

September 17, 2025  
Laredo International  
Airport (LRD) Master Plan  
  
Technical Advisory  
Committee (TAC) Meeting



# Agenda

- » Introductions
- » Master Plan Overview
- » Inventory Analysis
- » Forecast Analysis
- » Pavement Management Plan
- » Schedule
- » Next Steps



**Laredo  
International  
Airport**

# Team

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RS&H  
*Prime Consultant*



Castle Engineering & Testing, LLC  
*Subconsultant - Geotechnical Services*

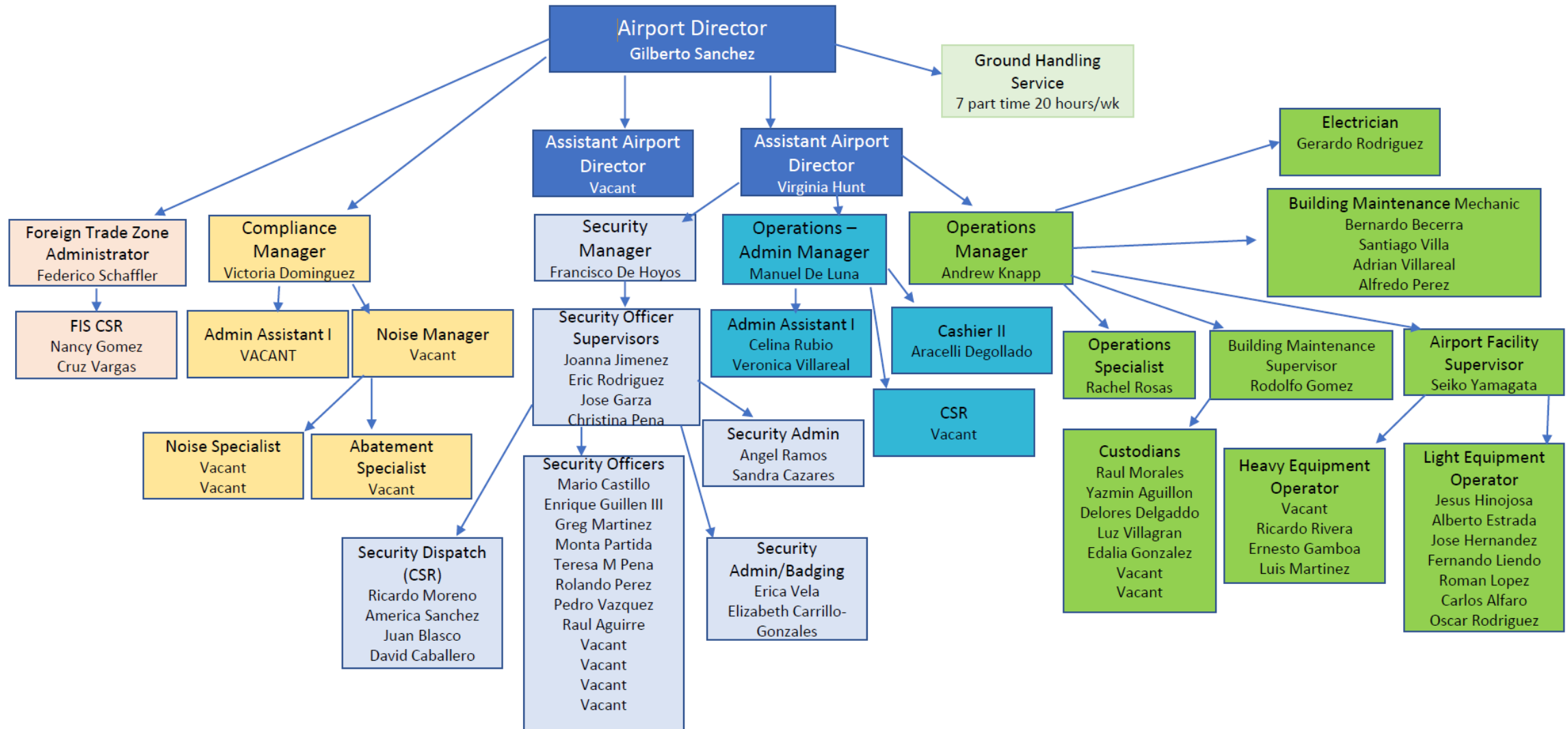


Crane Engineering  
*Subconsultant – Pavement Condition Services*



Martinez Geospatial  
*Aeronautical Surveys*

# Airport Personnel





# RS&H Planning Leads



**Angela Archibeque, CM**  
*Project Manager*



**Amanda O'Krongley, CM**  
*Project Officer*



**Lanre Olaniyan, CM, ACE**  
*Deputy Project Manager*



**Adam Novak**  
*Quality Control*



**Scott LeCount**  
*Finance Lead*



**Tammy Merrill**  
*ALP Lead*



**Jon Erion**  
*Environmental Lead*



**Esteban Alfonso**  
*Forecast Lead*

# Critical Public Involvement Roles

- » Technical Advisory Committee (TAC)
  - Responsible for providing input and insight on technical issues that pertain to master plan and future Airport development
- » Provide critical input at key points
- » Serve as a conduit to your organizations
- » Offer local expertise and experience



# *Master Planning Overview*



# What is an Airport Master Plan?

**“An airport master plan is a comprehensive study of an airport and usually describes the short-, medium-, and long-term development plans to meet future aviation demand.”**

