

Kalaeloa Airport (JRF) Noise Exposure Map Update

Public Meeting #1 – Honouliuli Middle School – June 30, 2026

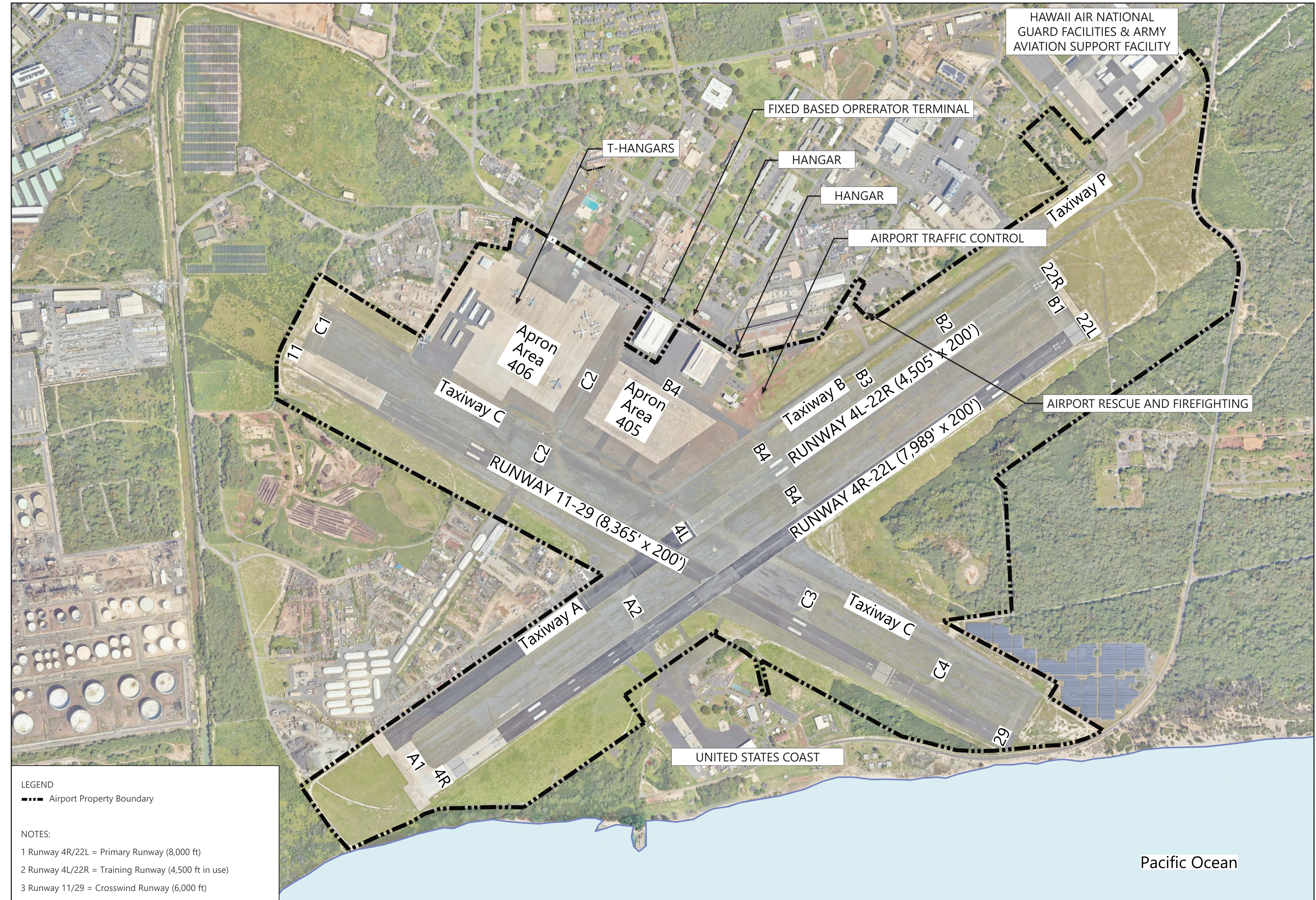


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Project Website



Airport Overview

- Local public reliever airport
- Supports a range of operations
 - General aviation (GA)
 - Flight schools
 - US Coast Guard
 - Hawai'i Air National Guard
 - Hawai'i Army National Guard
- No scheduled airline service
 - However, JRF can and has been used as a reliever for Daniel K. Inouye International Airport (HNL)
- **No significant changes to airfield layout anticipated in five years**



