

# PDX 2045 Planning Advisory Committee

Meeting 4

October 21, 2024

# Meeting goals

- Airfield tour questions and observations
- Airfield capacity findings
- Planning exercise
- PAC meeting 5 on Dec. 9

# Agenda

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<b>Time</b>	<b>Topic</b>
6:00 PM	Welcome and Introductions
6:10 PM	Airfield Tour Recap
6:25 PM	Airfield Capacity Findings
6:40 PM	Airport Planning Exercise Instructions
6:55 PM	Public Comment & Break
7:05 PM	Airport Planning Exercise
7:50 PM	PAC Next Steps
8:00 PM	Adjourn

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# Airfield Tour Recap



# Airfield tour recap

- Physical layout and facilities
- Airfield operations
- Terminal operation
- Airlines and tenants
- Aircraft Rescue and Fire Fighting

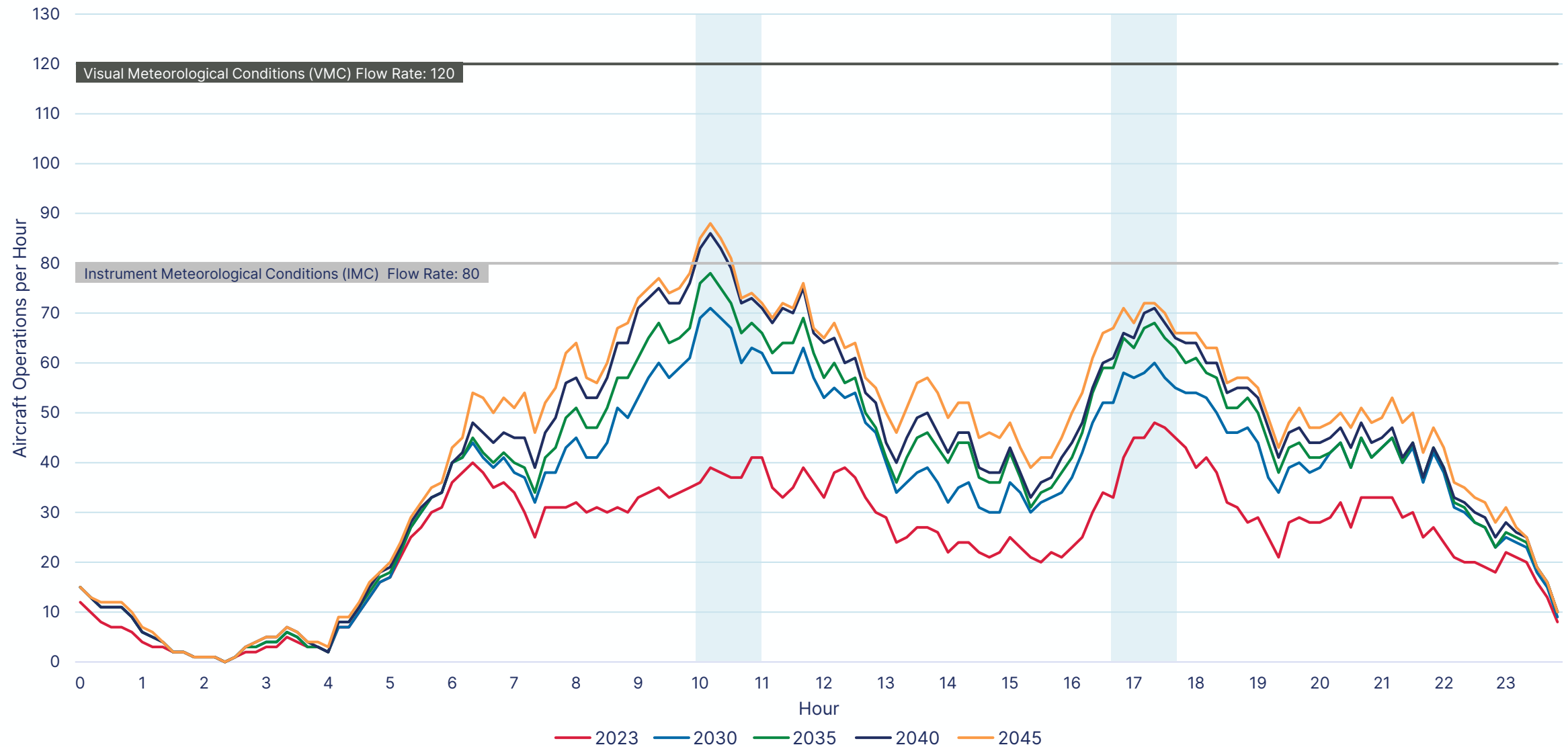


# Q&A

# Airfield Capacity Findings

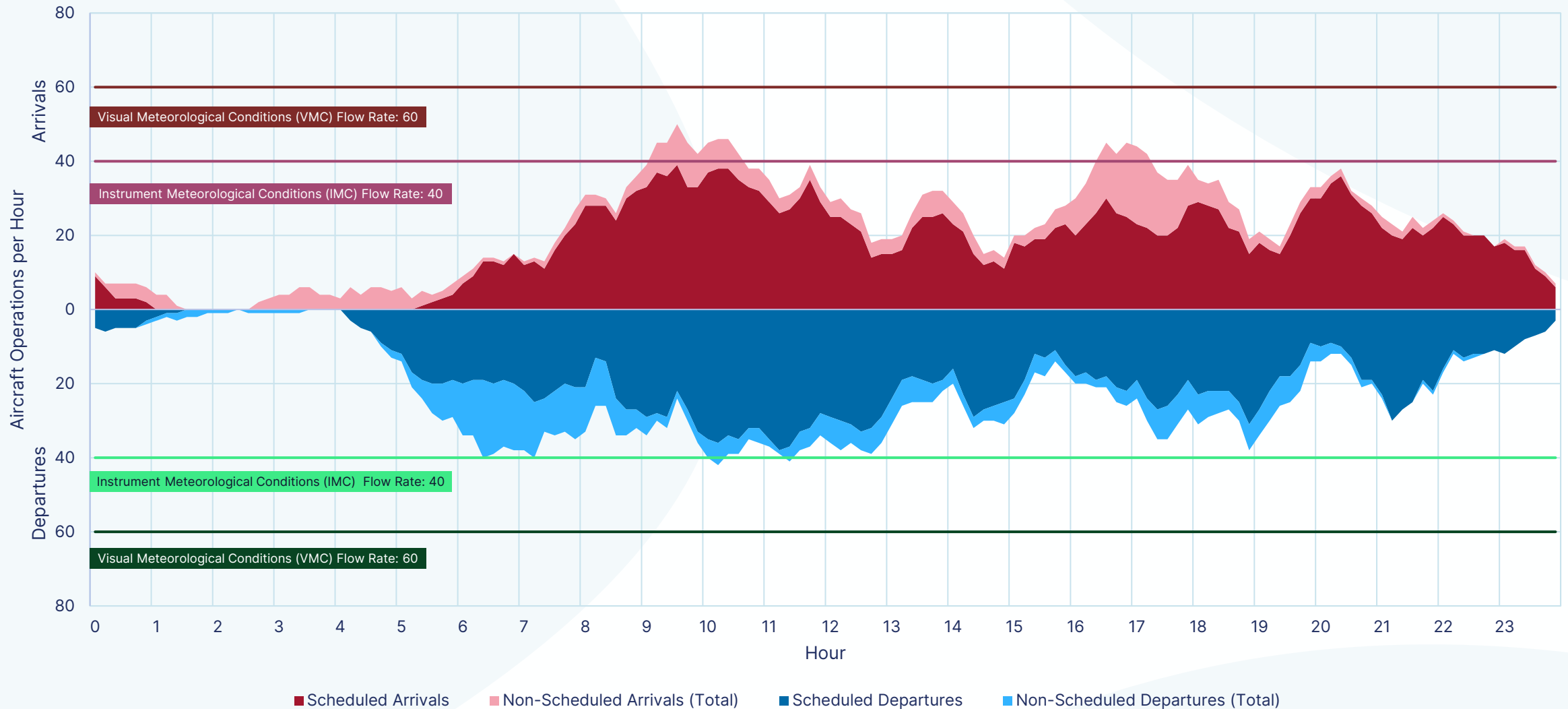


# Design Day Hourly Runway Demand/Capacity



Sources: Federal Aviation Administration, *Aviation System Performance Metrics, Daily Weather by Hour Report*, January 1, 2012 through December 31, 2023, June 2024 (Data); Ricondo & Associates, Inc., *Design Day Flight Schedule*, June 2024; Ricondo & Associates, Inc., June 2024 (Analysis).