*-FAA Advisory Circular 150/5070-6B Airport Master Plans*



# What is Purpose of an Airport Master Plan?



## **A Plan that . . .**

Provides guidelines for future development that satisfies future aviation demand

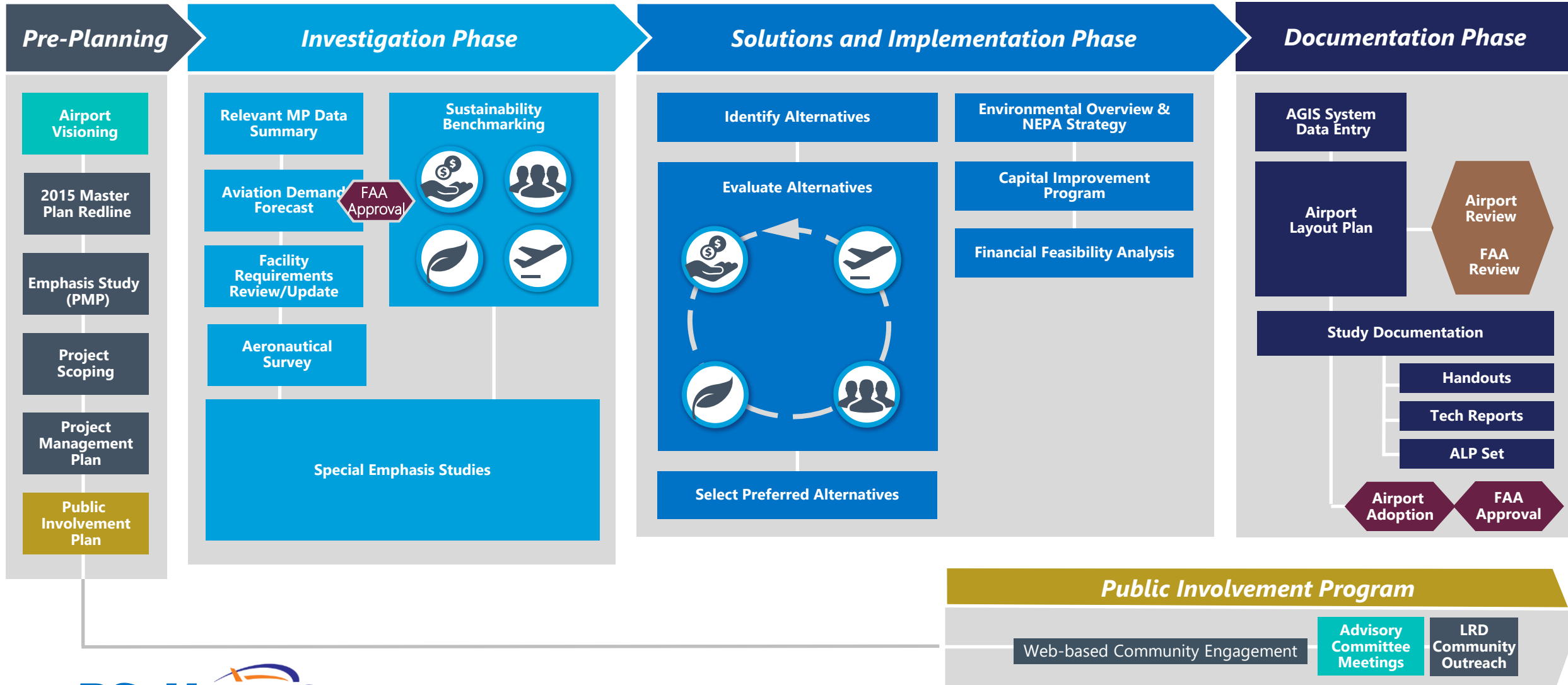


Is financially feasible



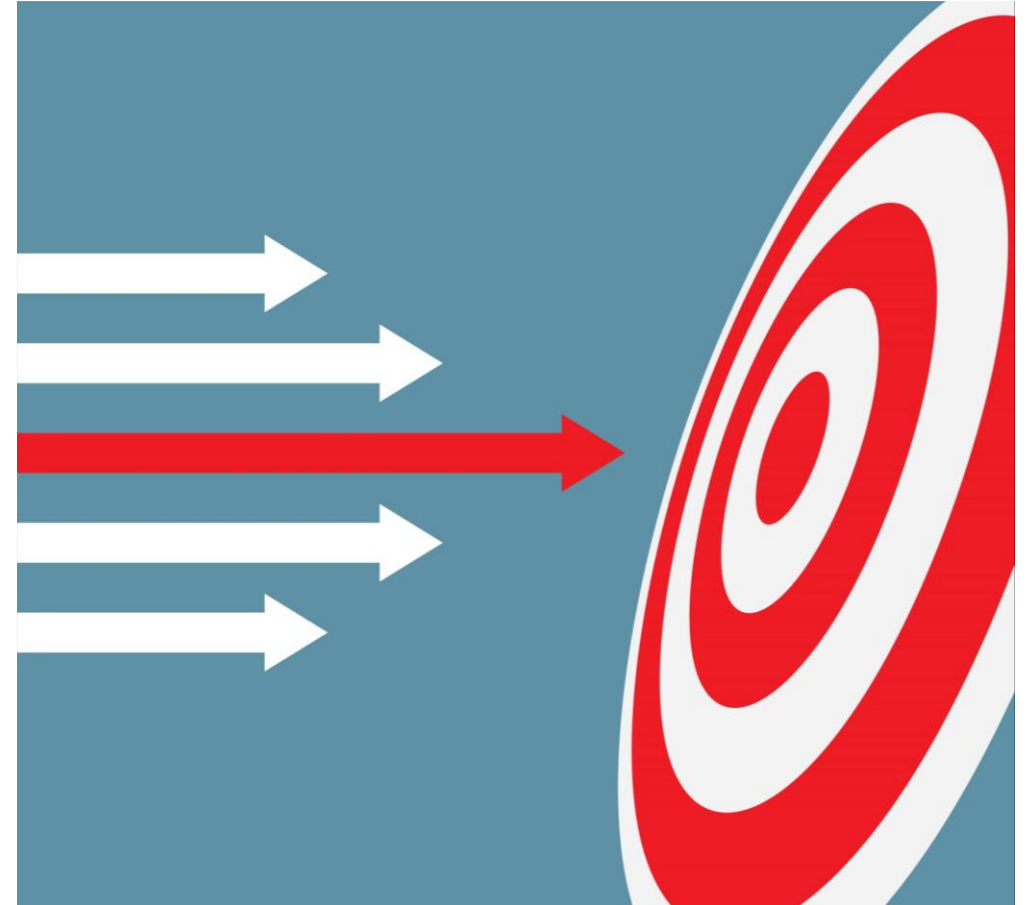
Identifies and responds to environmental and socioeconomic conditions

# LRD's tailored master plan process



# LRD Strategic Visioning

- » Create safe, secure, and community conscious operations
- » Integrate sustainability in its practices
- » Modernize facilities and enhance services
- » Become an economic development catalyst
- » Promote opportunities for global & domestic connectivity