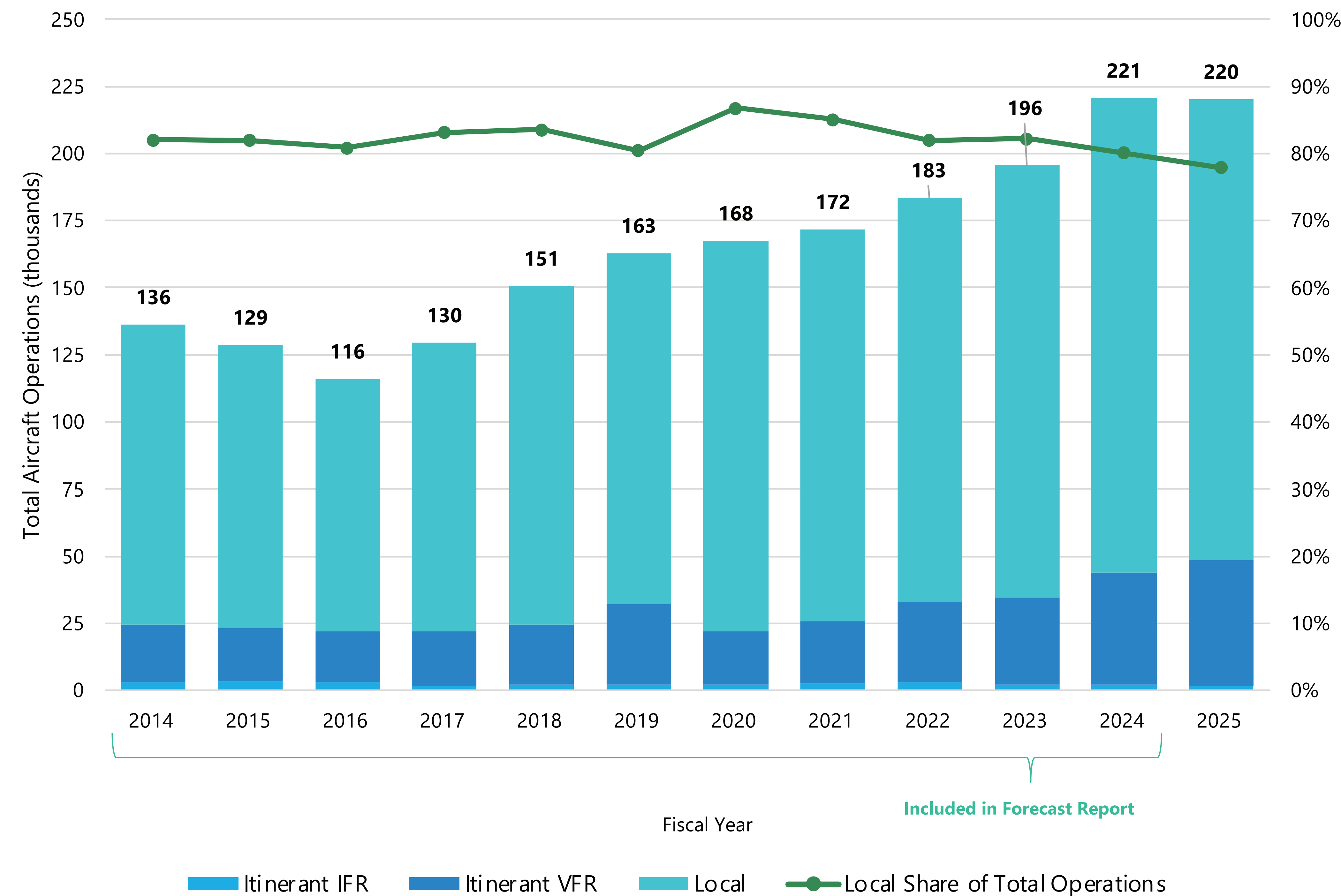
SOURCE: Ricondo & Associates, Inc., September 2025.



