Port of Portland

PDX 2045 Interagency Advisory Committee

Meeting #2

May 22, 2025

Meeting goals

- Discuss recent community outreach and open houses
- Review and discuss preliminary terminal gate expansion alternatives
- Discuss preliminary landside facility needs and planning approaches

Agenda

Time	Topic
10:30 AM	Welcome and Introductions
10:40 AM	Open House & Community Outreach Updates
10:50 AM	Preliminary Terminal Gate Expansion Alternatives
11:20 AM	Preliminary Landside Facility Needs and Planning Approaches
11:45 AM	Next Steps, Q&A, and Open Discussion
12:00 PM	Adjourn

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

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Open House & Community Outreach


Public Comment
Your feedback is essential!
Please take our survey by scanning the QR code below or fill out a paper survey.
Bienvenido a McDaniel Don Javier Zamora
Welcome to McDaniel Mr. Javier Zamora
Portland Public Schools
Port of Portland


DX 2045 Master Plan Project Overview
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 and 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.
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Outreach summary since IAC 1

Outreach Completed

- March 2025
  - In-person Open House
- April 2025
  - Zoom & Online Open Houses
- May 2025
  - International Air Service Committee
  - Portland Freight Advisory Committee
  - PDX Community Advisory Committee
  - PDX 2045 Planning Advisory Committee

Themes We've Heard

- International experience & service needs to be improved.
- Multimodal access is key, especially walking, rolling, and transit.
- Need to incorporate universal design and usability for everyone.

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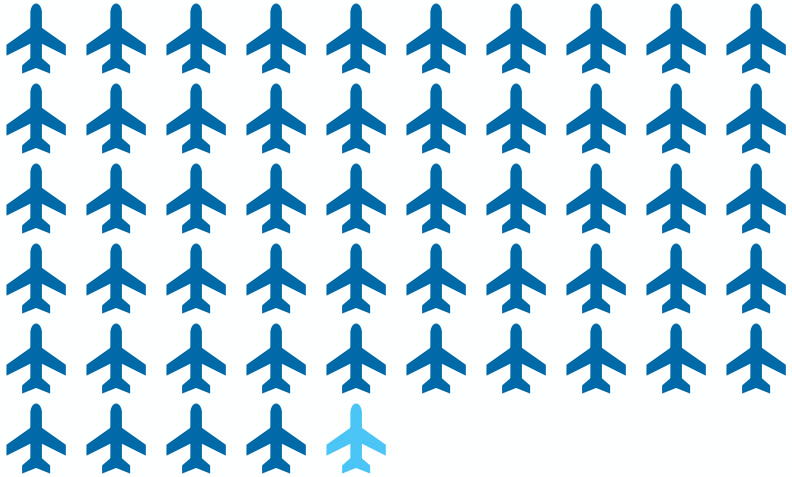
Preliminary Terminal Gate Expansion Alternatives

2045 gate requirements

Common-Use

55 gates



9 international gates

5.8
average operations per gate

64
total gates required (+5 gates)

Airline 1

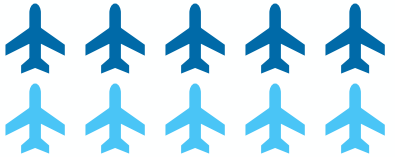
5 gates

Airline 2

6 gates

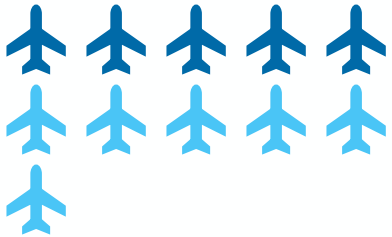
Airline 3

10 gates



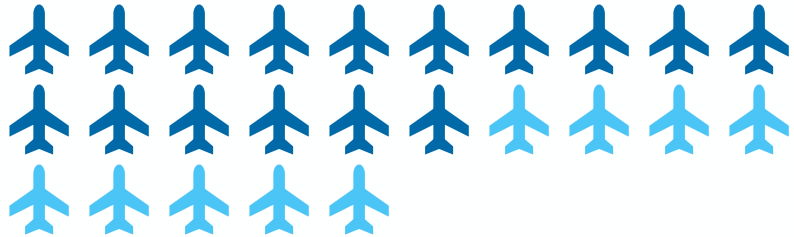
Airline 4

11 gates



Airline 5

25 gates



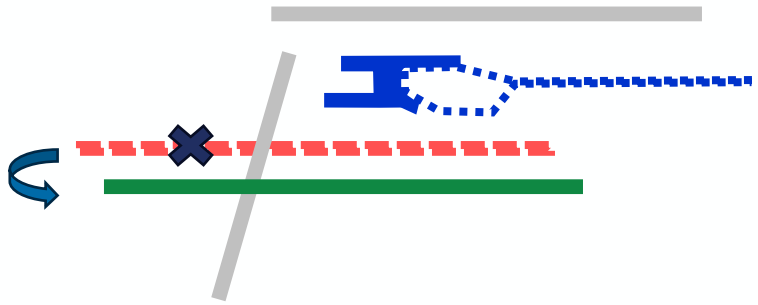
9 international gates

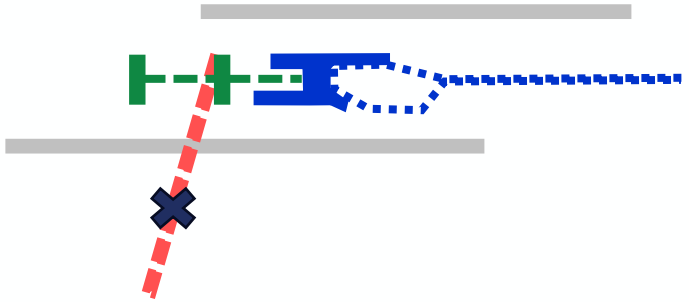
8 ultra low-cost carriers gates

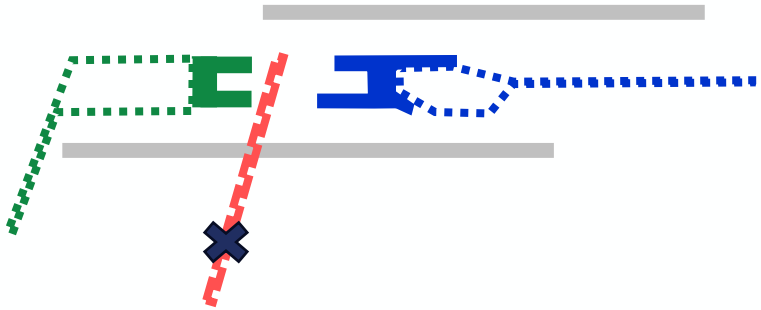
4.8
average operations per gate

75
total gates required (+16 gates)

Discarded concepts

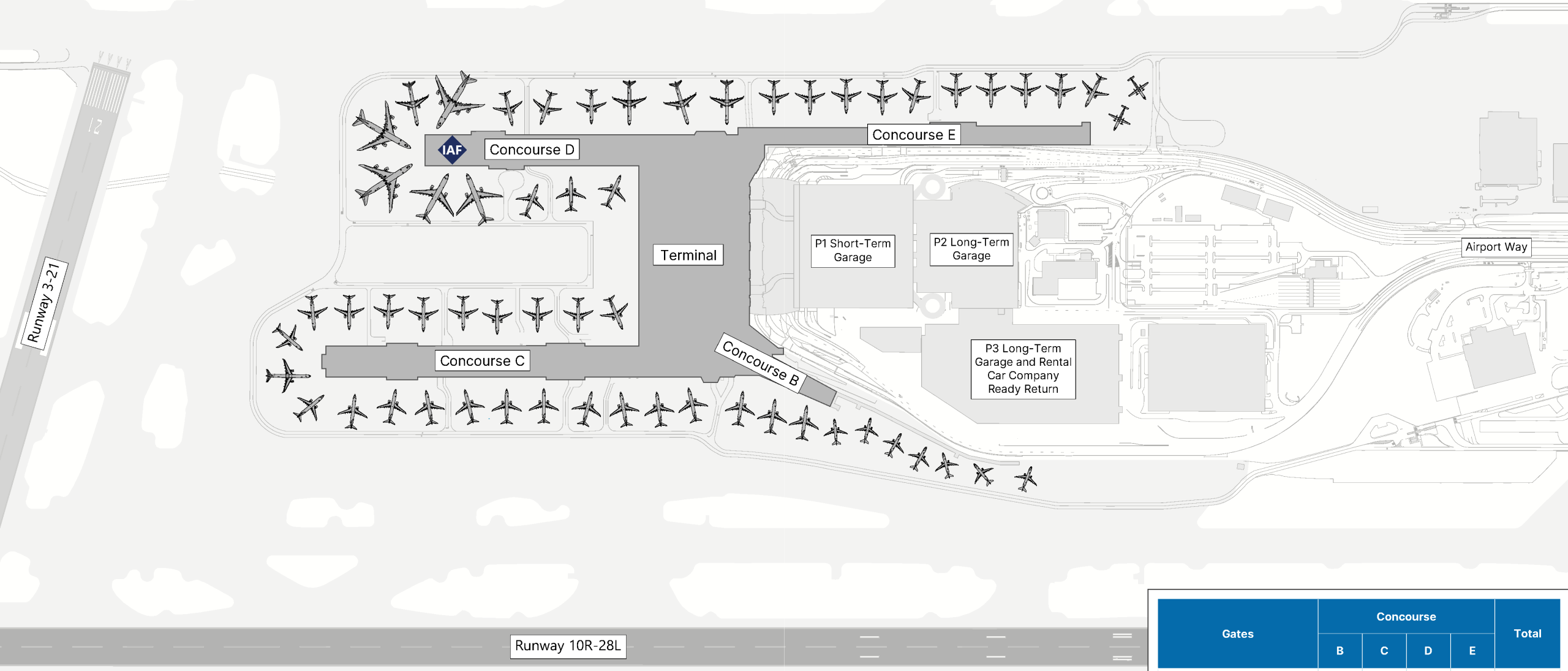






Concept	Relocating the south runway and/or realigning MAX	Remote concourse(s) connected by automated people mover (APM)	New unit terminal(s) served by new airport access roadways
Reasons not advanced	Cost, noise, facility impacts, limited anticipated benefit	Cost, PDX Strategy guidance, limited anticipated benefit	Cost, PDX Strategy guidance, feasibility, passenger experience