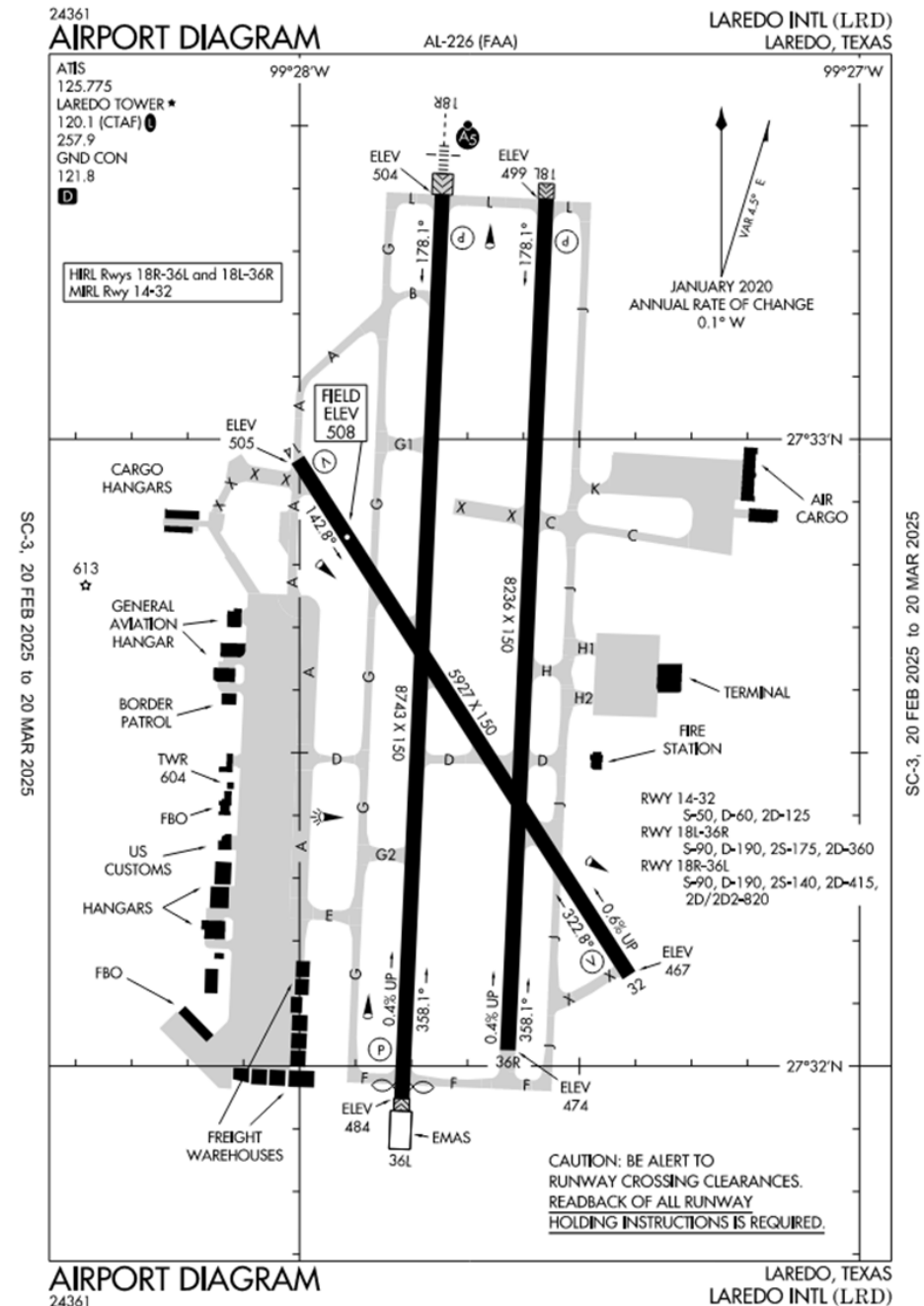
# *INVENTORY OF EXISTING CONDITIONS*





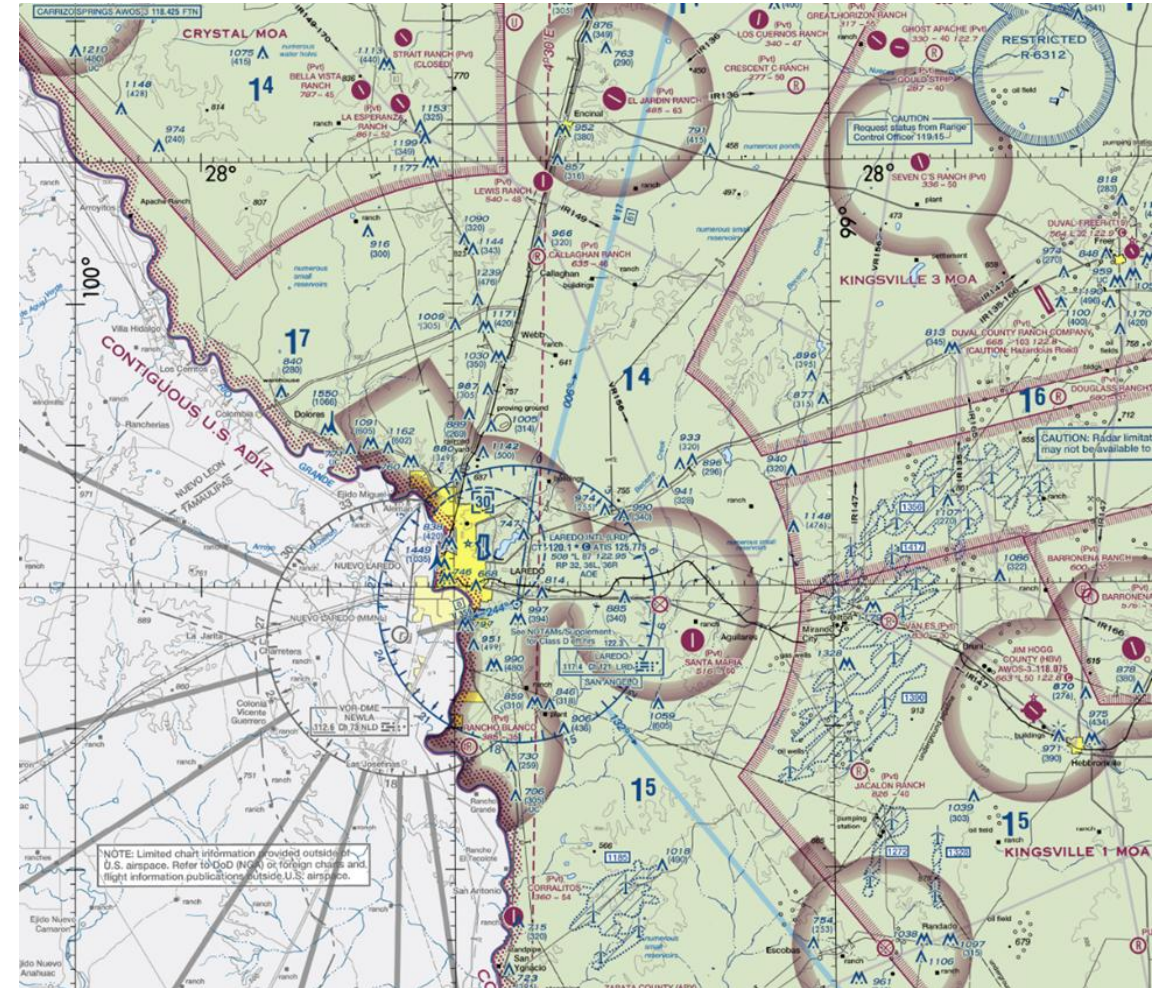
# Airfield Facilities

- » Runway System
  - Three runways
    - *Two parallel*
    - *One crosswind*
- » Declared Distances
- » Taxiway System
- » Pavement Condition
- » Airfield Hot Spots
- » Meteorological Conditions
- » Navigational Aids and Lighting



# Airspace

- » Air Traffic Control Procedures
  - Airspace around the airport is controlled by FAA & a contract tower
- » VFR and IFR Procedures
- » Part 77 Objects Affecting Navigable Airspace
- » Takeoff Obstacles
  - Airport publishes obstructions that could impact flight operations.

