

PDX 2045 Master Plan Update

Portland Freight Advisory Committee May 1, 2025

What's an Airport Master Plan?

• FAA definition: A comprehensive study of an airport that usually describes the short-, medium-, and long-term development plans to meet future aviation demand.

- Port definition: A tool to guide development of the airport over the next 20 years.
 - Evaluates needs, priorities, and alternatives
 - Examines triggers and timing for development
 - Sets the stage for future studies and implementation
- What it's not: A specific blueprint for everything that will happen at the airport over the next 20 years.

Project focus areas



Renew or Replace

Invest in existing facilities to prolong useful life or develop new flexible facilities that consolidate functions.



Aircraft Gates

Determine the appropriate number of international and domestic gates needed to accommodate future demand.



Passenger & Baggage Facilities

Assess level of service and optimize terminal capacity.



Federal Facilities

Expand international facilities to accommodate anticipated demand and improve the passenger experience.



Landside Capacity

Explore multi-modal options to manage vehicular traffic and relieve congested roadway systems.



Customer Experience

Maintain the "best-in-class" reputation of PDX. Enhance services and offerings for customers.



Airfield Optimization

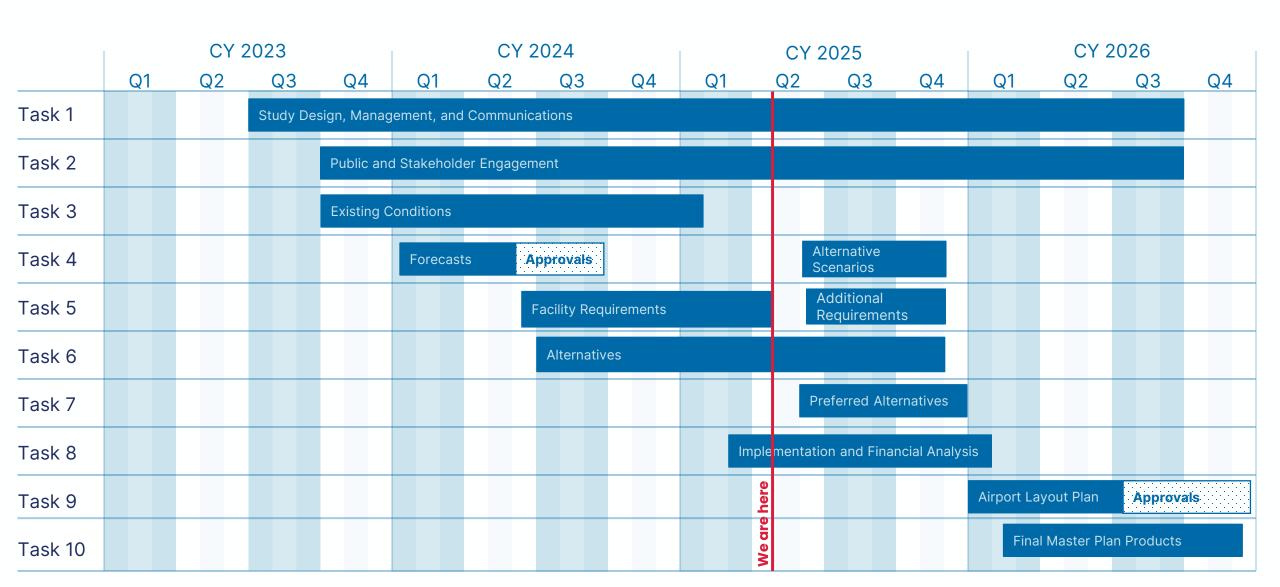
Identify and plan for the appropriate runway and taxiway facilities.



Support Functions

Identify opportunities for colocating critical functions and provide facilities for safe and efficient operations.

Overall project timeline





Aviation Demand Forecasts

What activity do we forecast?



Passengers

- Domestic and International
- Origin and Destination (O&D) and Connecting
- Additional Breakdown As Needed:
 - Airline
 - o Terminal
 - Point of Origin



Operations

- Mainline and Regional Passenger **Operations**
- Cargo
- Air Taxi
- General Aviation
- Military
- Additional Detail as Needed
 - o Fleet mix
 - Itinerant / Local
 - o IFR / VFR



Other Activity and Metrics

- Cargo Volume
- Landed Weight
- Based Aircraft
- Peaking Characteristics (seasonal, daily and hourly)

Forecast Headlines

• Slower but steady COVID Recovery: 19 MAP in 2026, 21 MAP in 2027.