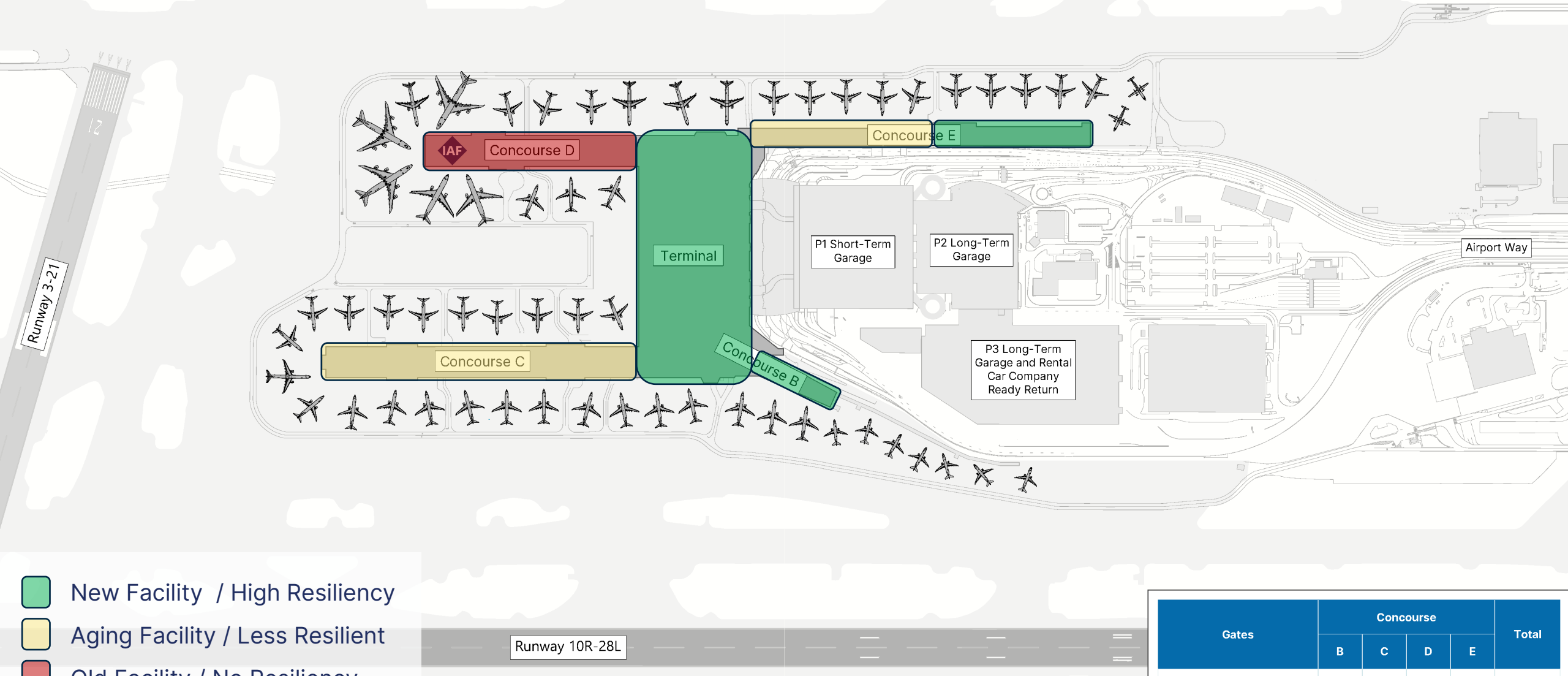
Existing conditions



Gates	Concourse				Total
	B	C	D	E	
Total Existing	11	21	13	14	59

IAF = International Arrivals Facility

Existing conditions



- New Facility / High Resiliency
- Aging Facility / Less Resilient
- Old Facility / No Resiliency

Gates	Concourse				Total
	B	C	D	E	
Total Existing	11	21	13	14	59

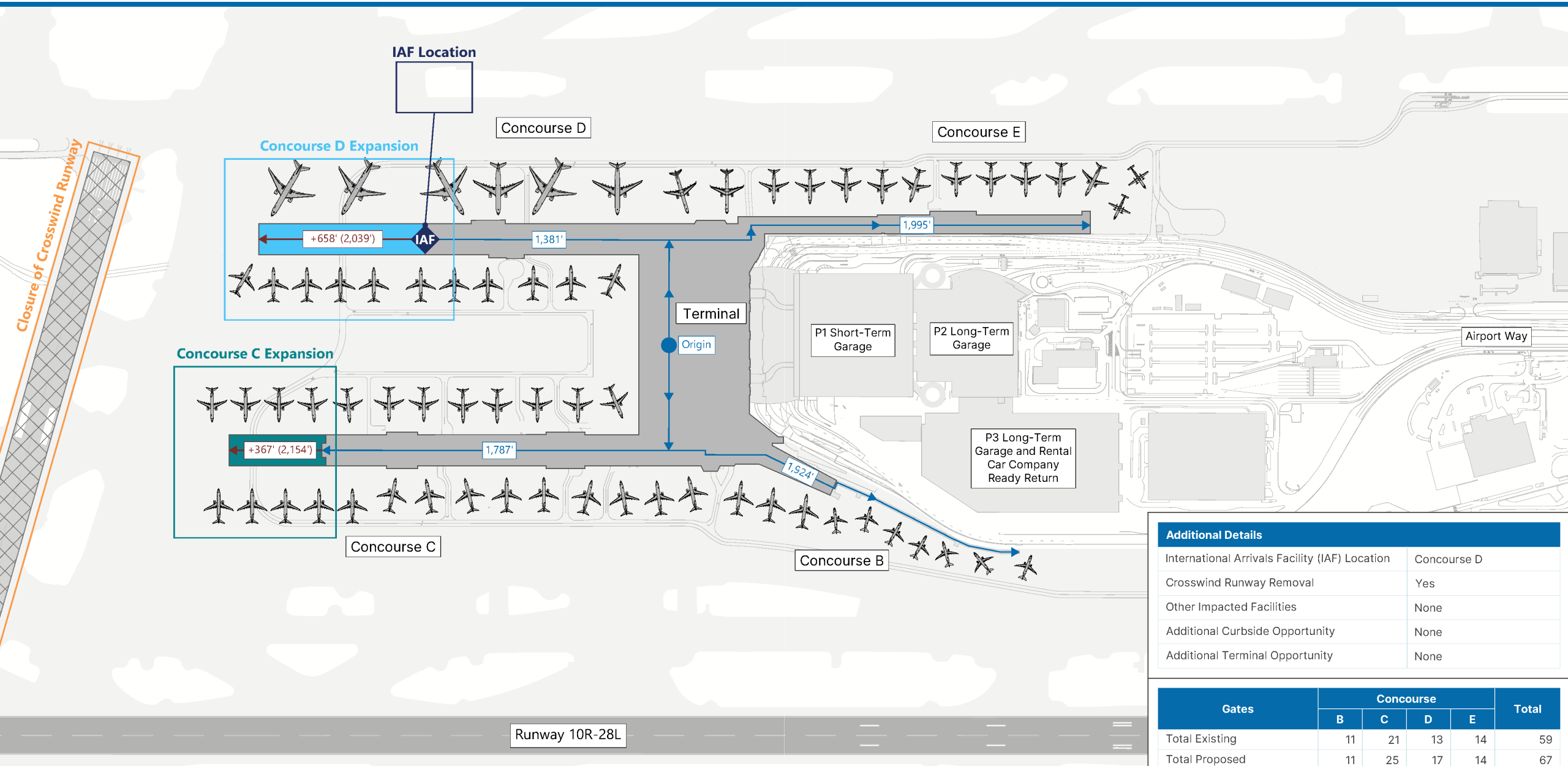
Preliminary observations

- Location of the international arrivals facility (IAF) is a key driver of future alternatives
  - Airfield: Large aircraft gate and access requirements
  - Terminal: International inspection spaces, sterile circulation, holdroom, and amenities requirements
  - Landside: Non-secure access

- North terminal areas provide greater opportunity for accommodating growth
  - Most available area for growth
  - Most significant deficiencies of existing facilities
  - Least resilient / oldest infrastructure

- South terminal areas provide opportunity for enhancement of existing facilities

