
Adjustment Detail	Discontinue JAYTE and TEAGN
Evaluation	These waypoints are not currently in use. They are proposed in the amendments to the SLAPP and OROSZ departure procedures that are currently being analyzed in the ongoing BUR EA.
Feasibility Assessment	Not applicable
Feasibility Justification	The waypoints are not currently in use.
Next Steps	No further FAA action
5.5 If JAYTE and TEAGN must be used at all, they should be placed at locations that will maximize noise reduction and safety for all communities and FAA-recognized noise-sensitive areas of the San Fernando Valley, without regard to any previous litigation settlement agreements, and they must not impose significant new impacts on new communities compared to pre-2017 conditions.	
Adjustment Type	Waypoint
Adjustment Detail	Relocate JAYTE and TEAGN to maximize noise reduction.
Evaluation	Waypoints JAYTE and TEGAN cannot be positioned to provide noise reduction for all communities. Movement of a waypoint position would shift the noise footprint to different communities.
Feasibility Assessment	It is not technically feasible to move JAYTE and TEAGN without shifting noise.
Feasibility Justification	Not able to reduce noise for all communities
Next Steps	No further FAA action

5.6 In the near-term, change the initial departure headings for OROSZ, SLAPP, and the conventional procedures so that they better disperse the early part of the flight tracks.	
Adjustment Type	Track
Adjustment Detail	Change initial departure headings

Evaluation	The FAA has already begun preparing an environmental assessment for the proposed SLAPP THREE and OROSZ THREE amendments (also referred to as the proposed action). As part of the environmental assessment of the proposed action, the FAA will consider reasonable alternatives, including consideration of adjusting the originally proposed procedures. The purpose and need of the proposed project includes designing and implementing flight procedures which are operationally efficient and safe while considering the local communities' overflight concerns to the greatest extent possible. Neither NEPA nor other applicable federal noise statutes require the FAA to "maximize noise reduction." Nonetheless, the EA will analyze the potential environmental effects of the proposed action and reasonable alternatives. The FAA's environmental review must comply with NEPA and the FAA's policies and procedures implementing NEPA (FAA Order 1050.1F). NEPA requires a federal agency to compare environmental consequences using existing conditions between the proposed action and the no action alternative at the very minimum. Here, the no action alternative comprises of the current SLAPP ONE and OROSZ TWO RNAV departure procedures; not pre-2017 conditions. We are also considering the feasibility of dispersal headings or other lateral track variations during the EA process for the proposed SLAPP THREE and OROSZ THREE procedures, as requested by the Burbank-Glendale-Pasadena Airport Authority. Any dispersion of aircraft departing on Runway 15 would have to occur to the south and east of a 213° initial heading, because of the requirements for separating Runway 15 departures from Runway 8 arrivals. Any headings farther north of this would not provide the required 45° separation per FAA Order 7110.65, 1-2-2. In order to disperse aircraft, headings south of 213° would have to be used for the aircraft to gain altitude before turning to the north. The resultant flight paths would likely be farther south than those currently flown.
Feasibility Assessment	Will be assessed in EA
Feasibility Justification	Not applicable
Next Steps	The FAA proceeds with the EA process that includes considering alternatives and the feasibility of dispersal headings or other lateral track variations.

6.1 Develop multiple waypoints and headings, whether RNAV or conventional, to create flight track dispersion for each departure direction from both. If this is not possible, request the FAA to design and implement the closest approximation to this goal to disperse flight tracks.	
Adjustment Type	Track, Waypoint
Adjustment Detail	Develop multiple waypoints and headings to create dispersion
Evaluation	FAA Order 8260.58 (Chapter 5) safety criteria do not allow multiple runway transitions (initial departure routes) on the same procedure. Additional waypoints could only be added at higher altitudes. The closest approximation is a radar vector SID, which the SLAPP and OROSZ departures procedures currently employ.
Feasibility Assessment	It is not technically feasible to develop multiple waypoints and headings to create dispersion close to the airport; the current design of the SLAPP ONE and OROSZ TWO (as radar vector SIDs) provides the closest approximation to the goal of dispersing flight tracks.
Feasibility Justification	FAA criteria do not allow multiple runway transitions (initial departure routes) on the same procedure.
Next Steps	No further FAA action

6.2 Redesign RNAV arrival and departure procedures so that they mimic pre-Metroplex conventional dispersed procedures. During the technical review to complete this, suspend RNAV procedures and fly pre-Metroplex conventional procedures.	
Adjustment Type	Track
Adjustment Detail	Redesign RNAV to mimic conventional procedures
Evaluation	RNAV procedures are already designed to mimic the conventional procedures as closely as possible. The FAA is modernizing the National Airspace System and is committed to moving to satellite based navigation, known as PBN. This is consistent with Congressional direction and necessitated by growth in the system, which by itself affects a community's perception of noise unrelated to airspace modernization. The FAA is studying ways to use PBN technology to create systematic dispersal of flight tracks while maintaining safety and efficiency. It is important to understand, however, that it is not possible to replicate the kind of random dispersal that occurs when planes are flying using ground based navigation—in other words, introducing systematic dispersal using satellite based routes would not achieve the outcome of "going back to the way it was." That type of

	random dispersal is no longer possible. There are no applicable concepts for arrivals or departures that eliminate noise; in general, they only move noise. This underscores the importance of clear communication with the communities that would get additional noise based on any given dispersion concept. Returning to conventional procedures would also impact operations at other facilities. While we understand community concerns about departures in close proximity to BUR and VNY, these RNAV procedures are designed to fly hundreds of miles and transition from terminal to en route airspace, and vice versa.
Feasibility Assessment	Not technically feasible
Feasibility Justification	The procedures exist as requested
Next Steps	No further FAA action

6.3 Implement "open" procedures where possible and avoid "closed" procedures wherever technically feasible to limit the creation of narrow flight paths.	
Adjustment Type	Track
Adjustment Detail	Limit narrow flight paths
Evaluation	There are three types of departures. An open departure begins with a defined RNAV route, has an "open" portion in the middle where ATC vectors aircraft, and then ends with a defined RNAV route. A standard departure has a defined RNAV route throughout the procedure. A radar vector departure begins with ATC vectoring aircraft and ends either with a defined RNAV route or in the higher-altitude, en route environment. We could implement an open departure concept (the proposed SLAPP THREE and OROSZ THREE are open departures), but open or standard departures limit aircraft dispersion at lower altitudes. The existing SLAPP ONE and OROSZ TWO are radar vector departures and allow for the maximum dispersion of aircraft.
Feasibility Assessment	Not applicable
Feasibility Justification	The proposed SLAPP THREE and OROSZ THREE are open SIDs that limit dispersion at lower altitudes, and the existing SLAPP ONE and OROSZ TWO are radar vector SIDs that allow for maximum dispersion of aircraft. Both are under consideration in the ongoing EA.
Next Steps	The FAA proceeds with the EA process that includes considering alternatives and the feasibility of dispersal headings or other lateral track variations.

6.4 Increase utilization of alternative departure headings on Runway 15 to achieve greater dispersal.

Adjustment Type	Track
Adjustment Detail	Alternative departure headings
Evaluation	See Recommendation 5.6.
Feasibility Assessment	Operationally feasible (ST) Financial feasibility to be determined.
Feasibility Justification	Based on the requirements for separating BUR Runway 15 departures from BUR Runway 8 arrivals, any dispersion of aircraft departing on Runway 15 would have to occur to the south and east of a 213° initial heading. Headings of 180°, 195°, and 210° could potentially be used to provide dispersion. The resultant flight paths would likely be farther south than those currently flown.
Next Steps	The FAA proceeds with the EA process that includes considering alternatives and the feasibility of dispersal headings or other lateral track variations.

6.5 Utilize open Standard Instrument Departure (SID) procedures, at lower minimum vector altitude.	
Adjustment Type	Track
Adjustment Detail	SID altitude
Evaluation	Lowering the MVAs is not operationally feasible due to safety concerns. See also the response to Recommendation 6.3 for open SID definitions. MVA charts are prepared in accordance with FAA Order 7210.3, 3-8-2, and are reviewed biannually. Also, aeronautical charts must be revised immediately when changes affecting MVAs occur. The MVA charts at SCT have been refined to their most efficient and effective design in accordance with all directives.
Feasibility Assessment	Not technically feasible
Feasibility Justification	Not in accordance with FAA safety directives
Next Steps	No further FAA action

6.6 Utilize Diverse Vector Area (DVA) (see, e.g., FAA Order 7110.65).	
Adjustment Type	Track
Adjustment Detail	Change local procedure
Evaluation	All BUR and VNY RNAV departure procedures are open SIDs or contain vectors in their initial segments.
Feasibility Assessment	Not operationally feasible

Feasibility Justification	See Recommendation 6 (b) response
Next Steps	No further FAA action

6.7 FAA should integrate a small range of automated randomization into Air Traffic Control (ATC) software guiding the turn instructions for departures in order to produce more dispersal.	
Adjustment Type	Procedures
Adjustment Detail	ATC software to produce dispersal
Evaluation	The FAA's Office of Environment and Energy is currently studying dispersion off the end of the runway. ATC makes decisions about aircraft separation based on numerous factors including traffic, weather, and aircraft performance. ATC uses automation to provide navigation, surveillance, and safety alerts.
Feasibility Assessment	Not technically feasible
Feasibility Justification	Not applicable
Next Steps	No further FAA action

7.1 Request that the FAA publish instrument approaches for Runways 15, 33, and 26.	
Adjustment Type	Procedures
Adjustment Detail	Publish instrument approaches
Evaluation	Due to design criteria and terrain, public instrument approaches are not feasible to BUR runways other than Runway 8. Approach procedures to Runway 15, 33, or 26 would not be feasible because the rapidly rising terrain forces a descent gradient above the maximum allowed by criteria per FAA Orders 8260.58 and 8260.3.
Feasibility Assessment	Not technically feasible
Feasibility Justification	Current instrument procedures allow aircraft to circle to other runways in visual conditions. Additionally, VFR aircraft can land on other runways. However, due to higher terrain to the north, east, and south, straight-in procedures to Runways 15, 26, and 33 cannot be constructed without exceeding maximum descent gradient criteria, in accordance with FAA Order 8260.58 and FAA Order 8260.3.
Next Steps	No further FAA action

8.1 Increase utilization of the existing ELMOO NINE departure procedure from Runway 15 by, among other things: (a) establishing ELMOO NINE as an RNAV procedure to conform its utilization with NextGen implementation; and (b) creating an enforceable requirement to encourage FAA to increase use of ELMOO NINE, such as constraining all other departure procedures to reduce their volume to their pre-2009 levels.	
Adjustment Type	Track
Adjustment Detail	Increase the use of ELMOO NINE, make it an RNAV, and make using it a requirement.
Evaluation	a) An RNAV flight procedure that mirrors the ELMOO NINE can be developed. b) The ELMOO NINE is generally used by smaller, non-jet aircraft. Forcing ATC to increase its use would result in jets being restricted to 6,000 feet MSL, due to the overlaying Class B airspace.
Feasibility Assessment	a) Not operationally feasible b) Not operationally feasible
Feasibility Justification	The basic design of airspace in the LA Basin enables departing aircraft to use appropriate runways based on aircraft weight and performance, and environmental factors including wind, weather, and visibility. The area southeast of BUR is constrained by Los Angeles Class B airspace to the south and mountainous terrain to the east-northeast. There are numerous VFR Flyways in the area and V-186/597 is a primary IFR Class B avoidance route. The ELMOO SID is primarily used by smaller, non-jet aircraft to transition from the San Fernando Valley to the Inland Empire area. Aircraft utilizing this routing are generally restricted to 6,000 feet MSL or below to avoid conflict with the large, fast-moving passenger jets within Los Angeles Class B airspace. Jets departing on the ELMOO SID would face similar altitude restrictions as their non-jet counterparts. Aircraft with destinations west through north would be on a course proceeding away (50–100+ miles) from their destination, potentially to the TRM intersection (near Thermal, California) and beyond. Aircraft with destinations northeast through southeast would also be held to lower altitudes for longer periods in order to safely transition into the en route environment. These jets would likely be routed via V-186 to V-64 to TRM being held down at 5,000 feet MSL until the PDZ intersection (near Riverside, California), then up to 13,000 feet MSL on V-64. These aircraft flying at lower altitudes for longer periods would increase fuel emissions and noise in those areas.

	Since the Cerritos midair collision thirty-four years ago, the FAA and aviation industry jointly developed TCAS while the FAA expanded the LAX Class B airspace to enhance safety in the greater Los Angeles area. Introducing BUR jets into this environment would threaten the established layers of safety as the mix of traffic (VFR, IFR jets, and IFR non-jets) would require extra controller vigilance, add traffic confliction points, increase the number of traffic calls, and create overtake situations between aircraft.
Next Steps	No further FAA action

8.2 In the long-term for RNAV departures with destinations to the east and northeast when Runway 15 is used, [a)] it is recommended that a new RNAV procedure be established similar to ELMOO NINE conventional procedure that sends aircraft east through the San Gabriel Valley. [b)] If an eastern departure routing is not feasible, the SLAPP concept proposed by Advocates for Viable Airport Solutions to the west and then north is proposed instead.	
Adjustment Type	Procedure
Adjustment Detail	New RNAV procedure
Evaluation	a) It is technically possible to develop an RNAV flight procedure that mirrors the ELMOO NINE. b) While technically feasible, the SLAPP concept presented by the Advocates for Viable Airport Solutions positions the aircraft less than the required 3 NM away from the Runway 8 final approach, limiting the ability to conduct simultaneous arrival and departure operations.
Feasibility Assessment	a) Not operationally feasible b) Not operationally feasible
Feasibility Justification	a) See response to Recommendation 8.1 b) Does not have the required lateral separation from Runway 8 final to preclude opposite direction operations.
Next Steps	No further FAA action

8.3 Support recommendations that will provide relief from airplane noise for all residents of the San Fernando Valley. This includes upgrading technology so that flights leaving BUR can utilize the ELMOO NINE route.	
Adjustment Type	General Improvements
Adjustment Detail	Not enough detail
Evaluation	There is not enough information included in this recommendation to determine whether it is feasible (technically, operationally, financially, and/or environmentally) for any defined procedure

	proposal to reduce noise for all residents. A reduction in noise for some residents will likely result in an increase in noise for others.
Feasibility Assessment	A more detailed recommendation is needed.
Feasibility Justification	A more detailed recommendation is needed.
Next Steps	No further FAA action

9.1 Support Congressional legislation imposing a mandatory nighttime curfew at each airport similar to the Authority's Part 161 curfew request submitted on February 2, 2009 and denied by the FAA.	
Evaluation	Non-FAA response required.
Additional FAA Response	The FAA respectfully points out that its determination on the 2009 Part 161 (See FAA 2009 BUR Part 161 decision effective October 30, 2009, 74 FR 66397) request was based on the statutory requirements set forth in 49 U.S.C. Chapter 475. The FAA will not take a public position on a legislative proposal that would change or limit the applicability of those provisions.

9.2 In effort to decrease the total volume of late-night flights (which cause particularly egregious disruption), the FAA should authorize a mandatory curfew at both between the hours of 10 pm and 7 am. This curfew should apply to all non-emergency operations and it should be enforced with fines for violators.	
Evaluation	Non-FAA response required.
Adjustment Type	New Noise Rule
Adjustment Detail	Title 14, Code of Federal Regulations (C.F.R) Part 161, *Notice and Approval of Airport Noise and Access Restrictions*.
Evaluation	FAA does not have the statutory authority to implement or enforce an airport sponsor's local noise rules. The Sponsor would have to submit a request to the FAA pursuant to 14 C.F.R. Part 161.
Preliminary Assessment	It would be premature for the FAA to render any kind of judgment.
Feasibility Justification	14 C.F.R. § 161.305 - Required analysis and conditions for approval of proposed restrictions. (Please note that section 161.305 applies to Stage 3 aircraft. Although theoretically there are no stage 2 airplanes flying, the Reauthorization Act of 2018 authorized some limited operation of Stage 2 aircraft.)
Next Steps	No further FAA action unless BGPAA pursues and receives FAA approval to implement nighttime curfew.
Additional FAA Response	FAA does not have the statutory authority to implement or enforce an airport sponsor's local noise rules. Should the BGPAA wish to pursue a mandatory curfew at BUR, it must follow 14 C.F.R. Part 161, *Notice and Approval of Airport Noise and Access*

	Restrictions. Should this occur, FAA will consider the request and provide a formal determination after review of the proposal. A noise or access restriction on the operation of stage 3 aircraft is only allowed in 3 circumstances:1. FAA approves it after an airport sponsor applies for such approval. The procedures and substantive standard governing FAA's reviewing and approval, if applicable, are provided for in 14 CFR part 161. 2. The restriction is pre-existing and meets the grandfather criteria under ANCA. 3. The restriction is passed with the unanimous consent of the sponsor and all aircraft operators.

9.3 Adopt new legislation prohibiting operations between 10 pm and 7 am.	
Evaluation	Non-FAA response required.
Adjustment Type	Change Noise Rule
Adjustment Detail	14 C.F.R. Part 161 *Notice and Approval of Airport Noise and Access Restrictions*.
Evaluation	It is unclear who would adopt the new legislation. Proposed local restrictions must comply with 14 C.F.R. Part 161, *Notice and Approval of Airport Noise and Access Restrictions*. ANCA limits the ability of airport sponsors to implement new restrictions or fines on aircraft operating into or out of their airport after 1990.
Preliminary Assessment	It would be premature for the FAA to render any kind of judgment.
Feasibility Justification	14 C.F.R. § 161.305 - Required analysis and conditions for approval of proposed restrictions. (Please note that section 161.305 applies to Stage 3 aircraft. Although theoretically there are no stage 2 airplanes flying, the Reauthorization Act of 2018 authorized some limited operation of Stage 2 aircraft.)
Next Steps	No further FAA action unless BGPAA pursues and receives FAA approval to implement nighttime curfew.
Additional FAA Response	Only the United States Congress has the authority to enact legislation that limits or otherwise affects access to U.S. airspace.

9.4 Noise guidelines should be implemented on both commercial and general aviation operators (using John Wayne Airport penalties as a model).	
Evaluation	Non-FAA response required.
Adjustment Type	Change Noise Rule
Adjustment Detail	14 C.F.R. Part 161, *Notice and Approval of Airport Noise and Access Restrictions*.

Evaluation	John Wayne Airport's (SNA) noise rules were grandfathered prior to the implementation of ANCA (https://www.ocair.com/aboutjwa/accessandnoise/). The SNA Access Plan places restrictions on operational capacity, hours of operations, and noise levels at the County's ten (10) noise-monitoring stations. General Aviation operations are permitted 24 hours daily subject to compliance with the daytime noise limits and the more restrictive curfew noise limits, as documented in the General Aviation Noise Ordinance (emphasis added). Proposed local restrictions must comply with 14 C.F.R. Part 161, *Notice and Approval of Airport Noise and Access Restrictions.* ANCA limits the ability of airport sponsors to implement new restrictions or fines on aircraft operating into or out of their airport after 1990.
Preliminary Assessment	It would be premature for the FAA to render any kind of judgment.
Feasibility Justification	14 C.F.R. § 161.305 - Required analysis and conditions for approval of proposed restrictions. (Please note that section 161.305 applies to Stage 3 aircraft. Although theoretically there are no stage 2 airplanes flying, the Reauthorization Act of 2018 authorized some limited operation of Stage 2 aircraft.)
Next Steps	No further FAA action unless BGPAA pursues a Part 161 process.
Additional FAA Response	John Wayne Airport's noise rules were grandfathered under ANCA. ANCA limits the ability of airport sponsors to adopt new restrictions or fines on aircraft operating into or out of their airport after 1990.

9.5 The FAA should look at the impact and feasibility of curfews for all airports in the San Fernando Valley.	
Adjustment Type	Implement Noise Rules
Adjustment Detail	14 C.F.R. Part 161, *Notice and Approval of Airport Noise and Access Restrictions*.
Evaluation	Proposed local restrictions must comply with 14 C.F.R. Part 161, *Notice and Approval of Airport Noise and Access Restrictions.* ANCA limits the ability of airport sponsors to implement new restrictions or fines on aircraft operating into or out of their airport after 1990.
Preliminary Assessment	San Fernando Valley airports are owned by multiple airport sponsors. Van Nuys (LAWA), BUR (Burbank-Glendale-Pasadena Airport Authority), and Whiteman Airport (Los Angeles County). No further FAA action unless an airport sponsor pursues and receives FAA approval to implement nighttime curfew.

Feasibility Justification	14 C.F.R. § 161.305 - Required analysis and conditions for approval of proposed restrictions. (Please note that section 161.305 applies to Stage 3 aircraft. Although theoretically there are no stage 2 airplanes flying, the Reauthorization Act of 2018 authorized some limited operation of Stage 2 aircraft.)
Next Steps	No further FAA action unless an airport sponsor pursues and receives FAA approval to implement nighttime curfew.
Additional FAA Response	San Fernando Valley airports are owned by multiple airport sponsors - Van Nuys (LAWA), BUR (Burbank-Glendale-Pasadena Airport Authority) and Whiteman Airport (Los Angeles County). FAA's role under this recommendation would be limited to reviewing noise restrictions proposed by airport sponsors, pursuant to 14 C.F.R. Part 161. Under Part 161, FAA must approve any restriction proposed. The approval must be based upon the criteria established in the regulation. The statute also allows for restrictions that are not approved by the FAA if they are enacted with unanimous consent of the sponsor and all aircraft operators as provided for in the statute. A noise or access restriction on the operation of stage 3 aircraft is only allowed in 3 circumstances: 1. FAA approves it after an airport sponsor applies for such approval. The procedures and substantive standard governing FAA's reviewing and approval, if applicable, are provided for in 14 CFR part 161. 2. The restriction is pre-existing and meets the grandfather criteria under ANCA. 3. The restriction is passed with the unanimous consent of the sponsor and all aircraft operators.

9.6 A new Part 161 study should be initiated to provide for a mandatory curfew, with the full understanding that the position taken by surrounding communities regarding a replacement terminal may well depend on whether a mandatory curfew and other effective noise impact reduction strategies are in place.	
Adjustment Type	Implement Noise Rules
Adjustment Detail	14 C.F.R Part 161, *Notice and Approval of Airport Noise and Access Restrictions*.
Evaluation	Proposed local restrictions must comply with 14 C.F.R. Part 161, *Notice and Approval of Airport Noise and Access Restrictions.* ANCA limits the ability of airport sponsors to implement new restrictions or fines on aircraft operating into or out of their airport after 1990.
Preliminary Assessment	It would be premature for the FAA to render any kind of judgment. However, other effective noise impact reduction strategies may not entirely be possible since LA Council District 2 and 6 are providing

	contradictory requests concerning southerly and northerly departures.
Feasibility Justification	14 C.F.R. § 161.305 - Required analysis and conditions for approval of proposed restrictions. (Please note that section 161.305 applies to Stage 3 aircraft. Although theoretically there are no stage 2 airplanes flying, the Reauthorization Act of 2018 authorized some limited operation of Stage 2 aircraft.)
Next Steps	No further FAA action unless the airport sponsor pursues a Part 161 process
Additional FAA Response	Any airport that wishes to pursue a mandatory curfew must follow 14 C.F.R. Part 161, Notice and Approval of Airport Noise and Access Restrictions. Should this occur, FAA will consider the request and provide a formal determination after review of the proposal.

9.7 Request Los Angeles World Airports (LAWA) implement a nighttime curfew for departures and arrivals of all aircraft to help mitigate community noise disturbances between 10 pm and 7 am on weekdays and 10 pm to 9 am on weekends and to be enforced in part by publishing the names of the aircraft management companies responsible and contact information for complaints to be directed to as well as the tail numbers and any other publicly available information related to the offending flight, pilots, and company or individual who owns or rents the aircraft.	
Evaluation	Non-FAA response required.
Adjustment Type	Modification of LAWA's Noise Rules
Adjustment Detail	14 C.F.R. Part 161 Notice and Approval of Airport Noise and Access Restrictions Study.
Evaluation	It is unclear if the request is for VNY and Los Angeles International Airport (LAX) since LAWA owns and operates both airports. Proposed local restrictions must comply with 14 C.F.R. Part 161, *Notice and Approval of Airport Noise and Access Restrictions*. ANCA limits the ability of airport sponsors to implement new restrictions or fines on aircraft operating into or out of their airport after 1990.
Preliminary Assessment	It would be premature for the FAA to render any kind of judgment.
Feasibility Justification	14 C.F.R. § 161.305 - Required analysis and conditions for approval of proposed restrictions. (Please note that section 161.305 applies to Stage 3 aircraft. Although theoretically there are no stage 2 airplanes flying, the Reauthorization Act of 2018 authorized some limited operation of Stage 2 aircraft.)
Next Steps	No further FAA action unless LAWA pursues and receives FAA approval to implement nighttime curfew.
Additional FAA Response	Any airport that wishes to pursue a mandatory curfew must follow 14 C.F.R. Part 161, Notice and Approval of Airport Noise and Access Restrictions. Should this occur, FAA will consider the

	request and provide a formal determination after review of the proposal.

11.1 FAA must work with BUR to ensure that the existing voluntary curfew is vigorously enforced (using John Wayne Airport penalties as a model).	
Adjustment Type	Modification of BUR's Noise Rules
Adjustment Detail	14 C.F.R. Part 161 Notice and Approval of Airport Noise and Access Restrictions Study.
Evaluation	A voluntary curfew is not enforceable. Enforcing a curfew requires compliance with ANCA and 14 CFR part 161. SNA's noise rules were grandfathered under ANCA. NOTE: A vast majority of the airlines and general aviation aircraft can operate anytime without violating BUR's noise rules.
Feasibility Assessment	Not legally permissible.
Feasibility Justification	14 C.F.R. § 161.305 - Required analysis and conditions for approval of proposed restrictions. (Please note that section 161.305 applies to Stage 3 aircraft. Although theoretically there are no stage 2 airplanes flying, the Reauthorization Act of 2018 authorized some limited operation of Stage 2 aircraft.)
Next Steps	No further FAA action unless BGPAA pursues and receives FAA approval to implement nighttime curfew.
Additional FAA Response	A voluntary curfew is not enforceable. Enforcing a curfew requires compliance with ANCA and 14 CFR part 161. We point out that John Wayne Airport's noise rules were grandfathered under ANCA.

11.2 FAA and BUR must enforce compliance with operating procedures during curfew hours.	
Adjustment Type	Modification of BUR's Noise Rules
Adjustment Detail	14 C.F.R. Part 161, *Notice and Approval of Airport Noise and Access Restrictions*.
Evaluation	There is no mandatory curfew at BUR. FAA does not implement or enforce an airport sponsor's local noise rules. A voluntary curfew is not enforceable. Enforcing a curfew requires compliance with ANCA and 14 CFR part 161. A vast majority of the airlines and general aviation aircraft can operate anytime without violating BUR's noise rules.
Preliminary Assessment	Not legally permissible.

Feasibility Justification	14 C.F.R. § 161.305 - Required analysis and conditions for approval of proposed restrictions. (Please note that section 161.305 applies to Stage 3 aircraft. Although theoretically there are no stage 2 airplanes flying, the Reauthorization Act of 2018 authorized some limited operation of Stage 2 aircraft.)
Next Steps	No further FAA action unless BGPAA pursues and receives FAA approval to implement nighttime curfew.
Additional FAA Response	A voluntary curfew is not enforceable. Making a curfew enforceable would require compliance with ANCA and 14 CFR part 161.

12.1 Support changes to FAA regulations or Congressional legislative changes to broaden the applicability of noise attenuation programs and funding to serve the greatest number of residents. This would encompass expanding the current federal criteria for use of such funds. For example, changing the definition of noise impacted areas to include levels less than the 65 DNL.	
Additional FAA Response	FAA has no current plans to change regulations or policies to broaden the applicability of noise attention programs/funding. The FAA will not take a public position on a legislative proposal that would change or limit the applicability of existing provisions.

13.1 Conduct a full EA and robust community outreach prior to any future flight path changes, procedure changes, or flight volume changes.	
Adjustment Type	Environmental Analysis
Adjustment Detail	Create minimum standard
Evaluation	See Recommendation 13
Feasibility Assessment	See Recommendation 13
Feasibility Justification	See Recommendation 13
Next Steps	No further FAA action

13.2 Any changes to routes must include an environmental review and analysis that includes a thorough study of noise and air quality. This review must take into consideration existing environmental justice issues and utilize measures of environmental hazards, such as CalEnviroscreen.	
Adjustment Type	Environmental Assessment
Adjustment Detail	Create minimum standard
Evaluation	See Recommendation 13
Feasibility Assessment	See Recommendation 13
Feasibility Justification	See Recommendation 13

Next Steps	No further FAA action

14.1 Conduct studies compliant with 14 CFR Part 150 in order to establish updated Noise Exposure Maps and Noise Compatibility Programs. The updates may include new or revised noise abatement programs for aircraft operators. The studies should evaluate the applicability of noise abatement departure procedures, preferential runway use and other best practices for aircraft operators.	
Adjustment Type	Noise Study
Adjustment Detail	Update 14 C.F.R Part 150 Airport Noise Compatibility Program (NCP)
Evaluation	While the Task Force directed this recommendation to BGPAA and LAWA, the FAA offers the following background information for context: Preparation of a Part 150 by an airport sponsor is voluntary and is NOT a requirement of the FAA, nor is it a grant agreement obligation requirement (unless the airport has requested and received an AIP grant to fund a Part 150 program). Part 150 NEM's requires only the existing condition and 5-year forecast maps. The NCP is the sponsor's proposed program, subject to regulatory process requirements and FAA approval. It can evaluate numerous noise compatibility alternatives including, but not limited to, preferential runway programs. An NCP is reviews and analyzes Noise Abatement Measures (actions that reduce sound at the source i.e. routing arrival and departure flight paths over less noise sensitive areas), Noise Mitigation Measures – (actions that reduce noise at the receptor, i.e. sound insulation), Land-Use Measures (i.e. zoning or other controls) and Continuing Program Measures (i.e. housekeeping measures for periodic review and maintenance of the NCP itself) on how to reduce the number of people affected by noise of 65 DNL (CNEL in California) or greater and how to prevent the introduction of new non-compatible land uses within the 65 DNL (CNEL) noise contour.
Preliminary Assessment	Conducting a Part 150 is feasible if the airport sponsors choose to do so. It is premature to assess the feasibility of any specific measure(s) that may be included in the resulting Noise Compatibility Program.
Feasibility Justification	14 C.F.R Part 150
Next Steps	BGPAA and LAWA may initiate a Part 150 Update if they choose to do so.
Additional FAA Response	FAA points out that the preparation of a Part 150 Study (or update) by an airport sponsor is voluntary and is NOT a

	requirement of the FAA. Part 150 provides a structured process for a collaborative approach to reducing incompatible land uses, and includes the airport(s), airlines and other user groups, community representatives, and the FAA. Part 150 requires development of current and forecast Noise Exposure Maps, and development of a Noise Compatibility Program (NCP). The Part 150 process may consider a broad range of measures, including (but not limited to) preferential use runways. The FAA's review of the measures included in the NCP include an evaluation of whether the measures can be safe to operate and meet all requirements prescribed by ANCA and is consistent with the applicable federal obligations.

14.2 Revamp its sound insulation program by conduction a new Part 150, Airport Noise Compatibility Planning Study, which will result in an updated Noise Exposure Map.	
Evaluation	Non-FAA response required.
Adjustment Type	Noise Study
Adjustment Detail	Update 14 C.F.R Part 150 Airport Noise Compatibility Program (NCP)
Evaluation	While the Task Force directed this recommendation to BGPAA and LAWA, the FAA offers the following background information for context: Preparation of a Part 150 by an airport sponsor is voluntary and is NOT a requirement of the FAA, nor is it a grant agreement obligation requirement (unless the airport has requested and received an AIP grant to fund a Part 150 program). Part 150 NEM's requires only the existing condition and 5-year forecast maps. The NCP is the sponsor's proposed program, subject to regulatory process requirements and FAA approval. It can evaluate numerous noise compatibility alternatives including, but not limited to, preferential runway programs. The NCP reviews and analyzes Noise Abatement Measures (actions that reduce sound at the source i.e. routing arrival and departure flight paths over less noise sensitive areas), Noise Mitigation Measures – (actions that reduce noise at the receptor, i.e. sound insulation), Land-Use Measures (i.e. zoning or other controls) and Continuing Program Measures (i.e. housekeeping measures for periodic review and maintenance of the NCP itself) on how to reduce the number of people affected by noise of 65 DNL (CNEL in California) or greater and how to prevent the introduction of new non-compatible land uses within the 65 DNL (CNEL) noise contour.

Preliminary Assessment	Conducting a Part 150 is feasible if the airport sponsors choose to do so. It is premature to assess the feasibility of any specific measure(s) that may be included in the resulting Noise Compatibility Program.
Feasibility Justification	14 C.F.R Part 150
Next Steps	BGPAA and LAWA may initiate a Part 150 Update if they choose to do so.
Additional FAA Response	FAA points out that the preparation of a Part 150 Study (or update) by an airport sponsor is voluntary and is NOT a requirement of the FAA. Part 150 provides a structured process for a collaborative approach to reducing incompatible land uses, and includes the airport(s), airlines and other user groups, community representatives, and the FAA. Part 150 requires development of current and forecast Noise Exposure Maps, and development of a Noise Compatibility Program (NCP). The Part 150 process may consider a broad range of measures, including (but not limited to) preferential use runways. The FAA's review of the measures included in the NCP include an evaluation of whether the measures can be safe to operate and meet all requirements prescribed by ANCA and is consistent with the applicable federal obligations.

14.3 Allow more northerly departures during "calm" wind conditions.	
Evaluation	Non-FAA response required.

14.4 Conduct a technical study to eliminate the substantial overlap of departing flight tracks over the San Fernando Valley. In particular, flights departing VNY south and turning east and flights departing BUR south and turning west, creating a substantially overlapping flight tracks vortex with impacted communities suffering from airport departures from two airports.	
Evaluation	Non-FAA response required.

14.5 In effort to decrease the concentration of flights over any one community, consider the following: the feasibility of eastbound take-offs from BUR, this should include consideration of adjusting flight paths at other airports (Los Angeles International Airport (LAX), BUR, etc.); the feasibility of northbound take-offs from both when there is little to no wind.	
Evaluation	Non-FAA response required.

14.6 In effort to decrease the concentration of flights over any one community, consider the following: the feasibility of eastbound take-offs from BUR, this should include consideration of adjusting flight paths at other airports (Los Angeles International Airport (LAX), BUR, etc.); the feasibility of northbound take-offs from both when there is little to no wind.	
Evaluation	Non-FAA response required.

14.7 Adopt all actions necessary to reduce the number of Runway 15 departures, including runway and directional rotation.	
Evaluation	Non-FAA response required.
Adjustment Type	Noise Study
Adjustment Detail	Update 14 C.F.R Part 150 Airport Noise Compatibility Program (NCP)
Evaluation	While the Task Force directed this recommendation to BGPAA and LAWA, the FAA offers the following background information for context: Preparation of a Part 150 by an airport sponsor is voluntary and is NOT a requirement of the FAA, nor is it a grant agreement obligation requirement (unless the airport has requested and received an AIP grant to fund a Part 150 program). Part 150 NEM's requires only the existing condition and 5-year forecast maps. The NCP is the sponsor's proposed program, subject to regulatory process requirements and FAA approval. It can evaluate numerous noise compatibility alternatives including, but not limited to, preferential runway programs. The NCP reviews and analyzes Noise Abatement Measures (actions that reduce sound at the source i.e. routing arrival and departure flight paths over less noise sensitive areas), Noise Mitigation Measures – (actions that reduce noise at the receptor, i.e. sound insulation), Land-Use Measures (i.e. zoning or other controls) and Continuing Program Measures (i.e. housekeeping measures for periodic review and maintenance of the NCP itself) on how to reduce the number of people affected by noise of 65 DNL (CNEL in California) or greater and how to prevent the introduction of new non-compatible land uses within the 65 DNL (CNEL) noise contour.
Preliminary Assessment	Conducting a Part 150 is feasible if the airport sponsors choose to do so. It is premature to assess the feasibility of any specific measure(s) that may be included in the resulting Noise Compatibility Program.
Feasibility Justification	14 C.F.R Part 150
Next Steps	BGPAA and LAWA may initiate a Part 150 Update if they choose to do so.

Additional FAA Response	While the Task Force directed this recommendation to BGPAA and LAWA, the FAA offers the following background information for context: FAA points out that the preparation of a Part 150 Study (or update) by an airport sponsor is voluntary and is NOT a requirement of the FAA. Part 150 provides a structured process for a collaborative approach to reducing incompatible land uses, and includes the airport(s), airlines and other user groups, community representatives, and the FAA. Part 150 requires development of current and forecast Noise Exposure Maps, and development of a Noise Compatibility Program (NCP). The Part 150 process may consider a broad range of measures, including (but not limited to) preferential use runways. The FAA's review of the measures included in the NCP include an evaluation of whether the measures can be safe to operate and meet all requirements prescribed by ANCA and is consistent with the applicable federal obligations.

14.8 Allow eastbound departures using Runway 8 and adopt an enforceable process to ensure a meaningful reduction in Runway 15 departures.	
Additional FAA Response	While the Task Force directed this recommendation to BGPAA and LAWA, the FAA offers the following background information for context: FAA points out that the preparation of a Part 150 Study (or update) by an airport sponsor is voluntary and is NOT a requirement of the FAA. Part 150 provides a structured process for a collaborative approach to reducing incompatible land uses, and includes the airport(s), airlines and other user groups, community representatives, and the FAA. Part 150 requires development of current and forecast Noise Exposure Maps, and development of a Noise Compatibility Program (NCP). The Part 150 process may consider a broad range of measures, including (but not limited to) preferential use runways. The FAA's review of the measures included in the NCP include an evaluation of whether the measures can be safe to operate and meet all requirements prescribed by ANCA and is consistent with the applicable federal obligations.

14.9 Any policies, procedures or practices relating to safety considerations for departures regarding proximity to the Verdugo Mountains should equitably be applied regarding proximity to the Santa Monica Mountains.

Additional FAA Response	While the Task Force directed this recommendation to BGPAA and LAWA, the FAA offers the following background information for context: FAA points out that the preparation of a Part 150 Study (or update) by an airport sponsor is voluntary and is NOT a requirement of the FAA. Part 150 provides a structured process for a collaborative approach to reducing incompatible land uses, and includes the airport(s), airlines and other user groups, community representatives, and the FAA. Part 150 requires development of current and forecast Noise Exposure Maps, and development of a Noise Compatibility Program (NCP). The Part 150 process may consider a broad range of measures, including (but not limited to) preferential use runways. The FAA's review of the measures included in the NCP include an evaluation of whether the measures can be safe to operate and meet all requirements prescribed by ANCA and is consistent with the applicable federal obligations.

14.10 Discontinue arrivals using Runway 33 except when required due to significant wind conditions.	
Evaluation	Non-FAA response required.
Adjustment Type	Implement Access Restrictions
Adjustment Detail	14 C.F.R Part 161 Notice and Approval of Airport Noise and Access Restrictions Study.
Evaluation	While the Task Force directed this recommendation to BGPAA and LAWA, the FAA offers the following background information for context: Proposed local restrictions must comply with 14 C.F.R. Part 161, *Notice and Approval of Airport Noise and Access Restrictions.* ANCA limits the ability of airport sponsors to implement new restrictions or fines on aircraft operating into or out of their airport after 1990.
Preliminary Assessment	Premature to evaluate. However, LA Council District 2 and 6 are providing contradictory requests concerning southerly and northerly departures.
Feasibility Justification	14 C.F.R. § 161.305 - Required analysis and conditions for approval of proposed restrictions. (Please note that section 161.305 applies to Stage 3 aircraft. Although theoretically there are no stage 2 airplanes flying, the Reauthorization Act of 2018 authorized some limited operation of Stage 2 aircraft.)
Next Steps	No further FAA action unless sponsor pursues and receives FAA approval to implement access restrictions.
Additional FAA Response	Any airport that wishes to pursue an access restriction must follow 14 C.F.R. Part 161, Notice and Approval of Airport Noise and Access Restrictions. Should this occur, FAA will consider the

	request and provide a formal determination after review of the proposal.
Adjustment Type	Implement Access Restrictions

14.11 In the near-term, increase departures heading directly north by designating Runway 33 the preferred operating scheme on days of clam wind (less than 5 knots) and when prevailing winds are from the West, Northwest, North, and Northeast.	
Evaluation	Non-FAA response required.
Additional FAA Response	While the Task Force directed this recommendation to BGPAA and LAWA, the FAA offers the following background information for context: FAA points out that the preparation of a Part 150 Study (or update) by an airport sponsor is voluntary and is NOT a requirement of the FAA. Part 150 provides a structured process for a collaborative approach to reducing incompatible land uses, and includes the airport(s), airlines and other user groups, community representatives, and the FAA. Part 150 requires development of current and forecast Noise Exposure Maps, and development of a Noise Compatibility Program (NCP). The Part 150 process may consider a broad range of measures, including (but not limited to) preferential use runways. The FAA's review of the measures included in the NCP include an evaluation of whether the measures can be safe to operate and meet all requirements prescribed by ANCA and is consistent with the applicable federal obligations.

14.12 In the long-term, increase departures heading directly north by designating Runway 33 the preferred operating scheme on days when the prevailing winds are from the West, Northwest, North and Northeast and on days when winds are less than 5 knots from the south. This northern departure route would follow the I-5 Freeway. Cross Runway 8 should be used for all arrivals on those days.	
Evaluation	Non-FAA response required.
Additional FAA Response	While the Task Force directed this recommendation to BGPAA and LAWA, the FAA offers the following background information for context: FAA points out that the preparation of a Part 150 Study (or update) by an airport sponsor is voluntary and is NOT a requirement of the FAA. Part 150 provides a structured process for a collaborative approach to reducing incompatible land uses, and includes the airport(s), airlines and other user groups, community representatives, and the FAA. Part 150 requires development of current and forecast Noise Exposure Maps, and development of a Noise Compatibility Program (NCP). The Part 150 process may

	consider a broad range of measures, including (but not limited to) preferential use runways. The FAA's review of the measures included in the NCP include an evaluation of whether the measures can be safe to operate and meet all requirements prescribed by ANCA and is consistent with the applicable federal obligations.

14.13 Conduct a technical analysis to establish fair share arrival and departure flight paths with the goal of flights departing North, South, East, and West roughly 25% in each direction and arriving North, South, East, and West roughly 24% in each direction. If the FAA determines this is not technically feasible, the FAA is requested to design arrival/departure procedures that as closely create fair share arrivals and departures as possible.	
Evaluation	Non-FAA response required.
14.14 Conduct a technical analysis to establish fair share arrival and departure flight paths with the goal of flights departing South and turning West, South and turning East, North and turning West, and North and turning East roughly 25% in each direction and arriving North and South roughly split 50% annually. If the FAA determines this is not technically feasible, the FAA is requested to design arrival/departure procedures that as closely create fair share arrivals and departures as possible.	
Evaluation	Non-FAA response required.

14.15 In the near-term, increase departures heading directly north by designating Runways 34L and 34R the preferred operating scheme on days when the prevailing winds are from the North, Northwest, West, and Northeast and on days when the winds are stagnant or less than 5 knots from the south. All arrivals should be from the west using Runway 16 on those days.	
Additional FAA Response	While the Task Force directed this recommendation to BGPAA and LAWA, the FAA offers the following background information for context: FAA points out that the preparation of a Part 150 Study (or update) by an airport sponsor is voluntary and is NOT a requirement of the FAA. Part 150 provides a structured process for a collaborative approach to reducing incompatible land uses, and includes the airport(s), airlines and other user groups, community representatives, and the FAA. Part 150 requires development of current and forecast Noise Exposure Maps, and development of a Noise Compatibility Program (NCP). The Part 150 process may consider a broad range of measures, including (but not limited to) preferential use runways. The FAA's review of the measures included in the NCP include an evaluation of whether the measures can be safe to operate and meet all requirements

	prescribed by ANCA and is consistent with the applicable federal obligations.

14.16 In the long-term, increase departures heading directly north by designating Runway 34 the preferred operating scheme on days when the prevailing winds are from the North, Northwest, West, and Northeast and on days when the winds are stagnant or less than 5 knots from the south. All arrivals should be from the west using Runway 16 on those days.	
Additional FAA Response	While the Task Force directed this recommendation to BGPAA and LAWA, the FAA offers the following background information for context: FAA points out that the preparation of a Part 150 Study (or update) by an airport sponsor is voluntary and is NOT a requirement of the FAA. Part 150 provides a structured process for a collaborative approach to reducing incompatible land uses, and includes the airport(s), airlines and other user groups, community representatives, and the FAA. Part 150 requires development of current and forecast Noise Exposure Maps, and development of a Noise Compatibility Program (NCP). The Part 150 process may consider a broad range of measures, including (but not limited to) preferential use runways. The FAA's review of the measures included in the NCP include an evaluation of whether the measures can be safe to operate and meet all requirements prescribed by ANCA and is consistent with the applicable federal obligations.

14.17 Evaluate and provide new noise mitigation measures for apartments, homes, and businesses based on average decibel level, including consideration of topographical features such as noise reverberations from canyon walls, and not merely proximity to the airports.	
Adjustment Type	
Adjustment Detail	
Evaluation	While the Task Force directed this recommendation to BGPAA and LAWA, the FAA offers the following background information for context: AEE would need to review and concur with the noise modeling inputs associated with topographical features such as noise reverberations from canyon walls.

Preliminary Assessment	Premature to evaluate. Additionally, FAA approval with noise modeling criteria will be necessary.
Feasibility Justification	Would require local and federal changes across all levels of government. Additionally, FAA approval with noise modeling criteria will be necessary.
Next Steps	
Additional FAA Response	The FAA would review AEDT input required with topographical features if the sponsor chooses to revise their NEMs. The NEMs could be updated to incorporate these features to determine new noise mitigation measures. The mitigation would have to be associated with a Part 150 Study initiated by the airport sponsor.

14.18 Commit to all mitigation measures to relieve the impacted communities, including but not limited to soundproofing.	
Adjustment Type	Noise Study
Adjustment Detail	Update 14 C.F.R Part 150 Airport Noise Compatibility Program
Evaluation	While the Task Force directed this recommendation to BGPAA and LAWA, the FAA offers the following background information for context: Preparation of a Part 150 by an airport sponsor is voluntary and is NOT a requirement of the FAA, nor is it a grant agreement obligation requirement (unless the airport has requested and received an AIP grant to fund a Part 150 program). Part 150 NEM's requires only the existing condition and 5-year forecast maps. The NCP is the sponsor's proposed program, subject to regulatory process requirements and FAA approval. It can evaluate numerous noise compatibility alternatives including, but not limited to, preferential runway programs. An NCP is reviews and analyzes Noise Abatement Measures (actions that reduce sound at the source i.e. routing arrival and departure flight paths over less noise sensitive areas), Noise Mitigation Measures – (actions that reduce noise at the receptor, i.e. sound insulation), Land-Use Measures (i.e. zoning or other controls) and Continuing Program Measures (i.e. housekeeping measures for periodic review and maintenance of the NCP itself) on how to reduce the number of people affected by noise of 65 DNL (CNEL in California) or greater and how to prevent the introduction of new non-compatible land uses within the 65 DNL (CNEL) noise contour. Under FAA policy, a municipality (City or County) may use a lower local noise standard (i.e. CNEL 60 dB) for mitigation if the standard is formally adopted by the respective municipality (City or County)

	for all local land use compatibility, not just for airport noise mitigation purposes.
Preliminary Assessment	The FAA cannot make advance commitments, but is prepared to consider funding requests for eligible noise mitigation measures within the defined 65 dB CNEL contour.
Feasibility Justification	14 C.F.R. Part 150. Both BUR and VNY already monitor noise and disclose those monitoring efforts quarterly as part of their State Noise Variance Requirements.
Next Steps	Initiating a 14 C.F.R. Part 150 Update is at the discretion of BGPAA and LAWA. Measures identified and approved by FAA in the NCP will be eligible for federal funding.
Additional FAA Response	FAA points out that the preparation of a Part 150 Study (or update) by an airport sponsor is voluntary and is NOT a requirement of the FAA. Part 150 provides a structured process for a collaborative approach to reducing incompatible land uses, and includes the airport(s), airlines and other user groups, community representatives, and the FAA. Part 150 requires development of current and forecast Noise Exposure Maps, and development of a Noise Compatibility Program (NCP). The Part 150 process may consider a broad range of measures, including (but not limited to) preferential use runways. The FAA's review of the measures included in the NCP include an evaluation of whether the measures can be safe to operate and meet all requirements prescribed by ANCA and is consistent with the applicable federal obligations. FAA will defer to the BGPAA and LAWA on this decision.

14.19 Conduct a formal noise study of actual (not modeled) noise patterns and impacts surrounding both, and commit to regular renewals, and should install and maintain noise monitoring equipment in the City of Los Angeles.	
Adjustment Type	Noise Study
Adjustment Detail	Noise monitoring and reporting.
Evaluation	14 C.F.R Part 150 requires modeling since you cannot measure future noise contours.
Preliminary Assessment	While the Task Force directed this recommendation to BGPAA and LAWA, the FAA offers the following background information for context: Conducting a Part 150 is feasible if the airport sponsors choose to do so. It is premature to assess the feasibility of any specific

	measure(s) that may be included in the resulting Noise Compatibility Program. Both BUR and VNY already monitor noise and as part of their State Noise Variance Requirements. BUR's existing 4th Quarter 2019 Noise Contour that is based on measured noise surrounding the airport and submitted to Los Angeles County and California as part of its State noise variance requirements identifies a 65 dB incompatible impact area of 13.73 acres, 137 residences and 370 residents. Whereas, VNY's existing 3rd Quarter 2019 Noise Contour is based on measured noise surrounding the airport and submitted to Los Angeles County and California as part of its State noise variance requirements identifies a 65 dB estimated incompatible impact area of 0 (zero) -acres, 0 (zero) -dwelling units and 0 (zero) -residents.
Feasibility Justification	14 C.F.R. Part 150. Both BUR and VNY already monitor noise and disclose those monitoring efforts quarterly as part of their State Noise Variance Requirements.
Next Steps	BGPAA and LAWA may initiate a Part 150 Update if they choose to do so. No further FAA action.
Additional FAA Response	FAA points out that the preparation of a Part 150 Study (or update) by an airport sponsor is voluntary and is NOT a requirement of the FAA. Part 150 provides a structured process for a collaborative approach to reducing incompatible land uses, and includes the airport(s), airlines and other user groups, community representatives, and the FAA. Part 150 requires development of current and forecast Noise Exposure Maps, and development of a Noise Compatibility Program (NCP). The Part 150 process may consider a broad range of measures, including (but not limited to) preferential use runways. The FAA's review of the measures included in the NCP include an evaluation of whether the measures can be safe to operate and meet all requirements prescribed by ANCA and is consistent with the applicable federal obligations. FAA will defer to the BGPAA and LAWA on this decision.

15.1 A Citizens' Advisory Board should be created, including representatives from the impacted communities of Los Angeles.	
Evaluation	Non-FAA response required.

15.2 Monitor potential changes to regulations pertaining to noise, particularly those which may result from the Airport Cooperative Research Program's (ACRP) study Research

Methods for Understanding Aircraft Noise Annoyances and Sleep Disturbance conducted by the National Academies of Sciences, Engineering, and Medicine in 2014.	
Evaluation	Non-FAA response required.

16.1 FAA must provide the Task Force with its post implementation study and all supporting documents, the Noise Screen that was provided to Benedict Hills in about January 2018, all documents requested previously by Task Force members, and all documents requested by the City of Los Angeles under the Freedom of Information Act.	
Adjustment Type	Providing Information
Adjustment Detail	FOIA request
Evaluation	See response to Recommendation 16
Feasibility Assessment	Not applicable
Feasibility Justification	Unable to comment on pending litigation
Next Steps	Await response to ongoing FOIA requests

APPENDIX C

Abbreviations

AEE – Office of Environment and Energy

AFS – FAA Flight Standards Service

ARTCC – Air Route Traffic Control Center

ATC – Air Traffic Control

CEQ – Council on Environmental Quality

DME – Distance Measuring Equipment

DOT – Department of Transportation

DVA – Diverse Vector Area

EA – Environmental Assessment

FMS – Flight Management System

FOIA – Freedom of Information Act

GA – General Aviation

IFP – Instrument Flight Procedures

IFR – Instrument Flight Rules

LAWA – Los Angeles World Airports

LT – Long Term (more than two years)

LOA – Letter of Agreement

MSL – Mean Sea Level

MVA – Minimum Vectoring Altitude

NEPA – National Environmental Policy Act

NM – Nautical Mile

NOTAM – Notice to Airmen

OSA – Operational Safety Assessment

PIC – Pilot in Command

PBN – Performance Based Navigation

RNAV – Area Navigation

SCT – Southern California TRACON

SID – Standard Instrument Departure

SOP – Standard Operating Procedure

SSR – System Service Review

ST – Short Term (two years or less)

TCAS – Traffic Alert and Collision Avoidance System

TMI – Traffic Management Initiative

TMR – Traffic Management Review

TRACON – Terminal Radar Approach Control

U.S.C. – United States Code

VFR – Visual Flight Rules

APPENDIX F – MEMORANDUM REGARDING MAPPING OF PROPOSED ALTERNATIVES TO RECOMMENDATIONS OF SSFVANTF

ROVOLUS

Date:	February 7, 2023	Contract Number:	693KA9-18-D-00005
To:	Ryan Weller	Task Order:	TO23
From:	Donovan Johnson	cc:	Darcy Zarubiak

Project: Hollywood Burbank Airport Environmental Assessment

Subject: Memorandum – Approach to Mapping Task Force Recommendations to Modeling Alternatives at Hollywood Burbank Airport

Introduction

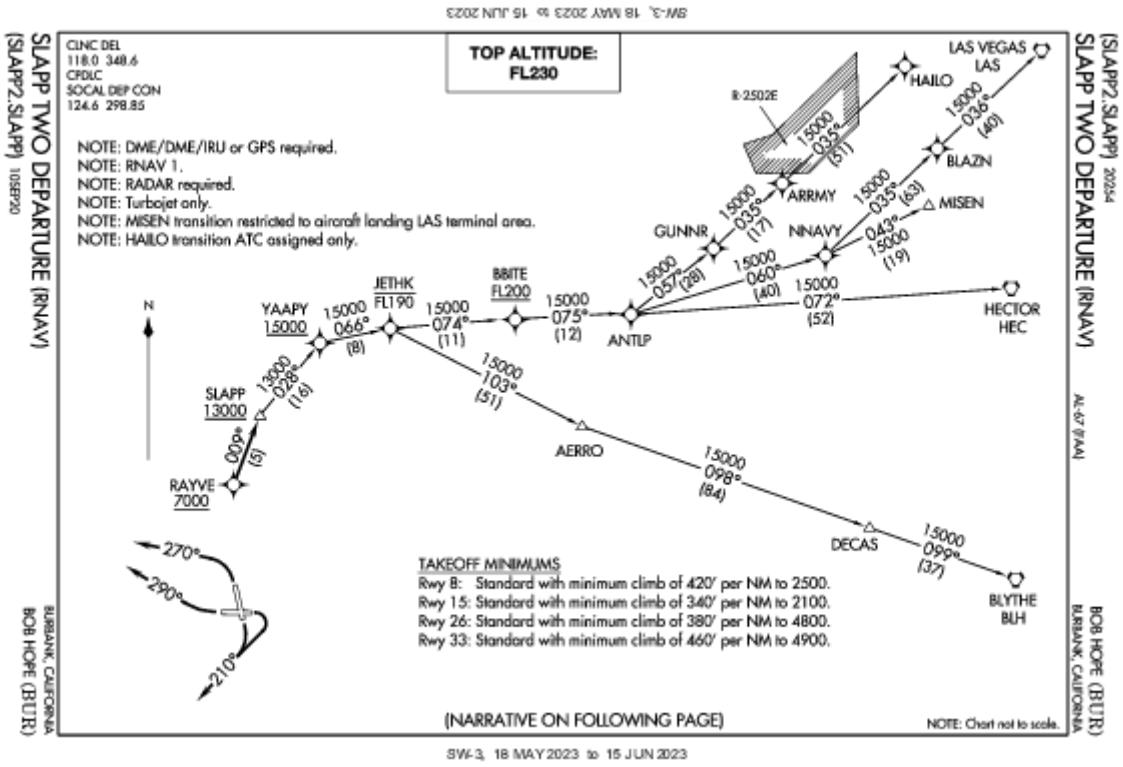
The Federal Aviation Administration (FAA) is currently undertaking an Environmental Assessment (EA) under the National Environmental Policy Act (NEPA) and FAA Order 1050.1 for changes to departure flight paths from Runway 15 at Hollywood Burbank Airport (the Airport). The purpose of this memorandum is to examine the recommendations from the Southern San Fernando Valley Airplane Noise Task Force (the Task Force) and determine how they can best be incorporated into alternatives considered in the EA. The selection of the alternatives is based on meeting the Purpose and Need of the EA, but there is a desire that the Task Force's thoughtful inputs be used to help refine the selected alternatives. This memorandum will only document how best to incorporate the recommendations of the Task Force into the alternatives; the actual modeling assumptions for the alternatives will be documented separately. The final set of modeling assumptions being used in the scenarios were modeled for the EA based on consultation with FAA air traffic control (ATC) personnel.

Background and Summary of FAA Proposed Action

The proposed satellite-based Area Navigation (RNAV) Open Standard Instrument Departure (Open SID) procedures, *SLAPP THREE* and *OROSZ THREE*, advanced through the flight procedure design process in accordance with FAA Order 8260.58A, *United States Standard for Performance Based Navigation (PBN),* take advantage of safety and efficiency benefits provided by the Open SID concept and would be an advanced approach for managing the complex terminal airspace in the region.

The existing RNAV SIDs, *SLAPP TWO and OROSZ TWO*, are primarily used for departures from Runway 15. These flight procedures route departing aircraft from Runway 15 to perform a climbing right turn to heading 210° when the aircraft reach 400 feet (or end of runway – whichever comes later). The aircraft continue with a heading of 210° until the aircraft are further directed by ATC using manual radar vectors. Each departing aircraft flies southwest on this specified heading until directed to turn to the northwest or northeast, where the aircraft then joins an RNAV transition to the enroute airway structure corresponding to the aircraft's final destination. The *SLAPP TWP* procedure is graphically shown in Figure 1. When aircraft follow this procedure, the distance the aircraft travels until performing the first two turns (reaching 400 feet, and being vectored) will vary based on operational factors such as aircraft performance, airspace congestion, aircraft separation requirements, and timing of communications between the air traffic controller and the aircraft flight deck.

Figure 1 – Graphical Description of the SLAPP TWO Departure Procedure



In contrast to present-day operations, the proposed Open SID procedures, *SLAPP THREE* and *OROSZ THREE,* would enable ATC to direct Runway 15 departures to the west more predictably utilizing two new airspace fixes. After following a standardized route and passing the first of the two fixes, aircraft would enter the "open" leg of the procedure, where ATC would provide vectors for aircraft to turn north toward the next charted fix after the aircraft was clear of any other pertinent traffic. Upon reaching the next charted fix, aircraft would resume following the standardized portion of the departure procedure unless directed otherwise by ATC. Given that the proposed *SLAPP THREE* and *OROSZ THREE* procedures would not fundamentally change the flight tracks of departures currently using *SLAPP TWO* and *OROSZ TWO* when departing Runways 8, 26, and 33, departures from these runways will not change in any of the alternative scenarios.

Southern San Fernando Valley Airplane Noise Task Force Recommendations

The Task Force provided a detailed list of 16 recommendations to the FAA on May 14, 2020, and when combined with sub-recommendations, comprised more than fifty potential actions for operations at the Airport and Van Nuys Airport. Aircraft noise and overflights resulting from Runway 15 departures is a key concern and many of the Task Force's recommendations seek to alleviate some of this. Many of the Task Force's recommendations focused on the concept of "dispersion"; while this term is not explicitly defined, FAA has interpreted this term to be the geographic distribution of flight operations.

The FAA determined the Task Force's recommendations would be considered based on four feasibility criteria: technical, operational, financial and environmental. FAA considered the Task Force's recommendations for technical and operational feasibility and narrowed them down to nine

recommendations that were deemed potentially feasible. Each of these potentially feasible recommendations will be considered for financial and environmental feasibility. An environmental feasibility determination occurs when a federal action is analyzed under FAA Order 1050.1F and NEPA. This EA is being performed pursuant to FAA Order 1050.1F, but the purpose of this EA is not the potential implementation of the Task Force's recommendations. However, where possible, the FAA seeks to include the Task Force's recommendations into this EA to evaluate the environmental feasibility of potential recommendations.

Incorporating Recommendations into Alternatives

The alternatives in the EA are required to respond to the Purpose and Need identified in this EA. The recommendations of the Noise Task Force were not developed in response to the Purpose and Need. Regardless, where feasible, FAA seeks to embrace the underlying intent of the Task Force recommendations into the development of the alternatives that will be considered in the EA. The consideration of how each of the nine potentially feasible recommendations can be reflected in an alternative is contained in the following sections:

I. Task Force Recommendation 3.5

Because a more rapid rate of ascent would likely reduce noise impacts in all communities, adopting rules, procedures, and/or ATC instructions that encourage pilots to increase altitude as rapidly as is safe when departing, including establishing altitude gates.

Modeling Roadmap: While the current *SLAPP TWO* and *OROSZ TWO* procedures allow for maximum climb gradient, they require a minimum 500 feet per nautical mile (NM) climb gradient. Radar track data shows that nearly all aircraft using these procedures climb at a rate well in excess of the minimum climb rate. As a result, increasing the required climb gradient or inserting altitude gates is unlikely to substantially change flight profiles from existing procedures.

Approach to modeling in EA: This recommendation would require a waiver deeming it not operationally feasible, but in the interest of exploring all options, will be considered from an environmental perspective. This recommendation will be modeled as a slightly modified version of the *No Action Alternative*. As aircraft typically already climb as quickly as possible there would be no functional profile changes that would occur as a result of increasing the climb gradient of the current *SLAPP TWO* and *OROSZ TWO* procedures for most aircraft. These would be modeled identically as they are today. The small proportion of aircraft that are unable to meet an increased climb gradient (notionally 600 feet per NM), would be modeled as flying the current *VNY THREE* procedure. The *VNY THREE* procedure is the airport's Obstacle Departure Procedure (ODP), which provides the lowest possible climb gradient necessary for departing aircraft to successfully clear obstacles. This alternative would be contained in the *Increased Climb Gradient Alternative*.

II. Task Force Recommendation 5

The Task Force opposes the FAA's proposed changes to the SLAPP and OROSZ departure procedures and requests the FAA design and implement a procedure for maximum dispersion of departures from Runway 15 and Hollywood Burbank Airport (BUR).

Modeling Roadmap: Currently, there is no operational scenario that is envisioned for the Airport that would increase dispersion of departures from Runway 15 beyond the present *SLAPP TWO/OROSZ TWO* procedures which presently require a turn at 400 feet above ground level (AGL) or upon reaching the departure end of the runway (whichever occurs latest).

Approach to modeling in EA: The *No-Action Alternative* being modeled in the EA is most closely aligned with Task Force Recommendation 5 and will be evaluated.

III. Task Force Recommendation 5.1

Regardless of the determination made by the EA to be conducted on the proposed amendments to incorporate the JAYTE and TEAGN waypoints into the SLAPP and OROSZ standard instrument departure procedures, the Task Force recommends not amending the procedures to implement the use of waypoints.

Modeling Roadmap: The current procedures in use at the Airport for Runway 15 departures (*SLAPP TWO* and *OROSZ TWO*) do not include the use of waypoints in the initial departure leg and require ATC personnel to vector departing flights to the initial waypoint. As the Task Force is recommending that these procedures not be amended to implement the use of waypoints, this recommendation is most closely aligned with the *No-Action Alternative*.

Approach to modeling in EA: This recommendation will be modeled as the *No-Action Alternative*.

IV. Task Force Recommendation 5.2

Proposed procedures SLAPP THREE and OROSZ THREE should be rejected as written and reconsidered to ensure maximize noise reduction and safety for all communities and FAA-recognized noise-sensitive areas of the San Fernando Valley, without regard to any previous litigation settlement agreements, and they must not impose significant new impacts on new communities compared to pre-2017 conditions.

Modeling Roadmap: The Purpose and Need of the EA is to respond to the Benedict Hills Homeowners Association (BHHA) Settlement Agreement and thus, is an intrinsic aspect of defining alternatives. The proposed procedures (*SLAPP THREE* and *OROSZ THREE*) are operationally safe and feasible and are being evaluated to determine their noise impacts for all communities when compared to *the No-Action Alternative*. Returning to pre-2017 routes is not a feasible solution, because the 2017 changes affected traffic throughout southern California and undoing those changes would create inefficiencies across the entire region FAA has considered several notional routes to determine if additional noise reduction is possible, but these routes have not been deemed operationally feasible at this time.

Approach to modeling in EA: This recommendation will be modeled as the *No-Action Alternative*.

V. Task Force Recommendation 5.3

If the proposed procedures SLAPP THREE and OROSZ THREE must be used at all, all waypoints should be considered "fly-by" and NOT "fly-over" in order to reduce exact uniformity and encourage delay in pilots' use of autopilot on departures.

Modeling Roadmap: The proposed procedures (*SLAPP THREE* and *OROSZ THREE*) already feature JAYTE and TEAGN as fly-by waypoints. Fly-over waypoints are not included in either of these procedures. The waypoint TEAGN does include a fly-by waypoint with no associated procedural turn, so while aircraft will fly directly over it in some cases, it is not a fly-over waypoint. It is anticipated that some aircraft that are flying this procedure may be given vectors to the north after JAYTE but prior to TEAGN. These aircraft will be accounted for after consultation with local ATC personnel and, if required, will be modeled using customized flight profiles (backbones) in the model.

Approach to modeling in EA: This recommendation will be modeled as the *Proposed Action Alternative*.

VI. Task Force Recommendation 5.6

In the near-term, change the initial departure headings for OROSZ, SLAPP and the conventional procedures so that they better disperse the early part of the flight tracks.

Modeling Roadmap: Currently, there is no operational condition at the Airport that has been deemed operationally feasible that would permit dispersed departures from Runway 15 other than the current *SLAPP TWO and OROSZ TWO* procedures that require a turn at 400 feet AGL or upon reaching the departure end of the runway (whichever occurs latest).

Approach to modeling in EA: If there were a feasible operational condition that increases departure dispersion beyond that provided by *SLAPP TWO and OROSZ TWO*, it could be noise modeled. However, since there is not an available procedure to model, the recommendation is most closely modeled as the *No-Action Alternative*.

VII. Task Force Recommendation 6

Replace current NextGen aircraft procedures at Hollywood Burbank Airport (BUR) and Van Nuys Airport (VNY) with procedures that provide better dispersion of flight tracks, such as [a)] "open" departures and [b)] diverse vector area (DVA) procedures.

Modeling Roadmap: As the currently proposed procedures (*SLAPP THREE* and *OROSZ THREE*) include an open segment of the departure procedure, providing opportunities for dispersion, though less dispersion than the present *SLAPP TWO/OROSZ TWO* procedures, this recommendation is being evaluated as a reasonable alternative. Any effort to further increase dispersion using open departures or DVA procedures, beyond that provided by *SLAPP THREE* and *OROSZ THREE,* is limited by the airspace required for the Santa Monica ILS approach. The EA is not considering any changes in activity at VNY.

Approach to modeling in EA: This recommendation will be modeled in the EA as the *Proposed Action Alternative*.

VIII. Task Force Recommendation 6.3

Implement "open" procedures where possible and avoid "closed" procedures wherever technically feasible to limit the creation of narrow flight paths.

Modeling Roadmap: As the currently proposed procedures (*SLAPP THREE* and *OROSZ THREE*) include an open segment of the departure procedure providing opportunities for natural dispersion, this recommendation is being evaluated as a feasible alternative.

Approach to modeling in EA: This recommendation will be modeled as the *Proposed Action Alternative*.

IX. Task Force Recommendation 6.4

Increase utilization of alternative departure headings on Runway 15 to achieve greater dispersal.

Modeling Roadmap: Currently, there is no operational condition at the Airport that has been deemed operationally feasible that features alternative headings from Runway 15 other than the

current *SLAPP TWO and OROSZ TWO* procedures. Those procedures require a turn at 400 feet AGL or upon reaching the departure end of the runway (whichever occurs latest).

Approach to modeling in EA: If there were a feasible operational condition that increases departure dispersion beyond that provided by *SLAPP TWO and OROSZ TWO*, it could be modeled using AEDT. This recommendation will be modeled as the *No-Action Alternative*.

No-Action Alternative Noise Modeling Assumptions

- The *No-Action Alternative* assumes no change from current operations at the Airport, thus, both the *Baseline* and *No-Action Alternatives* are a single model.
- As the environmental analysis only examines the differences between current operations that use *SLAPP TWO* and *OROSZ TWO* for Runway 15 departures and a future where those same operations use *SLAPP THREE* and *OROSZ THREE* instead, the *No-Action Alternative* will have the same operational portfolio as the *Proposed Action Alternative* (as well as any additional scenarios that could be added after ATC consultation).

Increased Climb Gradient Alternative Noise Modeling Assumptions

- The Increased Climb Gradient Alternative assumes traffic mix, traffic volumes, and runway usage identical to the *No-Action Alternative*.
- All traffic currently climbing at greater than 600 feet per NM will continue using the *SLAPP TWO* and *OROSZ TWO* procedures.
- All traffic unable to climb at greater than 600 feet per NM will be reassigned to the *VNY THREE* procedure.

