



August 2025

**Errata to the Environmental Assessment
and
Record of Decision**

for

**Settlement Agreement Departure Procedure
Amendments**

**Bob Hope “Hollywood Burbank” Airport
Burbank, California**

Prepared by:

**United States Department of Transportation
Federal Aviation Administration**

Table of Contents

Section 1. Introduction	3
1.1 Background	3
1.2 Administrative Requirements	4
1.3 Summary of Modifications	5
Section 2. List and Explanation of Modifications	6
2.1 Clarification of Northbound Vectoring Operations	6
2.2 Supplemental Graphics	7
Section 3. Identification of the Preferred Alternative and Discussion	17
Section 4. The Agency’s Findings	19
Section 5. Summary of Public Comments and Agency Responses	21
5.1 Air Quality	27
5.2 Climate Change.....	28
5.3 Biological Resources	29
5.4 Community Engagement	30
5.5 Noise	32
5.6 Section 4(f) of the Department of Transportation Act of 1966	34
5.7 Section 106 of the National Historic Preservation Act.....	38
5.8 Quality of Life.....	40
5.9 Safety	41
5.10 Procedural Objections.....	42
5.11 Other	45
5.12 Out of Scope	45
Section 6. Indication of Specific Circumstances That Would Trigger a Reevaluation or Supplemental Environmental Assessment	49
Section 7. Record of Decision	50
Appendix N – Compilation of Public Comments	
Appendix M – Section 106 and Section 4(f) Consultation Documentation	

Section 1. Introduction

1.1 Background

The Federal Aviation Administration (FAA) originally established satellite-based area navigation (RNAV) departure procedures at Bob Hope “Hollywood Burbank” Airport (BUR) as a part of the 2016 Southern California Metroplex project.

Following the implementation of the original procedures and beginning in 2018, the FAA received letters from a wide range of officials, individuals, and community groups related to noise at BUR, including the following:

- Congressman Adam Schiff
- Congressman Brad Sherman
- Congressman Ken Calvert
- Congressman Ted Lieu
- Congressman Tony Cárdenas
- Senator Dianne Feinstein
- Senator Kamala Harris
- City of Los Angeles City Council
- City of Burbank Council
- Burbank-Glendale-Pasadena Airport Authority
- City of Burbank Mayor
- City of Pasadena Mayor
- City of Glendale Mayor
- Santa Monica Mountains Conservancy
- Los Angeles Unified School District
- Southern San Fernando Valley Airplane Noise Task Force (Task Force)

As the result of a lawsuit filed against the FAA on October 24, 2016, the FAA entered into a settlement agreement with the Benedict Hills Estates Association and Benedict Hills Homeowners Association (Settlement Agreement) on March 3, 2018.

On March 25, 2019, based on public feedback, the FAA announced its decision to prepare an environmental assessment (EA) to consider proposed amendments to two departure procedures at BUR, including the OROSZ and SLAPP procedures, to fulfill its obligations under the Settlement Agreement. The FAA noted in its announcement that it would not include a re-evaluation of the Southern California Metroplex project. Informational briefings and updates were posted to the FAA’s community engagement website in July 2019. On October 4, 2019, the FAA announced that it had awarded a contract to conduct the EA.

The FAA developed Alternative A in compliance with the initial design outlined in the Settlement Agreement. The FAA posted presentations and materials that were presented to the Task Force on December 9, 2019, describing Alternative A. The FAA encountered delays in completing the EA that arose from the 2020 Covid-19 public health emergency. The project was further delayed

to appropriately consider recommendations provided by the Task Force in May 2020. The FAA responded to each of the recommendations set forth by the Task Force in a letter dated September 1, 2020, and incorporated the recommendations that the FAA deemed to be technically feasible in the development of alternatives for the EA, which eventually became Alternative B.

The FAA continued to work on the EA from 2020 through 2023, and on November 30, 2023, the FAA published a draft EA (DEA) entitled “Proposed Settlement Agreement Departure Procedure Amendments for Hollywood Burbank Airport.” The DEA identified the environmental effects associated with the potential implementation of two alternatives that considered the adoption of new procedures for Runway 15 departures at BUR.

On December 11, 2023, the FAA published a notice of availability to announce the release of the DEA in the *Federal Register*. The public comment period was open for a total of 105 days, from December 11, 2023, through March 24, 2024. The DEA and supplemental information provided during the public comment period were published on the FAA’s Community Engagement website.¹ The FAA received a total of 1,116 comments during the DEA public comment period.

1.2 Administrative Requirements

This Errata to the Environmental Assessment and Record of Decision (Errata/ROD) finalizes the FAA’s decision on the “Proposed Settlement Agreement Departure Procedure Amendments for BUR.” The Council on Environmental Quality (CEQ) regulations implementing the National Environmental Policy Act (NEPA) allow the use of errata sheets in lieu of rewriting a Draft Environmental Assessment (40 C.F.R. 1501.5(k); 40 C.F.R. 1503.4(c)), and FAA Order 1050.1F, *Environmental Policies and Procedures*, Section 6-2.2(i), provides for the use of errata sheets under the following circumstances:²

Use of Errata Sheet. If the modifications to the [DEA] in response to comments are minor and are confined to factual corrections or explanations of why the comments do not warrant additional agency response, the FAA or applicant may prepare an errata sheet in lieu of a final EA. In this situation, the comments, responses, and errata sheet may be considered the final EA. Use of errata sheets is subject to the condition that the errata sheets:

¹ FAA Community Engagement – Burbank. https://www.faa.gov/air_traffic/community_engagement/bur. Accessed October 24, 2024.

² On January 20, 2025, President Trump issued Executive Order 14154 that rescinded Executive Order 11991, which had directed federal agencies to comply with the Council on Environmental Quality’s regulations. Executive Order 14154 also directed the Council on Environmental Quality to propose rescinding its NEPA regulations and to provide guidance to federal agencies on implementing NEPA. On February 25, 2025, the Council on Environmental Quality issued an interim final rule to rescind its NEPA regulations. 90 Fed. Reg. 10610 (Feb. 25, 2025). However, the interim final rule provides that “[a]gencies have NEPA implementing procedures that largely conform to CEQ’s regulations. After this action, agencies will remain free to use or amend those procedures, and agencies should, in defending actions they have taken, continue to rely on the version of CEQ’s regulations that was in effect at the time that the agency action under challenge was completed. Thus, removing CEQ’s regulations does not constitute a retroactive change in agencies’ practices.” Therefore, the FAA continues to rely on the version of the CEQ regulations in effect at the time the Draft EA was submitted for public comment.

- (1) Cite the sources, authorities, or reasons that support the position of the FAA;
and
- (2) If appropriate, indicate the circumstances that would trigger agency reappraisal
or further response.

Consistent with FAA Order 1050.1F, this Errata/ROD was prepared in lieu of a final EA and serves to finalize the FAA's decision on the DEA.

1.3 Summary of Modifications

Public comments were received requesting clarification on northbound vectoring operations, particularly with respect to Alternative A, and other comments were received that requested better illustrations of the flight paths for the alternatives compared to existing conditions. The following modifications were made to address these comments:

1. The addition of information clarifying northbound vectoring operations, also provided in Appendix J of the DEA; and
2. The addition of supplemental graphics to better illustrate the alternatives and existing conditions.

The modifications are further described in **Section 2** of this Errata/ROD. A compilation of the comments received during the public comment period is provided in **Appendix N**.

Additionally, the Environmental Justice analysis included in the DEA was removed from the Errata/ROD to reflect recent changes to the law. On Jan. 20, 2025, President Trump issued an Executive Order (Initial Rescissions of Harmful Executive Orders and Actions) rescinding President Biden's Executive Order 14096, which had supplemented President Clinton's Order 12898, issued in 1994, establishing a government-wide mandate to advance environmental justice. On Jan. 21, 2025, President Trump issued another Order (Ending Illegal Discrimination and Restoring Merit-Based Opportunity) that rescinded Executive Order 12898. Therefore, the Environmental Justice analysis included in the Draft EA was removed from the Errata/ROD and does not form a basis for the FAA's decision.

Section 2. List and Explanation of Modifications

2.1 Clarification of Northbound Vectoring Operations

Public comments were received requesting clarification on northbound vectoring operations, particularly with respect to Alternative A. Comments were also received suggesting that Alternative A was not designed in accordance with the “Settlement Agreement Between Federal Aviation Administration, Benedict Hills Estates Association, and Benedict Hills Homeowners Association” (Settlement Agreement).³ Specifically, comments indicated a concern that northbound vectoring operations were not included in the design for Alternative A.

Alternative A does include northbound vectoring, as noted below. Further, the Settlement Agreement includes a provision that requires an aircraft using the procedures to initiate those northbound vectors “as soon as practicable.” Turning to the north as soon as practical is the current practice and would be the continued practice under Alternative A, Alternative B, and the No Action Alternative.

The DEA provided an explanation of how vectoring would be applied to Alternative A in the Noise Modeling Technical Report found in Appendix J, Section 3.1. That explanation has been refined below for inclusion as the first modification to the DEA in this Errata/ROD.

Alternative A was developed in accordance with the Settlement Agreement to have aircraft turn westbound, and to not travel southwest bound over the Santa Monica mountains as they do today under the No Action Alternative. The FAA included northbound vectoring operations in its analysis, wherein aircraft would be turned northbound as soon as practicable after take-off for this alternative.

Alternative A was designed consistent with the initial design presented in Exhibit A of the Settlement Agreement with a built-in turn to the west (approximately 3.5 nautical miles from the airport), which would keep aircraft clear of the hills to the south while still allowing controllers to vector aircraft north as soon as possible. The use or timing of vectors depends on a variety of factors such as workload, traffic conflicts, safety requirements, and weather.

The new procedures were modeled by using the centerline of the proposed procedure; aircraft would automatically turn westbound and fly along an RNAV route until air traffic control provides a vector (turn) to the north. Expectations of turns to the north were done by extrapolating controllers’ current timing of turns to the north and applying those expectations to the new route, which can be seen in the graphics provided in Section 2.2 of this Errata/ROD. The blue, pink, and combined purple areas show where aircraft are expected to fly when vectored north. These areas were based on how aircraft are vectored north today, the minimum vectoring altitude, and aircraft climb gradients.

³ Burbank DEA, Appendix C
Errata to the Environmental Assessment and Record of Decision
For Settlement Agreement Departure Procedure Amendments at
Bob Hope “Hollywood Burbank” Airport, Burbank, California
Page 6

Although this information was provided in Appendix J of the DEA, the justification for including this modification in the Errata/ROD is to clarify for the reader the manner in which aircraft are vectored north under current conditions and how aircraft would be vectored north under Alternative A.

2.2 Supplemental Graphics

Public comments were received requesting graphics that better illustrate the alternatives and existing flight paths. As a result, supplemental graphics were provided on February 22, 2024, for public viewing on the FAA's Community Engagement website and the public comment period was extended from January 24, 2024, to March 24, 2024, allowing an additional 60 days for the public to provide comments.

The decision to incorporate this information in this Errata/ROD is because public comments indicated a high level of interest in better illustrations of flight paths and how flight tracks would be expected to change, particularly in relation to Alternative A.

Thus, the second modification of this Errata/ROD amends the DEA by providing the supplemental graphics to clarify the text following page 2-3 of the DEA in Section 2.2.1, as illustrated in **Figures 1–10**.