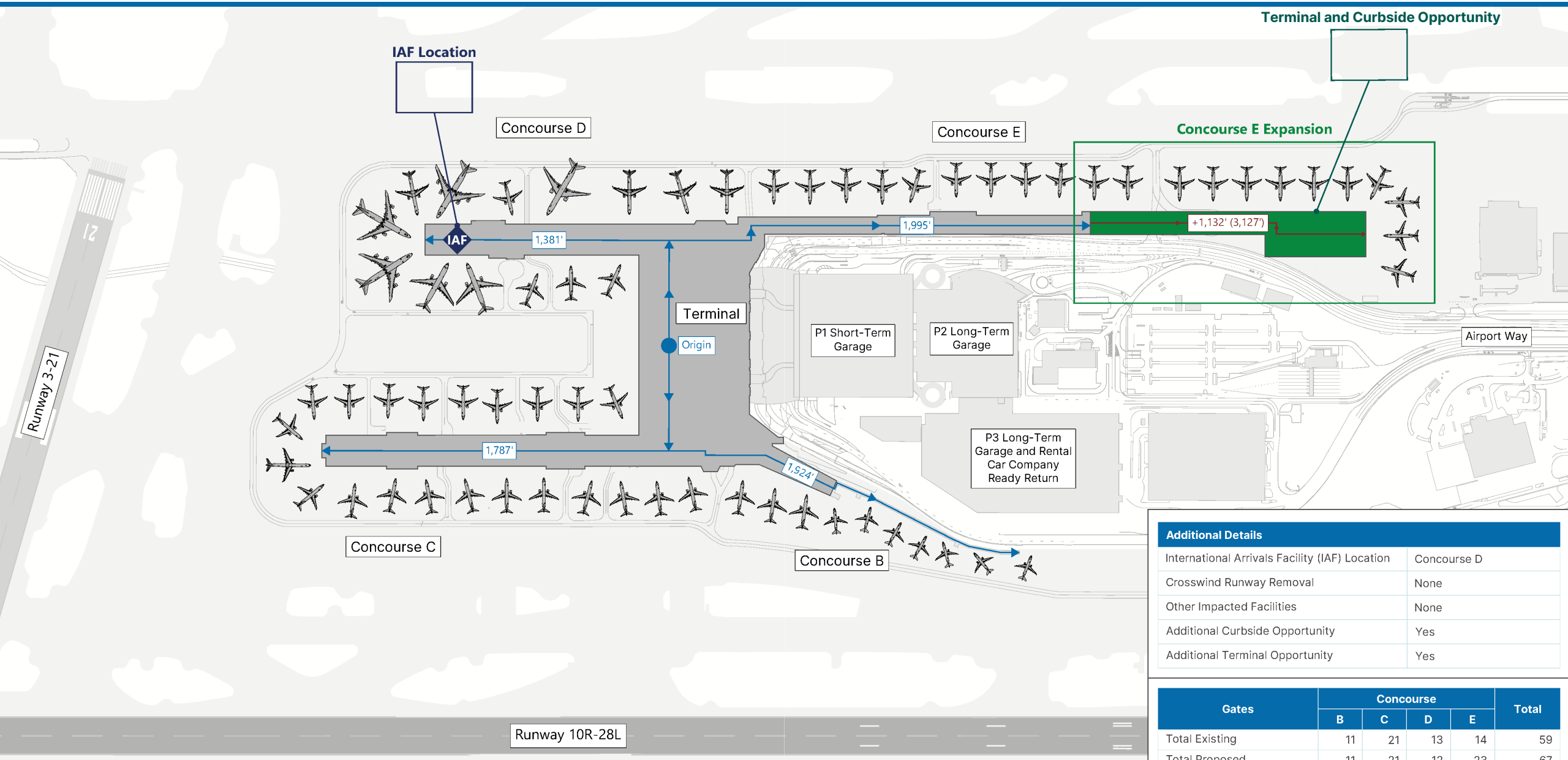
Concourses C and D expansion



Additional Details	
International Arrivals Facility (IAF) Location	Concourse D
Crosswind Runway Removal	Yes
Other Impacted Facilities	None
Additional Curbside Opportunity	None
Additional Terminal Opportunity	None

Gates	Concourse				Total
	B	C	D	E	
Total Existing	11	21	13	14	59
Total Proposed	11	25	17	14	67
NET CHANGE	**0**	**+4**	**+4**	**0**	**+8**

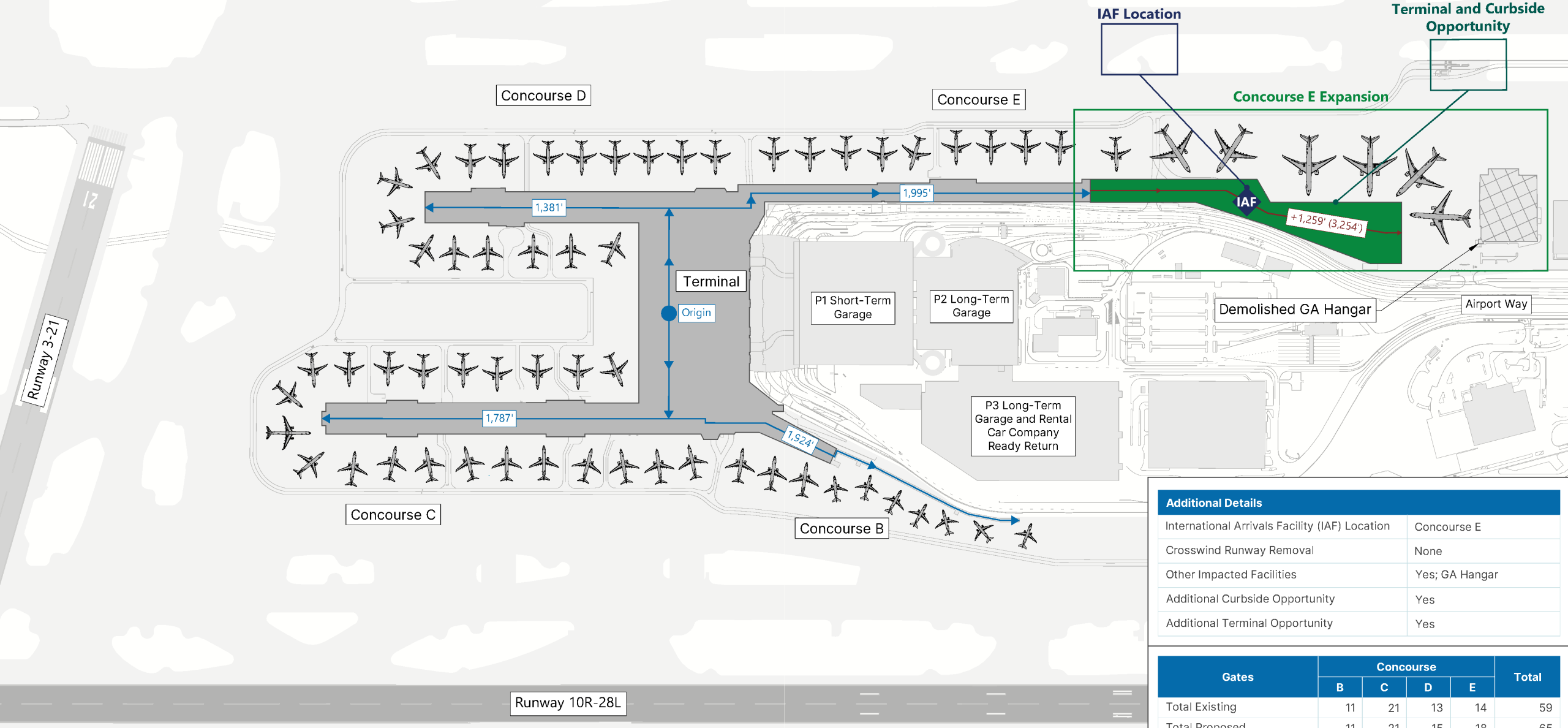
Concourse E expansion



Additional Details	
International Arrivals Facility (IAF) Location	Concourse D
Crosswind Runway Removal	None
Other Impacted Facilities	None
Additional Curbside Opportunity	Yes
Additional Terminal Opportunity	Yes

Gates	Concourse				Total
	B	C	D	E	
Total Existing	11	21	13	14	59
Total Proposed	11	21	12	23	67
NET CHANGE	**0**	**0**	**-1**	**+9**	**+8**

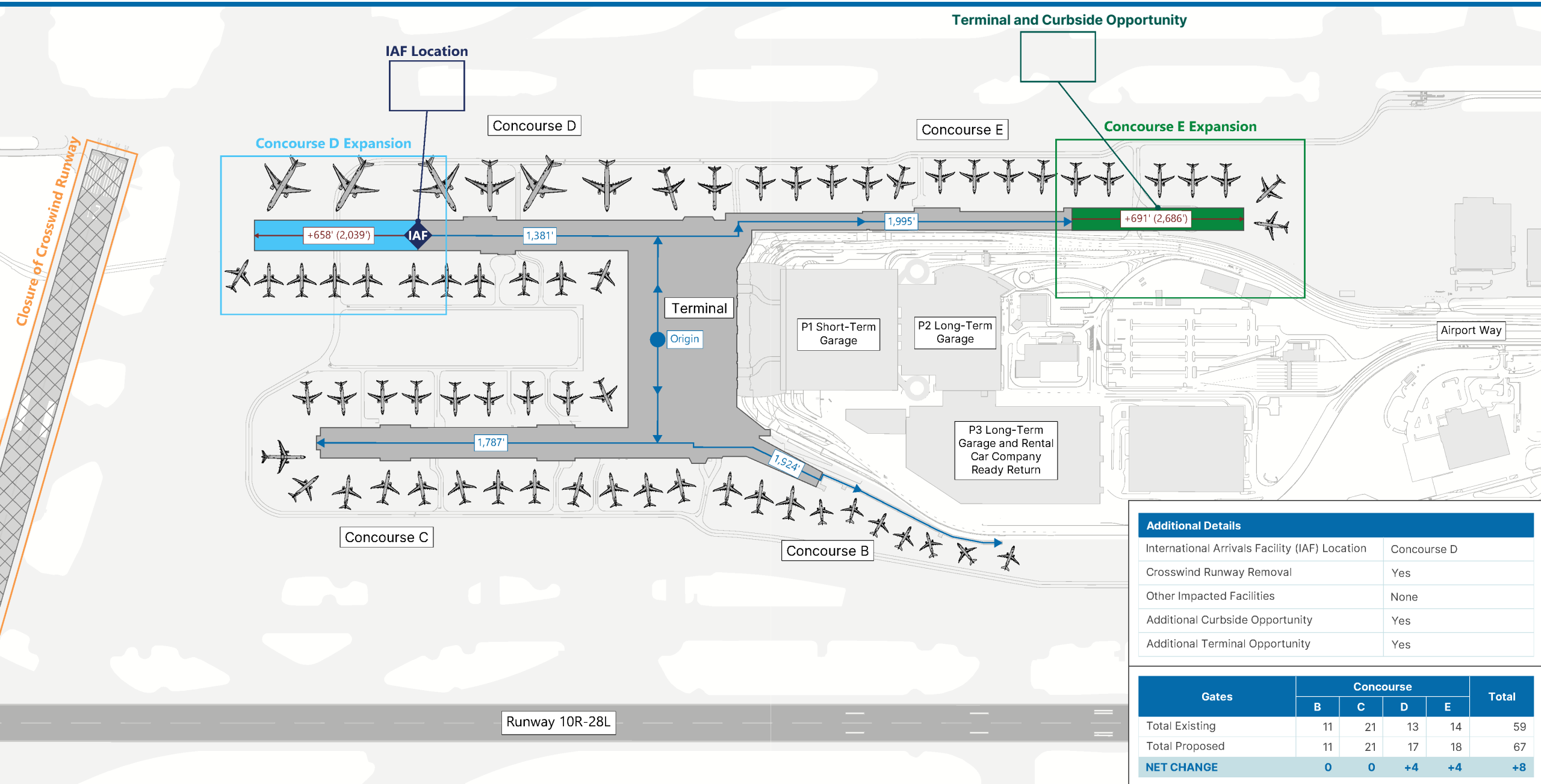
Concourse E expansion with IAF



Additional Details	
International Arrivals Facility (IAF) Location	Concourse E
Crosswind Runway Removal	None
Other Impacted Facilities	Yes; GA Hangar
Additional Curbside Opportunity	Yes
Additional Terminal Opportunity	Yes