Proposed Action Alternative Noise Modeling Assumptions

- The *Proposed Action Alternative* assumes the implementation of the *SLAPP THREE* and *OROSZ THREE* procedures at the Airport. Representative backbones will be created for each procedure.
- The *Proposed Action Alternative* assumes traffic mix, traffic volumes, and runway usage identical to the *No-Action Alternative*.
- All traffic currently using the *SLAPP TWO* and *OROSZ TWO* procedures will use the updated version of each procedure unless otherwise directed.

APPENDIX G – TABLE OF STATE-LISTED THREATENED, ENDANGERED, CRITICAL HABITAT, AND SPECIAL CONCERN SPECIES

Common Name ***Scientific Name***	**Sensitivity Status[1]**	**Preferred Habitat/Known Distribution[2]**	**Presence/Potential to Occur in the Noise Impact Area[3,4]**
Invertebrates			
Snails, Slugs, and Abalone **Gastropoda**			
Soledad shoulderband *Helminthoglypta fontiphila*	Federal: None State: CSA Local: None	Endemic to Los Angeles County, known only from Little Rock Creek Canyon on the north flank of the San Gabriel Mountains and Soledad Canyon near Acton.	**Not Expected.** While this species is known to occur within the GSA, it is endemic to Little Rock Creek Canyon on the north flank of the San Gabriel Mountains and Soledad Canyon near Acton outside of the Noise Impact Area.
Pacoima shoulderband *Helminthoglypta traskii pacoimensis*	Federal: None State: CSA Local: None	Endemic to western Los Angeles County, known only from Pacoima Canyon on the west slope of the San Gabriel Mountains.	**Not Expected.** While this species is known to occur within the GSA, it is endemic to Pacoima Canyon on the west slope of the San Gabriel Mountains outside of the Noise Impact Area.
Spiders and Relatives **Arachnida**			
Gertsch's socalchemmis spider *Socalchemmis gertschi*	Federal: None State: CSA Local: None	Known to occur in California within coastal scrub habitat.	**Not Expected.** While this species is known to occur within the GSA, no suitable habitat is present within the Noise Impact Area. Additionally, this species does not occur in the vicinity of the Noise Impact Area where noise from takeoff is highest.
Order Anostraca (fairy shrimp) **Crustacea**			
vernal pool fairy shrimp *Branchinecta lynchi*	Federal: FT State: CSA Local: None	Limited to vernal pools in Oregon and California. Occasionally will be found in habitats other than vernal pools, such as artificial pools created by roadside ditches.	**Not Expected.** While this species is known to occur within the GSA, no suitable habitat is present within the Noise Impact Area. Additionally, this species does not occur in the vicinity of the Noise Impact Area where noise from takeoff is highest.
Riverside fairy shrimp *Streptocephalus woottoni*	Federal: FE State: CSA Local: None	Endemic to western Riverside, Orange and San Diego Counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub. Inhabit seasonally astatic pools filled by winter/spring rains greater than 12 inches in depth. Hatch in warm water later in the season. Typically observed January through March.	**Not Expected.** While this species is known to occur within the GSA, no suitable habitat is present within the Noise Impact Area. Additionally, this species does not occur in the vicinity of the Noise Impact Area where noise from takeoff is highest.

Common Name ***Scientific Name***	**Sensitivity Status[1]**	**Preferred Habitat/Known Distribution[2]**	**Presence/Potential to Occur in the Noise Impact Area[3,4]**
Order Lepidoptera (butterflies & moths) ***Insecta***			
monarch butterfly – California overwintering population *Danaus plexippus pop. 1*	Federal: FC State: CSA Local: None	Wintering sites in California are associated with wind-protected groves of large trees (primarily eucalyptus or pine [*Pinus* spp.]) with nectar and water sources nearby that are generally near the coast.	**Not Expected.** While this species is known to occur within the GSA, no suitable habitat is present within the vicinity of the Noise Impact Area. This species typically overwinters along the coast and the closest known occurrence is located approximately 11.7 miles southwest of the Impact Area.
Busck's gallmoth *Eugnosta busckana*	Federal: None State: CSA Local: None	Limited to southern California. Larval host is California brittlebush (*Encelia californica*).	**Not Expected.** While this species is known to occur within the GSA, no suitable habitat is present within the Noise Impact Area. Additionally, this species does not occur in the vicinity of the Noise Impact Area where noise from takeoff is highest
Order Hymenoptera (ants, bees, & wasps) ***Insecta***			
Crotch bumble bee *Bombus crotchii*	Federal: None State: SCE Local: None	Open grassland and scrub habitats that support potential nectar sources such as plants within the Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, and Boraginaceae families.	**Not Expected.** While this species is known to occur within the GSA, no suitable habitat is present within the Noise Impact Area. Additionally, this species does not occur in the vicinity of the Noise Impact Area where noise from takeoff is highest
American bumble bee *Bombus pensylvanicus*	Federal: None State: CSA Local: None	Nests on the surface of the ground and forages in large fields that support potential nectar sources such as plants within the Aquilegia, Eupatorium, Erythronium, Hypericum, Solidago, Trefolium, and Vicia genus.	**Not Expected.** While this species is known to occur within the GSA, no suitable habitat is present within the Noise Impact Area. Additionally, this species does not occur in the vicinity of the Noise Impact Area where noise from takeoff is highest
FISH			
Minnows & Carp ***Cyprinidae***			
Arroyo chub *Gila orcutti*	Federal: None State: SSC Local: None	Los Angeles Basin south coastal streams. Prefers slow water stream sections with muddy or sandy bottoms. Feeds on aquatic vegetation, insects, and associated invertebrates.	**Not Expected.** While this species is known to occur within the GSA, no suitable habitat is present within the Noise Impact Area. Additionally, this species does not occur in the

Common Name ***Scientific Name***	**Sensitivity Status[1]**	**Preferred Habitat/Known Distribution[2]**	**Presence/Potential to Occur in the Noise Impact Area[3,4]**
			vicinity of the Noise Impact Area where noise from takeoff is highest
Santa Ana speckled dace *Rhinichthys osculus ssp. 3*	Federal: None State: SSC Local: None	Prefer south coast flowing water in habitat that includes clear, well oxygenated water with movement due to a current or waves. In addition the fish thrive in areas with deep cover or overhead protection from vegetation or woody debris.	**Not Expected.** While this species is known to occur within the GSA, no suitable habitat is present within the Noise Impact Area. Additionally, this species does not occur in the vicinity of the Noise Impact Area where noise from takeoff is highest
Suckers ***Catostomidae***			
Santa Ana sucker *Catostomus santaanae*	Federal: FT State: CSA Local: None	Habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, and algae.	**Not Expected.** While this species is known to occur within the GSA, no suitable habitat is present within the Noise Impact Area. Additionally, this species does not occur in the vicinity of the Noise Impact Area where noise from takeoff is highest
Sticklebacks ***Gasterosteidae***			
unarmored threespine stickleback *Gasterosteus aculeatus williamsoni*	Federal: FE State: SE, FP Local: None	Weedy pools, backwaters, and among emergent vegetation at the stream edge in small Southern California streams.	**Not Expected.** While this species is known to occur within the GSA, no suitable habitat is present within the Noise Impact Area. Additionally, this species does not occur in the vicinity of the Noise Impact Area where noise from takeoff is highest
Gobies ***Gobiidae***			
tidewater goby *Eucyclogobius newberryi*	Federal: FE State: SSC Local: None	Found in shallow brackish water habitats, lagoons, and lower stream reaches along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Require fairly still but not stagnant water and high oxygen levels.	**Not Expected.** While this species is known to occur within the GSA, no suitable habitat is present within the Noise Impact Area. Additionally, this species does not occur in the vicinity of the Noise Impact Area where noise from takeoff is highest
AMPHIBIANS			

Common Name ***Scientific Name***	**Sensitivity Status[1]**	**Preferred Habitat/Known Distribution[2]**	**Presence/Potential to Occur in the Noise Impact Area[3,4]**
Newts ***Salamandridae***			
Coast Range newt *Taricha torosa*	Federal: None State: SSC Local: None	Leave their aquatic habitat within a few weeks of breeding, and estivate terrestrially during the dry summer, residing in moist habitats under woodland debris, animal burrows, or in rock crevices. Species has been documented migrating approximately 2 miles between breeding and estivation sites.	**Not Expected.** While this species is known to occur within the GSA, no suitable habitat is present within the Noise Impact Area. Additionally, this species does not occur in the vicinity of the Noise Impact Area where noise form takeoff is highest.
Spadefoot Toads ***Scaphiopodidae***			
western spadefoot *Spea hammondii*	Federal: None State: SSC Local: None	Mixed woodland, grasslands, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Prefers washes and other sandy areas with patches of brush and rocks. Rain pools or shallow temporary pools, which do not contain bullfrogs, fish, or crayfish are necessary for breeding. Perennial plants necessary for its major food-termites.	**Not Expected.** While this species is known to occur within the GSA, no suitable habitat is present within the Noise Impact Area. Additionally, this species does not occur in the vicinity of the Noise Impact Area where noise form takeoff is highest.
True Toads ***Bufonidae***			
arroyo toad *Anaxyrus californicus*	Federal: FE State: SSC Local: None	Gravelly or sandy washes, stream and river banks, and arroyos where flow rates are great enough to keep silt and clay suspended. Found in desert wash, riparian scrub, riparian woodland, south coast flowing waters, and south coast standing waters. Shallow sandy pools bordered sand and gravel flood terraces are needed for breeding.	**Not Expected.** While this species is known to occur within the GSA, no suitable habitat is present within the Noise Impact Area. Additionally, this species does not occur in the vicinity of the Noise Impact Area where noise form takeoff is highest.
True Frogs ***Ranidae***			
California red-legged frog *Rana draytoni*	Federal: FT State: SSC Local: None	Aquatic habitats including pools and backwaters within streams and creeks,	**Not Expected.** While this species is known to occur within the GSA, no suitable habitat is present within the Noise Impact Area. Additionally, this species does not occur in the

Common Name ***Scientific Name***	**Sensitivity Status[1]**	**Preferred Habitat/Known Distribution[2]**	**Presence/Potential to Occur in the Noise Impact Area[3,4]**
		ponds, marshes, springs, sag ponds, dune ponds and lagoons.	vicinity of the Noise Impact Area where noise form takeoff is highest.
REPTILES			
Box & Water Turtles ***Emydidae***			
western pond turtle *Emys marmorata*	Federal: None State: SSC Local: None	Known to occur in slow-moving permanent or intermittent streams, ponds, small lakes, rivers, streams, marshes, irrigation ditches with abundant vegetation, reservoirs with emergent basking sites, and either rocky or muddy bottoms. In woodland, forest, or grassland habitats. In creeks that pool to shallower areas and with logs, rocks, cattail mats, and/or exposed banks for basking are required. Could enter brackish or even seawater. Adjacent uplands used during winter.	**Not Expected.** While this species is known to occur within the GSA, no suitable habitat is present within the Noise Impact Area. Additionally, this species does not occur in the vicinity of the Noise Impact Area where noise form takeoff is highest.
Spiny Lizards ***Phrynosomatidae***			
coast horned lizard *Phrynosoma blainvillii*	Federal: None State: SSC Local: None	Prefers sandy riparian and sage scrub habitats but also occurs in valley-foothill hardwood, conifer, pine-cypress, juniper and annual grassland habitats below 6,000 feet, open country, especially sandy areas, washes, flood plains, and windblown deposits. Requires open areas for sunning, bushes and loose soil for cover and abundant supply of harvester ants.	**Not Expected.** While this species is known to occur within the GSA, no suitable habitat is present within the Noise Impact Area. Additionally, this species does not occur in the vicinity of the Noise Impact Area where noise form takeoff is highest.
Whiptails & relatives ***Teiidae***			
coastal western whiptail *Aspidoscelis tigris stejnegeri*	Federal: None State: SSC Local: None	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland and riparian areas. Ground may be firm soil, sandy, or rocky.	**Not Expected.** While this species is known to occur within the GSA, no suitable habitat is present within the Noise Impact Area. Additionally, this species does not occur in the vicinity of the Noise Impact Area where noise form takeoff is highest.

Common Name ***Scientific Name***	**Sensitivity Status[1]**	**Preferred Habitat/Known Distribution[2]**	**Presence/Potential to Occur in the Noise Impact Area[3,4]**
Legless Lizards ***Anniellidae***			
southern California legless lizard [=silvery legless lizard] *Anniella stebbinsi* [=*Anniella pulchra*]	Federal: None State: SSC Local: None	Occurs in moist warm loose soil with plant cover. Moisture is essential. Occurs in sparsely vegetated areas of beach/coastal dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. Leaf litter under trees and bushes in sunny areas and dunes stabilized with bush lupine and mock heather often indicate suitable habitat. Often can be found under surface objects such as rocks, boards, driftwood, and logs. Can also be found by gently raking leaf litter under bushes and trees. Sometimes found in suburban gardens in Southern California.	**Not Expected.** While this species is known to occur within the GSA, no suitable habitat is present within the Noise Impact Area. Additionally, this species does not occur in the vicinity of the Noise Impact Area where noise form takeoff is highest.
Egg-Laying Snakes ***Colubridae***			
California glossy snake *Arizona elegans occidentalis*	Federal: None State: SSC Local: None	Inhabits arid scrub, rocky washes, and grasslands, and chaparral habitats. Appears to prefer microhabitats of open areas with friable soils for burrowing.	**Not Expected.** While this species is known to occur within the GSA, no suitable habitat is present within the Noise Impact Area. Additionally, this species does not occur in the vicinity of the Noise Impact Area where noise form takeoff is highest.
Live-Bearing Snakes ***Natricidae***			
two-striped garter snake *Thamnophis hammondii*	Federal: None State: SSC Local: None	Habitat includes marsh and swamp, riparian scrub, riparian woodland, and wetland. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	**Not Expected.** While this species is known to occur within the GSA, no suitable habitat is present within the Noise Impact Area. Additionally, this species does not occur in the vicinity of the Noise Impact Area where noise form takeoff is highest.
BIRDS			

Common Name ***Scientific Name***	**Sensitivity Status[1]**	**Preferred Habitat/Known Distribution[2]**	**Presence/Potential to Occur in the Noise Impact Area[3,4]**
Cuckoos & relatives ***Cuculidae***			
western yellow-billed cuckoo *Coccyzus americanus occidentalis*	Federal: FT, BCC State: SE Local: LACSB	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry nettles, or wild grape.	**Low Potential**. While there is suitable habitat for this species within the GSA, no suitable nesting or foraging habitat is present within the Noise Impact Area. However, this is a migratory species with the potential to occur within the Noise Impact Area. The closest known occurrence of this species is located in San Fernando approximately 6.1 miles northwest of the Noise Impact Area.
Rails, Coots, & Gallinules ***Rallidae***			
light-footed Ridgway's rail *Rallus obsoletus levipes*	Federal: FE State: SE, FP Local: LACSB	Found in salt marshes traversed by tidal sloughs, where cordgrass and pickleweed are the dominant vegetation. Requires dense growth of either pickleweed or cordgrass for nesting or escape cover. Feeds on molluscs and crustaceans.	**Not Expected.** While there is suitable habitat for this species within the GSA, no suitable habitat is present within the Noise Impact Area. This species is non-migratory and the closest known occurrence of this species is located along the coast within Point Mugu Naval Station approximately 43.5 miles west of the Noise Impact Area.
Plovers & relatives ***Charadriidae***			
western snowy plover *Charadrius nivosus nivosus*	Federal: FT, BCC State: SSC Local: LACSB	Found in Great Basin standing waters, sand shore, wetland. Sandy beaches, salt pond levees & shores of large alkali lakes. Requires sandy, gravelly, or friable soil substrate for nesting.	**Low Potential.** While there is suitable habitat for this species within the GSA, no suitable nesting or foraging habitat is present within the Noise Impact Area. However, this is a migratory species with potential to occur within the Noise Impact Area during takeoff. The closest known occurrence of this species is located along the coast near Marina del Rey and Palisades del Rey approximately 16.7 miles southwest of the Noise Impact Area.
Sandpipers & relatives ***Scolopacidae***			
California least tern *Sternula antillarum browni*	Federal: FE State: SE, FP Local: LACSB	Known to occur in alkali playas and coastal dune and beach habitats. Nests along the coast from San Francisco Bay south to northern Baja California. Colonial breeder on bare or sparsely	**Not Expected.** No suitable habitat is present within the GSA or Noise Impact Area and this species migrates along the coast outside of the GSA. The closest known occurrence of this species is located along the coast near Playa

Common Name ***Scientific Name***	**Sensitivity Status[1]**	**Preferred Habitat/Known Distribution[2]**	**Presence/Potential to Occur in the Noise Impact Area[3,4]**
		vegetated, flat substrates: sand beaches, alkali flats, landfills, or paved areas.	Vista approximately 15.2 miles southwest of the Noise Impact Area.
Auklets, Puffins, & relatives ***Alcidae***			
marbled murrelet *Brachyramphus marmoratus*	Federal: FT State: SE Local: None	Nests in old-growth redwood-dominated forests, up to six miles inland, often in Douglas-fir.	**Not Expected.** No suitable habitat is present within the GSA or Impact Area. There are no known occurrences of this species located within 200 miles of the Noise Impact Area. Additionally, this species migrates along the coast outside of the GSA.
New World Vultures ***Cathartidae***			
turkey vulture *Cathartes aura*	Federal: None State: None Local: LACSB	Highly migratory species that forages over a wide ranges of habitats as long as carrion is present. Nests in secluded rocky outcrops away from human activity.	**High Potential.** While no suitable nesting habitat is present for this species within the Noise Impact Area, suitable foraging habitat is present if carrion is present. Additionally, this is a highly migratory species that is known to occur throughout the GSA.
California condor *Gymnogyps californianus*	Federal: FE State: SE, FP Local: LACSB	Scavenge for carrion in habitats ranging from Pacific beaches to mountain forests and meadows. They nest in caves on cliff faces in mountains up to 6,000 feet in elevation.	**Low Potential.** While no suitable habitat is present within Noise Impact Area and this species is non-migratory. It is known to travel over 100 miles in a day while foraging and fly at altitudes of up to 15,000 feet. The closest known occurrence of this species is located in Hopper Mountain National Wildlife Refuge approximately 30 miles northwest of the Noise Impact Area.
Hawks, Kites, Harriers, & Eagles ***Accipitridae***			
Cooper's hawk *Accipiter cooperii*	Federal: None State: WL Local: None	Inhabits cismontane woodland, riparian forest, riparian woodland, upper montane coniferous forest, or other forest habitats near water. Nests and forages near open water or in riparian vegetation.	**High Potential.** Suitable nesting habitat is present within the Noise Impact Area.
Swainson's hawk *Buteo swainsoni*	Federal: BCC State: ST Local: LACSB	Found in Great Basin grassland, riparian forest, riparian woodland, valley and foothill grassland. Breeds in grasslands with scattered trees, juniper-sage flats,	**Low Potential.** No suitable nesting habitat is present within the Noise Impact Area. However, an individual was observed within the Pierce Brothers Valhalla Memorial Park and Mortuary

Common Name ***Scientific Name***	**Sensitivity Status[1]**	**Preferred Habitat/Known Distribution[2]**	**Presence/Potential to Occur in the Noise Impact Area[3,4]**
		riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	just south of BUR Airport in 2011 (AMEC 2014). This individual was assumed to be a passing migrant as this species is not known to nest within the GSA.
white-tailed kite *Elanus leucurus*	Federal: None State: FP Local: LACSB	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes nest to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	**Low Potential.** While there is suitable habitat for this species within the GSA, no suitable habitat is present within the Noise Impact Area and this species is non-migratory. The closest known occurrence of this species is located in in Santa Clarita along the Santa Clara River approximately 19.3 miles northwest of the Noise Impact Area.
True Owls ***Strigidae***			
California spotted owl *Strix occidentalis occidentalis*	Federal: FPE State: SSC Local: LACSB	Inhabits conifer forests and oak woodlands.	**Not Expected.** While there is suitable habitat for this species within the GSA, no suitable habitat is present within or surrounding the Noise Impact Area. The closest known suitable habitat is present approximately 12 miles north of the Noise Impact Area within the Santa Susana and San Gabriel Mountains portions of the GSA. Additionally, this species is non-migratory and not known to fly at high altitudes.
burrowing owl *Athene cunicularia*	Federal: BCC State: SSC Local: LACSB	Inhabits coastal prairie, coastal scrub, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, annual and perennial grasslands, bare ground, and disturbed habitats characterized by low-growing vegetation. A subterranean nester dependent upon burrowing mammals, particularly the California ground squirrel.	**Not Expected.** While there is suitable habitat for this species within the GSA, no suitable nesting or foraging habitat is present within the Noise Impact Area. Limited suitable habitat is present within BUR Airport as there is presence of California ground squirrel burrows. However, no burrowing owl were observed during the 2018 field assessment conducted at BUR Airport (FAA 2021). Additionally, this species is non-migratory and not known to fly at high altitudes.
Falcons ***Falconidae***			
prairie falcon *Falco mexicanus*	Federal: BCC State: WL	Inhabits dry, open terrain, either level or hilly such as grassland, rangeland, agriculture, desert scrub, and alpine	**Not Expected.** No suitable habitat is present within or surrounding the Noise Impact Area. The closest known suitable habitat is present

Common Name ***Scientific Name***	**Sensitivity Status[1]**	**Preferred Habitat/Known Distribution[2]**	**Presence/Potential to Occur in the Noise Impact Area[3,4]**
	Local: LACSB	meadows. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	approximately 12 miles north of the Noise Impact Area on the northern side of the Santa San Gabriel Mountains outside of the GSA. Additionally, this species is non-migratory.
American kestrel *Falco sparverius*	Federal: None State: None Local: LACSB	Inhabits open terrain, agriculture, cities, and wood edges. Will occur in any kind of open or semi-open habitat, from forest clearings to agriculture to desert, wherever it can find adequate prey and raised perches.	**High Potential.** Suitable nesting habitat is present within the Noise Impact Area. Additionally, this is a migratory species that is known to occur throughout the GSA.
Tyrant Flycatchers ***Tyrannidae***			
southwestern willow flycatcher *Empidonax traillii extimus*	Federal: FE State: SE Local: LACSB	For nesting, species requires dense riparian habitats (cottonwood/willow and tamarisk vegetation) with microclimatic conditions dictated by the local surroundings. Saturated soils, standing water, or nearby streams, pools, or cienegas are a component of nesting habitat that also influences the microclimate and density vegetation component. Habitat not suitable for nesting may be used for migration and foraging. Recurrent flooding and a natural hydrograph are important to withstand invading exotic species (tamarisk).	**Low Potential.** While there is suitable habitat for this species present within GSA, no suitable nesting or foraging habitat is present within the Noise Impact Area. However, this is a migratory species with the potential to occur within the Noise Impact Area during takeoff. The closest known occurrence of this species is located within Pasadena approximately 7.0 miles east of the Noise Impact Area.
Vireos ***Vireonidae***			
least Bell's vireo *Vireo bellii pusillus*	Federal: FE State: SE, SSC Local: LACSB	Known to occur in riparian forest, scrub, and woodland habitats. Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2,000 feet. Highly territorial and nests primarily in willow, mule fat, or mesquite habitats.	**Low Potential.** While there is suitable habitat for this species present within GSA, no suitable nesting or foraging habitat is present within the Noise Impact Area. However, this is a migratory species with the potential to occur within the Noise Impact Area during takeoff. The closest known occurrences of this species are located along the Los Angeles River approximately 3.2 miles southeast of the Noise Impact Area and Hanson Dam approximately 3.6 miles north of the Noise Impact Area.

Common Name ***Scientific Name***	**Sensitivity Status[1]**	**Preferred Habitat/Known Distribution[2]**	**Presence/Potential to Occur in the Noise Impact Area[3,4]**
Gnatcatchers ***Polioptilidae***			
coastal California gnatcatcher *Polioptila californica californica*	Federal: FT State: SSC Local: LACSB	Species is an obligate, permanent resident of coastal sage scrub habitats dominated by California sagebrush and flat-topped buckwheat, mainly on cismontane slopes below 1,500 feet in elevation. Low coastal sage scrub in arid washes, on mesas and slopes.	**Not Expected.** While suitable habitat for this species is present within the GSA, no suitable habitat is present within or surrounding the Noise Impact Area. The closest known suitable habitat is present approximately 1.2 miles east of the Noise Impact Area along the west side of the Verdugo Mountains. Additionally, this species is non-migratory.
Sparrows ***Passerellidae***			
southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	Federal: None State: WL Local: LACSB	Known to frequent relatively steep, often rocky hillsides with grass and forb species. Resident in southern California coastal sage scrub and mixed chaparral habitats.	**Not Expected.** While suitable habitat for this species is present within the GSA, no suitable habitat is present within or surrounding the Noise Impact Area. The closest known suitable habitat is present approximately 5.6 miles south of the Noise Impact Area just south of Hollywood Reservoir. Additionally, this species is non-migratory.
Yellow-Breasted Chats ***Icteriidae***			
yellow-breasted chat *Icteria virens*	Federal: None State: SSC Local: LACSB	Known to occur with riparian forest, scrub, and woodland habitats. Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 feet of ground.	**Low Potential.** While suitable habitat is present within the GSA, no suitable habitat is present within the Noise Impact Area. However, this is a migratory species with the potential to occur within the Noise Impact Area during takeoff. The closest known occurrence of this species is located within Santa Fe Dam Open Space approximately 3.2 miles southeast of the Noise Impact Area and Hanson Dam approximately 22.3 miles east of the Noise Impact Area.
Blackbirds ***Icteridae***			
tricolored blackbird *Agelaius tricolor*	Federal: None State: ST; SSC Local: LACSB	Known to occur in freshwater marsh, marsh, swap, and wetland. Highly colonial species, most numerous in Central Valley and vicinity. Requires open water, protected nesting substrate,	**Not Expected.** While suitable habitat for this species is present within the GSA, no suitable habitat is present within or surrounding the Noise Impact Area. The closest known occurrence is located approximately 15.3 miles

Common Name ***Scientific Name***	**Sensitivity Status[1]**	**Preferred Habitat/Known Distribution[2]**	**Presence/Potential to Occur in the Noise Impact Area[3,4]**
		and foraging area with insect prey within a few kilometers of the colony.	west of the Noise Impact Area within Chatsworth Nature Preserve and Reservoir. Additionally, this species is non-migratory.
Wood-Warblers ***Parulidae***			
yellow warbler *Setophaga petechia*	Federal: None State: SSC Local: LACSB	Found in riparian forest, scrub, and woodland. Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	**Low Potential.** While suitable habitat for this species is present within the GSA, no suitable habitat is present within or surrounding the Noise Impact Area. However, this is a migratory species with the potential to occur within the Noise Impact Area during takeoff. The closest known occurrence of this species is located along Big Tujunga Creek approximately 10.3 miles northeast of the Noise Impact Area.
MAMMALS			
Evening Bats ***Vespertilionidae***			
pallid bat *Antrozous pallidus*	Federal: None State: SSC Local: None	Occurs in a wide variety of habitats including chaparral, coastal scrub, desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, riparian woodland, Sonoran desert scrub, upper montane coniferous forest, valley and foothill grasslands. Most common in open, dry habitats with rocky areas for roosting. For roosting, rocky outcrops, cliffs and crevices with access to open habitats for foraging. Roosts must protect species from high temperatures. Very sensitive to disturbance of roosting sites.	**Not Expected.** While suitable habitat for this species is present within the GSA, no suitable habitat is present within or surrounding the Noise Impact Area. The closest known occurrence is located approximately 1.7 miles south of the Noise Impact Area within North Hollywood. While this species is non-migratory, it forages near the ground up to 3 miles from day roosts.
Townsend's big-eared bat *Corynorhinus townsendi*	Federal: None State: SSC Local: None	Throughout California in a wide variety of habitats, including broadleaved upland forest, chaparral, chenopod scrub, Great Basin grassland, Great Basin scrub, Joshua tree woodland, lower montane coniferous forest, meadow and seep, Mojavean desert scrub, riparian forest, riparian woodland, Sonoran desert scrub, Sonoran thorn woodland, upper montane coniferous	**Not Expected.** While suitable habitat for this species is present within the GSA, no suitable habitat is present within or surrounding the Noise Impact Area. The closest known occurrence is located approximately 4.8 miles north of the Noise Impact Area along the foothills of the San Gabriel Mountains. While this species is non-migratory, it forages near the ground up to 10 miles from day roosts.

Common Name ***Scientific Name***	**Sensitivity Status[1]**	**Preferred Habitat/Known Distribution[2]**	**Presence/Potential to Occur in the Noise Impact Area[3,4]**
		forest, valley and foothill grassland. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings; tree cavities, mines, and caves. Roosting sites limiting. Extremely sensitive to human disturbance.	
spotted bat *Euderma maculatum*	Federal: None State: SSC Local: None	Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests. Feeds over water and along washes. Feeds almost entirely on moths. Needs rock crevices in cliffs or caves for roosting.	**Not Expected.** While suitable habitat for this species is present within the GSA, no suitable habitat is present within or surrounding the Noise Impact Area. The closest known occurrence is located approximately 22.1 miles southwest of the Noise Impact Area within the Santa Monica Mountains. Limited information is available regarding migration, but it is thought that some bats migrate south for the winter.
silver-haired bat *Lasionycteris noctivagans*	Federal: None State: CSA Local: None	Associated with coniferous, mixed coniferous and deciduous forests, especially in old growth forests. They form maternity colonies almost exclusively in tree cavities or small hollows.	**Low Potential.** While suitable habitat for this species is present within the GSA, no suitable habitat is present within or surrounding the Noise Impact Area. However, this is a migratory species with the potential to occur within the Noise Impact Area during takeoff. The closest known occurrence of this species is located within Van Nuys approximately 3.9 miles west of the Noise Impact Area
hoary bat *Lasiurus cinereus*	Federal: None State: CSA Local: None	Inhabits broadleaved upland forest, cismontane woodland, lower montane coniferous forest, and north coast coniferous forest.	**Moderate Potential.** While suitable habitat for this species is present within the GSA, limited suitable foraging habitat is present within the Noise Impact Area. This species is migratory and known to fly at altitudes of up to 9,800 feet above ground level (Voigt et al. 2018). Additionally, the closest known occurrences are located approximately 1.4 miles southeast and 3.6 miles southwest of the Noise Impact Area.
Free-Tailed Bats ***Molossidae***			
western mastiff bat *Eumops perotis californicus*	Federal: None State: SSC Local: None	Known to occur in habitat consisting of extensive open areas within dry desert washes, flood plains, chaparral, cismontane oak woodland, coastal scrub, open ponderosa pine forest, and grasslands. Roosts primarily in crevices in rock outcrops and buildings.	**Low Potential.** While suitable habitat for this species is present within the GSA, limited suitable foraging habitat is present within the Noise Impact Area. The closest known occurrences of this species are located approximately 5.5 miles southwest of the Noise Impact Area within Glendale, which is outside

Common Name ***Scientific Name***	**Sensitivity Status[1]**	**Preferred Habitat/Known Distribution[2]**	**Presence/Potential to Occur in the Noise Impact Area[3,4]**
			of the GSA, and 5.9 miles south of the Noise Impact Area within Hollywood.
big free-tailed bat *Nyctinomops macrotis*	Federal: None State: SSC Local: None	Low-lying arid areas in Southern California within habitats such as desert shrub, woodlands, and evergreen forests. Need high cliffs or rugged, rocky outcrops or canyons for roosting sites. Feeds principally on large moths.	**Low Potential.** While suitable habitat for this species is present within the GSA, limited suitable foraging habitat is present within the Noise Impact Area. This is a migratory species with the potential to occur within the Noise Impact Area during takeoff although it is not known to fly at high altitudes. The closest known occurrence of this species is located approximately 1.5 miles southeast of the Noise Impact Area within Burbank.
Rabbits, Hares & Pikas ***Leporidae***			
San Diego black-tailed jackrabbit *Lepus californicus bennettii*	Federal: None State: SSC Local: None	Inhabits open grasslands, agricultural fields, and sparse coastal scrub where they occur primarily in arid regions with short grass.	**Not Expected.** While this species is known to occur within the GSA, no suitable habitat is present within the Noise Impact Area. Additionally, this species does not occur in the vicinity of the Noise Impact Area where noise from takeoff is highest.
Pocket Mice & Kangaroo Rats ***Heteromyidae***			
Los Angeles pocket mouse *Perognathus longimembris brevinasus*	Federal: None State: SSC Local: None	Found in lower elevation grasslands and coastal sage scrub communities.	**Not Expected.** While this species is known to occur within the GSA, no suitable habitat is present within the Noise Impact Area. Additionally, this species does not occur in the vicinity of the Noise Impact Area where noise from takeoff is highest.
Mice, Rats, & Voles ***Cricetidae***			
San Diego desert woodrat *Neotoma lepida intermedia*	Federal: None State: SSC Local: None	Found in a variety of coastal scrub, desert scrub, chaparral, cactus, and rocky habitats. Nests primarily against rock outcroppings, boulders, cacti, or areas of dense undergrowth.	**Not Expected.** While this species is known to occur within the GSA, no suitable habitat is present within the Noise Impact Area. Additionally, this species does not occur in the vicinity of the Noise Impact Area where noise from takeoff is highest.

Common Name ***Scientific Name***	**Sensitivity Status[1]**	**Preferred Habitat/Known Distribution[2]**	**Presence/Potential to Occur in the Noise Impact Area[3,4]**
Weasels & relatives ***Mustelidae***			
American badger *Taxidea taxus*	Federal: None State: SSC Local: None	Found in a variety of habitats, including alkali marsh, desert wash, Great Basin scrub, marsh and swamp, meadow and seep, Mojavean desert scrub, riparian scrub, riparian woodland, valley and foothill grassland. Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils, and open, uncultivated ground to dig burrows. Preys on burrowing rodents.	**Not Expected.** While this species is known to occur within the GSA, no suitable habitat is present within the Noise Impact Area. Additionally, this species does not occur in the vicinity of the Noise Impact Area where noise from takeoff is highest.
Cats ***Felidae***			
mountain lion - Southern California/Central Coast ESU *Puma concolor*	Federal: None State: SCT Local: None	Prefers large, unfragmented habitats such as mountains, forests, and deserts.	**Not Expected.** While this species is known to occur within the GSA, no suitable habitat is present within the Noise Impact Area. Additionally, this species does not occur in the vicinity of the Noise Impact Area where noise from takeoff is highest.

[1] **Sensitivity Status**

Federal (USFWS)

FE	*Federally Endangered*
FT	*Federally Threatened*
FPE	*Federally Proposed as Endangered*
FPT	*Federally Proposed as Threatened*
FC	*Federal Candidate*

State

CSA	*California Special Animal*
FP	*Fully Protected*
SE	*State Endangered*
ST	*State Threatened*
SCE	*State Candidate as Endangered*
SCT	*State Candidate as Threatened*
SSC	*State Species of Special Concern*
WL	*Watch List*

Local

Los Angeles County Sensitive Bird List

[2] **Sources for Preferred Habitat:**

CDFW. 2023a. California Natural Diversity Database (CNDDB). RareFind, Version 5.0 (Commercial Subscription). Sacramento, California: CDFW, Biogeographic Data Branch. Available online at: https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data. Accessed on August 24, 2023.

CDFW. 2023b. California Wildlife Habitat Relationships. Available online at: https://wildlife.ca.gov/Data/CWHR/Life-History-and-Range. Accessed on August 24, 2023.

Comstock, J.A. 1939. The fauna and flora of the El Segundo sand dunes [contd.]. Bulletin of the Southern California Academy of Sciences 38. p. 112.

Rourke, K. 2023. Pollinator of the Month: The American Bumble Bee (*Bombus pensylvanicus*). Pollinator Partnership. https://www.fs.usda.gov/wildflowers/pollinators/pollinator-of-the-month/american-bumble-bee.shtml. Accessed on August 24, 2023.

[3] **Potential to Occur Criteria:**

- **Not Expected:** Suitable habitat for the species is not present within the GSA.
- **Low Potential:** The GSA supports limited habitat for a particular species. For example, the appropriate vegetation assemblage may be present while the substrate preferred by the species may be absent.
- **Moderate Potential:** Marginal habitat for a particular species may exist. For example, the habitat may be heavily disturbed and/or may not support all stages of a species' life cycle; or may not fit all preferred habitat characteristics.
- **High Potential:** The GSA provides suitable habitat conditions for a particular species and/or known populations occur in the immediate vicinity.

[4] **Noise Impact Area:** this area is located in Burbank where noise impacts resulting from Alternative 3 are expected to occur.

Additional Sources:

AMEC (AMEC Environment & Infrastructure, Inc.) 2014. Bob Hope Airport Wildlife Hazard Management Plan. Prepared for Bob Hope Airport in May 2014.

FAA (Federal Aviation Administration). 2021. Final Environmental Impact Statement: Proposed Replacement Passenger Terminal Project for Bob Hope "Hollywood Burbank" Airport, Burbank, Los Angeles County, California. https://bobhopeairporteis.com/documents-resources-and-reports/#reports.

Voigt, C.C., S. E. Currie, M. Fritze, M. Roeleke, and O. Lindecke. 2018. Conservation Strategies for Bats Flying at High Altitudes. BioScience: 68 (6). P. 427-435.

Source: ESA 2023.

APPENDIX H – LIST OF PUBLICLY-OWNED PARKS AND RECREATIONAL PROPERTIES WITHIN GSA

ID	Name	Latitude (DD)	Longitude (DD)	LAT (DMS)	LONG (DMS)
1	Whitnall Highway Park North	34.17091786	-118.3549081	34°10'15.304296000012"	-118°21'17.669160000012"
2	Los Encinos State Historic Park	34.15997118	-118.4990725	34°9'35.8962479999982"	-118°29'56.660999999988"
3	Santa Susana Pass State Historic Park	34.26268678	-118.6243965	34°15'45.672408000012"	-118°37'27.827400000012"
4	Topanga State Park	34.09765907	-118.5486737	34°5'51.5726519999958"	-118°32'55.225319999982"
5	Will Rogers State Historic Park	34.05980168	-118.5121261	34°3'35.2860479999988"	-118°30'43.653960000012"
6	Griffith Park	34.13900236	-118.3236919	34°8'20.408495999997"	-118°19'25.29084"
7	Michael D Antonovich Open Space	34.34033257	-118.5238855	34°20'25.197252000006"	-118°31'25.987800000018"
8	Mission Canyon Open Space	34.1203231	-118.4908082	34°7'13.1631600000006"	-118°29'26.909520000012"
9	Rim of the Valley County Parkland	34.33365748	-118.4579178	34°20'11.66928"	-118°27'28.504080000012"
10	Michael D Antonovich Open Space Preserve	34.32822826	-118.5372687	34°19'41.621736000012"	-118°32'14.167319999994"
11	Michael D. Antonovich Regional Park at Joughin Ranch	34.3164942	-118.615305	34°18'59.379120000006"	-118°36'55.098000000024"
12	Mulholland Gateway Park	34.13638272	-118.5601458	34°8'10.9777920000012"	-118°33'36.52488"
13	Rocky Peak Park	34.30495643	-118.6443044	34°18'17.843147999988"	-118°38'39.495839999982"
14	Santa Clarita Woodlands Park	34.35563547	-118.5842718	34°21'20.287692000012"	-118°35'33.78479999988"
15	Summit Valley Edmund D. Edelman Park	34.12638872	-118.5893859	34°7'34.9993920000048"	-118°35'21.789239999988"
16	Westridge-Canyonback Wilderness Park	34.11080288	-118.5099435	34°6'38.8903680000048"	-118°30'35.796600000018"
17	Wilson Canyon Park	34.33372573	-118.4416513	34°20'14.12627999994"	-118°26'29.944680000012"
18	L.A. County Sanitation District Open Space	34.11138486	-118.5324318	34°6'40.9854960000042"	-118°31'56.754479999994"
19	Sepulveda Basin Wildlife Reserve	34.17634255	-118.4798099	34°10'34.833180000006"	-118°28'47.315640000024"
20	Angeles National Forest	34.34582018	-118.397261	34°20'44.952647999988"	-118°23'50.1396"
21	Franklin Canyon Park	34.11278934	-118.4116533	34°6'46.0416239999964"	-118°24'41.951879999994"
22	Fryman Canyon Park	34.12439236	-118.3841314	34°7'27.812496000006"	-118°23'28.73040000006"
23	Santa Monica Mountains National Recreation Area	34.1262853	-118.5772972	34°7'34.6270799999976"	-118°34'38.269920000012"
24	Balboa Golf Course & Encino Golf Course	34.17219897	-118.4923195	34°10'19.916291999988"	-118°29'32.350199999976"
25	Balboa Sports Center	34.17624468	-118.5034014	34°10'34.480848000012"	-118°30'12.245040000006"
26	Barrington Recreation Center	34.06134998	-118.4692126	34°3'40.8599280000102"	-118°28'9.165360000024"
27	Benedict Canyon Open Space	34.11043495	-118.4350379	34°6'37.565819999994"	-118°26'6.136439999994"
28	Beverly Gardens Park	34.07596601	-118.3973599	34°4'33.4776360000066"	-118°23'50.495639999994"
29	Beverly Glen Park	34.11303146	-118.4425123	34°6'46.9132560000072"	-118°26'33.044280000018"
30	Beverly Park Estates Open Space	34.12770424	-118.4170928	34°7'39.7352639999994"	-118°25'15.34080000024"
31	BLM	34.35943647	-118.6202345	34°21'33.971291999994"	-118°37'12.844199999982"
32	Branford Park	34.23208754	-118.4229841	34°13'55.515144000006"	-118°25'22.742759999976"
33	Briar Summit Open Space Preserve	34.12455649	-118.3667936	34°7'28.403364000012"	-118°22'45.6959999976"
34	Cahuenga Pass-Oakshire Open Space	34.12675733	-118.3561911	34°7'36.326387999988"	-118°21'22.287960000012"
35	Canyon Oaks Open Space Access	34.12500545	-118.6029453	34°7'30.019620000012"	-118°36'10.603080000006"
36	Castilian MRCA Open Space	34.11000263	-118.3437977	34°6'36.0094679999886"	-118°20'37.671719999988"
37	Cold Creek Valley Preserve	34.27600184	-118.5831644	34°16'33.606624"	-118°34'59.391840000006"
38	Coldwater Canyon Park	34.09061803	-118.4116037	34°5'26.224908000006"	-118°24'41.77332"
39	Corbin Canyon Open Space	34.15188451	-118.5672362	34°9'6.7842360000078"	-118°34'20.50319999988"
40	Deer Lake Highlands	34.28495332	-118.5989108	34°17'58.31952"	-118°35'56.078879999994"
41	Dexter Park	34.29514973	-118.3739239	34°17'42.539027999994"	-118°22'26.126039999976"
42	Dirt Mulholland	34.12910189	-118.5278393	34°7'44.7668040000042"	-118°31'40.221479999988"
43	Dixie Canyon Park	34.13345698	-118.4239286	34°8'44.5127999994"	-118°25'26.142959999988"
44	Dr. Richard H Rioux Memorial Park	34.39084497	-118.5931847	34°23'27.041892000012"	-118°35'35.464919999982"
45	Elrita Bowl Adjacent Open Space	34.1177109	-118.3729725	34°7'37.592399999952"	-118°22'22.701000000012"
46	Elsmere Canyon Park	34.35553091	-118.4999325	34°21'19.911275999994"	-118°29'59.757"
47	Encino Reservoir - Federal	34.12969461	-118.5138048	34°7'46.9005960000048"	-118°30'49.697280000012"
48	Fernangeles Recreation Center	34.22910231	-118.4022476	34°13'44.768316000006"	-118°24'8.091359999982"
49	Flood Control	34.33041224	-118.4441331	34°19'49.484064000006"	-118°26'38.879160000006"
50	Fossil Ridge Park	34.13713396	-118.4423128	34°8'13.6822559999994"	-118°26'32.326079999988"
51	Gothic Rinaldi Park	34.27800621	-118.4813062	34°16'40.822356000006"	-118°28'52.702320000024"
52	Granada Hills Park	34.26288013	-118.4967863	34°15'46.368468"	-118°29'48.430679999988"
53	Greystone Park	34.09218632	-118.4012895	34°5'31.870752000012"	-118°24'46.42200000018"
54	Hasley Canyon Park	34.45205799	-118.6197233	34°27'7.408764"	-118°37'11.003880000012"
55	Hilton Open Space	34.10233676	-118.4978188	34°6'8.412336"	-118°29'52.147680000018"
56	Hilton Open Space	34.0886777	-118.4996833	34°5'19.2397199999928"	-118°29'58.859880000006"
57	Hjelte Sports Center	34.16684148	-118.485079	34°10'6.29328000006"	-118°29'6.284399999994"
58	Holmby Park	34.07257169	-118.429563	34°4'21.258083999988"	-118°25'46.426800000006"
59	Jake Kuredjian Park	34.38165741	-118.5806883	34°22'53.966676000012"	-118°34'50.477880000018"
60	Johnny Carson Park	34.15392377	-118.3293165	34°9'14.1255719999952"	-118°19'45.539400000018"
61	Johnny Carson Park	34.154457	-118.3299515	34°9'16.0452000000024"	-118°19'47.825400000024"
62	Kenter Canyon Open Space of LA	34.08375582	-118.4855172	34°5'15.209520000012"	-118°29'7.861920000012"
63	Kings Road Park	34.08899981	-118.371302	34°5'20.3993159999898"	-118°22'16.6872"
64	Lake Balboa Park	34.18169553	-118.4939506	34°10'54.103907999994"	-118°29'38.222160000018"
65	Lake Hollywood MRCA Open Space	34.11540245	-118.3321629	34°6'55.4488199999916"	-118°19'55.78644"
66	Larry Maxam Park	34.18897779	-118.3523611	34°11'20.320044000012"	-118°21'8.499959999988"
67	Las Palmas Park	34.28643836	-118.4506911	34°17'11.178095999994"	-118°27'24.8796"
68	Layne Park	34.28910821	-118.4440886	34°17'20.789556000006"	-118°26'38.71896"
69	Libbit Park	34.1632099	-118.4895562	34°9'47.5556399999934"	-118°29'22.402319999982"
70	Limekiln Canyon Park	34.28699595	-118.5598673	34°17'13.185419999994"	-118°33'35.522279999976"
71	Lopez Reservoir and Dam	34.30681943	-118.4098795	34°18'24.549947999988"	-118°24'35.566200000006"
72	Los Angeles City Water Resource Parkland	34.0928711	-118.4944597	34°5'34.3359600000126"	-118°29'40.054919999976"
73	Los Angeles County Open Space	34.10883028	-118.5928325	34°6'31.7890079999976"	-118°35'34.197"
74	Los Angeles Department of Water and Power	34.12821643	-118.3374036	34°7'41.5791480000072"	-118°20'14.652960000006"
75	Maltz Park	34.07668958	-118.4201423	34°4'36.082488"	-118°25'12.512279999982"
76	Mandeville Canyon Open Space	34.0956555	-118.5038707	34°5'44.3597999999982"	-118°30'13.934519999976"

77	Mandeville Canyon Park	34.09823174	-118.5081991	34°5'53.6342640000102"	-118°30'29.516759999994"
78	Mandeville East Open Space	34.10186266	-118.5017916	34°6'6.7055760000066"	-118°30'6.449760000018"
79	Mandeville Open Space	34.08655672	-118.5088417	34°5'11.6041919999904"	-118°30'31.830120000018"
80	Mountain View Park	34.15819943	-118.316006	34°9'29.517948000012"	-118°18'57.621600000006"
81	Mountains Restoration Trust Parkland	34.10863065	-118.4404927	34°6'31.0703400000072"	-118°26'25.773719999976"
82	MRCA Parkland	34.30057309	-118.5997236	34°18'20.63124"	-118°35'59.004960000018"
83	Mulholland Adjacent Open Space	34.12713782	-118.3608573	34°7'37.6961520000054"	-118°21'39.086280000024"
84	Mulholland Gateway Park of Los Angeles	34.13583407	-118.5628141	34°8'9.0026520000048"	-118°33'46.130759999988"
85	Oak Forest Canyon Natural Area	34.1362941	-118.4459341	34°8'10.6587600000024"	-118°26'45.362760000006"
86	Oak Forest West Access	34.13906284	-118.445712	34°8'20.6262240000042"	-118°26'44.5632"
87	Old Orchard Park	34.37983361	-118.5477116	34°22'47.400995999994"	-118°32'51.76176"
88	Parma Open Space	34.10714913	-118.4340324	34°6'25.736868000012"	-118°26'25.16640000024"
89	Paxton Park	34.26878428	-118.4379982	34°16'7.623407999994"	-118°26'16.793519999982"
90	Pioneer Park	34.29435327	-118.4313461	34°17'39.671772000006"	-118°25'52.845959999994"
91	Plummer Park	34.09257592	-118.3510675	34°5'33.273312000006"	-118°21'38.43"
92	Ralph Foy Park	34.1857068	-118.3460449	34°11'8.544479999994"	-118°20'45.761639999982"
93	Robert E Lundigan Park	34.19603189	-118.3405182	34°11'45.714804"	-118°20'25.865520000018"
94	Rocky Peak Adj. Tax Default	34.27304272	-118.632306	34°16'22.953792"	-118°37'56.3016"
95	San Vicente Mountain Park	34.12832884	-118.5132602	34°7'41.9838240000066"	-118°30'47.736720000018"
96	Santa Monica Mountains National Recreation Area	34.13844648	-118.6052149	34°8'18.4073279999964"	-118°36'18.773639999976"
97	Sepulveda Basin Recreation Area	34.1778329	-118.4994057	34°10'40.198439999994"	-118°29'57.860519999988"
98	Sepulveda Garden Center	34.16616971	-118.4957849	34°9'58.210955999994"	-118°29'44.825640000012"
99	Sepulveda Pass Open Space	34.11879519	-118.4748695	34°7'7.6626840000006"	-118°28'29.530199999988"
100	Sepulveda Pass Open Space	34.12461991	-118.4755392	34°7'28.6316759999994"	-118°28'31.94112"
101	Studio City Park	34.15225901	-118.4084206	34°9'8.132436000006"	-118°24'30.31416"
102	Sullivan Canyon Creek & Dam	34.07477724	-118.5093789	34°4'29.1980640000108"	-118°30'33.764040000006"
103	Temescal Gateway Park	34.06128127	-118.5239583	34°3'40.6125720000072"	-118°31'26.249880000012"
104	Top of Topanga Overlook	34.13970396	-118.5997854	34°8'22.9342559999946"	-118°35'59.227440000006"
105	Topanga Canyon-Canyon Oaks Open Space	34.1355387	-118.6025278	34°8'7.9393199999922"	-118°36'9.100080000018"
106	Topanga Open Space	34.11019657	-118.5929066	34°6'36.7076519999976"	-118°35'34.463760000024"
107	Topanga State Park	34.05975479	-118.5158556	34°3'35.1172439999982"	-118°30'57.080159999982"
108	Valencia Meadows Park	34.39307858	-118.5556483	34°23'35.082888000006"	-118°33'20.333880000006"
109	Verdugo Park	34.16393264	-118.3397613	34°9'50.1575039999952"	-118°20'23.140680000024"
110	Vickroy Park	34.18626405	-118.3369929	34°11'10.550579999994"	-118°20'13.174439999994"
111	West Hollywood Park	34.08289072	-118.3844906	34°4'58.406592000006"	-118°23'41.66160000024"
112	Westridge-Canyonback Wilderness Park of LA	34.1184974	-118.5079202	34°7'6.590640000009"	-118°30'28.512720000006"
113	Wilacre Park	34.13390589	-118.4005259	34°8'20.612040000042"	-118°24'18.93240000018"
114	Will Rogers Memorial Park	34.08043242	-118.4125722	34°4'49.5567120000036"	-118°24'45.25992"
115	William S. Hart Regional Park	34.36862185	-118.5335511	34°22'7.038659999988"	-118°32'7.83959999988"
116	Woodley Avenue Park	34.18073428	-118.4764299	34°10'50.643408000012"	-118°28'35.14764"
117	Sheldon-Arleta Park	34.2269026	-118.4073407	34°13'36.849360000012"	-118°24'26.426520000024"
118	Deervale-Stone Canyon Park	34.14180161	-118.4560507	34°8'30.485796000006"	-118°27'21.782520000018"
119	Hansen Dam Golf Course	34.25928938	-118.3886424	34°15'33.441767999994"	-118°23'19.112639999982"
120	Pico Canyon Park	34.3775429	-118.5841856	34°22'39.154440000006"	-118°35'30.68159999994"
121	Heritage Park	34.29431561	-118.4441229	34°17'39.536195999994"	-118°26'38.842439999988"
122	Sal Guarriello Veterans' Memorial Fountain	34.09048044	-118.3748891	34°5'25.7295840000012"	-118°22'29.600760000018"
123	Granada Hills Youth Recreation Center	34.30745914	-118.4977689	34°18'26.852903999994"	-118°29'51.968039999988"
124	Unnamed site - Mountains Recreation and Conservation Authority	34.27415815	-118.5050028	34°16'26.969339999994"	-118°30'18.01008"
125	Unnamed site - Los Angeles, City of	34.26473713	-118.4437852	34°15'53.053668"	-118°26'37.626719999976"
126	Marson Park	34.2156369	-118.4657439	34°12'56.29284"	-118°27'56.678040000024"
127	Virginia Robinson Gardens	34.08662605	-118.4175208	34°5'11.8537799999982"	-118°25'30.74880000018"
128	Browns Canyon	34.29486782	-118.5915522	34°17'41.524152"	-118°35'29.587919999982"
129	Cahuenga Peak Phase 1	34.13665911	-118.3287956	34°8'11.9727959999874"	-118°19'43.664160000024"
130	Encino Reservoir	34.13856934	-118.517693	34°8'18.8496239999874"	-118°31'36.94799999982"
131	Dorothy J. and Benjamin B. Smith Park	34.10393284	-118.342889	34°6'14.1582239999958"	-118°20'34.4004"
132	Lake Hollywood Reservoir	34.12134787	-118.3315507	34°7'16.8523320000036"	-118°19'53.582519999976"
133	Nordhoff Park	34.23470665	-118.4869893	34°14'49.4394"	-118°29'13.161480000018"
134	Fossil Ridge Adjacent - McKinnon	34.1373209	-118.4457497	34°8'14.3552399999958"	-118°26'44.698919999976"
135	Unnamed site - Mountains Recreation and Conservation Authority	34.10877564	-118.4376128	34°6'31.592303999991"	-118°26'15.406079999988"
136	Unnamed site - Mountains Recreation and Conservation Authority	34.11228205	-118.4150073	34°6'44.215379999991"	-118°24'54.02628"
137	Lopez Canyon	34.31721755	-118.3842768	34°19'19.83180000006"	-118°23'33.96479999982"
138	Valencia Summit Park	34.40651088	-118.5577731	34°24'23.439167999994"	-118°33'27.983160000018"
139	Unnamed site - Santa Monica Mountains Conservancy	34.1303607	-118.5633089	34°7'49.2985199999898"	-118°33'47.912039999982"
140	Gates King Open Space	34.35062841	-118.5165527	34°21'22.62275999994"	-118°30'59.589720000018"
141	Placerita Golden Valley Ranch Open Space	34.36993582	-118.4286318	34°22'11.768952000006"	-118°25'43.074480000018"
142	Valley Park	34.17854058	-118.3581485	34°10'42.746088000012"	-118°21'29.334599999994"
143	Rivendale Ranch Open Space	34.36689441	-118.5724056	34°22'8.19876"	-118°34'20.660159999988"
144	Rivendale Ranch Open Space	34.35824695	-118.5599285	34°21'29.689020000006"	-118°33'35.742599999994"
145	Robert E. Gross Park	34.19119863	-118.3409183	34°11'28.315068000006"	-118°20'27.305879999994"
146	Round Mountain Open Space	34.42738211	-118.5757677	34°25'38.575596000012"	-118°34'32.76372"
147	Whitnall Highway Park South	34.16285075	-118.3432987	34°9'46.2626999999892"	-118°20'35.875320000018"
148	South Fork River Trail Open Space	34.38331824	-118.5505469	34°22'59.945664000006"	-118°33'19.6884"
149	Whitney Elsmere Open Space	34.34086154	-118.4947694	34°20'27.101543999994"	-118°29'41.169839999982"
150	Abraham Lincoln Park	34.16483895	-118.3306597	34°9'53.4202199999874"	-118°19'50.374919999994"
151	Whitney Elsmere Open Space	34.35935111	-118.4929451	34°21'33.663995999994"	-118°29'34.60236"
152	Unnamed site - Santa Monica Mountains Conservancy	34.17682699	-118.5693729	34°10'36.577164000006"	-118°34'9.742440000018"
153	Coldwater Canyon Open Space Park	34.13127545	-118.4133639	34°7'52.5916199999886"	-118°24'48.110039999976"

154	Devil Canyon Red Mesa	34.28242203	-118.6051901	34°16'56.719308"	-118°36'18.684360000006"
155	Rexford Reservoir	34.08323436	-118.4093171	34°4'59.6436959999952"	-118°24'33.541559999982"
156	Sierra Park	34.08915545	-118.3940723	34°5'20.9596199999994"	-118°23'38.660280000018"
157	Fryman Canyon Park	34.12536948	-118.3949863	34°7'31.330128000012"	-118°23'41.95068"
158	Fryman Canyon Natural Area	34.12284735	-118.3927842	34°7'22.2504600000024"	-118°23'34.023119999976"
159	Garden of the Gods	34.27324086	-118.6109988	34°16'23.667096000006"	-118°36'39.595680000018"
160	Serrania Park	34.14831401	-118.586794	34°8'53.930436"	-118°35'12.458399999994"
161	Ron Bishop & Judge Anderson Park	34.35178771	-118.6281177	34°21'6.435756000012"	-118°37'41.223720000018"
162	Ed Davis Park in Towsley Canyon	34.35548697	-118.5624358	34°21'19.753092000006"	-118°33'44.768880000012"
163	Mentryville	34.37808442	-118.6128928	34°22'41.103912"	-118°36'46.414079999988"
164	Getty View Park & Trailhead	34.09891374	-118.473559	34°5'56.0894640000012"	-118°28'24.812399999982"
165	Sheila Agnes Nature Preserve	34.12812541	-118.4387397	34°7'41.2514760000096"	-118°26'19.46292"
166	Whitney Canyon Park	34.36409488	-118.4870563	34°21'50.741568000012"	-118°29'13.402680000024"
167	Cesar Chavez Memorial	34.27989316	-118.4367253	34°16'47.615376"	-118°26'12.211080000024"
168	Longridge Park	34.13346766	-118.4208086	34°8'48.3576000003"	-118°25'14.910960000006"
169	Oak Forest West	34.14086645	-118.4451196	34°8'27.1192199999898"	-118°26'42.430559999994"
170	Trebek Open Space	34.11072293	-118.3580847	34°6'38.6025480000054"	-118°21'29.104920000024"
171	Los Angeles Riverfront Park	34.15053094	-118.4240467	34°9'19.113840000108"	-118°25'26.568120000018"
172	Stoney Point Park	34.27450879	-118.6017148	34°16'28.231643999994"	-118°36'6.173279999988"
173	Northridge City Little League	34.25873263	-118.541738	34°15'31.437467999988"	-118°32'30.256799999982"
174	Hansen Dam Equestrian Center	34.27128847	-118.3708053	34°16'16.638492000006"	-118°22'14.89908"
175	Hansen Dam Recreation Area	34.26686556	-118.3810053	34°16'7.16016"	-118°22'51.619079999994"
176	Orcas Gabrieleno Equestrian Park	34.2705091	-118.3675914	34°16'13.832759999994"	-118°22'33.29039999982"
177	Unnamed - Los Angeles County Flood Control District	34.26870484	-118.3527521	34°16'7.337423999994"	-118°21'9.907560000012"
178	Indian Springs Open Space	34.2827739	-118.6266055	34°16'57.986040000006"	-118°37'35.779799999988"
179	Los Angeles River and Aliso Creek Confluence Park	34.19130926	-118.5432845	34°11'28.713335999988"	-118°32'35.824199999994"
180	Gateway Ranch Open Space	34.35061538	-118.5352427	34°21'22.15368"	-118°32'6.873719999994"
181	Valley Vista Open Space	34.3436381	-118.5165894	34°20'37.09716"	-118°30'59.721840000006"
182	Santa Monica Mountains Conservancy Open Space	34.12116149	-118.3406854	34°7'16.1813639999952"	-118°20'26.467439999994"
183	Maple Street Playground	34.18082275	-118.3532883	34°10'50.961899999988"	-118°21'11.837880000012"
184	Runyon Canyon Park	34.11210976	-118.3513074	34°6'43.5951360000096"	-118°21'47.06639999988"
185	Havenhurst Park	34.09582479	-118.3677624	34°5'44.9692440000066"	-118°22'39.44640000012"
186	Formosa Park	34.091816	-118.3459196	34°5'30.5376000000054"	-118°20'45.310560000006"
187	El Cariso Community Regional Park	34.31711992	-118.4149732	34°19'16.31712000012"	-118°24'53.903520000018"
188	El Cariso Golf Course	34.31263505	-118.4136803	34°18'45.486179999988"	-118°24'49.249079999982"
189	John Anson Ford Amphitheatre and County Parkland	34.11444	-118.3340049	34°6'51.9840000000066"	-118°20'24.17639999988"
190	Placerita Canyon State Park	34.37061259	-118.446232	34°22'14.205324"	-118°26'46.435199999982"
191	Veterans Memorial Community Regional Park	34.32682861	-118.4168993	34°19'36.582996"	-118°25'8.37479999988"
192	West Lakeside Street Park	34.29810109	-118.4721966	34°17'53.163924000012"	-118°28'19.907760000012"
193	Pacoima Wash Natural Park	34.29497812	-118.4202961	34°17'41.921232000012"	-118°25'13.065960000006"
194	Wildwood Canyon Open Space	34.36095265	-118.535453	34°21'39.429540000006"	-118°32'7.630800000012"
195	Highland Camrose Park	34.11299198	-118.3397869	34°6'46.7711279999886"	-118°20'23.232839999976"
196	Santa Monica Mountains National Recreation Area	34.13466474	-118.6009741	34°8'47.930639999928"	-118°36'35.06760000006"
197	Knollwood Golf Course	34.29196001	-118.497393	34°17'31.056035999988"	-118°29'50.614800000006"
198	Knollwood Pool	34.28877947	-118.4997567	34°17'19.606092000006"	-118°29'59.124120000024"
199	Laurel Park	34.09558287	-118.3648012	34°5'44.0983320000042"	-118°21'53.284320000006"
200	Newhall Pass_Plourde	34.35670215	-118.5360677	34°21'24.127739999988"	-118°32'9.843720000012"
201	Van Nuys Golf Course	34.1902715	-118.4885085	34°11'24.977400000006"	-118°29'18.630599999982"
202	Woodley Lakes Golf Course	34.17982514	-118.4877919	34°10'47.370503999994"	-118°29'16.050840000018"
203	Cahuenga Pass Open Space	34.12176258	-118.3431685	34°7'18.3452880000078"	-118°20'35.406600000018"
204	Unnamed site - Los Angeles, County of	34.11361946	-118.5829222	34°6'49.030056000009"	-118°34'58.519919999994"
205	Rancho Simi Recreation and Park District Open Space	34.26416589	-118.6329052	34°15'50.997204000006"	-118°37'58.458719999988"
206	Chatsworth Nature Preserve	34.23440363	-118.6180664	34°14'38.53068000012"	-118°37'50.39040000012"
207	San Fernando Recreation Park	34.28005452	-118.4345769	34°16'48.196272"	-118°26'44.76839999988"
208	Corriganville Park	34.26617057	-118.6345546	34°15'58.214052"	-118°38'43.96560000006"
209	TreePeople Land Trust Topanga	34.10810656	-118.5930279	34°6'29.1836160000108"	-118°35'34.900439999982"
210	TreePeople Land Trust Woodland Hills	34.14669555	-118.5903474	34°8'48.1039799999886"	-118°35'25.250639999994"
211	Aliso Canyon Park	34.28715555	-118.5321178	34°17'13.759980000006"	-118°31'55.624079999982"
212	Alizondo Drive Park	34.15047581	-118.6054496	34°9'17.129160000114"	-118°36'19.61856"
213	Allegheny Park	34.23696543	-118.3939394	34°14'13.075547999994"	-118°23'38.181839999976"
214	Amistad Park	34.25287318	-118.4179802	34°15'10.343448000006"	-118°25'47.28720000006"
215	Andres and Maria Cardenas Recreation Center	34.21490266	-118.4544873	34°12'53.649576"	-118°27'16.154279999988"
216	Andreas Pico Adobe Park	34.26871668	-118.4658689	34°16'7.380047999988"	-118°27'57.128040000012"
217	Veterans' Barrington Park	34.06272127	-118.4671919	34°3'45.7965719999904"	-118°28'18.90840000012"
218	Bee Canyon Park	34.3072448	-118.5070871	34°18'26.08128"	-118°30'25.513560000024"
219	Bellaire Avenue Pocket Park	34.21555638	-118.4125831	34°12'56.002968000006"	-118°24'45.299160000024"
220	Brand Park	34.27245188	-118.4584672	34°16'20.826767999994"	-118°27'30.481920000006"
221	Briarwood Park	34.12017443	-118.4445931	34°7'12.6279479999952"	-118°26'40.535160000024"
222	Brown's Creek Park	34.28505181	-118.589506	34°17'6.186515999994"	-118°35'22.2216"
223	Caballero Creek Park	34.18544799	-118.5283425	34°11'7.612764"	-118°31'42.032999999976"
224	Campo De Cahuenga	34.13983396	-118.3621804	34°8'23.4022559999898"	-118°21'43.84944"
225	Caplow Property	34.14098915	-118.5867931	34°8'27.5609400000102"	-118°35'12.455159999982"
226	Carey Ranch Park	34.28877877	-118.4603551	34°17'19.603572"	-118°27'37.278360000006"
227	Sean Brown Park	34.22363893	-118.6178733	34°13'25.100148"	-118°37'43.4388"
228	Chatsworth Park North	34.2638167	-118.6127639	34°15'49.74012"	-118°36'45.950040000018"
229	Chatsworth Park South	34.26093854	-118.6191255	34°15'39.378743999994"	-118°37'8.851799999982"
230	Chatsworth Reservoir Site	34.24207575	-118.6268659	34°14'31.472699999994"	-118°37'36.717239999994"

