Hollywood Burbank Airport

Part 150 STUDY

Noise Compatibility Study
Public Open House

Airport History

1930 Opens as United Airport; largest in LA until 1946

1934 - 1940 Renamed Union Air Terminal, then Lockheed Air Terminal after purchase by Lockheed.

1967 Renamed Hollywood–Burbank Airport, introducing jet services.

1978 Authority acquired Airport, and renamed it to Burbank-Glendale-Pasadena Airport

2003 Renamed Bob Hope Airport in honor of the comedian.

2014 - 2017 Regional Intermodal Transportation Center opens; rebranded as Hollywood Burbank Airport.

2024 - 2026 Breaks ground on new terminal, set to open in 2026 with modern facilities.

Noise Exposure Map (NEM) accepted by FAA in 1988, 2000, and 2013.

Noise Compatibility Program (NCP) measures approved by FAA in 1989, 2000, 2004, and 2016.

Airport Facility Overview

2
Intersecting Runways

6,886
Feet of Runway, North-South

5,802
Feet of Runway, East-West

555
Acres on the Premises

140,000
Total Aircraft Operations

6 million
Annual Passengers

24,000
General Aviation Operations

400
Military Operations

64,000
Air Carrier Operations

25,000
Air Taxi Operations

1
Aircraft Rescue and Firefighting Station

2
Fixed-Base Operators & 2 Cargo Carriers

Part 150 Overview

Regulation

Title 14 of the Code of Federal Regulations Part 150 (Part 150), "Airport Noise Compatibility Planning"

- Voluntary FAA-defined process for airport noise studies
- Over 250 airports have participated
- Sets national standards for analysis
- Provides access to FAA funding of some approved measures

Technical Elements

Part 150 has two technical elements:

1. **Noise Exposure Map (NEM)**
   FAA Accepts the document as being completed per 14 CFR Part 150
2. **Noise Compatibility Program (NCP)**
   FAA Accepts the document as being completed per 14 CFR Part 150
   FAA approves/disapproved each Airport-recommended measure in a Record of Approval (ROA)

Planning Process

Study Initiation

- Finalize methodology
- Establish Citizen's Advisory Committee
- Establish Technical Advisory Committee
- Develop project schedule and milestones

Verification

- Existing Noise Exposure Maps, planning, and environmental documents
- Noise complaint data
- GIS and land use data
- Flight track, operations, and noise data
- FAA activity forecasts

Develop NEMs

- Develop noise contours for existing and 5-year forecast conditions
- Review land use data & policies
- Noise impact evaluation for CNEL 65-75
- Identify incompatible land uses and review existing NCP
- Prepare maps in accordance with 14 CFR Part 150

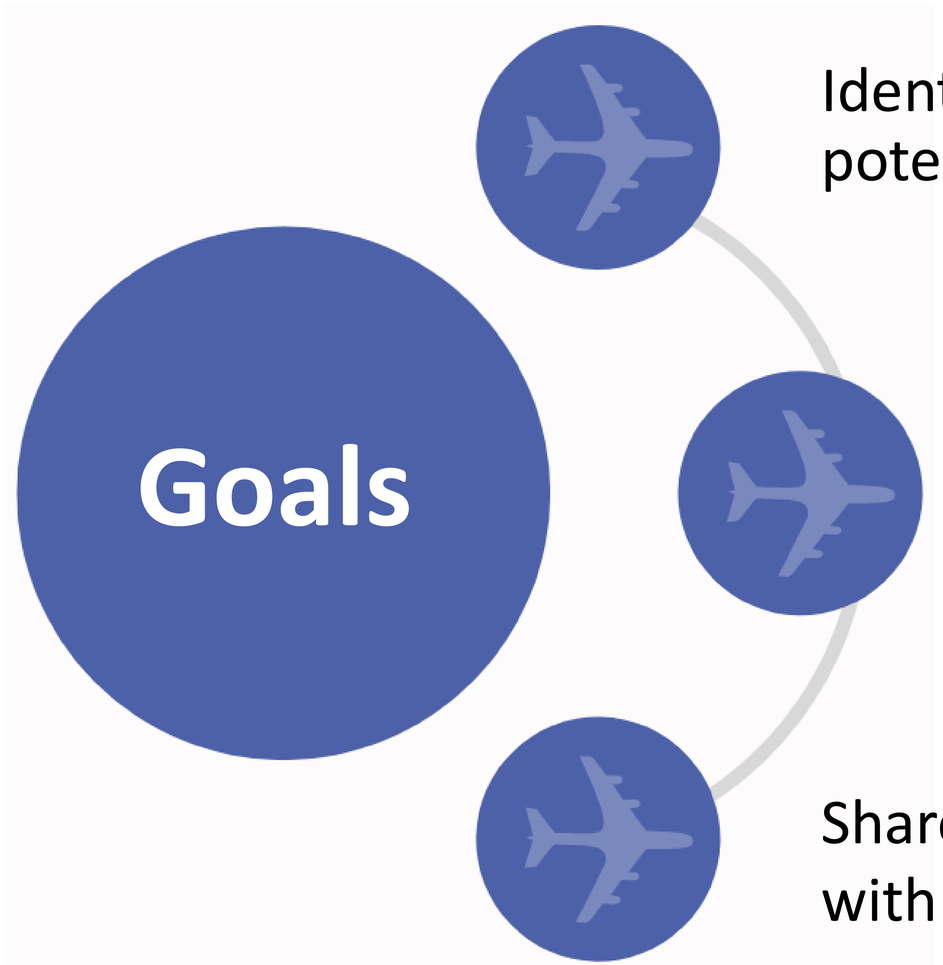
Develop NCP

- Consider noise abatement strategies
- Consider land use strategies
- Consider programmatic strategies
- Update NCP in accordance with 14 CFR Part 150

Stakeholder Engagement and Public Outreach

Citizen's Advisory Committee • Technical Advisory Committee • Public Meetings/Hearing • Public Website Materials and Newsletters

NEM Update Goals



Identify incompatible land uses potentially eligible for noise mitigation

Review implementation of the Noise Compatibility Program

Share pertinent data and information with the public

Note: *FAA requires that Noise Exposure Maps reflect existing and/or forecast conditions at all times – thus the need to update them on a regular basis.*

NCP Development

Objectives of Proposed Measures

- **Reduce** exposure over incompatible uses
- **Limit** growth in exposure over incompatible uses
- **Mitigate** exposure where it cannot be reduced to compatible levels
- **Prevent** introduction of new incompatible uses

Land Use Strategies

- Land acquisition
- Sound insulation
- Avigation easements
- Prevention
- Land use controls
- Real estate disclosures

Noise Abatement Strategies

- Flight tracks
- Preferential runway use
- Arrival/departure procedures
- Airport layout modifications
- Use restrictions

Programmatic Measures

- Implementation
- Promotion
- Monitoring
- Reporting
- NEM updating
- NCP Revision

Analysis and Selection Process

1) Evaluate effectiveness in addressing objectives
2) Evaluate feasibility (economic, operational, safety, etc.)
3) Select most effective “package” of measures
4) Identify implementation responsibilities, schedule, etc.
5) If not recommended, document reason(s)

Roles and Responsibilities

BGPAA

- Project sponsor
- Contracts with consultant team
- Certifies the NEM is accurate and complete
- Submits NEM Update to the FAA for acceptance

FAA

- Provides federal funding for NEM Update
- Accepts NEM update
- Certification that the documentation meets federal regulations and guidelines

Consultant Team

- Overall project management, documentation, and outreach
- Aircraft noise analysis
- Land use compatibility analysis
- Aviation forecast and airfield analysis

Advisory Committees

- Review study inputs, assumptions, analyses, documentation, etc.
- Input, advice, and guidance related to NEM development

Public

- Provide input on study during comment period
- Review public draft documents

Advisory Committees

Technical Advisory Committee (TAC)

- Hollywood Burbank Airport
- Burbank-Glendale-Pasadena Airport Authority
- FAA Airport District Office and Air Traffic Control
- National Business Aviation Administration
- Four Airlines (Alaska, JetBlue, Southwest, Spirit)
- Three cargo carriers (FedEx, UPS, Harbor Freight)
- Two fixed-base operators (Atlantic Aviation and Million Air)
- LA County Airport Land Use Commission
- City of Burbank Land Use Planner
- City of Los Angeles Land Use Planner

Citizen's Advisory Committee (CAC)