Gates	Concourse				Total
	B	C	D	E	
Total Existing	11	21	13	14	59
Total Proposed	11	21	15	18	65
NET CHANGE	**0**	**0**	**+2**	**+4**	**+6**

Concourses D and E expansion



Additional Details	
International Arrivals Facility (IAF) Location	Concourse D
Crosswind Runway Removal	Yes
Other Impacted Facilities	None
Additional Curbside Opportunity	Yes
Additional Terminal Opportunity	Yes

Gates	Concourse				Total
	B	C	D	E	
Total Existing	11	21	13	14	59
Total Proposed	11	21	17	18	67
NET CHANGE	**0**	**0**	**+4**	**+4**	**+8**

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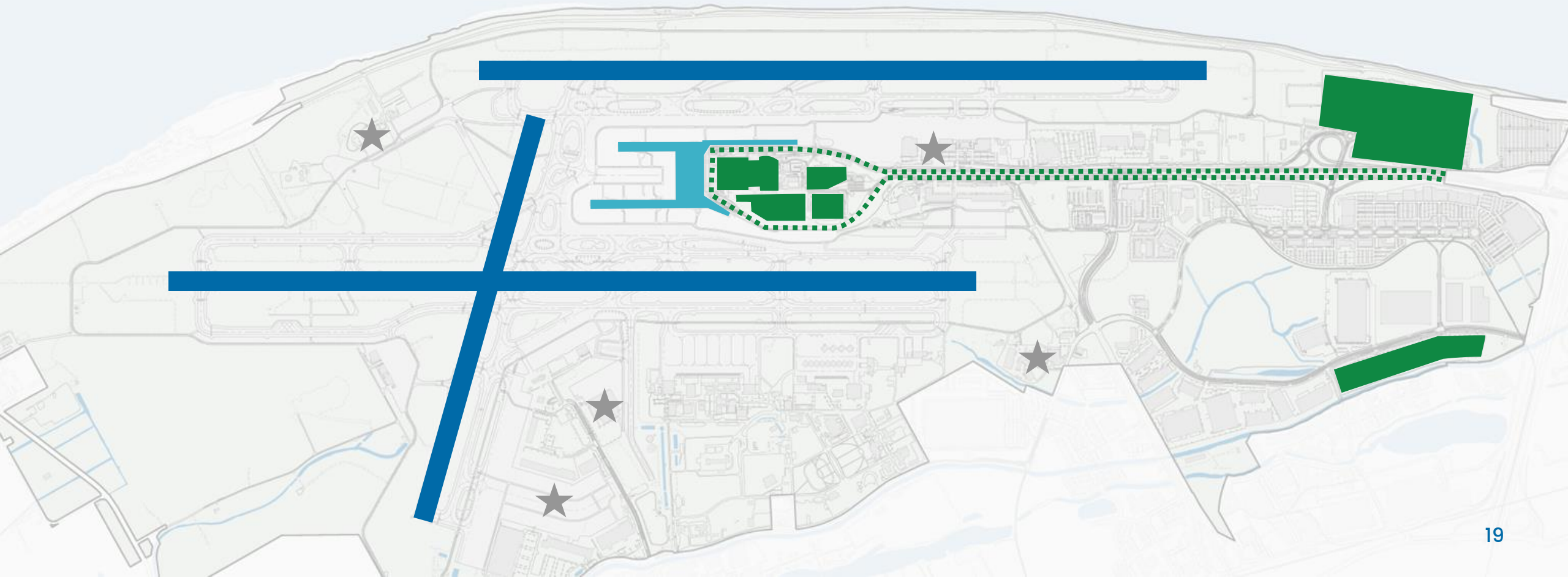
Preliminary Landside Facility Needs and Planning Approaches

Requirements summary

Airfield Requirements | Terminal Requirements | Landside Requirements | Other Requirements

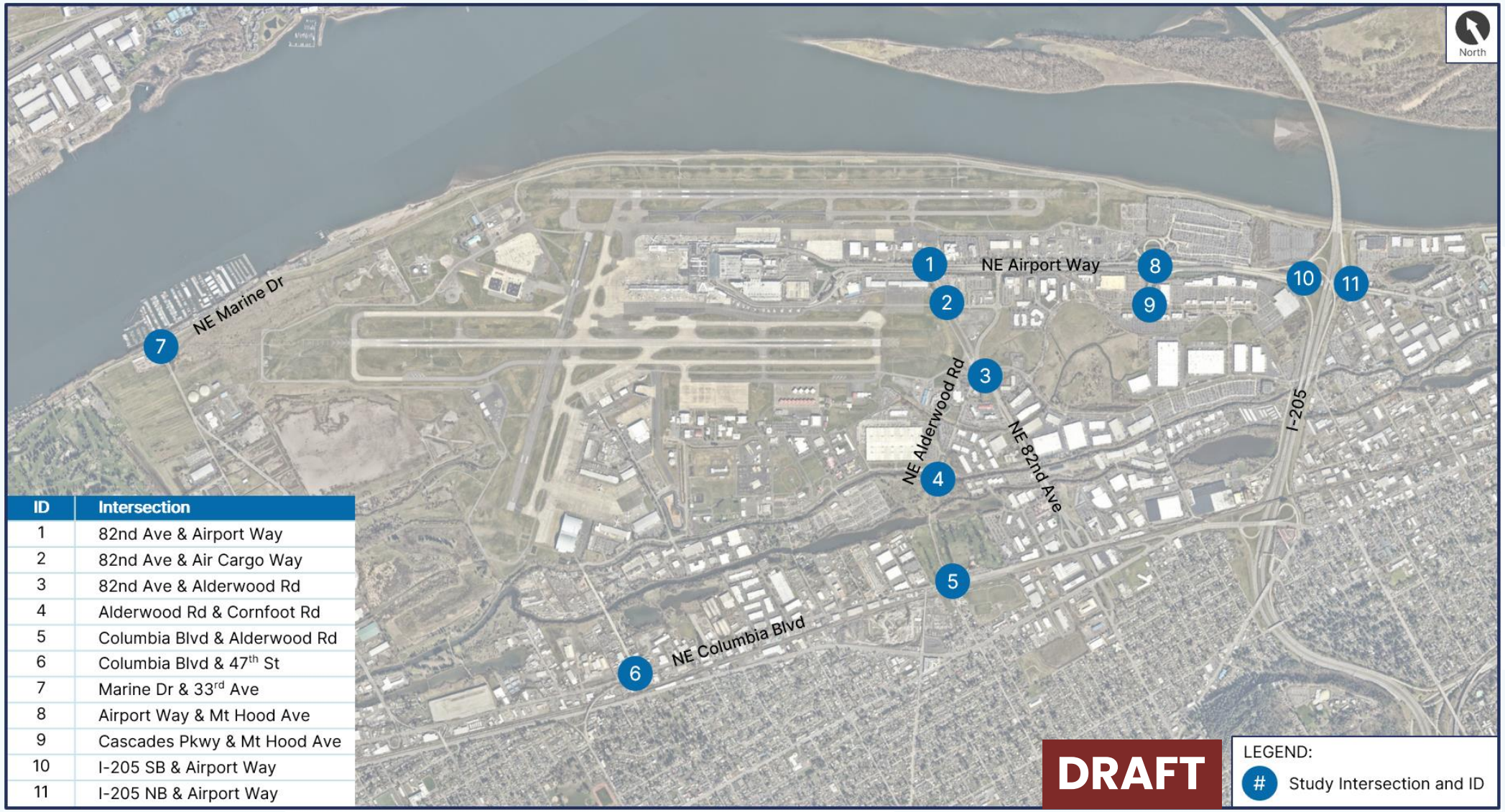


Landside roadways

PRIMARY ACCESS

OTHER ACCESS

Study Intersections



ID	Intersection
1	82nd Ave & Airport Way
2	82nd Ave & Air Cargo Way
3	82nd Ave & Alderwood Rd
4	Alderwood Rd & Cornfoot Rd
5	Columbia Blvd & Alderwood Rd
6	Columbia Blvd & 47th St
7	Marine Dr & 33rd Ave
8	Airport Way & Mt Hood Ave
9	Cascades Pkwy & Mt Hood Ave
10	I-205 SB & Airport Way
11	I-205 NB & Airport Way

Off-Airport Facility Planning Approach

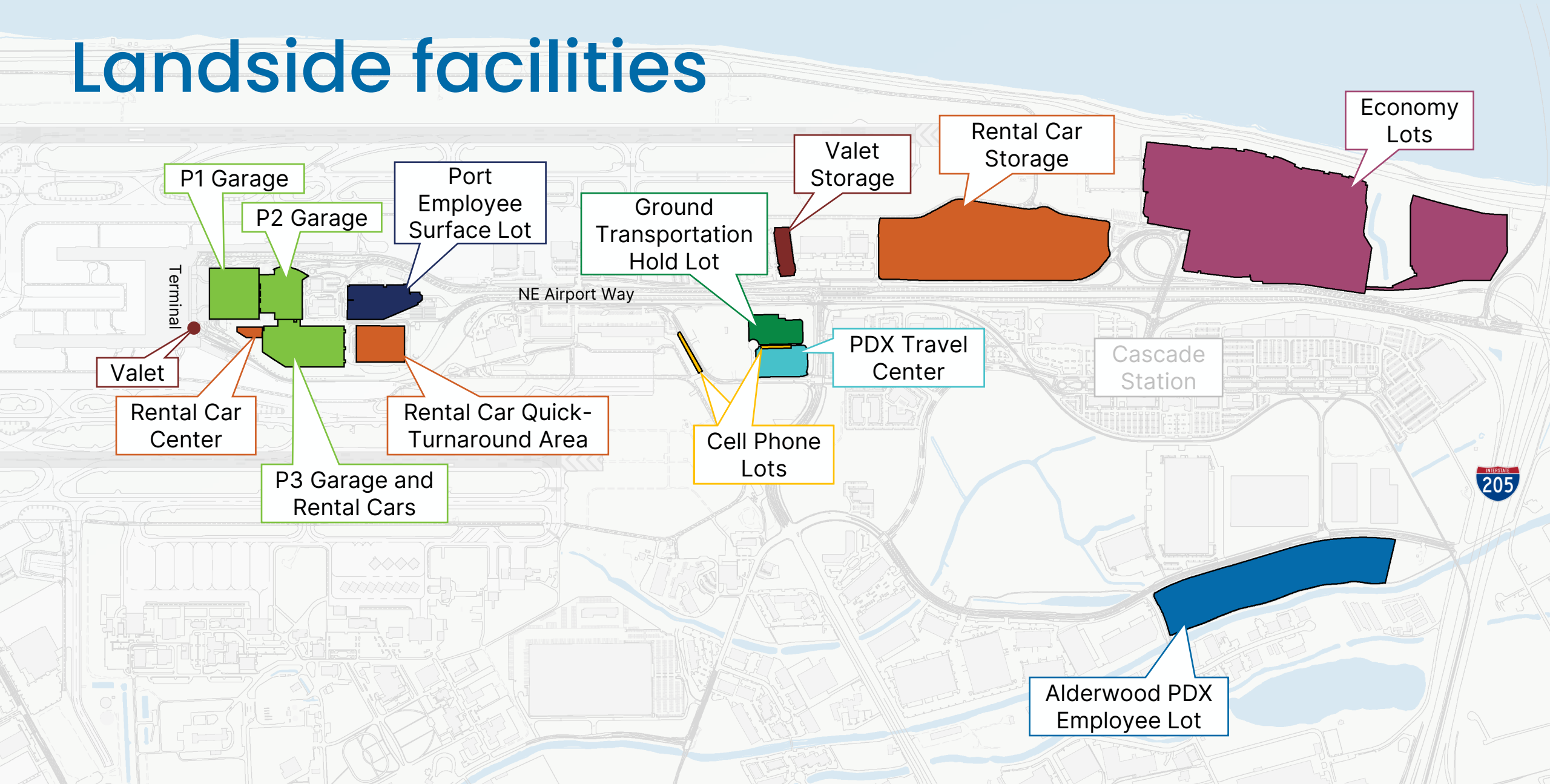
- PDX 2045 will identify forecast demand so that we can collaborate with agency partners on long-term capacity solutions.