231	Coldwater Canyon Park	34.12955971	-118.4035425	34°7'46.4149560000084"	-118°24'12.753"
232	Corbin Canyon Park	34.15484193	-118.565994	34°9'17.4309480000126"	-118°33'57.578400000012"
233	Costanoso Fire Station 84 Park	34.1670934	-118.597141	34°10'15.36239999994"	-118°35'49.707599999976"
234	Crestwood Hills Park	34.07766851	-118.4881969	34°4'39.6066360000084"	-118°29'17.508840000018"
235	David M. Gonzales Recreation Center	34.26861418	-118.4132394	34°16'7.011048"	-118°24'47.661839999982"
236	De Neve Square Park	34.08466715	-118.4347979	34°5'48.017400000048"	-118°26'52.72440000024"
237	Dearborn Park	34.23708043	-118.5082925	34°14'13.489547999994"	-118°30'29.852999999988"
238	Delano Park	34.18181578	-118.4623626	34°10'54.536808000006"	-118°27'44.505360000024"
239	Devonshire Arleta Park	34.25806282	-118.4431685	34°15'29.026152"	-118°26'35.406599999994"
240	Devonwood Park	34.25632186	-118.4536093	34°15'22.758696"	-118°27'12.993479999988"
241	Eddleston Park	34.28619255	-118.532903	34°17'10.293180000012"	-118°31'58.450800000018"
242	El Dorado Avenue Park	34.27534266	-118.4360575	34°16'31.233576"	-118°26'9.807000000012"
243	El Paseo Cahuenga Park	34.13069004	-118.3497846	34°7'50.484143999991"	-118°20'59.224560000024"
244	Encino Park	34.16072073	-118.5027099	34°9'38.5946280000048"	-118°30'9.75564"
245	Fox and Laurel Park	34.27170095	-118.4463991	34°16'18.123420000012"	-118°26'47.036759999976"
246	Franklin Ivar Park	34.10594647	-118.3287299	34°6'21.407291999997"	-118°19'43.427639999994"
247	Fulton Avenue Park	34.1943719	-118.4222494	34°11'39.73884"	-118°25'20.097839999994"
248	Gateway Triangle	34.07996762	-118.4227436	34°4'47.8834319999922"	-118°25'21.876960000012"
249	Greenwood Square Park	34.20149014	-118.4403523	34°12'53.64503999988"	-118°26'25.26828"
250	Hartland Mini Park	34.19478252	-118.4308371	34°11'41.217071999988"	-118°25'51.013560000018"
251	Holleigh Bernson Memorial Park	34.29179396	-118.5711474	34°17'30.458256"	-118°34'16.130640000006"
252	Hubert H. Humphrey Memorial Park	34.28130168	-118.4065917	34°16'52.686047999994"	-118°24'23.730120000024"
253	Jaime Beth Slavin Park	34.21519667	-118.4072731	34°12'54.708011999988"	-118°24'26.183159999994"
254	Jesse Owens Mini Park	34.19967811	-118.5180238	34°11'58.841196"	-118°31'48.85679999982"
255	John Quimby Park	34.19837524	-118.5878737	34°11'54.150863999988"	-118°35'16.345320000012"
256	Kagel Canyon Park	34.28090987	-118.3810258	34°16'51.275532000006"	-118°22'51.692880000012"
257	Kittridge Mini Park	34.19017858	-118.426119	34°11'24.642888000006"	-118°25'34.0284"
258	Lakeview Terrace Recreation Center	34.27616647	-118.3710084	34°16'34.199292"	-118°22'15.630239999976"
259	Lanark Recreation Center	34.21655395	-118.6037751	34°12'59.594219999994"	-118°36'13.590359999976"
260	L.A.P.D. S.W.A.T. Officer Randal D. Simmons Park	34.19292947	-118.5459196	34°11'34.546092000012"	-118°32'45.310560000018"
261	Laurel Canyon Mulholland Park	34.12264021	-118.3749622	34°7'21.5047560000006"	-118°22'29.863919999994"
262	Laurel Canyon Park	34.12105115	-118.3796804	34°7'15.7841399999982"	-118°22'46.849439999994"
263	Louise Park	34.20035977	-118.5087169	34°12'12.95171999994"	-118°30'31.380839999988"
264	Teichman Family Magnolia Park	34.16495523	-118.4689115	34°9'53.8388279999886"	-118°28'8.081400000018"
265	Mason Park	34.26075425	-118.5784419	34°15'38.715299999994"	-118°34'42.390840000006"
266	Mecca Avenue Park	34.16702097	-118.537329	34°10'12.75492000012"	-118°32'14.3844"
267	Moonshine Canyon Park	34.28919022	-118.5684284	34°17'21.084792000006"	-118°34'6.342240000006"
268	Moorpark Park	34.15076027	-118.3952668	34°9'27.369719999976"	-118°23'42.960480000006"
269	Mulholland View Site No 16	34.13147697	-118.4910737	34°7'53.3170920000048"	-118°29'27.865320000006"
270	North Hills Community Park	34.23030539	-118.4662365	34°13'49.099403999994"	-118°27'58.451399999976"
271	North Hollywood Park	34.16480732	-118.3804944	34°9'53.3063520000048"	-118°22'49.779840000012"
272	San Fernando Road Park	34.29529624	-118.4545512	34°17'43.066463999994"	-118°27'16.384319999988"
273	Northridge Recreation Center	34.25443039	-118.5328766	34°15'15.949404000012"	-118°31'58.355759999982"
274	O'Melveny Park	34.31319291	-118.5211211	34°18'47.494475999994"	-118°31'16.035960000006"
275	Old Mission Trail	34.27227699	-118.5691566	34°16'20.197164000006"	-118°34'8.96376"
276	Palisades Park (Porter Ranch)	34.28944852	-118.5470593	34°17'22.014672"	-118°32'49.41348"
277	Panorama City Recreation Center	34.2275265	-118.441034	34°13'39.095400000012"	-118°26'27.722400000006"
278	Parthenia Park	34.22773402	-118.5989301	34°13'39.842472"	-118°35'56.148360000012"
279	Pilson Property	34.13176637	-118.5663629	34°7'54.3589320000042"	-118°33'58.906440000006"
280	Poinsettia Recreation Center	34.08819397	-118.3497285	34°5'17.4982919999964"	-118°20'59.022599999994"
281	Porter Ranch Park	34.26709863	-118.5583771	34°16'15.55068"	-118°33'30.157560000006"
282	Porter Ridge Park	34.2973179	-118.54221	34°17'50.344440000012"	-118°32'31.955999999988"
283	Reseda Park	34.18816527	-118.5336584	34°11'17.394971999994"	-118°32'11.70239999976"
284	Reseda Skate Facility	34.2003595	-118.5291865	34°12'12.94199999994"	-118°31'45.071399999982"
285	Rinaldi Park	34.27614888	-118.5367856	34°16'34.135968000006"	-118°32'12.428160000006"
286	Ritchie Valens Park	34.26593101	-118.4382994	34°15'57.351636000012"	-118°26'17.877840000018"
287	Rivas Canyon Park	34.06033834	-118.5183366	34°3'37.2180240000048"	-118°31'6.011759999994"
288	Roger Jessup Recreation Center	34.25967949	-118.4053089	34°15'34.846164000012"	-118°24'19.112039999982"
289	Runnymede Park	34.20470144	-118.5730099	34°12'16.925184000006"	-118°34'22.835640000006"
290	Rustic Canyon Park	34.07079568	-118.5136772	34°4'14.864448000012"	-118°30'49.237920000012"
291	Sepulveda Recreation Center	34.23002218	-118.4581992	34°13'48.079847999994"	-118°27'29.517119999982"
292	Serrania Avenue Park	34.15505892	-118.5867886	34°9'18.2121120000066"	-118°35'12.438960000018"
293	Sherman Oaks Castle Park	34.16177739	-118.4679182	34°9'42.398603999991"	-118°28'45.0552"
294	Sheldon Skate Park	34.23115239	-118.405751	34°13'52.148603999994"	-118°24'20.703599999982"
295	Steers Property	34.12857279	-118.5685983	34°7'42.8620439999994"	-118°34'6.953880000018"
296	Stetson Ranch Park	34.32557813	-118.474413	34°19'32.081267999988"	-118°28'27.886799999994"
297	Stonehurst Recreation Center	34.24843819	-118.3757833	34°14'54.377484000006"	-118°22'32.819879999982"
298	Stoney Point Park	34.27021654	-118.6040306	34°16'12.779544"	-118°36'14.510160000006"
299	Strathern Park North	34.21697892	-118.4066889	34°13'11.24112000012"	-118°24'24.080040000024"
300	Strathern Park West	34.21053335	-118.4075378	34°12'37.920059999994"	-118°24'27.13608"
301	Sullivan Canyon Park	34.07167238	-118.5091911	34°4'18.020568000009"	-118°30'33.087959999982"
302	Sun Valley Park	34.21842019	-118.3725386	34°13'6.312684000012"	-118°22'21.138959999994"
303	Sylmar Park	34.30819332	-118.4457663	34°18'29.495952000006"	-118°26'44.758680000012"
304	Tarzana Recreation Center	34.17479472	-118.5507733	34°10'29.260992000006"	-118°33'27.83880000012"
305	Telfair Park	34.3043737	-118.4733779	34°18'15.74532"	-118°28'24.160440000012"
306	Temescal Ridge Trailhead	34.07636189	-118.5464572	34°4'34.9028040000042"	-118°32'47.245920000024"
307	Tiara Street Park	34.17816313	-118.3819391	34°10'41.387268000006"	-118°22'54.980759999988"

308	Tobias Avenue Park	34.23636972	-118.4509865	34°14'10.930991999994"	-118°27'35.51399999994"
309	Tujunga Greenbelt	34.17489366	-118.4140535	34°10'29.617176000006"	-118°24'50.592599999982"
310	Valley Glen Community Park	34.18239233	-118.4192332	34°10'56.612387999994"	-118°25'9.239519999976"
311	Valley Plaza Park	34.19360579	-118.40221	34°11'36.980844"	-118°24'7.955999999988"
312	Valley Village Park	34.16143442	-118.382114	34°9'41.1639119999964"	-118°22'55.610400000006"
313	Van Norman Lakes Reservoir	34.28008924	-118.4813557	34°16'48.321264000006"	-118°28'52.880519999982"
314	Van Nuys Sherman Oaks Park	34.16212876	-118.443519	34°9'43.663536000006"	-118°26'36.668399999982"
315	Van Nuys Recreation Area	34.1949063	-118.444903	34°11'41.66268"	-118°26'41.650799999988"
316	Vanalden Park	34.23254009	-118.5477597	34°13'57.144324"	-118°32'51.93492"
317	Veterans' Barrington Dog Park	34.06222272	-118.4671942	34°3'44.0017920000042"	-118°28'18.99119999982"
318	Victory-Vineland Recreation Center	34.18811532	-118.3727297	34°11'17.215152000006"	-118°22'21.826919999976"
319	Viking Park	34.28109407	-118.5444639	34°16'51.938652000006"	-118°32'40.070039999988"
320	Warner Ranch Park	34.17642663	-118.6035215	34°10'35.135868000006"	-118°36'12.6774"
321	Wattles Garden Park	34.1078292	-118.3540559	34°6'28.1851199999916"	-118°21'14.601240000024"
322	North Weddington Park	34.14536811	-118.3668877	34°8'43.3251959999988"	-118°22'7.95720000024"
323	South Weddington Park	34.1414356	-118.3647441	34°8'29.1681600000042"	-118°21'53.078759999982"
324	Whitnall Highway Park	34.17621203	-118.362028	34°10'34.363308000006"	-118°21'43.300799999982"
325	Wilbur Tampa Park	34.28907338	-118.5566255	34°17'20.664167999994"	-118°33'23.851799999982"
326	William S Hart Park	34.09540007	-118.3716297	34°5'43.440251999988"	-118°22'17.86692"
327	Winnetka Recreation Center	34.22298245	-118.5722215	34°13'22.736820000012"	-118°34'19.997399999994"
328	Woodbridge Park	34.14920412	-118.3761017	34°8'57.1348320000012"	-118°22'33.966120000024"
329	Zelzah Park	34.28245832	-118.5244808	34°16'56.849952000012"	-118°31'28.130880000024"
330	Kalisher Park	34.2829323	-118.4477856	34°16'58.556279999994"	-118°26'52.028160000012"
331	Studio City Mini-Park	34.15065841	-118.4055981	34°9'23.70275999994"	-118°24'20.153160000024"
332	Porter Ranch-Sesnon Property	34.28961811	-118.5781296	34°17'22.625196"	-118°34'41.266559999988"
333	Oakridge Residence	34.25623218	-118.5403366	34°15'22.435847999994"	-118°32'25.211760000012"
334	Barbara A. Fine Overlook at the Summit	34.12148692	-118.3980993	34°7'17.3529120000084"	-118°23'53.157479999994"
335	Nancy Hoover Pohl Overlook	34.1221162	-118.3846056	34°7'19.6183200000024"	-118°23'45.8016"
336	Richard Lillard Outdoor Classroom	34.1485132	-118.4217088	34°8'54.6475199999874"	-118°25'18.151680000018"
337	Paxton Street Park	34.28704123	-118.3998683	34°17'13.348428"	-118°23'59.525879999982"
338	Mt Lee Park	34.13592026	-118.321683	34°8'9.3129359999958"	-118°19'18.058799999976"
339	Lake Hollywood	34.11538785	-118.3317619	34°6'55.3962599999916"	-118°19'54.342840000012"
340	John Anson Ford Amphitheatre and County Parkland	34.11235166	-118.3351095	34°6'44.465976000006"	-118°20'6.394200000006"
341	Santa Monica Mountains National Recreation Area	34.1147031	-118.5750144	34°6'52.9311599999994"	-118°34'30.05184"
342	Santa Monica Mountains National Recreation Area	34.1152496	-118.5794701	34°6'54.8985599999946"	-118°34'46.092359999982"
343	Griffith Park	34.15257443	-118.3214983	34°9'9.2679480000048"	-118°19'17.393880000006"
344	Santa Monica Mountains National Recreation Area	34.11552612	-118.5790615	34°6'55.894031999994"	-118°34'44.621399999982"
345	Santa Monica Mountains National Recreation Area	34.11285093	-118.5890221	34°6'46.2633480000018"	-118°35'20.479559999976"
346	Santa Monica Mountains National Recreation Area	34.11307149	-118.5891597	34°6'47.0573640000108"	-118°35'20.974919999988"
347	Unnamed Site - Beverly Hills, City of	34.0722376	-118.3987652	34°4'20.0553600000042"	-118°23'55.55472"
348	Unnamed site - Mountains Recreation and Conservation Authority	34.12416442	-118.5699581	34°7'26.9919119999988"	-118°34'11.849159999976"
349	John Anson Ford Amphitheatre and County Parkland	34.11297972	-118.3323336	34°6'46.7269919999946"	-118°19'56.400959999994"
350	Santa Monica Mountains National Recreation Area	34.11493	-118.58569	34°6'53.7480000000042"	-118°35'8.484"
351	Santa Monica Mountains National Recreation Area	34.11501854	-118.5799734	34°6'54.0667440000042"	-118°34'47.90424"
352	Santa Monica Mountains National Recreation Area	34.11411576	-118.5796486	34°6'50.8167359999898"	-118°34'46.734959999994"
353	Santa Monica Mountains National Recreation Area	34.11411651	-118.5833246	34°6'50.8194360000084"	-118°34'59.968559999988"
354	Santa Monica Mountains National Recreation Area	34.11428717	-118.5801298	34°6'51.4338119999898"	-118°34'48.467279999982"
355	Santa Monica Mountains National Recreation Area	34.1144225	-118.5796035	34°6'51.9210000000126"	-118°34'46.572600000018"
356	Santa Monica Mountains National Recreation Area	34.11507164	-118.5797458	34°6'54.2579039999874"	-118°34'47.084879999994"
357	Santa Monica Mountains National Recreation Area	34.11235771	-118.5792867	34°6'44.4877559999916"	-118°34'45.432119999988"
358	Santa Monica Mountains National Recreation Area	34.11262796	-118.5898702	34°6'45.460655999991"	-118°35'23.532719999976"
359	Santa Monica Mountains National Recreation Area	34.1127166	-118.5895283	34°6'45.7797599999958"	-118°35'22.301879999994"
360	Santa Monica Mountains National Recreation Area	34.11279225	-118.5892276	34°6'46.052099999994"	-118°35'21.219360000006"
361	Santa Monica Mountains National Recreation Area	34.11428917	-118.5814012	34°6'51.4410119999976"	-118°34'53.044320000006"
362	Unnamed Site - Santa Clarita	34.38596543	-118.5635904	34°23'9.475547999994"	-118°33'48.925439999982"
363	Unnamed Site - Santa Clarita	34.40303144	-118.5607332	34°24'10.913184"	-118°33'38.639520000006"
364	Unnamed Site - Calabasas	34.13649974	-118.6067443	34°8'11.3990639999922"	-118°36'24.279480000012"
365	Fillmore-Piru Greenbelt	34.38492924	-118.690078	34°23'57.45263999994"	-118°41'24.2808"
366	Save Open Space and Agricultural Resources	34.33701615	-118.6659586	34°20'13.258139999988"	-118°39'57.450959999988"
367	Santa Susana Pass State Historic Park	34.26374151	-118.6148028	34°15'49.469436000012"	-118°36'53.290080000024"
368	Chatsworth Park North	34.26374151	-118.6148028	34°15'49.469436000012"	-118°36'53.290080000024"
369	Santa Susana Pass State Historic Park	34.26025556	-118.6171932	34°15'36.920015999988"	-118°37'18.95520000012"
370	Chatsworth Park South	34.26025556	-118.6171932	34°15'36.920015999988"	-118°37'18.95520000012"
371	Santa Susana Pass State Historic Park	34.26213761	-118.6320696	34°15'43.695396000012"	-118°37'55.450559999976"
372	Topanga State Park	34.13274439	-118.5573075	34°7'57.879803999997"	-118°33'26.306999999976"
373	Mulholland Gateway Park	34.13274439	-118.5573075	34°7'57.879803999997"	-118°33'26.306999999976"
374	Topanga State Park	34.1192788	-118.5457931	34°7'9.4036799999874"	-118°32'44.855159999988"
375	L.A. County Sanitation District Open Space	34.1192788	-118.5457931	34°7'9.4036799999874"	-118°32'44.855159999988"
376	Topanga State Park	34.10894761	-118.5801555	34°6'32.2113960000048"	-118°34'48.559800000012"
377	Cold Creek Valley Preserve	34.10894761	-118.5801555	34°6'32.2113960000048"	-118°34'48.559800000012"
378	Topanga State Park	34.15055262	-118.5664461	34°9'19.89431999997"	-118°33'59.205959999976"
379	Corbin Canyon Open Space	34.15055262	-118.5664461	34°9'19.89431999997"	-118°33'59.205959999976"
380	Topanga State Park	34.05986017	-118.5157279	34°3'35.4966120000012"	-118°30'56.620440000006"
381	Topanga State Park	34.05986017	-118.5157279	34°3'35.4966120000012"	-118°30'56.620440000006"
382	Topanga State Park	34.14597709	-118.5794652	34°8'45.5175240000084"	-118°34'46.074720000006"
383	Unnamed site - Mountains Recreation and Conservation Authority	34.14597709	-118.5794652	34°8'45.5175240000084"	-118°34'46.074720000006"
384	Topanga State Park	34.0606935	-118.5202042	34°3'38.4965999999976"	-118°31'12.735119999982"

385	Rivas Canyon Park	34.0606935	-118.5202042	34°3'38.4965999999976"	-118°31'12.735119999982"
386	Topanga State Park	34.12782686	-118.5662114	34°7'40.1766959999964"	-118°33'58.36104"
387	Steers Property	34.12782686	-118.5662114	34°7'40.1766959999964"	-118°33'58.36104"
388	Will Rogers State Historic Park	34.0598082	-118.5155986	34°3'35.309519999997"	-118°30'56.154960000012"
389	Topanga State Park	34.0598082	-118.5155986	34°3'35.309519999997"	-118°30'56.154960000012"
390	Will Rogers State Historic Park	34.05939965	-118.5160467	34°3'33.8387400000114"	-118°30'57.768120000012"
391	Rivas Canyon Park	34.05939965	-118.5160467	34°3'33.8387400000114"	-118°30'57.768120000012"
392	Griffith Park	34.13429065	-118.3268608	34°8'34.463399999892"	-118°19'36.698880000018"
393	Cahuenga Peak Phase 1	34.13429065	-118.3268608	34°8'34.463399999892"	-118°19'36.698880000018"
394	Griffith Park	34.12177714	-118.3268512	34°7'18.3977039999964"	-118°19'36.664319999976"
395	Lake Hollywood Reservoir	34.12177714	-118.3268512	34°7'18.3977039999964"	-118°19'36.664319999976"
396	Michael D Antonovich Open Space	34.33977515	-118.5233285	34°20'23.190540000006"	-118°31'23.982600000018"
397	Unnamed site - Mountains Recreation and Conservation Authority	34.33977515	-118.5233285	34°20'23.190540000006"	-118°31'23.982600000018"
398	Mission Canyon Open Space	34.116439	-118.494303	34°6'59.1803999999988"	-118°29'39.490800000006"
399	Westridge-Canyonback Wilderness Park	34.116439	-118.494303	34°6'59.1803999999988"	-118°29'39.490800000006"
400	Rim of the Valley County Parkland	34.33384704	-118.4493717	34°20'18.49344000006"	-118°26'57.73812"
401	Wilson Canyon Park	34.33384704	-118.4493717	34°20'18.49344000006"	-118°26'57.73812"
402	Rim of the Valley County Parkland	34.33733253	-118.4524411	34°20'14.397107999994"	-118°27'8.787960000006"
403	Angeles National Forest	34.33733253	-118.4524411	34°20'14.397107999994"	-118°27'8.787960000006"
404	Michael D Antonovich Open Space Preserve	34.33832076	-118.5418088	34°20'17.954736000006"	-118°32'30.511679999994"
405	Santa Clarita Woodlands Park	34.33832076	-118.5418088	34°20'17.954736000006"	-118°32'30.511679999994"
406	Michael D Antonovich Open Space Preserve	34.33818896	-118.5253256	34°20'17.480255999988"	-118°31'31.172160000006"
407	Unnamed site - Mountains Recreation and Conservation Authority	34.33818896	-118.5253256	34°20'17.480255999988"	-118°31'31.172160000006"
408	Michael D Antonovich Open Space Preserve	34.3183814	-118.5289034	34°19'6.17304"	-118°31'44.052240000018"
409	O'Melveny Park	34.3183814	-118.5289034	34°19'6.17304"	-118°31'44.052240000018"
410	Michael D. Antonovich Regional Park at Joughin Ranch	34.30383086	-118.6243686	34°18'13.791095999994"	-118°37'27.726959999988"
411	Rocky Peak Park	34.30383086	-118.6243686	34°18'13.791095999994"	-118°37'27.726959999988"
412	Michael D. Antonovich Regional Park at Joughin Ranch	34.30338132	-118.597071	34°18'12.172752"	-118°35'49.4556"
413	Cold Creek Valley Preserve	34.30338132	-118.597071	34°18'12.172752"	-118°35'49.4556"
414	Michael D. Antonovich Regional Park at Joughin Ranch	34.28577937	-118.595413	34°17'8.805732"	-118°35'43.486799999976"
415	Deer Lake Highlands	34.28577937	-118.595413	34°17'8.805732"	-118°35'43.486799999976"
416	Michael D. Antonovich Regional Park at Joughin Ranch	34.30080048	-118.5997279	34°18'28.81728"	-118°35'59.020440000018"
417	MRCA Parkland	34.30080048	-118.5997279	34°18'28.81728"	-118°35'59.020440000018"
418	Michael D. Antonovich Regional Park at Joughin Ranch	34.29438351	-118.5930404	34°17'39.780636000012"	-118°35'34.945440000024"
419	Browns Canyon	34.29438351	-118.5930404	34°17'39.780636000012"	-118°35'34.945440000024"
420	Mulholland Gateway Park	34.13603422	-118.5801822	34°8'9.723191999997"	-118°34'48.655919999988"
421	Cold Creek Valley Preserve	34.13603422	-118.5801822	34°8'9.723191999997"	-118°34'48.655919999988"
422	Mulholland Gateway Park	34.13670633	-118.5605192	34°8'12.1427880000096"	-118°33'37.869120000006"
423	Mulholland Gateway Park of Los Angeles	34.13670633	-118.5605192	34°8'12.1427880000096"	-118°33'37.869120000006"
424	Mulholland Gateway Park	34.13226662	-118.5315745	34°7'56.1598320000102"	-118°31'53.668200000018"
425	Encino Reservoir	34.13226662	-118.5315745	34°7'56.1598320000102"	-118°31'53.668200000018"
426	Mulholland Gateway Park	34.14068339	-118.5856858	34°8'26.4602039999982"	-118°35'8.468879999976"
427	Caplow Property	34.14068339	-118.5856858	34°8'26.4602039999982"	-118°35'8.468879999976"
428	Rocky Peak Park	34.29745567	-118.6310738	34°17'50.840411999994"	-118°37'51.865679999982"
429	Cold Creek Valley Preserve	34.29745567	-118.6310738	34°17'50.840411999994"	-118°37'51.865679999982"
430	Rocky Peak Park	34.31032307	-118.6449633	34°18'37.163052000012"	-118°38'41.86788"
431	Santa Clarita Woodlands Park	34.36524569	-118.6143106	34°21'54.884484000006"	-118°36'51.518159999988"
432	BLM	34.36524569	-118.6143106	34°21'54.884484000006"	-118°36'51.518159999988"
433	Santa Clarita Woodlands Park	34.34833236	-118.5418859	34°20'53.996496"	-118°32'30.789239999988"
434	Cold Creek Valley Preserve	34.34833236	-118.5418859	34°20'53.996496"	-118°32'30.789239999988"
435	Santa Clarita Woodlands Park	34.37555689	-118.6149238	34°22'32.004803999994"	-118°36'53.72568"
436	Mentryville	34.37555689	-118.6149238	34°22'32.004803999994"	-118°36'53.72568"
437	Westridge-Canyonback Wilderness Park	34.11987184	-118.5029383	34°7'11.5386240000066"	-118°30'10.577879999988"
438	Cold Creek Valley Preserve	34.11987184	-118.5029383	34°7'11.5386240000066"	-118°30'10.577879999988"
439	Westridge-Canyonback Wilderness Park	34.09450111	-118.5038572	34°5'40.2039960000108"	-118°30'13.885919999994"
440	Mandeville Canyon Open Space	34.09450111	-118.5038572	34°5'40.2039960000108"	-118°30'13.885919999994"
441	Westridge-Canyonback Wilderness Park	34.09634805	-118.5091823	34°5'46.8529800000114"	-118°30'33.056280000024"
442	Mandeville Canyon Park	34.09634805	-118.5091823	34°5'46.8529800000114"	-118°30'33.056280000024"
443	Westridge-Canyonback Wilderness Park	34.12841396	-118.5138792	34°7'42.2902560000114"	-118°30'49.965120000018"
444	San Vicente Mountain Park	34.12841396	-118.5138792	34°7'42.2902560000114"	-118°30'49.965120000018"
445	Westridge-Canyonback Wilderness Park	34.13136508	-118.5084084	34°7'52.9142880000066"	-118°30'30.270239999976"
446	Encino Reservoir	34.13136508	-118.5084084	34°7'52.9142880000066"	-118°30'30.270239999976"
447	Wilson Canyon Park	34.33711038	-118.446483	34°20'13.597367999994"	-118°26'47.3388"
448	Angeles National Forest	34.33711038	-118.446483	34°20'13.597367999994"	-118°26'47.3388"
449	Wilson Canyon Park	34.33644563	-118.4362244	34°20'11.204268"	-118°26'10.40784"
450	Cold Creek Valley Preserve	34.33644563	-118.4362244	34°20'11.204268"	-118°26'10.40784"
451	Wilson Canyon Park	34.33106237	-118.4376679	34°19'51.824531999994"	-118°26'15.604439999976"
452	Flood Control	34.33106237	-118.4376679	34°19'51.824531999994"	-118°26'15.604439999976"
453	Angeles National Forest	34.32221784	-118.3923707	34°19'19.984224"	-118°23'32.53452"
454	Cold Creek Valley Preserve	34.32221784	-118.3923707	34°19'19.984224"	-118°23'32.53452"
455	Angeles National Forest	34.29698941	-118.3719979	34°17'49.161876000006"	-118°22'19.192439999988"
456	Dexter Park	34.29698941	-118.3719979	34°17'49.161876000006"	-118°22'19.192439999988"
457	Angeles National Forest	34.33121945	-118.4282606	34°19'52.390019999994"	-118°25'41.738160000006"
458	Flood Control	34.33121945	-118.4282606	34°19'52.390019999994"	-118°25'41.738160000006"
459	Angeles National Forest	34.33703452	-118.4689867	34°20'13.324272000012"	-118°28'8.352120000006"
460	Unnamed site - Mountains Recreation and Conservation Authority	34.33703452	-118.4689867	34°20'13.324272000012"	-118°28'8.352120000006"
461	Angeles National Forest	34.31949487	-118.382788	34°19'10.181532"	-118°22'58.036800000018"

462	Lopez Canyon	34.31949487	-118.382788	34°19'10.181532"	-118°22'58.036800000018"
463	Angeles National Forest	34.36943247	-118.4273898	34°22'9.956892"	-118°25'38.60328"
464	Placerita Golden Valley Ranch Open Space	34.36943247	-118.4273898	34°22'9.956892"	-118°25'38.60328"
465	Angeles National Forest	34.34144216	-118.4850028	34°20'29.191776"	-118°29'6.010080000012"
466	Whitney Elsmere Open Space	34.34144216	-118.4850028	34°20'29.191776"	-118°29'6.010080000012"
467	Angeles National Forest	34.35572062	-118.4849915	34°21'20.594232"	-118°29'59.69400000024"
468	Whitney Elsmere Open Space	34.35572062	-118.4849915	34°21'20.594232"	-118°29'59.69400000024"
469	Angeles National Forest	34.34568735	-118.3674185	34°20'44.474459999994"	-118°22'27.066"
470	Unnamed site - Santa Monica Mountains Conservancy	34.34568735	-118.3674185	34°20'44.474459999994"	-118°22'27.066"
471	Angeles National Forest	34.36650325	-118.4804047	34°21'59.411700000006"	-118°28'49.456919999976"
472	Whitney Canyon Park	34.36650325	-118.4804047	34°21'59.411700000006"	-118°28'49.456919999976"
473	Angeles National Forest	34.3726656	-118.4624182	34°22'21.596159999994"	-118°27'44.705520000006"
474	Placerita Canyon State Park	34.3726656	-118.4624182	34°22'21.596159999994"	-118°27'44.705520000006"
475	Angeles National Forest	34.32987962	-118.4184991	34°19'47.566632"	-118°25'6.596760000018"
476	Veterans Memorial Community Regional Park	34.32987962	-118.4184991	34°19'47.566632"	-118°25'6.596760000018"
477	Fryman Canyon Park	34.12541313	-118.3878464	34°7'31.487267999994"	-118°23'16.24704"
478	Fryman Canyon Natural Area	34.12541313	-118.3878464	34°7'31.487267999994"	-118°23'16.24704"
479	Fryman Canyon Park	34.12230287	-118.3841449	34°7'20.2903319999952"	-118°23'29.21639999982"
480	Santa Monica Mountains National Recreation Area	34.14903375	-118.6054745	34°8'56.5215000000036"	-118°36'19.7082"
481	Alizondo Drive Park	34.14903375	-118.6054745	34°8'56.5215000000036"	-118°36'19.7082"
482	Santa Monica Mountains National Recreation Area	34.1241235	-118.571444	34°7'26.8446000000114"	-118°34'17.1984"
483	BLM	34.36400304	-118.6334729	34°21'50.410944"	-118°38'50.2440000006"
484	Cold Creek Valley Preserve	34.36400304	-118.6334729	34°21'50.410944"	-118°38'50.2440000006"
485	Cold Creek Valley Preserve	34.28278988	-118.600976	34°16'58.043568000012"	-118°36'35.13600000012"
486	Deer Lake Highlands	34.28278988	-118.600976	34°16'58.043568000012"	-118°36'35.13600000012"
487	Cold Creek Valley Preserve	34.13652914	-118.4242354	34°8'11.5049040000012"	-118°25'27.24744"
488	Dixie Canyon Park	34.13652914	-118.4242354	34°8'11.5049040000012"	-118°25'27.24744"
489	Cold Creek Valley Preserve	34.12170964	-118.3410654	34°7'18.1547039999958"	-118°20'27.835440000018"
490	Los Angeles Department of Water and Power	34.12170964	-118.3410654	34°7'18.1547039999958"	-118°20'27.835440000018"
491	Cold Creek Valley Preserve	34.30570211	-118.5976151	34°18'20.527595999994"	-118°35'51.414359999994"
492	MRCA Parkland	34.30570211	-118.5976151	34°18'20.527595999994"	-118°35'51.414359999994"
493	Cold Creek Valley Preserve	34.15149704	-118.3996912	34°9'53.893440000084"	-118°23'58.888320000024"
494	Unnamed site - Mountains Recreation and Conservation Authority	34.15149704	-118.3996912	34°9'53.893440000084"	-118°23'58.888320000024"
495	Cold Creek Valley Preserve	34.11003358	-118.4461878	34°6'36.1208879999988"	-118°26'46.276080000012"
496	Unnamed site - Mountains Recreation and Conservation Authority	34.11003358	-118.4461878	34°6'36.1208879999988"	-118°26'46.276080000012"
497	Cold Creek Valley Preserve	34.09314669	-118.4387183	34°5'35.328083999991"	-118°26'19.385880000018"
498	Unnamed site - Mountains Recreation and Conservation Authority	34.09314669	-118.4387183	34°5'35.328083999991"	-118°26'19.385880000018"
499	Cold Creek Valley Preserve	34.31764298	-118.3866485	34°19'35.14728000006"	-118°23'11.934600000024"
500	Lopez Canyon	34.31764298	-118.3866485	34°19'35.14728000006"	-118°23'11.934600000024"
501	Cold Creek Valley Preserve	34.35951732	-118.6180716	34°21'34.262352000006"	-118°37'50.57759999976"
502	Unnamed site - Santa Monica Mountains Conservancy	34.35951732	-118.6180716	34°21'34.262352000006"	-118°37'50.57759999976"
503	Cold Creek Valley Preserve	34.28278481	-118.6042581	34°16'58.025316000012"	-118°36'15.329159999982"
504	Devil Canyon Red Mesa	34.28278481	-118.6042581	34°16'58.025316000012"	-118°36'15.329159999982"
505	Cold Creek Valley Preserve	34.10961713	-118.3475236	34°6'34.621667999988"	-118°20'51.084960000006"
506	Runyon Canyon Park	34.10961713	-118.3475236	34°6'34.621667999988"	-118°20'51.084960000006"
507	Cold Creek Valley Preserve	34.11407986	-118.5784957	34°6'50.6874959999886"	-118°34'42.584520000018"
508	Unnamed site - Los Angeles, County of	34.11407986	-118.5784957	34°6'50.6874959999886"	-118°34'42.584520000018"
509	Cold Creek Valley Preserve	34.26403387	-118.6326445	34°15'50.521931999994"	-118°37'57.520199999994"
510	Rancho Simi Recreation and Park District Open Space	34.26403387	-118.6326445	34°15'50.521931999994"	-118°37'57.520199999994"
511	Cold Creek Valley Preserve	34.26659856	-118.6330292	34°15'59.754815999994"	-118°37'58.905119999982"
512	Corriganville Park	34.26659856	-118.6330292	34°15'59.754815999994"	-118°37'58.905119999982"
513	Cold Creek Valley Preserve	34.29461774	-118.537953	34°17'40.623864"	-118°32'16.630800000006"
514	Aliso Canyon Park	34.29461774	-118.537953	34°17'40.623864"	-118°32'16.630800000006"
515	Cold Creek Valley Preserve	34.28367545	-118.5911889	34°17'12.31619999988"	-118°35'28.280040000024"
516	Brown's Creek Park	34.28367545	-118.5911889	34°17'12.31619999988"	-118°35'28.280040000024"
517	Cold Creek Valley Preserve	34.12221004	-118.3746026	34°7'19.9561439999958"	-118°22'28.569360000012"
518	Laurel Canyon Mulholland Park	34.12221004	-118.3746026	34°7'19.9561439999958"	-118°22'28.569360000012"
519	Cold Creek Valley Preserve	34.29781467	-118.5403026	34°17'52.132812000006"	-118°32'25.089360000012"
520	Porter Ridge Park	34.29781467	-118.5403026	34°17'52.132812000006"	-118°32'25.089360000012"
521	Cold Creek Valley Preserve	34.12846961	-118.5714361	34°7'42.490596000012"	-118°34'17.16996"
522	Steers Property	34.12846961	-118.5714361	34°7'42.490596000012"	-118°34'17.16996"
523	Cold Creek Valley Preserve	34.11468956	-118.5749806	34°6'52.8824160000078"	-118°34'29.930160000012"
524	Cold Creek Valley Preserve	34.11285773	-118.5889648	34°6'46.2878280000066"	-118°35'20.27328"
525	Cold Creek Valley Preserve	34.11426542	-118.5813412	34°6'51.3555120000084"	-118°34'52.828319999988"
526	Cold Creek Valley Preserve	34.26367708	-118.6325769	34°15'49.237488"	-118°37'57.276840000012"
527	Corbin Canyon Open Space	34.15265293	-118.5651012	34°9'9.5505480000078"	-118°33'54.364320000006"
528	Corbin Canyon Park	34.15265293	-118.5651012	34°9'9.5505480000078"	-118°33'54.364320000006"
529	Elsmere Canyon Park	34.35190103	-118.5	34°21'6.843708"	-118°30'0"
530	Whitney Elsmere Open Space	34.35190103	-118.5	34°21'6.843708"	-118°30'0"
531	Elsmere Canyon Park	34.35907116	-118.5001282	34°21'32.656176"	-118°30'46.1520000024"
532	Whitney Elsmere Open Space	34.35907116	-118.5001282	34°21'32.656176"	-118°30'46.1520000024"
533	Flood Control	34.32918994	-118.4757682	34°19'45.083783999994"	-118°28'32.765520000018"
534	Unnamed site - Mountains Recreation and Conservation Authority	34.32918994	-118.4757682	34°19'45.083783999994"	-118°28'32.765520000018"
535	Flood Control	34.32769902	-118.4748845	34°19'39.716471999988"	-118°28'29.584200000006"
536	Stetson Ranch Park	34.32769902	-118.4748845	34°19'39.716471999988"	-118°28'29.584200000006"
537	Hilton Open Space	34.08778217	-118.5000449	34°5'16.0158119999892"	-118°30'16.1640000024"
538	Hilton Open Space	34.08778217	-118.5000449	34°5'16.0158119999892"	-118°30'16.1640000024"

539	Hilton Open Space	34.10051426	-118.4960713	34°6'18.513359999892"	-118°29'45.856679999988"
540	Los Angeles City Water Resource Parkland	34.10051426	-118.4960713	34°6'18.513359999892"	-118°29'45.856679999988"
541	Hilton Open Space	34.10455855	-118.5017273	34°6'16.4107800000006"	-118°30'6.218279999994"
542	Unnamed site - Mountains Recreation and Conservation Authority	34.10455855	-118.5017273	34°6'16.4107800000006"	-118°30'6.218279999994"
543	Hilton Open Space	34.08468225	-118.495716	34°5'48.561000000006"	-118°29'44.577600000006"
544	Los Angeles City Water Resource Parkland	34.08468225	-118.495716	34°5'48.561000000006"	-118°29'44.577600000006"
545	Hjelte Sports Center	34.16604357	-118.4837001	34°9'57.7568519999976"	-118°29'13.20359999976"
546	Sepulveda Basin Recreation Area	34.16604357	-118.4837001	34°9'57.7568519999976"	-118°29'13.20359999976"
547	Limekiln Canyon Park	34.28569916	-118.5649718	34°17'8.516976"	-118°33'53.898479999982"
548	Moonshine Canyon Park	34.28569916	-118.5649718	34°17'8.516976"	-118°33'53.898479999982"
549	Los Angeles Department of Water and Power	34.13590477	-118.3349959	34°8'9.257172000012"	-118°20'59.85239999982"
550	Cahuenga Peak Phase 1	34.13590477	-118.3349959	34°8'9.257172000012"	-118°20'59.85239999982"
551	Los Angeles Department of Water and Power	34.1095533	-118.3569556	34°6'34.391880000006"	-118°21'25.040160000024"
552	Trebek Open Space	34.1095533	-118.3569556	34°6'34.391880000006"	-118°21'25.040160000024"
553	Los Angeles Department of Water and Power	34.12159403	-118.3409803	34°7'17.7385079999898"	-118°20'27.529079999994"
554	Santa Monica Mountains Conservancy Open Space	34.12159403	-118.3409803	34°7'17.7385079999898"	-118°20'27.529079999994"
555	Los Angeles Department of Water and Power	34.11484492	-118.3532101	34°6'53.4417120000108"	-118°21'11.556359999994"
556	Runyon Canyon Park	34.11484492	-118.3532101	34°6'53.4417120000108"	-118°21'11.556359999994"
557	Los Angeles Department of Water and Power	34.11193345	-118.3549697	34°6'42.9604200000078"	-118°21'17.890919999994"
558	Wattles Garden Park	34.11193345	-118.3549697	34°6'42.9604200000078"	-118°21'17.890919999994"
559	Mandeville Canyon Open Space	34.09640909	-118.5038688	34°5'47.072724000006"	-118°30'13.927680000024"
560	Mandeville Canyon Park	34.09640909	-118.5038688	34°5'47.072724000006"	-118°30'13.927680000024"
561	MRCA Parkland	34.29670692	-118.5933393	34°17'48.144911999994"	-118°35'36.021479999988"
562	Browns Canyon	34.29670692	-118.5933393	34°17'48.144911999994"	-118°35'36.021479999988"
563	Rocky Peak Adj. Tax Default	34.27478512	-118.6325323	34°16'29.226431999988"	-118°37'57.116279999976"
564	Indian Springs Open Space	34.27478512	-118.6325323	34°16'29.226431999988"	-118°37'57.116279999976"
565	Santa Monica Mountains National Recreation Area	34.13700252	-118.606221	34°8'13.2090720000102"	-118°36'22.395600000018"
566	Topanga Canyon-Canyon Oaks Open Space	34.13268603	-118.6007573	34°7'57.6697080000078"	-118°36'27.26279999994"
567	Unnamed site - Santa Monica Mountains Conservancy	34.13268603	-118.6007573	34°7'57.6697080000078"	-118°36'27.26279999994"
568	Topanga Canyon-Canyon Oaks Open Space	34.13613828	-118.6062263	34°8'10.0978079999904"	-118°36'22.414680000012"
569	Unnamed site - Mountains Recreation and Conservation Authority	34.13809952	-118.5065272	34°8'17.1582719999904"	-118°30'23.497919999976"
570	Encino Reservoir	34.13809952	-118.5065272	34°8'17.1582719999904"	-118°30'23.497919999976"
571	Unnamed site - Mountains Recreation and Conservation Authority	34.36716288	-118.572282	34°22'17.86368000006"	-118°34'20.215200000006"
572	Rivendale Ranch Open Space	34.36716288	-118.572282	34°22'17.86368000006"	-118°34'20.215200000006"
573	Unnamed site - Mountains Recreation and Conservation Authority	34.27116441	-118.3510289	34°16'16.191875999988"	-118°21'37.04040000012"
574	Unnamed - Los Angeles County Flood Control District	34.27116441	-118.3510289	34°16'16.191875999988"	-118°21'37.04040000012"
575	Unnamed site - Mountains Recreation and Conservation Authority	34.28031216	-118.6323718	34°16'49.123776000006"	-118°37'56.538480000006"
576	Indian Springs Open Space	34.28031216	-118.6323718	34°16'49.123776000006"	-118°37'56.538480000006"
577	Unnamed site - Mountains Recreation and Conservation Authority	34.12920317	-118.5714339	34°7'45.131411999988"	-118°34'17.162040000006"
578	Steers Property	34.12920317	-118.5714339	34°7'45.131411999988"	-118°34'17.162040000006"
579	Unnamed site - Mountains Recreation and Conservation Authority	34.12956439	-118.5718724	34°7'46.4318039999958"	-118°34'18.740640000012"
580	Lake Hollywood Reservoir	34.11609628	-118.3336946	34°6'57.9466080000024"	-118°20'13.00560000006"
581	John Anson Ford Amphitheatre and County Parkland	34.11609628	-118.3336946	34°6'57.9466080000024"	-118°20'13.00560000006"
582	Unnamed site - Mountains Recreation and Conservation Authority	34.11477538	-118.338751	34°6'53.191367999991"	-118°20'19.503600000006"
583	Highland Camrose Park	34.11477538	-118.338751	34°6'53.191367999991"	-118°20'19.503600000006"
584	Gates King Open Space	34.3455434	-118.51494	34°20'43.956239999988"	-118°30'53.783999999982"
585	Valley Vista Open Space	34.3455434	-118.51494	34°20'43.956239999988"	-118°30'53.783999999982"
586	Rivendale Ranch Open Space	34.35718747	-118.5610859	34°21'25.874892"	-118°33'39.909239999982"
587	Ed Davis Park in Towsley Canyon	34.35718747	-118.5610859	34°21'25.874892"	-118°33'39.909239999982"
588	Whitney Elsmere Open Space	34.35380963	-118.4872425	34°21'13.714668"	-118°29'14.072999999976"
589	Whitney Elsmere Open Space	34.35380963	-118.4872425	34°21'13.714668"	-118°29'14.072999999976"
590	Whitney Elsmere Open Space	34.36807616	-118.4885102	34°22'50.74176000006"	-118°29'18.636719999976"
591	Whitney Canyon Park	34.36807616	-118.4885102	34°22'50.74176000006"	-118°29'18.636719999976"
592	Unnamed site - Santa Monica Mountains Conservancy	34.11997475	-118.3778708	34°7'11.9090999999898"	-118°22'40.334879999988"
593	Laurel Canyon Park	34.11997475	-118.3778708	34°7'11.9090999999898"	-118°22'40.334879999988"
594	Fryman Canyon Park	34.12322896	-118.3954391	34°7'23.6242559999952"	-118°23'43.580760000018"
595	Fryman Canyon Natural Area	34.12322896	-118.3954391	34°7'23.6242559999952"	-118°23'43.580760000018"
596	Serrania Park	34.15281794	-118.5876372	34°9'10.1445839999946"	-118°35'15.493920000012"
597	Serrania Avenue Park	34.15281794	-118.5876372	34°9'10.1445839999946"	-118°35'15.493920000012"
598	Hansen Dam Recreation Area	34.26751169	-118.3581199	34°16'30.42084"	-118°21'29.231640000018"
599	Unnamed - Los Angeles County Flood Control District	34.26751169	-118.3581199	34°16'30.42084"	-118°21'29.231640000018"
600	Gateway Ranch Open Space	34.34165901	-118.5197783	34°20'29.972436"	-118°31'11.201879999994"
601	Valley Vista Open Space	34.34165901	-118.5197783	34°20'29.972436"	-118°31'11.201879999994"
602	Unnamed site - Los Angeles, County of	34.11517913	-118.5794477	34°6'54.6448680000048"	-118°34'46.011720000012"
603	Unnamed site - Los Angeles, County of	34.11490469	-118.5797066	34°6'53.6568840000108"	-118°34'46.943759999982"
604	Unnamed site - Los Angeles, County of	34.11242118	-118.579153	34°6'44.716247999994"	-118°34'44.950800000018"
605	Rancho Simi Recreation and Park District Open Space	34.2639554	-118.6332482	34°15'50.23944"	-118°37'59.693519999988"
606	Holleigh Bernson Memorial Park	34.28974617	-118.5705356	34°17'23.086212"	-118°34'13.92816"
607	Moonshine Canyon Park	34.28974617	-118.5705356	34°17'23.086212"	-118°34'13.92816"
608	Old Mission Trail	34.27203709	-118.5665167	34°16'19.333523999994"	-118°33'59.460119999976"
609	Porter Ranch Park	34.27203709	-118.5665167	34°16'19.333523999994"	-118°33'59.460119999976"
610	Santa Susana Pass State Historic Park	34.2633547	-118.6325466	34°15'48.07692"	-118°37'57.167759999994"
611	Rancho Simi Recreation and Park District Open Space	34.2633547	-118.6325466	34°15'48.07692"	-118°37'57.167759999994"
612	Rim of the Valley County Parkland	34.33740485	-118.4493312	34°20'14.657459999994"	-118°26'57.592320000012"
613	Wilson Canyon Park	34.33740485	-118.4493312	34°20'14.657459999994"	-118°26'57.592320000012"
614	Angeles National Forest	34.33740485	-118.4493312	34°20'14.657459999994"	-118°26'57.592320000012"
615	Michael D. Antonovich Regional Park at Joughin Ranch	34.29909944	-118.5974512	34°17'56.757983999994"	-118°35'50.824319999982"

616	Cold Creek Valley Preserve	34.29909944	-118.5974512	34°17'56.757983999994"	-118°35'50.824319999982"
617	MRCA Parkland	34.29909944	-118.5974512	34°17'56.757983999994"	-118°35'50.824319999982"
618	Angeles National Forest	34.31710319	-118.3871143	34°19'15.71483999988"	-118°23'13.611479999976"
619	Cold Creek Valley Preserve	34.31710319	-118.3871143	34°19'15.71483999988"	-118°23'13.611479999976"
620	Lopez Canyon	34.31710319	-118.3871143	34°19'15.71483999988"	-118°23'13.611479999976"
621	Angeles National Forest	34.35379116	-118.4850223	34°21'13.648176"	-118°29'6.080279999988"
622	Whitney Elsmere Open Space	34.35379116	-118.4850223	34°21'13.648176"	-118°29'6.080279999988"
623	Whitney Elsmere Open Space	34.35379116	-118.4850223	34°21'13.648176"	-118°29'6.080279999988"
624	Cold Creek Valley Preserve	34.26362145	-118.6325828	34°15'49.037220000006"	-118°37'57.298079999982"
625	Rancho Simi Recreation and Park District Open Space	34.26362145	-118.6325828	34°15'49.037220000006"	-118°37'57.298079999982"
626	Unnamed site - Mountains Recreation and Conservation Authority	34.12921595	-118.5714344	34°7'45.177420000009"	-118°34'17.163840000006"
627	Steers Property	34.12921595	-118.5714344	34°7'45.177420000009"	-118°34'17.163840000006"

APPENDIX I – LIST OF HISTORIC, ARCHITECTURAL, OR CULTURAL RESOURCES WITHIN APE

Name	Street Address	City	Zip	Evaluation Info
Chateau Colline	10335 Wilshire Blvd	Los Angeles	90024	1S
Chateau Colline One-Story Free-Standing Garage	10355 Wilshire Blvd	Los Angeles	90024	1D
Chateau Colline Reinforced Concrete Garage	10355 Wilshire Blvd	Los Angeles	90024	1D
Marymount High School	10643 Sunset Blvd	Los Angeles	90024	2S2
Dracker Apartments/ Lindbrook Manor	10824 Lindbrook Dr	Los Angeles	90024	2D2
Lindbrook Village	10830 Lindbrook Dr	Los Angeles	90024	2D2
Courtyard Apartment Complex	10840 Lindbrook Dr	Los Angeles	90024	2D2
Landfair Apartments, Everett Robison Hall	10940 Ophir Dr	Los Angeles	90024	3S
Federal Building	11000 Wilshire Blvd	Los Angeles	90024	1S
Strathmore Apartments	11005-11013 1/2 Strathmore Dr	Los Angeles	90024	1S
Strathmore Apartments	11005-11013 1/2 Strathmore Dr	Los Angeles	90024	1S
Strathmore Apartments	11005-11013 1/2 Strathmore Dr	Los Angeles	90024	1S
Strathmore Apartments	11005-11013 1/2 Strathmore Dr	Los Angeles	90024	1S
Ralphs Grocery Store	1142 Westwood Blvd	Los Angeles	90024	1S
UCLA Hedrick Hall	250 De Neve Dr	Los Angeles	90024	2S2
UCLA-Ackerman Hall	308 Westwood Plaza	Los Angeles	90024	2S2
Dickson Plaza - UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2
Dodd Hall-UCLA, 309 Portola Pl, 405 Hilgard Ave	405 N Hilgard Ave	Los Angeles	90024	2S2
Haines Hall-UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2
Janss Steps - UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2
Kerckoff Hall-UCLA	405 N Hilgard Ave	Los Angeles	90024	2S2
Kinsey Hall-UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2
Men's Gym-UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2

Moore Hall-UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2
Murphy Hall-UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2
Powell Library-UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2
Royce Hall-UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2
University Of California Los Angeles	405 N Hilgard Ave	Los Angeles	90024	2S2
Women's Gym-UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2
Kelton Apartments	644 Kelton Ave	Los Angeles	90024	1S
Fox Westwood Village Theater	959 Broxton Ave	Los Angeles	90024	2S2
Gayley Terrace	959 Gayley Ave	Los Angeles	90024	2S2
Hollywood High School	1521 N Highland Ave	Los Angeles	90028	1D
Hollywood High School Athletic Field	1521 N Highland Ave	Los Angeles	90028	1D
Hollywood High School Auditorium	1521 N Highland Ave	Los Angeles	90028	1D
Hollywood High School Historic District	1521 N Highland Ave	Los Angeles	90028	1S
Hollywood High School Liberal Arts Bldg	1521 N Highland Ave	Los Angeles	90028	1D
Hollywood High School Library	1521 N Highland Ave	Los Angeles	90028	1D
Hollywood High School Science Bldg	1521 N Highland Ave	Los Angeles	90028	1D
Talbot-Wood Dwelling	1608 N Las Palmas Ave	Los Angeles	90028	2S4
Ums Bldg	1618 N Las Palmas Ave	Los Angeles	90028	2S4
Max Factor Makeup Salon	1666 N Highland Ave	Los Angeles	90028	1D
Whitley Court	1720 Whitley Ave	Los Angeles	90028	1S
El Cadiz Apartments	1725 N Sycamore Ave	Los Angeles	90028	2S2
La Levenda	1737 Whitley Ave	Los Angeles	90028	3S
Canterbury Apartment Hotel, The	1746 N Cherokee Ave	Los Angeles	90028	1S
The Fontenoy	1811 Whitley Ave	Los Angeles	90028	3S
Fleur De Lis	1825 Whitley Ave	Los Angeles	90028	2S2
El Cabrillo	1832 N Grace Ave	Los Angeles	90028	1S

El Cabrillo Fountain	1832 N Grace Ave	Los Angeles	90028	1D
El Cabrillo Wall	1832 N Grace Ave	Los Angeles	90028	1D
The Havenhurst	1861 Whitley Ave	Los Angeles	90028	3S
	1921 Whitley AVE	LOS ANGELES	90028	2S2
Hollywood American Legion Post #43	2035 N Highland Ave	Los Angeles	90028	3S
Hollywood Boulevard Commercial And Entertainment D	6200 Hollywood Blvd	Los Angeles	90028	1S
Jj Newberrys	6600 Hollywood Blvd	Los Angeles	90028	1D
The Baine Building, Merchants Title	6601 Hollywood Blvd	Los Angeles	90028	1D
S H Kress & Co, Fredricks Of Hollywood	6606 Hollywood Blvd	Los Angeles	90028	1D
Vogue Theater	6629 Hollywood Blvd	Los Angeles	90028	3S
Cherokee Building	6630 Hollywood Blvd	Los Angeles	90028	1D
Shane Building	6652 Hollywood Blvd	Los Angeles	90028	1D
Musso Frank Grill	6663 Hollywood Blvd	Los Angeles	90028	1D
	6679 Hollywood Blvd	Los Angeles	90028	1D
Outpost Building	6701 Hollywood Blvd	Los Angeles	90028	1D
Grauman's Egyptian Theater	6708 Hollywood Blvd	Los Angeles	90028	1D
Pig N Whistle Restaurant, London Britches	6718 Hollywood Blvd	Los Angeles	90028	1D
Christie Hotel, Scientology Institute	6724 Hollywood Blvd	Los Angeles	90028	1D
Millers Stationers	6740 Hollywood Blvd	Los Angeles	90028	1D
Pickwick Bookstore, B. Dalton Pickwick Bookstore	6743 Hollywood Blvd	Los Angeles	90028	1D
Luberman Company, Bennett's Book Store	6753 Hollywood Blvd	Los Angeles	90028	3S
Montmartre	6755 Hollywood Blvd	Los Angeles	90028	1D

Hollywood Wax Museum	6765 Hollywood Blvd	Los Angeles	90028	1D
Hollywood Theatre	6766 Hollywood Blvd	Los Angeles	90028	1D
Los Angeles First Federal, Security Pacific Bank	6777 Hollywood Blvd	Los Angeles	90028	1D
Bank Of America	6780 Hollywood Blvd	Los Angeles	90028	1D
Rexall Drug Store, Lee Drug Co	6800 Hollywood Blvd	Los Angeles	90028	1D
	6806 Hollywood Blvd	Los Angeles	90028	1D
El Capitan Theater Office Building	6834 Hollywood Blvd	Los Angeles	90028	1D
Hollywood Masonic Temple	6840 Hollywood Blvd	Los Angeles	90028	1D
Seven Seas	6904 Hollywood Blvd	Los Angeles	90028	1D
Grauman's Chinese Theater	6925 Hollywood Blvd	Los Angeles	90028	1D
Hollywood Roosevelt Hotel	7000 Hollywood Blvd	Los Angeles	90028	1D
Hillview Cadillac, Motorame	7001 Hollywood Blvd	Los Angeles	90028	1D
Arthur Murray Dance Studio	7016 Hollywood Blvd	Los Angeles	90028	3S
Garden Court Apartments Residential Hotel	7021 Hollywood Blvd	Los Angeles	90028	3S
Arthur Murray	7024 Hollywood Blvd	Los Angeles	90028	1D
Hollywood Professional Bldg	7046 Hollywood Blvd	Los Angeles	90028	1D
Security Trust	7051 Hollywood Blvd	Los Angeles	90028	1D
	7055 Hollywood Blvd	Los Angeles	90028	1D
Hollywood Congregational Church	7065 Hollywood Blvd	Los Angeles	90028	1D
Santa Monica Boulevard Historic District	Santa Monica Blvd	West Hollywood	90046	2S2
Samuel Goldwyn Studios	1040 N Formosa Ave	Los Angeles	90046	3S
Pickford Fairbanks Studio	1041 Formosa Ave	West Hollywood	90046	3S

Plummer Park Community Clubhouse	1200 N Vista St	West Hollywood	90046	1S
Ramona, The	1236 N Harper Ave	West Hollywood	90046	2S
La Fontaine	1285 N Crescent Heights Blvd	West Hollywood	90046	3S
Mexican Village	1300 N Harper Ave	West Hollywood	90046	1D
Romanesque Villa Apartments	1301 N Harper Ave	West Hollywood	90046	1D
El Mirador	1302 N Sweetzer Ave	West Hollywood	90046	3S
Casa Granda Apartments, Harper House	1334 N Harper Ave	West Hollywood	90046	1D
Villa Sevilla	1338 N Harper Ave	West Hollywood	90046	1D
	1343 N Laurel Ave	West Hollywood	90046	2S2
Villa D'este	1355 Laurel Ave	West Hollywood	90046	3S
Ronda | Mi Casa Apartments	1400 Havenhurst Dr	West Hollywood	90046	1S
	1400 N Hayworth Ave	West Hollywood	90046	3S
Colonial House	1416 N Havenhurst Dr	Los Angeles	90046	1S
Colonial House	1416 N Havenhurst Dr	West Hollywood	90046	1S
Andalusia	1471 Havenhurst Dr	Los Angeles	90046	1S
The Adalusia Fountain	1471 Havenhurst Dr	Los Angeles	90046	1D
The Andalusia Building 2	1473 Havenhurst Dr	Los Angeles	90046	1D
The Andalusia Building 3	1475 Havenhurst Dr	Los Angeles	90046	1D
	1520 N Curson Ave	Los Angeles	90046	2D2
	1528 N Curson Ave	Los Angeles	90046	2D2
Hollywood School For Girls	1741 N La Brea Ave	Los Angeles	90046	1S
Hollywood School For Girls Cottage	1741 N La Brea Ave	Los Angeles	90046	1D
Hollywood School For Girls Shed	1741 N La Brea Ave	Los Angeles	90046	1D
Woman's Club Of Hollywood	1741 N La Brea Ave	Los Angeles	90046	1S

Wattles Mansion And Gardens	1824 N Curson Ave	Los Angeles	90046	3S
Toberman, C. E., Estate	1847 Camino Palmero	Hollywood	90046	1S
Atkinson Farnum Swain Residence	2003 N La Brea Terrace	Los Angeles	90046	2S2
Durfee Residence	2003 N La Brea Terrace	Los Angeles	90046	2S2
Boy Scouts Of America Clubhouse, Lions Club	623 N Robertson Blvd	West Hollywood	90046	3S
	7109 Hawthorn Ave	Los Angeles	90046	3S
	7113 Hawthorn Ave	Los Angeles	90046	3S
	7117 Hawthorn Ave	Los Angeles	90046	3S
	7129 Hawthorn Ave	Los Angeles	90046	3S
Normandie Towers	7219 Hampton Ave	West Hollywood	90046	2D2
Oldest House In Hollywood	7377 Santa Monica Blvd	Los Angeles	90046	3S
Los Angeles County Fire Station #8	7643 Santa Monica Blvd	West Hollywood	90046	2S2
Harpel, Willis House	7764 W Torreyson Dr	Los Angeles	90046	1S
Facade Improvements	7916 W Santa Monica Blvd	West Hollywood	90046	2D2
El Greco Apartment	817 N Hayworth Ave	Los Angeles	90046	1S
Chateau Marmont	8221 Sunset Blvd	Los Angeles	90046	3S
PATIO DEL MORO | Casita Para Una Estrellita	8225 Fountain Ave	West Hollywood	90046	1D
Les Maisonettes	8250 Fountain Ave	West Hollywood	90046	1D
Schindler, R. M., House	833 N Kings Rd	West Hollywood	90046	1S
William S. Hart House	8341 De Longpre Ave	West Hollywood	90046	2S4
Sunset Towers	8358 Sunset Blvd	West Hollywood	90046	1S
Coronet Apartments Hacienda Arms, Piazza Del Sol	8439 Sunset Blvd	West Hollywood	90046	1S

El Palacio	8491 W Fountain Ave	West Hollywood	90046	3S
Case Study House No. 21	9038 Wonderland Park Ave	Los Angeles	90046	1S
Adobe	916 N Genesee Ave	West Hollywood	90046	3S
Chasens	9023 Beverly Blvd	West Hollywood	90048	3S
Catholic-Protestant Chapels, Veterans Admin Center	Eisenhower Ave	Los Angeles	90049	1D
Streetcar Depot | Depot #66	Pershing Ave	Los Angeles	90049	1D
Mount St Mary's College Brady Hall	12001 Chalon Rd	Los Angeles	90049	2D2
Mount St Mary's College Carondelet Hall	12001 Chalon Rd	Los Angeles	90049	2D2
Mount St Mary's College Charles Willard Memorial L	12001 Chalon Rd	Los Angeles	90049	2D2
Mount St Mary's College Historic District	12001 Chalon Rd	Los Angeles	90049	2S2
Mount St Mary's College Mary Chapel	12001 Chalon Rd	Los Angeles	90049	2S2
Mount St Mary's College Rossiter Hall	12001 Chalon Rd	Los Angeles	90049	2D2
Mount St Mary's College St Joseph's Hall	12001 Chalon Rd	Los Angeles	90049	2D2
Fairfield Inn By Marriott	525 N Sepulveda Blvd	Los Angeles	90049	2S2
Los Angeles National Cemetery Arcade	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Bivouac Of Dead Plaq	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Chapel (Admin Bldg)	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery	950 S Sepulveda Blvd	Los Angeles	90049	1D

Civil War Soldier Mo				
Los Angeles National Cemetery Columbarium	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Comfort Station	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Flagpole	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Fuel Storage Bldg	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Maintenance Bldg 1	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Maintenance Bldg 2	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery NHDVS Monument	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Rostrum	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Span-Amer War Monume	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Terraces/Overlooks	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Wilshire Blvd Gate H	950 S Sepulveda Blvd	Los Angeles	90049	1D
	1914 N Las Palmas Ave	Los Angeles	90068	1D
Shrader House	1927 N Highland Ave	Los Angeles	90068	3S
	1959 Whitley Ave	Los Angeles	90068	1D
Freeman House F L Wright Block House Thematic	1962 Glencoe Wy	Los Angeles	90068	1CL
	1965 Whiteley Ave	LOS ANGELES	90068	1D

	1969 Whiteley Ave	LOS ANGELES	90068	1D
	1987 Whitely Terrace	LOS ANGELES	90068	1D
Yamashiro Historic District Garage	1999 N Sycamore Ave	Los Angeles	90068	1D
Yamashiro Historic District Groundkeeper's Cottage	1999 N Sycamore Ave	Los Angeles	90068	1D
Yamashiro Historic District Hollywood Hills Hotel	1999 N Sycamore Ave	Los Angeles	90068	1D
Yamashiro Historic District Japanese Pagoda	1999 N Sycamore Ave	Los Angeles	90068	1D
Yamashiro Historic District Main House	1999 N Sycamore Ave	Los Angeles	90068	1D
Yamashiro Historic District Menagerie House	1999 N Sycamore Ave	Los Angeles	90068	1D
Yamashiro Historic District Resting Pavilion	1999 N Sycamore Ave	Los Angeles	90068	1D
Yamashiro Historic District South Gatehouse	1999 N Sycamore Ave	Los Angeles	90068	1D
	2000 Grace Ave	Los Angeles	90068	1D
Valentino Apartments	2000 N Highland Ave	Los Angeles	90068	3S
	2000 N Las Palmas Ave	Los Angeles	90068	1D
Jane Fonda And Tom Hayden Residence	2001 Holly Hill Terrace	Los Angeles	90068	1D
John Thomas	2002 N Las Palmas Ave	Los Angeles	90068	1D
	2002 Whitely Ave	Los Angeles	90068	1D
	2006 N Las Palmas Ave	Los Angeles	90068	1D
	2008 N Las Palmas Ave	Los Angeles	90068	1D
	2008 Whitely Ave	Los Angeles	90068	1D
	2010 Holly Hill Terrace	Los Angeles	90068	1D
	2011 Holly Hill Terrace	LOS ANGELES	90068	1D
	2014 Grace Ave	LOS ANGELES	90068	1D

	2014 N Las Palmas Ave	Los Angeles	90068	1D
	2014 Whitely Ave	Los Angeles	90068	1D
	2015 Whitely Ave	Los Angeles	90068	1D
	2017 Holly Hill Terrace	Los Angeles	90068	1D
	2018 Whitley Ave	Los Angeles	90068	1D
	2019 Grace Ave	Los Angeles	90068	1D
Francis X Bushman	2020 Grace Ave	Los Angeles	90068	1D
	2020 N Las Palmas Ave	Los Angeles	90068	1D
	2020 Whitley Terrace Steps	Los Angeles	90068	1D
	2021 Holly Hill Terrace	Los Angeles	90068	1D
	2021 Whitley Terrace Steps	Los Angeles	90068	1D
	2022 Holly Hill Terrace	Los Angeles	90068	1D
	2022 Whitely Ave	Los Angeles	90068	1D
	2025 Grace Ave	Los Angeles	90068	1D
	2025 Holly Hill Terrace	Los Angeles	90068	1D
	2026 Holly Hill Terrace	Los Angeles	90068	1D
	2026 N Las Palmas Ave	Los Angeles	90068	1D
Gertrude Astor Home	2030 Holly Hill Terrace	Los Angeles	90068	1D
	2031 Holly Hill Terrace	Los Angeles	90068	1D
	2031 Whitley Terrace	Los Angeles	90068	1D
	2032 N Las Palmas Ave	Los Angeles	90068	1D
	2034 Grace Ave	Los Angeles	90068	1D
	2034 N Las Palmas Ave	Los Angeles	90068	1D
	2036 Holly Hill Terrace	Los Angeles	90068	1D
	2037 Holly Hill Terrace	Los Angeles	90068	1D
	2037 Whitley Terrace	Los Angeles	90068	1D
	2038 N Las Palmas Ave	Los Angeles	90068	1D
	2040 Bella Vista Wy	Los Angeles	90068	1D

	2040 N Las Palmas Ave	Los Angeles	90068	1D
Martin Balsam Home, Joyce Van Patten Home	2041 Grace Ave	Los Angeles	90068	1D
	2042 N Las Palmas Ave	Los Angeles	90068	1D
	2044 Grace Ave	Los Angeles	90068	1D
	2047 Grace Ave	Los Angeles	90068	1D
	2049 N Las Palmas Ave	Los Angeles	90068	1D
	2050 N Las Palmas Ave	Los Angeles	90068	1D
Mary Jackson Home	2055 Grace Ave	Los Angeles	90068	1D
	2055 N Las Palmas Ave	Los Angeles	90068	1D
	2056 Grace Ave	Los Angeles	90068	1D
Paul Kelly	2057 N Las Palmas Ave	Los Angeles	90068	1D
Gloria Swanson	2058 Watsonia Terrace	Los Angeles	90068	1D
	2059 Watsonia Terrace	Los Angeles	90068	1D
Richard And Karen Wookey Home	2062 Watsonia Terrace	Los Angeles	90068	1D
	2064 Watsonia Terrace	Los Angeles	90068	1D
	2068 Watsonia Terrace	Los Angeles	90068	1D
Frank Scully Home	2071 Grace Ave	Los Angeles	90068	1D
H J Whitley Home	2073 Whitley Terrace	Los Angeles	90068	1D
John Charles Thomas	2074 Watsonia Terrace	Los Angeles	90068	1D
	2075 Watsonia Terrace	Los Angeles	90068	1D
Lasky Demille Studio Barn	2100 N Highland Ave	Los Angeles	90068	1S
Richard Eagan Home	2133 Fairfield Ave	Los Angeles	90068	1D
	2139 Fairfield Ave	Los Angeles	90068	1D
	2145 Fairfield Ave	Los Angeles	90068	1D
Hollywood Bowl	2301 N Highland Ave	Los Angeles	90068	2S2
Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2D2

Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2D2
Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2D2
Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2D2
Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2D2
Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2D2
Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2D2
Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2D2
Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2D2
Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2S2
	6510 Cerritos Pl	Los Angeles	90068	1D
	6526 Cerritos Pl	Los Angeles	90068	1D
	6532 Cerritos Pl	Los Angeles	90068	1D
	6538 Bella Vista Wy	Los Angeles	90068	1D
	6542 Bella Vista Wy	Los Angeles	90068	1D
	6603 Emmet Terrace	Los Angeles	90068	1D
Beverly Dangelo Home	6603 Whitley Terrace	Los Angeles	90068	1D
	6607 Padre Terrace	Los Angeles	90068	1D
	6609 Whitley Terrace	Los Angeles	90068	1D
	6610 Padre Terrace	Los Angeles	90068	1D
	6611 Emmet Terrace	Los Angeles	90068	1D
	6612 Whitley Terrace	Los Angeles	90068	1D
	6613 Whitley Terrace	Los Angeles	90068	1D
	6614 Emmet Terrace	Los Angeles	90068	1D
Zoellner Home	6615 Emmet Terrace	Los Angeles	90068	1D
Carmen Miranda Home	6615 Padre Terrace	Los Angeles	90068	1D

H H Barter House	6620 Whitley Terrace	Los Angeles	90068	1D
Phyllis Haver Home	6621 Emmet Terrace	Los Angeles	90068	1D
	6621 Padre Terrace	Los Angeles	90068	1D
	6621 Whitley Terrace	Los Angeles	90068	1D
	6624 Whitley Terrace	Los Angeles	90068	1D
Jean Parker Home	6627 Emmet Terrace	Los Angeles	90068	1D
Whitley Home	6630 Whitley Terrace	Los Angeles	90068	1D
	6633 Emmet Terrace	Los Angeles	90068	1D
	6633 Whitley Terrace	Los Angeles	90068	1D
	6636 Emmet Terrace	Los Angeles	90068	1D
	6640 Whitley Terrace	Los Angeles	90068	1D
	6642 Emmet Terrace	Los Angeles	90068	1D
	6643 Emmet Terrace	Los Angeles	90068	1D
	6646 Whitley Terrace	Los Angeles	90068	1D
Amy Archard Home	6650 Whitley Terrace	Los Angeles	90068	1D
	6652 Whitley Terrace	Los Angeles	90068	1D
	6654 Whitley Terrace	Los Angeles	90068	1D
	6655 Emmet Terrace	Los Angeles	90068	1D
	6657 Emmet Terrace	Los Angeles	90068	1D
	6658 Emmet Terrace	Los Angeles	90068	1D
Henry Jones Home	6658 Whitley Terrace	Los Angeles	90068	1D
Beulah Bondi	6660 Whitley Terrace	Los Angeles	90068	1D
	6661 Emmet Terrace	Los Angeles	90068	1D
	6662 Emmet Terrace	Los Angeles	90068	1D