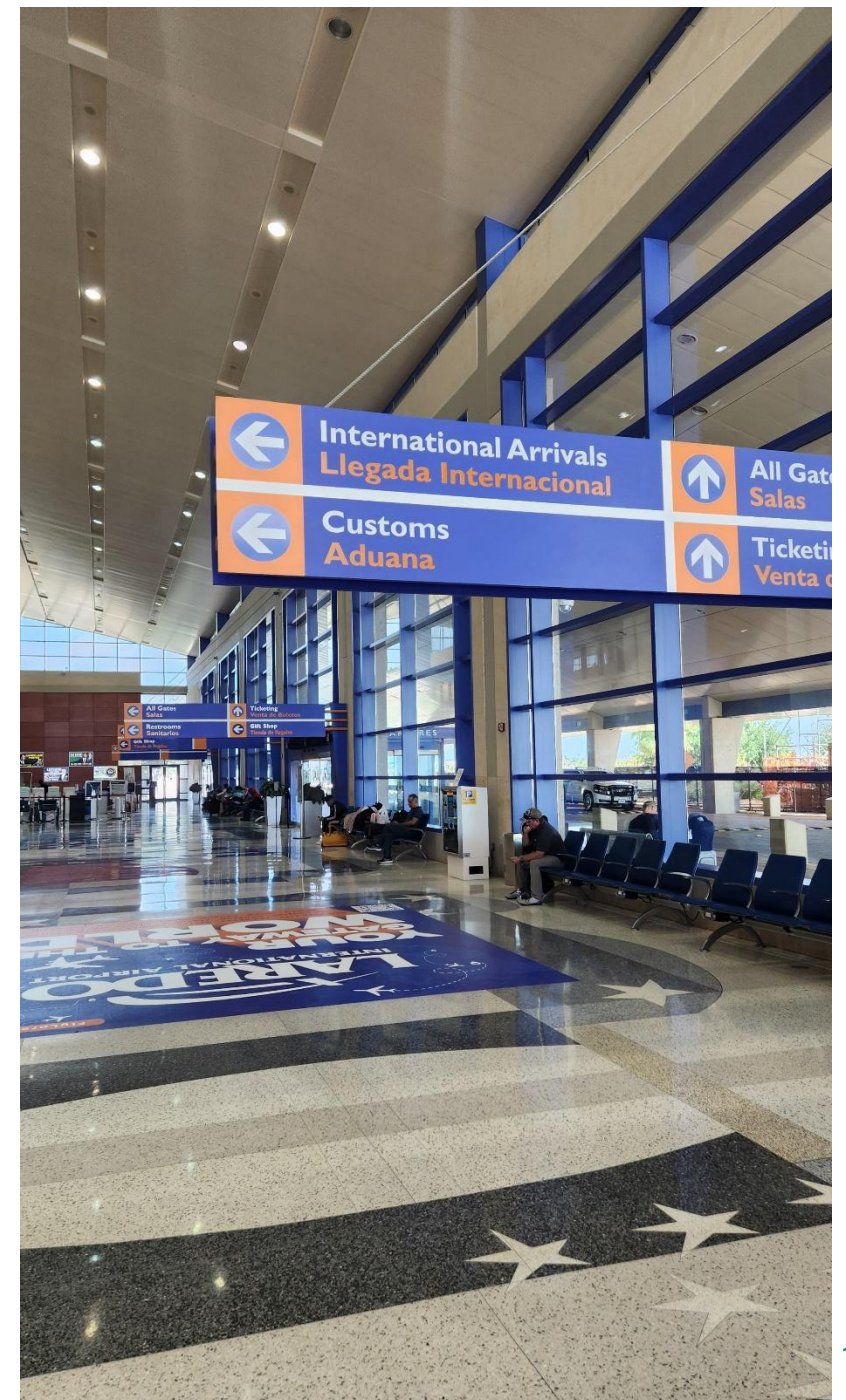


Source: U.S DOT and Federal Aviation Administration, December 2024



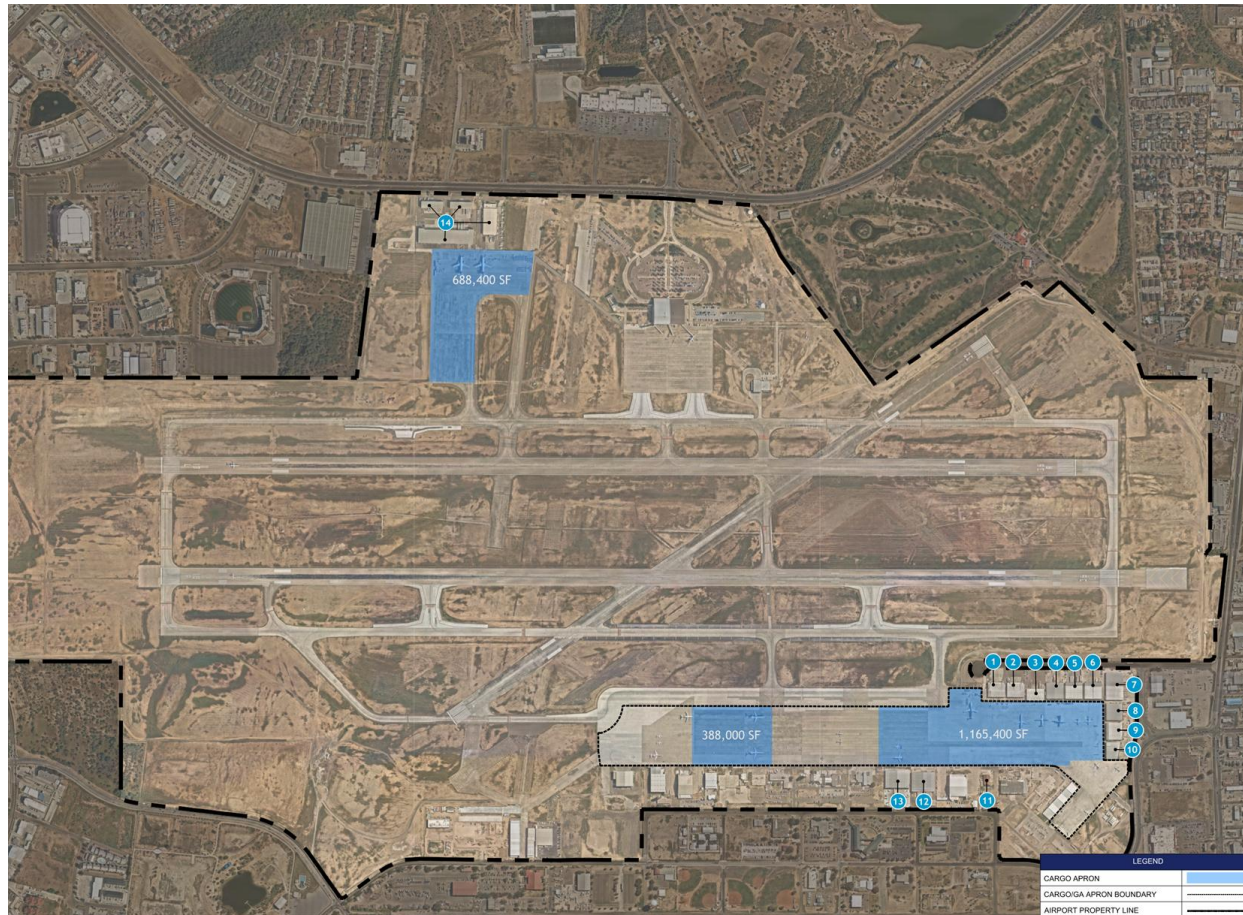
# Commercial Service

- » United
  - Non-stop to Houston
- » American
  - Non-stop to Dallas
- » Allegiant
  - Non-stop to Las Vegas (Twice weekly)
- » Aerus
  - Non-stop to Monterrey (M-F Weekly)



# Air Cargo

- » Significantly utilized by air cargo operators
- » Major air cargo carriers
  - Aeronaves
  - TSM
  - FedEx
  - UPS
  - USA Jet
  - Kalitta
  - IFL
- » FY 2024 Operations: 12,626



## LAREDO INTERNATIONAL AIRPORT

### CARGO FACILITIES

- 1 Emery - 20,000 SF
- 2 Cavazos A/F - 20,000 SF
- 3 Campbells - 15,000 SF
- 4 Eagle USA/FedEx - 22,500 SF
- 5 BAX Global - 22,500 SF
- 6 Cintas - 22,500 SF
- 7 Team Worldwide - 40,000 SF
- 8 Forward Air - 22,500 SF
- 9 Palacios & Sons - 22,500 SF
- 10 Mach One - 18,000 SF
- 11 Laredo National Bank - 4,500 SF
- 12 VA Logistics - 40,000 SF
- 13 Laredo Air Cargo Center - 33,500 SF
- 14 FedEx - 92,000 SF



# Passenger Terminal

## » Passenger Terminal Area

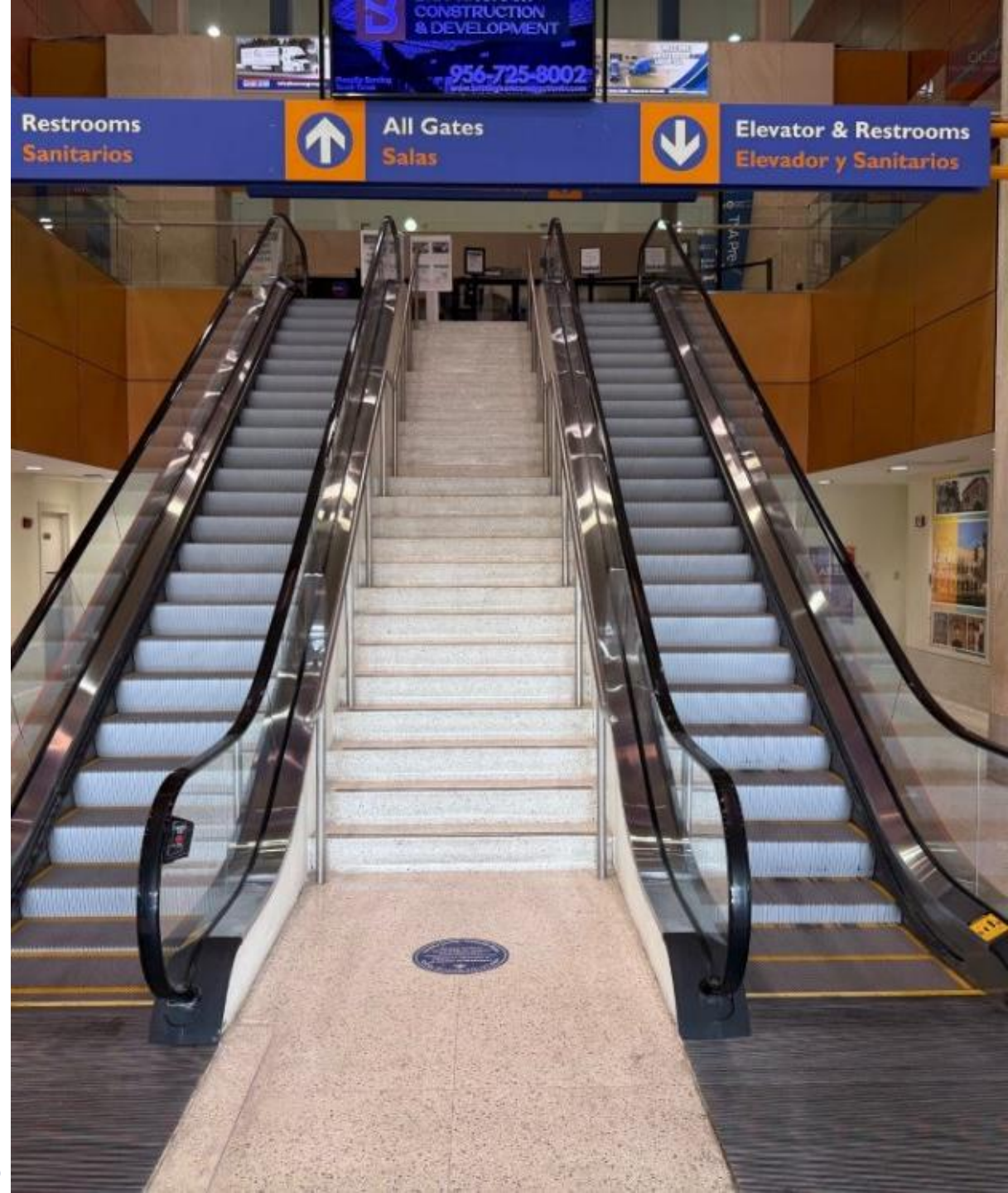
- Holdrooms/Gates
- Airline Space
- Public Space
- TSA
- Building Support/Admin
- Rental Car Counters
- Terminal Apron
- Total (76,840 sf)