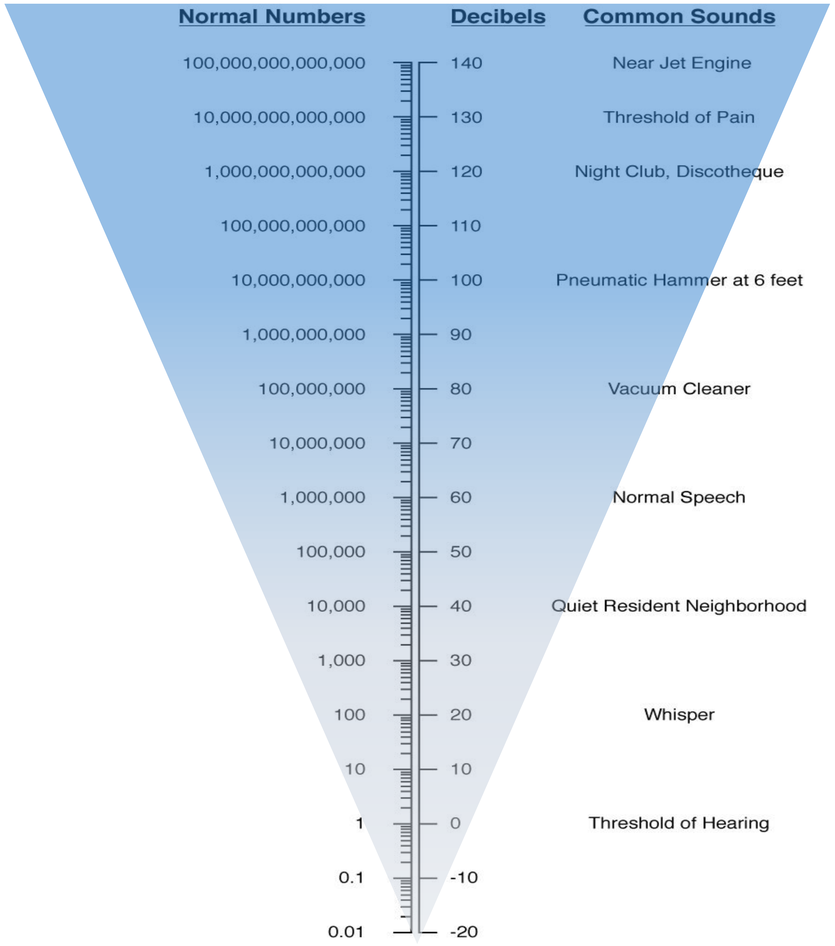
Three representatives each, from the cities of:

- Burbank
- Glendale
- Pasadena
- Los Angeles

Noise Terminology

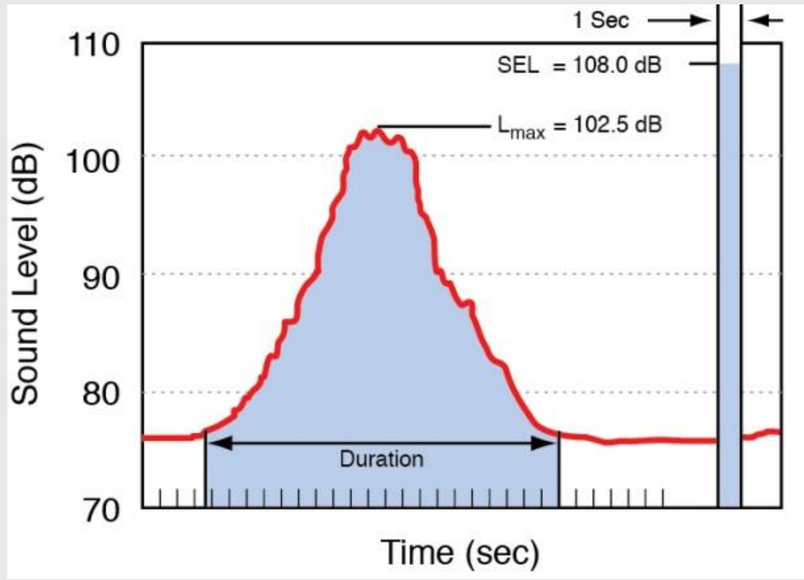
Reported in A-weighted decibels (dB)

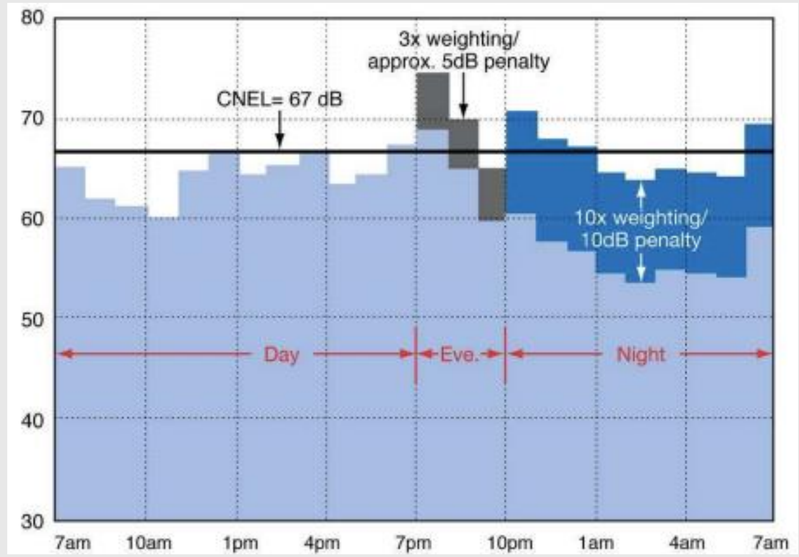
- Logarithmic scale base 10
- We hear sound pressures over a large range
- We perceive sounds in decibels



Noise Terminology

- Maximum Noise Level (L_{max})
- Single Event Noise Exposure Level (SENEL)
- Equivalent Sound Level (L_{eq})
- Community Noise Equivalent Level (CNEL)





Noise Terminology

Decibels

- The decibel **(dB)** is a complex logarithmic quantity based on sound pressure
- A-weighted decibels correlate well with how we hear

Noise Levels

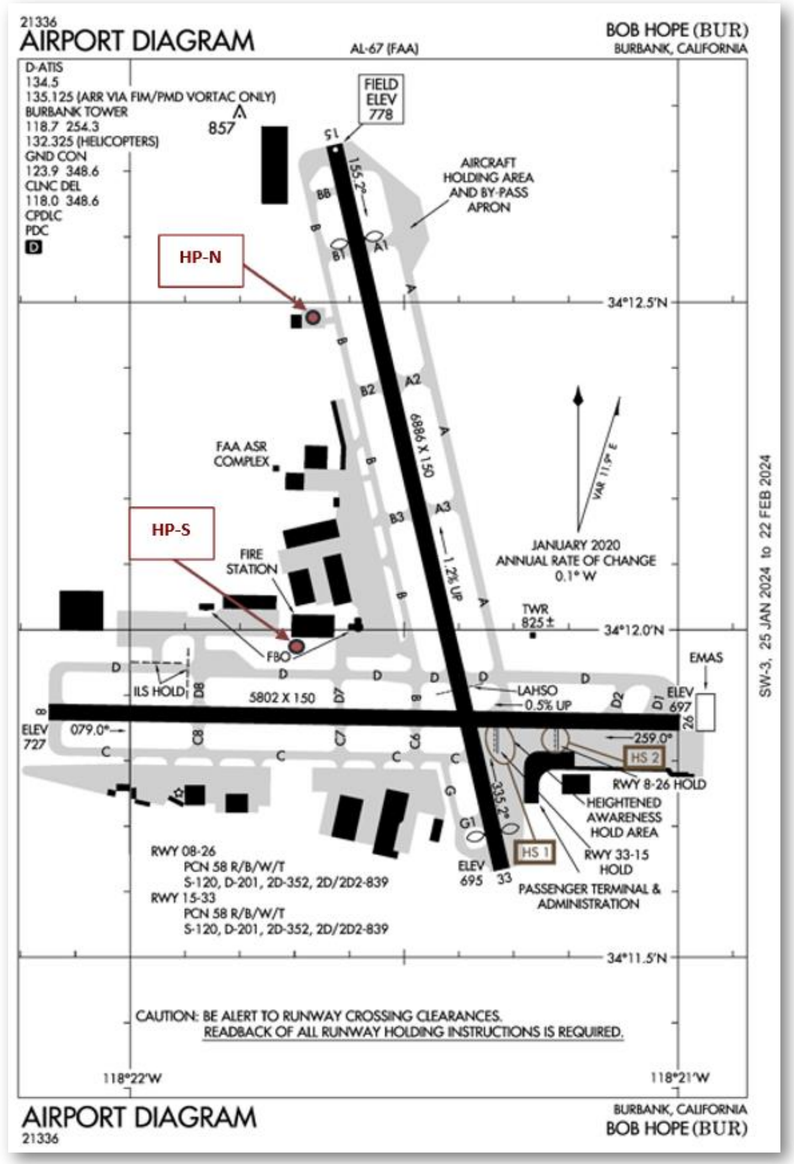
- Noise levels can be expressed many ways depending on their purpose, including but not limited to:
  - Instantaneous maximum noise levels (L_{max})
  - Single event dose (SEL)
  - Long-duration exposure (CNEL)

Part 150 Requirements

- FAA requires use of CNEL in a Part 150 study
- FAA Part 150 land use compatibility guidelines:
  - ***All land use is compatible with aircraft noise less than CNEL 65 dB***
- Land use compatibility assessments use 5-dB contour bands
  - 65 to 70 dB
  - 70 to 75 dB
  - Greater than 75 dB

Airport Layout

Runway End	Elevation (ft. MSL)	Length (ft)	Landing Displaced Threshold (ft)	Magnetic Orientation (degrees)
08	727.4	5,802	-	
15	778.0	6,886	909	
26	697.3	5,802	-	
33	694.5	6,886	350	
HP-N	756.9	-	-	
HP-S	725.6	-	-	