Chester Morris Home	6662 Whitley Terrace	Los Angeles	90068	1D
	6663 Bon Air Pl	Los Angeles	90068	1D
Rissner Patty	6665 Emmet Terrace	Los Angeles	90068	1D
Anita Louise	6666 Whitley Terrace	Los Angeles	90068	1D
	6670 Whitley Terrace	Los Angeles	90068	1D
Barbara Lamarr	6672 Whitley Terrace	Los Angeles	90068	1D
	6673 Emmet Terrace	Los Angeles	90068	1D
	6674 Bon Air Pl	Los Angeles	90068	1D
	6674 Whitley Terrace	Los Angeles	90068	1D
Donald O'connor Home	6675 Whitley Terrace	Los Angeles	90068	1D
	6676 Emmet Terrace	Los Angeles	90068	1D
	6680 Bon Air Pl	Los Angeles	90068	1D
	6680 Emmet Terrace	Los Angeles	90068	1D
Maurice Chevalier Home	6680 Whitley Terrace	Los Angeles	90068	1D
	6688 Whitley Terrace	Los Angeles	90068	1D
William Eythe	6689 Emmet Terrace	Los Angeles	90068	1D
	6690 Whitley Terrace	Los Angeles	90068	1D
Richard Barthelmess Home, Bill Bast Home	6691 Whitley Terrace	Los Angeles	90068	1D
Wesley And Julia Barry Home	6692 Whitley Terrace	Los Angeles	90068	1D
	6694 Whitley Terrace	Los Angeles	90068	1D
Robert Vignola	6697 Whitley Terrace	Los Angeles	90068	1D
	6698 Whitley Terrace	Los Angeles	90068	1D
	6707 Milner Rd	Los Angeles	90068	1D
	6708 Milner Rd	Los Angeles	90068	1D
	6711 Whitley Terrace	Los Angeles	90068	1D
	6717 Milner Rd	Los Angeles	90068	1D

	6717 Whitley Terrace	Los Angeles	90068	1D
Marie Dressler Home	6718 Milner Rd	Los Angeles	90068	1D
Whitney Blake	6722 Whitley Terrace	Los Angeles	90068	1D
	6726 Milner Rd	Los Angeles	90068	1D
	6727 Milner Rd	Los Angeles	90068	1D
	6733 Wedgewood Pl	Los Angeles	90068	1D
Dennis Okeefe	6734 Wedgewood Pl	Los Angeles	90068	1D
	6735 Wedgewood Pl	Los Angeles	90068	1D
Fay Compton	6738 Wedgewood Pl	Los Angeles	90068	1D
Irene Tedrow	6740 Milner Rd	Los Angeles	90068	1D
	6740 Whitley Terrace	Los Angeles	90068	1D
	6742 Wedgewood Pl	Los Angeles	90068	1D
	6746 Milner Rd	Los Angeles	90068	1D
W C Fields	6746 Wedgewood Pl	Los Angeles	90068	1D
William Wellman	6747 Milner Rd	Los Angeles	90068	1D
	6749 Whitley Terrace	Los Angeles	90068	1D
	6750 Wedgewood Pl	Los Angeles	90068	1D
	6753 Milner Rd	Los Angeles	90068	1D
Lloyd Nolan	6754 Wedgewood Pl	Los Angeles	90068	1D
	6755 Wedgewood Pl	Los Angeles	90068	1D
	6756 Milner Rd	Los Angeles	90068	1D
	6757 Milner Rd	Los Angeles	90068	1D
	6758 Milner Rd	Los Angeles	90068	1D
	6758 Wedgewood Pl	Los Angeles	90068	1D
	6760 Milner Rd	Los Angeles	90068	1D
	6763 Whitley Terrace	Los Angeles	90068	1D
	6764 Milner Rd	Los Angeles	90068	1D
	6767 Wedgewood Pl	Los Angeles	90068	1D
	6767 Whitley Terrace	Los Angeles	90068	1D
Marquardt	6770 Milner Rd	Los Angeles	90068	1D

	6776 Milner Rd	Los Angeles	90068	1D
	6782 Milner Rd	Los Angeles	90068	1D
	6796 Milner Rd	Los Angeles	90068	1D
	6943 Camrose Dr	Los Angeles	90068	2D2
North Harper Avenue Historic District	N Harper Ave	West Hollywood	90069	1S
	1127 Horn Ave	West Hollywood	90069	3S
The 1236	1236 N Flores St	West Hollywood	90069	3S
The Royal Gardens	1255 N Flores St	West Hollywood	90069	3S
	1285 N Sweetzer Ave	West Hollywood	90069	3S
Hayworth Tower	1314 N Hayworth Ave	West Hollywood	90069	3S
El Pasadero	1330 N Harper Ave	West Hollywood	90069	1D
	1334 N Laurel Ave	West Hollywood	90069	2S2
Casa Real	1354 N Harper Ave	West Hollywood	90069	1D
Case Study House No. 22	1635 Woods Dr	Los Angeles	90069	1S
Mitchell Camera Corporation Factory/Studio One	652 N La Peer Dr	West Hollywood	90069	2S
United Artists	7200 Santa Monica Blvd	West Hollywood	90069	2S2
	7950 W Fountain Ave	West Hollywood	90069	3S
Storer House	8161 Hollywood Blvd	Los Angeles	90069	1S
Automotive Garage	8264 Fountain Ave	West Hollywood	90069	1D
Golden Crest Retirement Hotel|Standard Hotel	8300 W Sunset Blvd	West Hollywood	90069	2S2
	8320 W Fountain Ave	West Hollywood	90069	3S
Hacienda Arms Apartments | Coronet Apartments	8439 Sunset Blvd	West Hollywood	90069	1S
Wright, Lloyd, Home And Studio	858 N Doheny Dr	West Hollywood	90069	1S
	8589 Sunset Blvd	West Hollywood	90069	3D
	8600 Sunset Blvd	West Hollywood	90069	3D
	8601 Sunset Blvd	West Hollywood	90069	3D
Trocadero Steps	8610 Sunset Blvd	West Hollywood	90069	3D

	8619 Sunset Blvd	West Hollywood	90069	3D
	8623 Sunset Blvd	West Hollywood	90069	3D
	8625 Sunset Blvd	West Hollywood	90069	3D
	8630 Sunset Blvd	West Hollywood	90069	3D
	8641 Sunset Blvd	West Hollywood	90069	3D
	8657 Sunset Blvd	West Hollywood	90069	3D
	8701 W Santa Monica Blvd	West Hollywood	90069	3S
	8720 Sunset Blvd	West Hollywood	90069	3D
	8924 W Cynthia St	West Hollywood	90069	3S
Dutch Reformed Church, First Baptist Church	9025 W Cynthia St	West Hollywood	90069	3S
Crosby Building	9028 W Sunset Blvd	West Hollywood	90069	2S
County Library	903 N Westhourne Ave	West Hollywood	90069	3S
	927 N Palm Ave	West Hollywood	90069	3S
	931 N Palm Ave	West Hollywood	90069	3S
County Fire Station #7	954 N Hancock Ave	West Hollywood	90069	3S
Walstrom, Douglas And Octavia, House	10500 Selkirk Ln	Los Angeles	90077	1S
Case Study House No. 16	1811 Bel Air Rd	Los Angeles	90077	2S
Morris Landau House	638 N Faring Rd	Bel Air	90077	2S2
La0065	350 De Neve Dr	Los Angeles	90095	2S2
Bunche Center For African American Studies, UCLA	405 Hilgard Ave	Los Angeles	90095	2S2
Boelter Hall	580 Portola Plaza	Beverly Hills	90095	2S2
Rogers	1000 N Crescent Dr	Beverly Hills	90210	3S
Thomas	1006 N Crescent Dr	Beverly Hills	90210	3S
Buster Keaton Estate	1018 Pamela Dr	Beverly Hills	90210	3S
Fredric March	1026 Ridgedale Dr	Beverly Hills	90210	3S
Pratt Residence	1028 Ridgedale Dr	Beverly Hills	90210	3S
Corrine Griffith Estate, Ronald Colman Estate	1030 Benedict Canyon Dr	Beverly Hills	90210	3S
David O. Selznick Residence	1050 Summit Dr	Beverly Hills	90210	3S

Silsby Spalding Estate	1100 Carolyn Wy	Beverly Hills	90210	2D3
Fudger Residence	1103 San Ysidro Dr	Beverly Hills	90210	3S
Pickfair	1143 Summit Dr	Beverly Hills	90210	3S
Kolb Estate	1146 Tower Rd	Beverly Hills	90210	3S
Elizabeth D. Hopper House	1305 Park Wy	Beverly Hills	90210	3S
Paul Helms House	135 Copley Pl	Beverly Hills	90210	3S
Beverly Hills Women's Club	1700 Chevy Chase Dr	Beverly Hills	90210	1S
T.A. Tooey	1700 Lexington Rd	Beverly Hills	90210	3S
Kress, George R., House	2337 Benedict Canyon Dr	Los Angeles	90210	1S
Payne Furnace & Supply Co. Plant, Payne Building	336 N Foothill Rd	Beverly Hills	90210	3S
Beverly Hills Mortuary	417 N Maple Dr	Beverly Hills	90210	3S
Beverly Hills City Hall	450 N Crescent Dr	Beverly Hills	90210	2S2
Us Post Office-Beverly Hills Main | Beverly Hills	469 N Cresent Dr	Beverly Hills	90210	1S
	506 N Arden Dr	Beverly Hills	90210	3D
	507 N Arden Dr	Beverly Hills	90210	3D
	508 N Arden Dr	Beverly Hills	90210	3D
	509 N Arden Dr	Beverly Hills	90210	3D
	510 N Arden Dr	Beverly Hills	90210	3D
	511 N Arden Dr	Beverly Hills	90210	3D
	512 N Arden Dr	Beverly Hills	90210	3D
	514 N Arden Dr	Beverly Hills	90210	3D
	515 N Arden Dr	Beverly Hills	90210	3D
Artemus Clark House	515 N Canon Dr	Beverly Hills	90210	3D
	516 N Arden Dr	Beverly Hills	90210	3D
	518 N Arden Dr	Beverly Hills	90210	3D
	519 N Arden Dr	Beverly Hills	90210	3D
	520 N Arden Dr	Beverly Hills	90210	3D
	521 N Arden Dr	Beverly Hills	90210	3D
	522 N Arden Dr	Beverly Hills	90210	3D
	523 N Arden Dr	Beverly Hills	90210	3D
	524 N Arden Dr	Beverly Hills	90210	3D
	525 N Arden Dr	Beverly Hills	90210	3D
	527 N Arden Dr	Beverly Hills	90210	3D
	603 N Arden Dr	Beverly Hills	90210	3D
	604 N Arden Dr	Beverly Hills	90210	3D

	605 N Arden Dr	Beverly Hills	90210	3D
	606 N Arden Dr	Beverly Hills	90210	3D
	607 N Arden Dr	Beverly Hills	90210	3D
	610 N Arden Dr	Beverly Hills	90210	3D
Oakman	610 N Beverly Dr	Beverly Hills	90210	3S
	611 N Arden Dr	Beverly Hills	90210	3D
	612 N Arden Dr	Beverly Hills	90210	3D
	613 N Arden Dr	Beverly Hills	90210	3D
William T. Sterling House	613 N Beverly Dr	Beverly Hills	90210	3D
	615 N Arden Dr	Beverly Hills	90210	3D
Herb Nacio Brown	616 N Beverly Dr	Beverly Hills	90210	3S
	617 N Arden Dr	Beverly Hills	90210	3D
	618 N Arden Dr	Beverly Hills	90210	3D
Edward M. Smith Residence	618 N Beverly Dr	Beverly Hills	90210	3D
L G Mcneil RESIDENCE	619 N Arden Dr	Beverly Hills	90210	3B
	620 N Arden Dr	Beverly Hills	90210	3D
	621 N Arden Dr	Beverly Hills	90210	3D
	622 N Arden Dr	Beverly Hills	90210	3D
	624 N Arden Dr	Beverly Hills	90210	3D
Hawthorne Grammar School	624 N Rexford Dr	Beverly Hills	90210	2S2
	625 N Arden Dr	Beverly Hills	90210	3D
	626 N Arden Dr	Beverly Hills	90210	3D
	627 N Arden Dr	Beverly Hills	90210	3D
	628 N Arden Dr	Beverly Hills	90210	3D
	629 N Arden Dr	Beverly Hills	90210	3D
	630 N Arden Dr	Beverly Hills	90210	3D
Samuel M. Lee Residence	634 N Alta Dr	Beverly Hills	90210	3S
J.R. Wesselne Residence	703 N Alpine Dr	Beverly Hills	90210	3D
	703 N Arden Dr	Beverly Hills	90210	3D
	704 N Arden Dr	Beverly Hills	90210	3D
	705 N Alpine Dr	Beverly Hills	90210	3D
	705 N Arden Dr	Beverly Hills	90210	3B
R.B. Murphy Residence	706 N Alpine Dr	Beverly Hills	90210	3D
	706 N Arden Dr	Beverly Hills	90210	3D
Herbert Robbins Residence	707 N Alpine Dr	Beverly Hills	90210	3D
Morrison, Agnes Residence	707 N Arden Dr	Beverly Hills	90210	3S
	708 N Arden Dr	Beverly Hills	90210	3D
F. A. Blensberg Residence	709 N Alpine Dr	Beverly Hills	90210	3D

	709 N Arden Dr	Beverly Hills	90210	3D
	710 N Alpine Dr	Beverly Hills	90210	3D
Paul A. Jesberg Residence	711 N Alpine Dr	Beverly Hills	90210	3D
Edward Wood House	711 N Canon Dr	Beverly Hills	90210	3D
F. D. Parker Residence	713 N Alpine Dr	Beverly Hills	90210	3D
Samuel Mortensen Residence	714 N Alpine Dr	Beverly Hills	90210	3D
	715 N Alpine Dr	Beverly Hills	90210	3D
Frank Charon Residence	716 N Alpine Dr	Beverly Hills	90210	3D
Sarah B. Hughes Resdience	717 N Alpine Dr	Beverly Hills	90210	3D
Hopper, C. B. & H. M. House	718 N Beverly Dr	Beverly Hills	90210	3S
	720 N Foothill Rd	Beverly Hills	90210	3S
S.C. Roew Residence	721 N Alpine Dr	Beverly Hills	90210	3D
	722 N Alpine Dr	Beverly Hills	90210	3D
	724 N Alpine Dr	Beverly Hills	90210	3D
Kate Greppin Residence	801 N Alpine Dr	Beverly Hills	90210	3D
Edmund Locke Residence	801 N Rodeo Dr	Beverly Hills	90210	3S
	801 N Roxbury Dr	Beverly Hills	90210	3S
Addie Greenfield Residence	802 N Alpine Dr	Beverly Hills	90210	3D
	803 N Alpine Dr	Beverly Hills	90210	3D
Cox House	803 N Rexford Dr	Beverly Hills	90210	3S
Eudora Thorkiblsen	803 N Rodeo Dr	Beverly Hills	90210	3S
W. S. Mcgilvray Residence	804 N Alpine Dr	Beverly Hills	90210	3D
Nelson Eddy	805 N Alpine Dr	Beverly Hills	90210	3D
Elizabeth Hinckley Residence	806 N Alpine Dr	Beverly Hills	90210	3D
Theodore R. Cadwallader Residence	808 N Alpine Dr	Beverly Hills	90210	3D
	810 N Alpine Dr	Beverly Hills	90210	3D
Aleck Curlett Residence	811 N Alpine Dr	Beverly Hills	90210	3D
L.W. Newbert Residence	812 N Alpine Dr	Beverly Hills	90210	3D
A. M. G. Bertolotti Residence	814 N Alpine Dr	Beverly Hills	90210	3D
	816 N Alpine Dr	Beverly Hills	90210	3D

Marlene Dietrich House	822 N Roxbury Dr	Beverly Hills	90210	3S
Rigby House	832 Greenway Dr	Beverly Hills	90210	3S
Doheny Estate/Greystone	905 Loma Vista Dr	Beverly Hills	90210	1S
Earle C. Anthony	910 N Bedford Dr	Beverly Hills	90210	3S
	918 N Alpine Dr	Beverly Hills	90210	3S
Debotiller Reside3nce	9481 Sunset Blvd	Beverly Hills	90210	3S
Beverly Hills Hotel	9641 Sunset Blvd	Beverly Hills	90210	2S2
J.R. Pinkham Residence	9930 Tower Ln	Beverly Hills	90210	3S
Whitley Court	1722 Whitley Ave	Los Angeles	90272	1D
Whitley Court	1726 Whitley Ave	Los Angeles	90272	1D
Whitley Court	1728 Whitley Ave	Los Angeles	90272	1D
Chatsworth Community Church	22601 Lassen St	Los Angeles	91311	3S
Charles Alexander Mentry House; Mentry House	27201 W Pico Canyon Rd	Santa Clarita	91320	3B
Felton School	27201 W Pico Canyon Rd	Santa Clarita	91320	3B
Mentry Barn & Carriage House	27201 W Pico Canyon Rd	Santa Clarita	91320	3D
Faith Bible Church	18531 Gresham St	Los Angeles	91324	3S
Temple Ramat Zion Synagogue	17655 Devonshire St	Northridge	91325	2S2
Victory Medical Center	19231 Victory Blvd	Reseda	91335	2S2
Salvation Army-Thrift Store	110 N Maclay St	San Fernando	91340	2S2
Lopez Adobe	1100 Pico St	San Fernando	91340	1S
San Fernando Junior High School	130 N Brand Blvd	San Fernando	91340	2S2
Mission San Fernando Rey De Espana	15151 San Fernando Mission Blvd	San Fernando	91340	1S
Old Rock Scout House	208 Park Ave	San Fernando	91340	2S2
	216 Hagar St	San Fernando	91340	2S2
	447 Hagar St	San Fernando	91340	2S2
Sylmar Recreation Center - Susan B Anthony Buildin	13109 Borden Ave	Los Angeles	91342	2D2
Citi Bank	16800 Devonshire St	Granada Hills	91344	2S2

Pico, Romulo, Adobe	10940 Sepulveda Blvd	Mission Hills	91345	1S
Stone House	8642 Sunland Blvd	Los Angeles	91352	3S
Fire Station No. 77	8943 Glenoaks Blvd	Los Angeles	91352	2S2
California Institute Of The Arts Main Building	24700 Mc Bean PKWY	Santa Clarita	91355	2S2
Boykin Hall | James D. Boykin Laboratory Center	26455 Rockwell Canyon Rd	Santa Clarita	91355	2S2
Pico #4^Other Name | Pico Canyon Oil Field^Other Name | Well #Cso 4^Other Name		Stevenson Ranch	91381	1S
Van Nuys City Hall	14410 Sylvan St	Van Nuys	91401	2S2
	8701 Tyrone Ave	Los Angeles	91402	2D2
Panorama City Historic District	8715 N Murietta Ave	Los Angeles	91402	2D2
	15300 Ventura Blvd	Sherman Oaks	91403	2S2
Old Van Nuys Post Office	14530 Sylvan St	Van Nuys	91404	3S
Sepulveda Flood Control Dam	15758 Burbank Blvd	Van Nuys	91406	2S2
Hathaway Building	7120 Hayvenhurst Ave	Van Nuys	91406	2S2
Valley Municipal Building, Van Nuys City Hall	14410 Sylvan St	Los Angeles	91409	2S2
Van Nuys Branch	14553 Sylvan Wy	Los Angeles	91411	1S
Department Of Water & Power	14601 Aetna St	Van Nuys	91411	2S2
Chase Knoll Apartments	13401 Riverside Dr	Los Angeles	91423	2S3
Garnier Building	16756 Moorpark St	Los Angeles	91436	1D
Limestone Blacksmith Shop	16756 Moorpark St	Los Angeles	91436	1D
Rancho El Encino	16756 Moorpark St	Encino	91436	1S
Vincente De La Osa Adobe	16756 Moorpark St	Los Angeles	91436	1D
Phils Diner	11138 Chandler Blvd	North Hollywood	91601	2S2

Southern Pacific Electric Station	11275 Chandler Blvd	North Hollywood	91601	2S2
Department Of Water And Power	5108 Lankershim Blvd	Los Angeles	91601	2S2
North Hollywood Library | Amelia Earhart Library	5211 N Tujunga Ave	Los Angeles	91601	1S
El Portal Theatre	5265 Lankershim Blvd	Los Angeles	91601	2S2
Security Trust And Savings Bank, Paperback Shack B	5303 Lankershim Blvd	Los Angeles	91601	2S2
Lankershim Southern Pacific Railroad Depot, Hendri	5401 Lankershim Blvd	Los Angeles	91601	2S2
Standard Oil Service Station	5401 Lankershim Blvd	North Hollywood	91601	2S
Circus Liquor Jr Market	5600 Vineland Ave	Los Angeles	91601	2S2
Case Study House No. 1	10152 Toluca Lake Ave	Los Angeles	91602	1S
Casa Adobe Hacienda Of Don Tomas Feliz, Campo De C	3919 Lankershim Blvd	Los Angeles	91602	1D
St Saviors Chapel	3700 Coldwater Canyon Dr	Los Angeles	91604	3S
Portal Of The Folded Wings Shrine To Aviation And	10621 Victory Blvd	North Hollywood	91606	1S
Victory Square	12444 Victory Blvd	North Hollywood	91606	2S2
Great Wall Of Los Angeles	12900 Oxnard ST	Valley Glen	91606	1S
S.B. Gleason Residence	504 Bellingham Ave	Los Angeles	91607	2S2
Universal City And Studios	100 Universal City Plaza	Universal City	91608	3S
Hollywood Reservoir Complex	Cahuenga Blvd	Los Angeles		2D2
Mission Wells And Settling Basin	Havana Ave	Los Angeles		3S
Los Angeles River Flood Channel | Reach 2a	I 5	Los Angeles		2S2
Cascades	Interstate 5	San Fernando		3S

Hollywood Reservoir Complex	Lake Hollywood Dr	Los Angeles	2D2
Hollywood Reservoir Complex	Lake Hollywood Dr	Los Angeles	2D2
Hollywood Reservoir Complex	Lake Hollywood Dr	Los Angeles	2D2
Hollywood Reservoir Complex	Lake Hollywood Dr	Los Angeles	2D2
Palmer, Minnie Hill, House	S Chatsworth Park	Chatsworth	1S
San Fernando Valley Generating Plant	11845 Vose St	Los Angeles	2S2
Olive Switching Station	13355 San Fernando Rd	Los Angeles	2S2
Fire Station No. 39	14415 Sylvan St	Los Angeles	2D2
Barber Shop-Olive View	14445 Olive View Dr	Los Angeles	2S2
Building #403	14445 Olive View Dr	Los Angeles	2S2
Building 106-Olive View	14445 Olive View Dr	Los Angeles	2S2
Building 108-Olive View	14445 Olive View Dr	Los Angeles	2S2
Building 110-Olive View	14445 Olive View Dr	Los Angeles	2S2
Building 114-Olive View	14445 Olive View Dr	Los Angeles	2S2
Building 301-Olive View	14445 Olive View Dr	Los Angeles	2S2
Building 303-Olive View	14445 Olive View Dr	Los Angeles	2S2
Building 305-Olive View	14445 Olive View Dr	Los Angeles	2S2
Building 307-Olive View	14445 Olive View Dr	Los Angeles	2S2
Building H-Olive View	14445 Olive View Dr	Los Angeles	2S2
Building I-Olive View	14445 Olive View Dr	Los Angeles	2S2
Buildings #401 And 402	14445 Olive View Dr	Los Angeles	2S2
Bungalow C-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow D-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow E-Olive View	14445 Olive View Dr	Los Angeles	2S2

Bungalow F-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow G-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow J-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow L-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow M-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow N-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow O-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow P-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow Q-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow R-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow S-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow T-Olive View	14445 Olive View Dr	Los Angeles	2S2
Convalescent Cottage-Olive View	14445 Olive View Dr	Los Angeles	2S2
Coroner's Office-Olive View	14445 Olive View Dr	Los Angeles	2S2
Cottage #1-Olive View	14445 Olive View Dr	Los Angeles	2S2
Cottage #3-Olive View	14445 Olive View Dr	Los Angeles	2S2
Cottage #4-Olive View	14445 Olive View Dr	Los Angeles	2S2
Cottage U-Olive View	14445 Olive View Dr	Los Angeles	2S2
Double Garage-Olive View	14445 Olive View Dr	Los Angeles	2S2
Film Storage Vault, Olive View	14445 Olive View Dr	Los Angeles	2S2
Garage	14445 Olive View Dr	Los Angeles	2S2
Garage-Olive View	14445 Olive View Dr	Los Angeles	2S2
Garbage And Can House-Olive View	14445 Olive View Dr	Los Angeles	2S2
Guest Cottage-Olive View	14445 Olive View Dr	Los Angeles	2S2

Medical Transcription-Olive View	14445 Olive View Dr	Los Angeles	2S2
Morgue-Olive View	14445 Olive View Dr	Los Angeles	2S2
Olive View	14445 Olive View Dr	Los Angeles	2S2
Personnel Payroll-Olive View	14445 Olive View Dr	Los Angeles	2S2
Ward 103	14445 Olive View Dr	Los Angeles	2S2
Warehouse-Olive View	14445 Olive View Dr	Los Angeles	2S2
Women Doctor's Cottage-Olive View	14445 Olive View Dr	Los Angeles	2S2
Brand Park Comfort Station	15174 San Fernando Mission Blvd	Los Angeles	2D2
Brand Park-Chest High Walls	15174 San Fernando Mission Blvd	Los Angeles	2D2
Brand Park-Entrance Gate	15174 San Fernando Mission Blvd	Los Angeles	2D2
Brand Park-Fountain	15174 San Fernando Mission Blvd	Los Angeles	2D2
Brand Park-Mission Fountain	15174 San Fernando Mission Blvd	Los Angeles	2D2
Brand Park-Pergolas	15174 San Fernando Mission Blvd	Los Angeles	2D2
Brand Park-Statue	15174 San Fernando Mission Blvd	Los Angeles	2D2
Brand Park-Sun Dial	15174 San Fernando Mission Blvd	Los Angeles	2D2
Food Storage Building	16756 Moorpark St	Los Angeles	1D
Pilgrimage Theater	2580 Cahuenga Blvd	Hollywood	2S2
Mentryville	27201 W Pico Canyon Rd	Santa Clarita	3S
Carpenter Elementary School	3909 Carpenter Ave	Los Angeles	2S2

North Hollywood High School	5231 Colfax Ave	Los Angeles	2S2
North Hollywood High School-Auditorium	5231 Colfax Ave	Los Angeles	2D2
North Hollywood High School-Frasher Hall	5231 Colfax Ave	Los Angeles	2D2
North Hollywood High School-Library	5231 Colfax Ave	Los Angeles	2D2
North Hollywood High School-Main Bldg	5231 Colfax Ave	Los Angeles	2D2
North Hollywood High School-Randolph Hall	5231 Colfax Ave	Los Angeles	2D2
North Hollywood Recreation Center	5301 Tujunga Ave	Los Angeles	2S2
North Hollywood Recreation Center-Baseball Diamond	5301 Tujunga Ave	Los Angeles	2D2
North Hollywood Recreation Center-Community Buildi	5301 Tujunga Ave	Los Angeles	2D2
North Hollywood Recreation Center-Playground	5301 Tujunga Ave	Los Angeles	2D2
North Hollywood Recreation Center-Swimming Pool	5301 Tujunga Ave	Los Angeles	2D2
Morningside Elementary School	575 N Maclay Ave	San Fernando	2S2
South Brand Boulevard Residential District	664 S Brand Blvd	Los Angeles	2D2
Canoga Park High School	6850 Topanga Canyon Ave	Canoga Park	2S2
South Brand Boulevard Residential District	702 S Brand Blvd	Los Angeles	2D2
South Brand Boulevard Residential District	705 S Brand Blvd	Los Angeles	2D2
South Brand Boulevard Residential District	707 S Brand Blvd	Los Angeles	2D2

South Brand Boulevard Residential District	708 S Brand Blvd	Los Angeles	2D2
South Brand Boulevard Residential District	712 S Brand Blvd	Los Angeles	2D2
South Brand Boulevard Residential District	713 S Brand Blvd	Los Angeles	2D2
South Brand Boulevard Residential District	719 S Brand Blvd	Los Angeles	2D2
South Brand Boulevard Residential District	722 S Brand Blvd	Los Angeles	2D2
Canoga Park Community Center; Fire Station #72	7248 Owensmouth Ave	Los Angeles	2D2
Reseda Elementary School	7265 Amigo Ave	Los Angeles	2S2
Canoga Park Elementary School	7428 Topanga Canyon Blvd	Los Angeles	2S2
Canoga Park Elementary School-Administration Bldg	7428 Topanga Canyon Blvd	Los Angeles	2D2
Canoga Park Elementary School-Auditorium	7428 Topanga Canyon Blvd	Los Angeles	2D2
South Brand Boulevard Residential District	751 S Brand Blvd	Los Angeles	2D2
South Brand Boulevard Residential District	752 S Brand Blvd	Los Angeles	2D2
South Brand Boulevard Residential District	756 S Brand Blvd	Los Angeles	2D2
South Brand Boulevard Residential District	757 S Brand Blvd	Los Angeles	2D2
South Brand Boulevard Residential District	762 S Brand Blvd	Los Angeles	2D2
South Brand Boulevard Residential District	767 S Brand Blvd	Los Angeles	2D2

South Brand Boulevard Residential District	802 S Brand Blvd	Los Angeles	2D2
South Brand Boulevard Residential District	808 S Brand Blvd	Los Angeles	2D2
Sun Valley Recreation Center-Community Building	8133 Vineland Ave	Los Angeles	2D2
Stonehurst Recreation Center	9901 Dronfield St	Los Angeles	2D2

APPENDIX J – NOISE MODELING TECHNICAL REPORT

Appendix J describes the noise modeling input parameters of the No Action Alternative as well as Alternative A and Alternative B. **Section J.1** reviews the methodology used to conduct the noise analysis, **Section J.2** describes the development of input data and the sources for the No Action Alternative, **Section J.3** describes input data development for Alternative A, and **Section J.4** describes input data development for Alternative B.

The No Action Alternative retains all departure and approach procedures at the Airport as they were flown during the baseline timeframe of the Environmental Assessment (EA). Under the No Action Alternative, input track data from the baseline timeframe was analyzed to determine traffic flying the SLAPP TWO and OROSZ TWO procedures at BUR. Departures identified as flying these procedures were included in three backbones representing three departure traffic flows from Runway 15 (1) SLAPP TWO, (2) OROSZ TWO, and (3) an additional flow representing aircraft that begin by flying the initial leg from SLAPP TWO and OROSZ TWO but are vectored to the north well in advance of reaching SLAPP or OROSZ (known as "northbound vectoring operations" going forward and explained in further detail in **Section J.3**). All other traffic at BUR was modeled as individual flight tracks, as these aircraft are not anticipated to change their operational regimes after the potential implementation of either Alternative A or Alternative B.

Alternative A reflects air traffic at BUR after the potential implementation of the SLAPP THREE and OROSZ THREE procedures. With the exception of traffic that is moved to the SLAPP THREE and OROSZ THREE procedures from the current SLAPP TWO and OROSZ TWO departures, Alternative A retains the same flight tracks and runway usage as the No Action Alternative.

Alternative B reflects air traffic at BUR after the potential implementation of an increased climb gradient of 600 feet/nm for the current SLAPP TWO and OROSZ TWO procedures. As most aircraft flying SLAPP TWO and OROSZ TWO already significantly exceed this climb gradient upon departure, this will not result in a change in climb profile for most aircraft. The small number of departures that cannot accept SLAPP TWO or OROSZ TWO with an increased climb gradient would be assigned the VNY3 obstacle departure procedure (ODP), which has a reduced climb gradient requirement of 335 feet/nm. Except for traffic that is moved to VNY3 from SLAPP TWO or OROSZ TWO, Alternative B also retains the same flight tracks and runway usage as the No Action Alternative.

J.1 Methodology

The methodology used in the noise analysis of the three alternatives follows established Federal Aviation Administration (FAA) guidelines in both the construction of a representative data model and the evaluation of noise impacts. Model construction and execution relied heavily on guidance provided in the FAA document titled "*Guidance on Using the Aviation Environmental Design Tool (AEDT) to Conduct Environmental Modeling for FAA Actions Subject to NEPA*" updated 10/27/2017.[1] Settings within the

[1] https://aedt.faa.gov/Documents/guidance_aedt_nepa.pdf

AEDT model such as weather, terrain, and atmospheric absorption were chosen based on the guidance provided in this document. In particular, the average annual weather at BUR during the baseline timeframe was used, as was National Elevation Dataset (NED) GridFloat terrain, and the SAE-ARP-5534 setting for atmospheric absorption. AEDT is the FAA's approved model for assessing noise and emissions at civilian airports. AEDT has been used for environmental review of aviation noise and emissions impacts since 2012 and is used for 14 CFR Part 150 studies, National Environmental Policy Act (NEPA) EAs and Environmental Impact Statements. For this EA, AEDT was used as an integrated model to estimate the total noise impact of all modeled aircraft flights.

As per the AEDT guidance referenced above, input data suitable for modeling was collected and aggregated into an operationally representative form known as an Annual Average Day (AAD) indicating the expected mix of aircraft operations over the course of a representative "average" day. These inputs, which consist of flight tracks and specific aircraft operations utilizing these tracks, were imported into the AEDT model and evaluated for noise exposure by using AEDT settings required by FAA guidance as described above. Key attributes of an aircraft operation relevant to noise modeling are the aircraft type, the operation type (arrival or departure), the runway used, the ground track used, the time of day (day or night), and the stage length. Stage length is an indicator of aircraft weight and is typically inferred by knowing the aircraft type and the trip distance. For the purposes of noise modeling, multiple aircraft operations possessing identical values for these key attributes were aggregated.

The noise analysis was conducted using AEDT version 3e to calculate noise exposure levels at population centroids within the General Study Area (GSA) for all three scenarios. In addition, noise exposure for these scenarios was calculated at Department of Transportation (DOT) Section 4(f) (recreational) and National Historic Preservation Act (NHPA) Section 106 (historic, architectural, or cultural) locations identified within the GSA.

J.2 No Action Alternative Noise Model Inputs

The No Action Alternative represents the annualized traffic flown at the Airport during the timeframe of January 1, 2022 – December 31, 2022. It is treated as the baseline against which noise exposure changes associated with Alternative A and Alternative B are measured. The baseline timeframe was chosen as it is representative of a typical recent year at the Airport, free of major traffic disruptions and is reflective of the traffic rebound that has been seen since the end of the COVID-19 pandemic. This section details the noise model design for the No Action Alternative.

J.2.1 No Action Alternative Aircraft Operations and Runway Use

Performance Data Analysis and Reporting System (PDARS) radar data for the baseline timeframe of January 1, 2022 – December 31, 2022 was obtained to develop operations data for the noise model. The FAA OpsNet database identifies a count of 117,140 Instrument Flight Rules (IFR) itinerant (non-local) operations during the baseline

timeframe, 102,976 of which were identified as tracks in the PDARS radar data. Tracks were analyzed to identify those that flew SLAPP TWO or OROSZ TWO. Since SLAPP TWO and OROSZ TWO include a radar vector segment which varies in length and subsequent heading assigned to each aircraft, aircraft flying these procedures do not fly a repeatable route towards the final fixes associated with each procedure (SLAPP for SLAPP TWO and OROSZ for OROSZ TWO). As a result, radar tracks were identified as flying these procedures based on their initial flight path (which is common to SLAPP TWO and OROSZ TWO).

For operations identified as flying either SLAPP TWO or OROSZ TWO, the associated radar tracks were placed onto representative backbones that were built based on traffic flows from Runway 15. All other operations were modeled as individual flight tracks and retained their original geometry. The number of combined operations (backbones and individual flight tracks) was scaled appropriately (by runway) to bring the total number of operations to the OpsNet count of 117,140. Helicopter operations are not identified in the OpsNet count, but 3,601 itinerant operations that were identified as helicopters in the PDARS data were included in the model, bringing the total number of modeled fixed wing and helicopter operations to 120,741. Due to limitations of the PDARS data in mountainous terrain, the circuitous routes flown by many helicopters, and the fact that many helicopters both arrive and depart at BUR, the radar data showed a large divergence in the proportion of the 3,601 helicopter operations identified as departures (3,540) versus those identified as arrivals (61). As this is not a realistic representation of the distribution between arrivals and departures (normally close to a 50/50 split), helicopter operations were weighted to equalize the amount of arrivals and departures at 1,800.5 each.

The total number of annual operations at BUR was divided by the number of days in the year to determine the AAD, which was then used as input to AEDT. This AAD was also utilized for both Alternative A and Alternative B as the potential implementation of either of these alternatives would not affect traffic at BUR. Other than helicopter operations, operations without both an origin and destination airport (such as VFR, circuit, and local operations) were not included.

Table J.1 shows the weighting used in AEDT to model the number of OpsNet arrivals, by runway. **Table J.2** shows the same data for departures.

TABLE J.1
IFR ITINERANT ARRIVAL OPERATIONAL STATISTICS BY RUNWAY

Runway	PDARS	OpsNet	Percentage	AEDT Weighting
8	45,664	52,452	87.8%	1.149
15	3,652	5,027	8.4%	1.377
26	79	187	0.3%	2.367

Runway	PDARS	OpsNet	Percentage	AEDT Weighting
33	1,851	2,076	3.5%	1.122
Helicopters (all routes)	3,540	-	-	0.509
Totals	**54,786**	**59,743**	**100.0%**	**1.123**

Note: totals may not equal 100% due to rounding.

Source: RoVolus, 2023.

TABLE J.2
IFR ITINERANT DEPARTURE OPERATIONS WEIGHTING BY RUNWAY

Runway	PDARS	OpsNet	Percentage	Weighting
8	598	1,536	2.7%	2.568
15	44,718	41,719	72.7%	0.933
26	410	675	1.2%	1.646
33	2,403	13,467	23.5%	5.604
Helicopters (all routes)	61	-	-	29.516
Totals	**48,190**	**57,397**	**100.0%**	**1.228**

Note: totals may not equal 100% due to rounding.

Source: RoVolus, 2023.

J.2.2 No Action Alternative Flight Tracks, Profiles, and Flight Track Use

For the purposes of noise modeling, PDARS flight tracks for operations that would change upon the implementation of Alternative A or Alternative B were modeled as representative backbones with expanded sub-tracks accounting for the dispersion of operations across a corridor. These backbones and sub-tracks were developed by isolating distinct flows by runway and operation type. As arrivals would not change due to the implementation of either alternative, only departure backbones were developed. Some flows were further isolated by day operations and night operations where the determination of day and night operations conform to the Day-Night-Level (DNL) time periods. All the flight operations from each flow were distributed onto the representative backbone and its sub-tracks by using the default AEDT binomial weight distribution scheme.

For all operations that would not change upon the implementation of either Alternative A or Alternative B, PDARS flight tracks were modeled as the original, unchanged flight tracks. These flight tracks were amalgamated into bundles by operational type (arrival or departure) and runway, and weighting was assigned to each of these bundles based on the number of observed CountOps operations for the baseline period.

AEDT includes a series of "standard" arrival and departure profiles for use in the model with variability in the altitude over the initial portion of departure trajectories determined by trip length or stage length. Depending on the aircraft type, AEDT's "standard" departure profiles are provided for different stage lengths ranging from one to nine – with higher numbers indicating heavier takeoff weights. The chosen "standard" profile effectively serves as a surrogate for aircraft weight and models heavier aircraft of a given aircraft type at a lower altitude on departures. As mentioned in **Section J.1** the stage length can be determined by the trip distance. For all modeled alternatives, the stage length for each modeled operation was determined by computing the trip distance between the origin and destination airports and translating the trip distance into a stage length and choosing the appropriate standard profile for that stage length. Flights were modeled as day and night operations as per the distribution shown below in **Table J.3** below.

TABLE J.3
AVERAGE ANNUAL DAY OPERATIONS MODELED IN AEDT

Aircraft Type	Category	Day (7:00 AM – 10:00 PM)		Night (10:00 PM – 7:00 AM)	
		Arrivals	Departures	Arrivals	Departures
737300	JET	0.003	0.015	0.003	0.000
737400	JET	0.003	0.003	0.003	0.003
737500	JET	0.003	0.003	0.003	0.003
737700	JET	56.579	61.741	20.365	13.078
737800	JET	1.348	1.753	1.015	0.419
767300	JET	0.006	0.000	0.003	0.008
767400	JET	0.439	0.426	0.047	0.031
1900D	TURBOPROP	0.006	0.005	0.000	0.000
7378MAX	JET	1.059	1.030	0.288	0.304
757RR	JET	0.192	0.095	0.049	0.049
A109	HELICOPTER	0.036	0.081	0.014	0.081
A300-622R	JET	2.253	0.772	0.047	1.644
A319-131	JET	1.023	1.133	0.213	0.023
A320-232	JET	2.975	2.958	1.307	1.043

Aircraft Type	Category	Day (7:00 AM – 10:00 PM)		Night (10:00 PM – 7:00 AM)	
		Arrivals	Departures	Arrivals	Departures
A320-271N	JET	1.570	1.424	0.214	0.283
A321-232	JET	0.723	0.669	0.214	0.253
B206L	HELICOPTER	0.014	0.162	0.000	0.000
B407	HELICOPTER	0.020	0.809	0.015	0.485
B429	HELICOPTER	0.001	0.000	0.000	0.000
BD-700-1A10	JET	0.729	0.809	0.266	0.084
BD-700-1A11	JET	0.148	0.135	0.035	0.023
BEC58P	PISTON	1.736	0.446	0.073	0.056
C130	TURBOPROP	0.004	0.000	0.000	0.000
C130AD	TURBOPROP	0.019	0.015	0.009	0.003
C17	JET	0.037	0.018	0.003	0.003
CIT3	JET	0.113	0.074	0.013	0.020
CL600	JET	4.722	4.989	0.979	0.388
CL601	JET	0.208	0.168	0.028	0.010
CNA172	PISTON	0.967	0.293	0.196	0.106
CNA182	PISTON	0.372	0.188	0.014	0.024
CNA206	PISTON	0.059	0.034	0.020	0.024
CNA208	TURBOPROP	1.442	1.616	0.451	0.541
CNA20T	PISTON	0.026	0.007	0.000	0.000
CNA441	TURBOPROP	0.238	0.215	0.011	0.018
CNA500	JET	0.010	0.003	0.000	0.003
CNA510	JET	0.347	0.365	0.060	0.023
CNA525C	JET	2.169	1.829	0.509	0.442
CNA55B	JET	2.126	1.668	0.277	0.327
CNA560E	JET	0.313	0.216	0.035	0.031
CNA560U	JET	0.361	0.251	0.053	0.044
CNA560XL	JET	1.216	1.092	0.133	0.171
CNA680	JET	1.424	1.150	0.164	0.136
CNA750	JET	1.662	1.505	0.213	0.129
COMJET	JET	0.479	0.439	0.077	0.061
COMSEP	PISTON	1.079	0.859	0.140	0.082

Aircraft Type	Category	Day (7:00 AM – 10:00 PM)		Night (10:00 PM – 7:00 AM)	
		Arrivals	Departures	Arrivals	Departures
CRJ9-ER	JET	1.630	1.847	0.349	0.072
DC3	PISTON	0.017	0.018	0.003	0.000
DHC6	TURBOPROP	6.977	11.073	0.650	0.503
DHC8	TURBOPROP	0.003	0.003	0.000	0.000
EC130	HELICOPTER	0.343	0.485	0.176	1.375
ECLIPSE500	JET	0.287	0.206	0.054	0.023
EMB120	TURBOPROP	0.006	0.005	0.000	0.000
EMB145	JET	13.084	15.226	2.807	0.528
EMB14L	JET	1.475	1.760	0.495	0.043
EMB175	JET	4.969	5.836	1.458	0.372
EMB190	JET	0.151	0.176	0.025	0.040
FAL20	JET	0.009	0.008	0.006	0.003
FAL900EX	JET	0.155	0.146	0.031	0.020
G650ER	JET	1.180	1.135	0.293	0.127
GASEPF	PISTON	0.178	0.070	0.047	0.024
GASEPV	PISTON	1.611	0.991	0.121	0.091
GIIB	JET	0.006	0.003	0.003	0.000
GIV	JET	1.480	1.420	0.572	0.148
GV	JET	1.729	1.785	0.6447	0.366
H500D	HELICOPTER	0.619	0.000	0.325	0.081
HS748A	TURBOPROP	0.003	0.003	0.000	0.000
IA1125	JET	0.221	0.233	0.041	0.033
LEAR25	JET	0.003	0.003	0.000	0.000
LEAR35	JET	1.795	1.825	0.522	0.324
MD83	JET	0.003	0.003	0.000	0.000
MU3001	JET	0.124	0.137	0.022	0.026
PA28	PISTON	0.509	0.192	0.163	0.042
PA30	PISTON	0.059	0.036	0.003	0.000
PA42	PISTON	0.004	0.007	0.000	0.000
R44	HELICOPTER	2.379	0.081	0.328	0.000
S61	HELICOPTER	0.001	0.000	0.000	0.000

Aircraft Type	Category	Day (7:00 AM – 10:00 PM)		Night (10:00 PM – 7:00 AM)	
		Arrivals	Departures	Arrivals	Departures
S70	HELICOPTER	0.007	0.243	0.000	0.000
S76	HELICOPTER	0.095	0.243	0.043	0.081
SA330J	HELICOPTER	0.001	0.000	0.000	0.000
SA355F	HELICOPTER	0.424	0.485	0.095	0.243
T-2C	JET	0.003	0.000	0.000	0.000
		131.799	**137.142**	**36.839**	**25.015**

Note: totals may not equal 100% due to rounding.

Source: Prepared by RoVolus, 2023.

J.3 Alternative A Noise Model Inputs

The input to AEDT for Alternative A represents estimated operations after the implementation of SLAPP THREE and OROSZ THREE in lieu of the current SLAPP TWO and OROSZ TWO procedures. When compared with the No Action Alternative, Alternative A is composed of the modification of the three representative backbones comprising departures flying SLAPP TWO and OROSZ TWO to correspond with the flow of departures anticipated under SLAPP THREE and OROSZ THREE.

Under the current operational regime, departures using SLAPP TWO and OROSZ TWO have a common initial leg, being required to turn to 210 degrees at 400 feet above ground level (AGL) or at the departure end of the runway (whichever occurs latest). After the turn to 210 degrees, SLAPP TWO and OROSZ TWO departures are then given radar vectors to waypoint RAYVE and ultimately waypoint SLAPP (in the case of SLAPP TWO) or to waypoint TILLR and ultimately waypoint OROSZ (in the case of OROSZ TWO). Two of the backbones, which were created to model SLAPP TWO and OROSZ TWO in the No Action Alternative, were modified to reflect SLAPP THREE and OROSZ THREE in Alternative A. SLAPP THREE and OROSZ THREE both have a new initial departure leg, which requires Runway 15 departures fly straight out prior to making their initial turn to the right.

While many aircraft fly the full SLAPP TWO and OROSZ TWO procedures in the current operational regime, some aircraft are cleared to depart using SLAPP TWO or OROSZ TWO, but after departure are ultimately cleared to other waypoints that are not part of the written procedure for SLAPP TWO or OROSZ TWO. Most of these aircraft not flying the full procedure proceed to points to the north, but aircraft that have completed the initial turn to 210 degrees can be vectored to the west and, rarely, to the south or east as well. In the PDARS flight track data, approximately 19% of all departures flying the initial 210

degree heading after departing Runway 15 (e.g., flying the initial SLAPP TWO/OROSZ TWO heading) proceeded northward to points other than the published initial vectoring points of RAYVE (SLAPP TWO) and TILLR (OROSZ TWO). Southern California TRACON has confirmed that if SLAPP THREE and OROSZ THREE are implemented, aircraft flying the new departure headings would still be vectored to different waypoints north of BUR at a similar rate as they are in the current operational regime. This is done to increase efficiency for aircraft operating from BUR as well as allow ATC personnel the required flexibility to utilize this constrained airspace area safely and efficiently.

Since northbound operations utilizing the initial SLAPP TWO and OROSZ TWO departure legs constituted a significant amount of northbound departure operations, as well as a significant amount of all Runway 15 departures, a third backbone was created to reflect only these operations. For purposes of clarity, this backbone is known as the "northbound vectoring operations" backbone in the context of this document. In the PDARS flight track data, Runway 15 departures consisting of aircraft flying SLAPP TWO, OROSZ TWO, or northbound vectoring operations comprised 95% of all Runway 15 departure tracks. The remaining 5% of Runway 15 departures were not expected to change materially after the implementation of Alternative A and were modeled as flight tracks like the remainder of traffic at BUR. Alternative A will not result in any change in the number of operations to any runway.

J.3.1 Alternative A Flight Tracks, Profiles, and Use

The model for Alternative A utilizes the same methodology as the No Action Alternative for constructing representative backbones, sub-tracks, and operation loading. Except for operations modeled on the three representative backbones reflecting SLAPP THREE, OROSZ THREE, and the northbound vectoring operations, Alternative A reuses the model data that was built to model the No Action Alternative, as shown in **Table J.3**.

As described in the No Action Alternative, three backbones were loaded with operations from the PDARS flight track data that were scaled as required to correspond with operations indicated in the CountOps runway usage data. All other flights were run as flight tracks, identically to the methodology used in the No Action Alternative. **Table J.4** shows the number of PDARS input flight tracks assigned to each backbone in Alternative A compared to the No Action Alternative. This table also indicates the number of departure flight tracks that were not assigned to any backbone and modeled as tracks.

TABLE J.4
PDARS RUNWAY 15 INPUT FLIGHT TRACKS – ALTERNATIVE A

Departure	Alt A - PDARS tracks	No Action – PDARS tracks
SLAPP THREE	14,776	14,776
OROSZ THREE	19,839	19,839
Northbound vectoring ops (SLAPP THREE/OROSZ THREE initial leg)	8,063	8,063

Other Runway 15 departures*	2,040	2,040
Totals	**44,718**	**44,718**

*Note – Other Runway 15 departures are modeled as tracks and do not have a representative backbone.

Source: Prepared by RoVolus, 2023.

J.4 Alternative B Noise Model Input

The input to AEDT represents estimated aircraft operations after the implementation of a modified version of SLAPP TWO and OROSZ TWO that increases the required climb gradient for departures flying these procedures from 340 feet per nm to 600 feet per nm, known as Alternative B. When compared with the No Action Alternative, Alternative B retains the three backbones reflecting departures flying SLAPP TWO, OROSZ TWO, and northbound vectoring ops, but adds a fourth backbone consisting of departures that would not be able to meet the increased climb gradient of 600 feet per nm.

FAA research at BUR has shown that the average climb gradient of aircraft currently flying the SLAPP TWO/OROSZ TWO departures from Runway 15 exceeds 1,000 feet per nmi, and 97% of annual departures would be able to meet an increased climb gradient of 600 feet per nmi. The remaining 3% of departures unable to meet this performance requirement would be assigned the VAN NUYS THREE (VNY3) ODP, which has a reduced climb gradient requirement (335 feet per nmi) that is nearly identical to the current SLAPP THREE/OROSZ THREE climb gradient requirement (340 feet per nmi). VNY3 has a very similar initial leg to SLAPP THREE and OROSZ THREE, but requires an initial turn to 213 degrees instead of 210 degrees as well as having different transitions to the enroute airspace.

Alternative B takes 3% of the departures assigned to the SLAPP TWO, OROSZ TWO, and northbound vectoring operations backbones and assigns them to a new backbone reflecting the horizontal extent of departures flying VNY3. As Runway 15 departures flying the initial leg of the VNY3 procedure are nearly impossible to discern from those flying SLAPP TWO and OROSZ TWO in the PDARS flight track data, and many aircraft are capable of struggling with the proposed increased climb gradient requirements for SLAPP TWO and OROSZ TWO (depending on atmospheric conditions and aircraft loading), the specific flight tracks that were moved from one of the three original backbones to the VNY3 backbone were chosen at random. All other traffic was flown as flight tracks, as with the No Action Alternative. As with Alternative A, Alternative B will not result in any change in the number of operations to any runway.

J.3.1 Alternative B Flight Tracks, Profiles, and Use

The model for Alternative B utilizes the same methodology as the No Action Alternative for constructing representative backbones, sub-tracks, and operation loading. Except for

operations that have been moved from one of the three representative backbones reflecting SLAPP TWO, OROSZ TWO, and the northbound vectoring operations to the new VNY3 backbone, Alternative B reuses the model data that was built to model the No Action Alternative, as shown in **Table J.3**.

For Alternative B, four backbones were loaded with operations from the PDARS flight track data, which were scaled as required to correspond with operations indicated in the CountOps runway usage data. All other flights were run as flight tracks, identically to the methodology used in the No Action Alternative. **Table J.5** shows the number of PDARS input flight tracks assigned to each backbone under Alternative B compared to the No Action Alternative. This table also indicates the number of departure flight tracks that were not assigned to any backbone and modeled as tracks.

TABLE J.5
PDARS RUNWAY 15 INPUT FLIGHT TRACKS – ALTERNATIVE B

Departure	Alt B - PDARS tracks	No Action – PDARS tracks
SLAPP TWO	14,333	14,776
OROSZ TWO	19,244	19,839
Northbound vectoring ops (SLAPP TWO/OROSZ TWO initial leg)	7,821	8,063
VAN NUYS THREE (VNY3)	1,280	-
Other Runway 15 departures*	2,040	2,040
Totals	**44,718**	**44,718**

*Note – Other Runway 15 departures are modeled as tracks and do not have a representative backbone.

Source: Prepared by RoVolus, 2023.

APPENDIX K – FINAL LIST OF HISTORIC, ARCHITECTURAL, OR CULTURAL PROPERTIES EVALUATED UNDER NHPA SECTION 106

Name	Street Address	City	Zip
ARTHUR MURRAY	7024 HOLLYWOOD BLVD	LOS ANGELES	90028
AUTOMOTIVE GARAGE	8264 FOUNTAIN AVE	WEST HOLLYWOOD	90069
BANK OF AMERICA	6780 HOLLYWOOD BLVD	LOS ANGELES	90028
CHEROKEE BUILDING	6630 HOLLYWOOD BLVD	LOS ANGELES	90028
CHRISTIE HOTEL, SCIENTOLOGY INSTITUTE	6724 HOLLYWOOD BLVD	LOS ANGELES	90028
COUNTY FIRE STATION #7	954 N HANCOCK AVE	WEST HOLLYWOOD	90069
HILLVIEW CADILLAC, MOTORAME	7001 HOLLYWOOD BLVD	LOS ANGELES	90028
HOLLYWOOD BOULEVARD COMMERCIAL AND ENTERTAINMENT D	6200 HOLLYWOOD BLVD	LOS ANGELES	90028
HOLLYWOOD PROFESSIONAL BLDG	7046 HOLLYWOOD BLVD	LOS ANGELES	90028
HOLLYWOOD WAX MUSEUM	6765 HOLLYWOOD BLVD	LOS ANGELES	90028
JJ NEWBERRYS	6600 HOLLYWOOD BLVD	LOS ANGELES	90028
LANKERSHIM SOUTHERN PACIFIC RAILROAD DEPOT, HENDRI	5401 LANKERSHIM BLVD	LOS ANGELES	91601
LOS ANGELES FIRST FEDERAL, SECURITY PACIFIC BANK	6777 HOLLYWOOD BLVD	LOS ANGELES	90028
LUBERMAN COMPANY, BENNETT'S BOOK STORE	6753 HOLLYWOOD BLVD	LOS ANGELES	90028
MISSION WELLS AND SETTLING BASIN	HAVANA AVE	LOS ANGELES	

Mitchell Camera Corporation Factory/Studio One	652 N La Peer Dr	West Hollywood	90069
MUSSO FRANK GRILL	6663 HOLLYWOOD BLVD	LOS ANGELES	90028
OLIVE SWITCHING STATION	13355 SAN FERNANDO RD	LOS ANGELES	
OUTPOST BUILDING	6701 HOLLYWOOD BLVD	LOS ANGELES	90028
PAYNE FURNACE & SUPPLY CO. PLANT, PAYNE BUILDING	336 N FOOTHILL RD	BEVERLY HILLS	90210
PHILS DINER	11138 CHANDLER BLVD	NORTH HOLLYWOOD	91601
PICKWICK BOOKSTORE, B. DALTON PICKWICK BOOKSTORE	6743 HOLLYWOOD BLVD	LOS ANGELES	90028
PIG N WHISTLE RESTAURANT, LONDON BRITCHES	6718 HOLLYWOOD BLVD	LOS ANGELES	90028
RALPHS GROCERY STORE	1142 WESTWOOD BLVD	LOS ANGELES	90024
SALVATION ARMY-THRIFT STORE	110 N MACLAY ST	SAN FERNANDO	91340
SAN FERNANDO VALLEY GENERATING PLANT	11845 VOSE ST	LOS ANGELES	
SECURITY TRUST	7051 HOLLYWOOD BLVD	LOS ANGELES	90028
SECURITY TRUST AND SAVINGS BANK, PAPERBACK SHACK B	5303 LANKERSHIM BLVD	LOS ANGELES	91601
SEVEN SEAS	6904 HOLLYWOOD BLVD	LOS ANGELES	90028
STANDARD OIL SERVICE STATION	5401 LANKERSHIM BLVD	NORTH HOLLYWOOD	91601
THE BAINE BUILDING, MERCHANTS TITLE	6601 HOLLYWOOD BLVD	LOS ANGELES	90028

	6679 HOLLYWOOD BLVD	LOS ANGELES	90028
	6806 HOLLYWOOD BLVD	LOS ANGELES	90028
	7055 HOLLYWOOD BLVD	LOS ANGELES	90028
CANOGA PARK COMMUNITY CENTER; FIRE STATION #72	7248 OWENSMOUTH AVE	LOS ANGELES	
HOLLYWOOD MASONIC TEMPLE	6840 HOLLYWOOD BLVD	LOS ANGELES	90028
A. M. G. BERTOLOTTI RESIDENCE	814 N ALPINE DR	BEVERLY HILLS	90210
ADDIE GREENFIELD RESIDENCE	802 N ALPINE DR	BEVERLY HILLS	90210
ALECK CURLETT RESIDENCE	811 N ALPINE DR	BEVERLY HILLS	90210
AMY ARCHARD HOME	6650 WHITLEY TERRACE	LOS ANGELES	90068
ANITA LOUISE	6666 WHITLEY TERRACE	LOS ANGELES	90068
BARBARA LAMARR	6672 WHITLEY TERRACE	LOS ANGELES	90068
BEULAH BONDI	6660 WHITLEY TERRACE	LOS ANGELES	90068
BEVERLY DANGELO HOME	6603 WHITLEY TERRACE	LOS ANGELES	90068
CARMEN MIRANDA HOME	6615 PADRE TERRACE	LOS ANGELES	90068
CASA GRANDA APARTMENTS, HARPER HOUSE	1334 N HARPER AVE	WEST HOLLYWOOD	90046
CHESTER MORRIS HOME	6662 WHITLEY TERRACE	LOS ANGELES	90068

DENNIS OKEEFE	6734 WEDGEWOOD PL	LOS ANGELES	90068
ELIZABETH HINCKLEY RESIDENCE	806 N ALPINE DR	BEVERLY HILLS	90210
F. A. BLENSBERG RESIDENCE	709 N ALPINE DR	BEVERLY HILLS	90210
F. D. PARKER RESIDENCE	713 N ALPINE DR	BEVERLY HILLS	90210
FAY COMPTON	6738 WEDGEWOOD PL	LOS ANGELES	90068
FRANCIS X BUSHMAN	2020 GRACE AVE	LOS ANGELES	90068
FRANK CHARON RESIDENCE	716 N ALPINE DR	BEVERLY HILLS	90210
GERTRUDE ASTOR HOME	2030 HOLLY HILL TERRACE	LOS ANGELES	90068
GLORIA SWANSON	2058 WATSONIA TERRACE	LOS ANGELES	90068
H H BARTER HOUSE	6620 WHITLEY TERRACE	LOS ANGELES	90068
H J WHITLEY HOME	2073 WHITLEY TERRACE	LOS ANGELES	90068
HENRY JONES HOME	6658 WHITLEY TERRACE	LOS ANGELES	90068
HERBERT ROBBINS RESIDENCE	707 N ALPINE DR	BEVERLY HILLS	90210
IRENE TEDROW	6740 MILNER RD	LOS ANGELES	90068
J.R. WESSELNE RESIDENCE	703 N ALPINE DR	BEVERLY HILLS	90210
JEAN PARKER HOME	6627 EMMET TERRACE	LOS ANGELES	90068
JOHN CHARLES THOMAS	2074 WATSONIA TERRACE	LOS ANGELES	90068

JOHN THOMAS	2002 N LAS PALMAS AVE	LOS ANGELES	90068
KATE GREPPIN RESIDENCE	801 N ALPINE DR	BEVERLY HILLS	90210
L G McNEIL RESIDENCE	619 N ARDEN DR	BEVERLY HILLS	90210
L.W. NEWBERT RESIDENCE	812 N ALPINE DR	BEVERLY HILLS	90210
LLOYD NOLAN	6754 WEDGEWOOD PL	LOS ANGELES	90068
MARIE DRESSLER HOME	6718 MILNER RD	LOS ANGELES	90068
MARQUARDT	6770 MILNER RD	LOS ANGELES	90068
MARTIN BALSAM HOME, JOYCE VAN PATTEN HOME	2041 GRACE AVE	LOS ANGELES	90068
MARY JACKSON HOME	2055 GRACE AVE	LOS ANGELES	90068
MAURICE CHEVALIER HOME	6680 WHITLEY TERRACE	LOS ANGELES	90068
MEXICAN VILLAGE	1300 N HARPER AVE	WEST HOLLYWOOD	90046
MORRISON, AGNES RESIDENCE	707 N ARDEN DR	BEVERLY HILLS	90210
NELSON EDDY	805 N ALPINE DR	BEVERLY HILLS	90210
NORTH HARPER AVENUE HISTORIC DISTRICT	N HARPER AVE	WEST HOLLYWOOD	90069
PAUL A. JESBERG RESIDENCE	711 N ALPINE DR	BEVERLY HILLS	90210
PAUL KELLY	2057 N LAS PALMAS AVE	LOS ANGELES	90068

PHYLLIS HAVER HOME	6621 EMMET TERRACE	LOS ANGELES	90068
R.B. MURPHY RESIDENCE	706 N ALPINE DR	BEVERLY HILLS	90210
Ramona, The	1236 N Harper Ave	West Hollywood	90046
RICHARD AND KAREN WOOKEY HOME	2062 WATSONIA TERRACE	LOS ANGELES	90068
RICHARD BARTHELMESS HOME, BILL BAST HOME	6691 WHITLEY TERRACE	LOS ANGELES	90068
RICHARD EAGAN HOME	2133 FAIRFIELD AVE	LOS ANGELES	90068
RISSNER PATTY	6665 EMMET TERRACE	LOS ANGELES	90068
ROBERT VIGNOLA	6697 WHITLEY TERRACE	LOS ANGELES	90068
ROMANESQUE VILLA APARTMENTS	1301 N HARPER AVE	WEST HOLLYWOOD	90046
S.C. ROEW RESIDENCE	721 N ALPINE DR	BEVERLY HILLS	90210
SAMUEL MORTENSEN RESIDENCE	714 N ALPINE DR	BEVERLY HILLS	90210
THEODORE R. CADWALLADER RESIDENCE	808 N ALPINE DR	BEVERLY HILLS	90210
W C FIELDS	6746 WEDGEWOOD PL	LOS ANGELES	90068
W. S. McGILVRAY RESIDENCE	804 N ALPINE DR	BEVERLY HILLS	90210
WHITLEY HOME	6630 WHITLEY TERRACE	LOS ANGELES	90068
WILLIAM EYTHE	6689 EMMET TERRACE	LOS ANGELES	90068

WILLIAM WELLMAN	6747 MILNER RD	LOS ANGELES	90068
Yamashiro Historic District garage	1999 N Sycamore Ave	Los Angeles	90068
Yamashiro Historic District groundkeeper's cottage	1999 N Sycamore Ave	Los Angeles	90068
Yamashiro Historic District Main House	1999 N Sycamore Ave	Los Angeles	90068
Yamashiro Historic District menagerie house	1999 N Sycamore Ave	Los Angeles	90068
ZOELLNER HOME	6615 EMMET TERRACE	LOS ANGELES	90068
	506 N ARDEN DR	BEVERLY HILLS	90210
	507 N ARDEN DR	BEVERLY HILLS	90210
	508 N ARDEN DR	BEVERLY HILLS	90210
	510 N ARDEN DR	BEVERLY HILLS	90210
	511 N ARDEN DR	BEVERLY HILLS	90210
	514 N ARDEN DR	BEVERLY HILLS	90210
	515 N ARDEN DR	BEVERLY HILLS	90210
	516 N ARDEN DR	BEVERLY HILLS	90210
	518 N ARDEN DR	BEVERLY HILLS	90210
	519 N ARDEN DR	BEVERLY HILLS	90210
	520 N ARDEN DR	BEVERLY HILLS	90210
	521 N ARDEN DR	BEVERLY HILLS	90210

	522 N ARDEN DR	BEVERLY HILLS	90210
	523 N ARDEN DR	BEVERLY HILLS	90210
	525 N ARDEN DR	BEVERLY HILLS	90210
	527 N ARDEN DR	BEVERLY HILLS	90210
	603 N ARDEN DR	BEVERLY HILLS	90210
	604 N ARDEN DR	BEVERLY HILLS	90210
	605 N ARDEN DR	BEVERLY HILLS	90210
	606 N ARDEN DR	BEVERLY HILLS	90210
	607 N ARDEN DR	BEVERLY HILLS	90210
	610 N ARDEN DR	BEVERLY HILLS	90210
	611 N ARDEN DR	BEVERLY HILLS	90210
	612 N ARDEN DR	BEVERLY HILLS	90210
	613 N ARDEN DR	BEVERLY HILLS	90210
	617 N ARDEN DR	BEVERLY HILLS	90210
	618 N ARDEN DR	BEVERLY HILLS	90210
	620 N ARDEN DR	BEVERLY HILLS	90210
	621 N ARDEN DR	BEVERLY HILLS	90210

	624 N ARDEN DR	BEVERLY HILLS	90210
	630 N ARDEN DR	BEVERLY HILLS	90210
	703 N ARDEN DR	BEVERLY HILLS	90210
	704 N ARDEN DR	BEVERLY HILLS	90210
	705 N ALPINE DR	BEVERLY HILLS	90210
	705 N ARDEN DR	BEVERLY HILLS	90210
	706 N ARDEN DR	BEVERLY HILLS	90210
	710 N ALPINE DR	BEVERLY HILLS	90210
	722 N ALPINE DR	BEVERLY HILLS	90210
	724 N ALPINE DR	BEVERLY HILLS	90210
	803 N ALPINE DR	BEVERLY HILLS	90210
	810 N ALPINE DR	BEVERLY HILLS	90210
	1914 N LAS PALMAS AVE	LOS ANGELES	90068
	1965 WHITLEY AVE	LOS ANGELES	90068
	1969 WHITLEY AVE	LOS ANGELES	90068
	2000 N LAS PALMAS AVE	LOS ANGELES	90068
	2002 WHITLEY AVE	LOS ANGELES	90068

	2006 N LAS PALMAS AVE	LOS ANGELES	90068
	2008 N LAS PALMAS AVE	LOS ANGELES	90068
	2008 WHITLEY AVE	LOS ANGELES	90068
	2014 GRACE AVE	LOS ANGELES	90068
	2014 N LAS PALMAS AVE	LOS ANGELES	90068
	2014 WHITLEY AVE	LOS ANGELES	90068
	2015 WHITLEY AVE	LOS ANGELES	90068
	2017 HOLLY HILL TERRACE	LOS ANGELES	90068
	2018 WHITLEY AVE	LOS ANGELES	90068
	2020 WHITLEY TERRACE STEPS	LOS ANGELES	90068
	2021 HOLLY HILL TERRACE	LOS ANGELES	90068
	2021 WHITLEY TERRACE STEPS	LOS ANGELES	90068
	2022 HOLLY HILL TERRACE	LOS ANGELES	90068
	2022 WHITLEY AVE	LOS ANGELES	90068
	2025 GRACE AVE	LOS ANGELES	90068
	2025 HOLLY HILL TERRACE	LOS ANGELES	90068
	2026 HOLLY HILL TERRACE	LOS ANGELES	90068

	2026 N LAS PALMAS AVE	LOS ANGELES	90068
	2031 HOLLY HILL TERRACE	LOS ANGELES	90068
	2032 N LAS PALMAS AVE	LOS ANGELES	90068
	2034 GRACE AVE	LOS ANGELES	90068
	2034 N LAS PALMAS AVE	LOS ANGELES	90068
	2036 HOLLY HILL TERRACE	LOS ANGELES	90068
	2037 HOLLY HILL TERRACE	LOS ANGELES	90068
	2037 WHITLEY TERRACE	LOS ANGELES	90068
	2038 N LAS PALMAS AVE	LOS ANGELES	90068
	2040 N LAS PALMAS AVE	LOS ANGELES	90068
	2042 N LAS PALMAS AVE	LOS ANGELES	90068
	2044 GRACE AVE	LOS ANGELES	90068
	2049 N LAS PALMAS AVE	LOS ANGELES	90068
	2055 N LAS PALMAS AVE	LOS ANGELES	90068
	2059 WATSONIA TERRACE	LOS ANGELES	90068
	2064 WATSONIA TERRACE	LOS ANGELES	90068
	2139 FAIRFIELD AVE	LOS ANGELES	90068