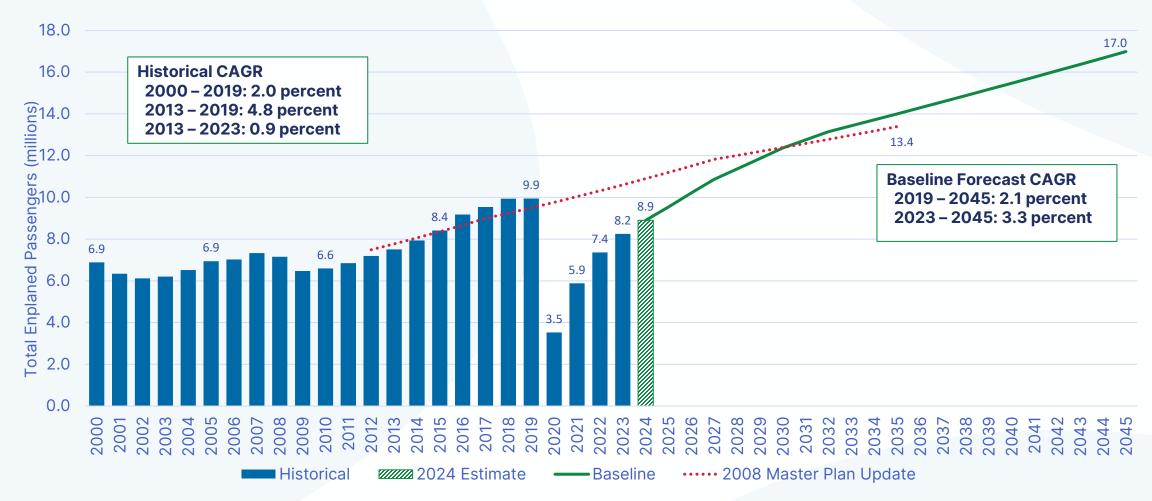
Long-Term Growth Eventually
 Resumes: Return to "new normal"
 annual growth surpassing Airport
 Futures forecast in 2030.

 Ample Airfield Capacity: Operations growth remains below Airport Futures projections through 2045. Today's Role Persists: Mainly origin & destination traffic (89%) with about 91% domestic/9% international passenger split.

 Cargo Growth Remains Volatile: Fresh look at cargo assumptions resets prior forecasts, projects modest growth.

Passenger Forecast Summary

• Enplaned passengers are forecast to increase to 17 million in 2045



Operations Forecast Summary

• Total airport operations are forecast to 331,000 operations in 2045



Sources: : Port of Portland, March 2024; Federal Aviation Operations Network, *Air Traffic Activity Data System and Traffic Flow Management System Counts*, March 2024; Jacobs Consultancy, Master Plan Update, technical Memorandum No. 2 – Aviation Demand Forecast, September 2008; Ricondo & Associates, Inc., April 2024.

Cargo Forecast Summary

Cargo tonnage is forecast to approximately 610,000 metric tonnes in 2045



Rolling Hour Passengers - Total



DEPLANED PASSENGERS				
YEAR	PEAK HOUR	DDFS	PEAK HOUR %	
2023	2,787	27,843	10.0%	
2030	4,422	42,431	10.4%	
2035	4,924	47,988	10.3%	
2040	5,695	53,019	10.7%	
2045	5,874	58,140	10.1%	

ENPLANED PASSENGERS				
YEAR	PEAK HOUR	DDFS	PEAK HOUR %	
2023	2,463	27,428	9.0%	
2030	4,243	41,620	10.2%	
2035	4,725	47,103	10.0%	
2040	5,473	52,007	10.5%	
2045	5,616	57,080	9.8%	