Figure 1. Burbank Environmental Assessment Supplemental Graphics

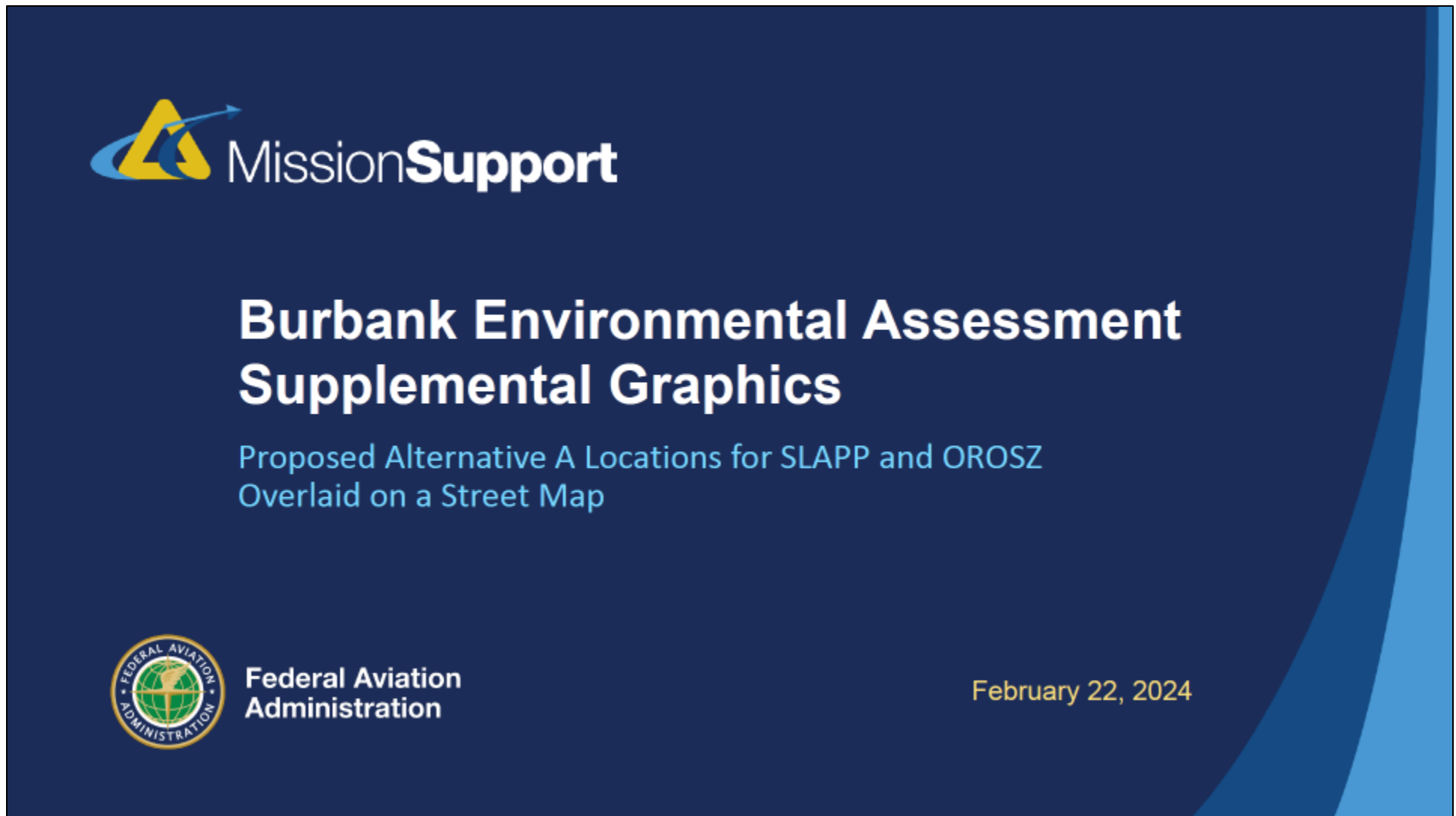


Figure 2. Proposed Waypoints (WP) for BUR's SLAPP and OROSZ

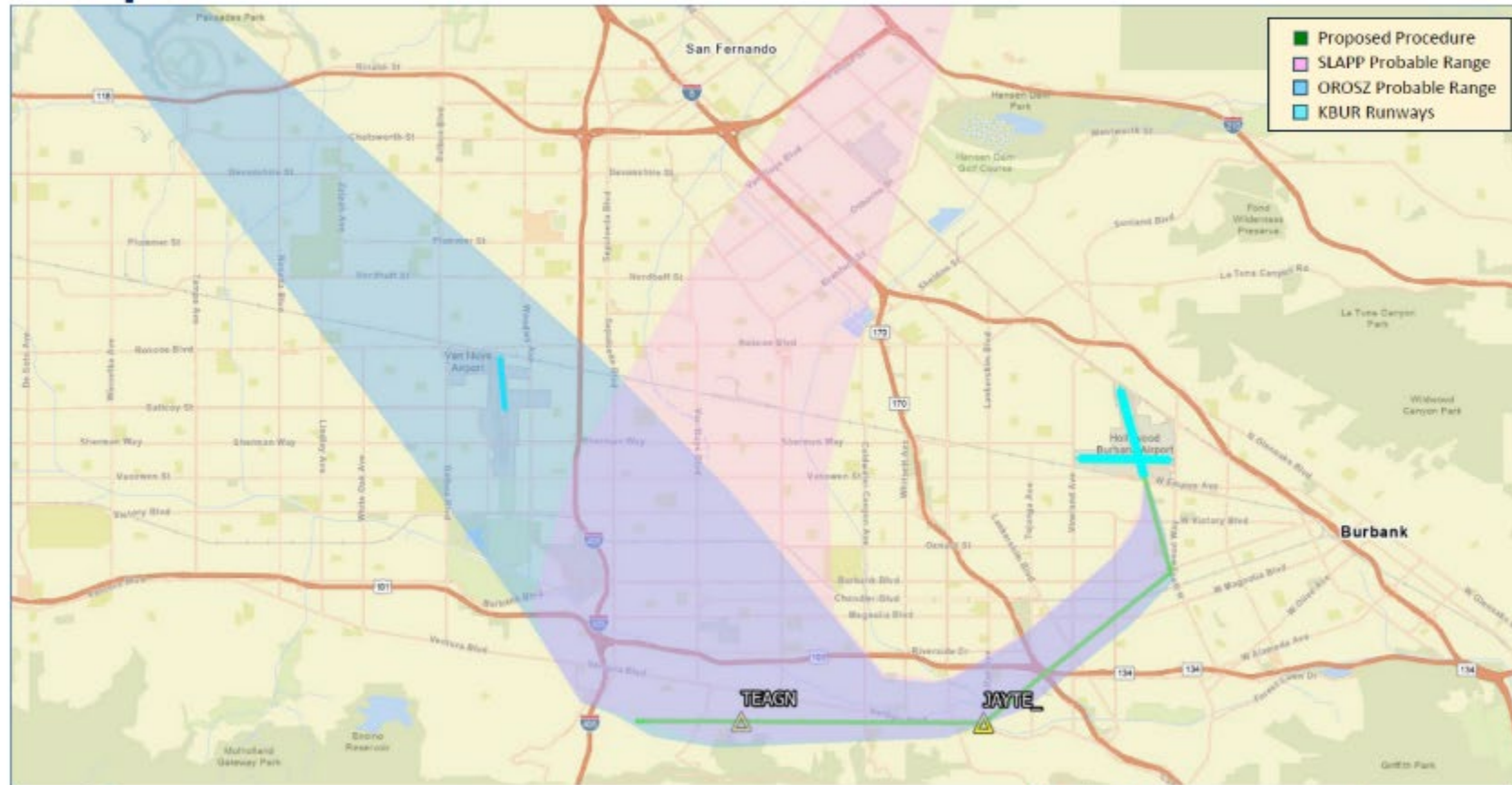
Proposed Waypoints for KBUR's SLAPP and OROSZ

- The following seven slides contain depictions of Alternative A's proposed SLAPP and OROSZ with JAYTE and TEAGN waypoints (WP) and the general flight procedure path.
- The blue and pink areas represent estimated flight paths when considering variables such as traffic, aircraft characteristics, pilotage, weather, etc. These areas are an estimate only since we would not know more precise flight paths until there are actual tracks from different aircraft types under contrasting conditions.
- Slides 6 – 8 are zoomed in on portions of the proposed procedure.
- The final slide has one day of the current procedure's flight tracks (January 2, 2024) with the proposed Alternative A procedure and probable flight areas.
- Note: The Alternative B proposal uses the existing procedure designs with an increased climb gradient and no other changes to the procedure track; as most aircraft already meet or exceed the proposed Alternative B increased climb gradient, the expected flight paths for Alternative B would be very similar to the existing departure flight tracks.