- **PDX 2045 will not attempt to design solutions for non-Port facilities to meet projected demand.** Instead, we'll identify the Airport's needs to provide planning-level input to future projects on non-Port facilities.

- Level of Service (LOS) will be projected at study intersections based on forecasted aviation demand.

- As always, the Port will collaborate with agency peers as future projects are planned and designed.

Landside facilities



Demand Curve: Garage Facilities

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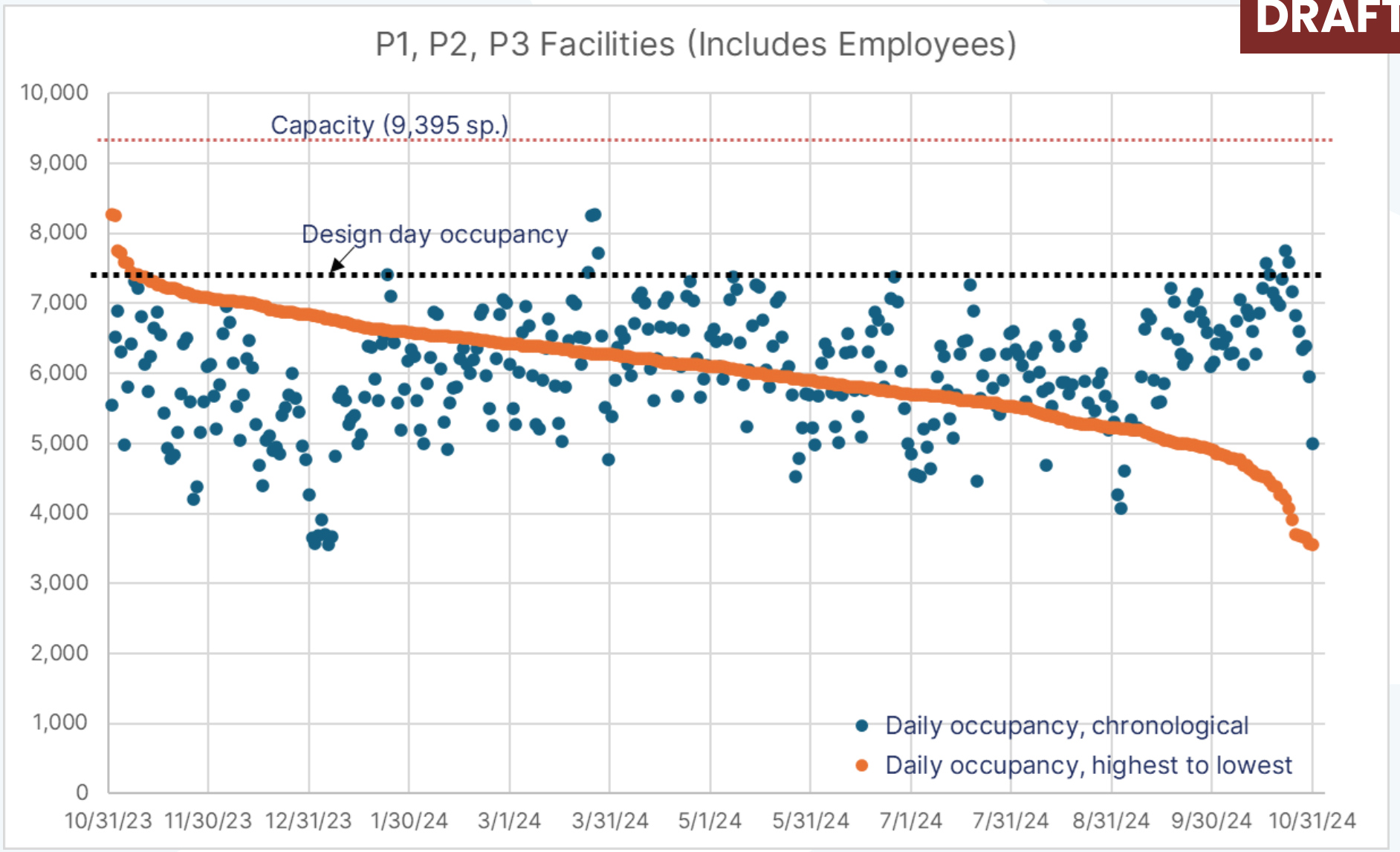


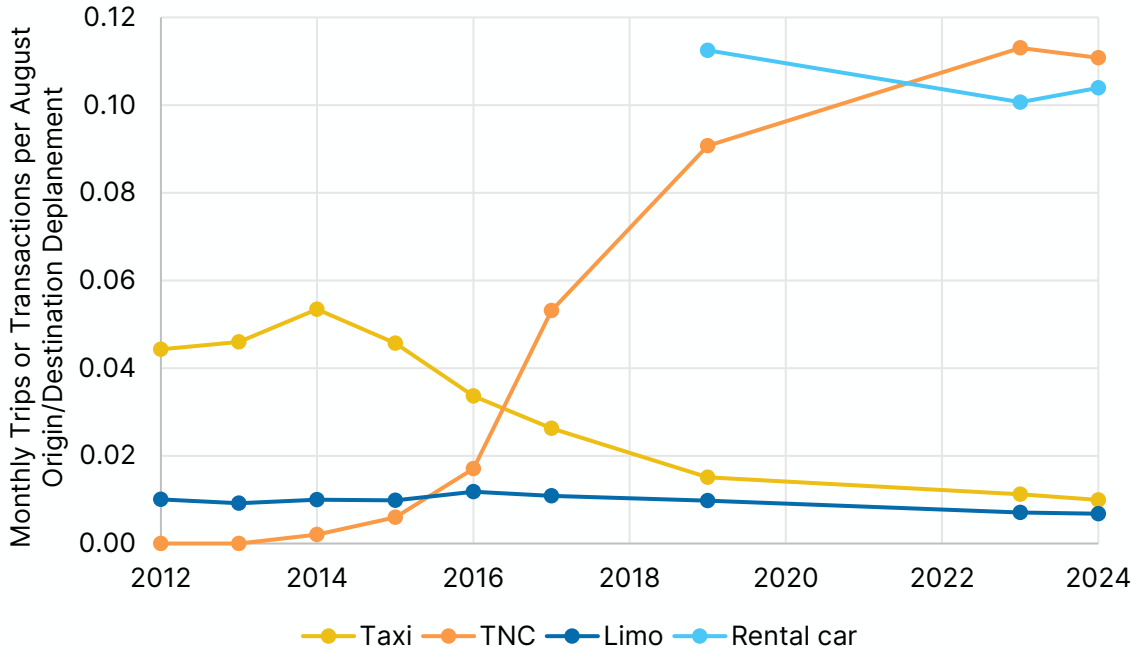
Preliminary requirements summary

	Preliminary Assessment			
Landside Facilities	**2030**	**2035**	**2040**	**2045**
Airport Way westbound, west of 82nd				
Airport Way eastbound, west of 82nd				
Curbsides				
Commercial vehicle facilities				
Public parking				
Employee parking				
Rental car area				

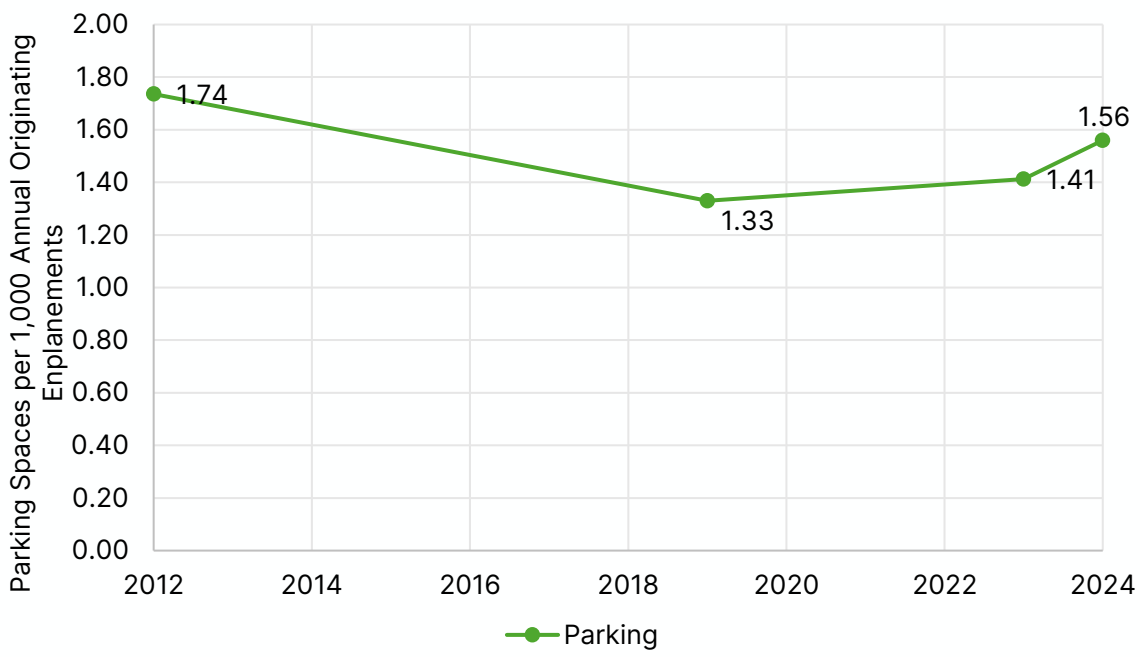
	Optimum				Sub-Optimum
LEGEND					

Historical activity per passenger, selected modes

Pickup Trips per Passenger Forecast:
Taxis, Limousines, Rental Cars, and TNCS



Public Parking Spaces
per 1,000 Passengers



SOURCE:
InterVISTAS, April 2025
NOTES:
1. TNC = Transportation Network Company (rideshare company such as Uber and Lyft)
2. TNC monthly trips or transactions between 2012 and 2015 are estimated..