Preliminary Facility Requirements

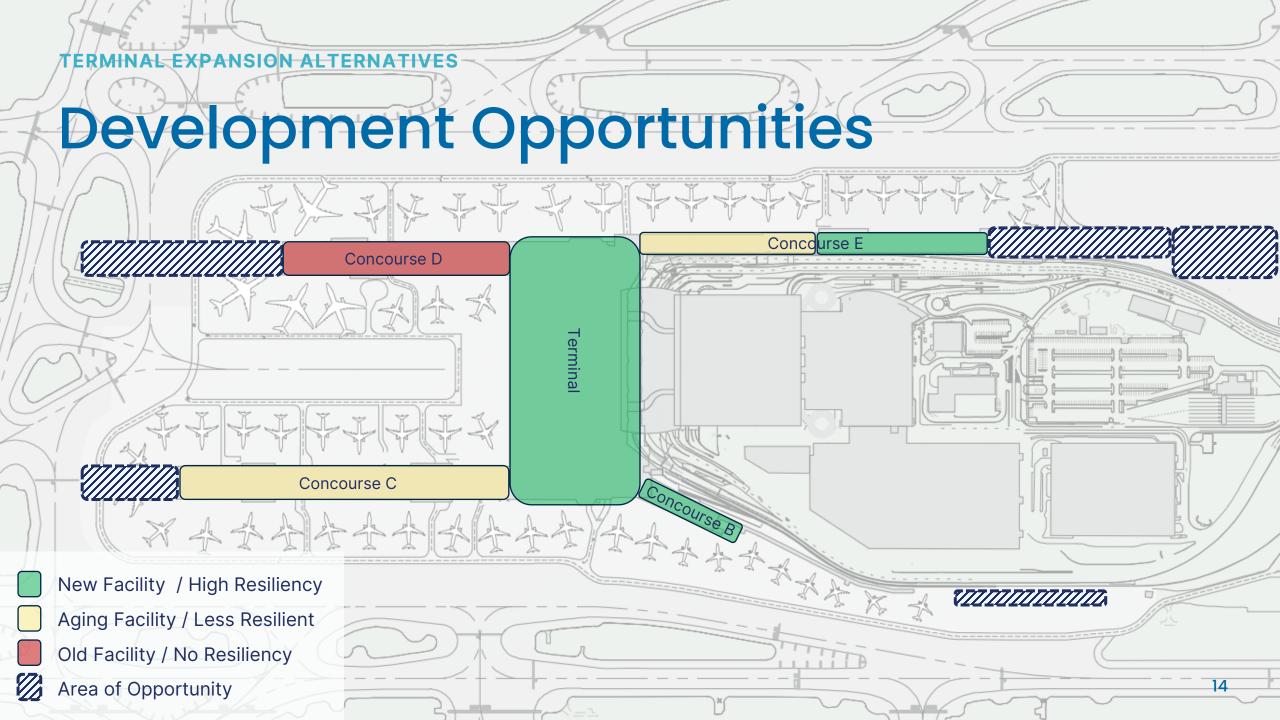
Airfield Summary

Conclusions:

- PDX is well positioned regarding airfield/airspace capacity through the planning period (2045)
- PDX 2045 will explore capacity enhancements specifically exit taxiways
- Runway 3-21 is not needed for capacity purposes
- The third parallel runway is not needed for capacity purposes within the planning period

Next steps:

- Identify taxiway capacity enhancements
- Consider opportunities to shorten or remove crosswind runway
- Revisit the location currently reserved for the third parallel runway



(Early) Cargo Facility Requirements

- Planning for growth: Forecast identifies cargo CAGR of about 3.6% 2023-2045. In 2045, tonnage is forecast to be roughly double current volumes.
- ...but: Cargo growth is volatile.

 Master Plan will identify
 opportunities for cargo facility
 expansion, but development is not
 expected to track demand exactly.

- New facilities needed to meet
 2045 demand: current facilities
 generally adequate, but 2045
 demand will require about 50%
 expansion in cargo square footage.
- Cargo facilities follow airfield and terminal requirements: Limited options for new facility location; will identify alternatives following terminal and airfield analysis.

Landside Planning Approach

 Stay tuned: Landside alternatives follow development/vetting of airfield, terminal, and cargo facility alternatives.

- Existing Conditions: Early identified landside needs include additional public and employee parking, curbside and roadway capacity, and terminal-serving commercial vehicle staging.
- Facility Requirements & Alternatives Development: PDX 2045 will identify forecast demand so that we can collaborate with agency partners on long-term capacity solutions.

PDX 2045 will <u>not</u> attempt to design solutions on PBOT/ODOT/WSDOT facilities to meet projected demand. Instead, we will tee up input and collaboration on future projects.



Stakeholder Engagement

PDX 2045 Planning Advisory Committee

- 100+ applications received, 25 members selected.
- Successfully recruited a diverse, communitycentered and group.
- Collective K/S/E includes folks from various neighborhoods, cultural backgrounds, occupational roles, ages, ways of experiencing.



PDX 2045 IAC Invited Participant Agencies

- City of Portland
 - Bureau of Environmental Services
 - Bureau of Planning & Sustainability
 - Bureau of Transportation
 - Parks & Recreation
 - Permitting & Development
- City of Vancouver
- Clackamas County
- Clark County
- C-TRAN

- Metro
- Multnomah County
- Oregon Air National Guard
- State of Oregon
 - Department of Aviation
 - Department of Environmental Quality
 - Department of Transportation
- TriMet
- Urban Flood Safety & Water Quality District
- Washington County

Community Engagement

Public Open Houses

- March/April: Introduction & Forecast
- Early Summer: Alternatives
- Early Autumn:
 Preferred Alternative
- Winter: Implementation and Ongoing Engagement

 Planning Advisory Committee: Meeting #7 May 19, 2025

Interagency Advisory Committee:
 Next meeting late May

 Project news, events, and updates available at pdx2045.org



Q&A and Thank You!

For more information: pdx2045.org

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