Historical Operational Levels

- Total operations have increased over the last 11 years
 - 2014: 136,406 operations
 - 2025: 220,265 operations
 - CAGR: 4.5%
- Most activity at JRF is Local
 - Performed by aircraft that remain in the local traffic pattern or operate to/from the same airport in a designated practice area within a ~20-mile radius

Historical Aircraft Operations at Kalaeloa Airport



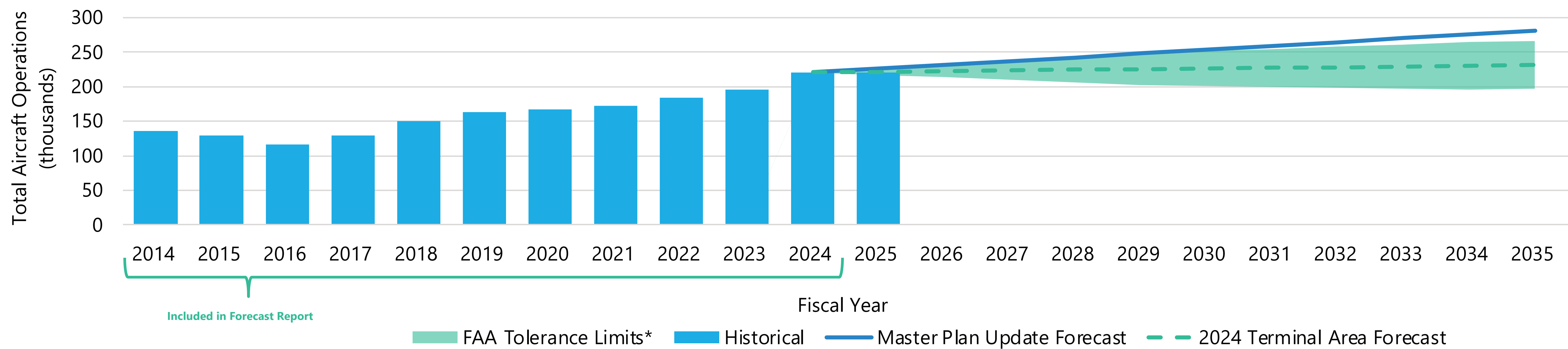
NOTES:
IFR – Instrument Flight Rules
VFR – Visual Flight Rules
CAGR – Compound Annual Growth Rate
SOURCE: US Department of Transportation, Federal Aviation Administration, Operations Network (OPSNET), June 2026.



FAA-Approved Forecast Operational Levels

- **FAA approved the JRF Forecast** for use in the NEM Update on **February 9, 2026**
 - GA aircraft operations are forecast to grow at a 2.2% CAGR based on regression analysis; military operations are forecast at constant Fiscal Year 2024 levels
- In accordance with 14 CFR §150.21(b), interested parties were provided the opportunity to review the forecast during TAC and public meetings held in September 2025
 - No formal comments on the forecast were submitted

Forecast Aircraft Operations at Kalaeloa Airport



NOTE: FAA – Federal Aviation Administration. CAGR – Compound Annual Growth Rate
* Forecast tolerances are defined in FAA AC 150/5070-6B as exceeding a 10 percent difference from the TAF at 5 years and exceeding a 15 percent difference from the TAF at 10 years.
SOURCES: Ricondo & Associates, Inc., Aviation Activity Forecast, June 2026.



Title 14 CFR Part 150 Overview

Title 14 CFR Part 150, *Airport Noise Compatibility Planning*, is a **voluntary FAA-defined process** for airport noise studies



PURPOSE

- Establishes procedures and standards for:
 1. Noise exposure maps
 2. Noise compatibility programs (NCPs)
- Informs the public of noise exposure and noncompatible land uses
- Identify measures to reduce and/or prevent new noncompatible land uses
- Describe FAA review process related to NEM acceptance and NCP approval



OBJECTIVE

- Inform surrounding communities of noise exposure and, if necessary, evaluate and identify methods to maintain and/or improve compatibility around an airport

SCOPE OF THE JRF NEM UPDATE

✓ Update aircraft noise | ✓ Reflect land use conditions | ✗ Will not develop an NCP*



Title 14 CFR Part 150 Overview

Who Can Regulate Airport Noise?