Aircraft Operations

Annual Average Day Operations	Existing Year 2025 Forecast Year 2030	
Aircraft Type	Jet Turboprop Helicopter Piston	*Matched to specific AEDT Aircraft Types*
Day-Evening-Night Split	Day: 7 AM – 7 PM Evening: 7 PM – 10 PM Night: 10 PM – 7 AM	
Runway Use, Flight Tracks, Track Use	*Represents where the flight operations occur*	
Stage Length	Surrogate for aircraft weight; determined by distance from departure to destination airport	

AIRCRAFT OPERATIONS

Year	Commercial	General Aviation	Military	Total
2025	97,700	61,560	411	159,671
2030	113,741	64,363	411	178,515

Note 1: Forecast approval received from FAA: March 14, 2025
Note 2: Operations sums may appear to be off due to rounding.
Source: M&H Forecast, FAA 2024 TAF

FAA Terminal Area Forecast (TAF)

Terminal Area Forecast (TAF)

- Official FAA forecast of aviation activity for U.S. airports
- Prepared for major users of the National Airspace System including
  - Air carrier
  - Air taxi/commuter
  - General aviation
  - Military
- Meets the budget and planning needs of the FAA
- Provides information for use by state and local authorities, the aviation industry, and the public

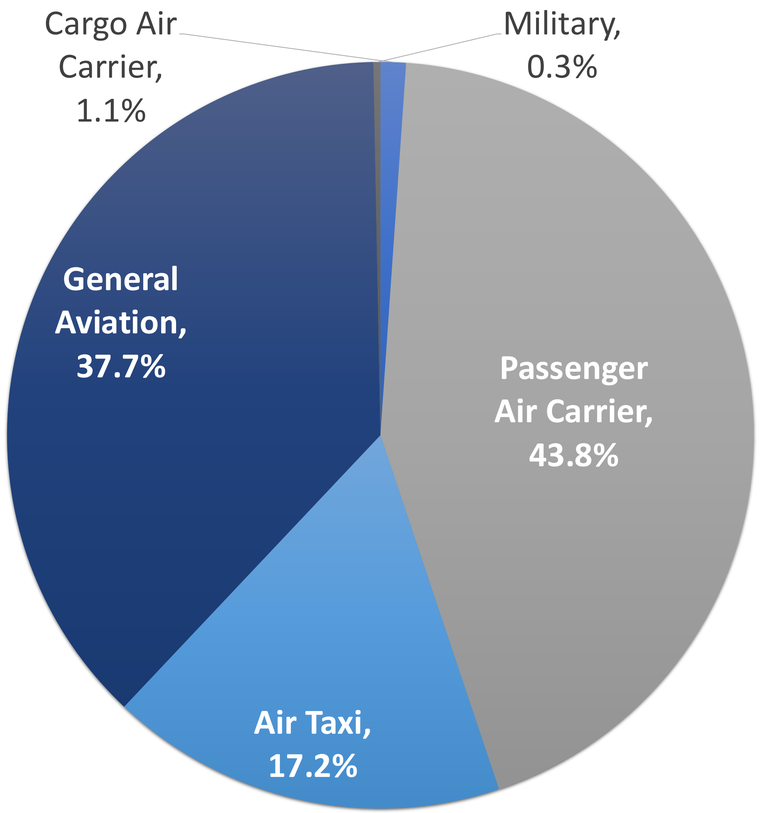
BUR Part 150

- The 2024 FAA TAF (published Feb 2025) is being used as the basis for the forecast aircraft operations at BUR.
  - Confirmed through independent forecasts

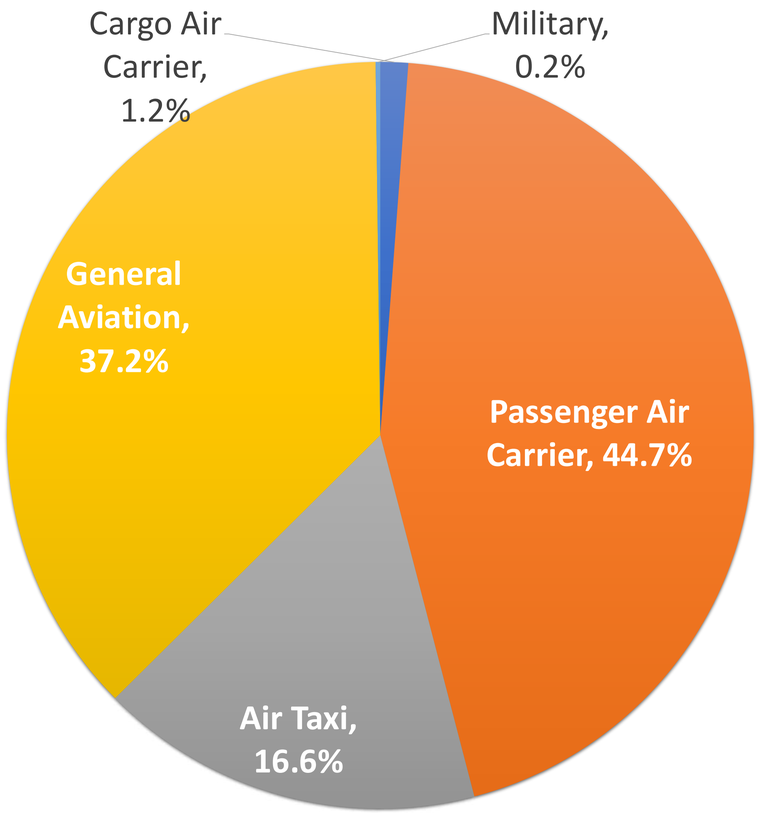
https://www.faa.gov/data_research/aviation/taf

Aircraft Summary by Category

2025 Operations



2030 Operations



- Most operations based on 2023 flight track and aircraft identification data from BUR Airport Noise & Operations Monitoring System (ANOMS™)
- Military operations based on 2023 FAA Traffic Flow Management System Counts (TFMSC) data

Noise Modeling Overview

Part 150 requires use of FAA's Aviation Environmental Design Tool (AEDT) noise modeling software.

- AEDT Version 3g was the most current version available at study's commencement (https://aedt.faa.gov)

AEDT requires noise model input data in three categories:

1 Aircraft Noise and Performance Data

- Aircraft performance profiles
- Noise level vs. distance curves

2 Airport Physical Inputs

- Runway end coordinates
- Ground engine runup locations
- Weather data
- Terrain data

3 Aircraft Operational Inputs

- Number of aircraft operations
- Aircraft fleet mix
- Day-night split of operations
- Runway utilization
- Flight track geometry and utilization

Noise Modeling Process

For Commercial and General Aviation Operations

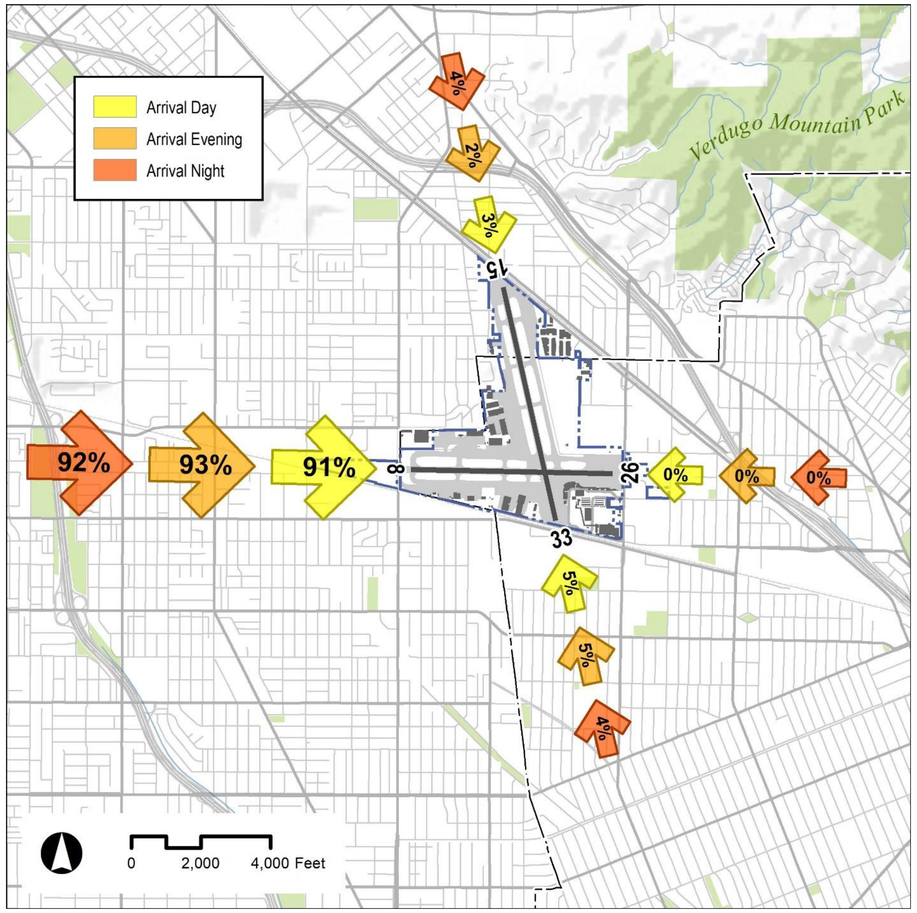
Base Year: 2/1/2023 through 1/31/2024

- Obtained, processed and analyzed 12 months of flight track and aircraft identification data
- Determined day-evening-night split of aircraft operations, and fleet mix