	6510 CERRITOS PL	LOS ANGELES	90068
	6526 CERRITOS PL	LOS ANGELES	90068
	6532 CERRITOS PL	LOS ANGELES	90068
	6542 BELLA VISTA WY	LOS ANGELES	90068
	6603 EMMET TERRACE	LOS ANGELES	90068
	6607 PADRE TERRACE	LOS ANGELES	90068
	6610 PADRE TERRACE	LOS ANGELES	90068
	6611 EMMET TERRACE	LOS ANGELES	90068
	6613 WHITLEY TERRACE	LOS ANGELES	90068
	6614 EMMET TERRACE	LOS ANGELES	90068
	6621 PADRE TERRACE	LOS ANGELES	90068
	6621 WHITLEY TERRACE	LOS ANGELES	90068
	6633 EMMET TERRACE	LOS ANGELES	90068
	6633 WHITLEY TERRACE	LOS ANGELES	90068
	6636 EMMET TERRACE	LOS ANGELES	90068
	6642 EMMET TERRACE	LOS ANGELES	90068
	6654 WHITLEY TERRACE	LOS ANGELES	90068

	6655 EMMET TERRACE	LOS ANGELES	90068
	6657 EMMET TERRACE	LOS ANGELES	90068
	6658 EMMET TERRACE	LOS ANGELES	90068
	6661 EMMET TERRACE	LOS ANGELES	90068
	6662 EMMET TERRACE	LOS ANGELES	90068
	6663 BON AIR PL	LOS ANGELES	90068
	6673 EMMET TERRACE	LOS ANGELES	90068
	6674 BON AIR PL	LOS ANGELES	90068
	6680 BON AIR PL	LOS ANGELES	90068
	6680 EMMET TERRACE	LOS ANGELES	90068
	6707 MILNER RD	LOS ANGELES	90068
	6708 MILNER RD	LOS ANGELES	90068
	6711 WHITLEY TERRACE	LOS ANGELES	90068
	6717 MILNER RD	LOS ANGELES	90068
	6717 WHITLEY TERRACE	LOS ANGELES	90068
	6726 MILNER RD	LOS ANGELES	90068
	6727 MILNER RD	LOS ANGELES	90068

	6733 WEDGEWOOD PL	LOS ANGELES	90068
	6735 WEDGEWOOD PL	LOS ANGELES	90068
	6740 WHITLEY TERRACE	LOS ANGELES	90068
	6746 MILNER RD	LOS ANGELES	90068
	6749 WHITLEY TERRACE	LOS ANGELES	90068
	6750 WEDGEWOOD PL	LOS ANGELES	90068
	6753 MILNER RD	LOS ANGELES	90068
	6755 WEDGEWOOD PL	LOS ANGELES	90068
	6756 MILNER RD	LOS ANGELES	90068
	6757 MILNER RD	LOS ANGELES	90068
	6758 MILNER RD	LOS ANGELES	90068
	6760 MILNER RD	LOS ANGELES	90068
	6764 MILNER RD	LOS ANGELES	90068
	6776 MILNER RD	LOS ANGELES	90068
	6782 MILNER RD	LOS ANGELES	90068
ADOBE	916 N GENESEE AVE	WEST HOLLYWOOD	90046

ANDALUSIA	1471 HAVENHURST DR	LOS ANGELES	90046
ARTEMUS CLARK HOUSE	515 N CANON DR	BEVERLY HILLS	90210
Atkinson Farnum Swain Residence	2003 N LA BREA TERRACE	LOS ANGELES	90046
BEVERLY HILLS HOTEL	9641 SUNSET BLVD	BEVERLY HILLS	90210
BUSTER KEATON ESTATE	1018 PAMELA DR	BEVERLY HILLS	90210
Canterbury Apartment Hotel, The	1746 N CHEROKEE AVE	LOS ANGELES	90028
CHATEAU MARMONT	8221 SUNSET BLVD	LOS ANGELES	90046
COLONIAL HOUSE	1416 N HAVENHURST DR	WEST HOLLYWOOD	90046
CORONET APARTMENTS HACIENDA ARMS, PIAZZA DEL SOL	8439 SUNSET BLVD	WEST HOLLYWOOD	90046
CORRINE GRIFFITH ESTATE, RONALD COLMAN ESTATE	1030 BENEDICT CANYON DR	BEVERLY HILLS	90210
COX HOUSE	803 N REXFORD DR	BEVERLY HILLS	90210
DEBOTILLER RESIDE3NCE	9481 SUNSET BLVD	BEVERLY HILLS	90210
DURFEE RESIDENCE	2003 N LA BREA TERRACE	LOS ANGELES	90046
EARLE C. ANTHONY	910 N BEDFORD DR	BEVERLY HILLS	90210
EDMUND LOCKE RESIDENCE	801 N RODEO DR	BEVERLY HILLS	90210
Edward M. Smith Residence	618 N BEVERLY DR	BEVERLY HILLS	90210

EDWARD WOOD HOUSE	711 N CANON DR	BEVERLY HILLS	90210
EL GRECO APARTMENT	817 N HAYWORTH AVE	LOS ANGELES	90046
EL MIRADOR	1302 N SWEETZER AVE	WEST HOLLYWOOD	90046
ELIZABETH D. HOPPER HOUSE	1305 PARK WY	BEVERLY HILLS	90210
FACADE IMPROVEMENTS	7916 W SANTA MONICA BLVD	WEST HOLLYWOOD	90046
FLEUR DE LIS	1825 WHITLEY AVE	LOS ANGELES	90028
FREEMAN House F L WRIGHT Block House Thematic	1962 GLENCOE WY	LOS ANGELES	90068
GARDEN COURT APARTMENTS RESIDENTIAL HOTEL	7021 HOLLYWOOD BLVD	LOS ANGELES	90028
HACIENDA ARMS APARTMENTS | Coronet Apartments	8439 SUNSET BLVD	WEST HOLLYWOOD	90069
HERB NACIO BROWN	616 N BEVERLY DR	BEVERLY HILLS	90210
HOLLYWOOD ROOSEVELT HOTEL	7000 HOLLYWOOD BLVD	LOS ANGELES	90028
HOPPER, C. B. & H. M. HOUSE	718 N BEVERLY DR	BEVERLY HILLS	90210
J.R. PINKHAM RESIDENCE	9930 TOWER LN	BEVERLY HILLS	90210
KOLB ESTATE	1146 TOWER RD	BEVERLY HILLS	90210
LA FONTAINE	1285 N CRESCENT HEIGHTS BLVD	WEST HOLLYWOOD	90046

LA LEVENDA	1737 WHITLEY AVE	LOS ANGELES	90028
LES MAISONETTES	8250 FOUNTAIN AVE	WEST HOLLYWOOD	90046
MARLENE DIETRICH HOUSE	822 N ROXBURY DR	BEVERLY HILLS	90210
MONTMARTRE	6755 HOLLYWOOD BLVD	LOS ANGELES	90028
NORMANDIE TOWERS	7219 HAMPTON AVE	WEST HOLLYWOOD	90046
PALMER, MINNIE HILL, HOUSE	S CHATSWORTH PARK	CHATSWORTH	
PATIO DEL MORO | Casita para una Estrellita	8225 FOUNTAIN AVE	WEST HOLLYWOOD	90046
PAUL HELMS HOUSE	135 COPLEY PL	BEVERLY HILLS	90210
PRATT RESIDENCE	1028 RIDGEDALE DR	BEVERLY HILLS	90210
RIGBY HOUSE	832 GREENWAY DR	BEVERLY HILLS	90210
ROGERS	1000 N CRESCENT DR	BEVERLY HILLS	90210
RONDA | Mi Casa Apartments	1400 HAVENHURST DR	WEST HOLLYWOOD	90046
SCHINDLER, R. M., HOUSE	833 N KINGS RD	WEST HOLLYWOOD	90046
SHRADER HOUSE	1927 N HIGHLAND AVE	LOS ANGELES	90068
SILSBY SPALDING ESTATE	1100 CAROLYN WY	BEVERLY HILLS	90210

STORER HOUSE	8161 HOLLYWOOD BLVD	LOS ANGELES	90069
SUNSET TOWERS	8358 SUNSET BLVD	WEST HOLLYWOOD	90046
T.A. TOOEY	1700 LEXINGTON RD	BEVERLY HILLS	90210
Talbot-Wood Dwelling	1608 N LAS PALMAS AVE	LOS ANGELES	90028
THE ADALUSIA FOUNTAIN	1471 HAVENHURST DR	LOS ANGELES	90046
THE ANDALUSIA BUILDING 2	1473 HAVENHURST DR	LOS ANGELES	90046
THE ANDALUSIA BUILDING 3	1475 HAVENHURST DR	LOS ANGELES	90046
THE FONTENOY	1811 WHITLEY AVE	LOS ANGELES	90028
THE HAVENHURST	1861 WHITLEY AVE	LOS ANGELES	90028
THE ROYAL GARDENS	1255 N FLORES ST	WEST HOLLYWOOD	90069
THOMAS	1006 N CRESCENT DR	BEVERLY HILLS	90210
TOBERMAN, C. E., ESTATE	1847 CAMINO PALMERO	Hollywood	90046
VALENTINO APARTMENTS	2000 N HIGHLAND AVE	LOS ANGELES	90068
VILLA D'ESTE	1355 LAUREL AVE	WEST HOLLYWOOD	90046
WILLIAM T. STERLING HOUSE	613 N BEVERLY DR	BEVERLY HILLS	90210
	216 HAGAR ST	SAN FERNANDO	91340

	447 HAGAR ST	SAN FERNANDO	91340
	720 N FOOTHILL RD	BEVERLY HILLS	90210
	801 N ROXBURY DR	BEVERLY HILLS	90210
	918 N ALPINE DR	BEVERLY HILLS	90210
	927 N PALM AVE	WEST HOLLYWOOD	90069
	931 N PALM AVE	WEST HOLLYWOOD	90069
	1334 N LAUREL AVE	WEST HOLLYWOOD	90069
	1343 N LAUREL AVE	WEST HOLLYWOOD	90046
	6943 CAMROSE DR	LOS ANGELES	90068
	8320 W FOUNTAIN AVE	WEST HOLLYWOOD	90069
	8701 W SANTA MONICA BLVD	WEST HOLLYWOOD	90069
ARTHUR MURRAY DANCE STUDIO	7016 HOLLYWOOD BLVD	LOS ANGELES	90028
WRIGHT, LLOYD, HOME AND STUDIO	858 N DOHENY DR	WEST HOLLYWOOD	90069
BARBER SHOP-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	

Beverly Hills Women's Club	1700 Chevy Chase Dr	Beverly Hills	90210
BOY SCOUTS OF AMERICA CLUBHOUSE, LIONS CLUB	623 N ROBERTSON BLVD	WEST HOLLYWOOD	90046
BUILDING #403	14445 OLIVE VIEW DR	LOS ANGELES	
BUILDING 106-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
BUILDING 108-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
BUILDING 110-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
BUILDING 114-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
BUILDING 301-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
BUILDING 303-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
BUILDING 305-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
BUILDING 307-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
BUILDING H-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
BUILDING I-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
BUILDINGS #401 AND 402	14445 OLIVE VIEW DR	LOS ANGELES	
BUNGALOW C-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
BUNGALOW D-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	

BUNGALOW E-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
BUNGALOW F-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
BUNGALOW G-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
BUNGALOW J-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
BUNGALOW L-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
BUNGALOW M-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
BUNGALOW N-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
BUNGALOW O-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
BUNGALOW P-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
BUNGALOW Q-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
BUNGALOW R-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
BUNGALOW S-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
BUNGALOW T-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
CASCADES	Interstate 5	SAN FERNANDO	
CONVALESCENT COTTAGE-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
CORONER'S OFFICE-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
COTTAGE #1-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	

COTTAGE #3-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
COTTAGE #4-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
COTTAGE U-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
DOUBLE GARAGE-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
FILM STORAGE VAULT, OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
GARAGE	14445 OLIVE VIEW DR	LOS ANGELES	
GARAGE-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
GARBAGE AND CAN HOUSE-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
GUEST COTTAGE-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
HOLLYWOOD AMERICAN LEGION POST #43	2035 N HIGHLAND AVE	LOS ANGELES	90028
MEDICAL TRANSCRIPTION-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
MORGUE-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
OLD ROCK SCOUT HOUSE	208 PARK AVE	SAN FERNANDO	91340
OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
PERSONNEL PAYROLL-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
Stone House	8642 SUNLAND BLVD	LOS ANGELES	91352
STREETCAR DEPOT | Depot #66	PERSHING AVE	LOS ANGELES	90049

WARD 103	14445 OLIVE VIEW DR	LOS ANGELES	
WAREHOUSE-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
WOMEN DOCTOR'S COTTAGE-OLIVE VIEW	14445 OLIVE VIEW DR	LOS ANGELES	
California Institute of the Arts Main Building	24700 Mc Bean PKWY	Santa Clarita	91355
CANOGA PARK ELEMENTARY SCHOOL	7428 TOPANGA CANYON BLVD	LOS ANGELES	
CANOGA PARK ELEMENTARY SCHOOL-ADMINISTRATION BLDG	7428 TOPANGA CANYON BLVD	LOS ANGELES	
CANOGA PARK ELEMENTARY SCHOOL-AUDITORIUM	7428 TOPANGA CANYON BLVD	LOS ANGELES	
CANOGA PARK HIGH SCHOOL	6850 TOPANGA CANYON AVE	CANOGA PARK	
CARPENTER ELEMENTARY SCHOOL	3909 CARPENTER AVE	LOS ANGELES	
MARYMOUNT HIGH SCHOOL	10643 SUNSET BLVD	LOS ANGELES	90024
MOUNT ST MARY'S COLLEGE BRADY HALL	12001 CHALON RD	LOS ANGELES	90049
MOUNT ST MARY'S COLLEGE CARONDELET HALL	12001 CHALON RD	LOS ANGELES	90049
MOUNT ST MARY'S COLLEGE CHARLES WILLARD MEMORIAL L	12001 CHALON RD	LOS ANGELES	90049
MOUNT ST MARY'S COLLEGE HISTORIC DISTRICT	12001 CHALON RD	LOS ANGELES	90049
MOUNT ST MARY'S COLLEGE ROSSITER HALL	12001 CHALON RD	LOS ANGELES	90049
MOUNT ST MARY'S COLLEGE ST JOSEPH'S HALL	12001 CHALON RD	LOS ANGELES	90049
RESEDA ELEMENTARY SCHOOL	7265 AMIGO AVE	LOS ANGELES	

UCLA Hedrick Hall	250 DE NEVE DR	LOS ANGELES	90024
UCLA-Ackerman Hall	308 Westwood Plaza	Los Angeles	90024
Woman's Club of Hollywood	1741 N La Brea Ave	Los Angeles	90046
DICKSON PLAZA - UCLA	405 N HILGARD AVE	LOS ANGELES	90024
DODD HALL-UCLA, 309 Portola Pl, 405 Hilgard Ave	405 N HILGARD AVE	LOS ANGELES	90024
HAINES HALL-UCLA	405 N HILGARD AVE	LOS ANGELES	90024
HAWTHORNE GRAMMAR SCHOOL	624 N REXFORD DR	BEVERLY HILLS	90210
HOLLYWOOD HIGH SCHOOL	1521 N HIGHLAND AVE	LOS ANGELES	90028
HOLLYWOOD HIGH SCHOOL ATHLETIC FIELD	1521 N HIGHLAND AVE	LOS ANGELES	90028
HOLLYWOOD HIGH SCHOOL AUDITORIUM	1521 N HIGHLAND AVE	LOS ANGELES	90028
HOLLYWOOD HIGH SCHOOL HISTORIC DISTRICT	1521 N HIGHLAND AVE	LOS ANGELES	90028
HOLLYWOOD HIGH SCHOOL LIBERAL ARTS BLDG	1521 N HIGHLAND AVE	LOS ANGELES	90028
HOLLYWOOD HIGH SCHOOL SCIENCE BLDG	1521 N HIGHLAND AVE	LOS ANGELES	90028
Hollywood School for Girls	1741 N La Brea Ave	Los Angeles	90046
Hollywood School for Girls cottage	1741 N La Brea Ave	Los Angeles	90046
Hollywood School for Girls shed	1741 N La Brea Ave	Los Angeles	90046
JANSS STEPS - UCLA	405 N HILGARD AVE	LOS ANGELES	90024
KERCKOFF HALL-UCLA	405 N HILGARD AVE	LOS ANGELES	90024
KINSEY HALL-UCLA	405 N HILGARD AVE	LOS ANGELES	90024

MEN'S GYM-UCLA	405 N HILGARD AVE	LOS ANGELES	90024
MOORE HALL-UCLA	405 N HILGARD AVE	LOS ANGELES	90024
MORNINGSIDE ELEMENTARY SCHOOL	575 N MACLAY AVE	SAN FERNANDO	
MURPHY HALL-UCLA	405 N HILGARD AVE	LOS ANGELES	90024
NORTH HOLLYWOOD HIGH SCHOOL	5231 COLFAX AVE	LOS ANGELES	
NORTH HOLLYWOOD HIGH SCHOOL-AUDITORIUM	5231 COLFAX AVE	LOS ANGELES	
NORTH HOLLYWOOD HIGH SCHOOL-FRASHER HALL	5231 COLFAX AVE	LOS ANGELES	
NORTH HOLLYWOOD HIGH SCHOOL-LIBRARY	5231 COLFAX AVE	LOS ANGELES	
NORTH HOLLYWOOD HIGH SCHOOL-MAIN BLDG	5231 COLFAX AVE	LOS ANGELES	
NORTH HOLLYWOOD HIGH SCHOOL-RANDOLPH HALL	5231 COLFAX AVE	LOS ANGELES	
NORTH HOLLYWOOD RECREATION CENTER	5301 TUJUNGA AVE	LOS ANGELES	
NORTH HOLLYWOOD RECREATION CENTER-BASEBALL DIAMOND	5301 TUJUNGA AVE	LOS ANGELES	
NORTH HOLLYWOOD RECREATION CENTER-COMMUNITY BUILDI	5301 TUJUNGA AVE	LOS ANGELES	
NORTH HOLLYWOOD RECREATION CENTER-PLAYGROUND	5301 TUJUNGA AVE	LOS ANGELES	
NORTH HOLLYWOOD RECREATION CENTER-SWIMMING POOL	5301 TUJUNGA AVE	LOS ANGELES	
POWELL LIBRARY-UCLA	405 N HILGARD AVE	LOS ANGELES	90024
ROYCE HALL-UCLA	405 N HILGARD AVE	LOS ANGELES	90024

San Fernando Junior High School	130 N Brand Blvd	San Fernando	91340
UNIVERSITY OF CALIFORNIA LOS ANGELES	405 N HILGARD AVE	LOS ANGELES	90024
WOMEN'S GYM-UCLA	405 N HILGARD AVE	LOS ANGELES	90024
CATHOLIC-PROTESTANT CHAPELS, VETERANS ADMIN CENTER	EISENHOWER AVE	LOS ANGELES	90049
ST SAVIORS CHAPEL	3700 COLDWATER CANYON DR	LOS ANGELES	91604
MOUNT ST MARY'S COLLEGE MARY CHAPEL	12001 CHALON RD	LOS ANGELES	90049
HOLLYWOOD HIGH SCHOOL LIBRARY	1521 N HIGHLAND AVE	LOS ANGELES	90028
BEVERLY HILLS MORTUARY	417 N MAPLE DR	BEVERLY HILLS	90210
EL CAPITAN THEATER OFFICE BUILDING	6834 HOLLYWOOD BLVD	LOS ANGELES	90028
EUDORA THORKIBLSEN	803 N RODEO DR	BEVERLY HILLS	90210
HOLLYWOOD THEATRE	6766 HOLLYWOOD BLVD	LOS ANGELES	90028
OAKMAN	610 N BEVERLY DR	BEVERLY HILLS	90210
OLDEST HOUSE IN HOLLYWOOD	7377 SANTA MONICA BLVD	LOS ANGELES	90046
PICKFAIR	1143 SUMMIT DR	BEVERLY HILLS	90210
WILLIAM S. HART HOUSE	8341 DE LONGPRE AVE	WEST HOLLYWOOD	90046
	1921 WHITLEY AVE	LOS ANGELES	90028

	7109 HAWTHORN AVE	LOS ANGELES	90046
	7113 HAWTHORN AVE	LOS ANGELES	90046
	7117 HAWTHORN AVE	LOS ANGELES	90046
	7129 HAWTHORN AVE	LOS ANGELES	90046
	7950 W FOUNTAIN AVE	WEST HOLLYWOOD	90069
PLUMMER PARK COMMUNITY CLUBHOUSE	1200 N VISTA ST	WEST HOLLYWOOD	90046
VOGUE THEATER	6629 HOLLYWOOD BLVD	LOS ANGELES	90028
CHATSWORTH COMMUNITY CHURCH	22601 LASSEN ST	LOS ANGELES	91311
HOLLYWOOD CONGREGATIONAL CHURCH	7065 HOLLYWOOD BLVD	LOS ANGELES	90028
FOX WESTWOOD VILLAGE THEATER	959 BROXTON AVE	LOS ANGELES	90024
GRAUMAN'S CHINESE THEATER	6925 HOLLYWOOD BLVD	LOS ANGELES	90028
GRAUMAN'S EGYPTIAN THEATER	6708 HOLLYWOOD BLVD	LOS ANGELES	90028
Lasky Demille Studio Barn	2100 N HIGHLAND AVE	LOS ANGELES	90068
PICKFORD FAIRBANKS STUDIO	1041 FORMOSA AVE	WEST HOLLYWOOD	90046
SAMUEL GOLDWYN STUDIOS	1040 N FORMOSA AVE	LOS ANGELES	90046

UNITED ARTISTS	7200 SANTA MONICA BLVD	WEST HOLLYWOOD	90069
Charles Alexander Mentry House; Mentry House	27201 W PICO CANYON RD	SANTA CLARITA	91320
DOHENY ESTATE/GREYSTONE	905 LOMA VISTA DR	BEVERLY HILLS	90210
El Cabrillo	1832 N Grace Ave	Los Angeles	90028
EL CABRILLO FOUNTAIN	1832 N GRACE AVE	LOS ANGELES	90028
EL CABRILLO WALL	1832 N GRACE AVE	LOS ANGELES	90028
Felton School	27201 W PICO CANYON RD	SANTA CLARITA	91320
LOPEZ ADOBE	1100 PICO ST	SAN FERNANDO	91340
MENTRY BARN & CARRIAGE HOUSE	27201 W PICO CANYON RD	SANTA CLARITA	91320
MENTRYVILLE	27201 W PICO CANYON RD	SANTA CLARITA	
Mission San Fernando Rey De Espana	15151 SAN FERNANDO MISSION BLVD	San Fernando	91340
PICO #4^Other Name | PICO CANYON OIL FIELD^Other Name | WELL #CSO 4^Other Name		Stevenson Ranch	91381
Pico, Romulo, Adobe	10940 Sepulveda Blvd	Mission Hills	91345
PORTAL OF THE FOLDED WINGS SHRINE TO AVIATION AND	10621 VICTORY BLVD	NORTH HOLLYWOOD	91606
VAN NUYS BRANCH	14553 SYLVAN WY	LOS ANGELES	91411
WATTLES MANSION AND GARDENS	1824 N CURSON AVE	LOS ANGELES	90046

WHITLEY COURT	1720 WHITLEY AVE	LOS ANGELES	90028
WHITLEY COURT	1722 WHITLEY AVE	LOS ANGELES	90272
WHITLEY COURT	1726 WHITLEY AVE	LOS ANGELES	90272
WHITLEY COURT	1728 WHITLEY AVE	LOS ANGELES	90272
Los Angeles National Cemetery Arcade	950 S Sepulveda Blvd	Los Angeles	90049
Los Angeles National Cemetery Columbarium	950 S Sepulveda Blvd	Los Angeles	90049
Los Angeles National Cemetery Comfort Station	950 S Sepulveda Blvd	Los Angeles	90049
Los Angeles National Cemetery Flagpole	950 S Sepulveda Blvd	Los Angeles	90049
Los Angeles National Cemetery Fuel Storage Bldg	950 S Sepulveda Blvd	Los Angeles	90049
Los Angeles National Cemetery Maintenance Bldg 1	950 S Sepulveda Blvd	Los Angeles	90049
Los Angeles National Cemetery Maintenance Bldg 2	950 S Sepulveda Blvd	Los Angeles	90049
Los Angeles National Cemetery NHDVS monument	950 S Sepulveda Blvd	Los Angeles	90049
Los Angeles National Cemetery Rostrum	950 S Sepulveda Blvd	Los Angeles	90049
Los Angeles National Cemetery Span-Amer War Monume	950 S Sepulveda Blvd	Los Angeles	90049
Los Angeles National Cemetery Wilshire Blvd Gate H	950 S Sepulveda Blvd	Los Angeles	90049
Temple Ramat Zion Synagogue	17655 Devonshire St	Northridge	91325
NORTH HOLLYWOOD LIBRARY | AMELIA EARHART LIBRARY	5211 N TUJUNGA AVE	LOS ANGELES	91601
BRAND PARK COMFORT STATION	15174 SAN FERNANDO MISSION BLVD	LOS ANGELES	
BRAND PARK-CHEST HIGH WALLS	15174 SAN FERNANDO MISSION BLVD	LOS ANGELES	
BRAND PARK-ENTRANCE GATE	15174 SAN FERNANDO MISSION BLVD	LOS ANGELES	

BRAND PARK-FOUNTAIN	15174 SAN FERNANDO MISSION BLVD	LOS ANGELES	
BRAND PARK-MISSION FOUNTAIN	15174 SAN FERNANDO MISSION BLVD	LOS ANGELES	
BRAND PARK-PERGOLAS	15174 SAN FERNANDO MISSION BLVD	LOS ANGELES	
BRAND PARK-STATUE	15174 SAN FERNANDO MISSION BLVD	LOS ANGELES	
BRAND PARK-SUN DIAL	15174 SAN FERNANDO MISSION BLVD	LOS ANGELES	
CASA ADOBE HACIENDA OF DON TOMAS FELIZ, CAMPO DE C	3919 LANKERSHIM BLVD	LOS ANGELES	91602
Food Storage Building	16756 MOORPARK ST	LOS ANGELES	
GARNIER BUILDING	16756 MOORPARK ST	LOS ANGELES	91436
Hollywood Bowl	2301 N Highland Ave	Los Angeles	90068
HOLLYWOOD RESERVOIR COMPLEX	CAHUENGA BLVD	LOS ANGELES	
HOLLYWOOD RESERVOIR COMPLEX	LAKE HOLLYWOOD DR	LOS ANGELES	
HOLLYWOOD RESERVOIR COMPLEX	LAKE HOLLYWOOD DR	LOS ANGELES	
HOLLYWOOD RESERVOIR COMPLEX	LAKE HOLLYWOOD DR	LOS ANGELES	
HOLLYWOOD RESERVOIR COMPLEX	LAKE HOLLYWOOD DR	LOS ANGELES	
HOLLYWOOD RESERVOIR COMPLEX	6454 Wiedlake Dr	LOS ANGELES	90068
HOLLYWOOD RESERVOIR COMPLEX	6454 Wiedlake Dr	LOS ANGELES	90068

HOLLYWOOD RESERVOIR COMPLEX	6454 Wiedlake Dr	LOS ANGELES	90068
HOLLYWOOD RESERVOIR COMPLEX	6454 Wiedlake Dr	LOS ANGELES	90068
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HOLLYWOOD RESERVOIR COMPLEX	6454 Wiedlake Dr	LOS ANGELES	90068
HOLLYWOOD RESERVOIR COMPLEX	6454 Wiedlake Dr	LOS ANGELES	90068
HOLLYWOOD RESERVOIR COMPLEX	6454 Wiedlake Dr	LOS ANGELES	90068
Limestone Blacksmith Shop	16756 MOORPARK ST	LOS ANGELES	91436
Los Angeles National Cemetery Bivouac of Dead plaq	950 S Sepulveda Blvd	Los Angeles	90049
Los Angeles National Cemetery Civil War Soldier Mo	950 S Sepulveda Blvd	Los Angeles	90049
Los Angeles National Cemetery Terraces/Overlooks	950 S Sepulveda Blvd	Los Angeles	90049
RANCHO EL ENCINO	16756 MOORPARK ST	Encino	91436
Vincente De La Osa Adobe	16756 MOORPARK ST	LOS ANGELES	91436
DUTCH REFORMED CHURCH, FIRST BAPTIST CHURCH	9025 W CYNTHIA ST	WEST HOLLYWOOD	90069
FAITH BIBLE CHURCH	18531 GRESHAM ST	LOS ANGELES	91324
COUNTY LIBRARY	903 N WESTHOURNE AVE	WEST HOLLYWOOD	90069

EL PORTAL THEATRE	5265 LANKERSHIM BLVD	LOS ANGELES	91601
PILGRIMAGE THEATER	2580 CAHUENGA BLVD	HOLLYWOOD	
UNIVERSAL CITY AND STUDIOS	100 UNIVERSAL CITY PLAZA	UNIVERSAL CITY	91608
Los Angeles National Cemetery Chapel (Admin Bldg)	950 S Sepulveda Blvd	Los Angeles	90049

APPENDIX L – NHPA SECTION 106 FULL REPORT

HOLLYWOOD BURBANK AIRPORT SLAPP/OROSZ DEPARTURE PROCEDURES

Cultural Resources Survey Report

Prepared for
Federal Aviation Administration

and

Hollywood Burbank Airport

October 2023

Authors:
Antonette Hrycyk, M.S.
Amy Langford, PhD
Shannon Papin, M.A.
Becky Urbano, M.S.

ESA

Final Report

HOLLYWOOD BURBANK AIRPORT SLAPP/OROSZ DEPARTURE PROCEDURES

Cultural Resources Survey Report

Prepared for
Federal Aviation Administration

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October 2023

Authors:
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2945 Towngate Road
Suite 200
Thousand Oaks, CA 91361
805.914.1500
esassoc.com

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NADB REPORT CITATION

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Author(s):	Hrycyk, Antonette, Amy Langford, Shannon Papin, and Becky Urbano
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Work Type:	Cultural Resources Inventory
Federal Agency:	Federal Aviation Administration

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STATEMENT OF CONFIDENTIALITY

This report identifies the locations of cultural resources in and within the vicinity of the Hollywood Burbank Airport (BUR), located in Los Angeles and Ventura Counties, California. Disclosure of this information to the public may be in violation of both federal and state laws. Such applicable federal regulations include, but may not be limited to, Section 304 of the National Historic Preservation Act of 1966 (NHPA) (54 United States Code [U.S.C.] 307103) and the Archaeological Resources Protection Act (16 U.S.C. Section 470h). Applicable state regulations include, but may not be limited to, Government Code Section 6250 et seq. and Section 6254 et seq. Disclosure of site location information to individuals other than those meeting the U.S. Secretary of the Interior's (SOI) Professional Qualifications Standards or the California State Personnel Board criteria for Associate State Archaeologist or State Historian II violates the California Office of Historic Preservation records access policy.

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EXECUTIVE SUMMARY

This Cultural Resources Survey Report documents the methods and results of a cultural resources inventory completed for the Hollywood Burbank (BUR or the Airport) for the BUR SLAPP/OROSZ Departure Procedures Project (Project). The Project is proposed by the Federal Aviation Administration (FAA) to modify aircraft flight routes and the supporting airspace management structure through the modification of two Area Navigation (RNAV) "Open" Standard Instrument Departure (SID) procedures BUR. The purpose of the Project is to maintain the safety and efficiency of the National Airspace System while designing and developing two open SID flight procedures at BUR. As a federal undertaking (Project requiring federal funding or issuance of a federal permit), the Project is subject to federal environmental regulations, including the National Historic Preservation Act of 1966 (NHPA), as amended (54 United States Code [U.S.C.] 306108). The Federal Aviation Administration (FAA) is the lead federal agency for NHPA purposes.

Before a federal undertaking is implemented, NHPA Section 106 requires federal agencies to consider the effects of the undertaking on historic properties. This document records the properties currently listed in or determined eligible for listing in the National Register of Historic Places (National Register) within the Project Area of Potential Effects (APE). Work performed consisted of background and archival research of national, state, and local databases to identify historic resources for the purposes of assessing effects that may result from the Project.

The APE contains areas of known archeological sensitivity. However, because the Project is located entirely in airspace above grade, includes no ground disturbance and is over areas already within the flightpaths of aircraft departing BUR, there is no potential to encounter buried archaeological resources within the APE during Project implementation.

The APE contains 685 historic properties. The Project would not change the total number of overflights within the APE. However, it would concentrate the existing flights, thereby changing the noise attributable to departures from BUR. Based on an analysis of 24 historic properties that were deemed to be most sensitive to changes in visual and auditory exposure, the average noise exposure within the APE would decrease in some capacity for 14 sensitive historic properties. The maximum increase in auditory exposure at the most sensitive properties would be 2.26 dB, at the lower threshold of human perception. Therefore, we conclude that the incremental increase changes in noise caused by the undertaking would not introduce any auditory elements that would diminish the integrity of these properties' significant historic features and therefore would not adversely affect the historic properties. This indicates that historic properties that are less sensitive to noise or visual intrusions would also not be adversely affected by the undertaking.

Therefore, ESA recommends a finding of **No Adverse Effect to Historic Properties** for the Hollywood Burbank Airport SLAPP/OROSZ Departure Procedures Project for Section 106 purposes, pursuant 36 CFR 800.4.

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CHAPTER 1
Introduction

This Cultural Resources Survey Report documents the methods and results of a cultural resources inventory completed for the Hollywood Burbank (BUR or the Airport) for the SLAPP/OROSZ Departure Procedures Project (Project). The Project is proposed by the Federal Aviation Administration (FAA) to modify aircraft flight routes and the supporting airspace management structure through the modification of two Area Navigation (RNAV) "Open" Standard Instrument Departure (SID) procedures BUR. The purpose of the Project is to maintain the safety and efficiency of the National Airspace System while designing and developing two open SID flight procedures at BUR.. The Project is shown on the U.S. Geological Survey (USGS) Val Verde, Newhall, Mint Canyon, Agua Dulce, Simi Valley East, Oat Mountain, San Fernando, Sunland, Calabasas, Canoga Park, Van Nuys, Burbank, Topanga, Beverly Hills, and Hollywood, 7.5-minute topographic quadrangles in Los Angeles and Ventura counties in California (**Figure 1**). As a federal undertaking (Project requiring federal funding or issuance of a federal permit), the Project is subject to federal environmental regulations, including the National Historic Preservation Act of 1966 (NHPA), as amended (54 United States Code [U.S.C.] 306108). The FAA is the lead federal agency for NHPA purposes.

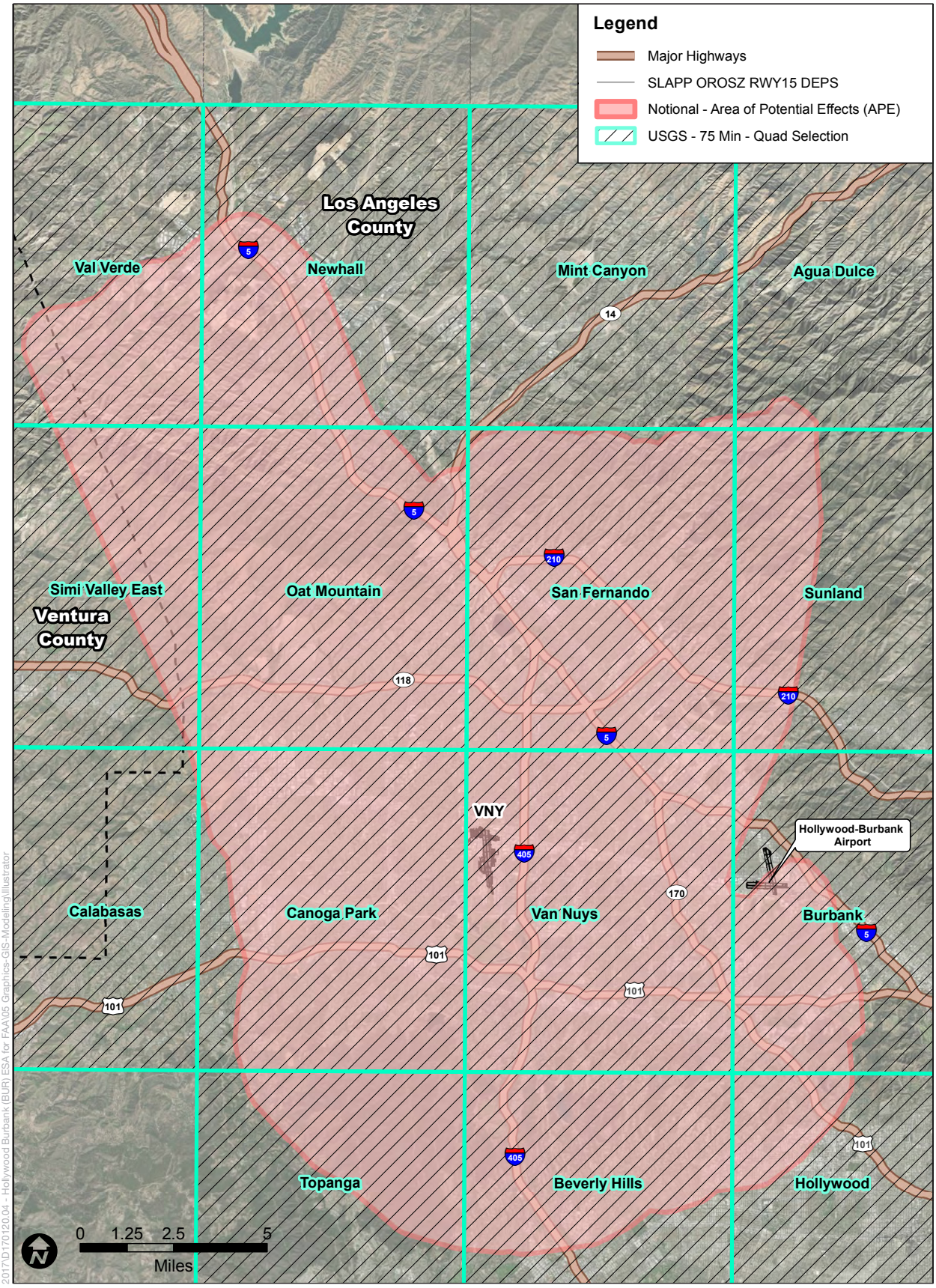
This document records the properties currently listed on or determined eligible for listing in the National Register of Historic Places (National Register) within the Project Area of Potential Effects (APE). Work performed consisted of background and archival research of national, state, and local databases to identify historic resources for the purposes of assessing effects that may result from the Project.

In accordance with NHPA Section 106, this cultural resource study was conducted to:

- Delineate an APE and identify historic properties listed in or determined eligible for listing in the National Register, including prehistoric and historic archaeological resources and places of importance to Native Americans, as well as architectural resources, within the Project APE;

- If applicable, determine whether the Project would cause an adverse effect to a historic property under Section 106; and

- If applicable, recommend procedures for avoidance or mitigation of adverse effect to a historic property under Section 106.



SOURCE: ESRI; Prepared by Jacobsen | Daniels, 2023

Hollywood Burbank Airport EA

Figure 1
Project Location and Vicinity

ESA

CHAPTER 2
Project Background

2.1 Project Description

The Project would implement two publicly available area navigation (RNAV) departure procedures at BUR, SLAPP THREE and OROSZ THREE.[1,2] The proposed RNAV procedures would modify the existing departure procedures, SLAPP TWO and OROSZ TWO, by eliminating an open leg between the Airport and the initial enroute waypoint for Runway 15 departures. Instead, SLAPP THREE and OROSZ THREE are designed as open Standard Instrument Departures (SIDs), with an open segment following a published initial segment. This allows for dispersion of departing aircraft, reduces cockpit communication in the departure phase of flight, increases vertical and lateral guidance to pilots, and gives air traffic controllers additional operational flexibility in separating these departing aircraft from overflying traffic, VNY traffic, and traffic arriving to Runway 8 at the Airport.

2.1.1 SLAPP THREE Departure Procedure

The new SLAPP THREE departure procedure would require aircraft departing Runway 15 to maintain the runway heading of 155º before executing a climbing right turn to intercept the 214º radial to the JAYTE waypoint. Aircraft must pass JAYTE at or above 2,500 feet above Mean Sea Level (MSL) as well as at or below 240 knots indicated airspeed (KIAS). From JAYTE, aircraft will fly the 258º track to the TEAGN waypoint, which must be crossed at or above 4,000 feet MSL. Upon crossing TEAGN, aircraft will continue to fly the 258º track until receiving Air Traffic Control (ATC) vectors to the RAYVE waypoint and into the enroute airspace structure at an altitude at or above 7,000 feet MSL. The segment from TEAGN to RAYVE represents the open leg of the departure procedure. Departures from all other runways will continue to fly as they do in the current SLAPP TWO departure procedure.

2.1.2 OROSZ THREE Departure Procedure

The new OROSZ THREE departure procedure would require aircraft departing Runway 15 to maintain the runway heading of 155º before executing a climbing right turn to intercept the 213º radial to the JAYTE waypoint. Aircraft must pass JAYTE at or above 2,500 feet MSL as well as at or below 240 KIAS. From JAYTE, aircraft will fly the 259º track to the TEAGN waypoint, which must be crossed at or above 4,000 feet MSL. Upon crossing TEAGN, aircraft will fly the

[1] RNAV is a method of navigation that permits aircraft operation on any desired flight path within the coverage of ground- or space-based navigation aids, or within the limits of the capability of self-contained aids, or a combination of these.

[2] Names for waypoints, intersections, Air Traffic Control coordination, and Distance Measuring Equipment fixes not co-located with a navigational aid (NAVAID) must consist of a five-letter pronounceable name. These five letters must serve as the name, identifier, and computer code. (FAA Order JO 7400.2, Section 3.3.4 (b))

258º track until receiving ATC vectors to the TILLR waypoint into the enroute airspace structure at an altitude at or above 8,000 feet MSL. The segment from TEAGN to TILLR represents the open leg of the departure procedure. Departures from all other runways will continue to fly as they do in the current OROSZ TWO departure procedure.

2.1.3 Increase of Climb Gradient for Runway 15 Departures using SLAPP TWO and OROSZ TWO Departure Procedures

Runway 15 departures using the current SLAPP TWO and OROSZ TWO procedures must meet a minimum climb gradient of 340 feet/nautical mile (nm) on the initial departure segment. SLAPP THREE and OROSZ THREE will require a higher minimum climb gradient of 460 feet/nm. An alternative is to increase the required minimum climb gradient from 340 feet/nm to 600 feet/nm to promote aircraft climbing out of the Airport as rapidly as possible to limit the exposure of sites on the ground to extended periods of aircraft noise. A 600 feet/nm climb gradient is well below observed climb gradients achieved by most Runway 15 departures. FAA analysis of departure climb data at the Airport indicates that Boeing 737s achieve an average climb gradient of 1,019 feet/nm, while Airbus A320s achieve an average climb gradient of 1,075 feet/nm. These two aircraft (along with derivatives with similar climb performance), comprise a considerable proportion of activity at the Airport and indicate that most aircraft utilizing the airport will have no issues reaching the higher climb gradient included in this alternative.

Since most aircraft departing the Airport already exceed this rate of climb, vertical and lateral profiles over the ground are not expected to materially change for most aircraft because of this alternative. Since this alternative will affect a small number of aircraft (typically older general aviation aircraft and aircraft that depart at a high proportion of their maximum takeoff weight) that do not have the performance to meet a 600 feet/nm climb gradient, those aircraft would not be able to accept this departure procedure. That small proportion of aircraft that cannot accept this departure procedure will fly the VAN NUYS THREE (VNY3) obstacle departure procedure (ODP).

2.2 Federal Regulatory Framework

As a federal undertaking subject to FAA approval, the Project is subject to federal environmental regulations, including the NHPA. The FAA is the lead federal agency for NHPA purposes.

Effects of federal undertakings on both architectural and archaeological resources are considered through the NHPA, and its implementing regulations. Before a federal undertaking (i.e., Project requiring federal funding or issuance of a federal permit) is implemented, NHPA Section 106 requires federal agencies to consider the effects of the undertaking on historic properties (i.e., properties listed in or eligible for listing in the National Register) and to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on any undertaking that would adversely affect historic properties. Under the NHPA, a property is considered significant

if it meets one of the National Register listing Criteria A through D, in 36 Code of Federal Regulations (CFR) 60.4, as follows:

> *The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and that:*
>
> *A. Are associated with events that have made a significant contribution to the broad patterns of our history, or*
>
> *B. Are associated with the lives of persons significant in our past, or*
>
> *C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction, or*
>
> *D. Have yielded, or may be likely to yield, information important in prehistory or history.*

For a resource to be eligible for listing in the National Register, it must also retain the integrity to be recognizable as a historical resource and to convey its significance. Resources that are less than 50 years old are generally not considered eligible for the National Register.

Federal review of the effects of undertakings on significant cultural resources is carried out under NHPA Section 106 and is often referred to as the Section 106 review process. This process is the responsibility of the lead federal agency, in this case the FAA. The Section 106 review process typically involves a four-step procedure, which is described in detail in the implementing regulations of the NHPA:

- Initiate the Section 106 process by establishing that the Project meets the definition of a federal undertaking and identify the appropriate State Historic Preservation Officer (SHPO) and other consulting parties to participate in the review process.
- In consultation with the SHPO and other consulting parties, define the APE in which an undertaking could directly or indirectly affect historic properties, identify historic properties within the APE and determine if historic properties will be affected by the undertaking.
- If historic properties will be affected by the undertaking, assess whether the effects on historic properties will be adverse by applying the criteria of adverse effects.
- If historic properties will be adversely affected, consult with the SHPO and other consulting parties to resolve adverse effects by developing an agreement that addresses the treatment of historic properties, notify the Advisory Council on Historic Preservation, and proceed with the Project according to the conditions of the agreement.

Because the Project requires approval from the FAA, it is considered a federal undertaking and is subject to federal environmental regulations, including the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA) of 1966, as amended (54 United States Code [U.S.C.] 306108), and its implementing regulations. The FAA is the lead federal agency for NEPA/NHPA compliance for this Project.

2.3 Area of Potential Effects

According to the implementing regulations of NHPA Section 106, as amended, the APE is defined as:

> *… the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking (36 CFR § 800.16(d)).*

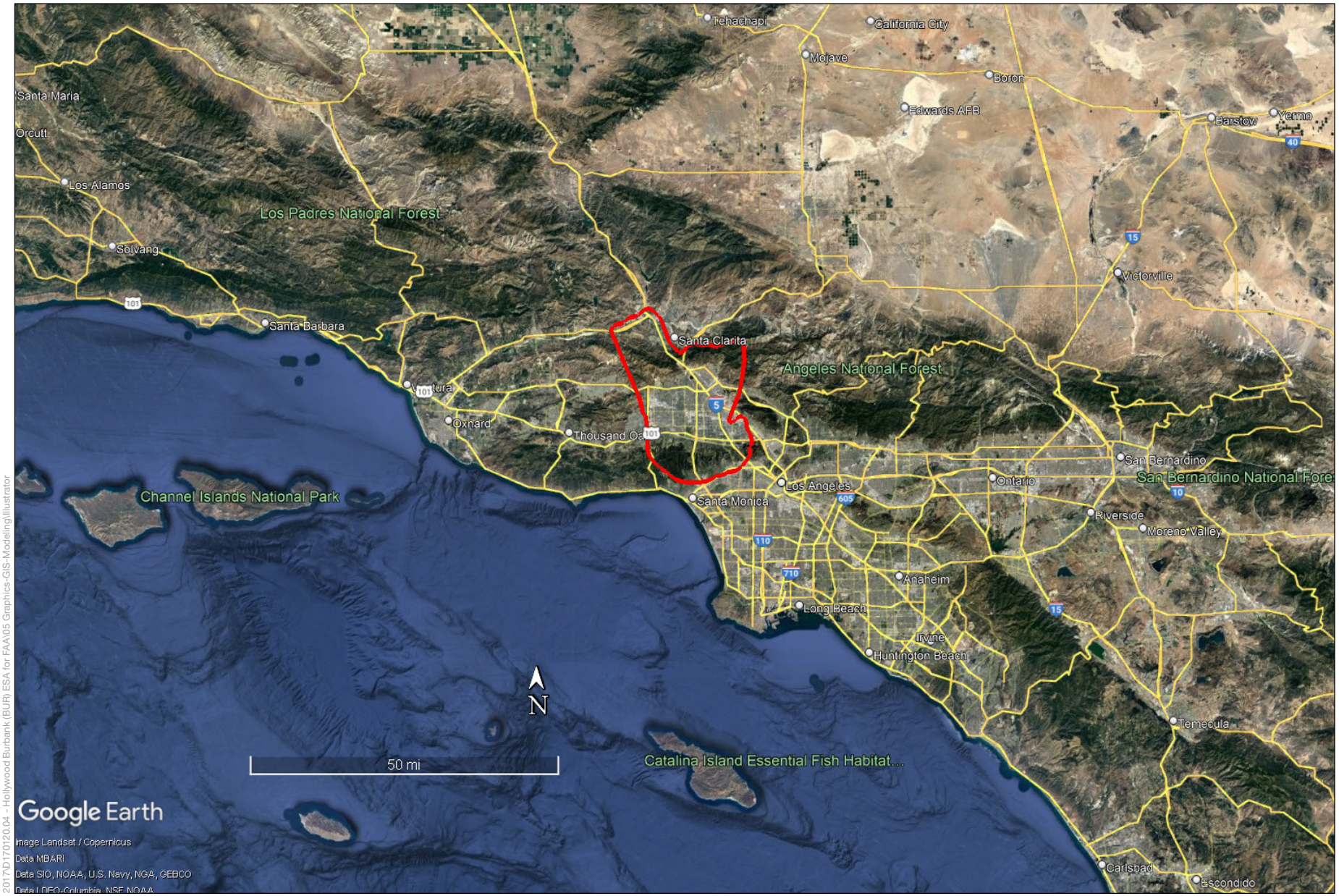
For the purposes of this undertaking, the horizontal APE for the Project is defined as the area where flight departures from Runway 15 are most heavily concentrated (**Figure 2**.) This APE considers the entire area where the concentration of overflights is likely to be altered by the undertaking and considers where noise and visual impacts from the undertaking are expected to occur. The APE encompasses approximately 380 square miles. Because the Project is procedural in nature and does not include any ground disturbance, no vertical APE is identified. The California SHPO concurred with this APE on [DATE, 2023].

2.3.1 Setting of the Area of Potential Effects

The APE encompasses a mix of terrains and land uses. The Santa Monica Mountains span east-west through the southern portion of the APE, forming a geologic border between the San Fernando Valley and the Los Angeles Basin. The mountain range lacks clearly defined peaks, but ranges in height from 1,000 – 3,000 feet. While portions of this mountain range are remote and set aside as public open space, the portion of the range within the APE is densely developed with residential buildings. Residential areas of development are accessed from curving streets that respond to the rugged topography. At the northern end of the APE are the Santa Susanna Mountains, which run east-west, and are roughly parallel to the Santa Monica Mountains. This area is slightly higher, with top elevations of 3,700 feet, and is very sparsely developed. Together, the two mountain ranges define the San Fernando Valley, where the central portion of the APE encompasses a dense urban environment.

Within the central portion of the APE are numerous cities, unincorporated communities, and several neighborhoods of the City of Los Angeles. The APE includes all or part of the following incorporated cities: Burbank, Calabasas, Glendale, Hidden Hills, San Fernando, Santa Clarita, University City, and West Hollywood. In addition, the APE includes all or part of the following neighborhoods within the City of Los Angeles: Bel Air, Canoga Park, Chatsworth, Encino, Granada Hillas, Hollywood, Mission Hills, North Hollywood, Northridge, Reseda, Sherman Oaks, Valley Glen, Van Nuys, and Woodland Hills.

Along with the natural boundaries formed by the Santa Monica and Santa Susanna mountains, several major freeways divide the APE and separate the communities noted above. Interstates 5 and 405 provide north-south routes through the APE. East-west routes include State Route (SR) 118, SR 134, and a portion of Highway 101. Highway 101 returns to a north-south alignment in the southeast quadrant of the APE.



2017\D170120.04 - Hollywood Burbank (BUR) ESA for FAA\05 Graphics-GIS-Modeling\Illustrator

SOURCE: Google Earth, 2023

Hollywood Burbank Airport EA

Figure 2
Area of Potential Effects

ESA

The area around BUR contains a mix of light industrial uses to the east and west, a large cemetery and memorial park to the south, and single-family residential development on all sides. Interstate 5 borders the airport property on the north, while an active rail line runs along the southern airport boundary. This area is densely developed with a variety of land uses located within a regular grid of major surface roads and minor residential streets.

CHAPTER 3
Environmental and Historical Context

3.1 Prehistoric Context

The chronology of Southern California is typically divided into three general time periods: the Early Holocene (9,600 cal B.C. to 5,600 cal B.C.), the Middle Holocene (5,600 cal B.C. to 1,650 cal B.C.), and the Late Holocene (1,650 cal B.C. to cal A.D. 1769). This chronology is manifested in the archaeological record by particular artifacts and burial practices that indicate specific technologies, economic systems, trade networks, and other aspects of culture.

While it is not certain when humans first came to California, their presence in Southern California by about 9,600 cal B.C. has been well documented. At Daisy Cave, on San Miguel Island, cultural remains have been radiocarbon dated to between 9,150 and 9,000 cal B.C.[3] During the Early Holocene (9,600 cal B.C. to 5,600 cal B.C.), the climate of Southern California became warmer and more arid and the human populations, who were represented by small hunter gathers until this point and resided mainly in coastal or inland desert areas, began exploiting a wider range of plant and animal resources.[4]

During the Late Holocene (1,650 cal B.C. to cal A.D. 1769), many aspects of Millingstone culture persisted, but a number of socioeconomic changes occurred.[5] The native populations of Southern California were becoming less mobile, and populations began to gather in small sedentary villages with satellite resource-gathering camps. Increasing population size necessitated the intensified use of existing terrestrial and mtorces.[6] Evidence indicates that the overexploitation of larger, high-ranked food resources may have led to a shift in subsistence, towards a focus on acquiring greater amounts of smaller resources, such as shellfish and small-seeded plants.[7] Between about A.D. 800 and A.D. 1350, there was an episode of sustained drought, known as the Medieval Climatic Anomaly (MCA).[8] While this climatic event did not

3 Brian F. Byrd and L. Mark Raab, "Prehistory of the Southern Bight: Models for a New Millenium," in *California Prehistory: Colonization, Culture, and Complexity*, ed. Terry L. Jones and Kathryn A. Klar (AltaMira Press: 2007), 215-227.

4 Byrd and Raab, "Prehistory", 215-227.

5 John M. Erlandson, *Early Hunter-Gatherers of the California Coast*, (New York: Plenum Press: 1994); William J. Wallace, "A Suggested Chronology for Southern California Coastal Archaeology," *Southwestern Journal of Anthropology*, 11 (1955): 214-230; Claude N. Warren, "Cultural Tradition and Ecological Adaptation on the Southern California Coast," *Archaic Prehistory in the Western United States* no. 1 (1968), 1-4. Eastern New Mexico University Paleo-Indian Institute.

6 Erlandson, *Early Hunter-Gatherers*.

7 Byrd and Raab, "Prehistory", 215-227.

8 Terry L. Jones *et al*, "Environmental Imperatives Reconsidered: Demographic Crises in Western North American during the Medieval Climatic Anomaly," *Current Anthropology*, 40, no. 2 (1999), 137-70.

appear to reduce the human population, it did lead to a change in subsistence strategies in order to deal with the substantial stress on resources.

Given the increasing sedentism and growing populations during the Late Holocene, territorial conscription and competition became acute. Primary settlements or village sites were typically established in areas with available freshwater, and where two or more ecological zones intersected.[9] This strategic placement of living space provided a degree of security in that when subsistence resources associated with one ecological zone failed, the resources of another could be exploited.[10] Villages typically claimed and carefully defended fixed territories that may have averaged 30-square miles in size encompassing a variety of ecological zones that could be exploited for subsistence resources.[11]

The Late Holocene marks a period in which specialization in labor emerged, trading networks became an increasingly important means by which both utilitarian and non-utilitarian materials were acquired, and travel routes were extended. Trade during this period reached its zenith as asphaltum (tar), seashells, and steatite were traded from Catalina Island (*Pimu* or *Pimugna)* and coastal Southern California to the Great Basin. Major technological changes appeared as well, particularly with the advent of the bow and arrow sometime after cal A.D. 500, which largely replaced the use of the dart and atlatl.[12]

3.2 Ethnographic Context

The APE is located within the territories that have been traditionally associated with the Gabrielino and the Tataviam. The term "Gabrielino" is a general term that refers to those Native Americans who were administered by the Spanish at the Mission San Gabriel Arcángel. The terms Tongva and Kizh, are preferred by many descendant groups over the Spanish words that have historically been used to describe them. Their neighbors included the Chumash and Tataviam to the north, the Juañeno to the south, and the Serrano and Cahuilla to the east. The Gabrielino are reported to have been second only to the Chumash in terms of population size and regional influence.[13] The Gabrielino language is part of the Takic branch of the Uto-Aztecan language family.

In 1978, the Smithsonian Institution complied the *Handbook of North American Indians* – a 20-volume encyclopedia summarizing the work of previous ethnographers and what was known about the prehistory, history, and culture of indigenous North American groups. *Volume 8: California* serves as the primary source material for the information presented in this section. Where possible, this information has been supplemented with information gleaned from other published sources[14] The following summaries are not intended to provide a comprehensive

9 William McCawley, *The First Angelinos: The Gabrielino Indians of Los Angeles* (Banning, California: Malki Museum Press, 1996).

10 McCawley, *The First Angelinos*.

11 McCawley, *The First Angelinos*.

12 Byrd and Raab, "Prehistory", 215-227.

13 L.J. Bean and C.R. Smith, "Gabrielino," California: Handbook of North American Indians, (Washington, D.C.: Smithsonian Institution, 1978), 8: 538-549.

14 McCawley, *The First Angelinos*.

account of these groups but are instead brief historical overviews based on available information. However, tribes are the authority on their cultural history.

It should be noted that the information presented herein is related to living tribes who still reside in Los Angeles County and who maintain a vested interest in their history, culture, practices, customs, and beliefs. Currently, there are five Gabrielino (Tongva and Kizh) groups that are recognized by the State as California Native American Tribes (as indicated by the NAHC): Gabrieleño Band of Mission Indians – Kizh Nation; Gabrielino Tongva Indians of California Tribal Council; Gabrieleno-Tongva San Gabriel Band of Mission Indians; Gabrielino-Tongva Tribe; and the Gabrielino/Tongva Nation. These tribes are living communities who actively participate in the preservation of their culture and tribal resources and were consulted during the preparation of this SCEA.

3.2.1 Gabrielino (or Tongva and Kizh)

The term "Gabrielino" is a general term that refers to those Native Americans who were sent by the Spanish to the Mission San Gabriel Arcángel. The term first appears, spelled Gabrieleños, in an 1876 report by Oscar Loew.[15] Two indigenous terms are commonly used by tribal groups refer to themselves and are preferred by descendant groups: Tongva and Kizh. The term Tongva was recorded by ethnographer C. Hart Merriam in 1903.[16] The term Kizh was first published by ethnologist Horatio Hale in 1846.[17] Since there are two terms that are used by different groups to refer to themselves, the term Gabrielino is used in this section to encompass both Tongva and Kizh groups.

Prior to European colonization, the Gabrielino occupied a diverse area that included: the watersheds of the Los Angeles, San Gabriel, and Santa Ana rivers; the Los Angeles basin; and the islands of San Clemente, San Nicolas, and Santa Catalina.[18] Their neighbors included the Chumash and Tataviam to the north, the Juañeno to the south, and the Serrano and Cahuilla to the east. The Gabrielino are reported to have been second only to the Chumash in terms of population size and regional influence.[19] The Gabrielino language was part of the Takic branch of the Uto-Aztecan language family.

The Gabrielino Indians were hunter-gatherers and lived in permanent communities located near the presence of a stable food supply. Subsistence consisted of hunting, fishing, and gathering. Small terrestrial game was hunted with deadfalls, rabbit drives, and by burning undergrowth, while larger game such as deer were hunted using bows and arrows. Fish were taken by hook and line, nets, traps, spears, and poison.[20] The primary plant resources were the acorn, gathered in the fall and processed in mortars and pestles, and various seeds that were harvested in late spring and summer and ground with manos and metates. The seeds included chia and other sages, various grasses, and islay or holly-leafed cherry. Community populations generally ranged from 50 to

15 Bean and Smith, "Gabrielino."
16 Heizer, *California.*
17 Heizer, *California.*
18 Bean and Smith, "Gabrielino."
19 Bean and Smith, "Gabrielino."
20 Bean and Smith, "Gabrielino."

100 inhabitants, although larger settlements may have existed. The Gabrielino are estimated to have had a population numbering around 5,000 in the pre-contact period.[21]

The Late Prehistoric period, spanning from approximately 1,500 years B.P. to the mission era, is the period associated with the florescence of the Gabrielino.[22] Coming ashore near Malibu Lagoon or Mugu Lagoon in October of 1542, Juan Rodriguez Cabrillo was the first European to contact the Gabrielino Indians.

At the time of Spanish contact, many Gabrielino practiced a religion that was centered around the mythological figure Chinigchinich.[23] This religion may have been relatively new when the Spanish arrived and was spreading at that time to other neighboring Takic groups. The Gabrielino practiced both cremation and inhumation of their dead. A wide variety of grave offerings, such as stone tools, baskets, shell beads, Projectile points, bone and shell ornaments, and otter skins, were interred with the deceased.

Coming ashore on Santa Catalina Island in October of 1542, Juan Rodriguez Cabrillo was the first European to contact the Gabrielino; the 1769 expedition of Portolá also passed through Gabrielino territory.[24] Native Americans suffered severe depopulation and their traditional culture was radically altered after Spanish contact. Nonetheless, Gabrielino descendants still reside in the greater Los Angeles and Orange County areas and maintain an active interest in their heritage.

Maps produced by early explorers indicate that at least 26 Gabrielino villages were within proximity to known Los Angeles River courses, while an additional 18 villages were reasonably close to the river.[25] The closest Gabrielino village to the Project Site is the village of *Maawnga* which is located near the current Forest Lawn Cemetery within Glendale city limits. Based on mission registers, the village had three registered baptisms in 1804.[26] The next closest mapped village was *Kaweenga*, which has been reported as located in Rancho Cahuenga or present-day Universal City and had 67 recorded baptisms between 1796 and 1814.[27]

3.2.2 Tataviam / Fernandeño-Tataviam

This Native American group is known to have lived mainly on the upper reaches of the Santa Clara River drainage east of Piru Creek. Although it is also known that their territory reached the Sawmill Mountains to the north. The Tatavium were surrounded by various Chumash groups to the west and to the south by various Gabrielino-speaking groups.

21 A.L. Kroeber, "Handbook of the Indians of California," *Bureau of American Ethnology Bulletin*, 78 (1925).
22 Wallace, "Chronology."
23 Bean and Smith, "Gabrielino.".
24 Bean and Smith, "Gabrielino.".
25 Blake Gumprecht, *Los Angeles River: It's Life, and Possible Rebirth*, (Baltimore: The Johns Hopkins University Press, 2001).
26 Stephen Hackel, Jeanette Zerneke, and Nat Zappia, "Early California Cultural Atlas," 2015, https://www.ecai.org/ecca/
27 Hackel, Zerneke, and Zappia. "Early California."

The word "Tataviam" most likely came from a Kitanemuk word that may be roughly translated as "people of the south-facing slope," due to their settlement on south-facing mountain slopes.[28] The Chumash referred to them as "Alliklik".[29] What the Tataviam called themselves is not known. The Tataviam spoke a language that was part of the Takic branch of the Uto-Aztecan language family.[30]

The Tataviam relied primarily on vegetable foods such as the buds of *Yucca whipplei*, acorns, juniper berries, sage seeds, and islay berries. Animal foods consisted of small mammals, deer, and antelope. Information recovered from Bowers's Cave located between Piru and Newhall suggests that there are major similarities among the Tataviam, Chumash and Gabrielino ritual organization. Ritual paraphernalia like that described by the Ventureño Chumash used by secret society members in the performance of ceremonies was found at Bowers's Cave. In addition, the Tataviam also appeared to have held their annual mourning ceremony in the late summer or early fall, just as did their southern neighbors. During historic times and by 1810, all the Tataviam had been baptized at the San Fernando Mission.[31]

According to the contemporary Fernandeño Tataviam Band of Mission Indians (Tatavium) in 1834 the Indians were to retain Mission land under government trust and protection and had the right to organize electoral village governments under the Secularization Act. They retained their Tataviam identity and continued to intermarry with lineages associated with the neighboring villages, as they did prior to the Mission period. In addition, the entire Fernandeño region (areas from which Indians were recruited to Mission San Fernando) formed a network of intermarriages that produced the basis for cooperative economic and social exchanges. Tribelets were composed of one lineage. Multiple families existed at each village with a lineage. Each family had a captain, or leader, who communicated with the principal village headman, or Tomár. Lineages, which can be found among individuals in the San Fernando Mission registers, are traced to currently enrolled Tataviam tribal citizens today.

The nearest village to the Project Site lies approximately 15-miles north and was known as *Tochonanga* and was a Tataviam village. Based on the San Fernando Mission register was inhabited from 1797 to 1811 based on a total of 86 baptisms in the register.[32]

Although Spanish explorers made brief visits the region in 1542 and 1602, sustained contact with Europeans did not commence until the onset of the Spanish Period. In 1769 Gaspar de Portolá led an expedition from San Diego, passing through Los Angeles Basin, San Fernando Valley, and the

28 Chester King and Thomas C. Blackburn, "Tataviam," *California: Handbook of North American Indians,* (Washington, D.C.: Smithsonian Institution, 1978), 8.

29 Krober, "Handbook."

30 King and Blackburn, "Tataviam."

31 King and Blackburn, "Tataviam."

32 Hackel, Zerneke, and Zappia. "Early California."

Santa Clara River Valley on its way to the San Francisco Bay.[33] This was followed in 1776 by the expedition of Father Francisco Garcés.[34]

In the late 18th century, the Spanish began establishing missions in California and forcibly relocating and converting native peoples. Three missions were in the region: Mission San Gabriel Arcángel, founded in 1771, Mission San Fernando Rey de España, founded in 1797, and Mission San Buenaventura founded in 1782. By 1820, most of the Tataviam population had been baptized at Mission San Fernando. By 1900, the Native Californian population had declined by as much as 90 percent. In addition, native economies were disrupted, trade routes were interrupted, and native ways of life were significantly altered.[35]

To promote Spanish settlement of Alta California, Spain granted several large land concessions from 1784 to 1821. At this time, unless certain requirements were met, Spain retained title to the land.

3.3 Historical Context

3.3.1 Mexican Period (A.D. 1821 – 1848)

The Mexican Period began when Mexico won its independence from Spain in 1821. Mexico continued to promote settlement of California with the issuance of land grants. In 1833, Mexico began the process of secularizing the missions, reclaiming most mission lands and redistributing them as land grants. According to the terms of the Secularization Law of 1833 and Regulations of 1834, at least a portion of the lands would be returned to the Native populations, but this did not always occur.[36]

Many ranchos continued to be used for cattle grazing by settlers during the Mexican Period. Hides and tallow from cattle became a major export for Californios (native Hispanic Californians), many of whom became wealthy and prominent members of society. The Californios led generally easy lives, leaving the hard work to vaqueros (Hispanic cowhands) and Indian laborers.[37,38]

3.3.2 American Period (A.D. 1848 – Present)

In 1846, the Mexican American War broke out. Mexican forces were eventually defeated in 1847 and Mexico ceded California to the United States as part of the Treaty of Guadalupe Hildalgo in 1848. California officially became one of the United States in 1850. While the treaty recognized

33 McCawley, *The First Angelinos*.

34 John R. Johnson and David D. Earle, "Tataviam Geography and Ethnohistory," *Journal of California and Great Basin Anthropology*, 12:2 (1990), 191-214.

35 David J. McLaughlin, "California Missions Resource Center," https://www.missionscalifornia.com/

36 Randall Milliken, Laurence H. Shoup, and Beverly R. Ortiz, Archaeological and Historical Consultants, "Ohlone/Costanoan Indians of the San Francisco Penisual and their Neighbors, Yesterday and Today," Prepared for National Park Service Golden Gate National Recreation Area, San Francisco, California, 20093

37 Leonard Pitt and Dale Pitt, *Los Angeles A to Z: An Encyclopedia of the City and Country*, (Los Angeles and Berkeley: University of California Press: 1997).

38 Kevin Starr, *California: A History.* (New York: Modern Library, 2005).

right of Mexican citizens to retain ownership of land granted to them by Spanish or Mexican authorities, the claimant was required to prove their right to the land before a patent was given. The process was lengthy, and generally resulted in the claimant losing at least a portion of their land to attorney's fees and other costs associated with proving ownership.[39]

When the discovery of gold in northern California was announced in 1848, a huge influx of people from other parts of North America flooded into California. The increased population provided an additional outlet for the Californios' cattle. As demand increased, the price of beef skyrocketed and Californios Project Sited the benefits. However, a devastating flood in 1861, followed by droughts in 1862 and 1864, led to a rapid decline of the cattle industry; over 70 percent of cattle perished during these droughts.[40] This event, coupled with the burden of proving ownership of their lands, caused many Californios to lose their lands during this period.[41] Former ranchos were subsequently subdivided and sold for agriculture and residential settlement.