Source: RS&H

# Terminal Improvement Program

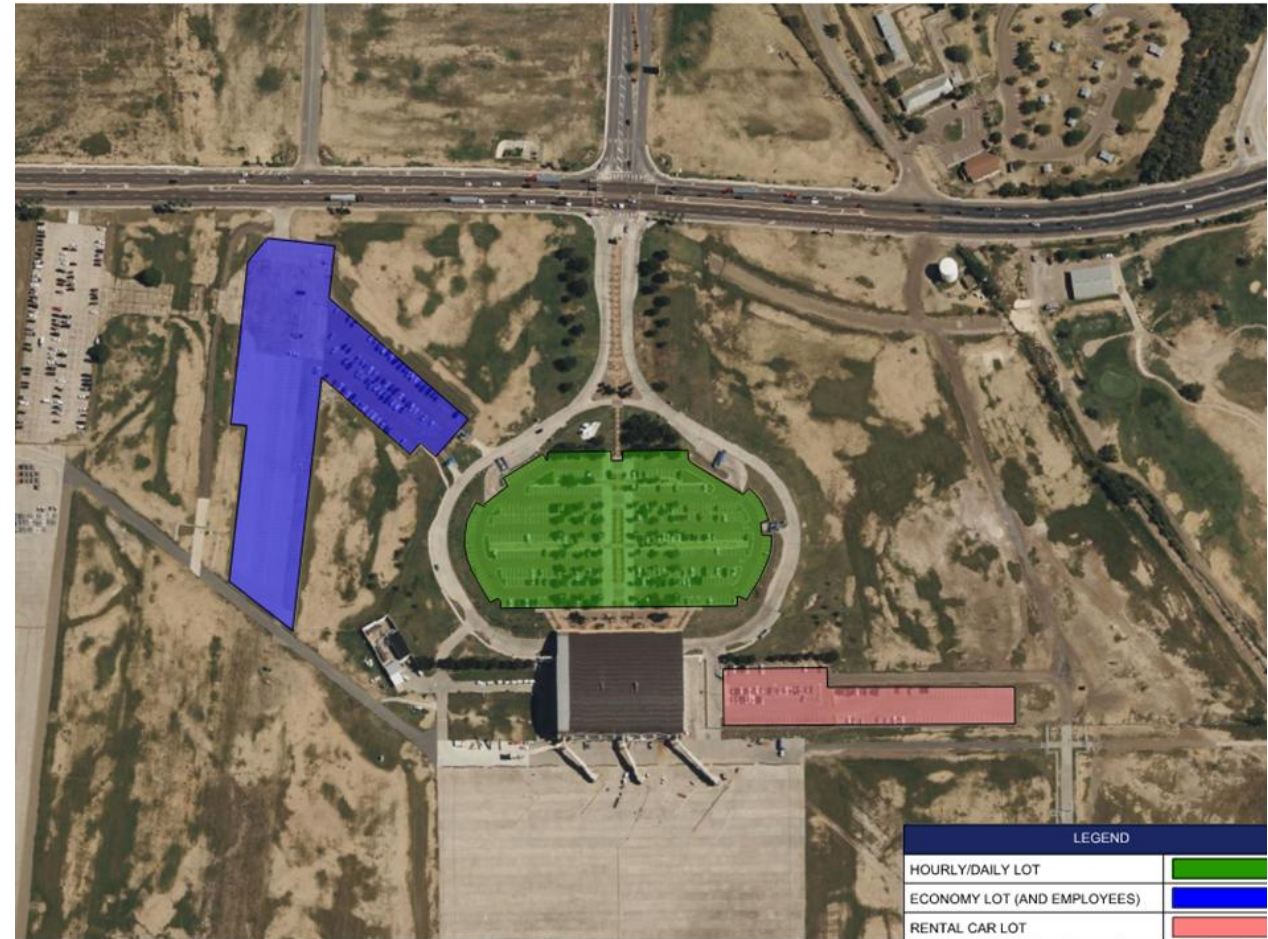
- » Current or Future Projects
  - New escalators
  - New roof
  - New passenger boarding bridges
  - Updated restroom facilities
  - Upgraded elevator
  - LED lighting throughout
  - Expanded TSA compliant security screening checkpoint with expanded queue





# Landside Facilities

- » Terminal Curbfront
  - 270 feet of curb
- » Ground Transportation Services
  - Uber, Lyft, buses, vans, El Metro
- » Vehicle Parking
  - Total of 474 spaces



Source: RS&H

# General Aviation and Support Facilities

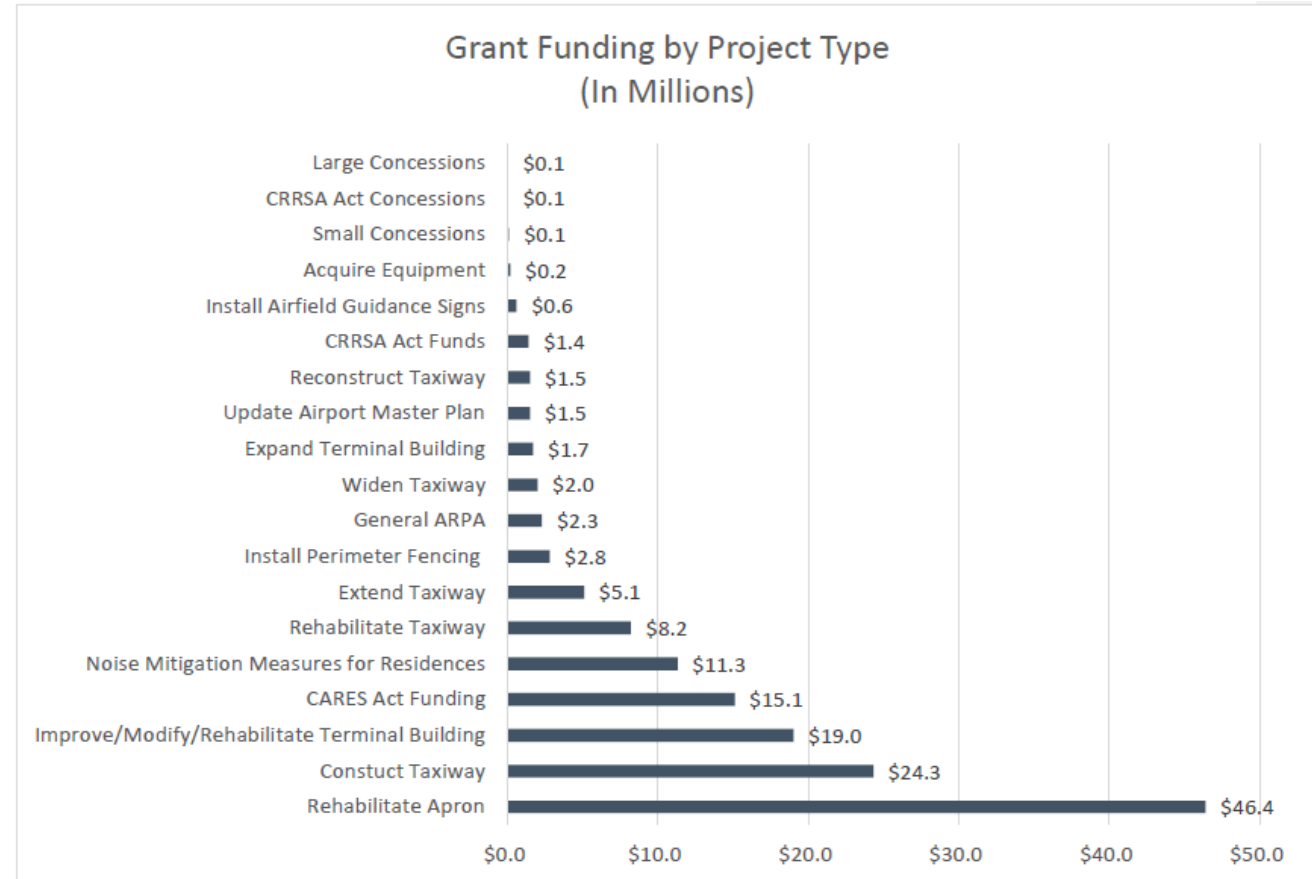
- » General/Cargo Aviation
- » Fixed Base Operators
- » Airport Traffic Control Tower
- » Aircraft Rescue and Firefighting
- » Aviation Fuel Storage
- » Airport Maintenance





# Financial Overview

- » Funding
  - Local, Federal, & State
- » Airport Revenues/Expenses
- » Landing Fees
- » Airline Lease Agreements
- » Federal State Grants
  - NPIAS, FAA AIP