# 2045 Demand and FAA Estimated Rates



Notes:  
 1 Non-Scheduled includes: Cargo, General Aviation, and Military operations.

Sources: Federal Aviation Administration, *Aviation System Performance Metrics, Daily Weather by Hour Report*, January 1, 2012 through December 31, 2023, June 2024 (Data); Ricondo & Associates, Inc., *Design Day Flight Schedule*, June 2024; Ricondo & Associates, Inc, June 2024 (Analysis).

# Annual Service Volume

- FAA Advisory Circular 150/5060-5 – *Airport Capacity and Delay* capacity benchmarks:
  - 60% of ASV – begin planning for additional capacity
  - 80% of ASV – begin implementing additional capacity
- Potential capacity enhancements
  - Additional airfield facilities (taxiways, runways)
  - Airspace improvements
  - Better navigation technology

	Base	2030	2035	2040	2045
Weighted Hourly Capacity ( $C_w$ )	114	114	114	114	114
Annual Operations	190,150	264,740	288,270	308,780	328,930
Average Daily Ops (Peak Month)	603	850	924	990	1,060
Average Peak Hour Ops (Peak Month)	48	71	78	86	88
D=	315.34	311.46	311.98	311.90	310.31
H=	12.56	11.97	11.85	11.51	12.05
ASV = $C_w \times D \times H$	452,000	426,000	422,000	410,000	427,000
Percent ASV	42%	62%	68%	75%	77%

# Annual Service Volume

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ASV	452,000	426,000	422,000	410,000	427,000
Percent ASV	42%	62%	68%	75%	77%

# Conclusions and Next Steps

## **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

# Q&A

# Airfield Planning Exercise (Part 1)

# Exercise Outline

Time	Topic	Notes
15 minutes	Instructions and setup	<ul style="list-style-type: none"><li>• Small groups of 4-5 people</li><li>• One large map and one set of planning cutout blocks per group</li></ul>
10 minutes	Break	
25 minutes	Interactive exercise	
20 minutes	Share ideas	



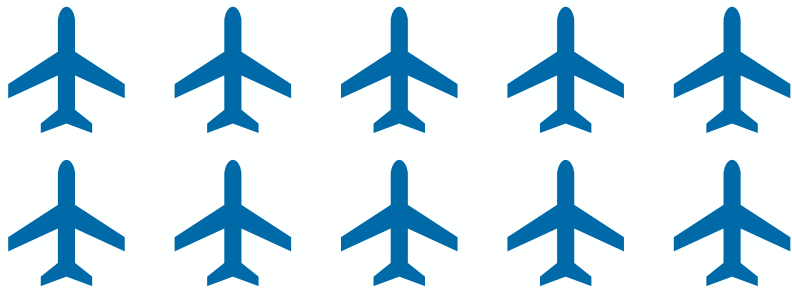
# Exercise Instructions

In this exercise, we'll break into teams and develop potential future layouts for the runways and gates at PDX.