Figure 3. Proposed Alternative A WPs for BUR

Proposed Alternative A WPs for KBUR



KBUR EA Supplemental Graphics

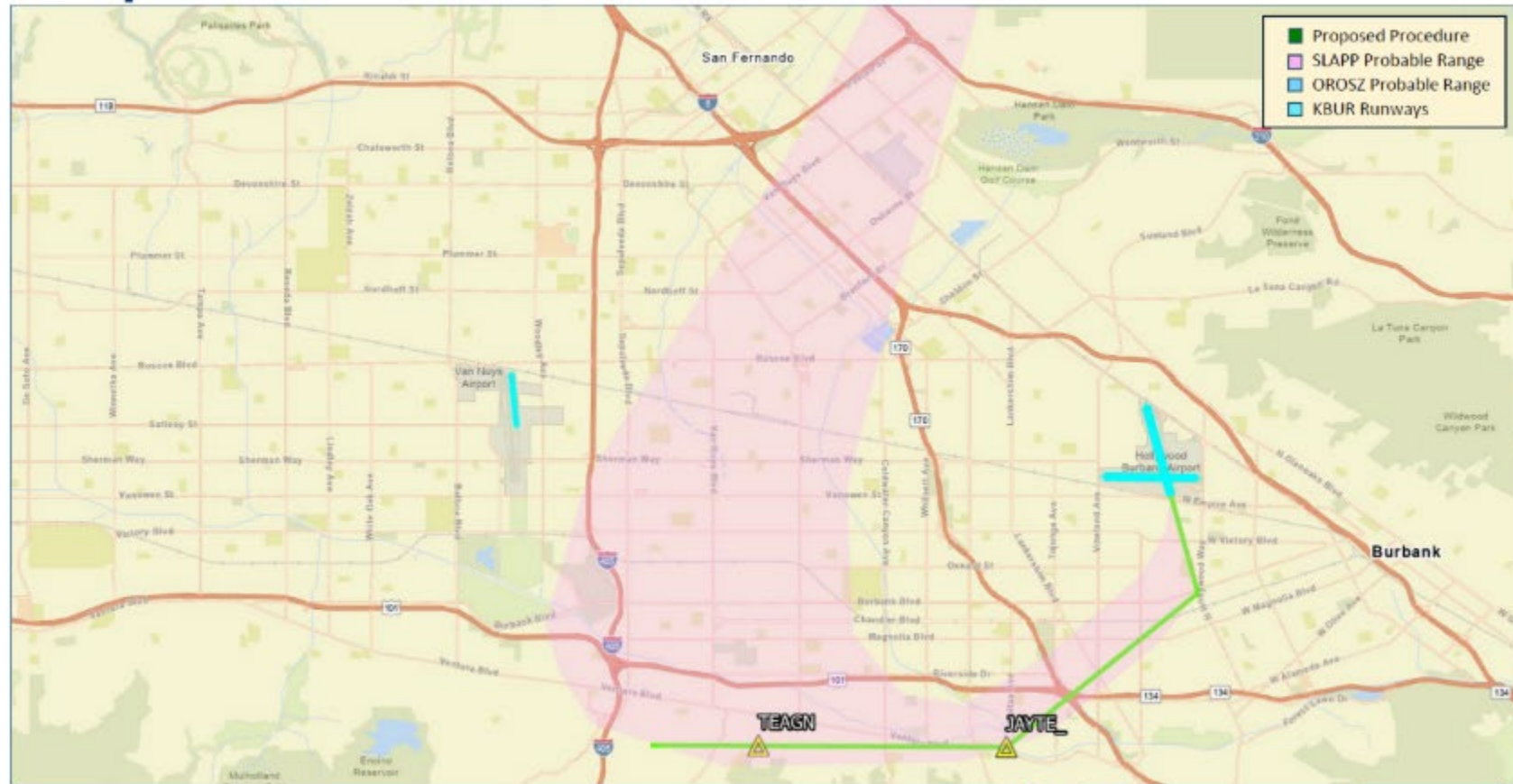
February 22, 2024

3



Figure 4. Proposed Alternative A WPs for SLAPP

Proposed Alternative A WPs for SLAPP



KBUR EA Supplemental Graphics

February 22, 2024

4



 MissionSupport

Figure 5. Proposed Alternative A WPs for OROSZ

Proposed Alternative A WPs for OROSZ



KBUR EA Supplemental Graphics

February 22, 2024

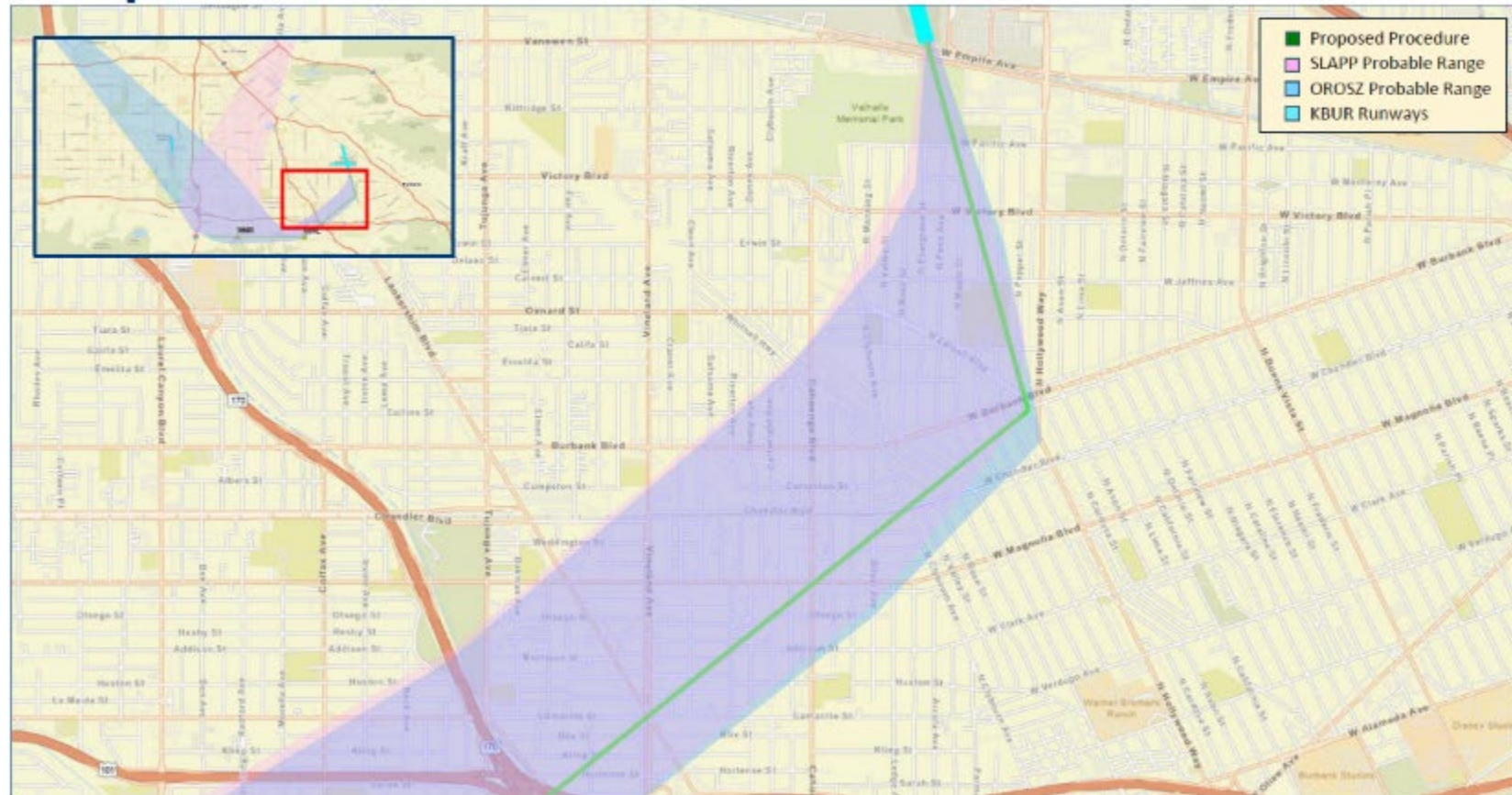
5



MissionSupport

Figure 6. Proposed Alternative A Zoomed in First Portion

Proposed Alternative A Zoomed in First Portion



KBUR EA Supplemental Graphics

February 22, 2024

6



Figure 7. Proposed Alternative A Zoomed in Second Portion

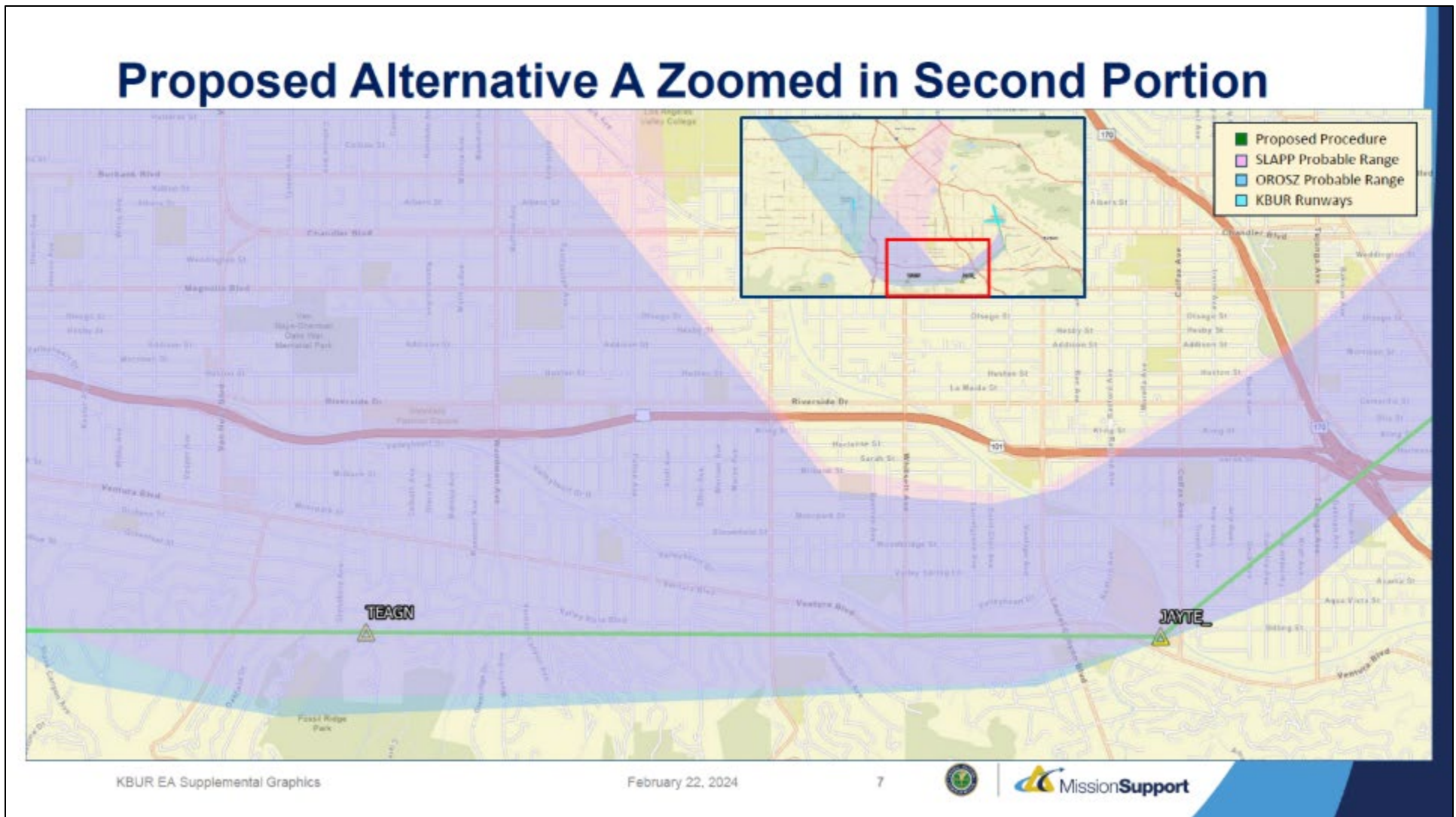
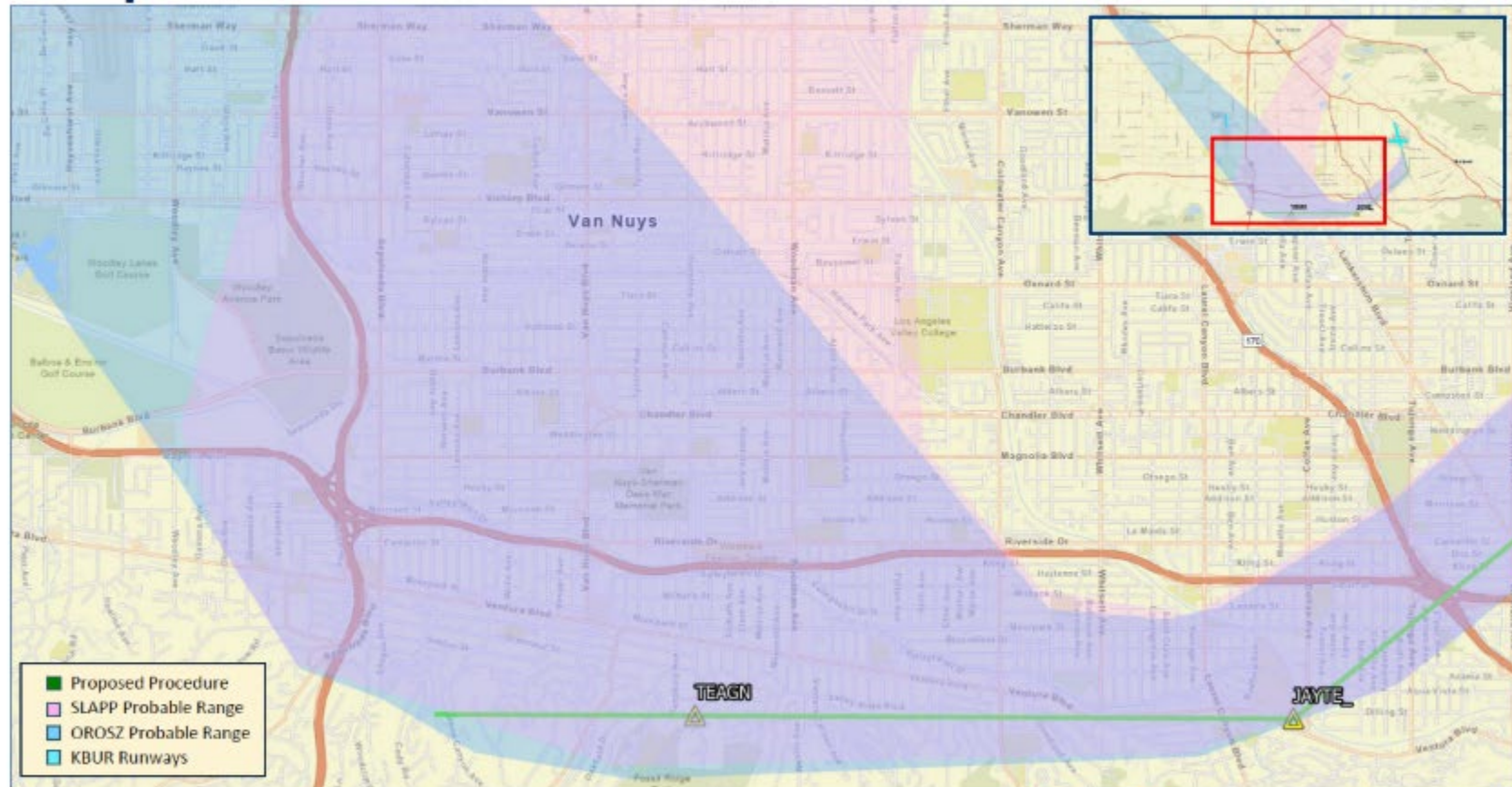


Figure 8. Proposed Alternative A Zoomed in Third Portion

Proposed Alternative A Zoomed in Third Portion



KBUR EA Supplemental Graphics

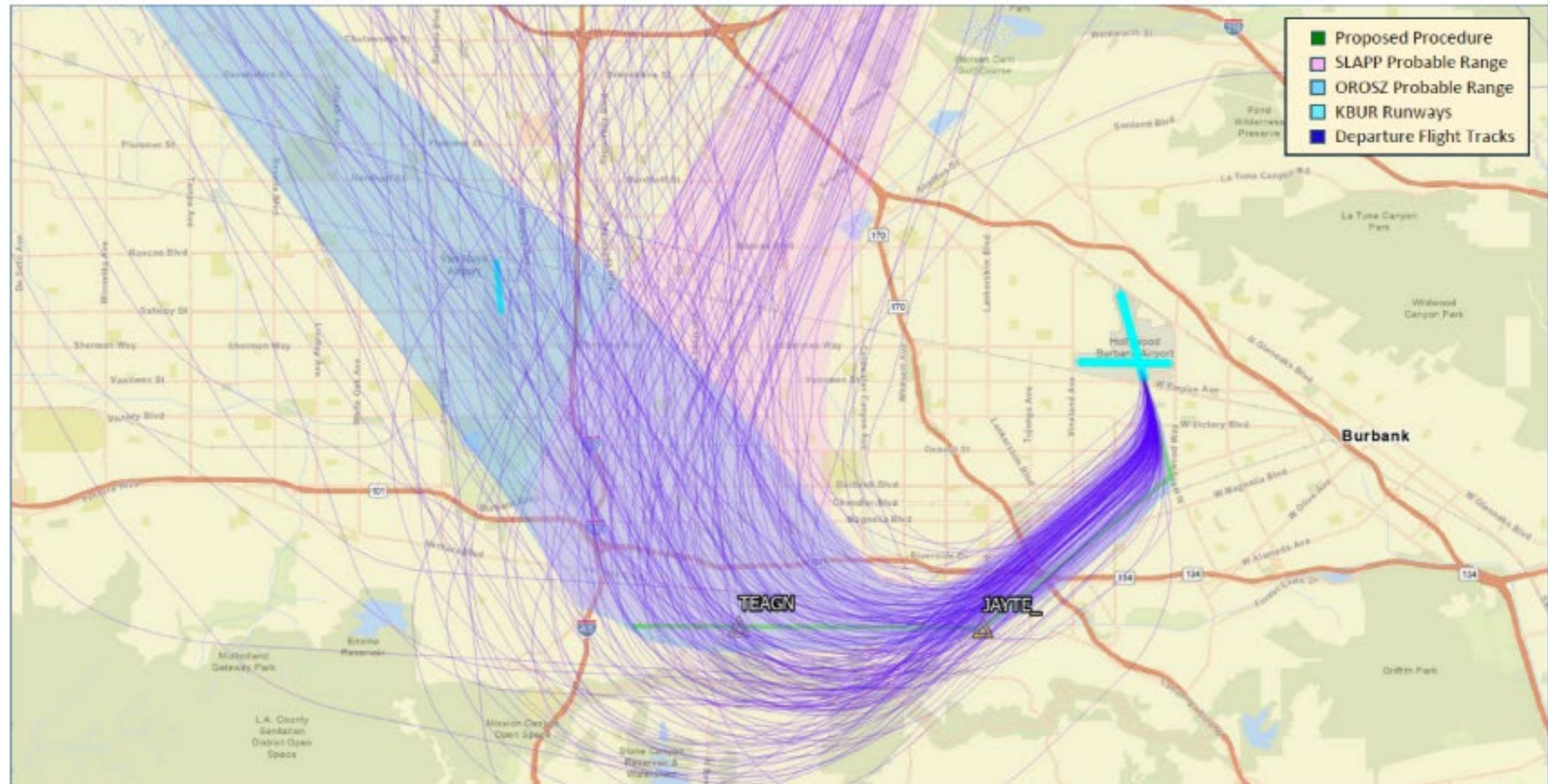
February 22, 2024

8



Figure 9. Proposed Alternative A WPs and Current Procedure Flight Tracks

Proposed Alternative A WPs and Current Procedure Flight Tracks



KBUR EA Supplemental Graphics

February 22, 2024

9



Section 3. Identification of the Preferred Alternative and Discussion

FAA Order 1050.1F requires the Agency to use the NEPA process to identify and assess the reasonable alternatives to proposed actions that will avoid or minimize the adverse effects of these actions on the quality of the human environment. Reasonable alternatives are a reasonable range of alternatives that are technically and economically feasible and meet the purpose and need for the proposed action.

While Alternative A satisfies the objectives of the Settlement Agreement, it would result in significant noise impacts—including to a public school, Luther Burbank Middle School—compared to the No Action Alternative (see page 3-39 of the DEA).

Alternative B does not meet the terms of the Settlement Agreement but was evaluated in the DEA because it was a technically feasible recommendation of the Task Force that could potentially meet the purpose and need of the DEA. Alternative B was developed based on recommendations by the Task Force to mitigate noise concerns from departing aircraft overflights while considering the operational safety and efficiency of BUR airspace. The FAA's evaluation has identified several concerns.