DRAFT

TNC Scenarios

Existing	High Impact Scenario	Low Impact Scenario
TNC's take 11% of originating enplanements to PDX in 2024	**TNC's take 22% of originating enplanements to PDX in 2045**	**TNC's take 17% of originating enplanements to PDX in 2045**

- The difference between the "high" and "low" TNC impact scenarios reflects uncertainty:
  - extent to which the TNC market at the Airport is approaching maturity
  - future adoption rate of car sharing services and connected/autonomous vehicles
- The high and low scenarios are used to conservatively estimate potential facility needs

TNC = Transportation Network Company (ridesharing company such as Uber or Lyft)

Forecast activity per passenger, selected modes

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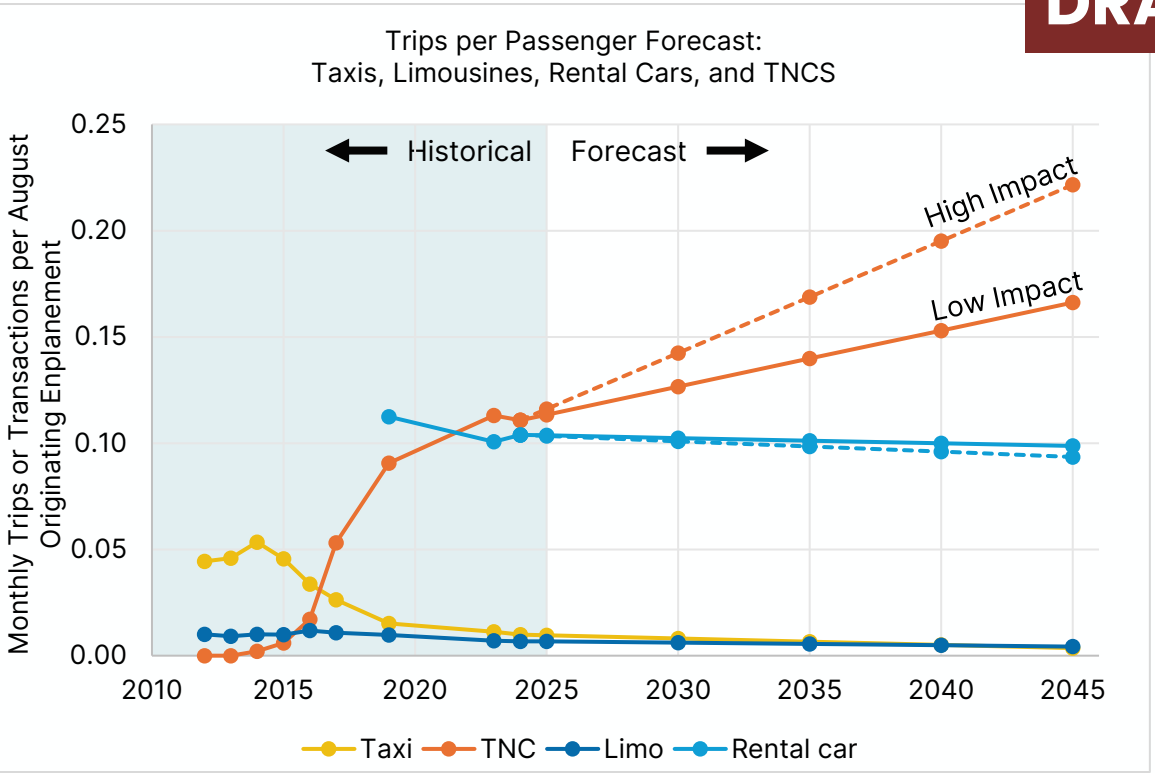

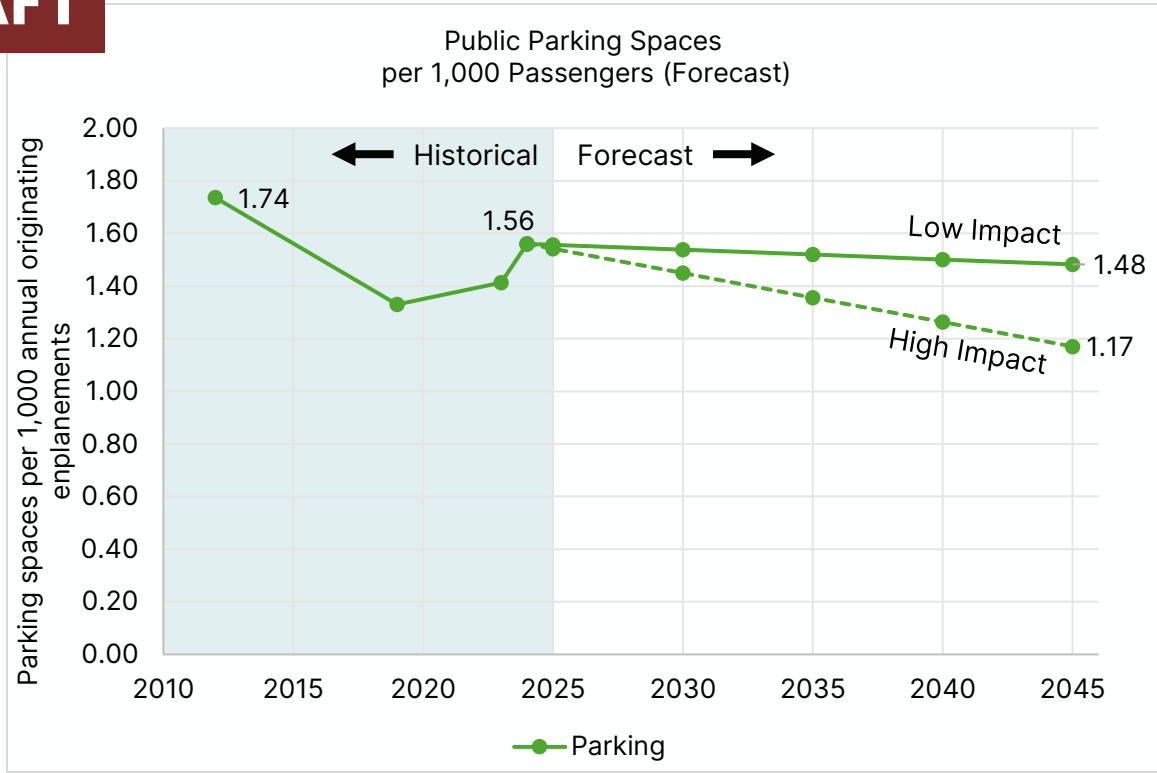

SOURCE:
InterVISTAS, April 2025
NOTES:
1. TNC = Transportation Network Company (rideshare company such as Uber and Lyft)

Landside Requirements Next Steps

- As Airfield and Terminal requirements are refined, detailed Landside facility requirements will be prepared for:
  - Airport Way vehicle capacity (lanes)
  - Terminal curbside (linear feet, both arrivals and departures roadways)
  - Commercial vehicle loading and staging (positions)
  - Public and employee parking (spaces)
  - Rental Car area (square feet)
- LOS projections will be developed for select intersections.
- Detailed volume to capacity (V/C) analysis will be prepared for on-Airport facilities.
- Functional requirements will be identified to accommodate:
  - Future bus service
  - Pedestrian/bike network enhancements

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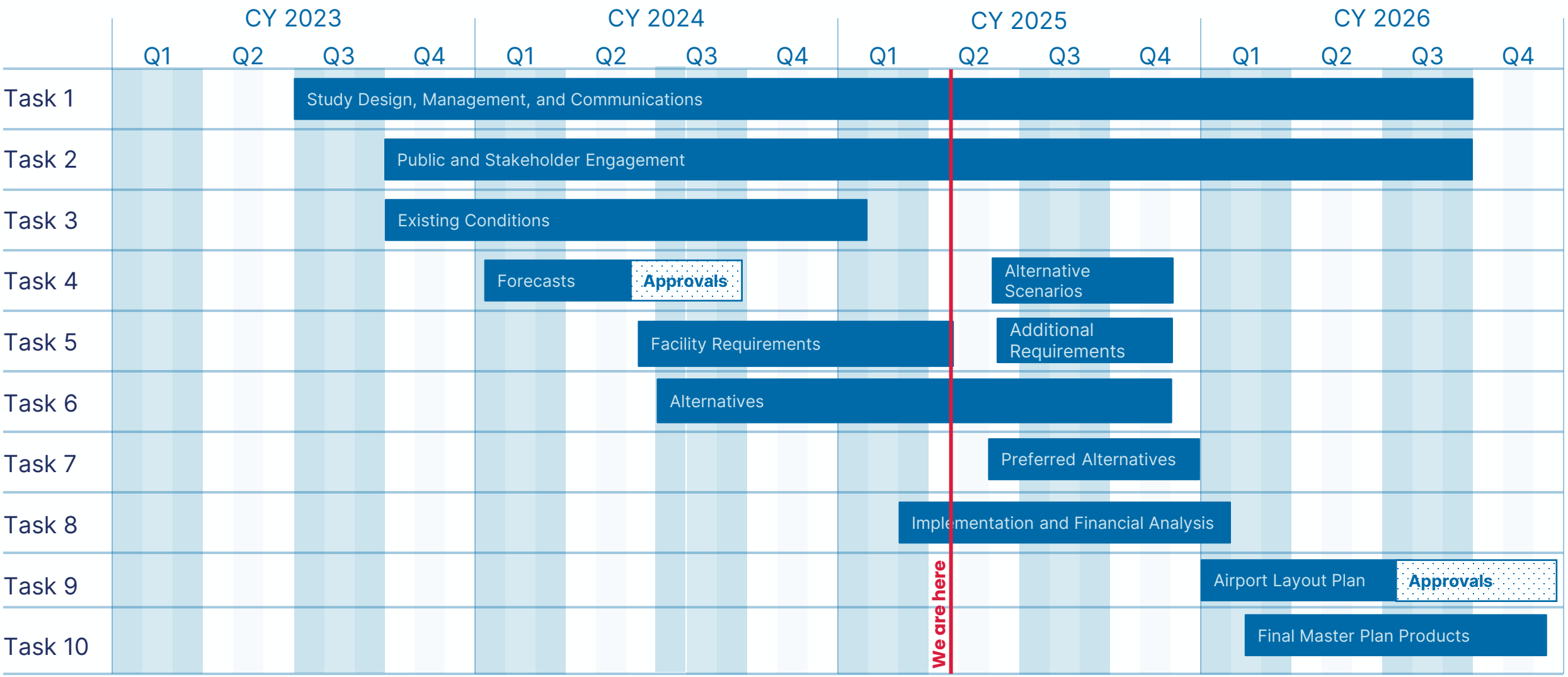
Upcoming Steps