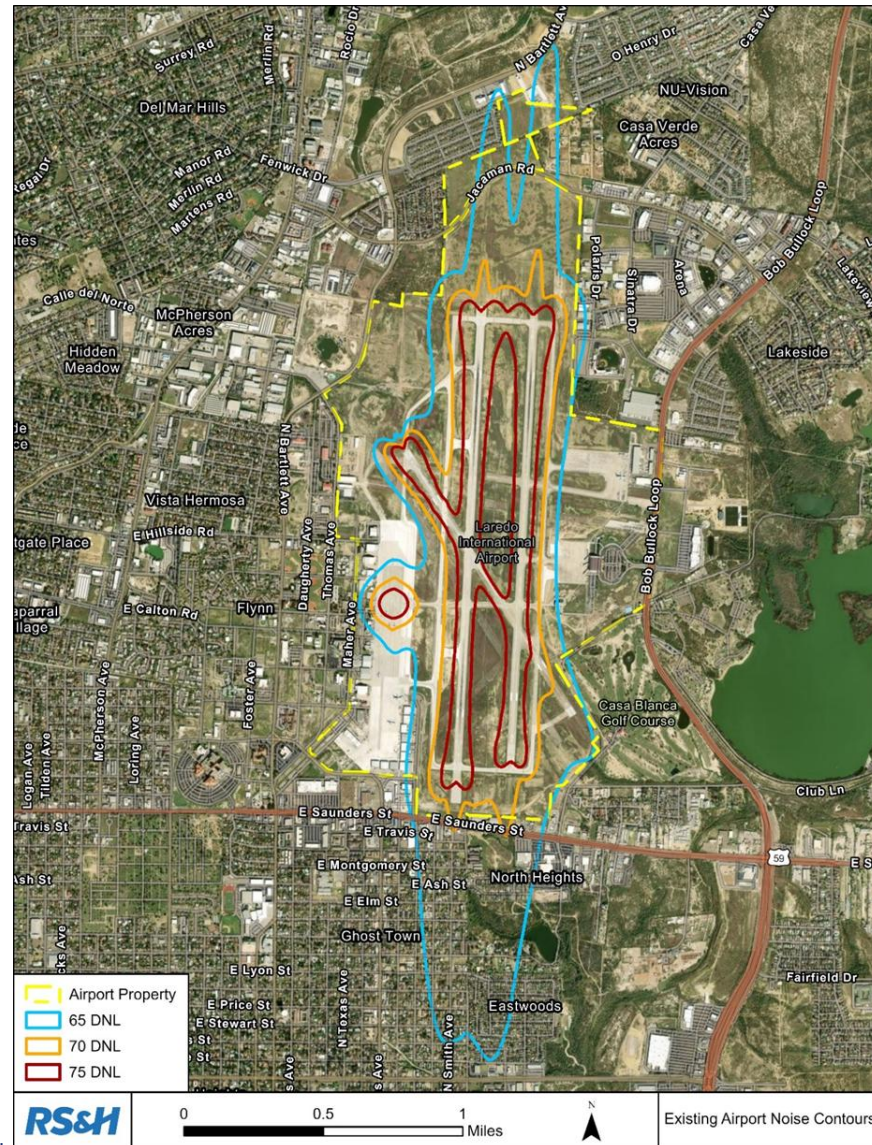


Source: FAA Office of Airports Planning and Programming



# Environmental Inventory/Conditions

- » Air Quality
- » Climate
- » Coastal Resources
- » Land Use
- » Natural Resources & Energy Supply
- » Noise and Noise-Compatible Land Use
- » Visual Effects
- » Water Resources
  - Wetlands





# *AVIATION DEMAND FORECAST*



# Aviation Forecast Elements

- » Passenger Enplanement
  - Number of passengers boarding an aircraft
- » Aircraft Operations
  - Number of landings and take-offs
- » Based Aircraft
  - Number of aircraft that are stored at LRD
- » Critical Aircraft
  - Most demanding aircraft type

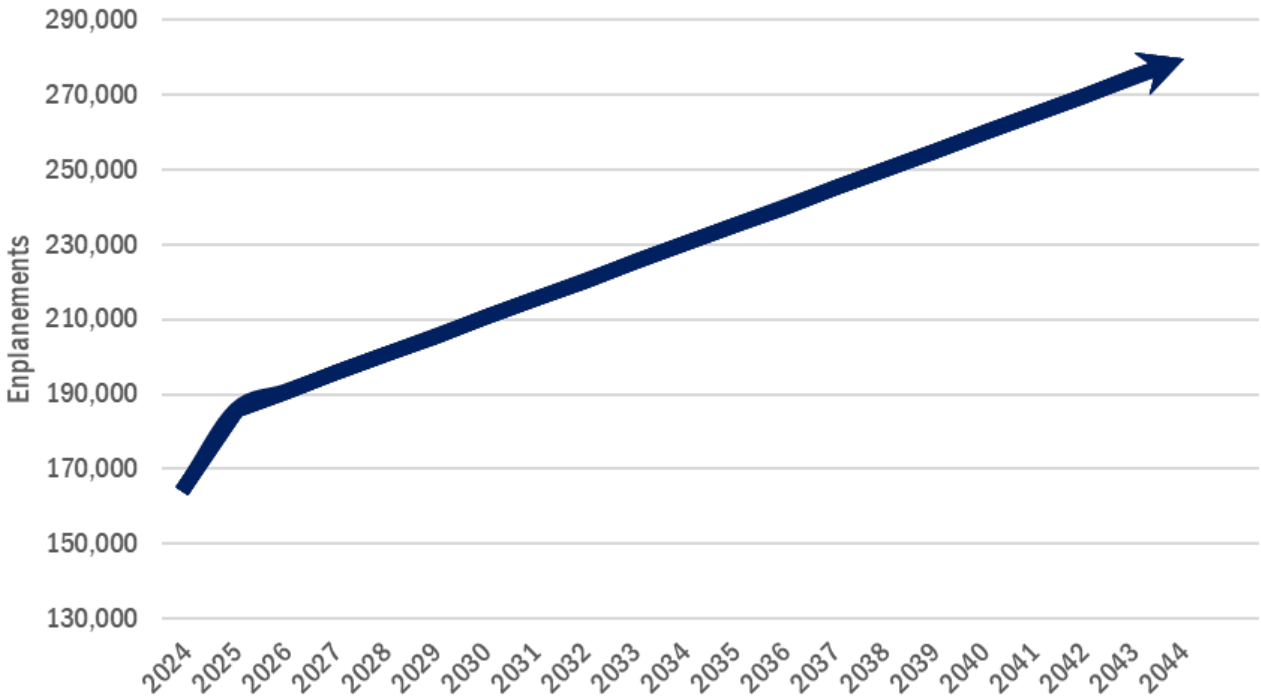




# Passenger Enplanements

» *FY 2024 and Projected FY 2025 thru FY 2044*

	FY	Enplaned Passengers
Baseline	2024	165,676
Forecast	2025	185,800
	2026	190,800
	2027	195,700
	2028	200,600
PAL 1	2029	205,600
PAL 2	2034	230,300
PAL 3	2044	279,600
CAGR		
2024 - 2025		12.1%
2025 - 2034		2.4%
2034 - 2044		2.0%
2025 - 2044		2.2%

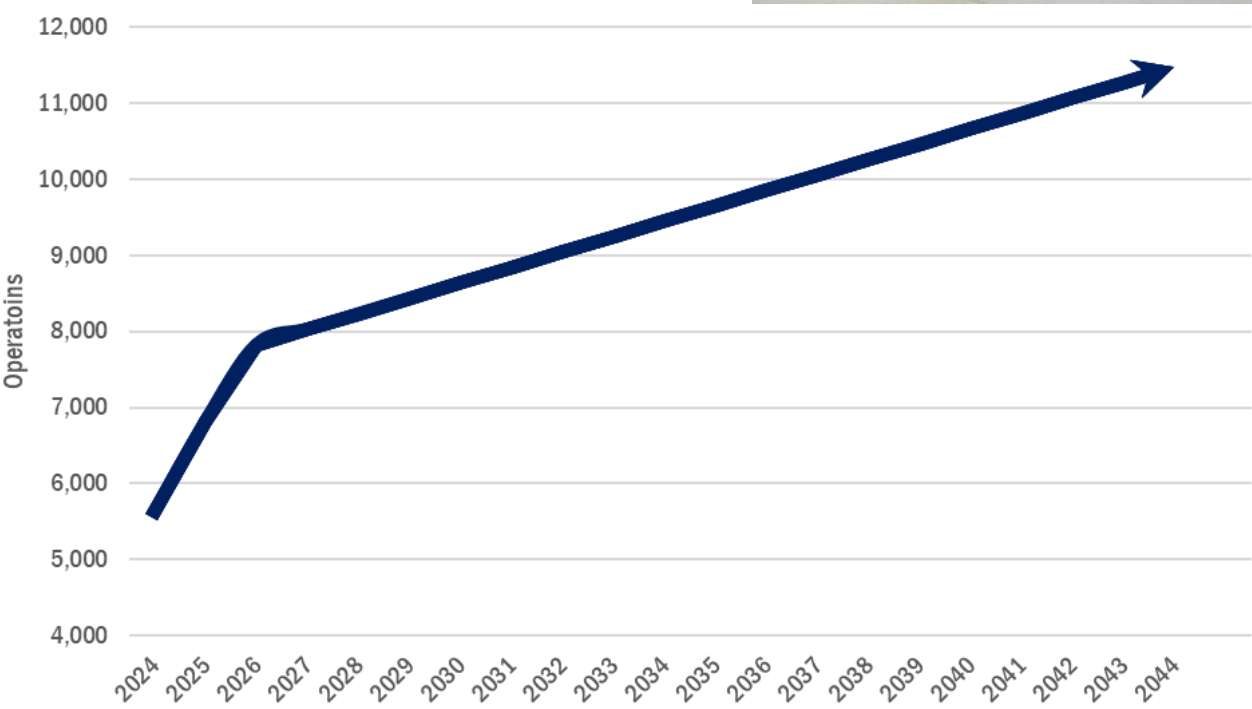


# Passenger Air Carrier Operations

» *FY 2024 and Projected FY 2025 thru FY 2044*



	FY	Operations
Baseline	2024	5,600
Forecast	2025	6,800
	2026	7,800
	2027	8,000
	2028	8,200
PAL 1	2029	8,400
PAL 2	2034	9,400
PAL 3	2044	11,500
CAGR		
2024 - 2025		21.4%
2025 - 2034		3.7%
2034 - 2044		2.0%
2025 - 2044		2.8%