While Alternative B is technically feasible, it would require a waiver to design criteria due to the climb gradient that exceeds standards. The FAA does not design outside of standard criteria (500 feet per nautical mile climb gradient) unless it is to address a safety concern (*See* topical response in Section 5.10 of Errata Sheet). In this case, it would be for an implausible noise benefit, not for safety. In addition, the DEA 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 (see page 2-6 of the DEA).

The DEA determined that Alternative B would not reduce noise because 97% of aircraft flying the existing procedures already exceeds the climb gradient proposed by Alternative B. Therefore, the requirement to establish a waiver from safety criteria to implement a higher-than-standard climb gradient would have no effect on 97% of existing aircraft. Thus, Alternative B would not accomplish a reduction in noise, and this recommendation would not achieve the objectives of the Task Force. See page 2-6 of the DEA.

Furthermore, economic discrimination would occur because the remaining 3% of aircraft currently using the OROSZ and SLAPP procedures would have to use an alternative procedure, most likely the conventional VAN NUYS THREE departure procedure. Efficiency would be reduced for both ATC and the aircraft since conventional procedures require additional controller handling compared to RNAV procedures. RNAV procedures also offer greater flexibility in flight paths, allowing for more direct routes which improves efficiency by reducing flight time and fuel consumption, allowing superior navigation capability to and from airports with challenging terrain or complex airspace, and providing enhanced situational awareness for pilots due to precise GPS-based navigation, all while minimizing dependence on ground-based navigational aids.

The FAA performed a technical evaluation of the other recommendations put forth by the Task Force (see Sections 2.2.3 through 2.2.6 of the DEA). These alternatives recommended by the Task Force were found to create an unacceptable level of safety risk, with a high probability of a severe accident compared to the alternatives considered as part of the DEA. Therefore, the other alternatives proposed by the Task Force were eliminated from further consideration.

After carefully considering the long-term environmental effects and the safety considerations associated with Proposed Alternatives A and B, the FAA has determined that the preferred alternative is the No Action Alternative. The No Action Alternative comprises the SLAPP TWO and OROSZ TWO departure procedures as currently published. A review of Runway 15 departures indicates that 95% of aircraft are vectored to the north, which would continue under the No Action Alternative. Although the No Action Alternative does not meet the purpose and need of the Proposed Action, it has been proven to be a safe and efficient operational regime, and the No Action Alternative would not result in new significant environmental effects compared to Alternative A. Additionally, the No Action Alternative has a higher degree of safety and does not discriminate against air carriers and operators at the airport as compared to Alternative B.

Section 4. The Agency's Findings

The FAA carefully weighed Alternative A, Alternative B, and the No Action Alternative to identify potential impacts to the quality of the human environment that could arise from each of the alternatives considered. The No Action Alternative comprises the current SLAPP TWO and OROSZ TWO departure procedures with no change to baseline conditions.

A. Alternative A would result in significant environmental impacts to communities.

While Alternative A satisfies the objectives of the Settlement Agreement, it would result in significant noise impacts—including to a public school, Luther Burbank Middle School—compared to the No Action Alternative. Based on these significant impacts, Alternative A is not the preferred alternative.

B. Alternative B would: not meet the terms of the Settlement Agreement, not achieve the Task Force's objectives of reducing BUR noise impacts, require a waiver to design criteria, discriminate economically, and reduce efficiency for ATC and pilots, which could result in a detrimental effect on safety.

Alternative B would:

- not meet the terms of the Settlement Agreement but was evaluated in the DEA because it was identified as a technically feasible recommendation of the Task Force that would be considered a potential alternative in the DEA.
- not reduce noise because 97% of aircraft flying the existing procedures already exceed the climb gradient proposed by Alternative B, and thus would not achieve the objectives of the Task Force in reducing noise impacts.
- require a waiver to design criteria. The FAA does not design procedures outside of the agency's criteria (500 feet per nautical mile for the climb gradient) unless it is for reasons of safety.
- discriminate economically since aircraft that cannot meet the increased climb gradient would be assigned a conventional procedure instead of an RNAV procedure. The economic discrimination would result in reduced efficiency. RNAV procedures offer greater flexibility in flight paths, allowing for more direct routes which improves efficiency by reducing flight time and fuel consumption and superior navigation capability to and from airports with challenging terrain or complex airspace. RNAV procedures also provide enhanced situational awareness for pilots due to precise GPS-based navigation, all while minimizing dependence on ground-based navigational aids.
- reduce efficiency for both ATC and the aircraft since conventional procedures require additional controller handling compared to RNAV procedures, which could result in a detrimental effect on safety within the BUR airspace.

For these reasons, Alternative B is not the preferred alternative.

C. The No Action Alternative would maintain the safety and efficiency of the NAS without significant noise impacts.

The Federal Aviation Act of 1958 gives the FAA Administrator the authority and responsibility to assign by order or regulation the use of navigable airspace to ensure the safety of aircraft and the efficient use of the airspace. Consistent with 49 U.S.C. § 40103(b)(1), the FAA shall develop plans and policies for the use of the navigable airspace and assign the use of airspace necessary to ensure the safety of aircraft and the efficient use of airspace. In the FAA's continuous effort to ensure the safety of aircraft and improve the efficiency of transit through the navigable local airspace, the FAA carefully weighed the No Action Alternative with Alternative A and Alternative B. The DEA found that Alternative A would result in new significant environmental effects over the No Action Alternative. The DEA also found that the No Action Alternative has a higher degree of safety than Alternative B and does not discriminate against air carriers and operators at the airport.

After carefully considering the long-term environmental effects and the safety considerations associated with Proposed Alternatives A and B, the FAA has determined that the preferred alternative is the No Action Alternative. Therefore, the FAA has determined to proceed under the No Action Alternative.

Section 5. Summary of Consultation Activities, Public Comments and Agency Responses

Consultation Activities

The FAA initiated Section 4(f) consultation with the following entities: the National Park Service, the U.S. Forest Service, the Bureau of Land Management, California State Parks, the City of Burbank, the City of Santa Clarita, the City of San Fernando, the City of Beverly Hills, the City of Los Angeles, the County of Los Angeles, the County of Ventura, the Conejo Recreation and Parks District, and the Mountains Recreation & Conservation Authority.

The FAA initiated Section 106 consultation with the following entities: California State Historic Preservation Office (SHPO), the California Native American Heritage Commission, the City of Burbank, the County of Los Angeles, and the County of Ventura.

Section 4(f) and Section 106 correspondence documentation is provided in **Appendix M**. Refer to Section 5.6 for agency responses to public comments pertaining to Section 4(f) resources, and Section 5.7 for agency responses to public comments pertaining to Section 106 resources.

Public Comments

A total of 1,116 public comments were received by the FAA during the DEA's public comment period—and most comments were form letters. The public comments were reviewed and grouped into the following 12 general categories: air quality, climate change, biological resources, community engagement, noise, Section 4(f) of the Department of Transportation Act, Section 106 of the National Historic Preservation Act (NHPA), quality of life, safety, procedural objections, other, and out of scope comments.

Of the comments received, 1,000 comments were identical or nearly identical copies of one of five form letters with personal comments appended. To aid in summarizing the comments, those that were received using form letters are labeled A (239 comments), B (12 comments), C (793 comments), D (13 comments), and E (7 comments).

The most frequently commented topic, with 821 comments, included some variation of a procedural objection to how the DEA was conducted and supported neither alternative. The second most frequently commented topic was related to aircraft noise, with 815 comments raising the issue, including comments questioning the DEA's chosen noise metric—day-night average sound level (DNL). The topic of the third most frequently received comment, totaling 245 comments, was the request to extend the public comment period.

The public comments are summarized in **Table 1**.

The public comments received were compiled and are provided in **Appendix N**.

Table 1. Summary of Public Comments

Comment #	Form Letter	Comment Topic(s)
1		Request for additional maps and data

Table 1. Summary of Public Comments

Comment #	Form Letter	Comment Topic(s)
2-16	A	Request for an extension of the public comment period
17	A	Request for an extension of the public comment period and personal comments
18-234	A	Request for an extension of the public comment period
235-237	A	Request for an extension of the public comment period and personal comments
238-240	A	Request for an extension of the public comment period
241	A	Request for an extension of the public comment period and personal comments
242		Inquiry as to whether an extension of the public comment period was granted
243		Request for an extension of the public comment period
244		Out of scope comments
245-247	B	Support for Alternative A
248		Request for an extension of the public comment period and out of scope comments
249-254	B	Support for Alternative A
255		Noise, safety, quality of life, and out of scope comments
256		Out of scope comments and support for Alternative B
257		Inquiry as to whether an extension of the public comment period was granted
258-260	B	Support for Alternative A
261		Biological, other comments, and support for Alternative A
262		Noise, quality of life, and support for Alternative B
263-264		Quality of life and support for Alternative A
265		Noise, safety, and quality of life
266		Noise and quality of life
267		Air quality, noise, quality of life, support for Alternative A, and support for Alternative B
268		Noise, community engagement, and quality of life
269-291	C	Noise, out of scope comments, procedural objections, opposition to Alternative A, opposition to Alternative B, and other comments
292	C	Noise, out of scope comments, procedural objections, opposition to Alternative A, opposition to Alternative B, other comments, and personal comments
293-311	C	Noise, out of scope comments, procedural objections, opposition to Alternative A, opposition to Alternative B, and other comments
312		Noise, quality of life, and procedural objections
313-982	C	Noise, out of scope comments, procedural objections, opposition to Alternative A, opposition to Alternative B, and other comments

Table 1. Summary of Public Comments

Comment #	Form Letter	Comment Topic(s)
983		Noise, out of scope comments, procedural objections, and other comments
984	C	Noise, out of scope comments, procedural objections, opposition to Alternative A, opposition to Alternative B, other comments, and personal comments
985		Air quality, noise, safety, community engagement, and procedural objections
986	C	Procedural objections
987		Air quality, noise, and procedural objections
988		Personal comments
989	C	Noise, opposition to Alternative A, opposition to Alternative B, and procedural objections
990	C	Noise, out of scope comments, procedural objections, opposition to Alternative A, opposition to Alternative B, community engagement, other comments, and personal comments
991		Noise, safety, and air quality
992	D	Air quality, procedural objections, and out of scope comments
993-995	D	Air quality, procedural objections, out of scope comments, and personal comments
996	D	Air quality, procedural objections, and out of scope comments
997		Noise, quality of life, biological, and procedural objections
998		Biological and procedural objections
999	C	Noise, procedural objections, opposition to Alternative A, opposition to Alternative B, out of scope comments, and other comments
1000		Biological, procedural objections, and out of scope comments
1001		Noise, Section 4(f), procedural objections, and out of scope comments
1002	C	Noise, opposition to Alternative A, opposition to Alternative B, procedural objections, out of scope comments, and other comments
1003		Support for Alternative A
1004	C	Air quality, noise, opposition to Alternative A, opposition to Alternative B, procedural objections, out of scope comments, and personal comments
1005		Noise, procedural objections, and out of scope comments
1006		Air quality, noise, community engagement, safety, procedural objections, out of scope comments, and personal comments
1007	C	Noise, opposition to Alternative A, opposition to Alternative B, procedural objections, out of scope comments, other comments, and personal comments

Table 1. Summary of Public Comments

Comment #	Form Letter	Comment Topic(s)
1008		Air quality, noise, and biological
1009	C	Noise, opposition to Alternative A, opposition to Alternative B, procedural objections, out of scope comments, other comments, and personal comments
1010		Air quality, Section 4(f), other comments, and out of scope comments
1011	D	Air quality, procedural objections, and out of scope comments
1012		Noise, Section 4(f), other comments, procedural objections, and out of scope comments
1013		Noise
1014	D	Air quality, procedural objections, and out of scope comments
1015		Air quality, noise, other comments, and out of scope comments
1016		Section 4(f), Section 106, noise, biological, procedural objections, and out of scope comments
1017		Air quality, noise, and out of scope comments
1018-1019	D	Air quality, procedural objections, and out of scope comments
1020	C	Noise, opposition to Alternative A, opposition to Alternative B, procedural objections, out of scope comments, other comments, and personal comments
1021		Air quality, noise, procedural objections, and out of scope comments
1022-1024	D	Air quality, procedural objections, and out of scope comments
1025		Noise
1026	D	Air quality, procedural objections, and out of scope comments
1027		Procedural objections
1028		Procedural objections
1029	C	Noise, opposition to Alternative A, opposition to Alternative B, procedural objections, out of scope comments, other comments, and personal comments
1030		Air quality, climate change, noise, Section 4(f), opposition to Alternative A, procedural objections, and out of scope comments
1031-1032	C	Noise, opposition to Alternative A, opposition to Alternative B, procedural objections, out of scope comments, and other comments
1033	C	Procedural objections and out of scope comments
1034-1036	C	Noise, opposition to Alternative A, opposition to Alternative B, procedural objections, out of scope comments, and other comments
1037		Noise and out of scope comments
1038		Air quality, noise, opposition to Alternative A, and support for Alternative B

Table 1. Summary of Public Comments

Comment #	Form Letter	Comment Topic(s)
1039-1042	E	Air quality, climate change, biological, Section 4(f), opposition to Alternative A, opposition to Alternative B, procedural objections, and out of scope comments
1043	C	Noise, procedural objections, out of scope comments, and other comments
1044	C	Noise, procedural objections, and personal comments
1045-1052	C	Noise, opposition to Alternative A, opposition to Alternative B, procedural objections, out of scope comments, other comments, and personal comments
1053		Air quality, climate change, noise, procedural objections, and out of scope comments
1054	C	Noise, opposition to Alternative A, opposition to Alternative B, procedural objections, out of scope comments, other comments, and personal comments
1055		Air quality, climate change, noise, biological, Section 4(f), other comments, procedural objections, and out of scope comments
1056-1059	C	Noise, opposition to Alternative A, opposition to Alternative B, procedural objections, out of scope comments, other comments, and personal comments
1060	C	Procedural objections, and out of scope comments
1061		Air quality, noise, and other comments
1062-1063	C	Noise, opposition to Alternative A, opposition to Alternative B, procedural objections, out of scope comments, other comments, and personal comments
1064		Out of scope
1065-1069	C	Noise, opposition to Alternative A, opposition to Alternative B, procedural objections, out of scope comments, other comments, and personal comments
1070	C	Noise, opposition to Alternative A, opposition to Alternative B, procedural objections, out of scope comments, and other comments
1071		Section 4(f), other comments, and procedural objections
1072		Procedural objections and out of scope comments
1073		Air quality, climate change, Section 4(f), other comments, procedural objections, and out of scope comments
1074	C	Noise, opposition to Alternative A, opposition to Alternative B, procedural objections, out of scope comments, other comments, and personal comments
1075		Other and out of scope comments