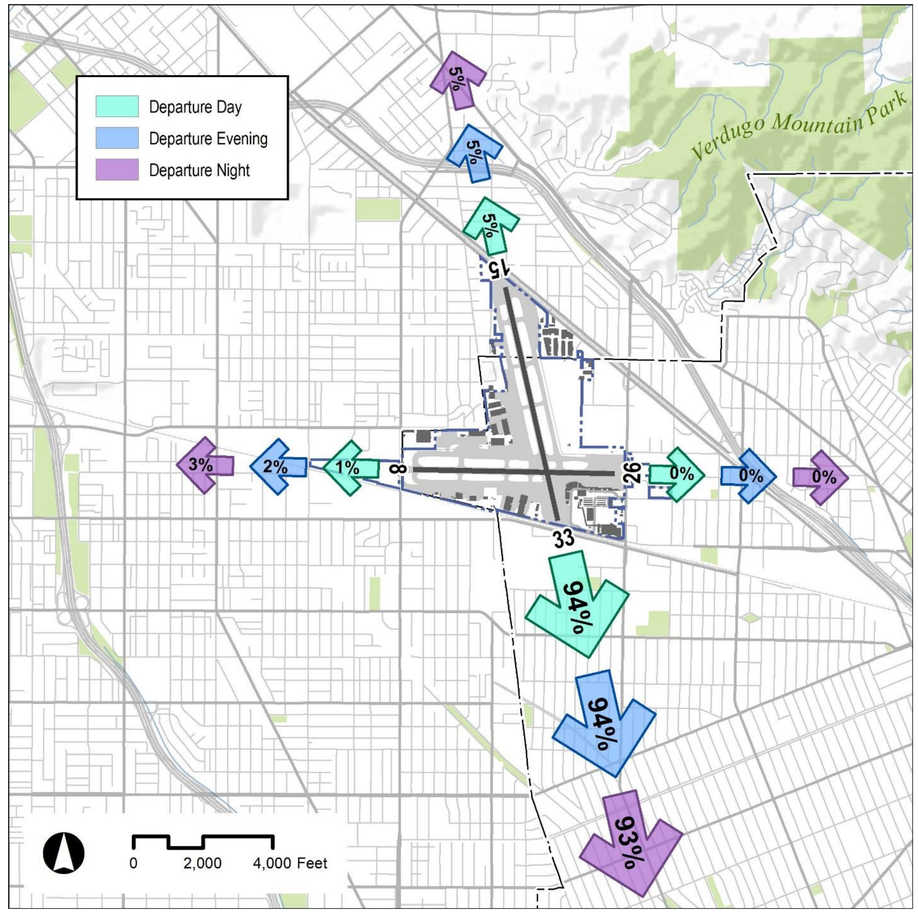
Existing and Forecast Conditions: 2025 & 2030

- Confirmation of FAA's Terminal Area Forecast (TAF)
- Scaled base year operations with updated fleet to TAF totals
- Developed model flight tracks for noise modeling