The first transcontinental railroad was completed in 1869, connecting San Francisco with the eastern United States. Newcomers poured into northern California. Southern California experienced a trickle-down effect, as many of these newcomers made their way south. The Southern Pacific Railroad extended this line from San Francisco to Los Angeles in 1876. The second transcontinental line, the Santa Fe, was completed in 1886 and caused a fare war, driving fares to an unprecedented low. Settlers flooded into the region and the demand for real estate skyrocketed. As real estate prices soared, land that had been farmed for decades outlived its agricultural value and was sold to become residential communities. The subdivision of the large ranchos took place during this time.[42] During the first three decades of the 20th century, more than 2 million people moved to Los Angeles County, transforming it from a largely agricultural region into a major metropolitan area.

3.3.3 Municipalities and Neighborhoods

3.3.3.1 City of Beverly Hills

Long synonymous with wealth and luxury, Beverly Hills evolved from former ranches and attempts at oil drilling. In 1906, after failing to find oil, developer Burton Green and his partners reorganized as the Rodeo Land and Water Company, christening the neighborhood Beverly Hills. Streets and parks were constructed shortly after in 1907, followed by the grand Beverly Hills Hotel in 1912.[43] Stars from Hollywood began to build large private estates there after Mary Pickford and Douglas Fairbanks built their home in the neighborhood in 1919.[44] While the city first incorporated in 1914, a 1925 annexation was prevented after lobbying by silent film stars.[45] Throughout the Great Depression and World War II, the population steadily grew as the city

39 Starr, *California.*

40 Carey McWilliams, *Southern California: An Island on the Land,* (Layton, Utah: Gibbs Smith), 1946.

41 McWilliams, *Southern California.*

42 McWilliams, *Southern California.*

43 "History of Beverly Hills," City of Beverly Hills, https://www.beverlyhills.org/citymanager/aboutbeverlyhills/historyofbeverlyhills/.

44 "History of Beverly Hills," Los Angeles Conservancy, https://www.laconservancy.org/history-of-beverly-hills-13/.

45 "Beverly Hills History in Pictures and Prose," The Beverly Hills Historical Society, https://www.beverlyhillshistoricalsociety.org/history.

maintained its reputation for glamour. This image was solidified in the national imagination as Beverly Hills became a popular setting for movies and television that emphasized a luxurious lifestyle, one that it maintains to this day.[46]

3.3.2.2 City of Burbank

The first Americans to own property in the area that is now the City of Burbank were David W. Alexander and Alexander Bell, who purchased Rancho La Providencia in 1851. In 1867, Rancho La Providencia and a portion of Rancho San Rafael were purchased by Dr. David Burbank, a Los Angeles dentist who later made his living as a sheep farmer. Burbank sold a right-of-way along San Fernando Road to the Southern Pacific Railroad in 1873 and the first train passed through in 1875. In 1886, Dr. Burbank sold his property to the Providencia Land and Water Company, which laid out the town of Burbank the following year in 1887. Within a year, Burbank, which was already on the Southern Pacific Railroad line, also had a streetcar line, a sixty-room hotel, and over 250 residents. The city was incorporated in 1911 and quickly grew into a residential and industrial community. The same year, Burbank was connected to Los Angeles via the Pacific Electric Railroad, which led to another population boom. In the 1920s to 1960s, the city also became a home for the entertainment industry, with Warner Brothers, Walt Disney, and NBC locating studios there. During the 1920s the motion picture and aircraft industries flourished, which led to the creation of residential developments. The city's industries sustained Burbank through the difficult periods of the Great Depression and World War II and the city experienced its biggest growth (to date) during the late 1940s and 1950s. The Lockheed Aircraft Company established an aviation plant at Burbank in the 1920s, which produced planes for the Allies during World War II. Lockheed closed the plant in the 1990s. The city has grown to a community with a population of 103,340 (according to the 2010 census).[47,48]

3.3.2.3 City of Glendale

Developed from a series of parcels carved out of a legal settlement dividing Rancho San Rafel in 1871, Glendale was platted in 1887 and incorporated in 1906.[49] One of the earliest suburbs of Los Angeles, Glendale became known for its temperate climate, with a variety of health spas, sanitariums, and recreational resorts opening within city limits. Glendale remained a predominately white community in the mid-century through its status as a "sundown town," where both formal and informal methods were used to keep non-white visitors off the streets after dark.[50] Glendale, like much of the greater Los Angeles area, rapidly suburbanized and grew throughout the 20th century, benefiting from its control of local water resources. Glendale became known for its aggressive annexation of nearby communities, growing from just over two square miles during its founding to its present size of 30.5 square miles.[51] In the late 1970s, Glendale

46 "History of Beverly Hills," City of Beverly Hills,

47 "2010 Census Interactive Population Search: CA – Burbank city". U.S. Census Bureau. Archived from the original on July 15, 2014. Retrieved June 12, 2020.

48 GPA, City of Burbank Citywide Historic Context Report, Prepared for the City of Burbank, 2009

49 City of Glendale, "North Glendale Historic Context," November 19, 2011, 8-9.

50 Ryann Blackshere Vargas, "Glendale Becomes First CA City to Recognize History as Sundown Town," SpectrumNews1, October 9, 2020, https://spectrumnews1.com/ca/la-east/news/2020/10/09/glendale-becomes-first-ca-city-to-recognize-history-as-sundown-town-.

51 "Historic Glendale," City of Glendale, https://www.glendaleca.gov/our-city/visitors/historic-glendale.

became home to a large population of ethnic Armenians who settled in the area and helped shape contemporary culture.[52]

3.3.2.4 City of Los Angeles

The APE also contains a variety of distinctive neighborhoods in Los Angeles, primarily within the San Fernando Valley. The short historical contexts below are adapted from neighborhood surveys completed by SurveyLA.

Encino

Encino obtains its name from *Rancho el Encino*, from the Spanish word for "oak", which was a 4,500-acre land grant of which few buildings remain.[53] The area remained primarily agricultural throughout the American settlement period, though nearby, Edgar Rice Burrough, author of *Tarzan*, created a community named after his eponymous character, Tarzana[54]. Small developments and movie ranches characterized the region throughout the 1920s and 1930s and the proximity to these filming locations also caused many Hollywood stars to build large estates in Encino and Tarzana.[55] Like much of the San Fernando Valley, massive tract housing developments propagated in the post-War World II era, creating the suburban built environment that characterizes Encino and Tarzana to this day.

Hollywood

At the start of the 20th century, residents of Hollywood enjoyed a rural lifestyle, with dirt roads, sparsely populated land, and limited services. However, the growth of the rail lines at the turn of the century brought settlement and development to the area, and in 1903 the City of Hollywood was incorporated.[56] However, the little city struggled with water supply issues and in 1910 was annexed by Los Angeles.[57] Before long the movie industry arrived in town and would soon make Hollywood a nationally known name. *Old California*, directed by D.W. Griffith, was the first film to shoot scenes in the city. By 1916, the merger between the Lasky Company, Paramount Pictures, and Zukor's Famous Players Company created Hollywood's first homegrown major studio.[58] The movie business continued to thrive in Hollywood in the early 20th century. Radio, which reached its peak years in the 1930s, also found a home in Hollywood. Famous broadcasters such as NBC and CBS took up residence along Sunset Boulevard, making Hollywood the core of radio programming in America. Nightclubs that catered to the stars of movies and radio began to

52 Chris McCormick, "Armenian Exceptionalism," The Atlantic, April 4, 2016, https://www.theatlantic.com/business/archive/2016/04/glendale-armenians/475926/.

53 Architectural Resources Group, Inc. "Historic Resources Survey Report: Encino-Tarzana Community Plan Area," Prepared for the City of Los Angeles, Department of City Planning, Office of Historic Resources, February 26, 2013, 8.

54 Architectural Resources Group, Inc. "Historic Resources Survey Report: Encino-Tarzana Community Plan Area," 9.

55 Architectural Resources Group, Inc. "Historic Resources Survey Report: Encino-Tarzana Community Plan Area," 11.

56 Marc Wanamaker and Robert W. Nudelman, *Images of America: Early Hollywood* (Charleston, South Carolina: Arcadia Publishing, 2007), 7-18.

57 Dave Ockun, "Hollywood, California, History and Information," AboutHollywood.com, November 16, 2010, accessed April 15, 2015, http://www.abouthollywood.com/hollywood-neighborhoods/hollywood-california-history-and-information/.

58 Wanamaker, et al., *Images of America: Early Hollywood*, 31.

pop up in the 1930s and 1940s. The Palladium, the Earl Carroll Theater, and during World War II, the Hollywood Canteen were all dazzling entertainment venues in the heart of Hollywood.[59] As the 20th century progressed, the rich and famous began to abandon Hollywood for the affluent residential communities to the west, such as Beverly Hills. After World War II, Hollywood began to lose its hold as a commercial and residential hotspot as movie stars and movie studios alike abandoned it for greener pastures. These factors lead to the economic downturn in Hollywood beginning in the 1950s.[60]

North Hollywood

Originally part of a large wheat ranch owned by the Lankershim family, North Hollywood was originally known as Toluca when it was subdivided in 1882, then renamed Lankershim in 1896 when early residential settlement began.[61] Lankershim was annexed by Los Angeles between 1915 and 1923 and renamed North Hollywood in 1927 to take advantage of the glamour of the motion picture industry in nearby Hollywood.[62] Residential and infrastructure development continued throughout World War II as the developing aviation industry flourished in the region. North Hollywood became well known as a center of a developing lesbian community in Los Angeles.[63] Postwar North Hollywood developed around the automobile, with a preponderance of single-family homes, strip malls, and early shopping malls.

Northridge

Along the Southern Pacific Railroad, in the San Fernando Valley, in 1909, Valley Homes Company purchased the former Hawk Ranch and subdivided a 40-acre town and named it "Zelsah."[64] The town remained agricultural in nature even after annexation by Los Angeles in 1915 and attracted a population primarily of Norwegian descent. The community changed its name to North Los Angeles in 1929, then again to Northridge Village in 1938 and to Northridge in 1939.[65] Many Hollywood celebrities and writers built large homes and ranches in Northridge in the 1930s and the community gradually transitioned from agriculture to residential throughout the 1940s and 1950s. The community saw the arrival of a four-year university in 1956, which eventually became a part of the California State University System. Like much of the San Fernando Valley, discriminatory real estate and home financing practices kept the community largely White. Racial tensions around came to a head at the new university in 1968, where Black students occupied the main building until administrators agreed to certain demands, resulting in

59 Amy Dawes, *Sunset Boulevard: Cruising the Heart of Los Angeles* (Los Angeles: Los Angeles Times Books, 2002), 82-89.

60 Chattel Architecture, Planning & Preservation, Inc., "Historic Resources Survey: Hollywood Redevelopment Project Area," February 2010, 60.

61 Architectural Resources Group, Inc. "Historic Resources Survey Report: North Hollywood-Valley Village Community Plan Area," Prepared for the City of Los Angeles, Department of City Planning, Office of Historic Resources, February 26, 2013, 10.

62 Architectural Resources Group, Inc. "Historic Resources Survey Report: North Hollywood-Valley Village Community Plan Area," 11.

63 Architectural Resources Group, Inc. "Historic Resources Survey Report: North Hollywood-Valley Village Community Plan Area," 12.

64 Architectural Resources Group, "Historic Resources Survey Report: Northridge Community Plan Area," Prepared for the City of Los Angeles, Department of City Planning, Office of Historic Resources, July 9, 2015, 8.

65 Architectural Resources Group, "Historic Resources Survey Report: Northridge Community Plan Area," 9.

the creation of Black and Chicano studies programs at the university.[66] Suburbanization continued through the 1970s and 1980s. Northridge sustained significant damage in the 1994 earthquake, resulting in the reconstruction of many damaged buildings.[67]

Sherman Oaks

Originally a 1,000-acre subdivision created by Moses Sherman, a land developer and key figure in the Los Angeles Streetcar system, the first Sherman Oaks tract was sold in 1927.[68] Maintaining its residential character throughout World War II, Sherman Oaks is perhaps best known for being the location of the first modern shopping mall in the San Fernando Valley.[69]

Van Nuys

Named after Isaac Newton Van Nuys, an early stockholder in the San Fernando Valley Homestead Association who owned a large ranch in the area, Van Buys was created by the Los Angeles Suburban Home Company in 1912.[70] The city quickly grew and was annexed by Los Angeles in 1915 after the completion of the Owens Valley aqueduct. Van Nuys saw the opening of the Metropolitan Airport in 1928, later known as the Van Nuys Army Airfield during World War II.[71] Following World War II, Van Nuys, like the rest of the San Fernando Valley, rapidly suburbanized with large neighborhoods of tract homes and the introduction of single-story strip malls which would become synonymous with the built environment of the San Fernando Valley.

3.3.2.5 City of San Fernando

San Fernando was one of the earliest planned communities and Anglo settlement developed from the Mission San Fernando Rey de Espana, which opened in 1797.[72] Settlement continued with agriculture, vineyards, and livestock forming the vast majority of the industry throughout the 1800s, though small quantities of gold were found in the 1840s. A formal town was organized in 1847, though it would not incorporate until the 20th century.[73] While much of the San Fernando Valley raced to join the City of Los Angles to access water from the newly opened Owens Valley Aqueduct, San Fernando benefited from deep wells that had been utilized by the Mission.[74] Like much of the Valley, the years following World War II facilitated the transition from a city

66 Architectural Resources Group, "Historic Resources Survey Report: Northridge Community Plan Area," 12-13.

67 Architectural Resources Group, "Historic Resources Survey Report: Northridge Community Plan Area," 14.

68 Architectural Resources Group, "Historic Resources Survey Report Draft: Van Nuys-North Sherman Oaks Community Plan Area," Prepared for the City of Los Angeles, Department of City Planning, Office of Historic Resources, July 31, 2015, 10.

69 Architectural Resources Group, "Historic Resources Survey Report Draft: Van Nuys-North Sherman Oaks Community Plan Area," 13.

70 Architectural Resources Group, "Historic Resources Survey Report Draft: Van Nuys-North Sherman Oaks Community Plan Area," 9.

71 Architectural Resources Group, "Historic Resources Survey Report Draft: Van Nuys-North Sherman Oaks Community Plan Area," 12.

72 "San Fernando Community History," Los Angeles County Library, https://lacountylibrary.org/sanfernando-local-history/.

73 "History," City of San Fernando, https://ci.san-fernando.ca.us/history/.

74 "San Fernando Community History," Los Angeles County Library.

dominated by agriculture to a predominately residential community, which was assisted by the construction of the I-5, I-210, and I-405 freeways in the 1960s.[75]

3.3.2.6 City of Santa Clarita

Within the city boundaries of Santa Clarita are four distinct communities, Canyon Country, Newhall, Saugus, and Valencia, all of which retain strong identities through a shared regional history. A former oil and agricultural hub, Santa Clarita was transformed with the arrival of the motion picture industry, as a variety of movie ranches sprung up around the area. Westerns were especially popular to film there.[76] Disaster struck in 1928 when the St. Francis Dam, designed to hold a two year supply of water for Los Angeles, collapsed, killing over 450 residents, primarily in Newhall.[77] In 1961, Santa Clarita became home to the California Institute of Arts (CalArts), the first higher education institution dedicated entirely to the arts.[78] When Santa Clarita incorporated in 1987, it was the largest city, by size, to incorporate in California.[79] Though massive damage was sustained to communities during the 1994 Northridge earthquake, there continues to be a large amount of residential development up to the present day.

3.3.2.7 City of West Hollywood

West Hollywood began as "Sherman", a town that sprung up around the main railroad yards for the Los Angeles Railroad.[80] With the nascent motion picture industry nearby in Hollywood, many early stars built homes within Sherman. Industrial operations to support the film industry, including studios and film production plants, also operated within city limits.[81] Capitalizing on this association, Sherman changed its name to West Hollywood in the 1920s, choosing to also not be annexed by Los Angeles, as the city had recently enacted temperance laws.[82] Throughout the 1930s and 1940s, West Hollywood became infamous for its various gambling establishments, along with early gay and lesbian bars on the Sunset Strip.[83] The Sunset Strip transformed into a well-known center for live music and nightclubs, in addition to maintaining its identity as a queer neighborhood. 1975 saw the opening of the Pacific Design Center, cementing West Hollywood's status as a center of art and design.[84] In the 1980s, concerned about rent control and attacks on LGBTQ+ rights, community organizers advocated for Cityhood, resulting tin incorporation in

75 Paul Haddad, *Freewaytopia: How Freeways Shaped Los Angeles*, Santa Monica Press: 2021.

76 "History of Santa Clarita," SantaClarita.com, https://www.santaclarita.com/history/.

77 Matt Blitz, "On Occasions Like This, I Envy the Dead: The St. Francis Dam Disaster," Smithsonian Magazine, March 12, 2015, https://www.smithsonianmag.com/history/occasions-i-envy-dead-st-francis-dam-disaster-180954543/.

78 "History," The California Institute of Arts, https://calarts.edu/about/institute/history.

79 "30 and Thriving," City of Santa Clarita, 2017, https://www.santa-clarita.com/city-hall/30th-anniversary.

80 "History of West Hollywood," West Hollywood Preservation Alliance, https://www.westhollywoodpreservationalliance.org/historic-places/history-of-west-hollywood/.

81 West Hollywood Context, 23-25.

82 "History of West Hollywood," West Hollywood Preservation Alliance.

83 "West Hollywood History," West Hollywood History Center, February 11, 2021, https://www.westhollywoodhistory.org/west-hollywood-history/.

84 "Our Story and Heritage," Pacific Design Center, 2021, https://pacificdesigncenter.com/about-us/.

1984.[85] West Hollywood continues to be a thriving neighborhood with an emphasis on the arts, culture, and design.

3.3.4 Hollywood Burbank Airport History

The Kelly Air Mail Act (1926) and the Air Commerce Act (1927) encouraged private investment in aviation, as did the 1926 establishment of the Daniel Guggenheim Fund for the promotion of Aeronautics. The growing enthusiasm for aviation prompted the Aeronautics Board of the U.S. Department of Commerce to conduct a survey identifying new locations for airfields. The Aeronautics Board reported that Burbank had the most favorable airport location surveyed.[86] In 1929, with the support of the Burbank Chamber of Commerce, United Aircraft and Transportation Company hired the Austin Company to begin construction on Los Angeles' new airport. Occupying approximately 234 acres of land, the airport boasted more paved landing area than any airfield at the time. "Over one hundred large oak trees were removed from the field and from property adjoining the field, by arrangements with the owners, in an effort to eliminate every possible hazard."[87] The architecturally pleasing Terminal (Building 10) included administrative offices, ticket offices, a baggage room, a telegraph office, and other conveniences. The airfield's layout was carefully planned, locating public structures like the Terminal near the southeast corner of the field, separate from the industrial, support, and private facilities on the property.[88]

Memorial Day weekend, 1930 marked the opening of the world's first million-dollar airport. Airplane races and a staged air battle with military bombers and fighter planes entertained the crowds on the ground below. "More than 25,000 automobiles jammed the new airport facilities, and the overflow crowds included many of neighboring Hollywood's brightest movie stars."[89] Only Pacific Air Transport (later acquired by United Airlines) operated from the airfield at first but "by 1933, when the airport was renamed Union Air Terminal, it had become the major facility for the greater Los Angeles area—used by all the major airlines of the day."[90]

The terminal was originally named United Airport but changed its name to Union Air Terminal after the United Aircraft and Transportation Corporation was broken up in 1934. The dismantling of the United Aircraft and Transportation Corporation resulted in Boeing Airplane Company, United Aircraft Company, and United Airlines. United Airlines assumed control of the Burbank airfield until 1940. During that time, several major airlines began operating from Union Air Terminal, including Pan American, Western Airlines, and Trans-World Airlines.[91] The 1930s were a historic decade for the Burbank airfield. The field welcomed aviation pioneers like

85 "About West Hollywood," City of West Hollywood, https://www.weho.org/city-government/communications/media-relations/about-west-hollywood.

86 Jackson Mayers, Burbank History (Burbank, CA: Soldado Publishing Company, 1974), 83.

87 United Airport Bespeaks Aviation's Progress, Airports, July 1930.

88 The United Airport at Burbank, California, Airway Age, July 1930.

89 E. Caswell Perry, *Burbank: An Illustrated History*. (Northridge, CA: Windsor Publications, Inc., 1987), 126.

90 Perry, *Burbank*, 127.

91 J. Ron Dickson, Hamilton Aero Hangar, United Airport, Burbank, Application for California Point of Historical Interest, December 16, 1993, 19.

Howard Hughes, Amelia Earhart, Wiley Post, and Charles Lindbergh.[92] Despite its growth however, United Airlines was forced to sell the terminal due to financial hardships incurred during the Great Depression. In 1940, the terminal was sold to neighboring Lockheed Aircraft, who continued to operate the terminal, supporting passenger and airfreight operations, while utilizing the airfield to manufacture and test new aircraft.

Lockheed's period of ownership (1940-1978) saw a massive expansion of the airfield to over 500 acres and growth in commercial air services. During that time, 1946 marked the terminal's (then known as Lockheed Air Terminal) highest period of activity, servicing 1.25 million passengers.[93] "In December 1946 Los Angeles Municipal Airport, forerunner of Los Angeles International, opened and quickly drew nearly all the major airlines' flights. During 1947 only 175,000 passengers used the Burbank Terminal, a drop of more than one million in a single year."[94] Although the airport's passenger totals dwindled during the post-war years, up to that point the facility played a significant role in early commercial aviation history as Los Angeles' first trans-continental air terminal. Between 1929 and 1949, the Burbank-Glendale-Pasadena Airport was "the model airport in the United States."[95]

92 Perry, *Burbank*, 127.
93 Perry, *Burbank*, 127.
94 Perry, *Burbank*, 127.
95 Perry, *Burbank*, 129.

CHAPTER 4
Historic Property Identification Efforts

Efforts to identify cultural resources that could qualify as Section 106 historic properties within the APE included archival research, consisting of a records search at the South Central Coastal Information Center (SCCIC) at California State University Fullerton in Fullerton, California, review of the Built Environment Resource Directory for Los Angeles and Ventura counties, the National Register database for California, the Federal Determinations of Eligibility database, the National Historic Landmark files, and Multiple Property Submission Covers. Because of the size of the APE and the nature of undertaking as an aircraft procedural change with no direct implications for physical changes at grade, resource identification primarily relied on desktop survey methodologies.

4.1 Architectural Resource Analysis

The California SHPO maintains a master database of cultural resources that have been evaluated, listed, or otherwise processed by the Office of Historic Preservation (OHP) through one or more of the California Historical Resource Information Centers. This database is known as the Built Environment Resource Database (BERD) and it includes resources reviewed for eligibility for the National Register and the California Historical Landmarks programs through federal and state environmental compliance laws, and resources nominated under federal and state registration programs. It is updated each month and is presented as county-specific spreadsheets available for download from the OHP website. Identification of historic properties in the APE began by accessing the BERD for Los Angeles and Ventura counties.

Each entry in the BERD includes a California Register of Historical Places status code. These status codes are a shorthand indicator of the current eligibility of a particular resource as well as the mechanism through which it was identified. The current status codes were implemented in 2003. There are seven eligibility classifications (1-7). Classifications 1-4 include properties that are listed in or determined eligible for listing in the National Register. **Table 1** shows the status codes used to identify historic properties within the APE.

TABLE 1
STATUS CODES ASSOCIATED WITH HISTORIC PROPERTIES IN THE APE

Status Code	Definition
1D	Contributor to a district or multiple resource property listed in the National Register by the Keeper, Listed in the California Register.
1S	Individual Property listed in the National Register by the Keeper. Listed in the California Register.
2B	Determined eligible for the National Register as an individual property and as a contributor to an eligible district in a federal regulatory process. Listed in the California Register.
2D	Contributor to a district determined eligible for the National Register by the Keeper. Listed in the California Register.
2D2	Contributor to a district determined eligible for the National Register by consensus through the Section 106 process. Listed in the California Register.
2D3	Contributor to a district determined eligible for the National Register by Part I Tax Certification. Listed in the California Register.
2D4	Contributor to a district determined eligible for the National Register pursuant to Section 106 without review by SHPO. Listed in the California Register.
2S	Individual property determined eligible for the National Register by the Keeper. Listed in the California Register.
2S2	Individual property determined eligible for the National Register consensus through the Section 106 process. Listed in the California Register.
2S3	Individual property determined eligible for the National Register by Part I Tax Certification. Listed in the California Register.
2S4	Individual property determined eligible for the National Register pursuant to Section 106 without review by SHPO. Listed in the California Register.
3B	Appears eligible for the National Register both individually and as a contributor to a National Register-eligible district through survey evaluation.
3D	Appears eligible for the National Register as a contributor to a National Register-eligible district through survey evaluation.
3S	Appears eligible for the National Register as an individual property through survey evaluation.
4CM	Master List of State-Owned Properties (PRC Section5024)

SOURCE: California Historical Resource Status Codes, published by the Office of Historic Preservation, 2003, https://ohp.parks.ca.gov/pages/1069/files/chrstatus%20codes.pdf.

ESA then sorted the Los Angeles and Ventura County BERD files for properties within the APE that were assigned one of the status codes shown in Table 1. This database was then cross-referenced with the National Register, National Historic Landmark, and Federal Determinations of Eligibility databases maintained by the National Park Service. The result was a total of 685 historic properties within the APE. A full list of all 685 historic resources is included in **Appendix A**. Following this, the historic property list was refined to identify those historic properties whose significance depends in whole, or in part, upon a setting that is sensitive to auditory or visual changes that could result from the Proposed Action. Four broad categories of potentially sensitive historic properties were identified:

1. Properties constructed before or deriving their significance during a period prior to construction of BUR in 1930. There were 390 properties within this category.
2. Properties that are composed of large open spaces or that may constitute cultural landscapes. This category included parks, cemeteries, school campuses, ranches, etc. and was comprised of 99 historic properties.

3. Properties that could be considered sacred in nature such as traditional cultural properties, places of worship, or places for contemplation. There were 10 such properties on the list.
4. Properties whose use would be sensitive to changes in noise that were not already identified in the other three categories. This included theaters, performance spaces, movie and art studios, libraries or similar spaces. From the list, 16 such properties were identified.

After sorting the list of properties within the APE that met one or more of the above categories, 515 potentially sensitive historic properties were identified. However, much of the APE is located within a dense urban environment that is already subject to intensive uses, high levels of noise intrusion, or changes to the surrounding land that would alter the original settings of these resources when they were constructed. Certain types of land use are particularly prone to high degrees of visual and auditory intrusion. In most cases, this intrusion had not resulted in diminished integrity of a resource's setting or feeling. The list of 515 potentially sensitive historic properties was then assessed to eliminate those resources for whom setting and feeling were not significant factors in their historical significance. Specifically, the following uses and resource types were excluded from the list:

A. Industrial properties, public office buildings or civic buildings, and commercial buildings of any age. These types of properties are generally expected to be within an environment that is typically loud and that may be subject to changing conditions. Their significance is not dependent on sustained periods of quiet. There were 36 properties in this category that were excluded from the list of potentially sensitive historic properties.
B. Twentieth century historic residential districts are a historic property type that relies upon a grouping of properties that share a history, an architectural style or appearance, or otherwise are unified by use or function. Their significance is partially derived from their relationship with other contributors to the district and is not dependent on setting or feeling to a degree that increases in changes in overhead air traffic would affect the grouping. Most of these districts were constructed after completion of the Airport in 1930 and therefore have always existed with some level of auditory or visual aircraft traffic. In total, there were 173 historic districts and historic district contributors within the APE that were excluded under this category.
C. Private residential properties, hotels, and apartment complexes that do not include gardens or landscapes. These properties are generally significant for their architecture or their association with historically notable individuals. Their histories are not tied to agriculture, ranching, or other historical uses that might have been in the APE before the Airport was constructed. Under this category, 76 historic properties were excluded.
D. Many public spaces and campuses have large open spaces but are also intended to function with intense levels of human interaction. They are generally loud and somewhat chaotic environments that are not inherently sensitive to changes in outside noise or overhead visual activity. This category includes schools, hospitals, recreation areas, community centers, and clubhouses. This category encompasses 111 historic properties that were excluded from the list.
E. Over time, many historic properties have already been affected by changes in their environment or have been modified to a degree that their integrity is already compromised. This category includes these altered properties, those that now exist in a highly dense urban environment, or for which the BERD information was inaccurate, missing, or could not be verified. This category contained 25 historic properties which were then excluded from the list.

In total, after applying the exclusion categories to the list of 515 potentially sensitive historic properties resulted in a list of 24 historic properties, including six historic districts that are comprised of multiple contributing buildings. This list of properties is summarized in **Table 2** below. Each is presented in greater detail in the following sections.

The undertaking would have an effect on a historic property if it alters the characteristics qualifying that property for the National Register (36 CFR 800.16(i), 800.5(a)(a)). Such effects are considered "adverse" if they would diminish the integrity of a property's location, design, setting, materials, workmanship, feeling, or association (36 CFR 800.5(a)). The undertaking does not require land acquisition, construction, or ground disturbance, and the FAA anticipates no direct or physical effects to historic properties. However, the FAA recognizes that for certain types of historic properties, particularly those where the property's historical significance is especially reliant on its setting or feeling, the introduction of visual, atmospheric, or audible elements could diminish the property's integrity. In such cases, changes in aircraft operations could result in indirect, non-physical effects.

Therefore, the FAA focused its assessment of effects on the potential for the undertaking to introduce visual or audible elements that would diminish the integrity of setting or feeling for historic properties where those are significant historical features, such as those properties presented in Table 2. The FAA also considered the extent to which those aspects of integrity have already been diminished under existing conditions.

The assessment of effects also acknowledges that many of the historic resources within the APE were designated in the 1970s, 1980s, and 1990s. As such, they have been potentially subject to decades of change including the introduction of visual and audible elements. This includes incremental changes, such as the increase in surface and aircraft traffic throughout the APE, as well as large changes such as the construction of I-405, I-210, or I-5 and subsequent expansions of the freeway system. These changes may have diminished the integrity of the properties setting or feeling, although other aspects of integrity may be sufficient to convey the properties' significance, and none have been removed from the National Register. However, for the purposes of this analysis, the FAA looked specifically at whether the properties retain integrity of setting and feeling under existing conditions. Therefore, the FAA assumes that all retain sufficient integrity to be considered historic resources for the purposes of this study.

4.1.1 Assessment of Visual Effects

Recognizing that some types of historic properties may be affected by overflights due to visual impacts, the FAA also considered the potential for the introduction of visual elements that could diminish the integrity of the property's historical features. To assess the potential visual impacts on historic properties, the data for a year of overflights at the airport was overlain on the APE in ArcGIS. The APE experiences 198 daily arrivals and 192 daily departure overflights. The Project does not add any new flights. Rather, it concentrates the existing number of departing flights into a narrow band of airspace. No changes to arriving flights are included as part of the Project. As shown in Figure 2, the APE is already heavily overflown.

TABLE 2
LISTED AND ELIGIBLE NATIONAL REGISTER PROPERTIES WITHIN THE APE WHOSE SIGNIFICANCE IS SENSITIVE TO AUDITORY AND/OR VISUAL CHANGES

Resource No.	Property Name	Type of Resource	Location (City)
1	Mentryville and Pico Well No. 4	District, 4 Contributing Features	Santa Clarita and Vicinity
2	Lopez Adobe/ La Casa de Geronimo	Individual	San Fernando
3	Mission San Fernando Rey de Convento Building	Individual	Los Angeles
4	Brand Park	District, 8 Contributing Features	Los Angeles
5	Romulo Pico Adobe	Individual	Mission Hills
6	Temple Ramat Zion Synagogue	Individual	Northridge
7	Faith Bible Church	Individual	Los Angeles
8	Van Nuys Branch Library	Individual	Los Angeles
9	Valhalla Cemetery / Portal of the Folded Wings Shrine to Aviation	Individual	North Hollywood
10	Los Encinos State Historic Park	District, 4 Contributing Features	Encino
11	North Hollywood Library, Amelia Earhart Library	Individual	Los Angeles
12	El Portal Theater	Individual	Los Angeles
13	Campo de Cahuenga/ Casa Adobe Hacienda of Don Tomas Feliz	Individual	Los Angeles
14	Universal City and Studios	Individual	Universal City
15	Hollywood Reservoir Complex	District, 15 Contributing Features	Los Angeles
16	Pilgrimage Theater	Individual	Hollywood
17	Hollywood Bowl	Individual	Los Angeles
18	Wattles Mansion and Gardens	Individual	Los Angeles
19	El Cabrillo	District, 3 Contributing Features	Los Angeles
20	Whitley Court	District, 6 Contributing Features	Los Angeles
21	Doheny Estate, Graystone Park	Individual	Beverly Hills
22	Dutch Reformed Church/ First Baptist Church	Individual	West Hollywood
23	West Hollywood Branch Library	Individual	West Hollywood
24	Los Angeles National Cemetery	District, 15 Contributing Features	Los Angeles

SOURCE: National Register Database; https://www.nps.gov/subjects/nationalregister/database-research.htm#table, BERD for Los Angeles and Ventura Counties; https://ohp.parks.ca.gov/?page_id=30338, Adapted by Environmental Science Associates, 2023.

4.1.2 Assessment of Auditory Effects

To assess the auditory impacts of the undertaking on historic properties, ESA first modeled the existing noise attributable to overflights from BUR using a metric known as Day-Night Average Sound Level (DNL). DNL is the standard noise metric used for all FAA studies of aviation noise

exposure in airport communities and was used to assess the potential noise exposure of each sensitive historic property within the APE, as shown on Table 2.

DNL is a 24-hour, time-weighted average noise metric, expressed in terms of decibel units of sound heard by the human ear, which accounts for the noise levels of individual aircraft events, the number of times those events occur, and the time of day they occur. DNL takes the contribution of noise from average aircraft operations and allows for a single number to represent aviation noise over a 24-hour period. There is one unique modification in that there is a "noise penalty" of any noise generated during "nighttime hours" (10:00 p.m. to 7:00 a.m.). In the calculation of DNL, for each hour during nighttime hours, the sound levels are increased by a 10 decibel-weighting penalty (equivalent to a 10-fold increase in aircraft operations) before the 24-hour value is computed.

The FAA's procedures for compliance with the National Environmental Policy Act (NEPA) define a significant noise impact as an increase of a DNL by 1.5 dB in areas exposed to aircraft noise of DNL 65 dB and higher.[96]

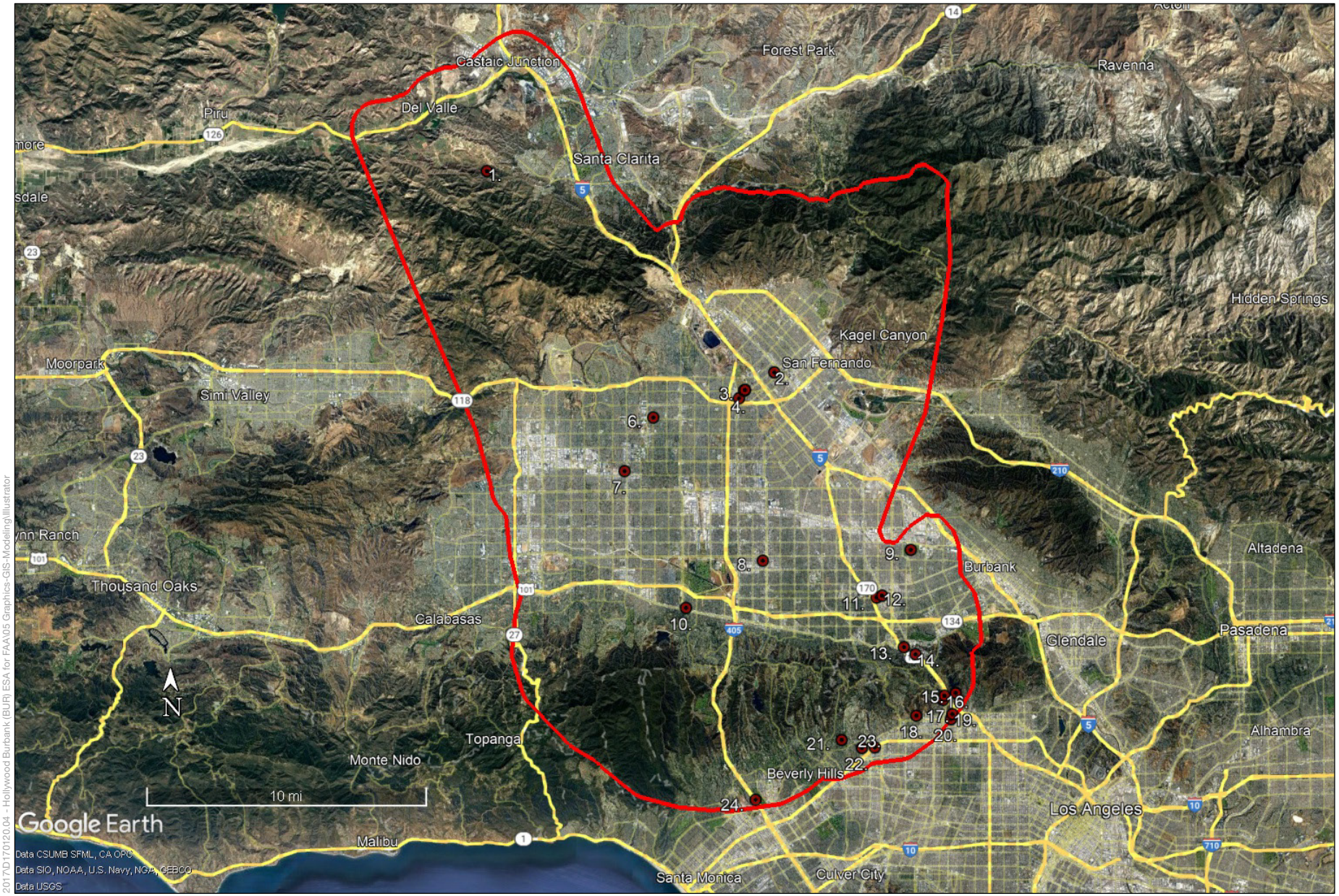
FAA's NEPA procedures also note that special consideration needs to be given to the evaluation of the significance of noise impacts on noise sensitive areas within historic sites, including traditional cultural properties, where the land use compatibility guidelines in 14 CFR Part 150 are not relevant to the value, significance, and enjoyment of the area in question. For example, the DNL 65 dB threshold may not adequately address the impacts of noise on areas where other noise is very low, and a quiet setting is a generally recognized purpose and attribute.

To assess the potential for incremental changes in noise levels or changes in the character of aircraft noise that may result in alteration of those characteristics of historic properties that qualify them for inclusion in the National Register, the FAA considered the Projected increase in the number or concentration of overflights over these areas.

4.1.3 Analysis of Sensitive Historic Resources

To exemplify the potential impacts on historic properties within the APE that are especially sensitive to overflights (i.e., where the introduction of visual or audible elements could diminish the integrity of a property's significant historical features), ESA looked more closely at the 24 properties that were determined to be especially sensitive to changes in auditory and visual factors (Table 2). Properties from the National Register list were then reviewed to determine which property types within the APE may be sensitive to noise and visual intrusions. These properties would experience the maximum potential impact from the undertaking. These 24 properties are shown in **Figure 3**.

[96] Specifically, the action would increase noise by DNL1.5 dB or more for a noise sensitive area that is exposed to noise at or above the DNL 65 dB noise exposure level, or that will be exposed at or above the DNL 65 dB level due to a DNL 1.5 dB or greater increase, when compared to the no action alternative for the same timeframe. FAA Order 1050.1F, Ex. 4-1 at p. 4-8.



SOURCE: Google Earth, 2023

Hollywood Burbank Airport EA

Figure 3
Sensitive Properties Within the APE

ESA

4.3.3.1 Mentryville and Pico Well No.4

Mentryville is a former oil boom town located in Pico Canyon in the Santa Susana Mountains in the northern area of the APE. Together with its associated oil well, Pico No. 4, the historic property is presently administered by the Santa Monica Mountains Recreation and Conservation Authority. Pico Well No. 4 is individually significant as both the first successful oil well in the west and the longest continually operating oil well in the world. It closed in 1990 and is now recognized as a National Historic Landmark. While the associated town was effectively abandoned by the 1930s, the historic buildings have been restored by a local advocacy group.

Mentryville is composed of four contributing elements, each of which is individually eligible as a historic property:

- Mentry House (3B);
- Felton School (3B);
- Mentry Barn and Carriage House (3D); and
- Pico Well No. 4 (1S).

All are listed in the National and California Registers under Criterion A/1 for their importance with the commercial and industrial development of the region. Pico Well No. 4 is also a National Historic Landmark. While the present documentation does not identify a period of significance, it is assumed that the resources have a shared period of significance of 1870 – 1930 marking the period when the well began production and the town was most active.[97]

The rural and rugged setting evokes the solitude of the area in the late 19th century when the town and the well were established. As such, the resource's setting is sensitive to changes in noise and overhead visual distraction.

Current Status and Condition

Mentryville currently experiences a DNL of 26.02 db. These noise levels are consistent with an outdoor recreational facility such as a nature exhibit or zoo and the property currently retains sufficient integrity to maintain its inclusion in the National Register.[98]

Effect Analysis

The Project includes three alternatives: No Action, Proposed Action, and the Proposed Action with an Increased Climb Gradient. The Proposed Action would **increase** the average noise exposure at the historic property by 0.17 dB. The Increased Climb Gradient would **increase** the average noise exposure at the historic property by 0.09 dB. These changes are below the

97 Charles W. Snell, *National Survey of Historic Sites and Buildings Nomination: Pico Canyon, Well No. "CSO" 4 ("Pico" #4),* 1963.

98 "Fundamentals of Noise and Sound," *Federal Aviation Administration*, https://www.faa.gov/regulations_policies/policy_guidance/noise/basics/. It should be noted that the figure referencing the "quiet urban environment" is an A-weighted SEL level while the calculated values above are DNL, which is weighted over 24 hours instead of 1 second and includes a nighttime penalty. As a point of reference, noise exposure levels below DNL 65 dB are considered compatible with residential use, parks, churches, and concert halls. 14 CFR part 150, appendix A.

threshold generally perceptible to the human ear and therefore, there would be no perceptible change in auditory exposure due to overhead flights from BUR resulting from the Project. Because the change in average noise exposure at this historic property would be imperceptible, the historic property would retain sufficient integrity to maintain its inclusion in the National Register.

4.3.3.2 Lopez Adobe / La Casa de Geronimo

The Lopez Adobe was first constructed in 1882-1883 by Valentino Lopez and is the first two-story adobe residence built in the San Fernando Valley. It was listed in the National Register in 1971 under Criteria A (events) and C (architecture). The building has undergone minimal alterations and remains an outstanding example of the early California architecture which characterized the transition period between the decline of the California Missions and the influx of American settlers during the Gold Rush period. Aside from its architectural significance, the building is significant for its association with the Lopez family who included the first residents of San Fernando, Don Geronimo and Catalina Lopez. The Lopez home was a center for local social activities and the site for the first English-language school in the vicinity when "the pastoral life of Southern California still retained its Spanish Mexican flavor and gracious living was deemed more important than promoting land development."[99]

The Lopez Adobe is located across the street from the St. Ferdinand Catholic Church and is situated in a residential and commercial neighborhood. It qualifies as a sensitive historic property because it represents residential and social development from a period that pre-dates modern air travel.

Current Status and Condition

The Lopez Adobe currently experiences a DNL of 43.81 db. These noise levels are consistent with an outdoor recreational facility such as a nature exhibit or zoo and the property currently retains sufficient integrity to maintain its listing in the National Register.[100]

Effect Analysis

The Project includes three alternatives: No Action, Proposed Action, and the Proposed Action with an Increased Climb Gradient. The Proposed Action would **decrease** the average noise exposure at the historic property by 0.30 dB. The Increased Climb Gradient would **increase** the average noise exposure at the historic property by 0.30 dB. These changes are below the threshold generally perceptible to the human ear and therefore, there would be no perceptible change in auditory exposure due to overhead flights from BUR resulting from the Project. Because the change in average noise exposure at this historic property would be imperceptible, the historic property would retain sufficient integrity to maintain its inclusion in the National Register.

99 James B. Gulbranson, *National Register of Historic Places Nomination: Lopez Adobe,* 1971.

100 "Table 1 – Land Use Compatibility with Yearly Day-Night Average Sound Levels," 14 CFR part 150, Appendix A, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-I/part-150/appendix-Appendix%20A%20to%20Part%20150.

4.3.3.3 Convento Building, Mission San Fernando Rey de Espana

The convento building of the Mission San Fernando Rey de Espana is a long, low rectangular adobe with a red clay tiled roof. The building is believed to have been built in stages between 1810 and 1922. It was listed in the National Register in 1988 under Criteria A (events) and C (architecture) for its significance to architectural history, the history of the exploration and settlement of California, and the history of religion in California. The National Register identifies a period of significance from 1810 to 1935, corresponding to its initial period of construction. It is the oldest surviving building in the San Fernando Valley (and therefore the City of Los Angeles), the only surviving building from the era of the Spanish occupation of California, and the only surviving building in that area built as part of the development of the chain of Franciscan missions of Spanish and Mexican California. It also appears to be the largest surviving building from the Spanish period in California and retains much of its physical appearance from the period of significance.

The convento building is bordered to the north and east by modern gardens that have incorporated plants used during the Mission era, is currently situated within the San Fernando Pastoral Region of the Archdiocese of Los Angeles, and the resulting contemplative, religious setting are attributes of significance.

Current Status and Condition

This historic property currently experiences a DNL of 46.27 db. These noise levels are consistent with an outdoor recreational facility such as a nature exhibit or zoo and the property currently retains sufficient integrity to maintain its listing in the National Register.[101]

Effect Analysis

The Project includes three alternatives: No Action, Proposed Action, and the Proposed Action with an Increased Climb Gradient. The Proposed Action would **decrease** the average noise exposure at the historic property by 0.13 dB. The Increased Climb Gradient would **increase** the average noise exposure at the historic property by 0.30 dB. These changes are below the change threshold generally perceptible to the human ear and therefore, there would be no perceptible change in auditory exposure due to overhead flights from BUR resulting from the Project. Because the change in average noise exposure at this historic property would be imperceptible, the historic property would retain sufficient integrity to maintain its inclusion in the National Register.

4.3.3.4 Brand Park

Brand Park is a 19-acre recreation facility located directly south of Mission San Fernando Rey de Espana in the San Fernando Valley's Mission Hills. The park opened in 1921 and represents early leisure in the area. Expansions to Brand Park in the post-WWII era represent the increasing recreational needs of the rapidly expanding population of the San Fernando Valley. Because of its multiple periods of development, this historic property has a long period of significance from

[101] "Table 1 – Land Use Compatibility with Yearly Day-Night Average Sound Levels," 14 CFR part 150, Appendix A, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-I/part-150/appendix-Appendix%20A%20to%20Part%20150.

1920 through 1960 to represent the full period of its construction. The park was designated as California Historic Landmark #150 in 1935 and was determined eligible for listing in the National Register through the Section 106 process.[102] It is composed of eight contributing elements:

- Comfort Station;
- Pergolas;
- Chest High Walls;
- Entrance Gates;
- Fountain;
- Mission Fountain;
- Statue; and
- a Sun Dial.

Brand Park sits on the Mission's original land grant and the park's Memory Garden preserves the peaceful and picturesque atmosphere of early California missions. As such, feeling and setting are essential to the integrity of the district of this municipal park.

Current Status and Condition

This historic property currently experiences a DNL of 46.31 db. These noise levels are consistent with amusements, parks, resorts, and camps and the property currently retains sufficient integrity to maintain its eligibility for listing in the National Register.[103]

Effect Analysis

The Project includes three alternatives: No Action, Proposed Action, and the Proposed Action with an Increased Climb Gradient. The Proposed Action would **decrease** the average noise exposure at the historic property by 0.13 dB. The Increased Climb Gradient would **increase** the average noise exposure at the historic property by 0.29 dB. These changes are below the change threshold generally perceptible to the human ear and therefore, there would be no perceptible change in auditory exposure due to overhead flights from BUR resulting from the Project. Because the change in average noise exposure at this historic property would be imperceptible, the historic property would retain sufficient integrity to maintain its inclusion in the National Register.

4.3.3.5 Romulo Pico Adobe / Ranchito Romulo

The Pico Romulo Adobe is a two-story rectangular adobe building that is an expansion of a single-story residence that belonged to Eulogio De Celis and was constructed on land owned by Mission San Fernando during the Mission period. In 1853, the property was purchased and

[102] "Brand Park (Memory Garden)," California Office of Historic Preservation, accessed September 11, 2023, https://ohp.parks.ca.gov/ListedResources/Detail/150.

[103] "Table 1 – Land Use Compatibility with Yearly Day-Night Average Sound Levels," 14 CFR part 150, Appendix A, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-I/part-150/appendix-Appendix%20A%20to%20Part%20150.

enlarged to its current configuration by Romulo Pico and gradually fell into disrepair. The property was purchased and restored by Dr. Mark Harrington in 1929. According to National Register documentation, the addition of modern plumbing during this period "[does] not appreciably impose upon the historical scene." It was listed in the National Register in 1972 under Criterion C (architecture) because it embodies the distinctive characteristics of Mission-era adobe architecture. SHPO reviewers of the National Register nomination in 1972 noted that the 1929 restoration "reeks of 'Early Hollywood' style, but they make a good claim for it." The building is also registered as California Historical Landmark #362.[104] It has an identified period of significance of 1853 and 1929, corresponding both to its expansion to a two-story structure, and the date of its restoration by Dr. Harrington.

Together with the Lopez Adobe, the Convento Building of Mission San Fernando Rey de Espana, and Brand Park, the Romulo Pico Adobe provides a sense of early 19th-century architecture and life in the San Fernando Valley. They evoke a period and setting that existed prior to the development of modern air transportation and as such are sensitive to changes in modern noise and visual intrusions.

Current Status and Condition

This historic property currently experiences a DNL of 46.94 db. These noise levels are consistent with an outdoor recreational facility such as a nature exhibit or zoo and the property currently retains sufficient integrity to maintain its listing in the National Register.[105]

Effect Analysis

The Project includes three alternatives: No Action, Proposed Action, and the Proposed Action with an Increased Climb Gradient. The Proposed Action would **decrease** the average noise exposure at the historic property by 0.12 dB. The Increased Climb Gradient would **increase** the average noise exposure at the historic property by 0.23 dB. These changes are below the change threshold generally perceptible to the human ear and therefore, there would be no perceptible change in auditory exposure due to overhead flights from BUR resulting from the Project. Because the change in average noise exposure at this historic property would be imperceptible, the historic property would retain sufficient integrity to maintain its inclusion in the National Register.

4.3.3.6 Temple Ramat Zion Synagogue

Temple Ramat Zion Synagogue was constructed in stages from 1962 to 1970. It is the property of one of the first and oldest Jewish communities in Los Angeles. The temple traces its beginnings to 1959 when a group of North Valley Jewish families organized a Conservative synagogue and received their charter as Temple Ramah the following year. They secured the property (which consisted of a single-family residence) at 17655 Devonshire in 1960 and by 1970 had built a temple and school building on site. In 2019, it was determined eligible for the National Register

[104] Allen W. Welts, *National Register of Historic Places Nomination: Pico Romulo, Adobe,* 1972.

[105] "Table 1 – Land Use Compatibility with Yearly Day-Night Average Sound Levels," 14 CFR part 150, Appendix A, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-I/part-150/appendix-Appendix%20A%20to%20Part%20150.

through the Section 106 process and listed in the California Register. It has a period of significance of 1962-1970, marking the eight-year period of construction.[106]

As a religious building dedicated to contemplation and meditation associated with cultural and religious practices, it is considered a sensitive historic property.

Current Status and Condition

This historic property currently experiences a DNL of 43.04 db. These noise levels are consistent with a church, auditorium, or concert hall and the property currently retains sufficient integrity to maintain its eligibility for listing in the National Register.[107]

Effect Analysis

The Project includes three alternatives: No Action, Proposed Action, and the Proposed Action with an Increased Climb Gradient. The Proposed Action would **increase** the average noise exposure at the historic property by 0.42 dB. The Increased Climb Gradient would **increase** the average noise exposure at the historic property by 0.12 dB. These changes are below the threshold generally perceptible to the human ear and therefore, there would be no perceptible change in auditory exposure due to overhead flights from BUR resulting from the Project. Because the change in average noise exposure at this historic property would be imperceptible, the historic property would retain sufficient integrity to maintain its inclusion in the National Register.

4.3.3.7 Faith Bible Church

The Faith Bible Church is a wood-frame, basilica plan church designed in the Carpenter Gothic Victorian style. It was constructed by a Norwegian Lutheran congregation in 1917 and served as the Zelzah Norsk Evangelisk Luther's Kirke (Norwegian Lutheran Church). The building is the first church built in what is now the City of Northridge. It was designated Los Angeles Historic-Cultural Monument #152 in 1976. The property was identified as potentially eligible for the National Register as an individual property through a previous survey evaluation.[108, 109] No period of significance is identified.

As a religious building dedicated to contemplation and meditation associated with cultural and religious practices, it is considered a sensitive historic property.

106 "Mission and History," Temple Ramat Zion Synagogue, accessed September 5, https://www.trz.org/mission.

107 "Table 1 – Land Use Compatibility with Yearly Day-Night Average Sound Levels," 14 CFR part 150, Appendix A, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-I/part-150/appendix-Appendix%20A%20to%20Part%20150.

108 "No. 152—Faith Bible Church," Big Orange Landmarks, accessed September 11, 2023, https://bigorangelandmarks.blogspot.com/2008/06/no-152-faith-bible-church.html.

109 "Faith Bible Church," HistoricPlacesLA, accessed September 8, 2023, http://historicplacesla.org/reports/3b3d8c37-3434-413f-94a6-1c482c7dc562.

Current Status and Condition

This historic property currently experiences a DNL of 41.66 db. These noise levels are consistent with a church, auditorium, or concert hall and the property currently retains sufficient integrity to maintain its eligibility for listing in the National Register.[110]

Effect Analysis

The Project includes three alternatives: No Action, Proposed Action, and the Proposed Action with an Increased Climb Gradient. The Proposed Action would **increase** the average noise exposure at the historic property by 2.07 dB. The Increased Climb Gradient would **decrease** the average noise exposure at the historic property by 0.16 dB. This means the Project would result in a perceptible increase in noise associated with departures from BUR. Faith Bible church is in an area that is fully developed with a mix of commercial and residential uses. It is a half block from Reseda Boulevard, a major thoroughfare, and one block from active railroad tracks. The setting around the church already experiences ambient noise that is common for a dense suburban environment. A 2.07 dB difference in volume is near the lower threshold of perceptibility for the average human being. Within an environment that already experiences a high level of ambient noise, such a change would be difficult to detect. Additionally, the 2.07 db increase is below the threshold that the FAA uses to assess if a significant impact could occur. The change in average noise exposure at this historic property is minimal and the historic property would retain sufficient integrity to maintain its inclusion in the National Register.

4.3.3.8 Van Nuys Branch Library

The Van Nuys Branch of the Los Angeles Library is a one-story masonry building constructed in 1926 and designed by the architecture firm of Allison and Allison in the Spanish Colonial Revival style. It was added to the National Register in 1987 as a part of the Los Angeles Branch Library System Thematic Resources Group. This multiple property submission (MPS) is comprised of 22 buildings designed in "various period revival styles constructed to house the initial branch library system of the City of Los Angeles… [and] are located in parks or are surrounded by maintained landscaping."[111] The MPS has a period of significance of 1913-1930, to encompass the dates of construction of the 22 selected buildings. The library system is significant under Criteria A (events) for community planning and C (architecture) for the use of representative period styles, master architects, and incorporation of literary motifs.

The building is no longer used as a library and currently functions as municipal offices. As a government building designed for study and literary purposes, it qualifies as a sensitive historic property.

[110] "Table 1 – Land Use Compatibility with Yearly Day-Night Average Sound Levels," 14 CFR part 150, Appendix A, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-I/part-150/appendix-Appendix%20A%20to%20Part%20150.

[111] Richard Mouck, et al., *National Register of Historic Places Nomination: Los Angles Library System (Thematic Nomination),* 1985, Section 7.

Current Status and Condition

This historic property currently experiences a DNL of 50.65 db. These noise levels are consistent with a government service use and the property currently retains sufficient integrity to maintain its listing in the National Register.[112]

Effect Analysis

The Project includes three alternatives: No Action, Proposed Action, and the Proposed Action with an Increased Climb Gradient. The Proposed Action would **increase** the average noise exposure at the historic property by 0.69 dB. The Increased Climb Gradient would **decrease** the average noise exposure at the historic property by 0.19 dB. These changes are below the change threshold generally perceptible to the human ear and therefore, there would be no perceptible change in auditory exposure due to overhead flights from BUR resulting from the Project. Because the change in average noise exposure at this historic property would be imperceptible, the historic property would retain sufficient integrity to maintain its inclusion in the National Register.

4.3.3.9 Portal of the Folded Wings Shrine to Aviation and Museum

The Portal of the Folded Wings Shrine to Aviation and Museum is a 72-foot-tall arched, four pillared decorative monument that originally functioned as the entrance to the Pierce Brothers Valhalla Memorial Park and Mortuary, a 101-acre cemetery in Burbank, California. The cemetery was founded in 1923 and the Portal was constructed in 1924. It stands at the eastern end of the cemetery property amid a manicured lawn interspersed by flat, ground-level bronze burial markers. Originally called the Rotunda, the marble structure was designed by architect Kenneth McDonald, Jr., and Italian-born sculptor Federico A. Giorgi and features a mosaic interior dome ceiling. In 1953, the Portal was dedicated as a shrine to aviation and eventually became the burial site for fifteen aviation pioneers.[113] Given its proximity to Hollywood, the cemetery is also the final resting place of many notable actors and film industry professionals. The cast stone decorations of the Portal were damaged by the 1994 Northridge earthquake and underwent restoration in 1996.[114]

It was listed in the National Register in 1998 under Criterion C (architecture) as an excellent example of Southern California's distinctive Mission/Spanish/Colonial Revival architecture and Churrigueresque decorative styles. Its period of significance is 1924 and is noted for how the monumental beauty of McDonald's design imbues the site with commemorative power.

As a memorial set within a larger cemetery landscape dedicated to contemplation and meditation associated with mourning, it is considered a sensitive historic property.

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[112] "Table 1 – Land Use Compatibility with Yearly Day-Night Average Sound Levels," 14 CFR part 150, Appendix A, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-I/part-150/appendix-Appendix%20A%20to%20Part%20150.

[113] "Pierce Brothers Valhalla Memorial Park and Mortuary," accessed September 8, 2023, https://www.dignitymemorial.com/funeral-homes/california/north-hollywood/pierce-brothers-valhalla/4786.

[114] Giancinta Bradley Koontz, National Register of Historic Places Nomination: Portal of the Folded Wings Shrine to Aviation and Museum, 1998.

Current Status and Condition

This historic property currently experiences a DNL of 68.61 db. These noise levels are consistent with amusements, parks, resorts and camps and the property currently retains sufficient integrity to maintain its listing in the National Register.[115]

Effect Analysis

The Project includes three alternatives: No Action, Proposed Action, and the Proposed Action with an Increased Climb Gradient. The Proposed Action would **increase** the average noise exposure at the historic property by 0.06 dB. The Increased Climb Gradient would **increase** the average noise exposure at the historic property by 1.45 dB. This means the Project would result in a perceptible increase in noise associated with departures from BUR. Valhalla Memorial Park is bordered on the north by the Burbank Airport and is currently exposed to high noise levels resulting from current arrivals and departures. An increase in volume of 1.45 dB in volume is at the lower threshold of perceptibility by the average human being. Within an environment that already experiences a high level of ambient noise, such a change would be difficult to detect. Because the change in average noise exposure associated with the Proposed Action at this historic property is at the lower threshold for human perception and because the setting is already within an area of high ambient noise exposure, the historic property would retain sufficient integrity to maintain its inclusion in the National Register.

4.3.3.10 Los Encinos State Historic Park

Rancho El Encino, also known as Los Encinos State Historic Park, covers 4.73 acres. This historic district is comprised of four contributors:

- Vincente de la Osa Adobe;
- Garnier Residence;
- a Food Storage Building; and
- a second food storage building that is also listed on the BERD as the Limestone Blacksmith Shop.

The Vincente de la Osa Adobe dates from the 1840s. The Garnier Residence is a limestone building constructed c.1872 by Eugene Garnier, the Basque owner-builder, in the style of provincial French architecture of the mid-19th century. The district was once used as a sheep ranch and stagecoach shop and features several surviving food storage outbuildings. The district is pastoral in setting and evokes the early history of California during the Rancho period (1784-1846). It was listed in the National Register in 1971. No period of significance is identified in the documentation.

As a grouping de la Osa Adobe, Garnier Residence, and outbuildings provide a sense of early 19th-century architecture and life in the San Fernando Valley. They evoke a period and setting

[115] "Table 1 – Land Use Compatibility with Yearly Day-Night Average Sound Levels," 14 CFR part 150, Appendix A, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-I/part-150/appendix-Appendix%20A%20to%20Part%20150.

that existed prior to the development of modern air transportation and as such are sensitive to changes in modern noise and visual intrusions.

Current Status and Condition

This historic property currently experiences a DNL of 44.36 db. These noise levels are consistent with amusements, parks, resorts, and camps and the property currently retains sufficient integrity to maintain its listing in the National Register.[116]

Effect Analysis

The Project includes three alternatives: No Action, Proposed Action, and the Proposed Action with an Increased Climb Gradient. The Proposed Action would **decrease** the average noise exposure at the historic property by 2.39 dB. The Increased Climb Gradient would **increase** the average noise exposure at the historic property by 0.49 dB. The decrease amounts resulting from the Project alternatives may be perceptible when compared to the existing conditions. This decrease in noise exposure would benefit the experience of the historic property and the increase is below the lower limit of human perception. Because the Project would result in a net decrease in noise exposure and such a change is beneficial to the experience at the historic property, the historic property would retain sufficient integrity to maintain its inclusion in the National Register.

4.3.3.11 North Hollywood Library

The North Hollywood Branch of the Los Angeles Library, also known as the Amelia Earhart Branch, was designed in the Spanish Colonial Revival style in 1930 by local architects Eugene and Wex Weston. A 1956 addition by John Landon is nearly indistinguishable from the original structure and retains the original feeling and design of significance.[117] It was added to the National Register in 1987 as a part of the Los Angeles Branch Library System Thematic Resources Group. This multiple property submission (MPS) is comprised of 22 buildings designed in "various period revival styles constructed to house the initial branch library system of the City of Los Angeles… [and] are located in parks or are surrounded by maintained landscaping."[118] The MPS has a period of significance of 1913-1930, to encompass the dates of construction of the 22 selected buildings. The library system is significant under Criteria A (events) for community planning and C (architecture) for the use of representative period styles, master architects, and incorporation of literary motifs. The North Hollywood Branch is also a Los Angeles Historic-Cultural Monument.

The building is no longer used as a library and currently functions as municipal offices. As a government building designed for study and literary purposes, it qualifies as a sensitive historic property.

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116 "Table 1 – Land Use Compatibility with Yearly Day-Night Average Sound Levels," 14 CFR part 150, Appendix A, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-I/part-150/appendix-Appendix%20A%20to%20Part%20150.

117 Richard Mouck, et al., *National Register of Historic Places Nomination: Los Angles Library System (Thematic Nomination),*1985.

118 Richard Mouck, et al., *National Register of Historic Places Nomination: Los Angles Library System (Thematic Nomination),* 1985, Section 7.

Current Status and Condition

This historic property currently experiences a DNL of 58.3 db. These noise levels are consistent with a government service use and the property currently retains sufficient integrity to maintain its listing in the National Register.[119]

Effect Analysis

The Project includes three alternatives: No Action, Proposed Action, and the Proposed Action with an Increased Climb Gradient. The Proposed Action would **decrease** the average noise exposure at the historic property by 3.2 dB. The Increased Climb Gradient would **increase** the average noise exposure at the historic property by 0.51 dB. The decrease amounts resulting from the Project alternatives may be perceptible when compared to the existing conditions. This decrease in noise exposure would benefit the experience of the historic property and the increase is below the lower limit of human perception. Because the Project would result in a net decrease in noise exposure and such a change is beneficial to the experience at the historic property, the historic property would retain sufficient integrity to maintain its inclusion in the National Register.

4.3.3.12 El Portal Theater

The El Portal Theater was a premier arts venue during the height of the Golden Age of Hollywood. Constructed in 1926 in the Spanish Colonial Revival style by architect Lewis A. Smith, it served as one of North Hollywood's primary venues for silent films, vaudeville, and later "talkies." [120] The theater was listed as Los Angeles Historic Cultural Monument No. 573 in 1993. It has been determined eligible for the National Register by consensus through the Section 106 process. No period of significance is identified in the historical documentation.

The original building sustained significant damage during the 1994 Northridge Earthquake and subsequently underwent major renovations that removed much of the original interior. However, the building retains its original distinctive façade, paybox, and marquee. The venue reopened in 2000 as the El Portal Center for the Arts and currently operates as a film and live performance theater, as well as an acting studio.[121]

As a performance space that was historically used for movies and live entertainment, it is considered sensitive to changes in environmental noise.

[119] "Table 1 – Land Use Compatibility with Yearly Day-Night Average Sound Levels," 14 CFR part 150, Appendix A, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-I/part-150/appendix-Appendix%20A%20to%20Part%20150.

[120] "El Portal Theater," Historical Marker Database, accessed September 8, 2023, https://www.hmdb.org/m.asp?m=167283.

[121] "El Portal Theatre, North Hollywood, Los Angeles, CA," Pacific Coast Architecture Database, accessed September 11, 2023, https://pcad.lib.washington.edu/building/15957/.

Current Status and Condition

This historic property currently experiences a DNL of 59.37 db. These noise levels are consistent with a church, auditorium, or concert hall and the property currently retains sufficient integrity to maintain its eligibility for listing in the National Register.[122]

Effect Analysis

The Project includes three alternatives: No Action, Proposed Action, and the Proposed Action with an Increased Climb Gradient. The Proposed Action would **decrease** the average noise exposure at the historic property by 3.23 dB. The Increased Climb Gradient would **increase** the average noise exposure at the historic property by 0.38 dB. The decrease amounts resulting from the Project alternatives may be perceptible when compared to the existing conditions. This decrease in noise exposure would benefit the experience of the historic property and the increase is below the lower limit of human perception. Because the Project would result in a net decrease in noise exposure and such a change is beneficial to the experience at the historic property, the historic property would retain sufficient integrity to maintain its inclusion in the National Register.

4.3.3.13 Campo de Cahuenga / Casa Adobe Hacienda of Don Tomas Feliz

Located near the entrance of Cahuenga Pass along the southern boundary of the San Fernando Valley, Campo de Cahuenga was the site of the Don Tomás Feliz adobe, a ranch house constructed c. 1844. No longer extant, the adobe was the site of the signing of the Treaty of Cahuenga on January 13, 1847, which ended hostilities between the United States and Mexico in California. The event was an important precursor to California's eventual statehood, which was cemented with the subsequent adoption of the Treaty of Guadalupe-Hidalgo in 1848. While the original adobe disintegrated by 1900, the Campo de Cahuenga Memorial Park and its extant associated buildings, particularly its Memorial Building, represent an early local example of municipal efforts to preserve and interpret pre-American sites in Los Angeles outside of the Missions. The site was listed in the National Register in 2003 as a historic district under Criteria A (events), C (architecture), and D (potential to yield historical information). It is significant as a commemorative site of an event of international importance and retains the distinctive features of the City of Los Angeles's original 1927 landscape plan which allows visitors to experience the "sense of a peaceful outpost on a historic route of travel." [123] Its period of significance under Criteria A and C is 1923-1953 and its period of significance under Criterion D is 1795-1880s.

As a grouping Campo de Cahuenga provide a sense of early 19th century architecture and life in the San Fernando Valley. They evoke a period and setting that existed prior to the development of modern air transportation and as such are sensitive to changes in modern noise and visual intrusions.

[122] "Table 1 – Land Use Compatibility with Yearly Day-Night Average Sound Levels," 14 CFR part 150, Appendix A, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-I/part-150/appendix-Appendix%20A%20to%20Part%20150.

[123] Roberta Greenwood, *National Register of Historic Places Nomination: Campo de Cahuenga Memorial Park,* 2003.

Current Status and Condition

This historic property currently experiences a DNL of 49.52 db. These noise levels are consistent with an outdoor recreational facility such as a nature exhibit or zoo and the property currently retains sufficient integrity to maintain its listing in the National Register.[124]

Effect Analysis

The Project includes three alternatives: No Action, Proposed Action, and the Proposed Action with an Increased Climb Gradient. The Proposed Action would **increase** the average noise exposure at the historic property by 2.17 dB. The Increased Climb Gradient would **increase** the average noise exposure at the historic property by 0.02 dB. This means the Project would result in a perceptible increase in noise associated with departures from BUR. Campo de Cahuenga is in an area that is fully developed with a mix of commercial, residential, and park uses. It is one block from Highway 101, a major thoroughfare. The setting around the historic property already experiences ambient noise that is common for a dense suburban environment. A 2.17 dB difference in volume is near the lower threshold of perceptibility by the average human being. Within an environment that already experiences a high level of ambient noise, such a change would be difficult to detect. Additionally, the 2.17 db increase is below the threshold that the FAA uses to assess if a significant impact could occur. The change in average noise exposure at this historic property is minimal and the historic property would retain sufficient integrity to maintain its inclusion in the National Register.

4.3.3.14 Universal City and Studios

Universal City and its associated Universal Studios Lot is a film and television production complex that currently encompasses 400 acres, 28 sound stages, and approximately 165 structures.[125] German immigrant and early film tycoon Carl Laemmle opened Universal Studios Lot in 1915 on the former site of a 230-acre ranch in the San Fernando Valley. The complex is considered to be the first self-contained site for producing motion pictures.[126] The site was identified as eligible for the National Register through survey evaluation in 2018. No period of significance is identified in the historical documentation.