Source: USDOT T-100; USDOT DB1B 10% Survey; RS&H Analysis, 2025

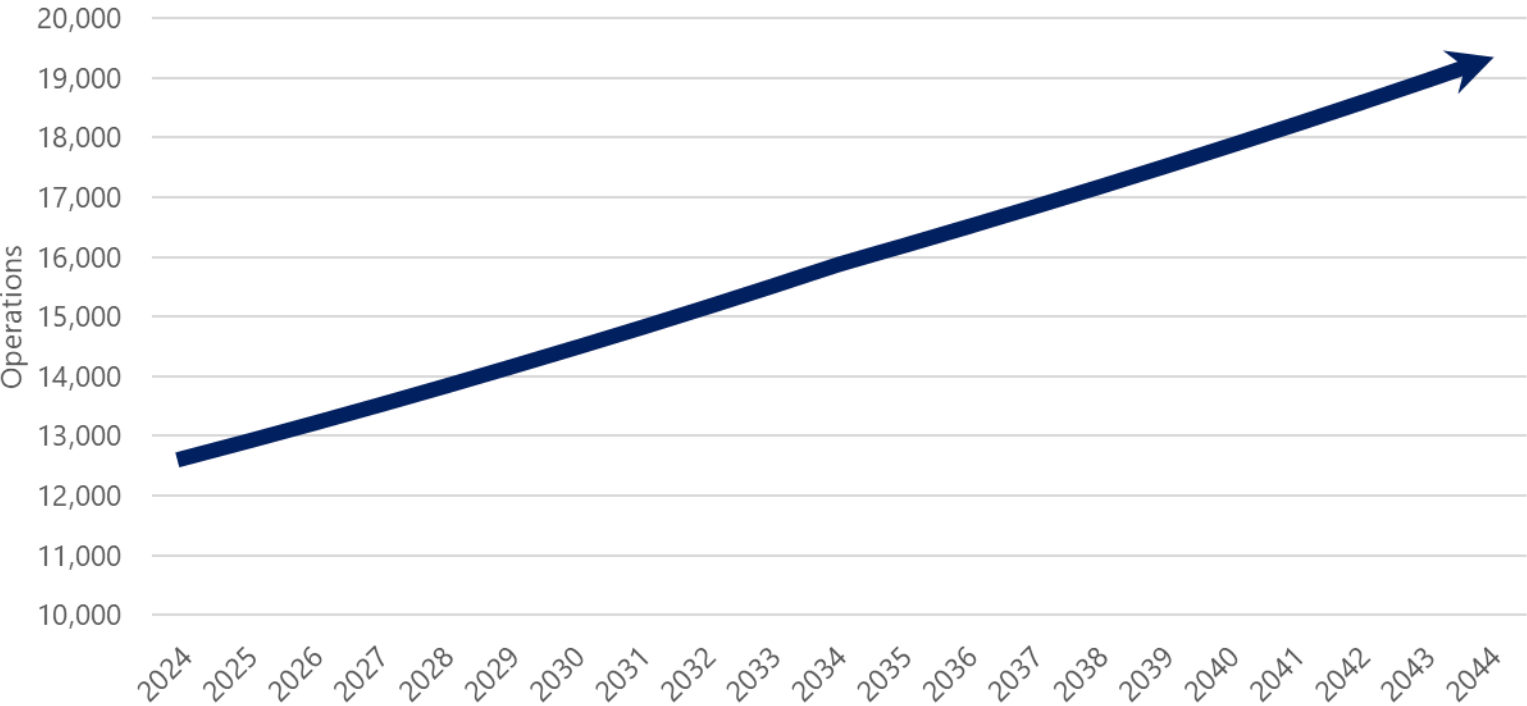
# Air Cargo Operations

» *FY 2024 and Projected FY 2025 thru FY 2044*



	FY	Operations
Baseline	2024	12,626
Forecast	2025	12,900
	2026	13,200
	2027	13,500
	2028	13,800
PAL 1	2029	14,200
PAL 2	2034	15,900
PAL 3	2044	19,400
CAGR		
2024 - 2025		2.2%
2025 - 2034		2.4%
2034 - 2044		2.0%
2025 - 2044		2.2%

Source: Airport Data; RS&H Analysis, 2025



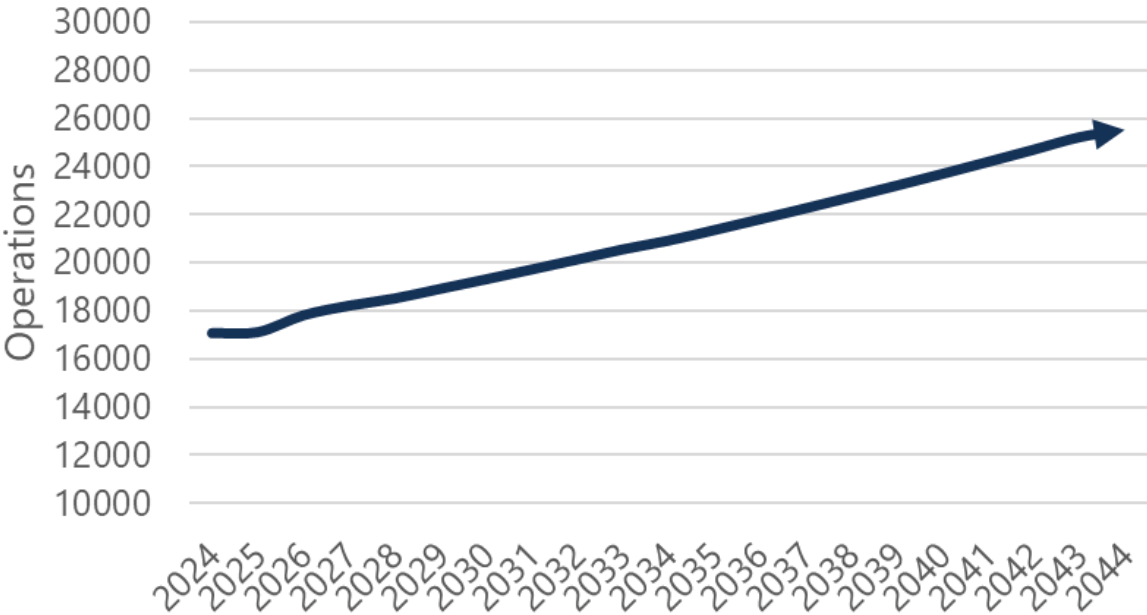
# General Aviation Operations

» *FY 2024 and Projected FY 2025 thru FY 2044*



	FY	Itinerant	Local	Total
Baseline	2024	16,097	961	17,058
Forecast	2025	16,100	1,000	17,100
	2026	16,800	1,000	17,800
	2027	17,200	1,000	18,200
	2028	17,500	1,000	18,500
	PAL 1 2029	17,900	1,000	18,900
	PAL 2 2034	19,900	1,000	20,900
	PAL 3 2044	24,400	1,100	25,500
CAGR				
2024 - 2025		2.3%	0.3%	2.2%
2025 - 2034		2.1%	0.6%	2.0%
2034 - 2044		2.1%	0.8%	2.0%
2025 - 2044		2.1%	0.7%	2.0%