Runway Use

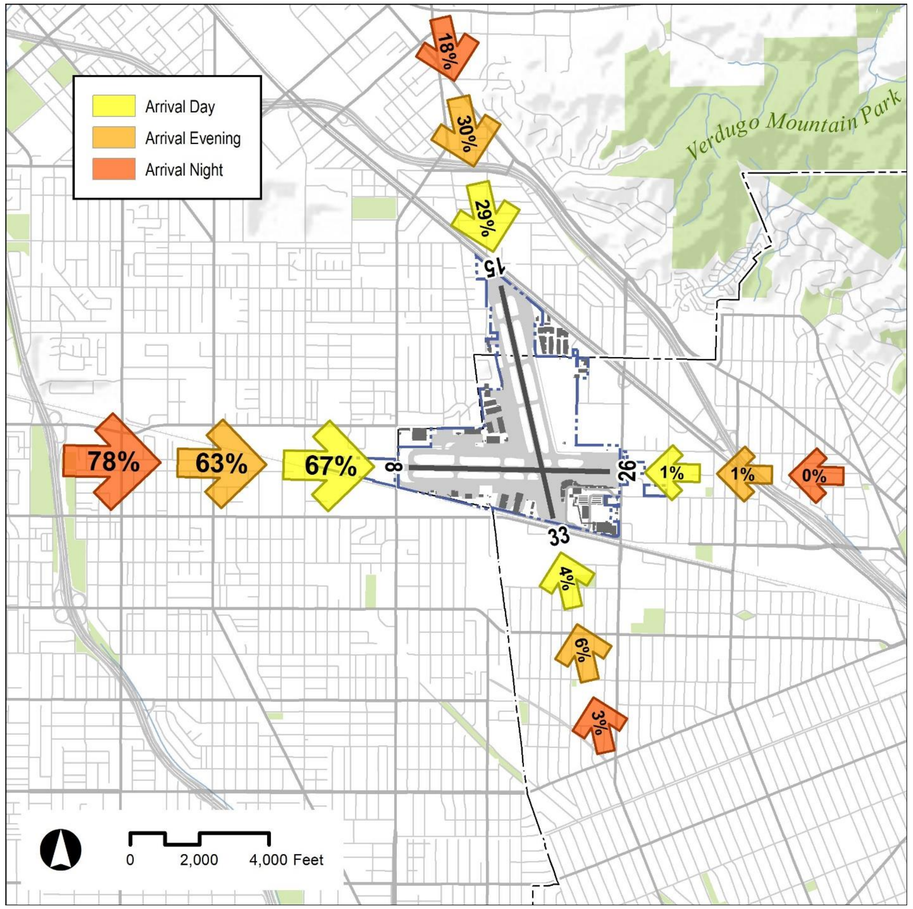


Jet Arrival Runway Use Percentages

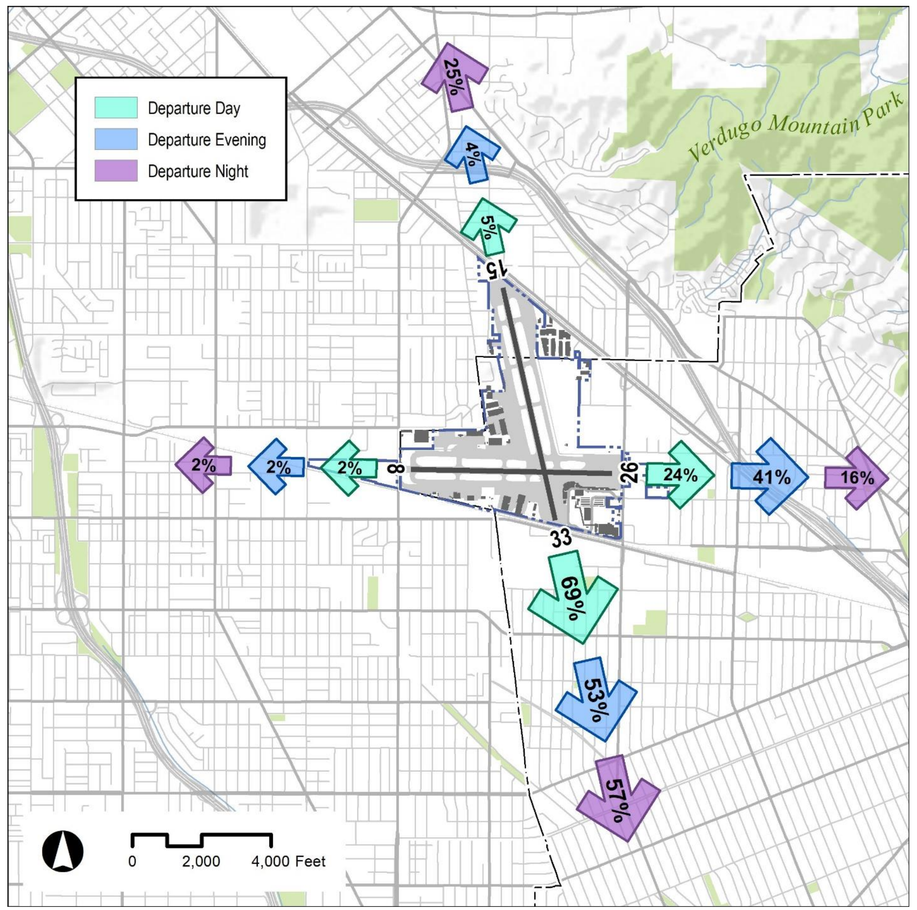


Jet Departure Runway Use Percentages

Runway Use



Non-Jet Arrival Runway Use Percentages

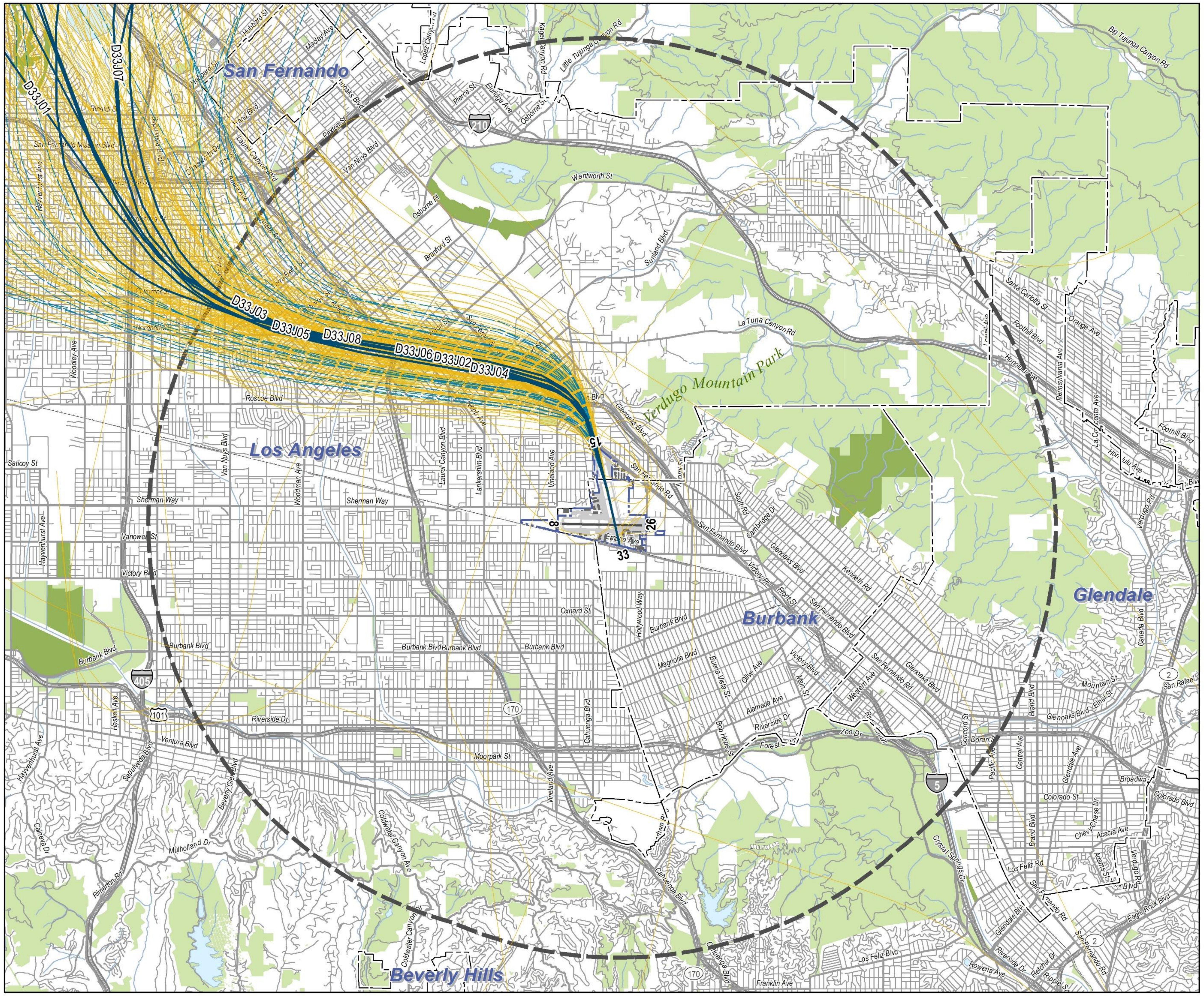


Non-Jet Departure Runway Use Percentages

Hollywood Burbank Airport

Part 150 STUDY

Figure 4-15:
Sample Modeled Departure Flight Tracks with Radar Departure Tracks



Modeled Departure Backbone Track (8)

Modeled Dispersed Dispersed Track (24)

Radar Track (10% Sample)

Airport Boundary

Runway / Taxiway

Building

Major / Minor Road

Railroad

Municipal Boundary

Study Area

Recreation / Open Space

Golf Course

Lake / Pond

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Hollywood Burbank Airport; County of Los Angeles Open Data; Los Angeles County Planning; LAGeoHub; National Register of Historic Places; ESRI, Inc.

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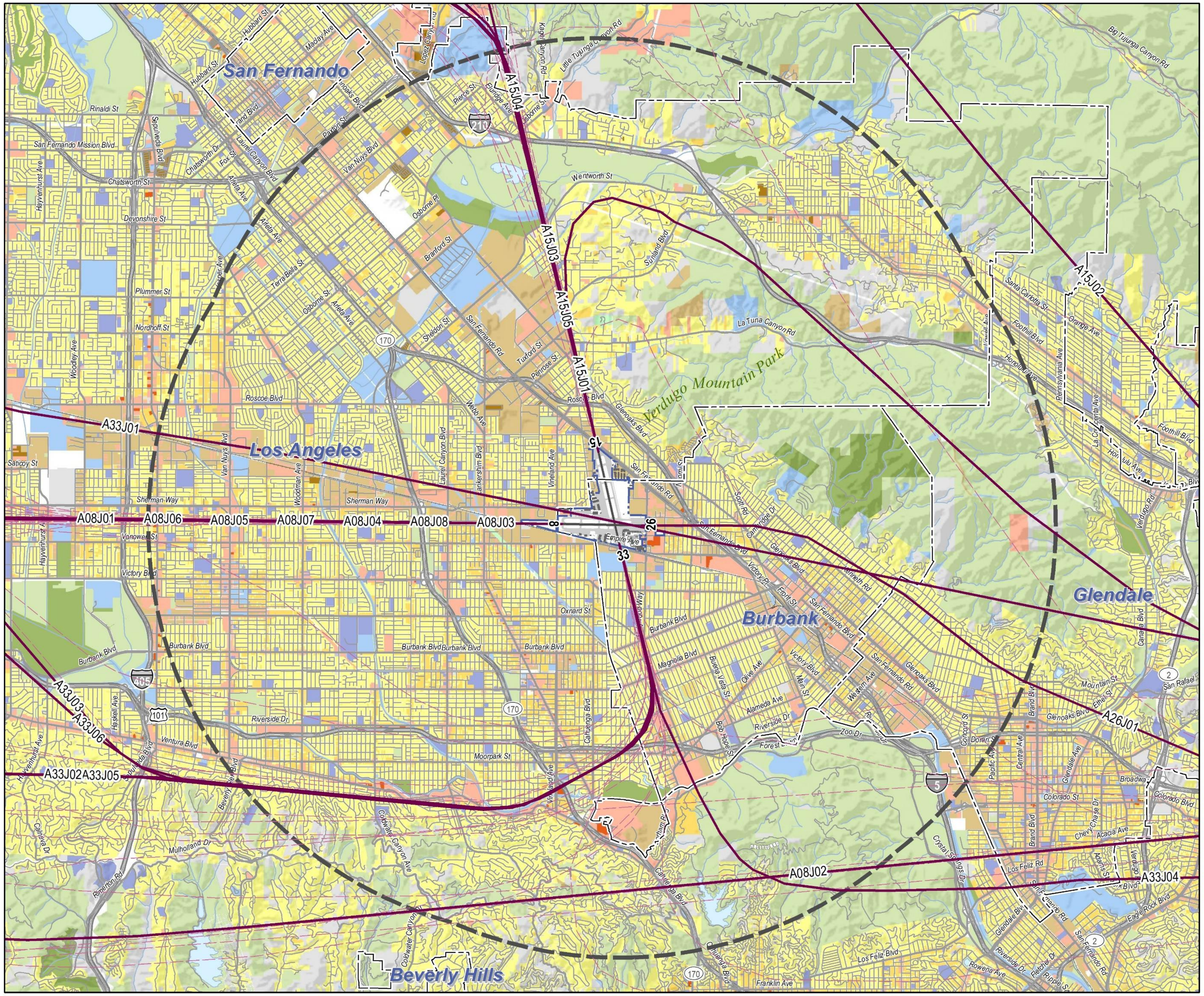
Figure 4-9:
Modeled Jet Arrival Flight Tracks



Modeled Arrival Backbone Track
Modeled Arrival Dispersed Track

Airport Boundary
Runway / Taxiway
Major / Minor Road
Municipal Boundary
Building
Railroad

Study Area

Single Family Residential
Multi-Family Residential
Mobile Home
Transient Lodging
Public Use 1 (Noncompatible)
Public Use 2 (Compatible)
Commercial Use
Manufacturing and Production
Lake / Pond
Agriculture
Recreation / Open Space
Golf Course
Vacant / Undefined