As a performance space and creative site with indoor and outdoor sets that were historically used to produce movies and entertainment, it is considered sensitive to changes in environmental noise.

[124] "Table 1 – Land Use Compatibility with Yearly Day-Night Average Sound Levels," 14 CFR part 150, Appendix A, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-I/part-150/appendix-Appendix%20A%20to%20Part%20150.

[125] "Facility Operations," Universal Studios Lot, accessed September 11, 2023, https://www.universalstudioslot.com/facility-operations.

[126] "About Us," Universal Studios Lot, accessed September 8, 2023, https://www.universalstudioslot.com/about-us.

Current Status and Condition

This historic property currently experiences a DNL of 48.68 db. These noise levels are consistent with office, business, and professional uses and the property currently retains sufficient integrity to maintain its eligibility for listing in the National Register.[127]

Effect Analysis

The Project includes three alternatives: No Action, Proposed Action, and the Proposed Action with an Increased Climb Gradient. The Proposed Action would **increase** the average noise exposure at the historic property by 2.26 dB. The Increased Climb Gradient would **decrease** the average noise exposure at the historic property by 0.04 dB. This means the Project would result in a perceptible increase in noise associated with departures from BUR. Universal City and Studios is in an area that is fully developed with a mix of commercial, entertainment, and recreational uses. It is one block from Highway 101, a major thoroughfare. The setting around the historic property already experiences ambient noise that is common for a dense, amusement park and commercial environment. A 2.26 dB difference in volume is near the lower threshold of perceptibility by the average human being. Within an environment that already experiences a high level of ambient noise, such a change would be difficult to detect. Additionally, the 2.26 db increase is below the threshold that the FAA uses to assess if a significant impact could occur. The change in average noise exposure at this historic property is minimal and the historic property would retain sufficient integrity to maintain its inclusion in the National Register.

4.3.3.15 Hollywood Reservoir Complex

The Lake Hollywood Reservoir Complex includes Lake Hollywood, the Mulholland Dam, and a series of support buildings and features. Construction of the Hollywood Dam, now known as the Mulholland Dam, began in 1923 to store water from both the Los Angeles Aqueduct Project and groundwater sources within the San Fernando Valley. It was dedicated in 1925.[128] The dam was reinforced with significant amounts of dirt in 1929, a project that obscured its stepped concrete face. Between 1929 and 1933, additional facilities were added to upgrade and better support the movement and treatment of water at the site, and to landscape the area to create a more park-like setting. The complex is considered a historic district and is comprised of 15 contributing elements. The complex was identified as eligible for the National Register as part of a survey evaluation. It has been given a period of significance of 1933, marking the date when final improvements to the complex were completed.[129]

As a large park, set in the hills above Hollywood, the sense of setting and feeling of openness and natural landscape is central to the property's significance. It is considered a sensitive historic property for these reasons.

[127] "Table 1 – Land Use Compatibility with Yearly Day-Night Average Sound Levels," 14 CFR part 150, Appendix A, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-I/part-150/appendix-Appendix%20A%20to%20Part%20150.

[128] "Mulholland Dam and Hollywood Reservoir," Water and Power Associates, accessed September 8, 2023, https://waterandpower.org/museum/Mulholland_Dam_and_Hollywood_Reservoir.html.

[129] "Lake Hollywood Reservoir," HistoricPlacesLA, 2014, accessed September 8, 2023, http://historicplacesla.org/reports/163acaf3-eda9-4368-83aa-cb04e638c26.

Current Status and Condition

This historic property currently experiences a DNL of 38.14 db. These noise levels are consistent with amusements, parks, resorts, and camps and the property currently retains sufficient integrity to maintain its eligibility for listing in the National Register.[130]

Effect Analysis

The Project includes three alternatives: No Action, Proposed Action, and the Proposed Action with an Increased Climb Gradient. The Proposed Action would **increase** the average noise exposure at the historic property by 1.30 dB. The Increased Climb Gradient would **decrease** the average noise exposure at the historic property by 0.06 dB. The increase in noise exposure resulting from the Project alternatives may be perceptible when compared to the existing conditions. However, this increase is near the lower limit of human perception. The property is significant for its engineering and landscape design, both of which would remain intact and unchanged. The Project, combined with the current heavy use of the site as a park in a suburban setting and an increase in noise exposure of 1.30 dB, is unlikely to result in a significant impact to the historic property. Additionally, the 1.30 db increase is below the threshold that the FAA uses to assess if a significant impact could occur. The change in average noise exposure at this historic property is minimal and the historic property would retain sufficient integrity to maintain its inclusion in the National Register.

4.3.3.16 Pilgrimage Theater

The Pilgrimage Theater, also known as the John Anson Ford Amphitheater, is an approximately 1,200-seat performing arts venue located in the Hollywood Hills. The original theater was designed and constructed in 1920 by Bernard Ralph Maybeck for Philadelphia-born heiress Christine Wetherhill Stevenson and the staging of her religious-themed "The Pilgrimage Play." After the original wood-frame structure was destroyed in a fire, the theater was rebuilt in concrete in 1930-193. It was renamed in honor of former Los Angeles County Supervisor John Anson Ford, in 1941.[131] The nearby Hollywood Pilgrimage Memorial Monument, commonly known as the Hollywood Cross, was constructed in Stevenson's honor in 1923. The Cross was designated Los Angeles Historic-Cultural Monument #617 in 1995.[132] The open-air venue is currently operated by the Los Angeles Philharmonic Association.

As an open-air performance space used for live entertainment, it is considered sensitive to changes in environmental noise and overhead visual distraction.

[130] "Table 1 – Land Use Compatibility with Yearly Day-Night Average Sound Levels," 14 CFR part 150, Appendix A, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-I/part-150/appendix-Appendix%20A%20to%20Part%20150.

[131] "Pilgrimage Theater #1, Hollywood Hills, Los Angeles, CA," Pacific Coast Architecture Database, accessed September 11, 2023, https://pcad.lib.washington.edu/building/2253/.

[132] "Hollywood Pilgrimage Memorial Monument (The Hollywood Cross)," *The Historical Marker Database*, accessed September 11, 2023, https://www.hmdb.org/m.asp?m=230075.

Current Status and Condition

This historic property currently experiences a DNL of 36.4 db. These noise levels are consistent with an outdoor music shell or amphitheater and the property currently retains sufficient integrity to maintain its eligibility for listing in the National Register.[133]

Effect Analysis

The Project includes three alternatives: No Action, Proposed Action, and the Proposed Action with an Increased Climb Gradient. The Proposed Action would **increase** the average noise exposure at the historic property by 1.20 dB. The Increased Climb Gradient would **decrease** the average noise exposure at the historic property by 0.02 dB. The increase in noise exposure resulting from the Project alternatives may be perceptible when compared to the existing conditions. However, this increase is near the lower limit of human perception. The property is significant for its use as an entertainment venue which would be unchanged. The Project, combined with the current heavy use of the site as a park in a suburban setting and an increase in noise exposure of 1.20 dB, is unlikely to result in a significant impact to the historic property. Additionally, the 1.20 db increase is below the threshold that the FAA uses to assess if a significant impact could occur. The change in average noise exposure at this historic property is minimal and the historic property would retain sufficient integrity to maintain its inclusion in the National Register.

4.3.3.17 Hollywood Bowl

Owned by Los Angeles County, the Hollywood Bowl Performing Arts Complex opened in 1922. The first band shell was constructed in 1926. It was immediately replaced in 1927 and again in 1928 by wooden shells designed by architect Lloyd Wright. These shells were considered to be acoustically superior to the original, but the construction was not durable. In 1928, a concrete shell with the now-famous concentric ring design was erected. Improvements to the acoustics were constantly applied, including several additions designed by Frank Gehry.[134] The current shell largely dates to 2003 when a major reconstruction took place that incorporated elements of the earlier iterations with increased space and structural stability for modern-day performances. It was named Los Angeles County Historical Landmark No.1 in 2020.[135] Also nearby is the Hollywood Bowl Pedestrian Tunnel, which SurveyLA notes is a rare example of a 1950s pedestrian tunnel.[136]

As an open-air performance space used for live entertainment, it is considered sensitive to changes in environmental noise and overhead visual distraction.

[133] "Table 1 – Land Use Compatibility with Yearly Day-Night Average Sound Levels," 14 CFR part 150, Appendix A, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-I/part-150/appendix-Appendix%20A%20to%20Part%20150.

[134] This included the addition of large fiberglass spheres. "Hollywood Bowl, Hollywood, Los Angeles, CA," *Pacific Coast Architecture Database,* accessed September 15, 2023, https://pcad.lib.washington.edu/building/2558/.

[135] "The Hollywood Bowl," Water and Power Associates, accessed September 8, 2023, https://waterandpower.org/museum/Early_Views_of_the_Hollywood_Bowl.html.

[136] "Hollywood Bowl Pedestrian Tunnel," HistoricPlacesLA, 2014, accessed September 8, 2023, http://historicplacesla.org/reports/7356bc32-2ae4-4403-9c91-62e605b55c97.

Current Status and Condition

This historic property currently experiences a DNL of 36.07 db. These noise levels are consistent with an outdoor music shell or amphitheater and the property currently retains sufficient integrity to maintain its eligibility for listing in the National Register.[137]

Effect Analysis

The Project includes three alternatives: No Action, Proposed Action, and the Proposed Action with an Increased Climb Gradient. The Proposed Action would **increase** the average noise exposure at the historic property by 1.19 dB. The Increased Climb Gradient would **decrease** the average noise exposure at the historic property by 0.01 dB. The increase in noise exposure resulting from the Project alternatives may be perceptible when compared to the existing conditions. However, this increase is near the lower limit of human perception. The property is significant for its use as an entertainment venue and for its architecture, both of which remain unchanged. The Project, combined with the current heavy use of the site as a park in a suburban setting and an increase in noise exposure of 1.19 dB, is unlikely to result in a significant impact to the historic property. Additionally, the 1.19 db increase is below the threshold that the FAA uses to assess if a significant impact could occur. The change in average noise exposure at this historic property is minimal and the historic property would retain sufficient integrity to maintain its inclusion in the National Register.

4.3.3.18 Wattles Mansion and Gardens

Wattles Mansion and Gardens was constructed in 1907 as a winter home by Omaha businessman Gurdon Wattles at a time when Hollywood was primarily agricultural in setting. It includes 49-acres of formal gardens, some of which date to the Wattles period of ownership. According to *Hollywood Heritage, it* is "the only remaining intact example of a Hollywood estate from the period before the area became associated with the film industry. Wattles Mansion and its surrounding historic landscape is also one of the largest historic turn-of-the-century estates in Southern California today. Predating the era of motion picture production…. [t]he estate embodies the unique integration of architecture, natural landscape, and gardens that became Southern California's distinctive regional style."[138] It is currently owned by the City of Los Angeles and operated as a public park and wedding venue. It was named Los Angeles Historic-Cultural Monument No. 579 in 2003.

The property is one of the rare examples of the large estates that pre-date large residential development of Hollywood and eventual annexation by Los Angeles. Its setting and quiet, bucolic feeling are essential to the integrity of the site.[139]

[137] "Table 1 – Land Use Compatibility with Yearly Day-Night Average Sound Levels," 14 CFR part 150, Appendix A, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-I/part-150/appendix-Appendix%20A%20to%20Part%20150.

[138] Hollywood Heritage, "The Wattles Mansion-A Special Jewel for Hollywood," *Hollywood Heritage, Inc.,* vol. 21, no.4, 2002, pp. 1-2.

[139] "Wattles Mansion and Gardens," City of Los Angeles Department of Recreation and Parks, accessed September 8, 2023, https://www.laparks.org/historic/wattles-mansion-and-gardens.

Current Status and Condition

This historic property currently experiences a DNL of 35.61 db. These noise levels are consistent with an outdoor recreational facility such as a nature exhibit or zoo and the property currently retains sufficient integrity to maintain its eligibility for listing in the National Register.[140]

Effect Analysis

The Project includes three alternatives: No Action, Proposed Action, and the Proposed Action with an Increased Climb Gradient. The Proposed Action would **increase** the average noise exposure at the historic property by 0.6 dB. The Increased Climb Gradient would **increase** the average noise exposure at the historic property by 0.15 dB. These changes are below the threshold generally perceptible to the human ear and therefore, there would be no perceptible change in auditory exposure due to overhead flights from BUR resulting from the Project. Because the change in average noise exposure at this historic property would be imperceptible, the historic property would retain sufficient integrity to maintain its inclusion in the National Register.

4.3.3.19 El Cabrillo

El Cabrillo is a small historic district that consists of a multi-family courtyard apartment complex composed of a two-story, continuous structure with three passageway openings at ground level; an elaborate, multi-tiered central fountain; and a landscaped courtyard enclosed by a wall. The plan is reminiscent of a traditional hacienda and was designed in the Spanish Colonial Revival style by Arthur and Nina Zwebell, who are considered master builder-architects of courtyard housing complexes throughout Los Angeles in the 1920s. The plan and configuration, including the surrounding walls and three-tiered foundation, help the site to "convey a sense of seclusion."[141] It was listed on the National Register in 2005 under Criterion C (architecture). It has a period of significance of 1928, the date of its construction. It is also a contributor to the National Register listed Whitley Heights Residential Historic District.

The El Cabrillo complex is designed to create a sense of separation, serenity, and respite from outside noise and visual intrusions. As such, it is particularly sensitive to changes in these environmental conditions.

Current Status and Condition

This historic property currently experiences a DNL of 34.73 db. These noise levels are consistent with a residential property and the property currently retains sufficient integrity to maintain its listing in the National Register.[142]

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[140] "Table 1 – Land Use Compatibility with Yearly Day-Night Average Sound Levels," 14 CFR part 150, Appendix A, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-I/part-150/appendix-Appendix%20A%20to%20Part%20150.

[141] Christy Johnson McAvoy and Jessica N. Ritz, *National Register Nomination Form: El Cabrillo,* 2005.

[142] "Table 1 – Land Use Compatibility with Yearly Day-Night Average Sound Levels," 14 CFR part 150, Appendix A, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-I/part-150/appendix-Appendix%20A%20to%20Part%20150.

Effect Analysis

The Project includes three alternatives: No Action, Proposed Action, and the Proposed Action with an Increased Climb Gradient. The Proposed Action would **increase** the average noise exposure at the historic property by 0.83 dB. The Increased Climb Gradient would **increase** the average noise exposure at the historic property by 0.01 dB. These changes are below the threshold generally perceptible to the human ear and therefore, there would be no perceptible change in auditory exposure due to overhead flights from BUR resulting from the Project. Because the change in average noise exposure at this historic property would be imperceptible, the historic property would retain sufficient integrity to maintain its inclusion in the National Register.

4.3.3.20 Whitley Court

Whitley Court is a nine-unit "bungalow court" built in the Dutch Colonial Revival Style. This small historic district is composed of a 1905 Queen Anne style single-family residence that was moved to the property in 1918 and four two-story duplex bungalows that were added in 1919. It was listed in the National Register in 2004 under Criteria A (events) and C (architecture) with a period of significance of 1905-1919. The site's architecture embodies the distinctive characteristics of a bungalow court, a building type associated with a period of rapid urbanization in Hollywood. The bungalows, constructed in 1919, also reflect Hollywood's transition from a farming suburb to an urban center due to the success of the film industry.[143]

As one of the most intact examples of bungalow courts in Hollywood, Whitley Court retains its interior, garden-like setting with an interior focus. Its sense of separation and solitude are critical elements of its architectural design and function. As such, bungalow courts like Whitley Court are considered sensitive properties.

Current Status and Condition

This historic property currently experiences a DNL of 33.38 db. These noise levels are consistent with a residential property and the property currently retains sufficient integrity to maintain its listing in the National Register.[144]

Effect Analysis

The Project includes three alternatives: No Action, Proposed Action, and the Proposed Action with an Increased Climb Gradient. The Proposed Action would **increase** the average noise exposure at the historic property by 0.76 dB. The Increased Climb Gradient would **increase** the average noise exposure at the historic property by 0.02 dB. These changes are below the threshold generally perceptible to the human ear and therefore, there would be no perceptible change in auditory exposure due to overhead flights from BUR resulting from the Project. Because the change in average noise exposure at this historic property would be imperceptible,

[143] Christy Johnson McAvoy and Jennifer Trotoux, *National Register of Historic Places Nomination: Whitley Court*, 2004.

[144] "Table 1 – Land Use Compatibility with Yearly Day-Night Average Sound Levels," 14 CFR part 150, Appendix A, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-I/part-150/appendix-Appendix%20A%20to%20Part%20150.

the historic property would retain sufficient integrity to maintain its inclusion in the National Register.

4.3.3.21 Doheny Estate, Greystone Park

Edward Lawrence Dohey constructed the 55-room, 46,000 square-foot eclectic limestone mansion as a gift for his only son, Edward Lawrence Dohey, Jr. He hired master architect Gordon B. Kaufmann to design the large estate, including the mansion, formal gardens, wooded areas, numerous brick and stone outbuildings, and pools. Today, the 16.8-acre property is owned by the City of Beverly Hills and used as a public park. It is also a popular filming location. It was listed in the National Register in 1976 under Criterion C (architecture) as an early example of the mansions that later became common in Beverly Hills.[145] Its period of significance is 1925-1929, spanning the period of construction.

The site is currently a public park, a popular filming location, and a location for special events. As such, it is considered sensitive to noise and overhead distractions.

Current Status and Condition

This historic property currently experiences a DNL of 37.1 db. These noise levels are consistent with a residential property and the property currently retains sufficient integrity to maintain its listing in the National Register.[146]

Effect Analysis

The Project includes three alternatives: No Action, Proposed Action, and the Proposed Action with an Increased Climb Gradient. The Proposed Action would **decrease** the average noise exposure at the historic property by 1.01 dB. The Increased Climb Gradient would **increase** the average noise exposure at the historic property by 1.34 dB. This means the Project would result in net noise increase at the property. However, this increase is below the change threshold generally perceptible to the human ear and therefore, there would be no perceptible change in auditory exposure due to overhead flights from BUR resulting from the Project. Because the change in average noise exposure at this historic property would be imperceptible, the historic property would retain sufficient integrity to maintain its inclusion in the National Register.

4.3.3.22 Dutch Reformed Church / First Baptist Church

The First Baptist Church of Beverly Hills is a four-story church designed in the Mediterranean architectural style. Constructed in the 1920s by a Dutch Reform congregation, the church is the only remaining building from the Town of Sherman, a settlement of trolley workers that eventually became present-day West Hollywood.[147] The City of West Hollywood designated the

[145] Loch Jones and Pat McCormick, *National Register of Historic Places Nomination: Doheny Estate/Greystone,* 1976.

[146] "Table 1 – Land Use Compatibility with Yearly Day-Night Average Sound Levels," 14 CFR part 150, Appendix A, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-I/part-150/appendix-Appendix%20A%20to%20Part%20150.

[147] Jon Ponder, "The Village of Sherman Rises around the Trolley Yard," West Hollywood History, accessed September 11, 2023, https://www.westhollywoodhistory.org/galleries/the-village-of-sherman-rises-around-the-trolley-yard/.

church as a historic site at the local level in 1993.[148] An unrelated survey evaluation indicated that the building may qualify for the National Register as an individual property.[149] No period of significance is identified in the historical documentation.

As a religious building dedicated to contemplation and meditation associated with cultural and religious practices, it is considered a sensitive historic property.

Current Status and Condition

This historic property currently experiences a DNL of 34.83 db. These noise levels are consistent with a church, auditorium, or concert hall and the property currently retains sufficient integrity to maintain its eligibility for listing in the National Register.[150]

Effect Analysis

The Project includes three alternatives: No Action, Proposed Action, and the Proposed Action with an Increased Climb Gradient. The Proposed Action would **decrease** the average noise exposure at the historic property by 0.71 dB. The Increased Climb Gradient would **increase** the average noise exposure at the historic property by 0.86 dB. These changes are below the threshold generally perceptible to the human ear and therefore, there would be no perceptible change in auditory exposure due to overhead flights from BUR resulting from the Project. Because the change in average noise exposure at this historic property would be imperceptible, the historic property would retain sufficient integrity to maintain its inclusion in the National Register.

4.3.3.23 County Library, West Hollywood

The County Library of West Hollywood is a one- and a half story stucco building constructed in 1929 and designed in the Spanish Colonial Revival style.[151] It was added to the National Register in 1987 as a part of the Los Angeles Branch Library System Thematic Resources Group. This multiple property submission (MPS) is comprised of 22 buildings designed in "various period revival styles constructed to house the initial branch library system of the City of Los Angeles… [and] are located in parks or are surrounded by maintained landscaping."[152] The MPS has a period of significance of 1913-1930, to encompass the dates of construction of the 22 selected buildings. The library system is significant under Criteria A (events) for community planning and C (architecture) for the use of representative period styles, master architects, and incorporation of literary motifs. The building functioned as a branch of the Los Angeles County Library System

[148] "History," First Baptist Church of Beverly Hills, accessed September 11, 2023, https://www.firstbaptistchurchbevhills.org/history.html.

[149] "9025 Cynthia Street," West Hollywood Historic Preservation, accessed September 8, 2023, https://www.wehopreservation.org/portfolio_page/9025-cynthia-street-2/.

[150] "Table 1 – Land Use Compatibility with Yearly Day-Night Average Sound Levels," 14 CFR part 150, Appendix A, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-I/part-150/appendix-Appendix%20A%20to%20Part%20150.

[151] David Amorena, California Department of Parks and Recreation Historic Resources Inventory, 1986-1987, accessed September 11, 2023, https://www.ruskinarc.com/public/files/15323/1986-87_West_Hollywood_Historic_Resources_Survey_Form.pdf.

[152] Richard Mouck, et al., *National Register of Historic Places Nomination: Los Angles Library System (Thematic Nomination),* 1985, Section 7.

during the 1920s and 1930s and is significant for its association with prewar West Hollywood at the local level.

The building is no longer used as a library and currently functions as municipal offices. As a government building designed for study and literary purposes, it qualifies as a sensitive historic property.

Current Status and Condition

This historic property currently experiences a DNL of 34.38 db. These noise levels are consistent with government service use and the property currently retains sufficient integrity to maintain its eligibility for listing in the National Register.[153]

Effect Analysis

The Project includes three alternatives: No Action, Proposed Action, and the Proposed Action with an Increased Climb Gradient. The Proposed Action would **decrease** the average noise exposure at the historic property by 0.59 dB. The Increased Climb Gradient would **increase** the average noise exposure at the historic property by 0.6 dB. These changes are below the threshold generally perceptible to the human ear and therefore, there would be no perceptible change in auditory exposure due to overhead flights from BUR resulting from the Project. Because the change in average noise exposure at this historic property would be imperceptible, the historic property would retain sufficient integrity to maintain its inclusion in the National Register.

4.3.3.24 Los Angeles National Cemetery

The Los Angeles National Cemetery (LANC) was dedicated in 1889. At the time it was part of Pacific Branch of the National Homes for Disabled Volunteer Soldiers, one of 11 facilities operated by the Veterans Administration (VA).[154] It was originally part of the same complex as the VA hospital, which is today located on an adjacent property. Along with the cemetery grounds, the LANC historic district includes 15 contributing buildings and features:

- the Arcade;
- the Bivouac of Dead plaque;
- the Civil War Soldier Monument;
- a columbarium;
- the Comfort Station;
- the Bob Hope Memorial Chapel /Administration Building;
- a flagpole;

[153] "Table 1 – Land Use Compatibility with Yearly Day-Night Average Sound Levels," 14 CFR part 150, Appendix A, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-I/part-150/appendix-Appendix%20A%20to%20Part%20150.

[154] National Park Service, "Los Angeles National Cemetery Los Angeles, California," *Discover Our Shared Heritage Travel Itinerary: Civil War Era National Cemeteries,* accessed September 15, 2023, https://www.nps.gov/nr/travel/national_cemeteries/california/los_angeles_national_cemetery.html.

- Fuel Storage building;
- Maintenance Building 1;
- Maintenance Building 2;
- the National Home for Disabled Volunteer Soldiers (NHDVS) monument;
- the LANC Rostrum;
- a Spanish-American War monument;
- a series of terraces and overlooks; and
- the Wilshire Boulevard Gate House.

The Bob Hope Memorial Chaple (1939-1940) and original indoor columbarium were both constructed by the WPA in a Spanish Revival style.[155] It was listed on the National Register in 2014 through efforts by the VA. This documentation could not be located but it is assumed that the property is significant under Criterion A (events) for its association with the early development of veterans' support following the Civil War and the establishment of the VA, and under Criterion C (architecture) for the design of its WPA-era buildings and memorials from various eras.

As a memorial set within a larger cemetery landscape dedicated to contemplation and meditation associated with mourning, it is considered a sensitive historic property.

Current Status and Condition

This historic property currently experiences a DNL of 29.57 db. These noise levels are consistent with amusements, parks, resorts and camps and the property currently retains sufficient integrity to maintain its listing in the National Register.[156]

Effect Analysis

The Project includes three alternatives: No Action, Proposed Action, and the Proposed Action with an Increased Climb Gradient. The Proposed Action would **decrease** the average noise exposure at the historic property by 1.11 dB. The Increased Climb Gradient would **increase** the average noise exposure at the historic property by 1.96 dB. Los Angeles National Cemetery is immediately adjacent to Interstate 405, a major regional highway connector through Los Angeles County. Noise levels within the cemetery are very high because of the proximity to the highway.[157] A 1.96 dB difference in volume is at the lower threshold of perceptibility by the humans with exceptional hearing. Within an environment that already experiences a high level of ambient noise, such a change would be difficult to detect. Because the change in average noise

[155] "Los Angeles National Cemetery," U.S. Department of Veterans Affairs: National Cemetery Administration, accessed September 8, 2023, https://www.cem.va.gov/cems/nchp/losangeles.asp.

[156] "Table 1 – Land Use Compatibility with Yearly Day-Night Average Sound Levels," 14 CFR part 150, Appendix A, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-I/part-150/appendix-Appendix%20A%20to%20Part%20150.

[157] Martha Groves, "Westwood Hills Residents Want Sount Wall Next to Los Angeles National Cemetery," *Los Angeles Times,* March 21, 2011, https://www.latimes.com/local/la-xpm-2011-mar-21-la-me-adv-cemetery-soundwall-20110321-story.html.

exposure associated with the Proposed Action at this historic property is at the lower threshold for human perception and because the setting is already within an area of high ambient noise exposure, the historic property would retain sufficient integrity to maintain its inclusion in the National Register.

4.2 Summary of Analysis

Baseline noise and overflight information was compared to that anticipated because of the undertaking for the 24 sensitive historic properties located within the APE. Based on this analysis, ESA concludes that the undertaking would result in no adverse effects to historic properties. **Table 3** summarizes the changes in noise exposure for the 24 historic properties most sensitive to such changes in setting.

To support a Finding of No Adverse Effect, an undertaking must not meet any of the criteria set forth in the Advisory Council on Historic Preservation's Section 106 regulations at 36 CFR § 800.5(a). This section presents why the undertaking does not meet any of these criteria.

- Does the undertaking physically destroy or damage the property?

  The undertaking would not have any physical impact on any property.

- Does the undertaking alter the property in any way that is inconsistent with the Secretary of the Interior's Standards for Treatment of Historic Properties (36 CFR Part 68)?

  The undertaking is in the airspace above the historic resources and would not result in any alteration or physical modifications to these resources.

- Does the undertaking remove a property from its historic location?

  The undertaking would not remove any property from its location.

- Does the undertaking change the character of the property's use, or of physical features within the property's setting that contribute to its historic significance?

  The undertaking would not change the character of any property's use or any physical features in any historical property's setting.

- Does the undertaking introduce an atmospheric, audible, or visual element to the area that would diminish the integrity of the property's significant historic features?

  As discussed above no increase in total overflights is attributable to the undertaking. Auditory changes that may result from the undertaking are at or below the level detectible by the average human ear (<3 dB) at all but one property. At that single property, the El Portal Theater, the significance of the property would not be diminished by the undertaking. As such, the undertaking would not introduce audible or visual elements that would diminish the integrity of the significant historical features of any historic resource in the APE.

- Does the undertaking result in neglect of a property which would result in its deterioration, transfer, sale, or lease?

  The undertaking would not cause any property to be neglected, sold, or transferred.

TABLE 3
SUMMARY OF CHANGES IN AUDITORY SETTING FOR SENSITIVE HISTORIC PROPERTIES

Resource No.	Property Name	Existing Noise Level (dB)	Proposed Action Change (dB)	Increased Climb Gradient Change (dB)
1	Mentryville and Pico Well No. 4	26.02	0.17	0.09
2	Lopez Adobe/ La Casa de Geronimo	43.81	-0.30	0.30
3	Mission San Fernando Rey de Convento Building	46.27	-0.13	0.30
4	Brand Park	46.31	-0.13	0.29
5	Romulo Pico Adobe	46.94	-0.12	0.23
6	Temple Ramat Zion Synagogue	43.04	0.42	0.12
7	Faith Bible Church	41.66	2.07	-0.16
8	Van Nuys Branch Library	50.65	0.69	-0.19
9	Valhalla Cemetery / Portal of the Folded Wings Shrine to Aviation	68.61	0.06	1.45
10	Los Encinos State Historic Park	44.36	-2.39	0.49
11	North Hollywood Library, Amelia Earhart Library	58.3	-3.2	0.51
12	El Portal Theater	59.37	-3.23	0.38
13	Campo de Cahuenga/ Casa Adobe Hacienda of Don Tomas Feliz	49.52	2.17	0.02
14	Universal City and Studios	48.68	2.26	-0.04
15	Hollywood Reservoir Complex	38.14	1.30	-0.06
16	Pilgrimage Theater	36.4	1.20	-0.02
17	Hollywood Bowl	36.07	1.19	-0.01
18	Wattles Mansion and Gardens	35.61	0.60	0.15
19	El Cabrillo	33.9	0.83	0.01
20	Whitley Court	33.38	0.76	0.02
21	Doheny Estate, Graystone Park	37.1	1.01	1.34
22	Dutch Reformed Church/ First Baptist Church	34.83	-0.71	0.86
23	West Hollywood Branch Library	34.38	-0.59	0.60
24	Los Angeles National Cemetery	29.57	-1.11	1.96

SOURCE: National Register Database; https://www.nps.gov/subjects/nationalregister/database-research.htm#table, BERD for Los Angeles and Ventura Counties; https://ohp.parks.ca.gov/?page_id=30338, Adapted by Environmental Science Associates, 2023.

Although the undertaking potentially affects the setting and feeling of certain types of historic properties that would be overflown by aircraft using the proposed procedure, the incremental increase in noise exposure in some parts of the APE exist in an area already densely overflown would not diminish the integrity of any historic properties' significant historical features.

CHAPTER 5
Conclusions and Recommendations

The examples discussed above represent types of historic properties that are most sensitive to changes in noise associated with aircraft overflights and are located where the undertaking's effects would be the most pronounced. Although some of the 24 properties would experience additional noise exposure on average because of the proposed undertaking, each area is already directly overflown and is subjected to noise associated with those flights. The undertaking would not change the total overflights within the APE. Auditory exposure would decrease under one or more alternatives for 14 sensitive historic properties. The undertaking would increase auditory exposure for all 24 properties under one or more alternatives, however the maximum noise increase would be 2.26 dB. This is at the lower limit of human perception and would occur within an environment that is already densely developed with modern commercial and residential uses. Therefore, we conclude that the incremental increase changes in noise caused by the undertaking would not introduce any auditory elements that would diminish the integrity of these properties' significant historic features and therefore would not adversely affect the historic properties. This indicates that historic properties that are less sensitive to noise or visual intrusions would also not be adversely affected by the undertaking.

The APE contains areas of known archeological sensitivity. However, because the Project includes no ground disturbance, is located entirely in airspace above grade, and is over areas already within the flightpaths of aircraft departing BUR, there is no potential to encounter buried archaeological resources within the APE during Project implementation.

Therefore, ESA recommends a finding of **No Adverse Effect to Historic Properties** for the Hollywood Burbank Airport SLAPP/OROSZ Departure Procedures Project for Section 106 purposes, pursuant 36 CFR 800.4.

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CHAPTER 6
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CHAPTER 7
Professional Qualifications

ESA architectural historian Becky Urbano, M.S., is the primary author of this report. Antonette Hrycyk, M.S. and Amy Langford, Ph.D. co-authored the context and resource identification section. Shannon Papin, M.A. provided quality assurance and review. Ms. Papin and Ms. Urbano meet the SOI Professional Qualifications Standards for history and architectural history.

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Appendix A

Identified Historic Properties Within the APE

ESA

Name	Street Address	City	Zip	Evaluation Info
Chateau Colline	10335 Wilshire Blvd	Los Angeles	90024	1S
Chateau Colline One-Story Free-Standing Garage	10355 Wilshire Blvd	Los Angeles	90024	1D
Chateau Colline Reinforced Concrete Garage	10355 Wilshire Blvd	Los Angeles	90024	1D
Marymount High School	10643 Sunset Blvd	Los Angeles	90024	2S2
Dracker Apartments/ Lindbrook Manor	10824 Lindbrook Dr	Los Angeles	90024	2D2
Lindbrook Village	10830 Lindbrook Dr	Los Angeles	90024	2D2
Courtyard Apartment Complex	10840 Lindbrook Dr	Los Angeles	90024	2D2
Landfair Apartments, Everett Robison Hall	10940 Ophir Dr	Los Angeles	90024	3S
Federal Building	11000 Wilshire Blvd	Los Angeles	90024	1S
Strathmore Apartments	11005-11013 1/2 Strathmore Dr	Los Angeles	90024	1S
Strathmore Apartments	11005-11013 1/2 Strathmore Dr	Los Angeles	90024	1S
Strathmore Apartments	11005-11013 1/2 Strathmore Dr	Los Angeles	90024	1S
Strathmore Apartments	11005-11013 1/2 Strathmore Dr	Los Angeles	90024	1S
Ralphs Grocery Store	1142 Westwood Blvd	Los Angeles	90024	1S
UCLA Hedrick Hall	250 De Neve Dr	Los Angeles	90024	2S2
UCLA-Ackerman Hall	308 Westwood Plaza	Los Angeles	90024	2S2
Dickson Plaza - UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2
Dodd Hall-UCLA, 309 Portola Pl, 405 Hilgard Ave	405 N Hilgard Ave	Los Angeles	90024	2S2
Haines Hall-UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2
Janss Steps - UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2
Kerckoff Hall-UCLA	405 N Hilgard Ave	Los Angeles	90024	2S2
Kinsey Hall-UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2
Men's Gym-UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2

Moore Hall-UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2
Murphy Hall-UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2
Powell Library-UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2
Royce Hall-UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2
University Of California Los Angeles	405 N Hilgard Ave	Los Angeles	90024	2S2
Women's Gym-UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2
Kelton Apartments	644 Kelton Ave	Los Angeles	90024	1S
Fox Westwood Village Theater	959 Broxton Ave	Los Angeles	90024	2S2
Gayley Terrace	959 Gayley Ave	Los Angeles	90024	2S2
Hollywood High School	1521 N Highland Ave	Los Angeles	90028	1D
Hollywood High School Athletic Field	1521 N Highland Ave	Los Angeles	90028	1D
Hollywood High School Auditorium	1521 N Highland Ave	Los Angeles	90028	1D
Hollywood High School Historic District	1521 N Highland Ave	Los Angeles	90028	1S
Hollywood High School Liberal Arts Bldg	1521 N Highland Ave	Los Angeles	90028	1D
Hollywood High School Library	1521 N Highland Ave	Los Angeles	90028	1D
Hollywood High School Science Bldg	1521 N Highland Ave	Los Angeles	90028	1D
Talbot-Wood Dwelling	1608 N Las Palmas Ave	Los Angeles	90028	2S4
Ums Bldg	1618 N Las Palmas Ave	Los Angeles	90028	2S4
Max Factor Makeup Salon	1666 N Highland Ave	Los Angeles	90028	1D
Whitley Court	1720 Whitley Ave	Los Angeles	90028	1S
El Cadiz Apartments	1725 N Sycamore Ave	Los Angeles	90028	2S2
La Levenda	1737 Whitley Ave	Los Angeles	90028	3S
Canterbury Apartment Hotel, The	1746 N Cherokee Ave	Los Angeles	90028	1S
The Fontenoy	1811 Whitley Ave	Los Angeles	90028	3S
Fleur De Lis	1825 Whitley Ave	Los Angeles	90028	2S2
El Cabrillo	1832 N Grace Ave	Los Angeles	90028	1S

El Cabrillo Fountain	1832 N Grace Ave	Los Angeles	90028	1D
El Cabrillo Wall	1832 N Grace Ave	Los Angeles	90028	1D
The Havenhurst	1861 Whitley Ave	Los Angeles	90028	3S
	1921 Whitley AVE	LOS ANGELES	90028	2S2
Hollywood American Legion Post #43	2035 N Highland Ave	Los Angeles	90028	3S
Hollywood Boulevard Commercial And Entertainment D	6200 Hollywood Blvd	Los Angeles	90028	1S
Jj Newberrys	6600 Hollywood Blvd	Los Angeles	90028	1D
The Baine Building, Merchants Title	6601 Hollywood Blvd	Los Angeles	90028	1D
S H Kress & Co, Fredricks Of Hollywood	6606 Hollywood Blvd	Los Angeles	90028	1D
Vogue Theater	6629 Hollywood Blvd	Los Angeles	90028	3S
Cherokee Building	6630 Hollywood Blvd	Los Angeles	90028	1D
Shane Building	6652 Hollywood Blvd	Los Angeles	90028	1D
Musso Frank Grill	6663 Hollywood Blvd	Los Angeles	90028	1D
	6679 Hollywood Blvd	Los Angeles	90028	1D
Outpost Building	6701 Hollywood Blvd	Los Angeles	90028	1D
Grauman's Egyptian Theater	6708 Hollywood Blvd	Los Angeles	90028	1D
Pig N Whistle Restaurant, London Britches	6718 Hollywood Blvd	Los Angeles	90028	1D
Christie Hotel, Scientology Institute	6724 Hollywood Blvd	Los Angeles	90028	1D
Millers Stationers	6740 Hollywood Blvd	Los Angeles	90028	1D
Pickwick Bookstore, B. Dalton Pickwick Bookstore	6743 Hollywood Blvd	Los Angeles	90028	1D
Luberman Company, Bennett's Book Store	6753 Hollywood Blvd	Los Angeles	90028	3S
Montmartre	6755 Hollywood Blvd	Los Angeles	90028	1D

Hollywood Wax Museum	6765 Hollywood Blvd	Los Angeles	90028	1D
Hollywood Theatre	6766 Hollywood Blvd	Los Angeles	90028	1D
Los Angeles First Federal, Security Pacific Bank	6777 Hollywood Blvd	Los Angeles	90028	1D
Bank Of America	6780 Hollywood Blvd	Los Angeles	90028	1D
Rexall Drug Store, Lee Drug Co	6800 Hollywood Blvd	Los Angeles	90028	1D
	6806 Hollywood Blvd	Los Angeles	90028	1D
El Capitan Theater Office Building	6834 Hollywood Blvd	Los Angeles	90028	1D
Hollywood Masonic Temple	6840 Hollywood Blvd	Los Angeles	90028	1D
Seven Seas	6904 Hollywood Blvd	Los Angeles	90028	1D
Grauman's Chinese Theater	6925 Hollywood Blvd	Los Angeles	90028	1D
Hollywood Roosevelt Hotel	7000 Hollywood Blvd	Los Angeles	90028	1D
Hillview Cadillac, Motorame	7001 Hollywood Blvd	Los Angeles	90028	1D
Arthur Murray Dance Studio	7016 Hollywood Blvd	Los Angeles	90028	3S
Garden Court Apartments Residential Hotel	7021 Hollywood Blvd	Los Angeles	90028	3S
Arthur Murray	7024 Hollywood Blvd	Los Angeles	90028	1D
Hollywood Professional Bldg	7046 Hollywood Blvd	Los Angeles	90028	1D
Security Trust	7051 Hollywood Blvd	Los Angeles	90028	1D
	7055 Hollywood Blvd	Los Angeles	90028	1D
Hollywood Congregational Church	7065 Hollywood Blvd	Los Angeles	90028	1D
Santa Monica Boulevard Historic District	Santa Monica Blvd	West Hollywood	90046	2S2
Samuel Goldwyn Studios	1040 N Formosa Ave	Los Angeles	90046	3S
Pickford Fairbanks Studio	1041 Formosa Ave	West Hollywood	90046	3S

Plummer Park Community Clubhouse	1200 N Vista St	West Hollywood	90046	1S
Ramona, The	1236 N Harper Ave	West Hollywood	90046	2S
La Fontaine	1285 N Crescent Heights Blvd	West Hollywood	90046	3S
Mexican Village	1300 N Harper Ave	West Hollywood	90046	1D
Romanesque Villa Apartments	1301 N Harper Ave	West Hollywood	90046	1D
El Mirador	1302 N Sweetzer Ave	West Hollywood	90046	3S
Casa Granda Apartments, Harper House	1334 N Harper Ave	West Hollywood	90046	1D
Villa Sevilla	1338 N Harper Ave	West Hollywood	90046	1D
	1343 N Laurel Ave	West Hollywood	90046	2S2
Villa D'este	1355 Laurel Ave	West Hollywood	90046	3S
Ronda | Mi Casa Apartments	1400 Havenhurst Dr	West Hollywood	90046	1S
	1400 N Hayworth Ave	West Hollywood	90046	3S
Colonial House	1416 N Havenhurst Dr	Los Angeles	90046	1S
Colonial House	1416 N Havenhurst Dr	West Hollywood	90046	1S
Andalusia	1471 Havenhurst Dr	Los Angeles	90046	1S
The Adalusia Fountain	1471 Havenhurst Dr	Los Angeles	90046	1D
The Andalusia Building 2	1473 Havenhurst Dr	Los Angeles	90046	1D
The Andalusia Building 3	1475 Havenhurst Dr	Los Angeles	90046	1D
	1520 N Curson Ave	Los Angeles	90046	2D2
	1528 N Curson Ave	Los Angeles	90046	2D2
Hollywood School For Girls	1741 N La Brea Ave	Los Angeles	90046	1S
Hollywood School For Girls Cottage	1741 N La Brea Ave	Los Angeles	90046	1D
Hollywood School For Girls Shed	1741 N La Brea Ave	Los Angeles	90046	1D
Woman's Club Of Hollywood	1741 N La Brea Ave	Los Angeles	90046	1S

Wattles Mansion And Gardens	1824 N Curson Ave	Los Angeles	90046	3S
Toberman, C. E., Estate	1847 Camino Palmero	Hollywood	90046	1S
Atkinson Farnum Swain Residence	2003 N La Brea Terrace	Los Angeles	90046	2S2
Durfee Residence	2003 N La Brea Terrace	Los Angeles	90046	2S2
Boy Scouts Of America Clubhouse, Lions Club	623 N Robertson Blvd	West Hollywood	90046	3S
	7109 Hawthorn Ave	Los Angeles	90046	3S
	7113 Hawthorn Ave	Los Angeles	90046	3S
	7117 Hawthorn Ave	Los Angeles	90046	3S
	7129 Hawthorn Ave	Los Angeles	90046	3S
Normandie Towers	7219 Hampton Ave	West Hollywood	90046	2D2
Oldest House In Hollywood	7377 Santa Monica Blvd	Los Angeles	90046	3S
Los Angeles County Fire Station #8	7643 Santa Monica Blvd	West Hollywood	90046	2S2
Harpel, Willis House	7764 W Torreyson Dr	Los Angeles	90046	1S
Facade Improvements	7916 W Santa Monica Blvd	West Hollywood	90046	2D2
El Greco Apartment	817 N Hayworth Ave	Los Angeles	90046	1S
Chateau Marmont	8221 Sunset Blvd	Los Angeles	90046	3S
PATIO DEL MORO | Casita Para Una Estrellita	8225 Fountain Ave	West Hollywood	90046	1D
Les Maisonettes	8250 Fountain Ave	West Hollywood	90046	1D
Schindler, R. M., House	833 N Kings Rd	West Hollywood	90046	1S
William S. Hart House	8341 De Longpre Ave	West Hollywood	90046	2S4
Sunset Towers	8358 Sunset Blvd	West Hollywood	90046	1S
Coronet Apartments Hacienda Arms, Piazza Del Sol	8439 Sunset Blvd	West Hollywood	90046	1S

El Palacio	8491 W Fountain Ave	West Hollywood	90046	3S
Case Study House No. 21	9038 Wonderland Park Ave	Los Angeles	90046	1S
Adobe	916 N Genesee Ave	West Hollywood	90046	3S
Chasens	9023 Beverly Blvd	West Hollywood	90048	3S
Catholic-Protestant Chapels, Veterans Admin Center	Eisenhower Ave	Los Angeles	90049	1D
Streetcar Depot | Depot #66	Pershing Ave	Los Angeles	90049	1D
Mount St Mary's College Brady Hall	12001 Chalon Rd	Los Angeles	90049	2D2
Mount St Mary's College Carondelet Hall	12001 Chalon Rd	Los Angeles	90049	2D2
Mount St Mary's College Charles Willard Memorial L	12001 Chalon Rd	Los Angeles	90049	2D2
Mount St Mary's College Historic District	12001 Chalon Rd	Los Angeles	90049	2S2
Mount St Mary's College Mary Chapel	12001 Chalon Rd	Los Angeles	90049	2S2
Mount St Mary's College Rossiter Hall	12001 Chalon Rd	Los Angeles	90049	2D2
Mount St Mary's College St Joseph's Hall	12001 Chalon Rd	Los Angeles	90049	2D2
Fairfield Inn By Marriott	525 N Sepulveda Blvd	Los Angeles	90049	2S2
Los Angeles National Cemetery Arcade	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Bivouac Of Dead Plaq	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Chapel (Admin Bldg)	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery	950 S Sepulveda Blvd	Los Angeles	90049	1D

Civil War Soldier Mo				
Los Angeles National Cemetery Columbarium	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Comfort Station	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Flagpole	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Fuel Storage Bldg	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Maintenance Bldg 1	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Maintenance Bldg 2	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery NHDVS Monument	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Rostrum	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Span-Amer War Monume	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Terraces/Overlooks	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Wilshire Blvd Gate H	950 S Sepulveda Blvd	Los Angeles	90049	1D
	1914 N Las Palmas Ave	Los Angeles	90068	1D
Shrader House	1927 N Highland Ave	Los Angeles	90068	3S
	1959 Whitley Ave	Los Angeles	90068	1D
Freeman House F L Wright Block House Thematic	1962 Glencoe Wy	Los Angeles	90068	1CL
	1965 Whiteley Ave	LOS ANGELES	90068	1D

	1969 Whiteley Ave	LOS ANGELES	90068	1D
	1987 Whitely Terrace	LOS ANGELES	90068	1D
Yamashiro Historic District Garage	1999 N Sycamore Ave	Los Angeles	90068	1D
Yamashiro Historic District Groundkeeper's Cottage	1999 N Sycamore Ave	Los Angeles	90068	1D
Yamashiro Historic District Hollywood Hills Hotel	1999 N Sycamore Ave	Los Angeles	90068	1D
Yamashiro Historic District Japanese Pagoda	1999 N Sycamore Ave	Los Angeles	90068	1D
Yamashiro Historic District Main House	1999 N Sycamore Ave	Los Angeles	90068	1D
Yamashiro Historic District Menagerie House	1999 N Sycamore Ave	Los Angeles	90068	1D
Yamashiro Historic District Resting Pavilion	1999 N Sycamore Ave	Los Angeles	90068	1D
Yamashiro Historic District South Gatehouse	1999 N Sycamore Ave	Los Angeles	90068	1D
	2000 Grace Ave	Los Angeles	90068	1D
Valentino Apartments	2000 N Highland Ave	Los Angeles	90068	3S
	2000 N Las Palmas Ave	Los Angeles	90068	1D
Jane Fonda And Tom Hayden Residence	2001 Holly Hill Terrace	Los Angeles	90068	1D
John Thomas	2002 N Las Palmas Ave	Los Angeles	90068	1D
	2002 Whitely Ave	Los Angeles	90068	1D
	2006 N Las Palmas Ave	Los Angeles	90068	1D
	2008 N Las Palmas Ave	Los Angeles	90068	1D
	2008 Whitely Ave	Los Angeles	90068	1D
	2010 Holly Hill Terrace	Los Angeles	90068	1D
	2011 Holly Hill Terrace	LOS ANGELES	90068	1D
	2014 Grace Ave	LOS ANGELES	90068	1D

	2014 N Las Palmas Ave	Los Angeles	90068	1D
	2014 Whitely Ave	Los Angeles	90068	1D
	2015 Whitely Ave	Los Angeles	90068	1D
	2017 Holly Hill Terrace	Los Angeles	90068	1D
	2018 Whitley Ave	Los Angeles	90068	1D
	2019 Grace Ave	Los Angeles	90068	1D
Francis X Bushman	2020 Grace Ave	Los Angeles	90068	1D
	2020 N Las Palmas Ave	Los Angeles	90068	1D
	2020 Whitley Terrace Steps	Los Angeles	90068	1D
	2021 Holly Hill Terrace	Los Angeles	90068	1D
	2021 Whitley Terrace Steps	Los Angeles	90068	1D
	2022 Holly Hill Terrace	Los Angeles	90068	1D
	2022 Whitely Ave	Los Angeles	90068	1D
	2025 Grace Ave	Los Angeles	90068	1D
	2025 Holly Hill Terrace	Los Angeles	90068	1D
	2026 Holly Hill Terrace	Los Angeles	90068	1D
	2026 N Las Palmas Ave	Los Angeles	90068	1D
Gertrude Astor Home	2030 Holly Hill Terrace	Los Angeles	90068	1D
	2031 Holly Hill Terrace	Los Angeles	90068	1D
	2031 Whitley Terrace	Los Angeles	90068	1D
	2032 N Las Palmas Ave	Los Angeles	90068	1D
	2034 Grace Ave	Los Angeles	90068	1D
	2034 N Las Palmas Ave	Los Angeles	90068	1D
	2036 Holly Hill Terrace	Los Angeles	90068	1D
	2037 Holly Hill Terrace	Los Angeles	90068	1D
	2037 Whitley Terrace	Los Angeles	90068	1D
	2038 N Las Palmas Ave	Los Angeles	90068	1D
	2040 Bella Vista Wy	Los Angeles	90068	1D

	2040 N Las Palmas Ave	Los Angeles	90068	1D
Martin Balsam Home, Joyce Van Patten Home	2041 Grace Ave	Los Angeles	90068	1D
	2042 N Las Palmas Ave	Los Angeles	90068	1D
	2044 Grace Ave	Los Angeles	90068	1D
	2047 Grace Ave	Los Angeles	90068	1D
	2049 N Las Palmas Ave	Los Angeles	90068	1D
	2050 N Las Palmas Ave	Los Angeles	90068	1D
Mary Jackson Home	2055 Grace Ave	Los Angeles	90068	1D
	2055 N Las Palmas Ave	Los Angeles	90068	1D
	2056 Grace Ave	Los Angeles	90068	1D
Paul Kelly	2057 N Las Palmas Ave	Los Angeles	90068	1D
Gloria Swanson	2058 Watsonia Terrace	Los Angeles	90068	1D
	2059 Watsonia Terrace	Los Angeles	90068	1D
Richard And Karen Wookey Home	2062 Watsonia Terrace	Los Angeles	90068	1D
	2064 Watsonia Terrace	Los Angeles	90068	1D
	2068 Watsonia Terrace	Los Angeles	90068	1D
Frank Scully Home	2071 Grace Ave	Los Angeles	90068	1D
H J Whitley Home	2073 Whitley Terrace	Los Angeles	90068	1D
John Charles Thomas	2074 Watsonia Terrace	Los Angeles	90068	1D
	2075 Watsonia Terrace	Los Angeles	90068	1D
Lasky Demille Studio Barn	2100 N Highland Ave	Los Angeles	90068	1S
Richard Eagan Home	2133 Fairfield Ave	Los Angeles	90068	1D
	2139 Fairfield Ave	Los Angeles	90068	1D
	2145 Fairfield Ave	Los Angeles	90068	1D
Hollywood Bowl	2301 N Highland Ave	Los Angeles	90068	2S2
Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2D2

Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2D2
Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2D2
Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2D2
Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2D2
Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2D2
Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2D2
Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2D2
Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2D2
Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2S2
	6510 Cerritos Pl	Los Angeles	90068	1D
	6526 Cerritos Pl	Los Angeles	90068	1D
	6532 Cerritos Pl	Los Angeles	90068	1D
	6538 Bella Vista Wy	Los Angeles	90068	1D
	6542 Bella Vista Wy	Los Angeles	90068	1D
	6603 Emmet Terrace	Los Angeles	90068	1D
Beverly Dangelo Home	6603 Whitley Terrace	Los Angeles	90068	1D
	6607 Padre Terrace	Los Angeles	90068	1D
	6609 Whitley Terrace	Los Angeles	90068	1D
	6610 Padre Terrace	Los Angeles	90068	1D
	6611 Emmet Terrace	Los Angeles	90068	1D
	6612 Whitley Terrace	Los Angeles	90068	1D
	6613 Whitley Terrace	Los Angeles	90068	1D
	6614 Emmet Terrace	Los Angeles	90068	1D
Zoellner Home	6615 Emmet Terrace	Los Angeles	90068	1D
Carmen Miranda Home	6615 Padre Terrace	Los Angeles	90068	1D

H H Barter House	6620 Whitley Terrace	Los Angeles	90068	1D
Phyllis Haver Home	6621 Emmet Terrace	Los Angeles	90068	1D
	6621 Padre Terrace	Los Angeles	90068	1D
	6621 Whitley Terrace	Los Angeles	90068	1D
	6624 Whitley Terrace	Los Angeles	90068	1D
Jean Parker Home	6627 Emmet Terrace	Los Angeles	90068	1D
Whitley Home	6630 Whitley Terrace	Los Angeles	90068	1D
	6633 Emmet Terrace	Los Angeles	90068	1D
	6633 Whitley Terrace	Los Angeles	90068	1D
	6636 Emmet Terrace	Los Angeles	90068	1D
	6640 Whitley Terrace	Los Angeles	90068	1D
	6642 Emmet Terrace	Los Angeles	90068	1D
	6643 Emmet Terrace	Los Angeles	90068	1D
	6646 Whitley Terrace	Los Angeles	90068	1D
Amy Archard Home	6650 Whitley Terrace	Los Angeles	90068	1D
	6652 Whitley Terrace	Los Angeles	90068	1D
	6654 Whitley Terrace	Los Angeles	90068	1D
	6655 Emmet Terrace	Los Angeles	90068	1D
	6657 Emmet Terrace	Los Angeles	90068	1D
	6658 Emmet Terrace	Los Angeles	90068	1D
Henry Jones Home	6658 Whitley Terrace	Los Angeles	90068	1D
Beulah Bondi	6660 Whitley Terrace	Los Angeles	90068	1D
	6661 Emmet Terrace	Los Angeles	90068	1D
	6662 Emmet Terrace	Los Angeles	90068	1D

Chester Morris Home	6662 Whitley Terrace	Los Angeles	90068	1D
	6663 Bon Air Pl	Los Angeles	90068	1D
Rissner Patty	6665 Emmet Terrace	Los Angeles	90068	1D
Anita Louise	6666 Whitley Terrace	Los Angeles	90068	1D
	6670 Whitley Terrace	Los Angeles	90068	1D
Barbara Lamarr	6672 Whitley Terrace	Los Angeles	90068	1D
	6673 Emmet Terrace	Los Angeles	90068	1D
	6674 Bon Air Pl	Los Angeles	90068	1D
	6674 Whitley Terrace	Los Angeles	90068	1D
Donald O'connor Home	6675 Whitley Terrace	Los Angeles	90068	1D
	6676 Emmet Terrace	Los Angeles	90068	1D
	6680 Bon Air Pl	Los Angeles	90068	1D
	6680 Emmet Terrace	Los Angeles	90068	1D
Maurice Chevalier Home	6680 Whitley Terrace	Los Angeles	90068	1D
	6688 Whitley Terrace	Los Angeles	90068	1D
William Eythe	6689 Emmet Terrace	Los Angeles	90068	1D
	6690 Whitley Terrace	Los Angeles	90068	1D
Richard Barthelmess Home, Bill Bast Home	6691 Whitley Terrace	Los Angeles	90068	1D
Wesley And Julia Barry Home	6692 Whitley Terrace	Los Angeles	90068	1D
	6694 Whitley Terrace	Los Angeles	90068	1D
Robert Vignola	6697 Whitley Terrace	Los Angeles	90068	1D
	6698 Whitley Terrace	Los Angeles	90068	1D
	6707 Milner Rd	Los Angeles	90068	1D
	6708 Milner Rd	Los Angeles	90068	1D
	6711 Whitley Terrace	Los Angeles	90068	1D
	6717 Milner Rd	Los Angeles	90068	1D

	6717 Whitley Terrace	Los Angeles	90068	1D
Marie Dressler Home	6718 Milner Rd	Los Angeles	90068	1D
Whitney Blake	6722 Whitley Terrace	Los Angeles	90068	1D
	6726 Milner Rd	Los Angeles	90068	1D
	6727 Milner Rd	Los Angeles	90068	1D
	6733 Wedgewood Pl	Los Angeles	90068	1D
Dennis Okeefe	6734 Wedgewood Pl	Los Angeles	90068	1D
	6735 Wedgewood Pl	Los Angeles	90068	1D
Fay Compton	6738 Wedgewood Pl	Los Angeles	90068	1D
Irene Tedrow	6740 Milner Rd	Los Angeles	90068	1D
	6740 Whitley Terrace	Los Angeles	90068	1D
	6742 Wedgewood Pl	Los Angeles	90068	1D
	6746 Milner Rd	Los Angeles	90068	1D
W C Fields	6746 Wedgewood Pl	Los Angeles	90068	1D
William Wellman	6747 Milner Rd	Los Angeles	90068	1D
	6749 Whitley Terrace	Los Angeles	90068	1D
	6750 Wedgewood Pl	Los Angeles	90068	1D
	6753 Milner Rd	Los Angeles	90068	1D
Lloyd Nolan	6754 Wedgewood Pl	Los Angeles	90068	1D
	6755 Wedgewood Pl	Los Angeles	90068	1D
	6756 Milner Rd	Los Angeles	90068	1D
	6757 Milner Rd	Los Angeles	90068	1D
	6758 Milner Rd	Los Angeles	90068	1D
	6758 Wedgewood Pl	Los Angeles	90068	1D
	6760 Milner Rd	Los Angeles	90068	1D
	6763 Whitley Terrace	Los Angeles	90068	1D
	6764 Milner Rd	Los Angeles	90068	1D
	6767 Wedgewood Pl	Los Angeles	90068	1D
	6767 Whitley Terrace	Los Angeles	90068	1D
Marquardt	6770 Milner Rd	Los Angeles	90068	1D

	6776 Milner Rd	Los Angeles	90068	1D
	6782 Milner Rd	Los Angeles	90068	1D
	6796 Milner Rd	Los Angeles	90068	1D
	6943 Camrose Dr	Los Angeles	90068	2D2
North Harper Avenue Historic District	N Harper Ave	West Hollywood	90069	1S
	1127 Horn Ave	West Hollywood	90069	3S
The 1236	1236 N Flores St	West Hollywood	90069	3S
The Royal Gardens	1255 N Flores St	West Hollywood	90069	3S
	1285 N Sweetzer Ave	West Hollywood	90069	3S
Hayworth Tower	1314 N Hayworth Ave	West Hollywood	90069	3S
El Pasadero	1330 N Harper Ave	West Hollywood	90069	1D
	1334 N Laurel Ave	West Hollywood	90069	2S2
Casa Real	1354 N Harper Ave	West Hollywood	90069	1D
Case Study House No. 22	1635 Woods Dr	Los Angeles	90069	1S
Mitchell Camera Corporation Factory/Studio One	652 N La Peer Dr	West Hollywood	90069	2S
United Artists	7200 Santa Monica Blvd	West Hollywood	90069	2S2
	7950 W Fountain Ave	West Hollywood	90069	3S
Storer House	8161 Hollywood Blvd	Los Angeles	90069	1S
Automotive Garage	8264 Fountain Ave	West Hollywood	90069	1D
Golden Crest Retirement Hotel|Standard Hotel	8300 W Sunset Blvd	West Hollywood	90069	2S2
	8320 W Fountain Ave	West Hollywood	90069	3S
Hacienda Arms Apartments | Coronet Apartments	8439 Sunset Blvd	West Hollywood	90069	1S
Wright, Lloyd, Home And Studio	858 N Doheny Dr	West Hollywood	90069	1S
	8589 Sunset Blvd	West Hollywood	90069	3D
	8600 Sunset Blvd	West Hollywood	90069	3D
	8601 Sunset Blvd	West Hollywood	90069	3D
Trocadero Steps	8610 Sunset Blvd	West Hollywood	90069	3D

	8619 Sunset Blvd	West Hollywood	90069	3D
	8623 Sunset Blvd	West Hollywood	90069	3D
	8625 Sunset Blvd	West Hollywood	90069	3D
	8630 Sunset Blvd	West Hollywood	90069	3D
	8641 Sunset Blvd	West Hollywood	90069	3D
	8657 Sunset Blvd	West Hollywood	90069	3D
	8701 W Santa Monica Blvd	West Hollywood	90069	3S
	8720 Sunset Blvd	West Hollywood	90069	3D
	8924 W Cynthia St	West Hollywood	90069	3S
Dutch Reformed Church, First Baptist Church	9025 W Cynthia St	West Hollywood	90069	3S
Crosby Building	9028 W Sunset Blvd	West Hollywood	90069	2S
County Library	903 N Westhourne Ave	West Hollywood	90069	3S
	927 N Palm Ave	West Hollywood	90069	3S
	931 N Palm Ave	West Hollywood	90069	3S
County Fire Station #7	954 N Hancock Ave	West Hollywood	90069	3S
Walstrom, Douglas And Octavia, House	10500 Selkirk Ln	Los Angeles	90077	1S
Case Study House No. 16	1811 Bel Air Rd	Los Angeles	90077	2S
Morris Landau House	638 N Faring Rd	Bel Air	90077	2S2
La0065	350 De Neve Dr	Los Angeles	90095	2S2
Bunche Center For African American Studies, UCLA	405 Hilgard Ave	Los Angeles	90095	2S2
Boelter Hall	580 Portola Plaza	Beverly Hills	90095	2S2
Rogers	1000 N Crescent Dr	Beverly Hills	90210	3S
Thomas	1006 N Crescent Dr	Beverly Hills	90210	3S
Buster Keaton Estate	1018 Pamela Dr	Beverly Hills	90210	3S
Fredric March	1026 Ridgedale Dr	Beverly Hills	90210	3S
Pratt Residence	1028 Ridgedale Dr	Beverly Hills	90210	3S
Corrine Griffith Estate, Ronald Colman Estate	1030 Benedict Canyon Dr	Beverly Hills	90210	3S
David O. Selznick Residence	1050 Summit Dr	Beverly Hills	90210	3S

Silsby Spalding Estate	1100 Carolyn Wy	Beverly Hills	90210	2D3
Fudger Residence	1103 San Ysidro Dr	Beverly Hills	90210	3S
Pickfair	1143 Summit Dr	Beverly Hills	90210	3S
Kolb Estate	1146 Tower Rd	Beverly Hills	90210	3S
Elizabeth D. Hopper House	1305 Park Wy	Beverly Hills	90210	3S
Paul Helms House	135 Copley Pl	Beverly Hills	90210	3S
Beverly Hills Women's Club	1700 Chevy Chase Dr	Beverly Hills	90210	1S
T.A. Tooey	1700 Lexington Rd	Beverly Hills	90210	3S
Kress, George R., House	2337 Benedict Canyon Dr	Los Angeles	90210	1S
Payne Furnace & Supply Co. Plant, Payne Building	336 N Foothill Rd	Beverly Hills	90210	3S
Beverly Hills Mortuary	417 N Maple Dr	Beverly Hills	90210	3S
Beverly Hills City Hall	450 N Crescent Dr	Beverly Hills	90210	2S2
Us Post Office-Beverly Hills Main | Beverly Hills	469 N Cresent Dr	Beverly Hills	90210	1S
	506 N Arden Dr	Beverly Hills	90210	3D
	507 N Arden Dr	Beverly Hills	90210	3D
	508 N Arden Dr	Beverly Hills	90210	3D
	509 N Arden Dr	Beverly Hills	90210	3D
	510 N Arden Dr	Beverly Hills	90210	3D
	511 N Arden Dr	Beverly Hills	90210	3D
	512 N Arden Dr	Beverly Hills	90210	3D
	514 N Arden Dr	Beverly Hills	90210	3D
	515 N Arden Dr	Beverly Hills	90210	3D
Artemus Clark House	515 N Canon Dr	Beverly Hills	90210	3D
	516 N Arden Dr	Beverly Hills	90210	3D
	518 N Arden Dr	Beverly Hills	90210	3D
	519 N Arden Dr	Beverly Hills	90210	3D
	520 N Arden Dr	Beverly Hills	90210	3D
	521 N Arden Dr	Beverly Hills	90210	3D
	522 N Arden Dr	Beverly Hills	90210	3D
	523 N Arden Dr	Beverly Hills	90210	3D
	524 N Arden Dr	Beverly Hills	90210	3D
	525 N Arden Dr	Beverly Hills	90210	3D
	527 N Arden Dr	Beverly Hills	90210	3D
	603 N Arden Dr	Beverly Hills	90210	3D
	604 N Arden Dr	Beverly Hills	90210	3D

	605 N Arden Dr	Beverly Hills	90210	3D
	606 N Arden Dr	Beverly Hills	90210	3D
	607 N Arden Dr	Beverly Hills	90210	3D
	610 N Arden Dr	Beverly Hills	90210	3D
Oakman	610 N Beverly Dr	Beverly Hills	90210	3S
	611 N Arden Dr	Beverly Hills	90210	3D
	612 N Arden Dr	Beverly Hills	90210	3D
	613 N Arden Dr	Beverly Hills	90210	3D
William T. Sterling House	613 N Beverly Dr	Beverly Hills	90210	3D
	615 N Arden Dr	Beverly Hills	90210	3D
Herb Nacio Brown	616 N Beverly Dr	Beverly Hills	90210	3S
	617 N Arden Dr	Beverly Hills	90210	3D
	618 N Arden Dr	Beverly Hills	90210	3D
Edward M. Smith Residence	618 N Beverly Dr	Beverly Hills	90210	3D
L G Mcneil RESIDENCE	619 N Arden Dr	Beverly Hills	90210	3B
	620 N Arden Dr	Beverly Hills	90210	3D
	621 N Arden Dr	Beverly Hills	90210	3D
	622 N Arden Dr	Beverly Hills	90210	3D
	624 N Arden Dr	Beverly Hills	90210	3D
Hawthorne Grammar School	624 N Rexford Dr	Beverly Hills	90210	2S2
	625 N Arden Dr	Beverly Hills	90210	3D
	626 N Arden Dr	Beverly Hills	90210	3D
	627 N Arden Dr	Beverly Hills	90210	3D
	628 N Arden Dr	Beverly Hills	90210	3D
	629 N Arden Dr	Beverly Hills	90210	3D
	630 N Arden Dr	Beverly Hills	90210	3D
Samuel M. Lee Residence	634 N Alta Dr	Beverly Hills	90210	3S
J.R. Wesselne Residence	703 N Alpine Dr	Beverly Hills	90210	3D
	703 N Arden Dr	Beverly Hills	90210	3D
	704 N Arden Dr	Beverly Hills	90210	3D
	705 N Alpine Dr	Beverly Hills	90210	3D
	705 N Arden Dr	Beverly Hills	90210	3B
R.B. Murphy Residence	706 N Alpine Dr	Beverly Hills	90210	3D
	706 N Arden Dr	Beverly Hills	90210	3D
Herbert Robbins Residence	707 N Alpine Dr	Beverly Hills	90210	3D
Morrison, Agnes Residence	707 N Arden Dr	Beverly Hills	90210	3S
	708 N Arden Dr	Beverly Hills	90210	3D
F. A. Blensberg Residence	709 N Alpine Dr	Beverly Hills	90210	3D

	709 N Arden Dr	Beverly Hills	90210	3D
	710 N Alpine Dr	Beverly Hills	90210	3D
Paul A. Jesberg Residence	711 N Alpine Dr	Beverly Hills	90210	3D
Edward Wood House	711 N Canon Dr	Beverly Hills	90210	3D
F. D. Parker Residence	713 N Alpine Dr	Beverly Hills	90210	3D
Samuel Mortensen Residence	714 N Alpine Dr	Beverly Hills	90210	3D
	715 N Alpine Dr	Beverly Hills	90210	3D
Frank Charon Residence	716 N Alpine Dr	Beverly Hills	90210	3D
Sarah B. Hughes Resdience	717 N Alpine Dr	Beverly Hills	90210	3D
Hopper, C. B. & H. M. House	718 N Beverly Dr	Beverly Hills	90210	3S
	720 N Foothill Rd	Beverly Hills	90210	3S
S.C. Roew Residence	721 N Alpine Dr	Beverly Hills	90210	3D
	722 N Alpine Dr	Beverly Hills	90210	3D
	724 N Alpine Dr	Beverly Hills	90210	3D
Kate Greppin Residence	801 N Alpine Dr	Beverly Hills	90210	3D
Edmund Locke Residence	801 N Rodeo Dr	Beverly Hills	90210	3S
	801 N Roxbury Dr	Beverly Hills	90210	3S
Addie Greenfield Residence	802 N Alpine Dr	Beverly Hills	90210	3D
	803 N Alpine Dr	Beverly Hills	90210	3D
Cox House	803 N Rexford Dr	Beverly Hills	90210	3S
Eudora Thorkiblsen	803 N Rodeo Dr	Beverly Hills	90210	3S
W. S. Mcgilvray Residence	804 N Alpine Dr	Beverly Hills	90210	3D
Nelson Eddy	805 N Alpine Dr	Beverly Hills	90210	3D
Elizabeth Hinckley Residence	806 N Alpine Dr	Beverly Hills	90210	3D
Theodore R. Cadwallader Residence	808 N Alpine Dr	Beverly Hills	90210	3D
	810 N Alpine Dr	Beverly Hills	90210	3D
Aleck Curlett Residence	811 N Alpine Dr	Beverly Hills	90210	3D
L.W. Newbert Residence	812 N Alpine Dr	Beverly Hills	90210	3D
A. M. G. Bertolotti Residence	814 N Alpine Dr	Beverly Hills	90210	3D
	816 N Alpine Dr	Beverly Hills	90210	3D