Overall project timeline



IAC Upcoming Steps

Today's meeting follow-ups:

- Annotated agenda and meeting slides to be posted to pdx2045.org (link will be e-mailed)
- Existing Conditions report available soon at pdx2045.org

Next IAC meeting (tentatively late July/early August):

- Refined terminal and airfield alternatives
- Preliminary landside alternatives
- Late summer Open House and community outreach plans

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Q&A and Thank You!

For more information: **pdx2045.org**

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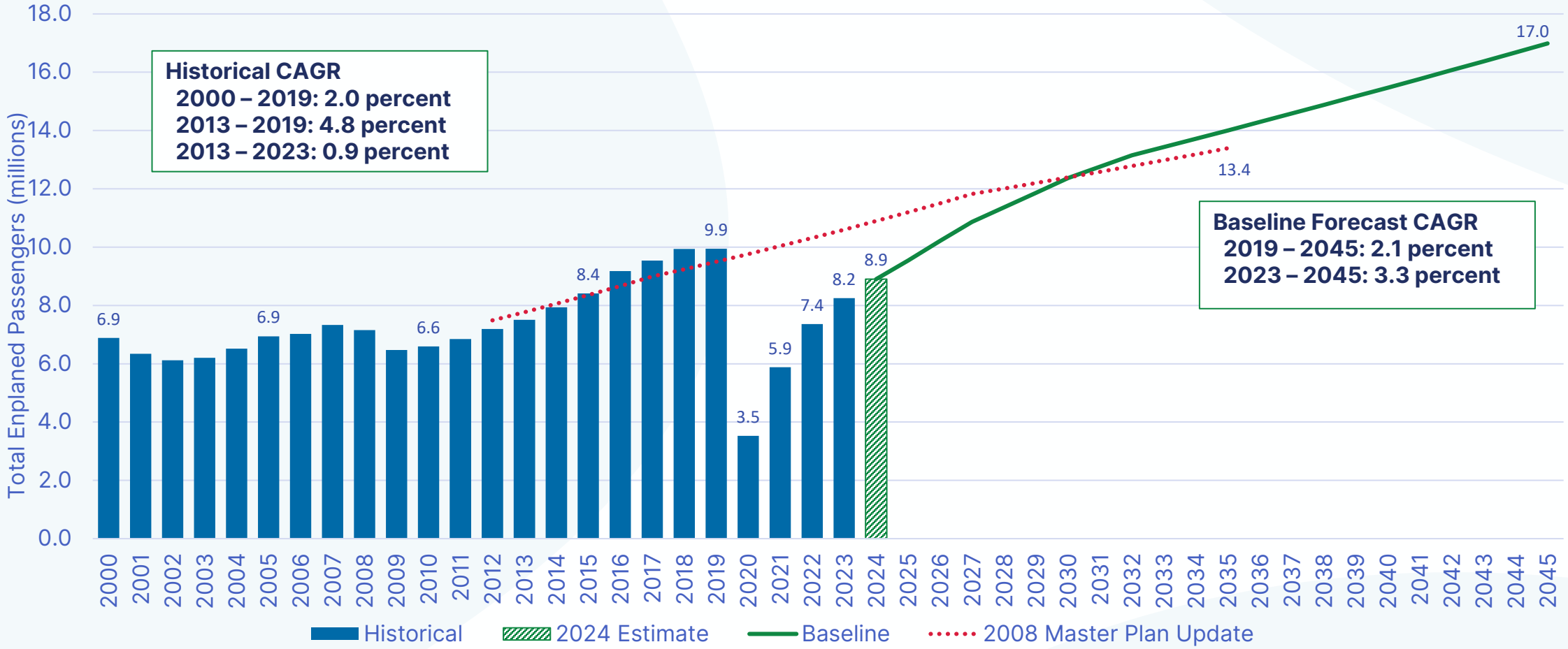
503-415-6570

Jennifer Rabby, AICP
Airfield Development Manager
jennifer.rabby@portofportland.com
503-415-6506

Passenger Forecast Summary

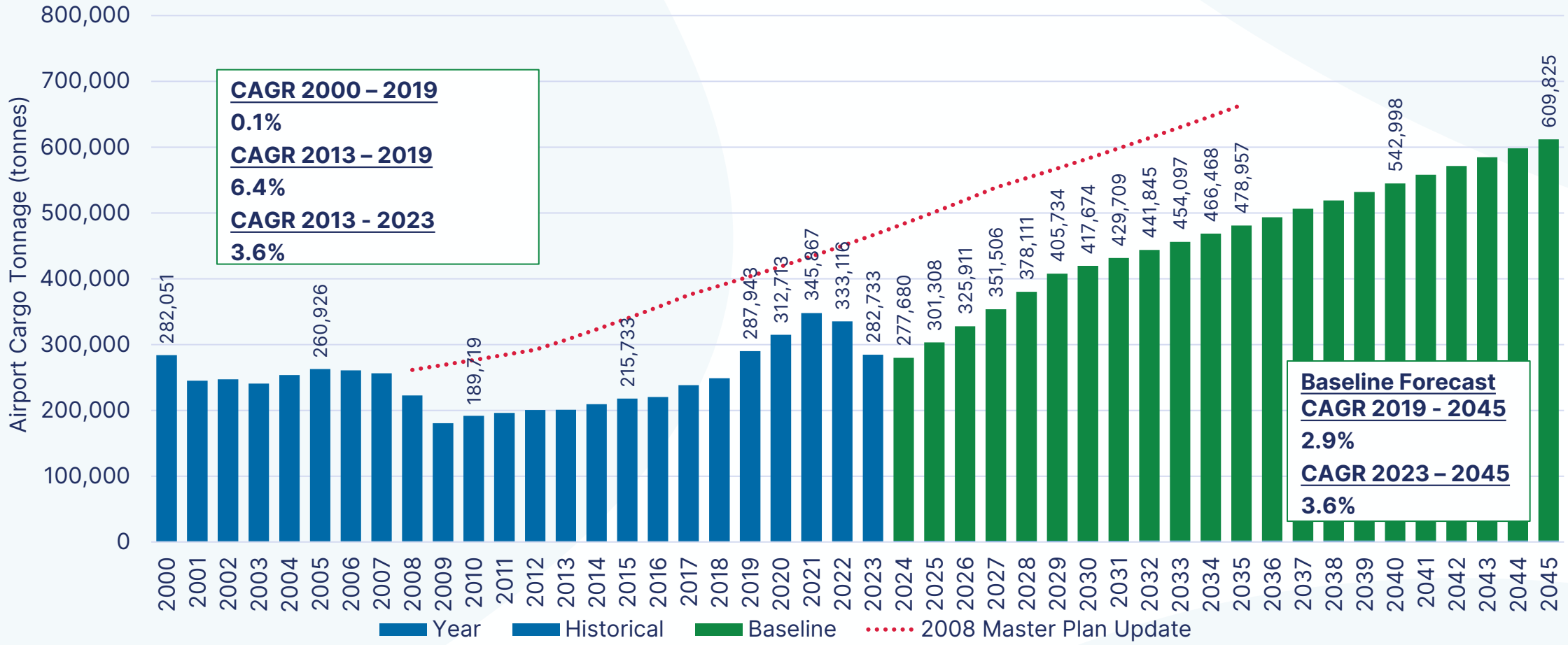
- Enplaned passengers are forecast to increase to 17 million in 2045



Sources: Port of Portland, March 2024; Cirium Diio, April 2024; Jacobs Consultancy, Master Plan Update, technical Memorandum No. 2 – Aviation Demand Forecast, September 2008; Ricondo & Associates, Inc., April 2024.