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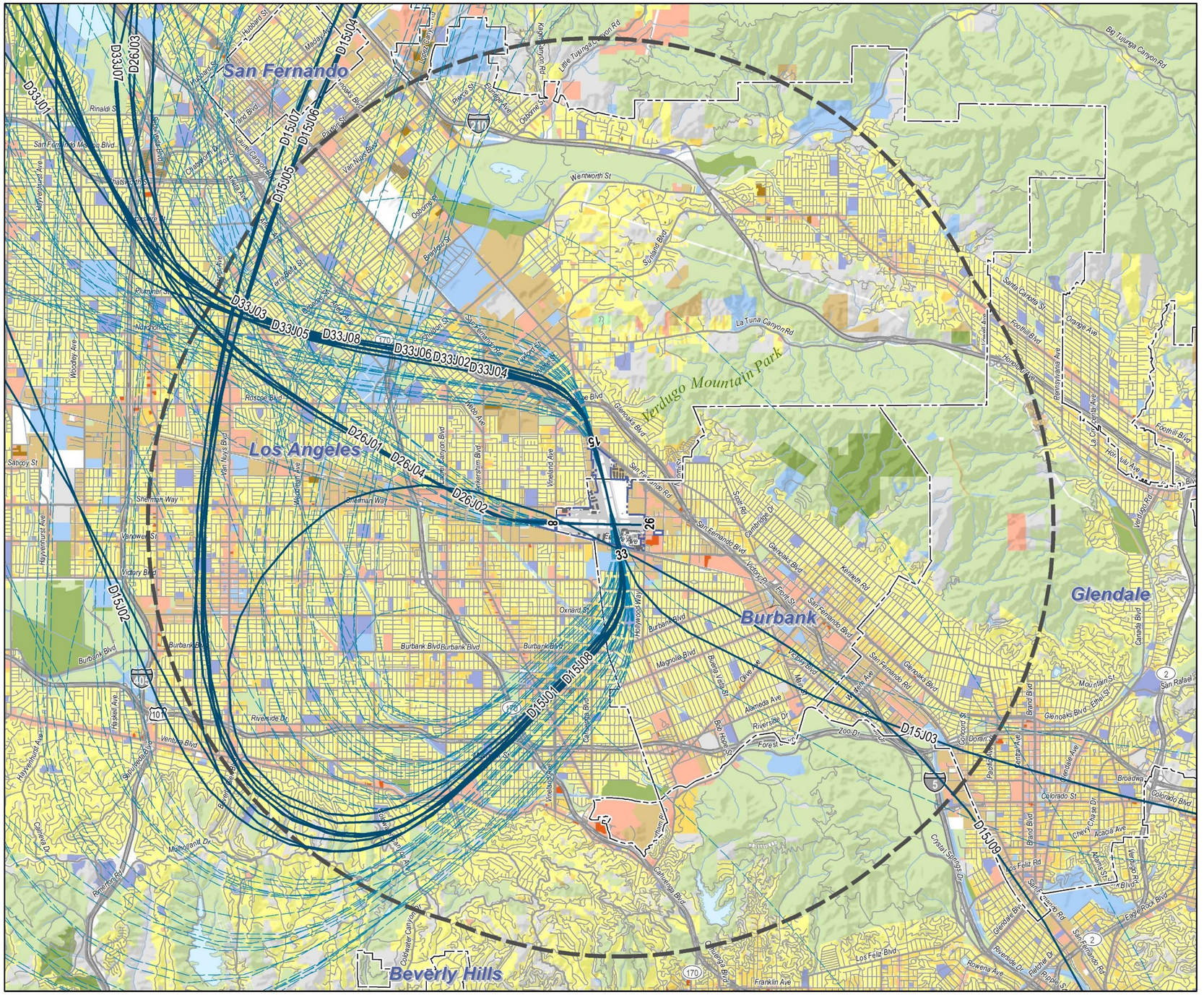
Figure 4-10:
Modeled Jet Departure Flight Tracks



Modeled Departure Backbone Track (21)
Modeled Dispersed Dispersed Track (80)

Airport Boundary
Runway / Taxiway
Major / Minor Road
Municipal Boundary
Building
Railroad

Study Area

Single Family Residential
Multi-Family Residential
Mobile Home
Transient Lodging
Public Use 1 (Noncompatible)
Public Use 2 (Compatible)
Commercial Use
Manufacturing and Production
Lake / Pond
Agriculture
Recreation / Open Space
Golf Course
Vacant / Undefined

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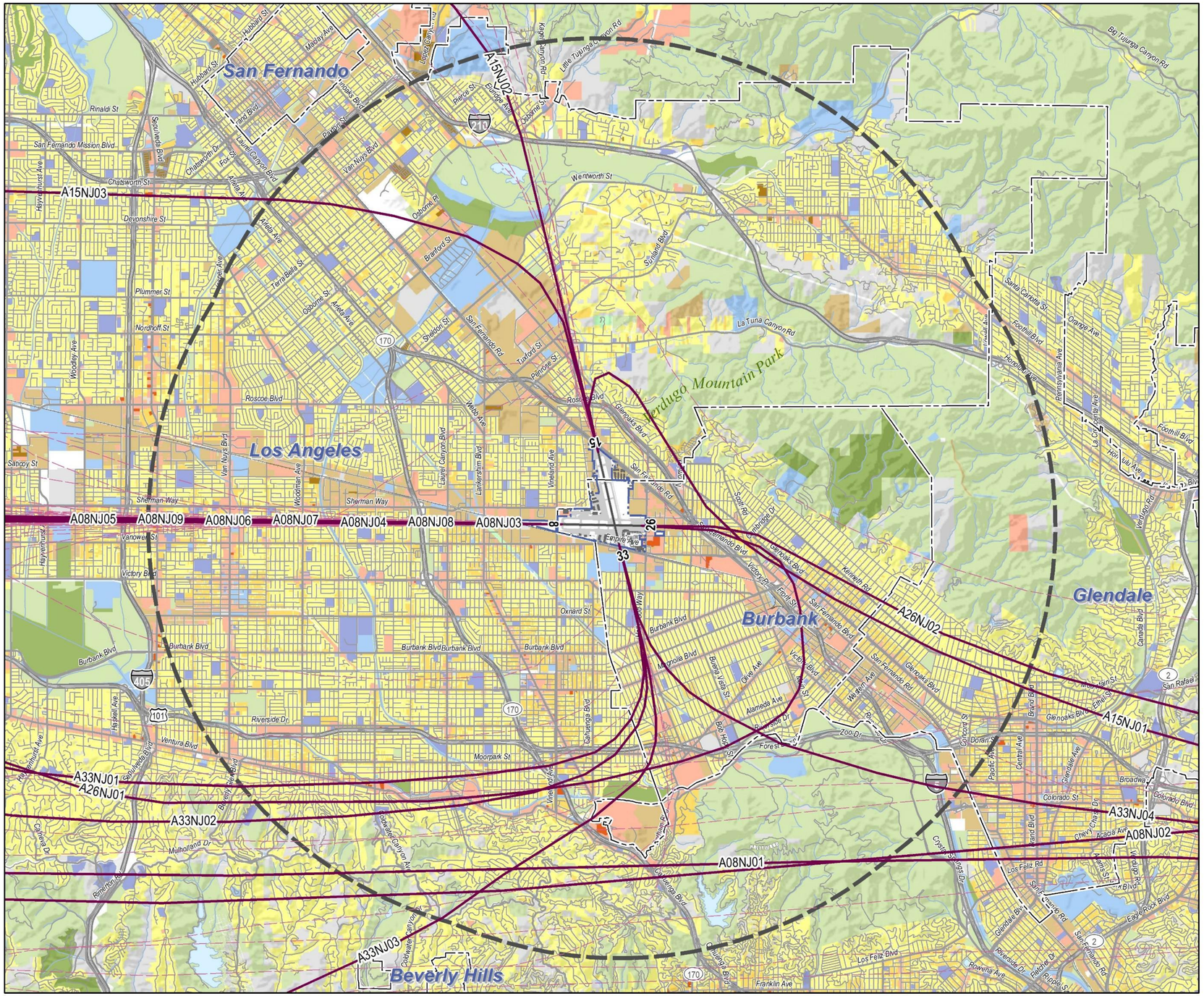
Hollywood Burbank Airport
Part 150 STUDY

Figure 4-11:
Modeled Non-Jet Arrival Flight Tracks



- Modeled Arrival Backbone Track
- Modeled Arrival Dispersed Track
- Airport Boundary
- Runway / Taxiway
- Major / Minor Road
- Municipal Boundary
- Study Area
- Building
- Railroad
- Single Family Residential
- Multi-Family Residential
- Mobile Home
- Transient Lodging
- Public Use 1 (Noncompatible)
- Public Use 2 (Compatible)
- Commercial Use
- Manufacturing and Production
- Lake / Pond
- Agriculture
- Recreation / Open Space
- Golf Course
- Vacant / Undefined