FEDERAL

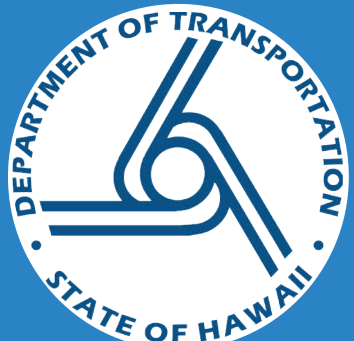
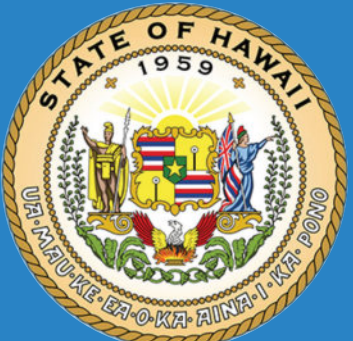
Federal Aviation Administration



- Controls aircraft in flight
- Regulates aircraft noise at its source (engines)
- Grants aircraft and pilot certification

STATE

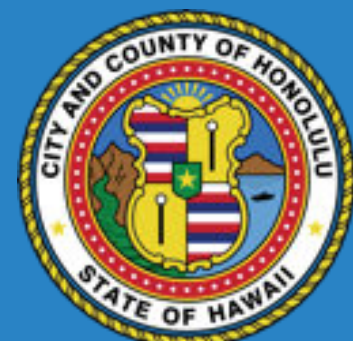
HDOT – Airports



- Cannot restrict aircraft operations
- Manages capital improvement projects and infrastructure
- May adopt local land use guidelines (with limitations)

LOCAL

Local Government (City & County)



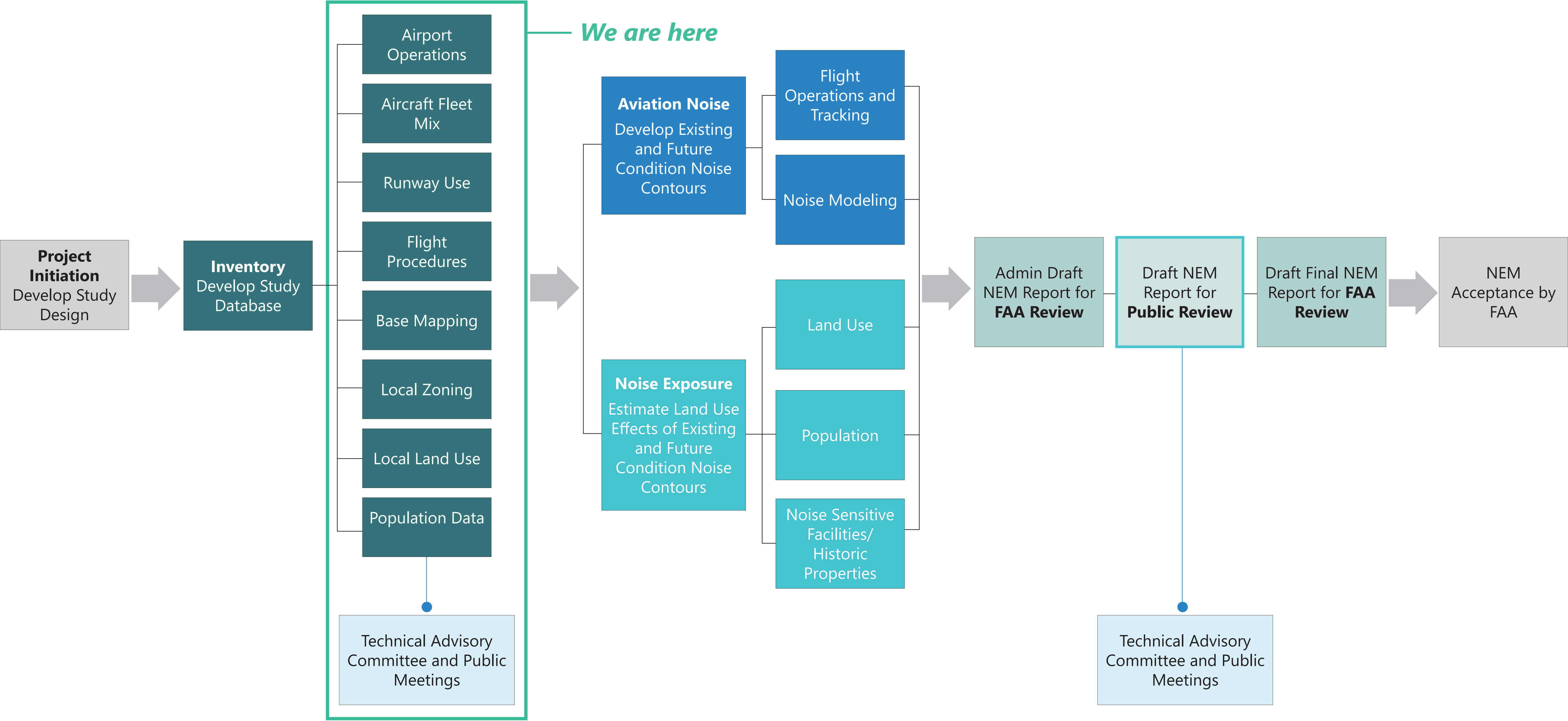
- Cannot restrict aircraft operations
- Enforces compatible land use through zoning
- Mandates sound-insulating building materials
- Implements real estate disclosure

KEY TAKEAWAY

Federal law preempts state and local regulations on aircraft noise.