## Main objectives:

10 new gates

70 acres of new cargo area

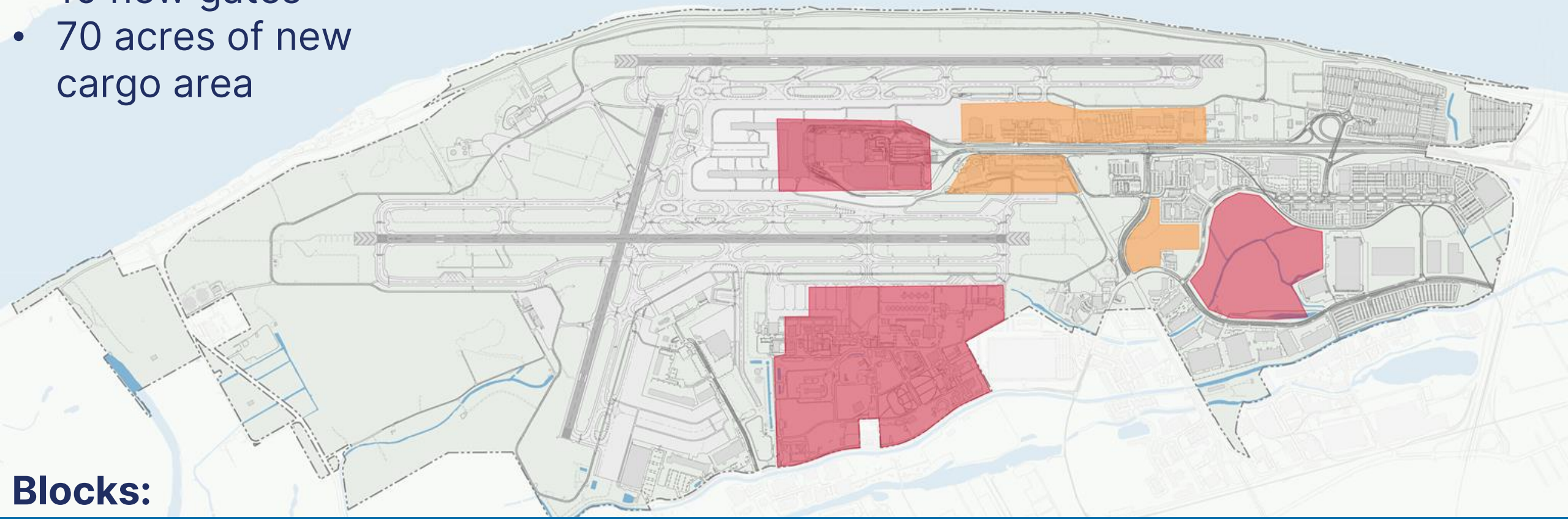


## Things to keep in mind:

- Guardrails (property boundary, red and orange areas)
- Consider the why, what are the motivations, what are the trade offs?
- What information would you need to fully evaluation your alternatives?

# Main objectives:

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- 70 acres of new cargo area

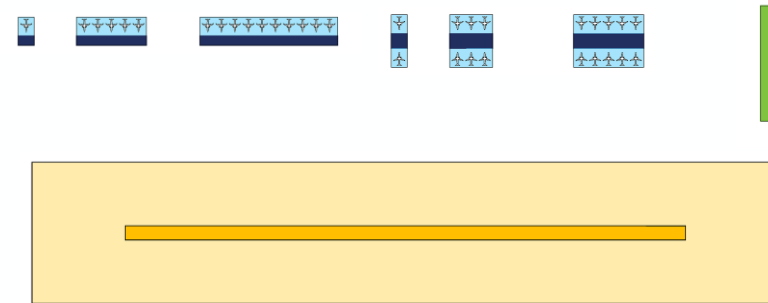


# Blocks:

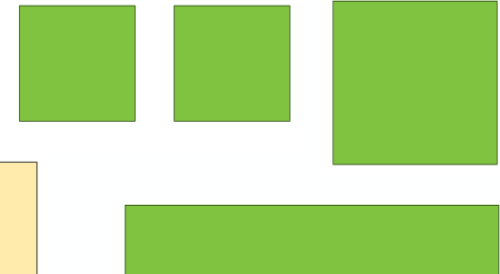
## Runways



## Concourse/Gates



## Cargo



# Public Comment

# Airfield Planning Exercise (Part 2)

# Next steps

## NEXT STEPS

# Work plan

PAC meeting	Meeting topics	Date
1	Welcome and background	May 20, 2024
2	Baseline forecast & preliminary facilities requirements	July 16, 2024
3	Facility tour	Sept 19, 2024
4	Facility requirements & preliminary alternatives	Oct 21, 2024
> 5	Functional area alternatives	Dec 9, 2024
6	Finalist functional alternatives & initial consolidated alternatives	~ Mar 2025
7	Refined consolidated alternatives	~ May 2025
8	Preferred alternative	~ July 2025
9	Preliminary implementation planning	~ Sept 2025
10	Implementation	~ Oct 2025
11	Thank you and PAC wrap	~ Dec 2025

## NEXT STEPS

# PAC Meeting 5

- Facility requirements
  - Terminal
  - Landside
  - Support
- Continuation of airfield and terminal alternatives discussion

Thank you for your  
participation!



Please take our  
meeting evaluation  
survey

[bit.ly/pac4](https://bit.ly/pac4)