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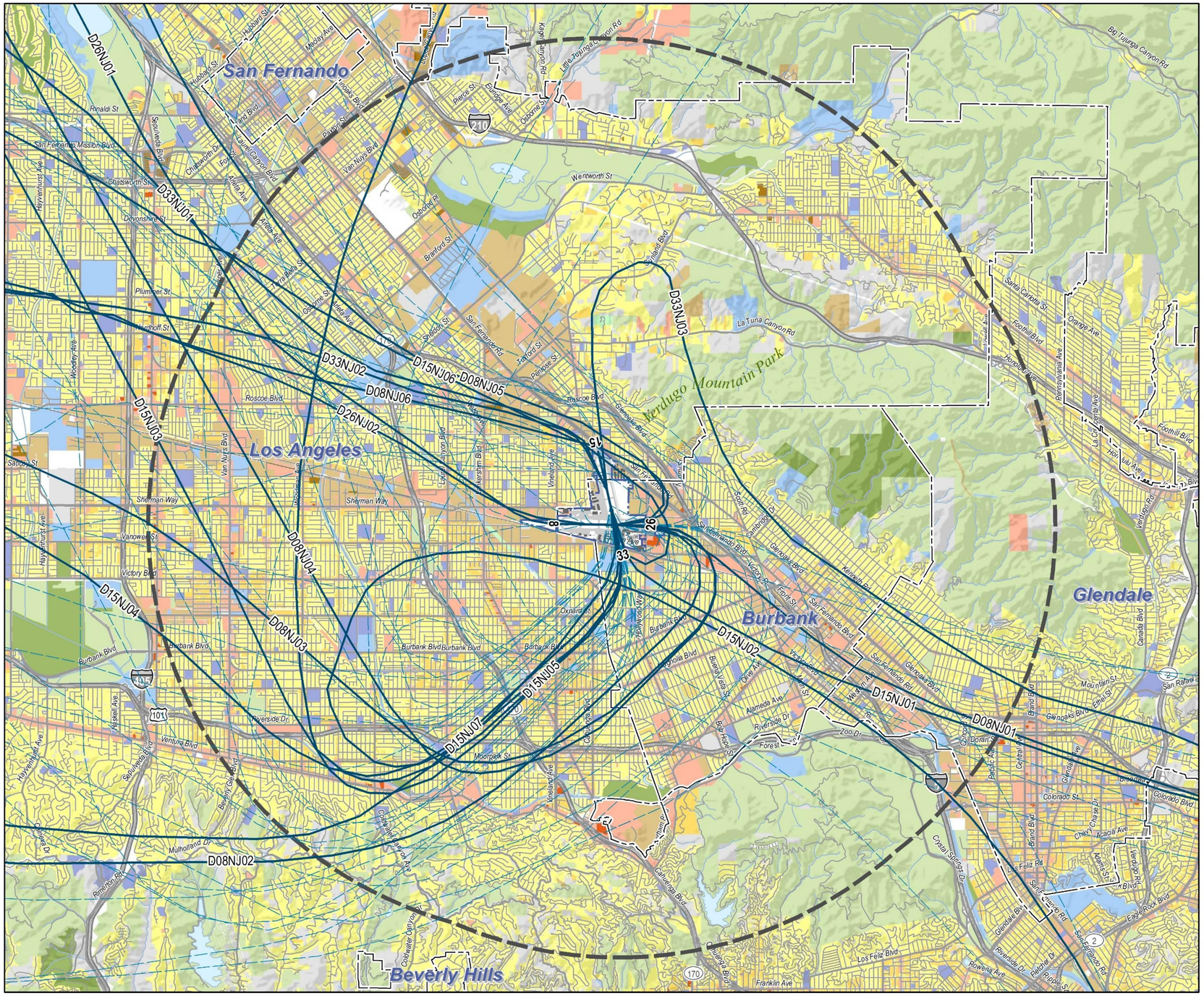
San Fernando
Los Angeles
Burbank
Glendale
Beverly Hills
Verdugo Mountain Park
D26NJ01
D33NJ01
D33NJ02
D33NJ03
D15NJ03
D15NJ04
D15NJ02
D15NJ01
D08NJ06
D26NJ02
D08NJ04
D08NJ03
D15NJ05
D15NJ07
D08NJ01
D08NJ02
Hollywood Burbank Airport
Part 150 STUDY
Figure 4-12:
Modeled Non-Jet Departure Flight Tracks
Modeled Departure Backbone Track (19)
Modeled Dispersed Dispersed Track (46)
Airport Boundary
Runway / Taxiway
Major / Minor Road
Municipal Boundary
Study Area
Building
Railroad
Single Family Residential
Multi-Family Residential
Mobile Home
Transient Lodging
Public Use 1 (Noncompatible)
Public Use 2 (Compatible)
Commercial Use
Manufacturing and Production
Lake / Pond
Agriculture
Recreation / Open Space
Golf Course
Vacant / Undefined
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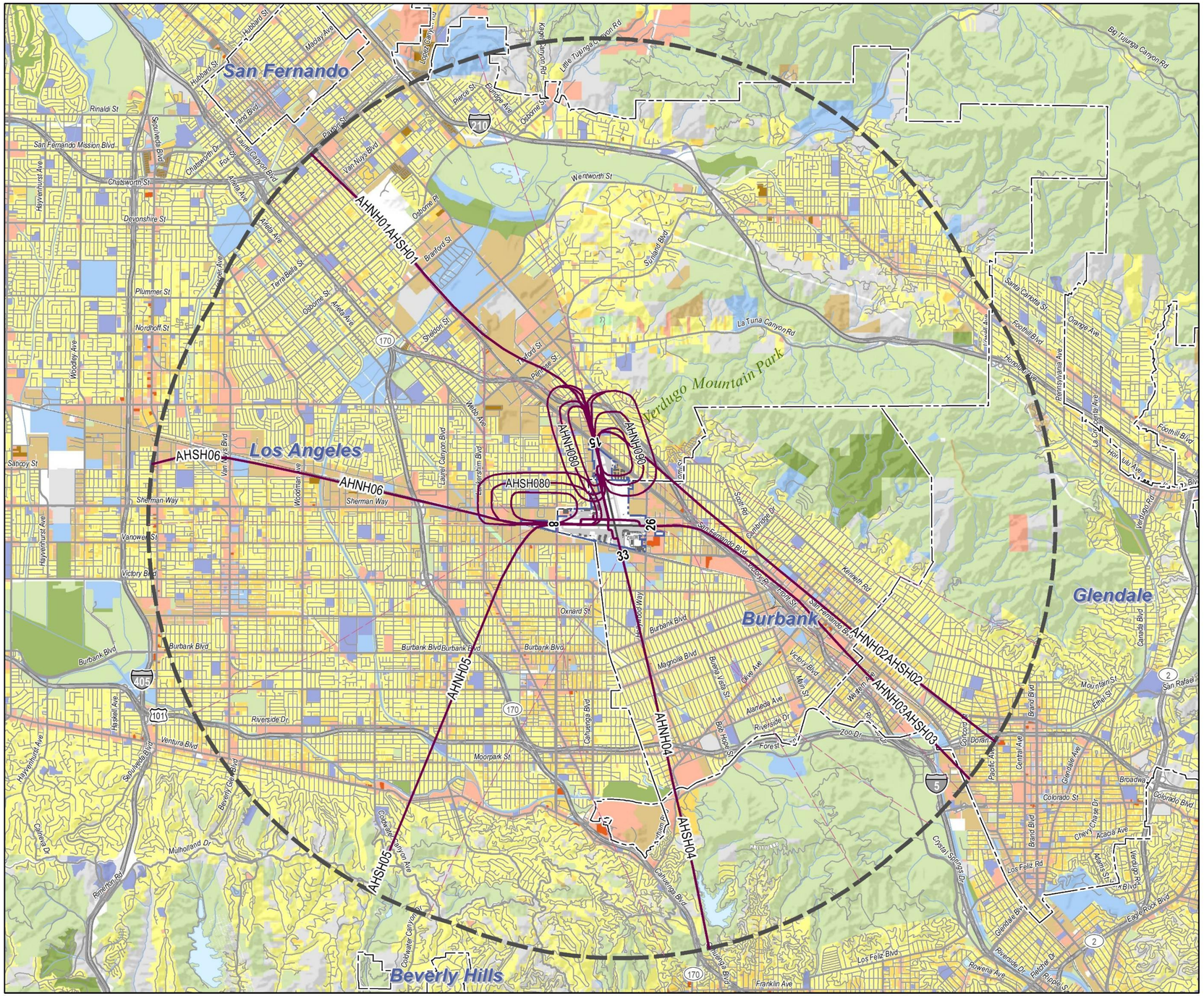
Figure 4-13:
Modeled Helicopter Arrival Flight Tracks



- Modeled Arrival Backbone Track
- Modeled Arrival Dispersed Track
- Airport Boundary
- Runway / Taxiway
- Major / Minor Road
- Municipal Boundary
- Study Area
- Building
- Railroad
- Single Family Residential
- Multi-Family Residential
- Mobile Home
- Transient Lodging
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- Public Use 2 (Compatible)
- Commercial Use
- Manufacturing and Production
- Lake / Pond
- Agriculture
- Recreation / Open Space
- Golf Course
- Vacant / Undefined