NEM Update Process



NEM Update Roles and Responsibilities

Federal Aviation Administration	HDOT - Airports	Local Government	Technical Advisory Committee	Public	Consultant Team
- Review and accept scope - Approve forecast - Review and accept the NEM	- Sponsor the NEM Update - Certify accuracy of the NEM - Consult with stakeholders - Coordinate with general public - Submit NEM to FAA for review	Provide input on existing and future land use and zoning	Provide input and insight on technical aspects of aviation, airport operations, and land use	Review/comment on Draft NEM and forecast	- Perform noise modeling - Prepare NEM Update report - Support consultation with agencies - Support public and stakeholder outreach

IMPORTANT NOTE:

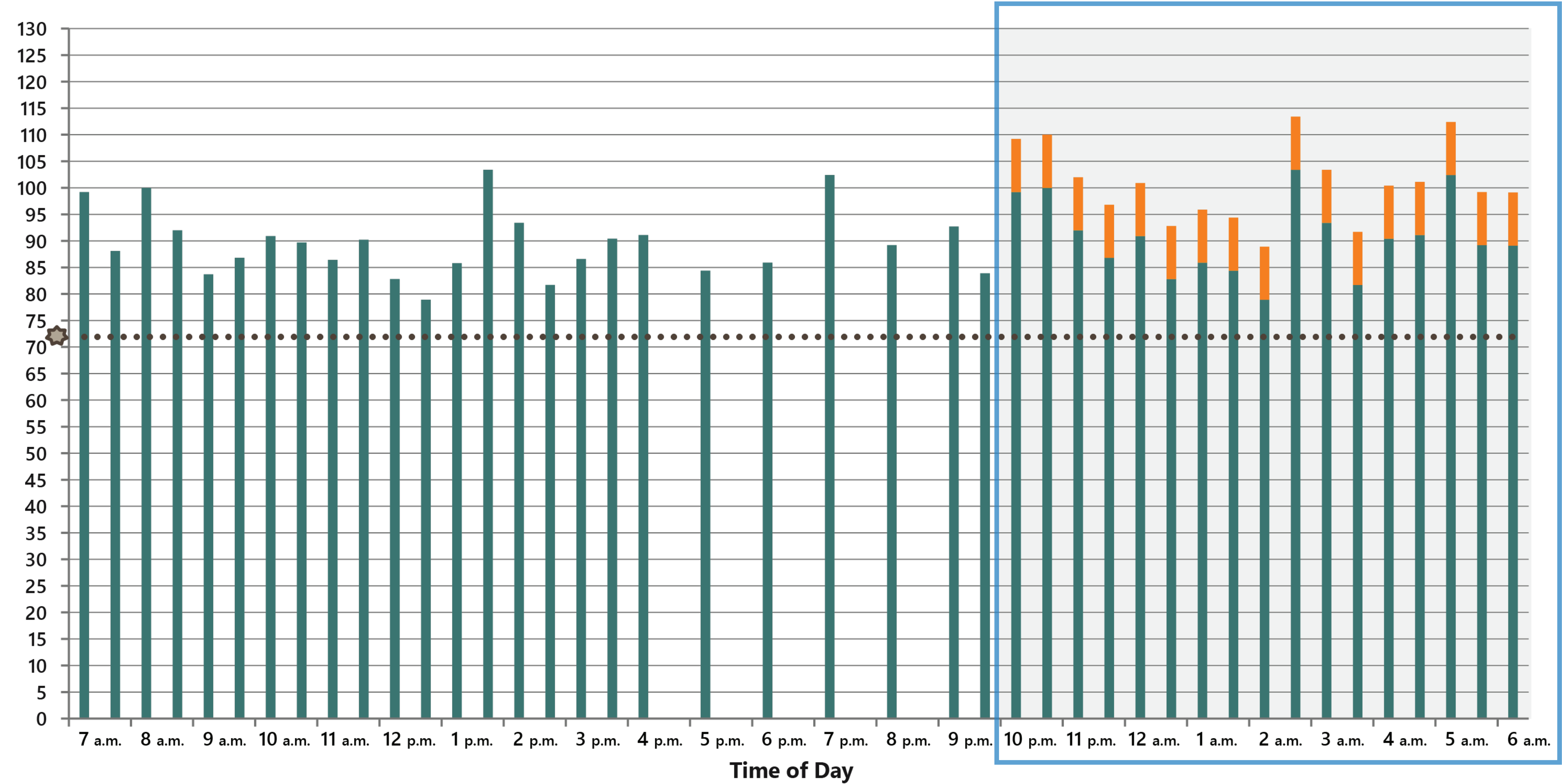
- TAC members may include the FAA Airports District Office, Airport Traffic Control Tower, local jurisdictions, airport users, and community representatives.
- Public stakeholders may include those with aviation interests, citizen representatives from local communities, and other interested parties.