Table 1. Summary of Public Comments

Comment #	Form Letter	Comment Topic(s)
1076	E	Air quality, biological, opposition to Alternative A, opposition to Alternative B, procedural objections, Section 4(f), out of scope comments, and personal comments
1077	C	Noise, opposition to Alternative A, opposition to Alternative B, procedural objections, out of scope comments, other comments, and personal comments
1078		Noise, Section 4(f), and procedural objections
1079	C	Procedural objections and out of scope comments
1080	C	Noise, opposition to Alternative A, opposition to Alternative B, procedural objections, out of scope comments, other comments, and personal comments
1081		Noise, Section 4(f), and procedural objections
1082	E	Noise, Section 4(f), procedural objections and out of scope comments
1083	C	Noise, opposition to Alternative A, opposition to Alternative B, procedural objections, out of scope comments, other comments, and personal comments
1084		Out of scope and opposition to Alternative A
1085	C	Noise, opposition to Alternative A, opposition to Alternative B, procedural objections, out of scope comments, other comments, and personal comments
1086	E	Air quality, climate change, biological, Section 4(f), opposition to Alternative A, opposition to Alternative B, procedural objections, out of scope, and personal comments
1087	C	Noise, opposition to Alternative A, opposition to Alternative B, procedural objections, out of scope comments, and other comments
1088	C	Procedural objections and out of scope comments
1089-1108	C	Noise, opposition to Alternative A, opposition to Alternative B, procedural objections, out of scope comments, other comments, and personal comments
1109		Noise, quality of life, and out of scope comments
1110-1114	C	Noise, opposition to Alternative A, opposition to Alternative B, procedural objections, out of scope comments, other comments, and personal comments
1115		Noise, support for Alternative A, opposition to Alternative B, and personal comments
1116		Safety and procedural objections.

Table 2 summarizes the total number of public comments that indicated support for or opposition to Alternative A and Alternative B.

Table 2. Public Comments Expressing General Support for or Opposition to Alternatives A and B

Alternative	Number of Comments Supporting	Number of Comments Opposing
Alternative A	18	779
Alternative B	4	778

Agency Responses

The FAA's general responses to these comments are provided in the corresponding sub-sections below. Each topic includes general definitions pertaining to its subject matter. Refer to the DEA for the FAA's analyses.

5.1 Air Quality

Air quality is the measure of the condition of the air expressed in terms of ambient pollutant concentrations and their temporal and spatial distribution. Air quality regulations in the United States are based on concerns that high concentrations of air pollutants may be harmful to human health, especially for children, the elderly, and people with compromised health conditions, as well as adversely affecting public welfare by damage to crops, vegetation, buildings, and other property.

The study area for air quality should be defined as the entire geographic area that could be either directly or indirectly affected by the proposed project. For example, air quality impacts from construction may be limited to a project site and immediate adjacent areas. However, air quality impacts from operations (e.g., aircraft flight) may extend beyond a project site and immediately adjacent areas and extend vertically up to the mixing height. The mixing height is defined by the U.S. Environmental Protection Agency based on atmospheric turbulence and directly reflects the ability of pollutants emitted above the ground to impact people on the ground. Under the Clean Air Act, 42 U.S.C. § 7401 *et seq.*, air traffic activities taking place above the mixing height are presumed to conform to the General Conformity Rule and are therefore exempt from demonstrating general conformity. Criteria pollutants emitted above this height are not considered in the air quality analysis (see Section 4 of the DEA). The mixing height for the DEA is assumed to be 3,000 feet above ground level.

Dispersion of air pollutants can be affected by meteorology, topography, the type of pollutant, and other factors. In addition, a federal action can lead to air pollutant emissions that may occur at some distance from a project site, such as exhaust from project-generated vehicle traffic on the surrounding road network. Therefore, the study area for a project's air quality analysis could encompass many square miles and/or multiple air basins.

Emissions standards are set for criteria pollutants by the U.S. Environmental Protection Agency, as directed in Section 108 of the Clean Air Act. 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 that have seen improvements in emissions levels that allow them to meet the standards, are considered to be in maintenance status.

Comments were received that reference airborne pollutants and/or claims of breathing issues caused by the introduction or existence of aircraft, etc. The FAA received 36 comments on potential air quality impacts.

Responses are provided below pursuant to concerns related to air quality impacts from the criteria pollutants defined by the Clean Air Act. Refer to Section 5.2 for a discussion on climate impacts resulting from greenhouse gas emissions, and Section 5.12 for a discussion on hazardous air pollutants.

Topical Response

Sections 3.3.1 and 4.1 of the DEA consider the potential for the proposed action to have impacts on air quality and provides details as to the methodology utilized. Section 4.2 of the DEA addresses the potential of climate impacts as a result of the proposed action. The number and types of aircraft would not change under Alternative A, Alternative B, or the No Action Alternative. Alternative B would have the potential to reroute a small number of aircraft on a different departure procedure (aircraft that are unable to meet the increased climb gradient proposed under Alternative B). However, there were no air quality impacts found in connection with either of the alternatives considered in the DEA compared to the No Action Alternative.

5.2 Climate Change

Greenhouse gases are naturally occurring and man-made gases that trap heat in the earth's atmosphere. The potential effects of proposed greenhouse gas emissions are by nature global and cumulative impacts. An appreciable impact on global climate change would only occur when proposed greenhouse gas emissions combine with greenhouse gas emissions from other human-made activities on a global scale. In 2020, the U.S. Environmental Protection Agency reported that domestic aviation contributed approximately three percent of total national carbon dioxide emissions.⁴ The International Civil Aviation Organization estimated in its 2010 Environmental Report that aviation accounted for approximately two percent of all global carbon dioxide emissions resulting from human activity.⁵ The FAA considers carbon dioxide emissions from aircraft to be the primary greenhouse gas of concern.

There are currently no accepted methods of determining significance applicable to aviation projects given the small percentage of emissions they contribute, nor has the FAA identified specific factors to consider in making a significance determination for greenhouse gas emissions. The estimated level of greenhouse gas emissions can serve as a reasonable proxy for assessing potential climate change impacts.

⁴ U.S. EPA, Regulations for Greenhouse Gas Emissions from Aircraft. <https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-greenhouse-gas-emissions-aircraft>. Accessed October 29, 2024.

⁵ International Civil Aviation Organization Environmental Report, 2010. https://www.icao.int/environmental-protection/documents/publications/env_report_2010.pdf. Accessed October 29, 2024.

A total of 9 comments were received that concern greenhouse gas emissions and climate change.

Topical Response

Section 4.2 of the DEA addresses effects on climate. In accordance with FAA guidance for assessing impacts to climate change, the Aviation Environmental Design Tool (AEDT) was utilized to calculate fuel burn and carbon dioxide 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, carbon dioxide equivalent (CO₂e) emissions are assumed to be equivalent to direct carbon dioxide.

While the AEDT model indicates that fuel burn could 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 greenhouse gas 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 carbon dioxide emissions is minor in the context of current BUR emissions. As a result, increases in greenhouse gases 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 A and Alternative B when compared to the No Action Alternative due to similarities in flight tracks between the proposed procedure designs, the existing procedure designs, and the existing VAN NUYS THREE DEPARTURE, which would be utilized by those aircraft that are unable to meet the Alternative B climb gradient. Correspondingly, fuel burn would result in no major reduction in carbon dioxide emissions and would not significantly contribute to atmospheric greenhouse gas levels.

5.3 Biological Resources

Biological resources are valued for their intrinsic, aesthetic, economic, and recreational qualities and include fish, wildlife, plants, and their respective habitats. Typical categories of biological resources include:

- Terrestrial and aquatic plant and animal species
- Game and non-game species
- Special status species (state or Federally listed threatened or endangered species, marine mammals, or species of concern, such as species proposed for listing or migratory birds)
- Environmentally sensitive or critical habitats

The FAA received 13 comments related to biological resources. The majority of the comments expressed general concern over the effects of flight paths and associated aircraft noise over wildlife habitats and protected lands. Some comments expressed dissatisfaction with the sufficiency of the FAA's biological impact analysis.

Topical Response

Section 3.2 of the DEA addresses environmental resources unlikely to be affected by the proposed action. Section 3.3 addresses potentially affected environmental resources. Section 4.3

addresses wildlife impacts. When defining the study area for biological resources, the FAA considers both areas directly impacted (such as through vegetation and habitat removal within the construction footprint) and those areas indirectly impacted through facility lighting, noise, air emissions, and changes to water quality or quantity caused by construction equipment or facility operations.

Potential impacts on biological resources from air traffic operations are primarily related to disturbance to noise-sensitive terrestrial and aquatic animals. The noise analysis assessed the potential impacts on these noise-sensitive species. The areas within the vicinity of air traffic operations were considered, as well as any land area or open water that would be overflowed.

Section 3.3.3.3 of the DEA addresses protected species and critical habitats, detailing the analysis used during the study. The results of the query are outlined in Appendix G, which includes a list of protected wildlife species in the general study area. Figure 3-6 of the DEA details federally and/or state listed species identified in the general study area. It was determined that four protected wildlife species have a moderate to high potential to occur within the area of significant noise impacts associated with Alternative A. Although six critical habitats are present in the general study area, none are located within the Alternative A area of significant noise.

The DEA concluded that, 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.

5.4 Community Engagement

The FAA's Community Involvement Policy Statement (April 17, 1995) affirms the FAA's commitment to make complete, open, and effective public participation an essential part of its actions, programs, and decisions. The U.S. Environmental Protection Agency defines meaningful involvement as:

- Potentially affected populations have an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health
- The public's contribution can influence the regulatory agency's decision
- The concerns of all participants will be considered in the decision-making process
- The rule-writers and decision-makers seek out and facilitate the involvement of those potentially affected

Three comments were received related to community engagement.

Topical Response

Section 5.1 of the DEA addresses public outreach and coordination. Community outreach was conducted consistent with FAA Order 1050.1F. The appropriate level of public engagement for an EA is determined on a case-by-case basis and will vary based on the proposed action and the

potential impacts. Beyond the required notice of availability, examples of some optional public engagement methods for EAs that should be considered in appropriate circumstances include: (1) scoping (see Paragraph 6-2.2.c); (2) circulation of a DEA for public comment (see Paragraph 6-2.2g); and (3) public meetings, workshops, and hearings (see Paragraph 2-5.3).

Examples of situations where circulation of a DEA may be appropriate include DEAs prepared for projects involving special purpose laws and requirements that necessitate public input (e.g., Section 106 of the NHPA; Executive Order 11988, Floodplain Management, as amended in Executive Order 13690, Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input; and projects that are highly controversial on environmental grounds (see FAA Order Para. 5-2.b.(10)).⁶ If a DEA is circulated, the responsible FAA official, or applicant as directed by the FAA, must circulate the DEA to interested agencies and parties, including any who submitted comments on the proposed action. Public meetings or hearings are not required for EAs, but may be considered in some situations (see FAA Order 1050.1F, Para. 2-5.3).

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. Public engagement was conducted as outlined in Section 5.1 of the DEA. The correspondence developed by the FAA during the consultation process for the assessment of adverse effects to historic resources from the alternatives considered, as prescribed in 36 CFR § 800.5, is included in Appendix M of the DEA.

Prior to conducting the DEA, extensive community engagement was completed, including two public workshops on November 7–8, 2018, a 30-day comment period for the Draft Environmental Review Proposed Categorical Exclusion, and numerous meetings and briefings with the Task Force. Based on the public input received in 2019, the FAA determined an EA was the appropriate level of environmental review for this action.

As the FAA was preparing the EA of the proposed amendments to the BUR departure procedures, the Task Force was formed. The Task Force requested that the FAA await their input, and they subsequently submitted 16 recommendations and 102 associated sub-recommendations. The FAA carefully considered all 118 recommendations as potential reasonable alternatives to the proposed amendments.

The DEA was announced in the *Federal Register* and four local newspapers, and the FAA sent out notices to congressional stakeholders for their awareness of the project. The FAA released the DEA on its community engagement website on December 11, 2023. The FAA received a

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. Mere opposition is not sufficient for a proposed action or its impacts to be considered highly controversial on environmental grounds. Opposition on environmental grounds by a federal, state, or local government agency or by a tribe or a substantial number of the persons affected by the action should be considered in determining whether or not reasonable disagreement regarding the impacts of a proposed action exists.

substantial number of requests for more time and supplemental information for public review of the DEA for the proposed amendments to the OROSZ and SLAPP procedures.

As a result of these requests, the FAA extended the time for public review from the original period of 45 days (comments due by January 24, 2024) to 105 days (comments due by March 25, 2024) to allow the public an additional 60 days for public review. The FAA also provided supplemental graphics on its community engagement website on February 23, 2024, pursuant to the early comments received.

Appendix D contains the Task Force recommendations addressing the community noise concerns, and Appendix E contains the FAA's response to the Task Force. The FAA considered the opinions of the public in formulating the alternatives put forth for review, and carefully considered comments received during the extensive public comment period.