Cargo Forecast Summary

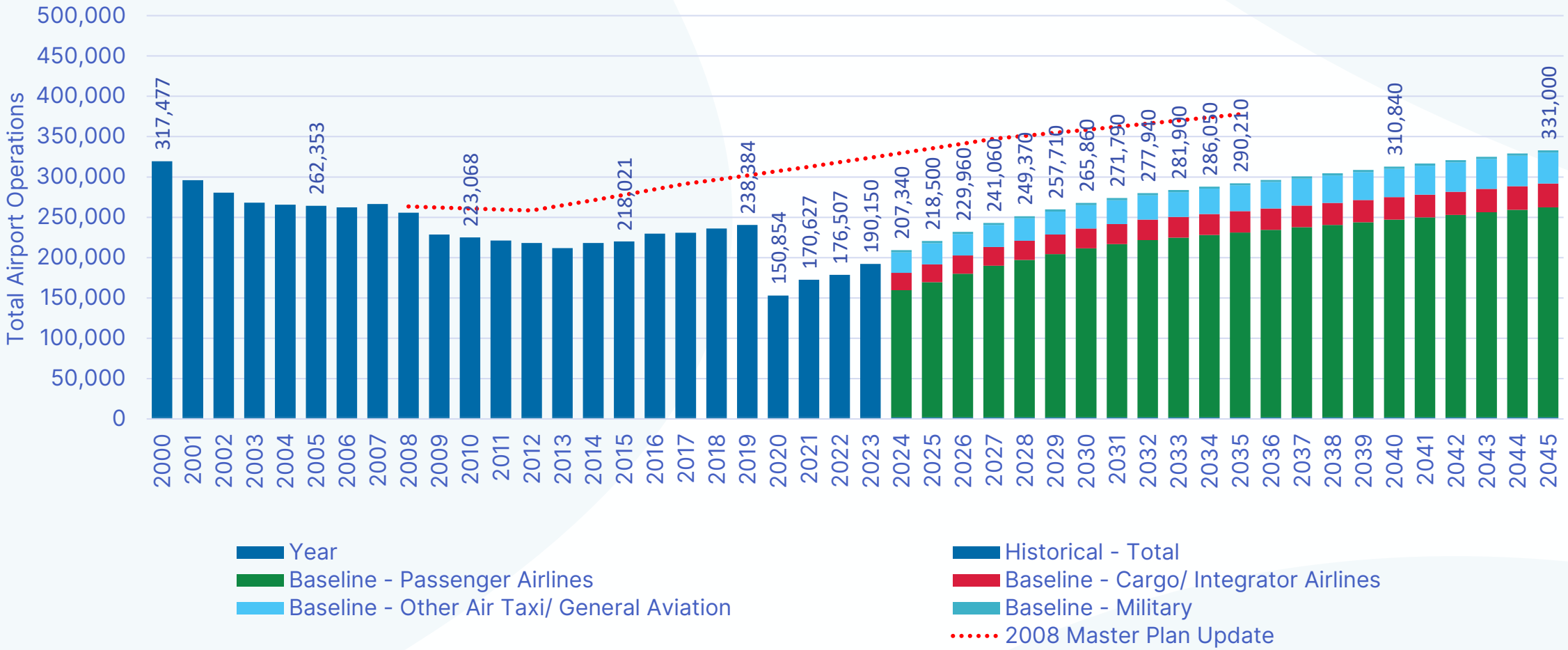
- Cargo tonnage is forecast to approximately 610,000 metric tonnes in 2045



Sources: Port of Portland, March 2024; Boeing World Air Cargo Forecast 2022 – 2041 & Commercial Market Outlook 2023 - 2042; Jacobs Consultancy, Master Plan Update, technical Memorandum No. 2 – Aviation Demand Forecast, September 2008;Ricondo & Associates, Inc., April 2024.

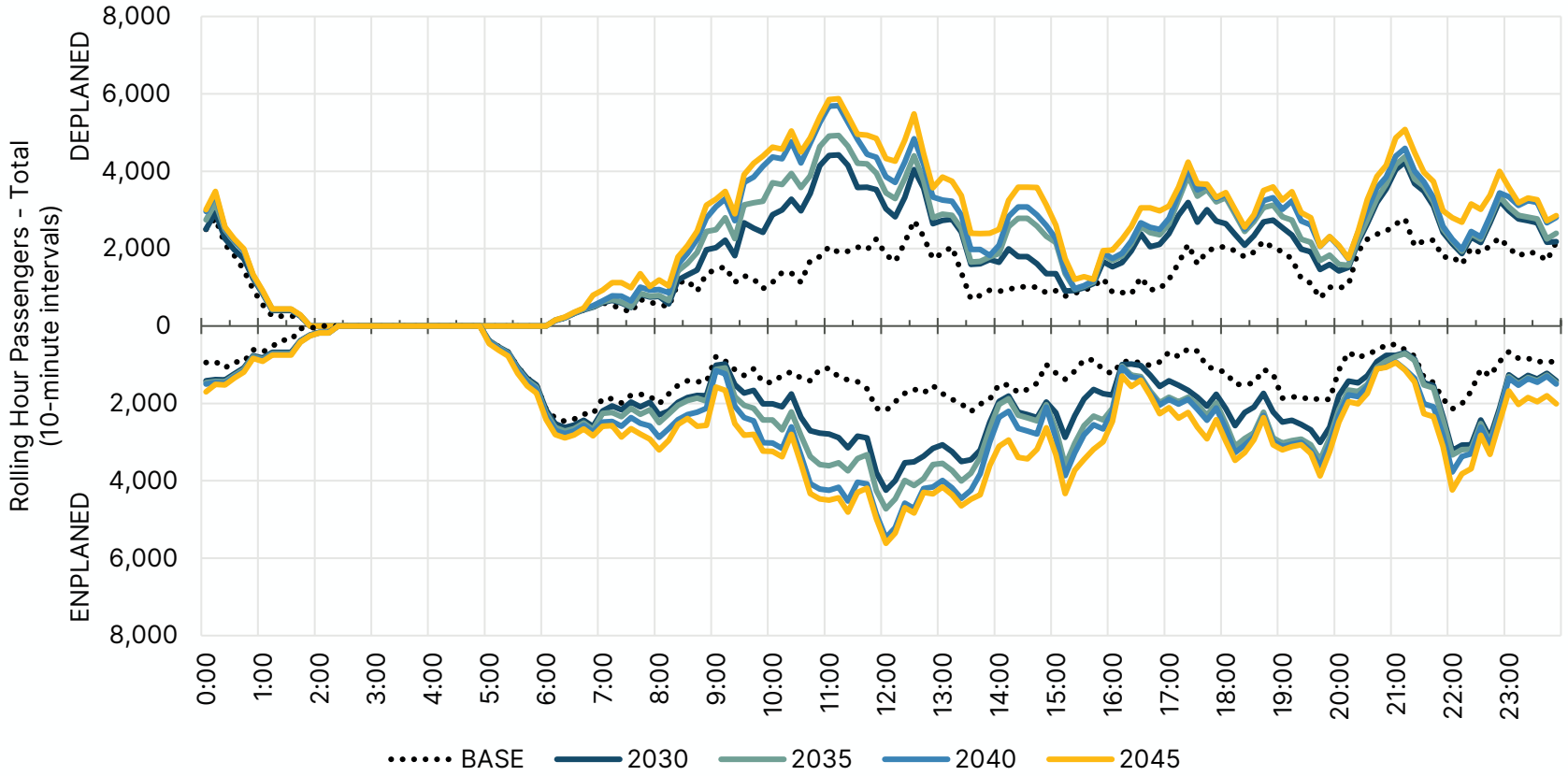
Operations Forecast Summary

- 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.

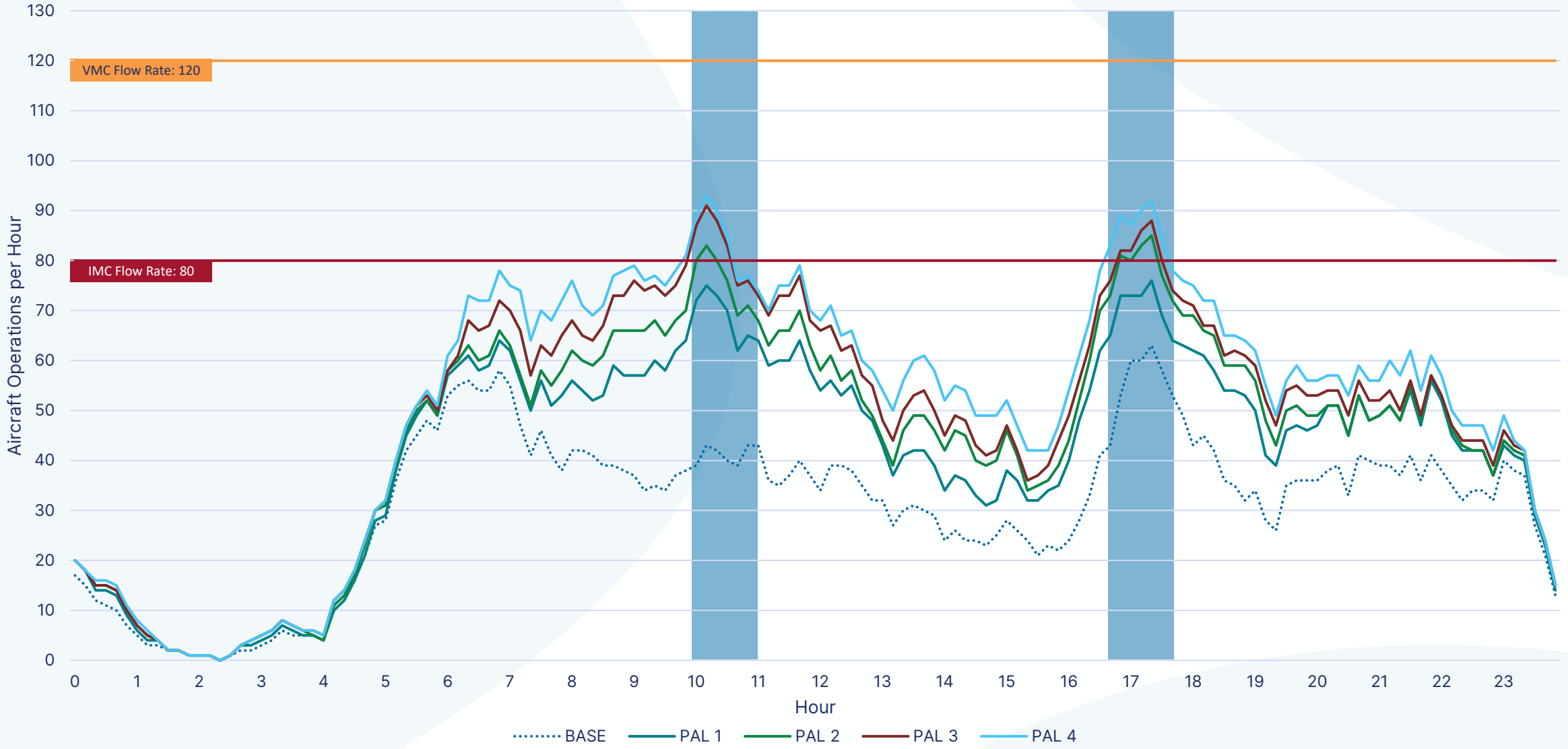
Rolling Hour Passengers – Total



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%

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).

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

Sources: Federal Aviation Administration (FAA), *Advisory Circular 150/5060-5 – Airport Capacity and Delay*, December 1, 1995; Ricondo & Associates, Inc., *Design Day Flight Schedule*, June 2024.