Noise and Sound Level Metrics

Day-Night Average Sound Level (DNL)

Nighttime
(10:00 p.m. to 6:59 a.m.)



NOTES: Chart is provided for conceptual purposes and does not represent actual noise levels at JRF.
SOURCE: Ricondo & Associates, Inc., 2026.

Extra 10 dBA weight for nighttime noise Aircraft noise event (SEL) 24-hour average DNL 72 dBA



Noise Modeling Methodology

- Aviation Environmental Design Tool (AEDT) is the FAA's modeling tool for evaluating aviation noise, emissions, and environmental impacts.
 - Version 4a will be used for this NEM Update
- Noise modeling is performed to generate DNL noise contours that are overlaid on a land use map to identify noncompatible land uses

INPUTS

- **Physical:** Runway layout, elevation and terrain, atmospheric conditions
- **Operational:** Runway use, number and type of aircraft, time of day, flight tracks

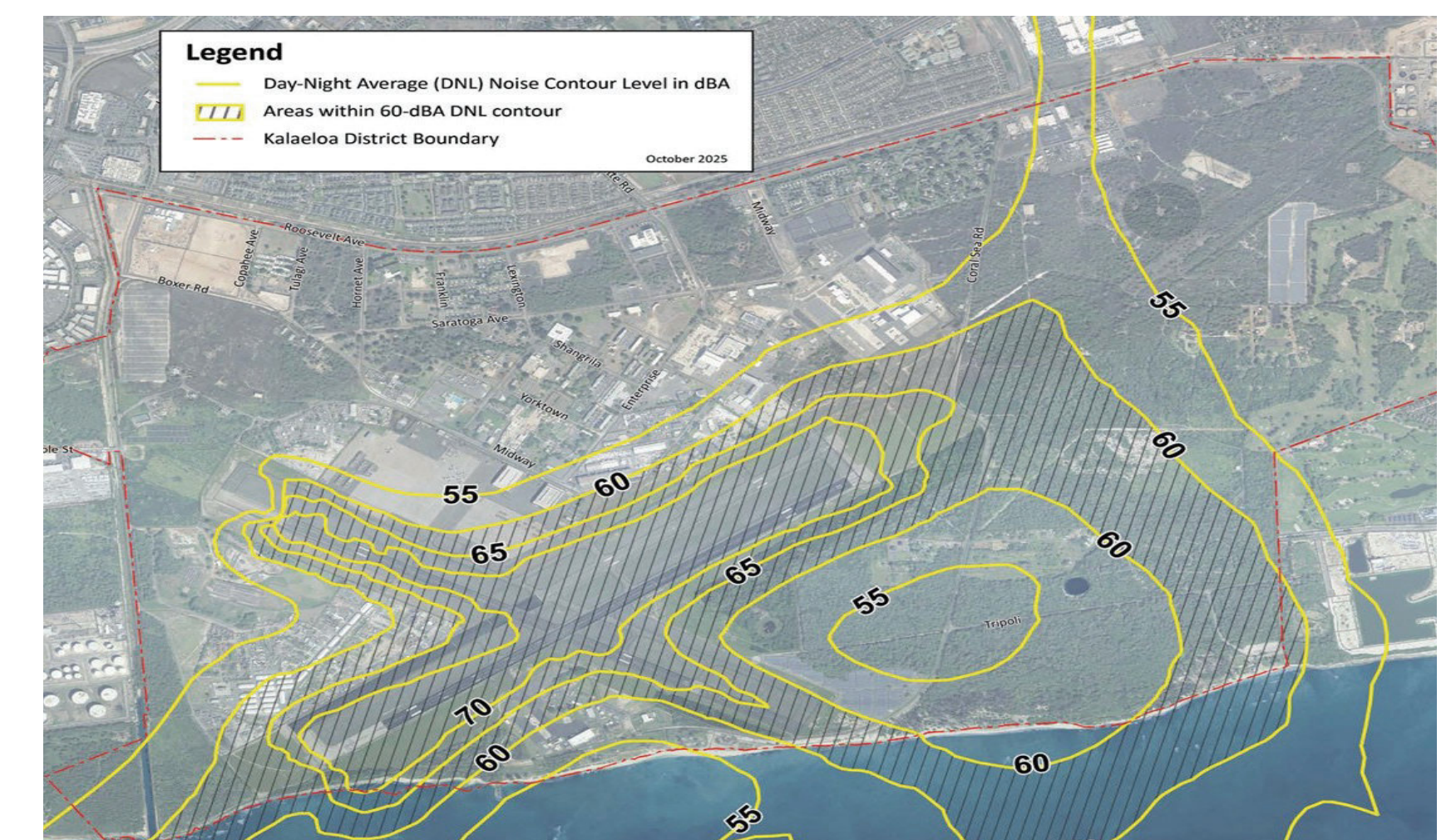
AEDT version 4a



Detailed aircraft noise and performance database

OUTPUTS

- **Noise Contours**



Land Use Overview

The JRF NEM Update uses State and Federal guidelines to assess land use compatibility

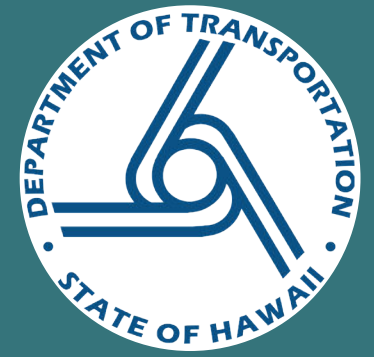
FAA – 14 CFR Part 150



DNL 65 dBA

- Federal standard from Table 1, Appendix A
- Applied nationwide at all US airports
- Must be used in 14 CFR Part 150 studies

State of Hawai'i Guidelines



DNL 60 dBA

- Reflects outdoor lifestyle & naturally ventilated homes
- More protective than the federal standard
- Buyer-notification boundary at DNL 55



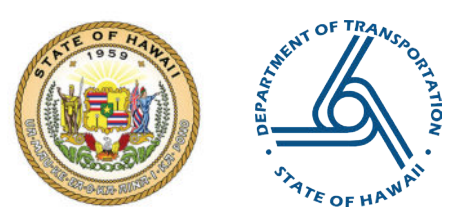