5.5 Noise

Sound is a physical phenomenon consisting of pressure fluctuations that travel through a medium, such as air, and are sensed by the human ear. Noise is considered unwanted sound that can disturb routine activities (e.g., sleep, conversation, student learning) and can cause annoyance. Aviation noise primarily results from the operation of fixed and rotary wing aircraft, such as departures, arrivals, overflights, taxiing, and engine run-ups. Noise is often the predominant aviation environmental concern of the public. Aircraft noise in communities around airports has historically generated most of the noise issues. There are increasing concerns in suburban and rural areas farther from airports where ambient noise is lower than it is in the more urbanized areas that tend to surround many commercial service airports. There are also special noise sensitivities with respect to certain resources such as national parks.

For aviation noise analyses, the FAA has determined that the cumulative noise energy exposure of individuals to noise resulting from aviation activities must be established in terms of DNL, the FAA's primary noise metric. 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.⁷ The DNL noise metric logarithmically averages aircraft sound levels at a location over a complete 24-hour period, with a 10 dB adjustment added to those noise events occurring from 10:00 p.m. and up to 7:00 a.m. the following morning. The 10 dB adjustment has been added because of the increased sensitivity to noise during normal nighttime hours and because ambient (without aircraft) sound levels during nighttime are typically about 10 dB lower than during daytime hours.

The compatibility of existing and planned land uses with proposed aviation actions is usually determined in relation to the level of aircraft noise. Federal compatible land use guidelines for a variety of land uses are provided in Table 1 in Appendix A of 14 CFR Part 150, *Land Use*

⁷ Average Sound Level means the level, in decibels, of the mean-square, A-weighted sound pressure during a specified period, with reference to the square of the standard reference sound pressure of 20 micropascals. Day-Night Average Sound Level (DNL) means the 24-hour average sound level, in decibels, for the period from midnight to midnight, obtained after the addition of ten decibels to sound levels for the periods between midnight and 7 a.m., and between 10 p.m., and midnight, local time. Yearly Day-Night Average Sound Level (YDNL) means the 365-day average, in decibels, of the day-night average sound level.

Compatibility with Yearly Day-Night Average Sound Levels. 14 CFR, Part 150, identifies a DNL level of 65 dB and below as compatible with residential and most other land uses. DNL is the FAA's required noise metric for the assessment of aircraft noise and was adopted through 14 CFR Part 150 to meet the provisions of the Aviation Safety and Noise Abatement Act of 1979.

A total of 815 comments were received concerning noise impacts.

Topical Response

To determine whether aircraft noise impacts are significant under NEPA, the FAA considers whether the predicted increase in noise associated with the proposed action exceeds 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. FAA 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 may not be sufficient to determine the noise impact.

Sections 3.3.6.1 through Section 3.3.6.3 of the DEA address noise and noise compatible land use analysis. A noise modeling study was conducted based on fixed-wing aircraft and helicopter flight operations recorded by radar occurring in the baseline timeframe (January 1, 2022–December 31, 2022). The DEA discusses information regarding noise and land use compatibility criteria applicable to the evaluation of noise impacts.

Significant noise impacts were identified in connection with Alternative A compared to the No Action Alternative. The FAA considers the impacts of noise on other environmental impact categories, and based on the review in the DEA, found that the significant noise impacts resulting from Alternative A would result in significant impacts to local communities and children's environmental health.

Comments were received specifically objecting to the application of the DNL noise metric in the DEA as opposed to the community noise equivalent level (CNEL) noise metric. According to FAA Order 1050.1F, Appendix B, B-1, for aviation noise analyses, the FAA has determined that the cumulative noise energy exposure of individuals to noise resulting from aviation activities must be established in DNL, the FAA's primary noise metric.

DNL and CNEL metrics are calculated similarly and measure cumulative noise. The difference between these noise metrics is that CNEL weighs evening flights that occur between the hours of 7:00 p.m. and 10:00 p.m. by a factor of three, while DNL does not. Thus, the findings of the DEA would still have identified significant noise impacts in connection with Alternative A if it had relied on the CNEL metric as opposed to the DEA's application of DNL. The FAA opted to utilize DNL in accordance with FAA policies, and to consider land use compatibility, as the Part 150 guidelines for land use compatibility are based on noise analysis using DNL, not CNEL.

In addition, the FAA’s 1050.1F Desk Reference (February 2020), Section 11.4, on Supplemental Noise Analysis states that “The Federal Interagency Committee on Noise (FICON) report, ‘Federal Agency Review of Selected Airport Noise Analysis Issues,’ dated August 1992, concluded that DNL is the recommended metric and should continue to be used as the primary metric for aircraft noise exposure. Subsequent review has confirmed there are no new descriptors or metrics of sufficient scientific standing to substitute for the present DNL cumulative noise exposure metric. However, DNL analysis may optionally be supplemented on a case-by-case basis to characterize specific noise impacts. Because of the diversity of situations, the variety of supplemental metrics available, and the limitations of individual supplemental metrics, the FICON report concluded that the use of supplemental metrics to analyze noise should remain at the discretion of individual agencies.” Therefore, the CNEL noise metric may be used in lieu of DNL for FAA actions in California, but it is not required.

5.6 Section 4(f) of the Department of Transportation Act of 1966

Section 4(f) of the U.S. Department of Transportation Act of 1966 (now codified as 49 U.S.C. § 303) protects significant publicly owned parks, recreational areas, wildlife and waterfowl refuges, and public and private historic sites. Section 4(f) provides that the Secretary of Transportation may approve a transportation program or project requiring the use of publicly owned land off a public park, recreation area, or wildlife or waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance, only if there is no feasible and prudent alternative to using that land and the program or project includes all possible planning to minimize harm resulting from the use. The FAA should identify—as early as practicable in the planning process—Section 4(f) resources that could be affected by the implementation of the proposed action and alternative(s).

Section 4(f) resources include:

- Parks and recreational areas of national, state, or local significance that are both publicly owned and open to the public
- Publicly owned wildlife and waterfowl refuges of national, state, or local significance that are open to the public
- Historic sites of national, state, or local significance in public or private ownership regardless of whether they are open to the public

A property must be a significant resource for Section 4(f) to apply. Any part of a Section 4(f) property is presumed to be significant unless there is a statement of insignificance relative to the entire property by the federal, state, or local official having jurisdiction over the property. Any statement of insignificance is subject to review by the FAA.

Section 4(f) protects only those historic or archeological properties that are listed, or eligible for inclusion, on the National Register of Historic Places (NRHP), except in unusual circumstances. Historic sites are normally identified during the process required under Section 106 of the NHPA, 54 U.S.C. § 300101 *et seq.*, and its implementing regulations (36 CFR part 800). If an

official formally provides information to indicate that a historic site not on or eligible for inclusion on the NRHP is significant, the responsible FAA official may determine that it is appropriate to apply Section 4(f). If the responsible FAA official finds that Section 4(f) does not apply, the NEPA document should include the basis for this finding (which may be based on the reasons the property was not eligible for the NRHP).

Where federal lands are administered for multiple uses, the federal official having jurisdiction over the lands shall determine whether the lands are, in fact, being used for park, recreation, wildlife, waterfowl, or historic purposes. National wilderness areas may serve similar purposes and shall be considered subject to Section 4(f) unless the controlling agency specifically determines that the lands are not being used for Section 4(f) purposes.

An initial assessment should be made to determine whether the proposed action and alternative(s) would result in the use of any of the properties to which Section 4(f) applies. If physical use or constructive use of a Section 4(f) property is involved, the potential impacts of the proposed action and alternative(s) on the Section 4(f) property must be described in detail. The description of the affected Section 4(f) property should include the location, size, activities, patronage, access, unique or irreplaceable qualities, relationship to similarly used lands in the vicinity, jurisdictional entity, and other factors necessary to understand and convey the extent of the impacts on the resource. Maps, plans, photos, or drawings may assist in describing the property and understanding the potential use, whether physical taking or constructive use. Any statements regarding the property's significance by officials having jurisdiction should be documented and attached.

Physical Use of Section 4(f) Property is defined as follows:

A Section 4(f) use would occur if the proposed action or alternative(s) would involve an actual physical taking of Section 4(f) property through purchase of land or a permanent easement, physical occupation of a portion or all of the property, or alteration of structures or facilities on the property. If a project would physically occupy an NRHP-listed or eligible property containing archeological resources that warrant preservation in place, there would be a Section 4(f) use. Although there may be some physical taking of land, Section 4(f) does not apply to NRHP-listed or eligible archeological properties where the responsible FAA official, after consultation with the SHPO and Tribal Historic Preservation Office (THPO), determines that the archeological resource is important chiefly for data recovery and is not important for preservation in place.

Constructive Use of Section 4(f) Property is defined as follows:

Use, within the meaning of Section 4(f), includes not only the physical taking of such property, but also "constructive use." The concept of constructive use is that a project that does not physically use land in a park, for example, may still, by means of noise, air pollution, water pollution, or other impacts, dissipate its aesthetic value, harm its wildlife, restrict its access, and take it in every practical sense. Constructive use occurs when the impacts of a project on a Section 4(f) property are so severe that the activities, features, or attributes that qualify the property for protection under Section 4(f) are substantially impaired. Substantial impairment occurs only when the protected activities, features, or attributes of the Section 4(f) property that

contribute to its significance or enjoyment are substantially diminished. This means that the value of the Section 4(f) property, in terms of its prior significance and enjoyment, is substantially reduced or lost. For example, noise would need to be at levels high enough to have negative consequences of a substantial nature that amount to a taking of a park or portion of a park for transportation purposes.

The responsible FAA official must consult all appropriate federal, state, and local officials with jurisdiction over the affected Section 4(f) properties when determining whether project-related impacts would substantially impair the resources. Following consultation and assessment of potential impacts, the FAA is solely responsible for Section 4(f) applicability and determinations.

The land use compatibility guidelines in 14 CFR Part 150 (the Part 150 guidelines) may be relied upon by the FAA to determine whether there is a constructive use under Section 4(f) where the land uses specified in the Part 150 guidelines are relevant to the value, significance, and enjoyment of the Section 4(f) lands in question. According to the FAA 1050.1F Desk Reference, V2 (February 2020), Section 5.3.2, on constructive use of Section 4(f) property, the FAA may rely on the Part 150 guidelines in evaluating constructive use of lands devoted to traditional recreational activities. The FAA may primarily rely upon DNL in Part 150 rather than single event noise analysis because DNL:

1. Is the best measure of significant impact on the quality of the human environment
2. Is the only noise metric with a substantial body of scientific data on the reaction of people to noise
3. Has been systematically related to federal compatible land use guidelines

The FAA may also rely upon the Part 150 guidelines to evaluate impacts on historic properties that are in use as residences. The Part 150 guidelines may be insufficient to determine the noise impact on historic properties where a quiet setting is a generally recognized purpose and attribute, such as a historic village preserved specifically to convey the atmosphere of rural life in an earlier era or a traditional cultural property. If architecture is the relevant characteristic of a historic neighborhood, then project-related noise would not substantially impair the characteristics that led to eligibility for or listing on the NRHP. As a result, noise would not constitute a constructive use, and Section 4(f) would not be triggered. A historic property would not be considered to be constructively used for Section 4(f) purposes when the FAA issues a finding of no historic properties affected or no adverse effect under Section 106 of the NHPA, 54 U.S.C. § 300101 *et seq.* Findings of adverse effects do not automatically trigger Section 4(f) unless the effects would substantially impair the affected resource's historical integrity. The FAA is responsible for complying with Section 106 of the NHPA regardless of the disposition of Section 4(f).

When assessing use of Section 4(f) properties located in a quiet setting and where the setting is a generally recognized feature or attribute of the site's significance, the FAA carefully evaluates reliance on the Part 150 guidelines. The FAA must weigh additional factors in determining whether to apply the thresholds listed in the Part 150 guidelines to determine the significance of noise impacts on noise sensitive areas within Section 4(f) properties (including, but not limited

to, noise sensitive areas within national parks, national wildlife and waterfowl refuges, and historic sites including traditional cultural properties). The FAA may use the Part 150 land use compatibility table as a guideline to determine the significance of noise impacts on Section 4(f) properties to the extent that the land uses specified bear relevance to the value, significance, and enjoyment of the lands in question. However, the Part 150 guidelines may not be sufficient for all historic sites as described above, and the Part 150 guidelines do not adequately address the impacts of noise on the expectations and purposes of people visiting areas within a national park or national wildlife refuge where other noise is very low and a quiet setting is a generally recognized purpose and attribute.

Exhibit 4-1 of FAA Order 1050.1F provides the FAA's significance threshold for Section 4(f) properties. A significant impact would occur when the 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. A significant impact under NEPA would not occur if mitigation measures eliminate or reduce the effects of the use below the threshold of significance. If a project would physically use a Section 4(f) property, the FAA is responsible for complying with Section 4(f) even if the impacts are less than significant for NEPA purposes.

A total of 17 comments were received concerning impacts to Section 4(f) properties.

Topical Response

The proposed action does not include land acquisition, construction, or other ground disturbance activities that result in the physical use of Section 4(f) resources. Accordingly, the FAA assessed the proposed action's potential for constructive use from noise or visual impacts.

As noted above, the FAA's NEPA procedures state 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 significant noise 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. Therefore, the FAA's reportable noise threshold is taken into consideration for these noise sensitive resources. The reportable noise threshold is more conservative than the 14 CFR Part 150 land use compatibility guidelines and includes noise impacts ranging from:

- DNL 60 dB to <65 dB with an increase of up to 3 dB
- DNL 45 dB to <60 dB with an increase of up to 5 dB

FAA considered all Section 4(f) resources identified as potentially "noise sensitive areas" in its analysis, including resources such as the protected parklands of the Santa Monica Mountains. Refer to Appendix H for a list of publicly owned parks and recreational properties within the general study area.