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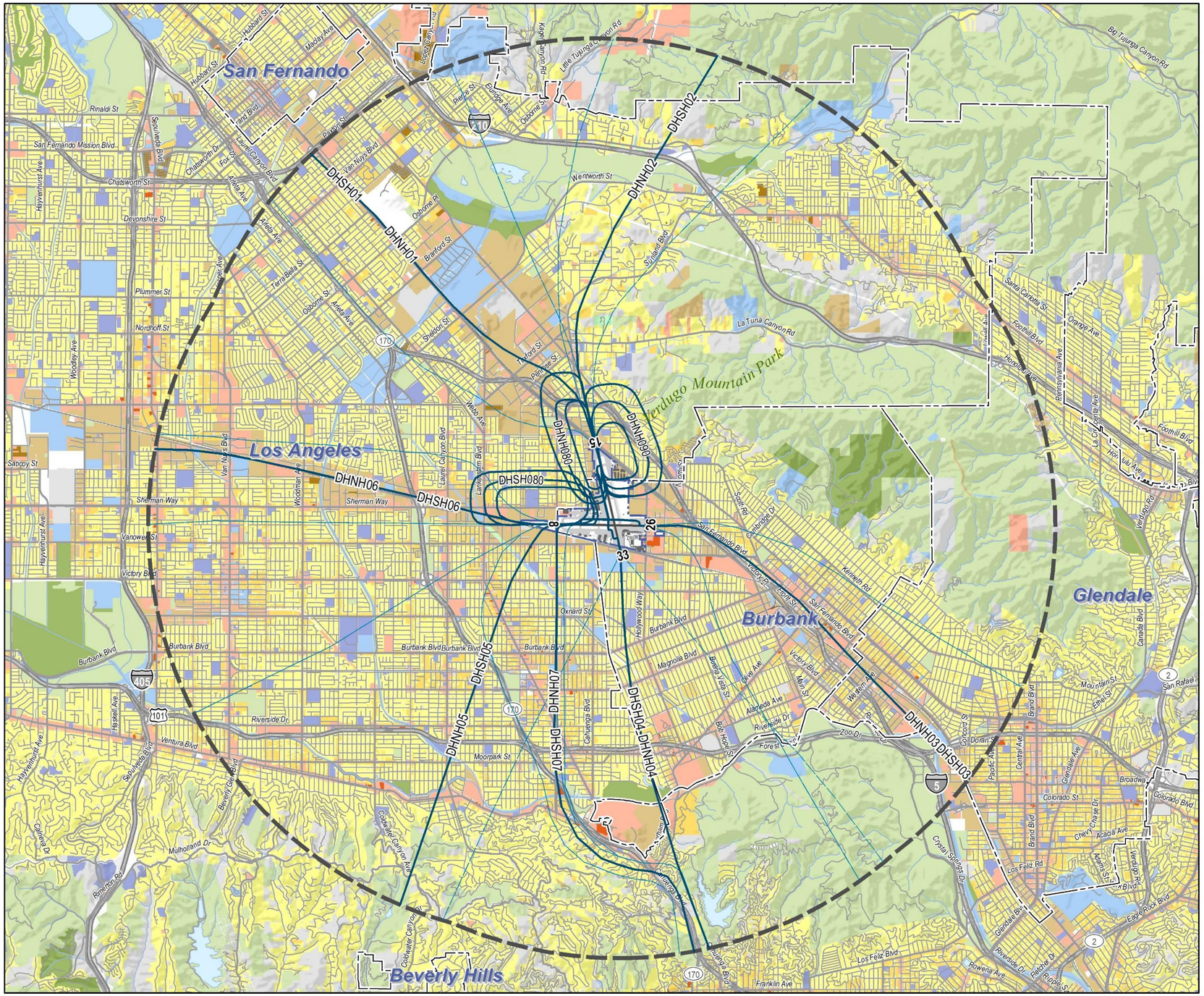
Figure 4-14:
Modeled Helicopter Departure Flight Tracks



- Modeled Departure Backbone Track (14)
- Modeled Dispersed Dispersed Track (28)
- Airport Boundary
- Runway / Taxiway
- Major / Minor Road
- Municipal Boundary
- Study Area
- Building
- Railroad
- Single Family Residential
- Multi-Family Residential
- Mobile Home
- Transient Lodging
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Noise Exposure Map (NEM)

The NEM document describes:

- ☑ Airport layout and operation
- ☑ Aircraft-related noise exposure
- ☑ Land uses in the airport environs
- ☑ Noise/land use compatibility

- An NEM must provide information for two timeframes:
  - Year of submission (2025)
  - Five-year forecast (2030)
- An FAA checklist identifies NEM requirements and documentation
- Annual average daily noise exposure (CNEL) is depicted using contour lines on a map

Hollywood Burbank Airport
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Figure 5-3:
Comparison of 2025 and 2030 CNEL Noise Contour

2025 CNEL Noise Contour (65-75 dB CNEL)
2030 CNEL Noise Contour (65-75 dB CNEL)

Airport Boundary
Runway / Taxiway
Major / Minor Road
Municipal Boundary
Building
Railroad

Residential Sound Insulation Program (RSIP)
Complete, Single Family Residential (1,783)
Complete, Multi-Family Residential (662)
Complete, School (5)

Single Family Residential
Multi-Family Residential
Mobile Home
Transient Lodging
Public Use 1 (Noncompatible)
Public Use 2 (Compatible)
Commercial Use
Manufacturing and Production
Lake / Pond
Agriculture
Recreation / Open Space
Golf Course
Vacant / Undefined

School
Place of Worship
Daycare
National Register of Historic Places
Hospital
Library

DRAFT - Subject to Change

Hollywood Burbank Airport; County of Los Angeles Open Data; Los Angeles County Planning; LAGeoHub; National Register of Historic Places; ESRI, Inc.

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Document Path: G:\Projects\22-XXX\22-0262A_BUR_Part_150_Update\GIS\220262A_BUR_Figure5-3_2025_2030_NEM_Contour_Comparison.mxd

Compatibility Guidelines

Part 150 requires the review of land uses surrounding an airport to determine land use compatibility associated with aircraft activity at the airport.

The FAA land use compatibility designations are contained in Part 150, Appendix A, Table 1.

The FAA considers all land uses with aircraft-related noise below DNL 65 as compatible. The FAA accepts the California noise standard of CNEL as a functional equivalent to DNL for this study.

Land Use	Yearly Day-Night Average Sound Level [DNL] in Decibels					
	<65	65-70	70-75	75-80	80-85	>85
Residential Use						
Other Residential	Y	N(1)	N(1)	N	N	N
Mobile home park	Y	N	N	N	N	N
Transient lodgings	Y	N(1)	N(1)	N(1)	N	N
Public Use						
Schools	Y	N(1)	N(1)	N	N	N
Hospitals and nursing homes	Y	25	30	N	N	N
Churches, auditoriums, concert halls	Y	25	30	N	N	N
Governmental services	Y	Y	25	30	N	N
Transportation	Y	Y	Y(2)	Y(3)	Y(4)	Y(4)
Parking	Y	Y	Y(2)	Y(3)	Y(4)	N
Commercial Use						
Offices, business and professional	Y	Y	25	30	N	N
Wholesale and retail	Y	Y	Y(2)	Y(3)	Y(4)	N
Retail trade	Y	Y	25	30	N	N
Utilities	Y	Y	Y(2)	Y(3)	Y(4)	N
Communication	Y	Y	25	30	N	N
Manufacturing and Production						
Manufacturing general	Y	Y	Y(2)	Y(3)	Y(4)	N
Photographic and optical	Y	Y	25	30	N	N
Agriculture (except livestock), forestry	Y	Y(6)	Y(7)	Y(8)	Y(8)	Y(8)
Livestock farming and breeding	Y	Y(6)	Y(7)	N	N	N
Mining and fishing, resource production and extraction	Y	Y	Y	Y	Y	Y
Recreational						
Outdoor sports arenas, spectator sports	Y	Y(5)	Y(5)	N	N	N
Outdoor music shells, amphitheaters	Y	N	N	N	N	N
Nature exhibits and zoos	Y	Y	N	N	N	N
Amusements, parks, resorts and camps	Y	Y	Y	N	N	N
Golf courses, riding stables, and water recreation	Y	Y	25	30	N	N

Land Use Assessment

Existing (2025) and Forecast (2030) Land Use Compatibility

Contour Interval	Population				Housing Units			
	2025		2030		2025		2030	
	Total	Non-compatible	Total	Non-compatible	Total	Non-compatible	Total	Non-compatible
65-70 CNEL	2,817	1,159	2,889	1,292	868	276	907	339
70-75 CNEL	13	7	13	5	3	1	2	0
>75 CNEL	0	0	0	0	0	0	0	0
Total within 65 CNEL	**2,830**	**1,166**	**2,902**	**1,297**	**871**	**277**	**909**	**339**

Source: HMMH, 2025

Notes:

(1)Population source data: U.S. Census, 2020

(2)Difference between the total and non-compatible is those housing units that received sound insulation treatment making them compatible with noise from aircraft operations

Hollywood Burbank Airport
Part 150 STUDY

Schedule

January 2024	Project Kick Off
February 2024	Data Collection and Study Protocol Development
January 30, 2025	Open House #1 (Study Introduction)
Spring 2025	Publish Draft NEM Document, 30-Day Review Period
May 22, 2025	Open House Meeting #2 (NEM Draft Document)
Summer 2025	Submit NEM to FAA, NCP Phase Begins
Spring 2026	Open House #3 (Draft NCP Recommendations)
Fall 2026	Open House #4 and Public Hearing (Draft NCP document)
November 2026	Submit NCP to FAA

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Website:
www.hollywoodburbankairport.com/noise/part-150-study-update