Land Use Compatibility – FAA vs. State of Hawai‘i

- Hawai‘i guidelines were developed to reflect the state’s outdoor lifestyle and the prevalence of naturally ventilated homes
- Considers land uses below DNL 60 dBA as compatible
- Utilizes DNL 55 dBA for the required buyer notification boundary

State Land Use Compatibility Table Changes to FAA Table

	TABLE SET UP	TABLE FOOTNOTES
1	Criteria of yearly DNL ranges are below DNL 60 TO DNL 85 instead of below DNL 65 to Over DNL 85.	Community determines residential uses to achieve NLR interior levels of DNL 45. Normal local construction can be expected to provide an average NLR of approximately 9 dBA.
2	Residential land use category is delineated into low density and high density.	NLR requirements should be evaluated and not be based solely upon the exterior DNL exposure level for schools, indoor auditoriums, concert halls, studios without outdoor sets, broadcasting, and production facilities.
3	Additional land use categories included under recreation: professional/resort sport facilities, locations of media events, extensive natural wildlife, and recreation areas	No indication of dBA measurement to achieve required NLR for the design and construction of buildings where the public is received, office areas, noise sensitive areas, or where the normal noise level is low.

NOTE: NLR – Noise Level Reduction
SOURCE: State of Hawai‘i Department of Transportation – Airports Division, Lihue Airport Noise Compatibility Program: Volume 1-Noise Exposure Map Report, May 1989.