Section 4.4 of the DEA addresses the 627 Section 4(f) properties identified in the general study area. These resources were identified through publicly available resources, such as maps and municipal websites, as well as through consultation activities. Specifically, the FAA initiated Section 4(f) consultation with the following entities and included all resources identified during these consultations in the DEA noise analysis: the National Park Service, the U.S. Forest Service, the Bureau of Land Management, California State Parks, the City of Burbank, the City of Santa Clarita, the City of San Fernando, the City of Beverly Hills, the City of Los Angeles, the County of Los Angeles, the County of Ventura, the Conejo Recreation and Parks District, and the Mountains Recreation & Conservation Authority.

The FAA assessed the potential for constructive use by considering whether there would be any reportable or significant noise increases for each individual Section 4(f) property identified. The noise model included centroids at the center of each property and the noise impact was calculated at each point for Alternative A and Alternative B. The DEA found that 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) for any of the Section 4(f) resources identified within the general study area. 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 of the DEA also indicates that there would be only a limited visual impact throughout the general study area which would not substantially impair any Section 4(f) resource. Based on the analyses conducted, the DEA concluded that there would be no constructive use, and, therefore, no significant impacts to Section 4(f) resources for the proposed action.

5.7 Section 106 of the National Historic Preservation Act

NEPA and the NHPA are two individual statutes with separate sets of implementing regulations. Under NEPA, the FAA is responsible for analyzing the impacts of its action on historical, architectural, archeological, and cultural resources as part of a broader review of the human environment. Historical, architectural, archeological, and cultural resources encompass a range of sites, properties, and physical resources relating to human activities, society, and cultural institutions. Such resources include past and present expressions of human culture and history in the physical environment—such as prehistoric and historic archaeological sites, structures, objects, and districts—which are considered important to a culture or community. Historical, architectural, archeological, and cultural resources also include aspects of the physical environment, namely natural features and biota, a part of traditional ways of life and practices and associated with community values and institutions.

Section 106 of the NHPA focuses on a specific subset of historical, architectural, archeological, and cultural resources: those properties that are listed on or meet the eligibility criteria for the National Register of Historic Preservation. The Section 106 implementing regulations use the term undertaking to mean a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a federal agency, including those carried out by or on behalf of a federal agency; those carried out with federal financial assistance; and those requiring a federal

permit, license, or approval (see 36 CFR § 800.16[y]). This term is analogous to a proposed federal action, as used in the NEPA context.

The NHPA defines the area of potential effects (APE) as the geographic area or areas where an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. This term is analogous to the general study area evaluated in the DEA.

One comment was received concerning historic and cultural resources protected under Section 106 of the NHPA.

Topical Response

Section 3.3.5.1 of the DEA addresses historic, architectural, and cultural resources in the general study area. This includes historic districts and their contributing properties, individual historic properties, sites, and objects in the general study area (analogous to the term “area of potential effects” under Section 106).

The FAA initiated Section 106 consultation with the following entities: California SHPO, the California Native American Heritage Commission, the City of Burbank, the County of Los Angeles, and the County of Ventura. The DEA includes a Cultural Resources Survey Report that documents the methods and results of a cultural resources inventory completed for the project. The inventory includes all properties currently listed in or determined eligible for listing in the NRHP within the APE.

A comprehensive list of the historic properties identified within the general study area—along with a detailed presentation of the analysis methodology used for assessment of effects—is provided in Appendix I. A total of 685 historic properties were identified. The proposed action 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. This increase would be within the lower threshold of human perception. Therefore, the DEA concluded that the incremental increase in noise caused by the undertaking would not introduce any auditory elements that would diminish the integrity of these properties’ significant historic features and thus 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 Cultural Resources Survey Report recommended a finding of No Adverse Effect to Historic Properties for the proposed action.

5.8 Quality of Life

Although quality of life is not specifically an environmental impact category under the FAA's guidance, the FAA considers impacts on the quality of the human environment with regards to the following impact categories:

- Air quality
- Biological resources (including fish, wildlife, and plants)
- Climate
- Coastal resources
- Department of Transportation Act, Section 4(f)
- Farmlands
- Hazardous materials, solid waste, and pollution prevention
- Historical, architectural, archeological, and cultural resources
- Land use
- Natural resources and energy supply
- Noise and compatible land use
- Socioeconomics and children's environmental health and safety risks
- Visual effects (including light emissions)
- Water resources (including wetlands, floodplains, surface waters, groundwater, and wild and scenic rivers)

The World Health Organization defines quality of life as an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns. Quality of life is a concept which aims to capture the well-being of either a population or individual regarding both positive and negative elements within the entirety of their existence at a specific point in time.

A total of 11 comments were received specifically concerning quality of life.

Topical response

Most of the comments related to quality of life included related comments pertaining to aviation impacts on air quality and noise sensitive areas. Comments related to air quality are specifically addressed in Section 5.1 of this Errata/ROD; however, comments on quality of life related to air quality are further addressed in this section. In the United States, air quality is generally monitored and managed at the county or regional level. The U.S. Environmental Protection Agency, pursuant to mandates of the federal Clean Air Act, 42 U.S.C. § 7401 *et seq.*, has established the National Ambient Air Quality Standards to protect public health, the environment, and quality of life from the detrimental effects of air pollution. The FAA prepared the appropriate level of environmental analysis for air quality in the DEA in accordance with the NEPA under FAA Order 1050.1F. The DEA addresses air quality in Sections 3.3.1 and 4.1, including discussions on the existing air quality conditions and possible impacts from the alternatives considered. Typically, significant air quality impacts would be identified if an action would result in the exceedance of one or more of the National Ambient Air Quality Standards, established by the U.S. Environmental Protection Agency, for any time period analyzed.

According to FAA Order 1050.1F, Exhibit 4-1, an emissions impact is significant if “[t]he action would cause pollutant concentrations to exceed one or more of the National Ambient Air Quality Standards, as established by the U. S. Environmental Protection Agency under the Clean Air Act, for any of the time periods analyzed, or to increase the frequency or severity of any such existing violations.” As noted in Section 5.1, none of the alternatives analyzed resulted in significant air quality impacts.

Comments related to noise are specifically addressed in Section 5.5 of this Errata/ROD; however, comments on quality of life related to noise sensitive areas are further addressed in this section. Noise sensitive areas are defined under FAA Order 1050.1F, Section 11-5:

(10) Noise Sensitive Area. An area where noise interferes with normal activities associated with its use. Normally, noise sensitive areas include residential, educational, health, and religious structures and sites, and parks, recreational areas, areas with wilderness characteristics, wildlife and waterfowl refuges, and cultural and historical sites. For example, in the context of noise from airplanes and helicopters, noise sensitive areas include such areas within the DNL 65 dB noise contour. Individual, isolated, residential structures may be considered compatible within the DNL 65 dB noise contour where the primary use of land is agricultural and adequate noise attenuation is provided. Also, transient residential use such as motels should be considered compatible within the DNL 65 dB noise contour where adequate noise attenuation is provided. A site that is unacceptable for outside use may be compatible for use inside of a structure, provided adequate noise attenuation features are built into that structure (see table 1 in Appendix A of 14 CFR part 150, Airport Noise Planning, Land Use Compatibility Guidelines). The FAA recognizes that there are settings where the DNL 65 dB standard may not apply. In these areas, the responsible FAA official should determine the appropriate noise assessment criteria based on specific uses in that area (see also the 1050.1F Desk Reference for further guidance).

The FAA adhered to the guidelines established in FAA Order 1050.1F and the noise and land use compatibility guidelines set forth in 14 CFR part 150 to assess the potential for the alternatives to have noise impacts on the quality of the human environment. The DEA found that Alternative A would have significant noise impacts compared to the No Action Alternative.

5.9 Safety

The arrival and departure procedures within the Southern California airspace are interconnected, interdependent, and designed to improve safety and efficiency within the National Airspace System (NAS). The design of new or amended procedures are in accordance with the FAA’s flight procedure design criteria and safety/operational requirements.

A total of six comments were received concerning safety.

Topical Response

BUR departures on the SLAPP and OROSZ procedures are assigned 4,000 feet mean sea level as an initial departure altitude to safely separate them from BUR arrival traffic crossing above the departure area from east to west.

The FAA designs procedures in accordance with current FAA design criteria and ensures the designs meet all safety standards in FAA Order 8260.58, *United States Standard for Performance Based Navigation Instrument Procedure Design*, and FAA Order 8260.3, *United States Standard for Terminal Instrument Procedures*. The FAA does not build procedures outside of criteria unless an equivalent level of safety can be achieved. Further information related to the factors that affect the feasibility of procedure designs is included in the topical response for Procedural Objections (see Section 5.10 below).

5.10 Procedural Objections

A total of 821 comments were received that are categorized as procedural objections. These types of comments include objections to the alternatives that were brought forward for analysis, objections to the design of Alternative A, objections to baseline conditions considered under the No Action Alternative, objections to the noise metrics utilized, and objections to FAA's NEPA regulations and policies for environmental analyses. Many of the comments in this category relate to the objections to the FAA's design criteria and the procedure designs considered in the DEA. Additionally, comments were received objecting to the DEA on the premise that mitigation measures were not included and that an environmental impact statement is not being prepared.

Topical Response

Comments were received objecting to the procedure designs considered in the DEA. The purpose and need of the proposed action are to maintain the safety and efficiency of the NAS while designing and developing two open standard instrument departure (SID) flight procedures at BUR.⁸ The FAA completed this environmental review to comply with the terms of the Settlement Agreement. The FAA worked extensively with the Task Force and agreed to consider the recommendations set forth by the Task Force in developing its alternatives, along with the No Action Alternative. The Task Force was comprised of local elected officials from Los Angeles, Burbank, Glendale, and Pasadena. Additional non-voting participants included representatives from the Congressional offices of Senator Feinstein and Harris, and House Members Cardenas, Schiff, and Sherman. The Task Force submitted 16 recommendations and 102 associated sub-recommendations. The FAA carefully considered all 118 recommendations.

Regarding procedure design constraints: in March 2016, safety criteria for open SID flight procedures was established with the issuance of FAA Order 8260.58A, *United States Standard for Performance Based Navigation 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 of the DEA contains the initial environmental review for those two flight procedures.

⁸ An open SID is a performance-based navigation departure procedure that has a defined path at the beginning and end, but also includes a manual termination leg within the procedure. The manual termination is necessary because the pilot must manually terminate the procedure once air traffic control vectoring is complete.

Section 1.1 of the DEA states that Alternative A was operationally feasible by air traffic controllers responsible for managing the region's complex terminal airspace. Alternative B was determined to have a variety of limitations in the DEA—most importantly, safety concerns related to increasing the complexity of the airspace and increased controller workload (see page 2-6 of the DEA).

The design of these procedures—including the increased climb gradient proposed in Alternative B—is ultimately subject to the FAA's design criteria in accordance with FAA Order 8260.58 and FAA Order 8260.3. Climb gradients in excess of 500 feet per nautical mile are outside of the current safety criteria requirements and would require a waiver from the FAA's Flight Standards Service. The FAA does not build procedures outside of criteria unless an equivalent level of safety can be achieved. Although many aircraft models currently exceed Alternative B's proposed climb gradient of 600 feet per nautical mile in normal operations, some aircraft would not be capable of meeting the proposed climb gradient and would need to be issued a different procedure.

In addition to safety constraints, procedure design is also constrained by operational considerations to manage traffic flows, including separation standards with safety margins. While the absolute minimum is three nautical miles, air traffic control requires some buffer space beyond that, particularly in areas with congested airspace, such as BUR. Moving the departure procedure farther north would reduce the buffer. The buffer is necessary to ensure lateral separation of aircraft in the event the procedures aren't flown with precision due to wind or aircraft equipment variances. In the case of BUR arrivals to Runway 8 and departures from Runway 15, lateral separation (at least three nautical miles between aircraft) is used until vertical separation (generally 1,000 feet) is established. The SLAPP and OROSZ procedures cannot be moved farther north because there is not enough distance between the final approach course to Runway 8 and the departure course from Runway 15 between JAYTE and TEAGN. If the safety buffer is reduced, there would be significant flight delays since BUR would not be able to have simultaneous instrument flight rules arrivals and departures.

Comments were received suggesting that Alternative A was not designed in accordance with the Settlement Agreement. Specifically, comments indicated a concern that northbound vectoring operations were not included in the design for Alternative A. As explained in Section 2.1 of this Errata/ROD, it is not safe or efficient for the procedure to turn automatically to the north due to the traffic crossing west to east inbound to Runway 8. The Settlement Agreement includes a provision that requires those northbound vectors be initiated as soon as practicable for an aircraft using the procedures, which is the current practice and would be the continued practice under Alternative A, Alternative B, and the No Action Alternative.

The FAA made two modifications to the DEA in this Errata/ROD to address these comments. Specifically, Section 2.1 provides a clearer explanation of how aircraft would be vectored under Alternative A, and supplemental graphics better illustrating the predicted flight paths and northbound vectoring operations are included in Section 2.2 of this Errata/ROD.

A review of the flight tracks data for the existing SLAPP TWO and OROSZ TWO indicates that 95% of all Runway 15 departures are vectored to the north well in advance of reaching SLAPP or OROSZ (known as “northbound vectoring operations”). The remaining 5% of Runway 15 departures would not change under the proposed action, with the exception of the westbound turn at JAYTE in Alternative A. The application of northbound vectoring operations would continue under Alternative A, wherein aircraft would be vectored north as soon as practicable after take-off, as demonstrated by the flight paths studied under Alternative A. (Refer to the explanation and supplemental graphics provided in Section 2 of this Errata/ROD.) The supplemental graphics are helpful in clarifying that under Alternative A, most (95%) aircraft departing BUR Runway 15 would not fly the full procedures but would instead be vectored north after controllers could safely turn the aircraft.