Source: FAA OPSNET; RS&H Analysis, 2025



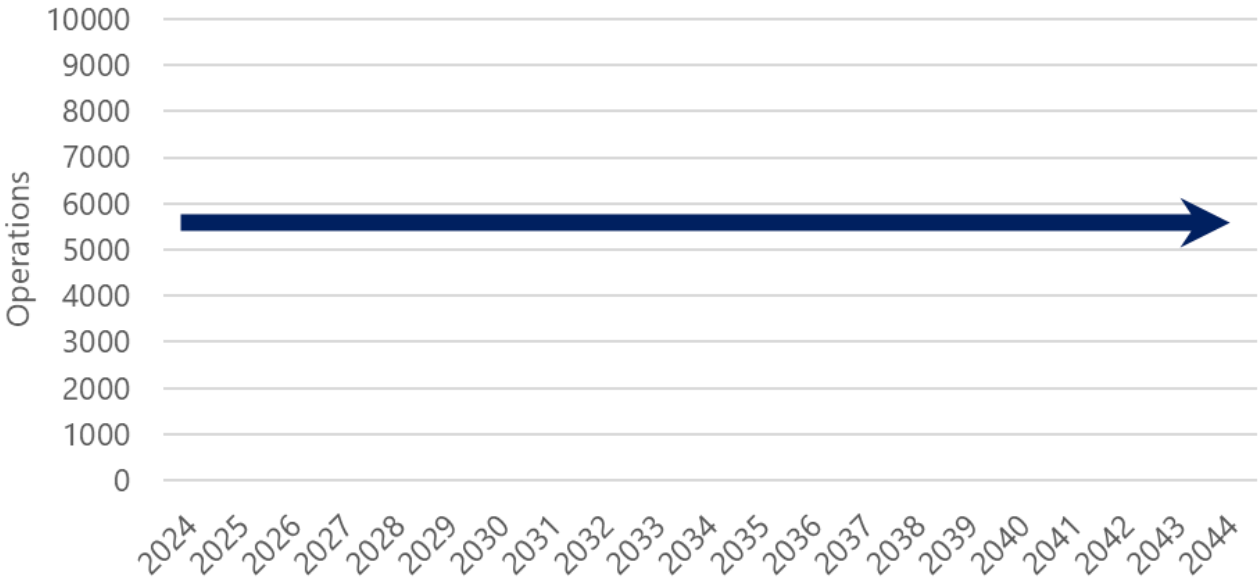


# Military Operations Forecast

» This forecast does not make any changes to the number of local or itinerant military operations



	FY	Military Operations
Baseline	2024	5,600
Forecast	2025	5,600
	2026	5,600
	2027	5,600
	2028	5,600
	2029	5,600
PAL 1	2029	5,600
PAL 2	2034	5,600
PAL 3	2044	5,600
CAGR		
2024 - 2025		0.0%
2025 - 2034		0.0%
2034 - 2044		0.0%
2025 - 2044		0.0%



Source: FAA OPSNET; RS&H Analysis, 2025

# Total Operations Forecast

» *FY 2024 and Projected FY 2025 thru FY 2044*



	FY	Air Carrier	Cargo	Air Taxi / Commuter	GA	Military	Total
Baseline	2024	5,636	12,626	1,094	17,058	5,600	42,014
Forecast	2025	6,800	12,900	1,100	17,100	5,600	43,500
	2026	7,800	13,200	1,200	17,800	5,600	45,600
	2027	8000	13,500	1,200	18,200	5,600	46,500
	2028	8,200	13,800	1,200	18,500	5,600	47,300
PAL 1	2029	8,400	14,200	1,300	18,900	5,600	48,400
PAL 2	2034	9,400	15,900	1,400	20,900	5,600	53,200
PAL 3	2044	11,500	19,400	1,800	25,500	5,600	63,800
CAGR 2024-2044		3.6%	2.2%	2.5%	2.0%	0.0%	2.1%

# What is a Pavement Management Program?

A PMP provides a consistent, objective, and systematic procedure for

- Establishing facility policies
- Setting priorities and schedules
- Allocating resources
- Budgeting for pavement

Required per FAA AC 150/5380-7B *Airport Pavement Management Program (PMP)* for airports accepting federal funding



# What is a Pavement Management Program?

- » Required by the FAA for all projects funded with federal grant monies through the Airport Improvement Program (AIP) and with revenue from the Passenger Facility Charges (PFC) Program
  - Grant Assurance No. 11, Pavement Preventive Maintenance, No. 34, Policies, Standards, and Specifications, and PFC Assurance No. 9, Standards and Specifications

# What is a Pavement Management Program?

- » A PMP Includes the following:
  - Database
    - *Pavement Inventory*
    - *Pavement Structure*
    - *M&R History*
    - *Pavement Condition Data*
      - PCI Survey - Updated either yearly or every 3-years if ASTM standard is used
    - *Traffic Data*
  - System Capabilities
    - *Predicting current and future pavement condition*
    - *Determining optimum M&R plans for a given budget*
    - *Determining budget requirements to meet management objectives*
    - *Facilitating the formulation and prioritization of M&R projects*

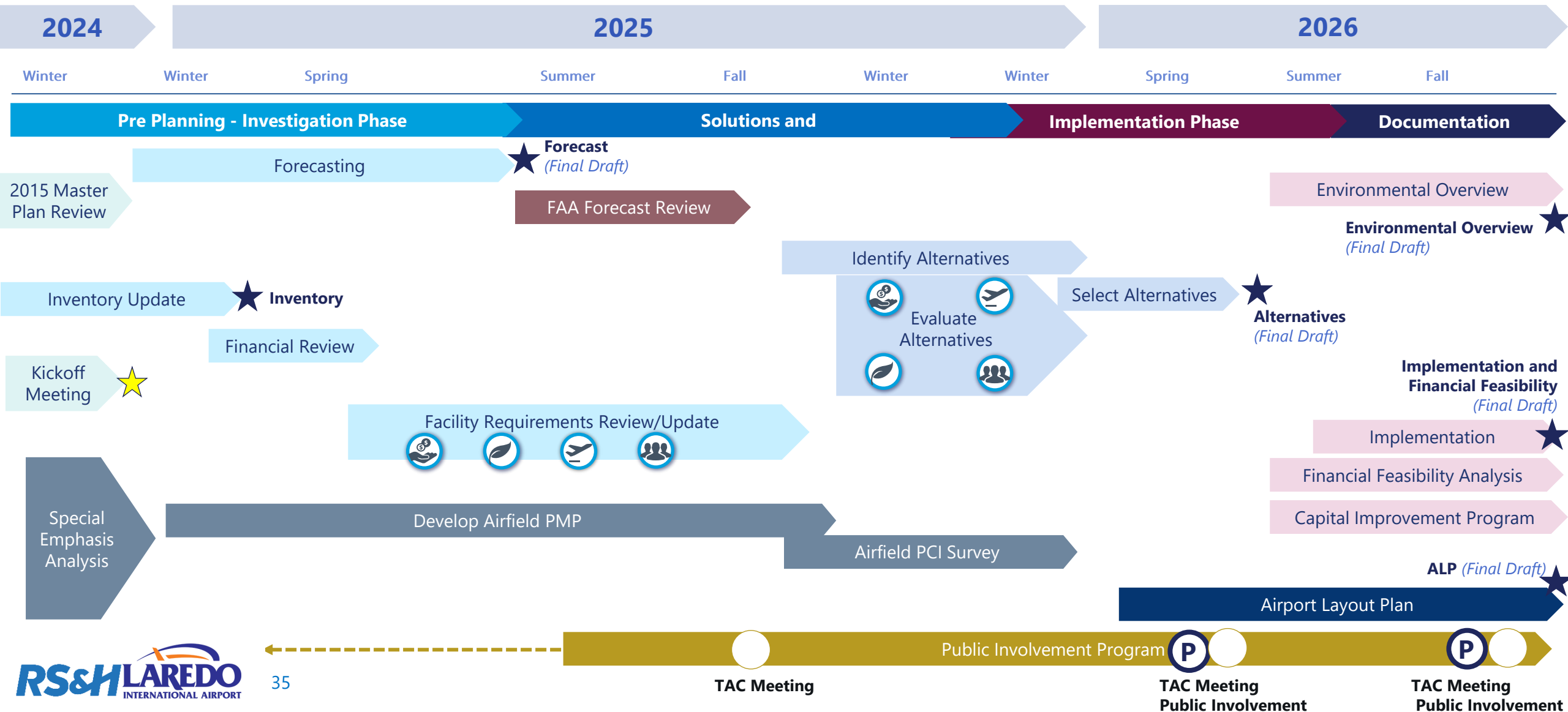


# Pavement Condition Rating (PCR)

- » Required per AC 150/5335-5D
- » Replaces PCN under 150/5335-5C
- » ACR number that expresses the effect of an aircraft on a pavement
- » PCR number that expresses the load-carrying capacity of a pavement for unrestricted operations



# Schedule



# Next Steps

- » Facility Requirements Analysis
- » Identify Alternatives
- » See you again in the Spring!



*THANK YOU*

*ANY QUESTIONS?*



*ARCHITECTURE | ENGINEERING | CONSULTING*