Draft Existing Land Use Map



LEGEND

--- Airport Property Boundary

Noise-sensitive Sites

Hospitals and Nursing Homes

Hotel

Place of Worship

Library

School/Daycare

Generalized Existing Land Use

Agricultural

Commercial

Industrial

Military

Park/Recreation/Open Space

Public/Civic/Institutional

Residential

Transportation

Water

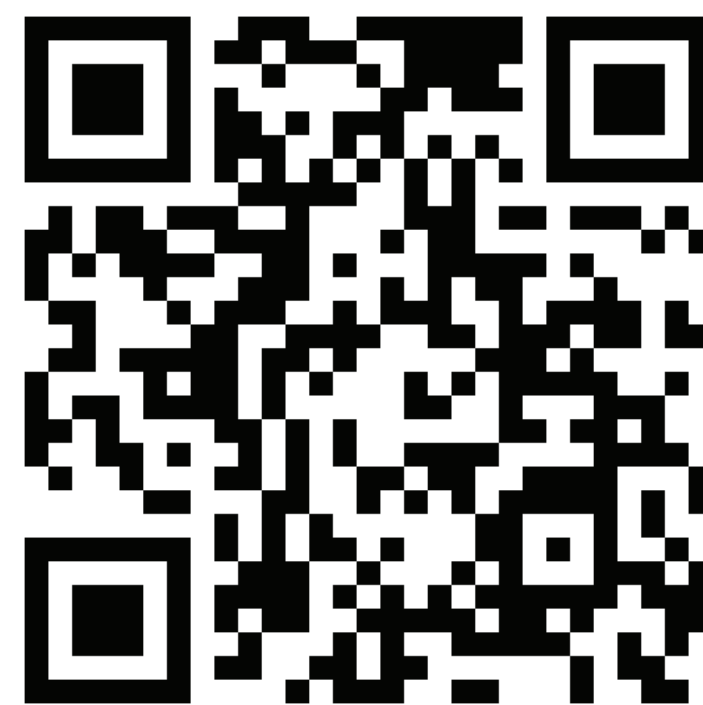
SOURCES: Woolpert, 2025 (aerial photography- for visual reference only, may not be to scale); Ricondo & Associates, Inc., based on data from the state of Hawaii, County of Honolulu, US Geological Survey, Hawaii Department of Transportation, Esri, and Google Maps, June 2026 (generalized existing land uses, noise-sensitive land use points)

Kalaeloa Airport | Noise Exposure Map Update

Consultation and Public Outreach

- **Public Meetings**
 - Two in-person meetings open to public
- **TAC Meetings**
 - Two meetings to present project updates, review technical information and receive feedback
- **Project Webpage**
 - Project updates
 - Informational materials
 - Submit public comments

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Kalaeloa Airport Master Plan



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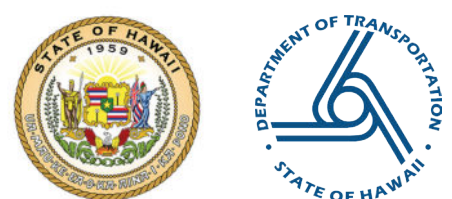
Welcome to Kalaeloa Airport (JRF)
Master Plan and Part 150 Noise Exposure Map Updates



© Accessibility

Link to Webpage:

www.jrfmasterplan.com/documentation



Anticipated Schedule

	2026												2027							
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A
NOISE EXPOSURE MAP UPDATE																				
Inventory and Data Collection																				
Noise Analysis/Modeling																				
Admin Draft NEM Update Report																				
Draft NEM Update Report																				
Final NEM Update Report*																				

We are here

NOTE:
* The Final NEM Update Report must be submitted in Calendar Year 2026, as FAA approved the Kalaeloa Airport Master Plan Forecast for use in the JRF NEM Update indicating CY2026 as the NEM Base year. Once the Final NEM Update Report is submitted to FAA for review and acceptance, it may take the FAA up to 180 days to review and accept the Final NEM Report.

LEGEND:

- Public Review
- Planned task
- FAA Review
- Technical Advisory Committee and Public Meetings

How to Submit a Comment

HDOT is accepting comments through any of the following methods:



Project Webpage

Comment online via the project website



E-mail

Comment by e-mailing:
traci.h.lum@hawaii.gov



In Person

Submit your comment here today

Please Scan to Access Project Website and Submit a Comment



Link:

www.jrfmasterplan.com/stay-informed/