Marlene Dietrich House	822 N Roxbury Dr	Beverly Hills	90210	3S
Rigby House	832 Greenway Dr	Beverly Hills	90210	3S
Doheny Estate/Greystone	905 Loma Vista Dr	Beverly Hills	90210	1S
Earle C. Anthony	910 N Bedford Dr	Beverly Hills	90210	3S
	918 N Alpine Dr	Beverly Hills	90210	3S
Debotiller Reside3nce	9481 Sunset Blvd	Beverly Hills	90210	3S
Beverly Hills Hotel	9641 Sunset Blvd	Beverly Hills	90210	2S2
J.R. Pinkham Residence	9930 Tower Ln	Beverly Hills	90210	3S
Whitley Court	1722 Whitley Ave	Los Angeles	90272	1D
Whitley Court	1726 Whitley Ave	Los Angeles	90272	1D
Whitley Court	1728 Whitley Ave	Los Angeles	90272	1D
Chatsworth Community Church	22601 Lassen St	Los Angeles	91311	3S
Charles Alexander Mentry House; Mentry House	27201 W Pico Canyon Rd	Santa Clarita	91320	3B
Felton School	27201 W Pico Canyon Rd	Santa Clarita	91320	3B
Mentry Barn & Carriage House	27201 W Pico Canyon Rd	Santa Clarita	91320	3D
Faith Bible Church	18531 Gresham St	Los Angeles	91324	3S
Temple Ramat Zion Synagogue	17655 Devonshire St	Northridge	91325	2S2
Victory Medical Center	19231 Victory Blvd	Reseda	91335	2S2
Salvation Army-Thrift Store	110 N Maclay St	San Fernando	91340	2S2
Lopez Adobe	1100 Pico St	San Fernando	91340	1S
San Fernando Junior High School	130 N Brand Blvd	San Fernando	91340	2S2
Mission San Fernando Rey De Espana	15151 San Fernando Mission Blvd	San Fernando	91340	1S
Old Rock Scout House	208 Park Ave	San Fernando	91340	2S2
	216 Hagar St	San Fernando	91340	2S2
	447 Hagar St	San Fernando	91340	2S2
Sylmar Recreation Center - Susan B Anthony Buildin	13109 Borden Ave	Los Angeles	91342	2D2
Citi Bank	16800 Devonshire St	Granada Hills	91344	2S2

Pico, Romulo, Adobe	10940 Sepulveda Blvd	Mission Hills	91345	1S
Stone House	8642 Sunland Blvd	Los Angeles	91352	3S
Fire Station No. 77	8943 Glenoaks Blvd	Los Angeles	91352	2S2
California Institute Of The Arts Main Building	24700 Mc Bean PKWY	Santa Clarita	91355	2S2
Boykin Hall | James D. Boykin Laboratory Center	26455 Rockwell Canyon Rd	Santa Clarita	91355	2S2
Pico #4^Other Name | Pico Canyon Oil Field^Other Name | Well #Cso 4^Other Name		Stevenson Ranch	91381	1S
Van Nuys City Hall	14410 Sylvan St	Van Nuys	91401	2S2
	8701 Tyrone Ave	Los Angeles	91402	2D2
Panorama City Historic District	8715 N Murietta Ave	Los Angeles	91402	2D2
	15300 Ventura Blvd	Sherman Oaks	91403	2S2
Old Van Nuys Post Office	14530 Sylvan St	Van Nuys	91404	3S
Sepulveda Flood Control Dam	15758 Burbank Blvd	Van Nuys	91406	2S2
Hathaway Building	7120 Hayvenhurst Ave	Van Nuys	91406	2S2
Valley Municipal Building, Van Nuys City Hall	14410 Sylvan St	Los Angeles	91409	2S2
Van Nuys Branch	14553 Sylvan Wy	Los Angeles	91411	1S
Department Of Water & Power	14601 Aetna St	Van Nuys	91411	2S2
Chase Knoll Apartments	13401 Riverside Dr	Los Angeles	91423	2S3
Garnier Building	16756 Moorpark St	Los Angeles	91436	1D
Limestone Blacksmith Shop	16756 Moorpark St	Los Angeles	91436	1D
Rancho El Encino	16756 Moorpark St	Encino	91436	1S
Vincente De La Osa Adobe	16756 Moorpark St	Los Angeles	91436	1D
Phils Diner	11138 Chandler Blvd	North Hollywood	91601	2S2

Southern Pacific Electric Station	11275 Chandler Blvd	North Hollywood	91601	2S2
Department Of Water And Power	5108 Lankershim Blvd	Los Angeles	91601	2S2
North Hollywood Library | Amelia Earhart Library	5211 N Tujunga Ave	Los Angeles	91601	1S
El Portal Theatre	5265 Lankershim Blvd	Los Angeles	91601	2S2
Security Trust And Savings Bank, Paperback Shack B	5303 Lankershim Blvd	Los Angeles	91601	2S2
Lankershim Southern Pacific Railroad Depot, Hendri	5401 Lankershim Blvd	Los Angeles	91601	2S2
Standard Oil Service Station	5401 Lankershim Blvd	North Hollywood	91601	2S
Circus Liquor Jr Market	5600 Vineland Ave	Los Angeles	91601	2S2
Case Study House No. 1	10152 Toluca Lake Ave	Los Angeles	91602	1S
Casa Adobe Hacienda Of Don Tomas Feliz, Campo De C	3919 Lankershim Blvd	Los Angeles	91602	1D
St Saviors Chapel	3700 Coldwater Canyon Dr	Los Angeles	91604	3S
Portal Of The Folded Wings Shrine To Aviation And	10621 Victory Blvd	North Hollywood	91606	1S
Victory Square	12444 Victory Blvd	North Hollywood	91606	2S2
Great Wall Of Los Angeles	12900 Oxnard ST	Valley Glen	91606	1S
S.B. Gleason Residence	504 Bellingham Ave	Los Angeles	91607	2S2
Universal City And Studios	100 Universal City Plaza	Universal City	91608	3S
Hollywood Reservoir Complex	Cahuenga Blvd	Los Angeles		2D2
Mission Wells And Settling Basin	Havana Ave	Los Angeles		3S
Los Angeles River Flood Channel | Reach 2a	I 5	Los Angeles		2S2
Cascades	Interstate 5	San Fernando		3S

Hollywood Reservoir Complex	Lake Hollywood Dr	Los Angeles	2D2
Hollywood Reservoir Complex	Lake Hollywood Dr	Los Angeles	2D2
Hollywood Reservoir Complex	Lake Hollywood Dr	Los Angeles	2D2
Hollywood Reservoir Complex	Lake Hollywood Dr	Los Angeles	2D2
Palmer, Minnie Hill, House	S Chatsworth Park	Chatsworth	1S
San Fernando Valley Generating Plant	11845 Vose St	Los Angeles	2S2
Olive Switching Station	13355 San Fernando Rd	Los Angeles	2S2
Fire Station No. 39	14415 Sylvan St	Los Angeles	2D2
Barber Shop-Olive View	14445 Olive View Dr	Los Angeles	2S2
Building #403	14445 Olive View Dr	Los Angeles	2S2
Building 106-Olive View	14445 Olive View Dr	Los Angeles	2S2
Building 108-Olive View	14445 Olive View Dr	Los Angeles	2S2
Building 110-Olive View	14445 Olive View Dr	Los Angeles	2S2
Building 114-Olive View	14445 Olive View Dr	Los Angeles	2S2
Building 301-Olive View	14445 Olive View Dr	Los Angeles	2S2
Building 303-Olive View	14445 Olive View Dr	Los Angeles	2S2
Building 305-Olive View	14445 Olive View Dr	Los Angeles	2S2
Building 307-Olive View	14445 Olive View Dr	Los Angeles	2S2
Building H-Olive View	14445 Olive View Dr	Los Angeles	2S2
Building I-Olive View	14445 Olive View Dr	Los Angeles	2S2
Buildings #401 And 402	14445 Olive View Dr	Los Angeles	2S2
Bungalow C-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow D-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow E-Olive View	14445 Olive View Dr	Los Angeles	2S2

Bungalow F-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow G-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow J-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow L-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow M-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow N-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow O-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow P-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow Q-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow R-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow S-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow T-Olive View	14445 Olive View Dr	Los Angeles	2S2
Convalescent Cottage-Olive View	14445 Olive View Dr	Los Angeles	2S2
Coroner's Office-Olive View	14445 Olive View Dr	Los Angeles	2S2
Cottage #1-Olive View	14445 Olive View Dr	Los Angeles	2S2
Cottage #3-Olive View	14445 Olive View Dr	Los Angeles	2S2
Cottage #4-Olive View	14445 Olive View Dr	Los Angeles	2S2
Cottage U-Olive View	14445 Olive View Dr	Los Angeles	2S2
Double Garage-Olive View	14445 Olive View Dr	Los Angeles	2S2
Film Storage Vault, Olive View	14445 Olive View Dr	Los Angeles	2S2
Garage	14445 Olive View Dr	Los Angeles	2S2
Garage-Olive View	14445 Olive View Dr	Los Angeles	2S2
Garbage And Can House-Olive View	14445 Olive View Dr	Los Angeles	2S2
Guest Cottage-Olive View	14445 Olive View Dr	Los Angeles	2S2

Medical Transcription-Olive View	14445 Olive View Dr	Los Angeles	2S2
Morgue-Olive View	14445 Olive View Dr	Los Angeles	2S2
Olive View	14445 Olive View Dr	Los Angeles	2S2
Personnel Payroll-Olive View	14445 Olive View Dr	Los Angeles	2S2
Ward 103	14445 Olive View Dr	Los Angeles	2S2
Warehouse-Olive View	14445 Olive View Dr	Los Angeles	2S2
Women Doctor's Cottage-Olive View	14445 Olive View Dr	Los Angeles	2S2
Brand Park Comfort Station	15174 San Fernando Mission Blvd	Los Angeles	2D2
Brand Park-Chest High Walls	15174 San Fernando Mission Blvd	Los Angeles	2D2
Brand Park-Entrance Gate	15174 San Fernando Mission Blvd	Los Angeles	2D2
Brand Park-Fountain	15174 San Fernando Mission Blvd	Los Angeles	2D2
Brand Park-Mission Fountain	15174 San Fernando Mission Blvd	Los Angeles	2D2
Brand Park-Pergolas	15174 San Fernando Mission Blvd	Los Angeles	2D2
Brand Park-Statue	15174 San Fernando Mission Blvd	Los Angeles	2D2
Brand Park-Sun Dial	15174 San Fernando Mission Blvd	Los Angeles	2D2
Food Storage Building	16756 Moorpark St	Los Angeles	1D
Pilgrimage Theater	2580 Cahuenga Blvd	Hollywood	2S2
Mentryville	27201 W Pico Canyon Rd	Santa Clarita	3S
Carpenter Elementary School	3909 Carpenter Ave	Los Angeles	2S2

North Hollywood High School	5231 Colfax Ave	Los Angeles	2S2
North Hollywood High School-Auditorium	5231 Colfax Ave	Los Angeles	2D2
North Hollywood High School-Frasher Hall	5231 Colfax Ave	Los Angeles	2D2
North Hollywood High School-Library	5231 Colfax Ave	Los Angeles	2D2
North Hollywood High School-Main Bldg	5231 Colfax Ave	Los Angeles	2D2
North Hollywood High School-Randolph Hall	5231 Colfax Ave	Los Angeles	2D2
North Hollywood Recreation Center	5301 Tujunga Ave	Los Angeles	2S2
North Hollywood Recreation Center-Baseball Diamond	5301 Tujunga Ave	Los Angeles	2D2
North Hollywood Recreation Center-Community Buildi	5301 Tujunga Ave	Los Angeles	2D2
North Hollywood Recreation Center-Playground	5301 Tujunga Ave	Los Angeles	2D2
North Hollywood Recreation Center-Swimming Pool	5301 Tujunga Ave	Los Angeles	2D2
Morningside Elementary School	575 N Maclay Ave	San Fernando	2S2
South Brand Boulevard Residential District	664 S Brand Blvd	Los Angeles	2D2
Canoga Park High School	6850 Topanga Canyon Ave	Canoga Park	2S2
South Brand Boulevard Residential District	702 S Brand Blvd	Los Angeles	2D2
South Brand Boulevard Residential District	705 S Brand Blvd	Los Angeles	2D2
South Brand Boulevard Residential District	707 S Brand Blvd	Los Angeles	2D2

South Brand Boulevard Residential District	708 S Brand Blvd	Los Angeles	2D2
South Brand Boulevard Residential District	712 S Brand Blvd	Los Angeles	2D2
South Brand Boulevard Residential District	713 S Brand Blvd	Los Angeles	2D2
South Brand Boulevard Residential District	719 S Brand Blvd	Los Angeles	2D2
South Brand Boulevard Residential District	722 S Brand Blvd	Los Angeles	2D2
Canoga Park Community Center; Fire Station #72	7248 Owensmouth Ave	Los Angeles	2D2
Reseda Elementary School	7265 Amigo Ave	Los Angeles	2S2
Canoga Park Elementary School	7428 Topanga Canyon Blvd	Los Angeles	2S2
Canoga Park Elementary School-Administration Bldg	7428 Topanga Canyon Blvd	Los Angeles	2D2
Canoga Park Elementary School-Auditorium	7428 Topanga Canyon Blvd	Los Angeles	2D2
South Brand Boulevard Residential District	751 S Brand Blvd	Los Angeles	2D2
South Brand Boulevard Residential District	752 S Brand Blvd	Los Angeles	2D2
South Brand Boulevard Residential District	756 S Brand Blvd	Los Angeles	2D2
South Brand Boulevard Residential District	757 S Brand Blvd	Los Angeles	2D2
South Brand Boulevard Residential District	762 S Brand Blvd	Los Angeles	2D2
South Brand Boulevard Residential District	767 S Brand Blvd	Los Angeles	2D2

South Brand Boulevard Residential District	802 S Brand Blvd	Los Angeles		2D2
South Brand Boulevard Residential District	808 S Brand Blvd	Los Angeles		2D2
Sun Valley Recreation Center-Community Building	8133 Vineland Ave	Los Angeles		2D2
Stonehurst Recreation Center	9901 Dronfield St	Los Angeles		2D2
Corriganville Park	7001 Smith Road	Simi Valley	93063	Local Resource Identified During Consultation
Stagecoach Road	7700 Lilac Lane	Simi Valley	93063	Local Resource Identified During Consultation

Appendix B

Potentially Sensitive Historic Properties Within the APE

ESA

Name	Street Address	City	Zip	Evaluation Info
Marymount High School	10643 Sunset Blvd	Los Angeles	90024	2S2
Ralphs Grocery Store	1142 Westwood Blvd	Los Angeles	90024	1S
UCLA Hedrick Hall	250 De Neve Dr	Los Angeles	90024	2S2
UCLA-Ackerman Hall	308 Westwood Plaza	Los Angeles	90024	2S2
Dickson Plaza - UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2
Dodd Hall-UCLA, 309 Portola Pl, 405 Hilgard Ave	405 N Hilgard Ave	Los Angeles	90024	2S2
Haines Hall-UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2
Janss Steps - UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2
Kerckoff Hall-UCLA	405 N Hilgard Ave	Los Angeles	90024	2S2
Kinsey Hall-UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2
Men's Gym-UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2
Moore Hall-UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2
Murphy Hall-UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2
Powell Library-UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2
Royce Hall-UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2
Dutch Reformed Church / First Baptist Church+46:77	405 N Hilgard Ave	Los Angeles	90024	2S2
Women's Gym-UCLA	405 N Hilgard Ave	Los Angeles	90024	2D2
Fox Westwood Village Theater	959 Broxton Ave	Los Angeles	90024	2S2
Hollywood High School	1521 N Highland Ave	Los Angeles	90028	1D
Hollywood High School Athletic Field	1521 N Highland Ave	Los Angeles	90028	1D
Hollywood High School Auditorium	1521 N Highland Ave	Los Angeles	90028	1D
Hollywood High School Historic District	1521 N Highland Ave	Los Angeles	90028	1S
Hollywood High School Liberal Arts Bldg	1521 N Highland Ave	Los Angeles	90028	1D
Hollywood High School Library	1521 N Highland Ave	Los Angeles	90028	1D

Hollywood High School Science Bldg	1521 N Highland Ave	Los Angeles	90028	1D
Talbot-Wood Dwelling	1608 N Las Palmas Ave	Los Angeles	90028	2S4
Whitley Court	1720 Whitley Ave	Los Angeles	90028	1S
La Levenda	1737 Whitley Ave	Los Angeles	90028	3S
Canterbury Apartment Hotel, The	1746 N Cherokee Ave	Los Angeles	90028	1S
The Fontenoy	1811 Whitley Ave	Los Angeles	90028	3S
Fleur De Lis	1825 Whitley Ave	Los Angeles	90028	2S2
El Cabrillo	1832 N Grace Ave	Los Angeles	90028	1S
El Cabrillo Fountain	1832 N Grace Ave	Los Angeles	90028	1D
El Cabrillo Wall	1832 N Grace Ave	Los Angeles	90028	1D
The Havenhurst	1861 Whitley Ave	Los Angeles	90028	3S
	1921 Whitley Ave	Los Angeles	90028	2S2
Hollywood American Legion Post #43	2035 N Highland Ave	Los Angeles	90028	3S
Hollywood Boulevard Commercial And Entertainment D	6200 Hollywood Blvd	Los Angeles	90028	1S
Jj Newberrys	6600 Hollywood Blvd	Los Angeles	90028	1D
The Baine Building, Merchants Title	6601 Hollywood Blvd	Los Angeles	90028	1D
Vogue Theater	6629 Hollywood Blvd	Los Angeles	90028	3S
Cherokee Building	6630 Hollywood Blvd	Los Angeles	90028	1D
Musso Frank Grill	6663 Hollywood Blvd	Los Angeles	90028	1D
	6679 Hollywood Blvd	Los Angeles	90028	1D
Outpost Building	6701 Hollywood Blvd	Los Angeles	90028	1D
Grauman's Egyptian Theater	6708 Hollywood Blvd	Los Angeles	90028	1D
Pig N Whistle Restaurant, London Britches	6718 Hollywood Blvd	Los Angeles	90028	1D
Christie Hotel, Scientology Institute	6724 Hollywood Blvd	Los Angeles	90028	1D

Pickwick Bookstore, B. Dalton Pickwick Bookstore	6743 Hollywood Blvd	Los Angeles	90028	1D
Luberman Company, Bennett's Book Store	6753 Hollywood Blvd	Los Angeles	90028	3S
Montmartre	6755 Hollywood Blvd	Los Angeles	90028	1D
Hollywood Wax Museum	6765 Hollywood Blvd	Los Angeles	90028	1D
Hollywood Theatre	6766 Hollywood Blvd	Los Angeles	90028	1D
Los Angeles First Federal, Security Pacific Bank	6777 Hollywood Blvd	Los Angeles	90028	1D
Bank Of America	6780 Hollywood Blvd	Los Angeles	90028	1D
	6806 Hollywood Blvd	Los Angeles	90028	1D
El Capitan Theater Office Building	6834 Hollywood Blvd	Los Angeles	90028	1D
Hollywood Masonic Temple	6840 Hollywood Blvd	Los Angeles	90028	1D
Seven Seas	6904 Hollywood Blvd	Los Angeles	90028	1D
Grauman's Chinese Theater	6925 Hollywood Blvd	Los Angeles	90028	1D
Hollywood Roosevelt Hotel	7000 Hollywood Blvd	Los Angeles	90028	1D
Hillview Cadillac, Motorame	7001 Hollywood Blvd	Los Angeles	90028	1D
Arthur Murray Dance Studio	7016 Hollywood Blvd	Los Angeles	90028	3S
Garden Court Apartments Residential Hotel	7021 Hollywood Blvd	Los Angeles	90028	3S
Arthur Murray	7024 Hollywood Blvd	Los Angeles	90028	1D
Hollywood Professional Bldg	7046 Hollywood Blvd	Los Angeles	90028	1D
Security Trust	7051 Hollywood Blvd	Los Angeles	90028	1D
	7055 Hollywood Blvd	Los Angeles	90028	1D

Hollywood Congregational Church	7065 Hollywood Blvd	Los Angeles	90028	1D
Samuel Goldwyn Studios	1040 N Formosa Ave	Los Angeles	90046	3S
Pickford Fairbanks Studio	1041 Formosa Ave	West Hollywood	90046	3S
Plummer Park Community Clubhouse	1200 N Vista St	West Hollywood	90046	1S
Ramona, The	1236 N Harper Ave	West Hollywood	90046	2S
La Fontaine	1285 N Crescent Heights Blvd	West Hollywood	90046	3S
Mexican Village	1300 N Harper Ave	West Hollywood	90046	1D
Romanesque Villa Apartments	1301 N Harper Ave	West Hollywood	90046	1D
El Mirador	1302 N Sweetzer Ave	West Hollywood	90046	3S
Casa Granda Apartments, Harper House	1334 N Harper Ave	West Hollywood	90046	1D
	1343 N Laurel Ave	West Hollywood	90046	2S2
Villa D'este	1355 Laurel Ave	West Hollywood	90046	3S
Ronda | Mi Casa Apartments	1400 Havenhurst Dr	West Hollywood	90046	1S
Colonial House	1416 N Havenhurst Dr	West Hollywood	90046	1S
Andalusia	1471 Havenhurst Dr	Los Angeles	90046	1S
The Adalusia Fountain	1471 Havenhurst Dr	Los Angeles	90046	1D
The Andalusia Building 2	1473 Havenhurst Dr	Los Angeles	90046	1D
The Andalusia Building 3	1475 Havenhurst Dr	Los Angeles	90046	1D
Hollywood School For Girls	1741 N La Brea Ave	Los Angeles	90046	1S
Hollywood School For Girls Cottage	1741 N La Brea Ave	Los Angeles	90046	1D
Hollywood School For Girls Shed	1741 N La Brea Ave	Los Angeles	90046	1D
Woman's Club Of Hollywood	1741 N La Brea Ave	Los Angeles	90046	1S
Wattles Mansion And Gardens	1824 N Curson Ave	Los Angeles	90046	3S

Toberman, C. E., Estate	1847 Camino Palmero	Hollywood	90046	1S
Atkinson Farnum Swain Residence	2003 N La Brea Terrace	Los Angeles	90046	2S2
Durfee Residence	2003 N La Brea Terrace	Los Angeles	90046	2S2
Boy Scouts Of America Clubhouse, Lions Club	623 N Robertson Blvd	West Hollywood	90046	3S
	7109 Hawthorn Ave	Los Angeles	90046	3S
	7113 Hawthorn Ave	Los Angeles	90046	3S
	7117 Hawthorn Ave	Los Angeles	90046	3S
	7129 Hawthorn Ave	Los Angeles	90046	3S
Normandie Towers	7219 Hampton Ave	West Hollywood	90046	2D2
Oldest House In Hollywood	7377 Santa Monica Blvd	Los Angeles	90046	3S
Facade Improvements	7916 W Santa Monica Blvd	West Hollywood	90046	2D2
El Greco Apartment	817 N Hayworth Ave	Los Angeles	90046	1S
Chateau Marmont	8221 Sunset Blvd	Los Angeles	90046	3S
PATIO DEL MORO | Casita Para Una Estrellita	8225 Fountain Ave	West Hollywood	90046	1D
Les Maisonettes	8250 Fountain Ave	West Hollywood	90046	1D
Schindler, R. M., House	833 N Kings Rd	West Hollywood	90046	1S
William S. Hart House	8341 De Longpre Ave	West Hollywood	90046	2S4
Sunset Towers	8358 Sunset Blvd	West Hollywood	90046	1S
Coronet Apartments Hacienda Arms, Piazza Del Sol	8439 Sunset Blvd	West Hollywood	90046	1S
Adobe	916 N Genesee Ave	West Hollywood	90046	3S
Catholic-Protestant Chapels, Veterans Admin Center	Eisenhower Ave	Los Angeles	90049	1D

Streetcar Depot | Depot #66	Pershing Ave	Los Angeles	90049	1D
Mount St Mary's College Brady Hall	12001 Chalon Rd	Los Angeles	90049	2D2
Mount St Mary's College Carondelet Hall	12001 Chalon Rd	Los Angeles	90049	2D2
Mount St Mary's College Charles Willard Memorial L	12001 Chalon Rd	Los Angeles	90049	2D2
Mount St Mary's College Historic District	12001 Chalon Rd	Los Angeles	90049	2S2
Mount St Mary's College Mary Chapel	12001 Chalon Rd	Los Angeles	90049	2S2
Mount St Mary's College Rossiter Hall	12001 Chalon Rd	Los Angeles	90049	2D2
Mount St Mary's College St Joseph's Hall	12001 Chalon Rd	Los Angeles	90049	2D2
Los Angeles National Cemetery Arcade	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Bivouac Of Dead Plaq	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Chapel (Admin Bldg)	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Civil War Soldier Mo	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Columbarium	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Comfort Station	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Flagpole	950 S Sepulveda Blvd	Los Angeles	90049	1D

Los Angeles National Cemetery Fuel Storage Bldg	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Maintenance Bldg 1	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Maintenance Bldg 2	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery NHDVS Monument	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Rostrum	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Span-Amer War Monume	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Terraces/Overlooks	950 S Sepulveda Blvd	Los Angeles	90049	1D
Los Angeles National Cemetery Wilshire Blvd Gate H	950 S Sepulveda Blvd	Los Angeles	90049	1D
	1914 N Las Palmas Ave	Los Angeles	90068	1D
Shrader House	1927 N Highland Ave	Los Angeles	90068	3S
Freeman House F L Wright Block House Thematic	1962 Glencoe Wy	Los Angeles	90068	1CL
	1965 Whitley Ave	Los Angeles	90068	1D
	1969 Whitley Ave	Los Angeles	90068	1D
Yamashiro Historic District Garage	1999 N Sycamore Ave	Los Angeles	90068	1D
Yamashiro Historic District Groundkeeper's Cottage	1999 N Sycamore Ave	Los Angeles	90068	1D
Yamashiro Historic District Main House	1999 N Sycamore Ave	Los Angeles	90068	1D

Yamashiro Historic District Menagerie House	1999 N Sycamore Ave	Los Angeles	90068	1D
Valentino Apartments	2000 N Highland Ave	Los Angeles	90068	3S
	2000 N Las Palmas Ave	Los Angeles	90068	1D
John Thomas	2002 N Las Palmas Ave	Los Angeles	90068	1D
	2002 Whitley Ave	Los Angeles	90068	1D
	2006 N Las Palmas Ave	Los Angeles	90068	1D
	2008 N Las Palmas Ave	Los Angeles	90068	1D
	2008 Whitley Ave	Los Angeles	90068	1D
	2014 Grace Ave	Los Angeles	90068	1D
	2014 N Las Palmas Ave	Los Angeles	90068	1D
	2014 Whitley Ave	Los Angeles	90068	1D
	2015 Whitley Ave	Los Angeles	90068	1D
	2017 Holly Hill Terrace	Los Angeles	90068	1D
	2018 Whitley Ave	Los Angeles	90068	1D
Francis X Bushman	2020 Grace Ave	Los Angeles	90068	1D
	2020 Whitley Terrace Steps	Los Angeles	90068	1D
	2021 Holly Hill Terrace	Los Angeles	90068	1D
	2021 Whitley Terrace Steps	Los Angeles	90068	1D
	2022 Holly Hill Terrace	Los Angeles	90068	1D
	2022 Whitley Ave	Los Angeles	90068	1D
	2025 Grace Ave	Los Angeles	90068	1D
	2025 Holly Hill Terrace	Los Angeles	90068	1D
	2026 Holly Hill Terrace	Los Angeles	90068	1D
	2026 N Las Palmas Ave	Los Angeles	90068	1D
Gertrude Astor Home	2030 Holly Hill Terrace	Los Angeles	90068	1D
	2031 Holly Hill Terrace	Los Angeles	90068	1D
	2032 N Las Palmas Ave	Los Angeles	90068	1D
	2034 Grace Ave	Los Angeles	90068	1D

	2034 N Las Palmas Ave	Los Angeles	90068	1D
	2036 Holly Hill Terrace	Los Angeles	90068	1D
	2037 Holly Hill Terrace	Los Angeles	90068	1D
	2037 Whitley Terrace	Los Angeles	90068	1D
	2038 N Las Palmas Ave	Los Angeles	90068	1D
	2040 N Las Palmas Ave	Los Angeles	90068	1D
Martin Balsam Home, Joyce Van Patten Home	2041 Grace Ave	Los Angeles	90068	1D
	2042 N Las Palmas Ave	Los Angeles	90068	1D
	2044 Grace Ave	Los Angeles	90068	1D
	2049 N Las Palmas Ave	Los Angeles	90068	1D
Mary Jackson Home	2055 Grace Ave	Los Angeles	90068	1D
	2055 N Las Palmas Ave	Los Angeles	90068	1D
Paul Kelly	2057 N Las Palmas Ave	Los Angeles	90068	1D
Gloria Swanson	2058 Watsonia Terrace	Los Angeles	90068	1D
	2059 Watsonia Terrace	Los Angeles	90068	1D
Richard And Karen Wookey Home	2062 Watsonia Terrace	Los Angeles	90068	1D
	2064 Watsonia Terrace	Los Angeles	90068	1D
H J Whitley Home	2073 Whitley Terrace	Los Angeles	90068	1D
John Charles Thomas	2074 Watsonia Terrace	Los Angeles	90068	1D
Lasky Demille Studio Barn	2100 N Highland Ave	Los Angeles	90068	1S
Richard Eagan Home	2133 Fairfield Ave	Los Angeles	90068	1D
	2139 Fairfield Ave	Los Angeles	90068	1D
Hollywood Bowl	2301 N Highland Ave	Los Angeles	90068	2S2
Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2D2

Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2D2
Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2D2
Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2D2
Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2D2
Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2D2
Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2D2
Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2D2
Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2D2
Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	2S2
	6510 Cerritos Pl	Los Angeles	90068	1D
	6526 Cerritos Pl	Los Angeles	90068	1D
	6532 Cerritos Pl	Los Angeles	90068	1D
	6542 Bella Vista Wy	Los Angeles	90068	1D
	6603 Emmet Terrace	Los Angeles	90068	1D
Beverly Dangelo Home	6603 Whitley Terrace	Los Angeles	90068	1D
	6607 Padre Terrace	Los Angeles	90068	1D
	6610 Padre Terrace	Los Angeles	90068	1D
	6611 Emmet Terrace	Los Angeles	90068	1D
	6613 Whitley Terrace	Los Angeles	90068	1D
	6614 Emmet Terrace	Los Angeles	90068	1D
Zoellner Home	6615 Emmet Terrace	Los Angeles	90068	1D
Carmen Miranda Home	6615 Padre Terrace	Los Angeles	90068	1D
H H Barter House	6620 Whitley Terrace	Los Angeles	90068	1D
Phyllis Haver Home	6621 Emmet Terrace	Los Angeles	90068	1D
	6621 Padre Terrace	Los Angeles	90068	1D

	6621 Whitley Terrace	Los Angeles	90068	1D
Jean Parker Home	6627 Emmet Terrace	Los Angeles	90068	1D
Whitley Home	6630 Whitley Terrace	Los Angeles	90068	1D
	6633 Emmet Terrace	Los Angeles	90068	1D
	6633 Whitley Terrace	Los Angeles	90068	1D
	6636 Emmet Terrace	Los Angeles	90068	1D
	6642 Emmet Terrace	Los Angeles	90068	1D
Amy Archard Home	6650 Whitley Terrace	Los Angeles	90068	1D
	6654 Whitley Terrace	Los Angeles	90068	1D
	6655 Emmet Terrace	Los Angeles	90068	1D
	6657 Emmet Terrace	Los Angeles	90068	1D
	6658 Emmet Terrace	Los Angeles	90068	1D
Henry Jones Home	6658 Whitley Terrace	Los Angeles	90068	1D
Beulah Bondi	6660 Whitley Terrace	Los Angeles	90068	1D
	6661 Emmet Terrace	Los Angeles	90068	1D
	6662 Emmet Terrace	Los Angeles	90068	1D
Chester Morris Home	6662 Whitley Terrace	Los Angeles	90068	1D
	6663 Bon Air Pl	Los Angeles	90068	1D
Rissner Patty	6665 Emmet Terrace	Los Angeles	90068	1D
Anita Louise	6666 Whitley Terrace	Los Angeles	90068	1D
Barbara Lamarr	6672 Whitley Terrace	Los Angeles	90068	1D
	6673 Emmet Terrace	Los Angeles	90068	1D
	6674 Bon Air Pl	Los Angeles	90068	1D
	6680 Bon Air Pl	Los Angeles	90068	1D
	6680 Emmet Terrace	Los Angeles	90068	1D

Maurice Chevalier Home	6680 Whitley Terrace	Los Angeles	90068	1D
William Eythe	6689 Emmet Terrace	Los Angeles	90068	1D
Richard Barthelmess Home, Bill Bast Home	6691 Whitley Terrace	Los Angeles	90068	1D
Robert Vignola	6697 Whitley Terrace	Los Angeles	90068	1D
	6707 Milner Rd	Los Angeles	90068	1D
	6708 Milner Rd	Los Angeles	90068	1D
	6711 Whitley Terrace	Los Angeles	90068	1D
	6717 Milner Rd	Los Angeles	90068	1D
	6717 Whitley Terrace	Los Angeles	90068	1D
Marie Dressler Home	6718 Milner Rd	Los Angeles	90068	1D
	6726 Milner Rd	Los Angeles	90068	1D
	6727 Milner Rd	Los Angeles	90068	1D
	6733 Wedgewood Pl	Los Angeles	90068	1D
Dennis Okeefe	6734 Wedgewood Pl	Los Angeles	90068	1D
	6735 Wedgewood Pl	Los Angeles	90068	1D
Fay Compton	6738 Wedgewood Pl	Los Angeles	90068	1D
Irene Tedrow	6740 Milner Rd	Los Angeles	90068	1D
	6740 Whitley Terrace	Los Angeles	90068	1D
	6746 Milner Rd	Los Angeles	90068	1D
W C Fields	6746 Wedgewood Pl	Los Angeles	90068	1D
William Wellman	6747 Milner Rd	Los Angeles	90068	1D
	6749 Whitley Terrace	Los Angeles	90068	1D
	6750 Wedgewood Pl	Los Angeles	90068	1D
	6753 Milner Rd	Los Angeles	90068	1D
Lloyd Nolan	6754 Wedgewood Pl	Los Angeles	90068	1D
	6755 Wedgewood Pl	Los Angeles	90068	1D
	6756 Milner Rd	Los Angeles	90068	1D
	6757 Milner Rd	Los Angeles	90068	1D
	6758 Milner Rd	Los Angeles	90068	1D

	6760 Milner Rd	Los Angeles	90068	1D
	6764 Milner Rd	Los Angeles	90068	1D
Marquardt	6770 Milner Rd	Los Angeles	90068	1D
	6776 Milner Rd	Los Angeles	90068	1D
	6782 Milner Rd	Los Angeles	90068	1D
	6943 Camrose Dr	Los Angeles	90068	2D2
North Harper Avenue Historic District	N Harper Ave	West Hollywood	90069	1S
The Royal Gardens	1255 N Flores St	West Hollywood	90069	3S
	1334 N Laurel Ave	West Hollywood	90069	2S2
Mitchell Camera Corporation Factory/Studio One	652 N La Peer Dr	West Hollywood	90069	2S
United Artists	7200 Santa Monica Blvd	West Hollywood	90069	2S2
	7950 W Fountain Ave	West Hollywood	90069	3S
Storer House	8161 Hollywood Blvd	Los Angeles	90069	1S
Automotive Garage	8264 Fountain Ave	West Hollywood	90069	1D
	8320 W Fountain Ave	West Hollywood	90069	3S
Hacienda Arms Apartments | Coronet Apartments	8439 Sunset Blvd	West Hollywood	90069	1S
Wright, Lloyd, Home And Studio	858 N Doheny Dr	West Hollywood	90069	1S
	8701 W Santa Monica Blvd	West Hollywood	90069	3S
Dutch Reformed Church, First Baptist Church	9025 W Cynthia St	West Hollywood	90069	3S
County Library	903 N Westhourne Ave	West Hollywood	90069	3S
	927 N Palm Ave	West Hollywood	90069	3S
	931 N Palm Ave	West Hollywood	90069	3S
County Fire Station #7	954 N Hancock Ave	West Hollywood	90069	3S
Rogers	1000 N Crescent Dr	Beverly Hills	90210	3S
Thomas	1006 N Crescent Dr	Beverly Hills	90210	3S
Buster Keaton Estate	1018 Pamela Dr	Beverly Hills	90210	3S

Pratt Residence	1028 Ridgedale Dr	Beverly Hills	90210	3S
Corrine Griffith Estate, Ronald Colman Estate	1030 Benedict Canyon Dr	Beverly Hills	90210	3S
Silsby Spalding Estate	1100 Carolyn Wy	Beverly Hills	90210	2D3
Pickfair	1143 Summit Dr	Beverly Hills	90210	3S
Kolb Estate	1146 Tower Rd	Beverly Hills	90210	3S
Elizabeth D. Hopper House	1305 Park Wy	Beverly Hills	90210	3S
Paul Helms House	135 Copley Pl	Beverly Hills	90210	3S
Beverly Hills Women's Club	1700 Chevy Chase Dr	Beverly Hills	90210	1S
T.A. Tooey	1700 Lexington Rd	Beverly Hills	90210	3S
Payne Furnace & Supply Co. Plant, Payne Building	336 N Foothill Rd	Beverly Hills	90210	3S
Beverly Hills Mortuary	417 N Maple Dr	Beverly Hills	90210	3S
	506 N Arden Dr	Beverly Hills	90210	3D
	507 N Arden Dr	Beverly Hills	90210	3D
	508 N Arden Dr	Beverly Hills	90210	3D
	510 N Arden Dr	Beverly Hills	90210	3D
	511 N Arden Dr	Beverly Hills	90210	3D
	514 N Arden Dr	Beverly Hills	90210	3D
	515 N Arden Dr	Beverly Hills	90210	3D
Artemus Clark House	515 N Canon Dr	Beverly Hills	90210	3D
	516 N Arden Dr	Beverly Hills	90210	3D
	518 N Arden Dr	Beverly Hills	90210	3D
	519 N Arden Dr	Beverly Hills	90210	3D
	520 N Arden Dr	Beverly Hills	90210	3D
	521 N Arden Dr	Beverly Hills	90210	3D
	522 N Arden Dr	Beverly Hills	90210	3D
	523 N Arden Dr	Beverly Hills	90210	3D
	525 N Arden Dr	Beverly Hills	90210	3D
	527 N Arden Dr	Beverly Hills	90210	3D
	603 N Arden Dr	Beverly Hills	90210	3D
	604 N Arden Dr	Beverly Hills	90210	3D
	605 N Arden Dr	Beverly Hills	90210	3D
	606 N Arden Dr	Beverly Hills	90210	3D
	607 N Arden Dr	Beverly Hills	90210	3D
	610 N Arden Dr	Beverly Hills	90210	3D
Oakman	610 N Beverly Dr	Beverly Hills	90210	3S
	611 N Arden Dr	Beverly Hills	90210	3D
	612 N Arden Dr	Beverly Hills	90210	3D
	613 N Arden Dr	Beverly Hills	90210	3D

William T. Sterling House	613 N Beverly Dr	Beverly Hills	90210	3D
Herb Nacio Brown	616 N Beverly Dr	Beverly Hills	90210	3S
	617 N Arden Dr	Beverly Hills	90210	3D
	618 N Arden Dr	Beverly Hills	90210	3D
Edward M. Smith Residence	618 N Beverly Dr	Beverly Hills	90210	3D
L G Mcneil RESIDENCE	619 N Arden Dr	Beverly Hills	90210	3B
	620 N Arden Dr	Beverly Hills	90210	3D
	621 N Arden Dr	Beverly Hills	90210	3D
	624 N Arden Dr	Beverly Hills	90210	3D
Hawthorne Grammar School	624 N Rexford Dr	Beverly Hills	90210	2S2
	630 N Arden Dr	Beverly Hills	90210	3D
J.R. Wesselne Residence	703 N Alpine Dr	Beverly Hills	90210	3D
	703 N Arden Dr	Beverly Hills	90210	3D
	704 N Arden Dr	Beverly Hills	90210	3D
	705 N Alpine Dr	Beverly Hills	90210	3D
	705 N Arden Dr	Beverly Hills	90210	3B
R.B. Murphy Residence	706 N Alpine Dr	Beverly Hills	90210	3D
	706 N Arden Dr	Beverly Hills	90210	3D
Herbert Robbins Residence	707 N Alpine Dr	Beverly Hills	90210	3D
Morrison, Agnes Residence	707 N Arden Dr	Beverly Hills	90210	3S
F. A. Blensberg Residence	709 N Alpine Dr	Beverly Hills	90210	3D
	710 N Alpine Dr	Beverly Hills	90210	3D
Paul A. Jesberg Residence	711 N Alpine Dr	Beverly Hills	90210	3D
Edward Wood House	711 N Canon Dr	Beverly Hills	90210	3D
F. D. Parker Residence	713 N Alpine Dr	Beverly Hills	90210	3D
Samuel Mortensen Residence	714 N Alpine Dr	Beverly Hills	90210	3D
Frank Charon Residence	716 N Alpine Dr	Beverly Hills	90210	3D
Hopper, C. B. & H. M. House	718 N Beverly Dr	Beverly Hills	90210	3S
	720 N Foothill Rd	Beverly Hills	90210	3S
S.C. Roew Residence	721 N Alpine Dr	Beverly Hills	90210	3D
	722 N Alpine Dr	Beverly Hills	90210	3D
	724 N Alpine Dr	Beverly Hills	90210	3D

Kate Greppin Residence	801 N Alpine Dr	Beverly Hills	90210	3D
Edmund Locke Residence	801 N Rodeo Dr	Beverly Hills	90210	3S
	801 N Roxbury Dr	Beverly Hills	90210	3S
Addie Greenfield Residence	802 N Alpine Dr	Beverly Hills	90210	3D
	803 N Alpine Dr	Beverly Hills	90210	3D
Cox House	803 N Rexford Dr	Beverly Hills	90210	3S
Eudora Thorkiblsen	803 N Rodeo Dr	Beverly Hills	90210	3S
W. S. Mcgilvray Residence	804 N Alpine Dr	Beverly Hills	90210	3D
Nelson Eddy	805 N Alpine Dr	Beverly Hills	90210	3D
Elizabeth Hinckley Residence	806 N Alpine Dr	Beverly Hills	90210	3D
Theodore R. Cadwallader Residence	808 N Alpine Dr	Beverly Hills	90210	3D
	810 N Alpine Dr	Beverly Hills	90210	3D
Aleck Curlett Residence	811 N Alpine Dr	Beverly Hills	90210	3D
L.W. Newbert Residence	812 N Alpine Dr	Beverly Hills	90210	3D
A. M. G. Bertolotti Residence	814 N Alpine Dr	Beverly Hills	90210	3D
Marlene Dietrich House	822 N Roxbury Dr	Beverly Hills	90210	3S
Rigby House	832 Greenway Dr	Beverly Hills	90210	3S
Doheny Estate/Greystone	905 Loma Vista Dr	Beverly Hills	90210	1S
Earle C. Anthony	910 N Bedford Dr	Beverly Hills	90210	3S
	918 N Alpine Dr	Beverly Hills	90210	3S
Debotiller Reside3nce	9481 Sunset Blvd	Beverly Hills	90210	3S
Beverly Hills Hotel	9641 Sunset Blvd	Beverly Hills	90210	2S2
J.R. Pinkham Residence	9930 Tower Ln	Beverly Hills	90210	3S
Whitley Court	1722 Whitley Ave	Los Angeles	90272	1D
Whitley Court	1726 Whitley Ave	Los Angeles	90272	1D
Whitley Court	1728 Whitley Ave	Los Angeles	90272	1D
Chatsworth Community Church	22601 Lassen St	Los Angeles	91311	3S
Charles Alexander Mentry House; Mentry House	27201 W Pico Canyon Rd	Santa Clarita	91320	3B
Felton School	27201 W Pico Canyon Rd	Santa Clarita	91320	3B

Mentry Barn & Carriage House	27201 W Pico Canyon Rd	Santa Clarita	91320	3D
Faith Bible Church	18531 Gresham St	Los Angeles	91324	3S
Temple Ramat Zion Synagogue	17655 Devonshire St	Northridge	91325	2S2
Salvation Army-Thrift Store	110 N Maclay St	San Fernando	91340	2S2
Lopez Adobe	1100 Pico St	San Fernando	91340	1S
San Fernando Junior High School	130 N Brand Blvd	San Fernando	91340	2S2
Mission San Fernando Rey De Espana	15151 San Fernando Mission Blvd	San Fernando	91340	1S
Old Rock Scout House	208 Park Ave	San Fernando	91340	2S2
	216 Hagar St	San Fernando	91340	2S2
	447 Hagar St	San Fernando	91340	2S2
Pico, Romulo, Adobe	10940 Sepulveda Blvd	Mission Hills	91345	1S
Stone House	8642 Sunland Blvd	Los Angeles	91352	3S
California Institute Of The Arts Main Building	24700 Mc Bean Pkwy	Santa Clarita	91355	2S2
Pico #4^Other Name | Pico Canyon Oil Field^Other Name | Well #Cso 4^Other Name		Stevenson Ranch	91381	1S
Van Nuys Branch	14553 Sylvan Wy	Los Angeles	91411	1S
Garnier Building	16756 Moorpark St	Los Angeles	91436	1D
Limestone Blacksmith Shop	16756 Moorpark St	Los Angeles	91436	1D
Rancho El Encino	16756 Moorpark St	Encino	91436	1S
Vincente De La Osa Adobe	16756 Moorpark St	Los Angeles	91436	1D
Phils Diner	11138 Chandler Blvd	North Hollywood	91601	2S2
North Hollywood Library | Amelia Earhart Library	5211 N Tujunga Ave	Los Angeles	91601	1S
El Portal Theatre	5265 Lankershim Blvd	Los Angeles	91601	2S2

Security Trust And Savings Bank, Paperback Shack B	5303 Lankershim Blvd	Los Angeles	91601	2S2
Lankershim Southern Pacific Railroad Depot, Hendri	5401 Lankershim Blvd	Los Angeles	91601	2S2
Standard Oil Service Station	5401 Lankershim Blvd	North Hollywood	91601	2S
Casa Adobe Hacienda Of Don Tomas Feliz, Campo De C	3919 Lankershim Blvd	Los Angeles	91602	1D
St Saviors Chapel	3700 Coldwater Canyon Dr	Los Angeles	91604	3S
Portal Of The Folded Wings Shrine To Aviation And	10621 Victory Blvd	North Hollywood	91606	1S
Universal City And Studios	100 Universal City Plaza	Universal City	91608	3S
Hollywood Reservoir Complex	Cahuenga Blvd	Los Angeles		2D2
Mission Wells And Settling Basin	Havana Ave	Los Angeles		3S
Cascades	Interstate 5	San Fernando		3S
Hollywood Reservoir Complex	Lake Hollywood Dr	Los Angeles		2D2
Hollywood Reservoir Complex	Lake Hollywood Dr	Los Angeles		2D2
Hollywood Reservoir Complex	Lake Hollywood Dr	Los Angeles		2D2
Hollywood Reservoir Complex	Lake Hollywood Dr	Los Angeles		2D2
Palmer, Minnie Hill, House	S Chatsworth Park	Chatsworth		1S
San Fernando Valley Generating Plant	11845 Vose St	Los Angeles		2S2
Olive Switching Station	13355 San Fernando Rd	Los Angeles		2S2
Barber Shop-Olive View	14445 Olive View Dr	Los Angeles		2S2
Building #403	14445 Olive View Dr	Los Angeles		2S2
Building 106-Olive View	14445 Olive View Dr	Los Angeles		2S2

Building 108-Olive View	14445 Olive View Dr	Los Angeles	2S2
Building 110-Olive View	14445 Olive View Dr	Los Angeles	2S2
Building 114-Olive View	14445 Olive View Dr	Los Angeles	2S2
Building 301-Olive View	14445 Olive View Dr	Los Angeles	2S2
Building 303-Olive View	14445 Olive View Dr	Los Angeles	2S2
Building 305-Olive View	14445 Olive View Dr	Los Angeles	2S2
Building 307-Olive View	14445 Olive View Dr	Los Angeles	2S2
Building H-Olive View	14445 Olive View Dr	Los Angeles	2S2
Building I-Olive View	14445 Olive View Dr	Los Angeles	2S2
Buildings #401 And 402	14445 Olive View Dr	Los Angeles	2S2
Bungalow C-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow D-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow E-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow F-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow G-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow J-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow L-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow M-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow N-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow O-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow P-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow Q-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow R-Olive View	14445 Olive View Dr	Los Angeles	2S2
Bungalow S-Olive View	14445 Olive View Dr	Los Angeles	2S2

Bungalow T-Olive View	14445 Olive View Dr	Los Angeles	2S2
Convalescent Cottage-Olive View	14445 Olive View Dr	Los Angeles	2S2
Coroner's Office-Olive View	14445 Olive View Dr	Los Angeles	2S2
Cottage #1-Olive View	14445 Olive View Dr	Los Angeles	2S2
Cottage #3-Olive View	14445 Olive View Dr	Los Angeles	2S2
Cottage #4-Olive View	14445 Olive View Dr	Los Angeles	2S2
Cottage U-Olive View	14445 Olive View Dr	Los Angeles	2S2
Double Garage-Olive View	14445 Olive View Dr	Los Angeles	2S2
Film Storage Vault, Olive View	14445 Olive View Dr	Los Angeles	2S2
Garage	14445 Olive View Dr	Los Angeles	2S2
Garage-Olive View	14445 Olive View Dr	Los Angeles	2S2
Garbage And Can House-Olive View	14445 Olive View Dr	Los Angeles	2S2
Guest Cottage-Olive View	14445 Olive View Dr	Los Angeles	2S2
Medical Transcription-Olive View	14445 Olive View Dr	Los Angeles	2S2
Morgue-Olive View	14445 Olive View Dr	Los Angeles	2S2
Olive View	14445 Olive View Dr	Los Angeles	2S2
Personnel Payroll-Olive View	14445 Olive View Dr	Los Angeles	2S2
Ward 103	14445 Olive View Dr	Los Angeles	2S2
Warehouse-Olive View	14445 Olive View Dr	Los Angeles	2S2
Women Doctor's Cottage-Olive View	14445 Olive View Dr	Los Angeles	2S2
Brand Park Comfort Station	15174 San Fernando Mission Blvd	Los Angeles	2D2
Brand Park-Chest High Walls	15174 San Fernando Mission Blvd	Los Angeles	2D2

Brand Park-Entrance Gate	15174 San Fernando Mission Blvd	Los Angeles	2D2
Brand Park-Fountain	15174 San Fernando Mission Blvd	Los Angeles	2D2
Brand Park-Mission Fountain	15174 San Fernando Mission Blvd	Los Angeles	2D2
Brand Park-Pergolas	15174 San Fernando Mission Blvd	Los Angeles	2D2
Brand Park-Statue	15174 San Fernando Mission Blvd	Los Angeles	2D2
Brand Park-Sun Dial	15174 San Fernando Mission Blvd	Los Angeles	2D2
Food Storage Building	16756 Moorpark St	Los Angeles	1D
Pilgrimage Theater	2580 Cahuenga Blvd	Hollywood	2S2
Mentryville	27201 W Pico Canyon Rd	Santa Clarita	3S
Carpenter Elementary School	3909 Carpenter Ave	Los Angeles	2S2
North Hollywood High School	5231 Colfax Ave	Los Angeles	2S2
North Hollywood High School-Auditorium	5231 Colfax Ave	Los Angeles	2D2
North Hollywood High School-Frasher Hall	5231 Colfax Ave	Los Angeles	2D2
North Hollywood High School-Library	5231 Colfax Ave	Los Angeles	2D2
North Hollywood High School-Main Bldg	5231 Colfax Ave	Los Angeles	2D2
North Hollywood High School-Randolph Hall	5231 Colfax Ave	Los Angeles	2D2
North Hollywood Recreation Center	5301 Tujunga Ave	Los Angeles	2S2
North Hollywood Recreation Center-Baseball Diamond	5301 Tujunga Ave	Los Angeles	2D2

North Hollywood Recreation Center-Community Buildi	5301 Tujunga Ave	Los Angeles		2D2
North Hollywood Recreation Center-Playground	5301 Tujunga Ave	Los Angeles		2D2
North Hollywood Recreation Center-Swimming Pool	5301 Tujunga Ave	Los Angeles		2D2
Morningside Elementary School	575 N Maclay Ave	San Fernando		2S2
Canoga Park High School	6850 Topanga Canyon Ave	Canoga Park		2S2
Canoga Park Community Center; Fire Station #72	7248 Owensmouth Ave	Los Angeles		2D2
Reseda Elementary School	7265 Amigo Ave	Los Angeles		2S2
Canoga Park Elementary School	7428 Topanga Canyon Blvd	Los Angeles		2S2
Canoga Park Elementary School-Administration Bldg	7428 Topanga Canyon Blvd	Los Angeles		2D2
Canoga Park Elementary School-Auditorium	7428 Topanga Canyon Blvd	Los Angeles		2D2
Marymount High School	10643 Sunset Blvd	Los Angeles	90024	2S2
Corriganville Park	7001 Smith Road	Simi Valley	93063	Local Resource Identified During Consultation
Stagecoach Road	7700 Lilac Lane	Simi Valley	93063	Local Resource Identified During Consultation

Appendix C

Sensitive Historic Properties Within the APE

ESA

No.	Name	Street Address	City	Zip	Type
1	Mentryville And Pico Well No**. 4**	**27201** W Pico Canyon Rd	Santa Clarita		District ,4 Contributors
2	Lopez Adobe, La Casa De Geronimo	1100 Pico St	San Fernando	91340	Individual
3	Mission San Fernando Rey De Convento Building	15151 San Fernando Mission Blvd	Los Angeles	91345	Individual
4	Brand Park	15174 San Fernando Mission Blvd	Los Angeles		District ,8 Contributors
5	Romulo Pico Adobe	10940 Sepulveda Blvd	Mission Hills	91345	Individual
6	Temple Ramat Zion Synagogue	17655 Devonshire St	Northridge	91325	Individual
7	Faith Bible Church	18531 Gresham St	Los Angeles	91324	Individual
8	Van Nuys Branch Library	14553 Sylvan Wy	Los Angeles	91411	Individual
9	Valhalla Cemetery And The Portal Of The Folded Wings Shrine To Aviation	10621 Victory Blvd	North Hollywood	91606	Individual
10	Los Encinos State Historic Park	16756 Moorpark St	Encino	91436	4 Contributors
11	North Hollywood Library / Amelia Earhart Library	5211 N Tujunga Ave	Los Angeles	91601	Individual
12	El Portal Theater	5265 Lankershim Blvd	Los Angeles	91601	Individual
13	Campo De Cahuenga / Casa Adobe Hacienda Of Don Tomas Feliz	3919 Lankershim Blvd	Los Angeles	91602	Individual
14	Universal City And Studios	100 Universal City Plaza	Universal City	91608	Individual
15	Hollywood Reservoir Complex	6454 Wiedlake Dr	Los Angeles	90068	15 Contributors
16	Pilgrimage Theater	2580 Cahuenga Blvd	Hollywood		Individual
17	Hollywood Bowl	2301 N Highland Ave	Los Angeles	90068	Individual

18	Wattles Mansion And Gardens	1824 N Curson Ave	Los Angeles	90046	Individual
19	El Cabrillo Apartments	1832 N Grace Ave	Los Angeles	90028	3 Contributors
20	Whitley Court Apartments	1720-1728 Whitley Ave	Los Angeles	90028	6 Contributors (6 Are Described In The NR Nomination Even Though Only 3 Are On The BERD)
21	Doheny Estate/ Greystone Park	905 Loma Vista Dr	Beverly Hills	90210	Individual
22	Dutch Reformed Church / First Baptist Church	9025 W Cynthia St	West Hollywood	90069	Individual
23	West Hollywood Branch Library	903 N Westhourne Ave	West Hollywood	90069	Individual
24	Los Angeles National Cemetery	950 S Sepulveda Blvd	Los Angeles	90049	15 Contributors

APPENDIX M – CORRESPONDENCE IN SUPPORT OF ENVIRONMENTAL ASSESSMENT

U.S. Department
of Transportation
**Federal Aviation
Administration**

Western Service Center

2200 South 216th Street
Des Moines, Washington 98198

June 23, 2020

Ms. Julianne Polanco
State Historic Preservation Officer
California State Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816

Reference: Section 106 Consultation Initiation for the Proposed OROSZ FOUR and SLAPP THREE Departure Procedures at Hollywood Burbank Airport

Dear Ms. Polanco

The Federal Aviation Administration (FAA) is proposing to optimize the efficiency of aircraft flight routes and the supporting airspace management structure through the implementation of two Area Navigation (RNAV) "Open" Standard Instrument Departure (SID) procedures at Hollywood Burbank Airport (Burbank Airport). These two flight procedures are the proposed OROSZ FOUR RNAV SID and SLAPP THREE RNAV SID, and will be referred to as the OROSZ FOUR and SLAPP THREE respectively from now on. The proposed implementation of these two flight procedures is considered an undertaking subject to Section 106 of the National Historic Preservation Act (NHPA)(16 U.S.C. § 470 et seq.) and its implementing regulations at 36 C.F.R. Part 800 and in line with these regulations, your office has been consulted concerning this undertaking.

Background Information

The Burbank Airport is owned by the Burbank–Glendale–Pasadena Airport Authority and controlled by the governments of those cities. The Burbank Airport is located in Burbank, California, and is the closest commercial airport to key urban and business districts of Los Angeles, Burbank, Glendale and Pasadena. The airport lies in a densely urbanized area of the San Fernando Valley, with areas of high terrain located north, east, and southwest of the airport. The combination of the volume of air traffic typically present in the area, along with terrain and dense urbanization, contribute to a challenging air traffic control environment which seeks to safely balance the airspace operational requirements with community preferences for aircraft flight paths.

The Undertaking

The existing OROSZ THREE and SLAPP TWO flight procedures would be modified to take advantage of modern satellite-based navigation technology. Additionally, a segment of the proposed OROSZ FOUR and SLAPP THREE flight procedures would be designed as "open". An open SID is a type of RNAV departure flight procedure that begins and ends with a defined path, but contains a variable Air Traffic Control (ATC) assigned vector leg within the flight procedure. The open SID design provides the precision and predictability benefits of satellite-based navigation routes, while giving ATC the flexibility to direct aircraft as necessary in the highly congested airspace near Burbank Airport. In contrast to present-day operations using currently available departure procedures, the proposed open SID procedures would enable ATC to direct Runway 15 departures to the west more predictably, utilizing two new airspace fixes. After reaching the second of the two fixes, aircraft would enter the open leg of the procedure, where ATC would provide vectors for aircraft to turn north toward the next charted fix. Upon reaching the next charted fix, aircraft would resume following the departure procedure, unless directed otherwise by ATC.

Your office has been previously contacted about this undertaking in our letter dated September 18, 2018, which is shared in **Attachment A** for your convenience. Please note at the time of the letter, the proposed SID flight procedures were referred to as SLAPP TWO and OROSZ THREE. Since September 2018, the existing procedures were renumbered to reflect a small modification unrelated to the undertaking. The FAA determined after the initial consultation, that a more detailed environmental review was necessary for the proposed flight procedures. The FAA, pursuant to the National Environmental Policy Act of 1969 (NEPA), began preparing an Environmental Assessment (EA) in November 2019, to evaluate the proposed OROSZ FOUR SID and SLAPP THREE SID flight procedures at Burbank Airport. The FAA intends to complete Section 106 in conjunction with the NEPA process.

Area of Potential Effect

The General Study Area (GSA) is delineated for purposes of identifying potential environmental impacts in accordance with NEPA. The GSA, as depicted in **Attachment B**, encompasses an area of approximately 570 square miles around Burbank Airport within Los Angeles County, California. The GSA was constructed to encompass the geographic area where an aircraft flight path could be affected as a result of the proposed flight procedures. As this letter is intended to re-initiate consultation, the Area of Potential Effect (APE), has not yet been developed. The FAA intends to develop the APE in consultation with the California State Historic Preservation Office.

Identification of Interested Parties

The FAA is inviting local governments with jurisdiction over land within the GSA to participate in consultation. Consistent with this effort, the FAA requests your assistance to identify other interested parties that should be invited to participate in consultation.

Similarly, the views of all stakeholders are essential to inform Federal decision making in the Section 106 process. The FAA requests your assistance in identifying community groups or associations that likely have an interest in the undertaking and its effects on historic properties. The FAA shall seek and consider the views of the public in a manner that reflects the nature and complexity of the undertaking and its effects on historic properties

As the FAA was in the process of initiating consultation, the COVID-19 pandemic occurred. The FAA recognizes that this situation affects the consultation timetable and ultimately those of other Federal, state and local agencies. With your agreement, the FAA would like to address these initial steps in the Section 106 process in this letter, as provided in 36 CFR §800.3(g). The FAA will continue to evaluate the situation in the coming weeks and will continue to reach out to potentially other consulting and interested parties. We look forward to your response. If you have any initial comments or questions on this undertaking, please contact Ryan Weller at (206)-231-2286, or at ryan.weller@faa.gov.

Sincerely,

SHAWN MICHAEL KOZICA

Digitally signed by SHAWN MICHAEL KOZICA
Date: 2020.06.22 12:22:13 -07'00'

Shawn M. Kozica
Manager
Operations Support Group
Western Service Center

Attachments

U.S. Department
of Transportation
**Federal Aviation
Administration**

Office of the Air Traffic Organization
Western Service Area

2200 South 216th Street
Des Moines, Washington 98198

September 18, 2018

Ms. Julianne Polanco
State Historic Preservation Officer
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, California 95816

RE: Section 106 Consultation Initiation for the Proposed OROSZ THREE and SLAPP TWO Area Navigation Standard Instrument Departure Air Traffic Procedures at Hollywood Burbank Airport, Burbank, California

Dear Ms. Polanco,

The Federal Aviation Administration (FAA) is proposing to implement two Area Navigation (RNAV) "Open" Standard Instrument Departure (SID) procedures at Hollywood Burbank Airport (KBUR), which has been determined an 'undertaking' subject to Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR part 800 (as amended). The purpose of this letter is to initiate consultation under Section 106 of the NHPA.

The Proposed Action and its associated activities are also subject to the National Environmental Policy Act (NEPA) and the FAA has initiated preparation of an appropriate NEPA document to meet its regulatory obligations. The FAA intends to complete Section 106 in conjunction with the NEPA process.

Proposed Action

In March 2016, the FAA Order 8260.58A, *United States Standard for Performance Based Navigation*, changed to include design criteria for the Open SID concept based on recommendations from the Performance Based Operations Aviation Rulemaking Committee.[1]

[1] The Performance Based Operations Aviation Rulemaking Committee provides a forum for the United States (U.S.) aviation community to discuss, prioritize, and resolve issues, provide direction for U.S. flight operations criteria, support the NextGen implementation plan and produce U.S. consensus positions for global harmonization.

Specifically, following the guidance of that Order, the FAA designed and developed two Open SID procedures to be named the OROSZ THREE DEPARTURE (RNAV), and the SLAPP TWO DEPARTURE (RNAV). Aircraft utilizing the proposed "Open" SID procedures would require radar vectors[2] turning to the north as soon as practicable after departing KBUR. The current OROSZ TWO SID and SLAPP ONE SID procedures would be revised due to this change in criteria allowing embedded radar vector segments to be included in the departure procedure.

The Proposed Action General Study Area (GSA) under NEPA encompasses roughly a 30 nautical mile radius around KBUR; where departing aircraft cross the General Study Area boundary at 10,000 feet Above Ground Level (AGL). Please see Attachment 1.

Identification of Interested Parties

The FAA is inviting local governments with jurisdiction over land within the GSA to participate in consultation. Consistent with this effort, the FAA requests your assistance to identify other interested parties that should be invited to participate in consultation.

Similarly, the views of the public are essential to inform Federal decision making in the Section 106 process. The FAA requests your assistance in identifying community groups or associations that likely have an interest in the undertaking and its effects on historic properties. The FAA shall seek and consider the views of the public in a manner that reflects the nature and complexity of the undertaking and its effects on historic properties.

We look forward to your response. If you have any initial comments or question on this undertaking, please contact Marina Landis at (206)231-2238, or marina.landis@faa.gov.

Sincerely,

Shawn M. Kozica
Manager
Operations Support Group
Western Service Center

Attachment

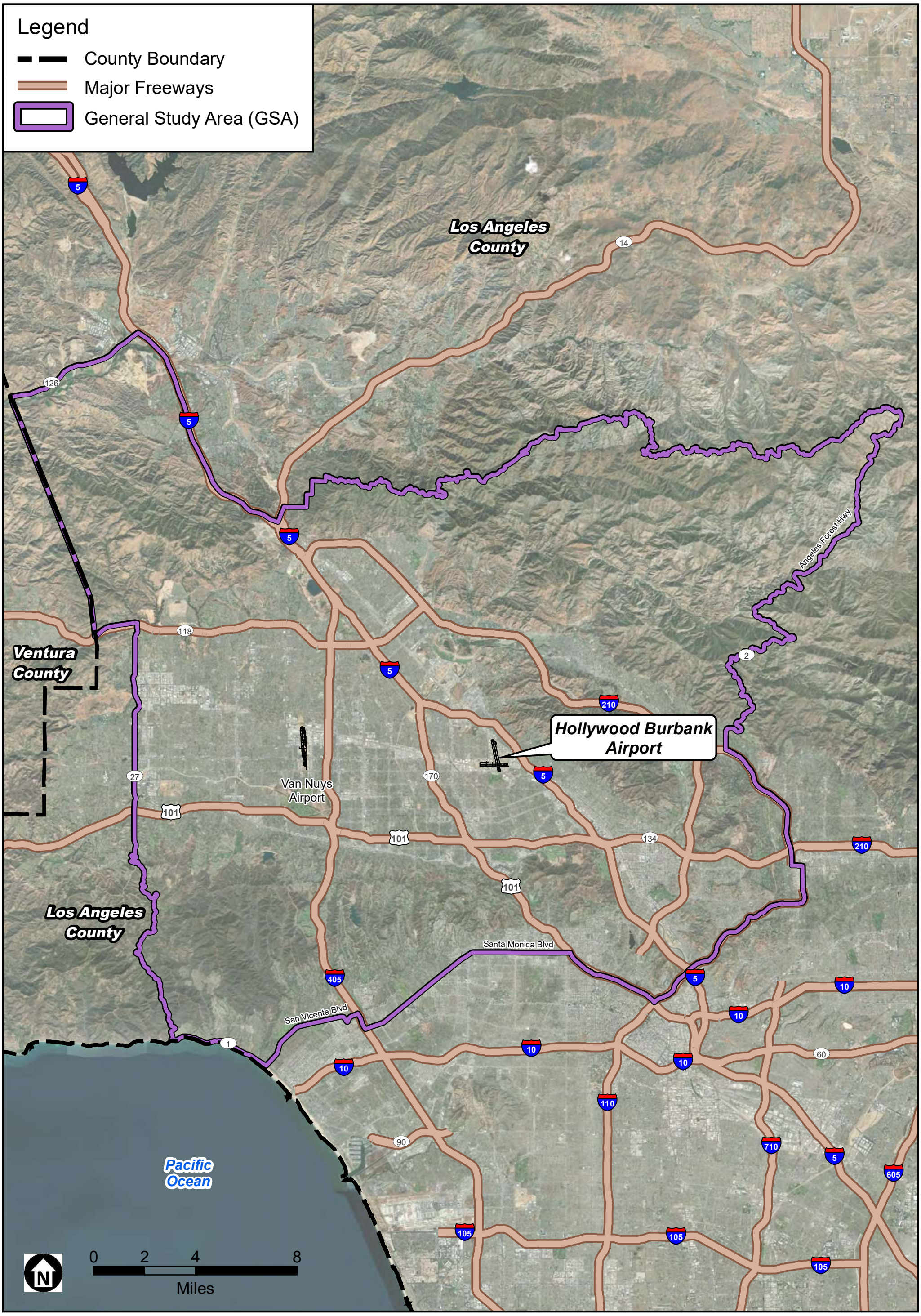
2 Manual Vectors: Directional headings issued to aircraft to provide navigational guidance and to maintain separation between aircraft and/or obstacles.

Attachment 1: General Study Area
OROSZ THREE DEPARTURE (RNAV), SLAPP TWO DEPARTURE (RNAV)

Figure 1. Depiction of the General Study Area[3]

Figure 2. Location of KBUR within the General Study Area[4]

[3] Figure 1 - Not to scale.
[4] Figure 2 - Not to scale.



SOURCE: Esri; Prepared by Jacobsen Daniels, 2020

Hollywood Burbank OROSZ/SLAPP Departure Procedures EA

Attachment B
BUR General Study Area