The “terms” section of the Settlement Agreement expressly identifies the burden on the FAA to “design and develop two open standard departure procedures...” The FAA met this obligation with the SLAPP and OROSZ procedures. The Settlement Agreement goes on to state that implementation of the procedures is subject to compliance with and evaluation under NEPA (see II.B. of the Settlement Agreement). Additionally, the procedures are subject to a safety risk management analysis (see II.C. of the Settlement Agreement). However, all changes to the NAS must meet the primary function of the FAA—to maintain the safety and efficiency of the NAS. Therefore, the FAA’s mission remains the basis for any proposed procedure designs when developing alternatives.

Comments were received suggesting that the FAA should have evaluated alternatives that would promote additional flight track dispersal in their initial departure segment by designing radar vector SID alternatives. There are only three types of departure procedures authorized due to technological limitations:

1. A radar vector departure uses course guidance provided by air traffic control, which issues vectors for aircraft to fly until the pilots take over navigation, typically as they transition to the en route environment. The existing SLAPP and OROSZ procedures are examples of radar vector departures.⁹
2. A standard departure route's course guidance is provided by the pilots via equipment in the aircraft itself, such as Global Positioning System (GPS), some form of RNAV, or following ground-based navigational aids.¹⁰
3. An open departure blends the two, typically with a defined (standard) course at the beginning of the route, the open segment in the middle with vectors from air traffic control, and then the aircraft resumes its own course guidance as they transition to the en route environment.

⁹ The en route phase of flight is defined as that segment of flight from the termination point of a departure procedure to the origination point of an arrival procedure.

¹⁰ Area navigation, or RNAV, enables aircraft traveling through terminal and en route airspace to follow more accurate and better-defined routes. This results in more predictable routes and altitudes that can be pre-planned by the pilot and air traffic control. Predictable routes improve the ability to ensure vertical, longitudinal, and lateral separation between aircraft.

The proposed SLAPP THREE and OROSZ THREE are open departures designed to maximize dispersion in the earlier segments of the procedure.

The FAA is working on ways to apply performance-based navigation (PBN) technology to create the 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. Introducing systematic dispersal using satellite-based routes does not achieve an outcome that would resemble “going back to the way it was” in terms of returning to conditions that existed before the original implementation of these procedures. That type of dispersal is no longer possible.

A total of 770 comments were received objecting to the DEA on the premise that FAA did not provide any mitigation measures for the significant noise impacts as they relate to Alternative A. These comments also recommended that the FAA prepare an Environmental Impact Statement. Based on significant environmental impacts, the FAA has determined to not proceed with Alternative A; therefore, mitigations are not required, and an environmental impact statement will not be prepared.

5.11 Other

Most of the comments received that did not fit into the other comment categories were related to requests for an extension to the public comment period and for supplemental graphics. Comments were also received relating to suggestions for alternatives that were either considered and eliminated from further evaluation, or not put forth in the DEA.

Topical Response

On December 11, 2023, the FAA announced it was seeking public comments on the DEA. The initial 45-day public comment period was scheduled to end on January 24, 2024. Based on comments received, the FAA extended the public comment period for an additional 60 days, until March 24, 2024, for a total of 105 days. The FAA also published supplemental graphics on February 23, 2024, in response to public comments requesting illustrations of the alternative flight paths compared to existing flight tracks.

Comments were received recommending the FAA revisit alternatives that had already been considered and eliminated from further evaluation, and that the FAA evaluate alternatives other than those posited in the DEA. Appendix E of the DEA provides the FAA’s response to the Task Force recommendations to address community noise. The FAA carefully considered and responded to each of the recommendations set forth by the Task Force and formulated Alternative B with consideration to the recommendations that were considered technically feasible. NEPA provides criteria for the elimination of alternatives. Alternatives that do not meet the project objectives or purpose and need, and alternatives that are not reasonable or feasible, may be eliminated from further consideration.

5.12 Out of Scope

Comments were received that did not relate to the actual proposed action. Some of these types of comments include comments related to the 2016 Southern California Metroplex project, comments about flight procedures other than those in the DEA, comments objecting to the FAA's standard practices and methodologies for various environmental impact category analyses as outlined in the Agency's orders and guidance materials, comments related to the Agency's ongoing noise policy review, comments on airport curfews, comments with misconceptions about climb gradients, comments objecting to BUR runway utilization, and comments on real estate property values in the general study area.

Topical Response

Comments related to the 2016 Southern California Metroplex are considered out of scope. The 2016 Southern California Metroplex project consisted of 153 satellite-based departures, arrivals, and other procedures at 6 major airports and 15 satellite airports. The flight procedures evaluated in the DEA are not the 2016 Southern California Metroplex project procedures and are limited to specific proposed amendments to BUR Runway 15 departure procedures. The FAA is not required to revisit its environmental analysis for the Southern California Metroplex project.

Comments regarding the FAA's management of the airspace are similarly out of scope. The Federal Aviation Act states that "[t]he United States Government has exclusive sovereignty of airspace of the United States" and "[a] citizen of the United States has a public right of transit through the navigable airspace" (49 U.S.C § 40103). The FAA possesses exclusive authority to regulate all "navigable airspace," establishing the rules and requirements for its utilization by the citizens wishing to do so.

Comments were received postulating that aircraft could climb steeper climb gradients with power "reduced considerably" to reduce noise. Though out of scope, such comments are based on misconceptions about the nature of climb gradients. Climb gradients are simply the altitude gained (vertically) over the distance traveled (laterally). The steeper the climb gradient, the more power the aircraft needs to safely climb. The standard (minimum) climb gradient specified by FAA design criteria for departures is used to ensure obstacle clearance for a wide variety of aircraft types of varying performance. Most users operate their aircraft in a manner that allows for better performance (i.e., steeper climb gradients) than the standard (minimum) climb gradients required by FAA design criteria. In short, steeper climb gradients require increased power.

Comments related to airport curfews are also considered out of scope. To a significant degree, public airports are restricted by Congress from unilaterally banning certain types of flight activity including enforcing mandatory curfews. (See the Airport Noise and Capacity Act of 1990 (ANCA), 49 U.S.C. §47521 et seq., as implemented by 14 CFR Part 161). The curfew at BUR is voluntary for aircraft operators, and the vast majority of airlines observe the curfew.

Comments objecting to runway utilization at BUR are also considered out of scope. To meet air traffic demands, runway configurations are used in accordance with runway selection criteria. Air traffic control's runway selection is based on many variables, such as runway availability, wind, weather, terrain, operational efficiency, airspace congestion, and noise considerations.

These factors historically have resulted in BUR primarily using Runway 15. The leading factor for this configuration is due to prevailing winds and higher terrain to the east.

Comments pertaining to flight procedures at other airports, such as Van Nuys Airport, Los Angeles International Airport, or Santa Monica Airport, are considered out of scope.

The DEA fulfills the FAA's compliance with NEPA, and is consistent with FAA Order 1050.1F, and FAA Order 7400.2P, *Procedures for Handling Airspace Matters*. Comments objecting to the FAA's overarching policies and procedures for agency compliance with various environmental laws and regulations or related to its ongoing noise policy review, including FAA's environmental neighborhood survey, are out of the scope of the proposed action and are not further addressed.

Comments relating to real estate property values are considered out of scope. The assessment of property values is not an environmental impact category as outlined in FAA Order 1050.1F, and specific studies of the impact of aviation on real property values are not required under NEPA. Studies conducted at other national airports have concluded that airport noise only has a slight impact on property values within the DNL 65 dB or greater noise contour around airports. Additionally, a comparison of older studies to more recent studies indicates that the impact was greater in the 1960s, when jet aircraft first entered the fleet.^{11 12} This decrease presumably is the result of the stabilization of real estate markets following an initial adjustment to noisier jets, and of noise reduction in modern aircraft.

Comments were received suggesting that the FAA was deficient in its air quality analysis because the DEA did not assess hazardous air pollutants beyond those compounds specified by the Clean Air Act National Ambient Air Quality Standards (NAAQS). Hazardous air pollutants (commonly referenced as HAPs) are considered pollutants for which there are no NAAQS but are still regulated under the federal Clean Air Act because of their potentially adverse effects on human health and the environment. Also known as "air toxics," these pollutants are comprised of a wide array of organic and inorganic compounds (e.g., formaldehyde, acetaldehyde, benzene, toluene, acrolein, 1,3-butadiene, xylene, lead, naphthalene, propionaldehyde). In relation to aviation sources, such emissions are present in the exhaust of aircraft, auxiliary power units, ground support equipment, and motor vehicle engines and, to a lesser extent, in boilers, fuel facilities, and other stationary sources.

The FAA recently updated its Aviation Emissions and Air Quality Handbook, V4, in July 2024, which addresses HAPs.¹³ Excerpts are provided below for ease of reference, but the guidance is publicly available and provides further information on this topic.

¹¹ FAA's *Aviation Noise Effects*, 1985.

¹² ACRP Synthesis Report 9 Effects of Aircraft Noise: Research Update on Selected Topics

¹³ FAA Aviation Emissions and Air Quality Handbook, https://www.faa.gov/regulations_policies/policy_guidance/envir_policy/airquality_handbook. Accessed October 24, 2024.

The EPA has identified 188 air pollutants that are considered to be HAPs and therefore subject to the requirements of Section 112 (Hazardous Air Pollutants) of the CAA. From this list of 188 HAPs, 33 have been further designated by the EPA as having the greatest potential health threat to the general public in the largest number of urban areas and are known as “Section 112(k) HAPs.” The major categories of HAPs in this group include volatile and semi-volatile organic compounds (i.e., VOCs, SVOCs) and heavy metals.

In a related matter, the EPA has identified 21 HAPs that are designated as Mobile Source Air Toxics (MSATs) to signify those HAPs that are emitted by motor vehicles and non-road engines (e.g., farm and construction equipment, heavy industrial vehicles, GSE, etc.). These pollutants include VOCs and heavy metals that are commonly associated with the combustion of gasoline and diesel fuels - including those emitted by aviation-related motor vehicles and GSE.

Other sources of HAPs associated with airports are similarly regulated under Section 112 of the CAA if their emissions exceed established thresholds and they meet the definition of a major stationary or area source. These may include aircraft repair and maintenance facilities, engine test cells, central heating plants, painting operations, and other airport support services that generate air emissions.

Importantly, neither airports nor aircraft are specifically included among the source types regulated pursuant to Section 112 of the CAA (42 U.S.C § 7412) nor do they meet the definitions of the source types (i.e., “major stationary,” “area,” or “mobile sources”) that are specifically covered under this section. Rather, all emissions from aircraft engines are currently regulated under Part B (Aircraft Emission Standards) 106 of the CAA. Therefore, although aircraft HAPs are not directly regulated under the CAA, they are indirectly controlled as elements of total unburned hydrocarbons (HC) and PM pursuant to Part B.

Given the limited control and opportunities for mitigation of Hazardous Air Pollutants, and the lack of a threshold of significance for these pollutants, FAA does not require quantification of these emissions, and expects preparation of such an inventory to be uncommon.

Therefore, comments pertaining to HAPs are considered out of scope.

Section 6. Indication of Specific Circumstances That Would Trigger a Reevaluation or Supplemental Environmental Assessment

The FAA acknowledges the high level of public interest in this project and its importance to the local communities. The FAA received 16 recommendations and 102 associated sub-recommendations from the Task Force. We also received correspondence from the surrounding cities and elected officials from all levels of government expressing opinions, concerns, and interest in the project. Additionally, over 1,100 comments were received from the public.

The alternatives considered in this project would either have significant environmental impacts or would not achieve the goals of the project. No circumstances have been identified that would trigger a reevaluation or a supplemental EA at this time.

The FAA respects the hard work, dedication, and recommendations of the Task Force, and the many perspectives offered by the public during the public comment period. We remain committed to providing the safest, most efficient aerospace system in the world while continuing to address the needs of the communities.

Section 7. Record of Decision

In compliance with the terms of the Settlement Agreement, the FAA designed and examined the environmental impacts of the two open SID flight procedures from BUR (Alternative A). After careful and thorough consideration of the EA and the facts contained herein, I find that Alternative A would result in significant environmental impacts. I further find that Alternative B would not meet the terms of the Settlement Agreement, would not achieve the Task Force's objectives of reducing noise impacts at BUR, would require a waiver to design criteria, and would result in increased air traffic controller workload. I find that the No Action Alternative is consistent with existing national environmental policies and objectives as set forth in Section 101 of NEPA and other applicable environmental requirements and will not significantly affect the quality of human environment or otherwise include any condition requiring consultation pursuant to Section 102(2)(C) of NEPA. I have determined to proceed under the No Action Alternative, and an environmental impact statement will not be prepared.

I, the undersigned, have reviewed the referenced the EA, including the evaluation of the purpose and need that this project would serve, the alternative means of achieving the purpose and need, and the environmental impacts associated with these alternatives.

I have carefully considered the FAA's statutory mandate under 49 U.S.C. § 40103 to ensure the safe and efficient use of the NAS and the other aeronautical goals and objectives discussed in the EA.

Accordingly, under the authority delegated to me by the Administrator of the FAA, I approve the decision to proceed under the No Action Alternative.

Approved:

Daniel N. Puterbaugh Jr.
Director of Operations
Air Traffic Services, Western Service Area

RIGHT OF APPEAL

This ROD constitutes a final order of the FAA Administrator and is subject to exclusive judicial review under 49 U.S.C. § 46110 by the U.S. Circuit Court of Appeals for the District of Columbia or the U.S. Circuit Court of Appeals for the circuit in which the person contesting the decision resides or has its principal place of business. Any party having substantial interest in this order may apply for review of the decision by filing a petition for review in the appropriate U.S. Court of Appeals no later than 60 days after the order is issued in accordance with the provisions of 49 U.S.C. § 46110.