

## Meeting Summary

# PDX 2045 Planning Advisory Committee Meeting 4

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October 21, 2024; 6:00 PM – 8:00 PM

Port of Portland HQ, Chinook Room (8<sup>th</sup> floor) and Zoom

### Attendees:

#### **PAC Members**

- Aidan Simpson
- Allyssa Bromley
- Angela DeHaven
- Anne Sweet
- Brian Kuzera
- Caleb Powell
- David Duncan
- David Van't Hof
- Heather King
- Jennie Heidrick
- Kathy Bareno
- Keith Miller
- Laura Young
- Mark Luna
- Maryhelen Kincaid
- Matthew Hodson
- Mychal Hornbeck
- Pete DeVasto
- Philip Rowe
- Phuong Truong
- Roger Gonzalez
- Stephanie Barnes
- Steven Lowe
- Tsering Sherpa
- Xavier Phanthongphay

#### **Port of Portland**

Aaron Ray  
Arainnia Armendariz  
Evan Howington  
Jeff Broderick  
Jennifer Rabby  
Mina Mora-Gonzalez  
Sean Loughran  
Symeon Walker

#### **Consultant Team**

Bridger Wineman, EnviroIssues  
Cadence Purdy, EnviroIssues  
Cameron Modjeski, Ricondo  
Chad Townsend, Ricondo  
Jenna Johnstone, Ricondo  
Julie Gueho, JMG Consulting  
Suzanne Donaldson, Donaldson  
Consulting

The project team held three make-up sessions to conduct the interactive planning exercise with PAC members who were not present at the Oct. 21 PAC meeting. A summary of the make-up sessions is included at the end of this document.

## Welcome and introduction

- Suzanne Donaldson welcomed Planning Advisory Committee (PAC) members to their fourth meeting. Suzanne led introductions of meeting attendees.
- Bridger then introduced the meeting goals and agenda.

## Airfield tour recap

- Bridger Wineman provided a recap of last month's airfield tour.
- During the tour, the PAC visited various sites around PDX including Airport Way and 82nd Avenue, Maintenance facilities (including snow equipment), the Ground Run-up Enclosure, cargo facilities, the Boeing painting hangar, Airport Rescue & Firefighting (ARFF), general aviation facilities, and more.
- PAC members received a handout summarizing questions asked during the tour and answers to those questions (also available at [pdx2045.org](http://pdx2045.org)). Discussions during the tour generally fell into the following categories – physical layout, airfield, terminal, airlines and tenants, Airport Rescue and Firefighting.
- Bridger went over a few of the questions so everyone could hear them even if they were on a different bus during the tour, or if they were absent.
- PAC members shared reflections from the tour, including:
  - It was cool to see the original terminal.
  - It was interesting to see things behind the scenes and how large the airfield is.
  - It was fascinating to learn how much effort it takes to manage birds.
- A question was asked about Government Island; the island was acquired by the Port from ODFW and is managed by Oregon Department of Parks and Recreation as a state park with the interior prioritized for mitigation.
- Thank you to Jeff and Evan for organizing the tour!

## Airfield capacity findings

- Cameron Modjeski shared airfield capacity findings with the PAC, including projected runway demand vs. capacity, Annual Service Volume (ASV) estimates, and how PDX is faring capacity-wise.
- Projecting runway demand vs. capacity involves measuring how efficiently aircraft move through the airport in a simulated bad weather day vs. good weather day.
- PDX can meet projected 2045 demand for good weather days. There may be small amounts of delay during peak hours on bad weather days.
- Daily capacity and forecasted demand are then calculated for the year, giving an ASV. When projected annual operations start to exceed 60% of ASV, airport planners begin planning for additional capacity. At 80% of ASV, airports start to add additional capacity.
- PDX is well positioned regarding capacity. The analysis shows that the crosswind runway (Runway 3-21) is not needed for capacity in the next 20 years. At this time, a third parallel runway is not needed in the next 20 years, but may be needed further in the future.

- Next steps for the airport could be finding taxiway capacity enhancements, considering opportunities to shorten or remove the crosswind runway, and revisiting the location currently reserved for the third parallel runway.
- *Q: How do you forecast the number of annual operations up until 2045? Doubling demand by 2045 seems like a lot compared to slow growth in the region.*
  - A: The demand increase is over a long time; small increases in growth add up. We look at variables such as population and income to prepare the forecast. This is an unconstrained forecast (not limited by existing airport facilities) based on what is known now. Sometimes things change in terms of income, population growth, etc., that could reduce demand. There is a summary of the forecast and how these metrics were achieved at [pdx2045.org](http://pdx2045.org).
- *Q: Do you have a forecast for expected number of people traveling in to and out of PDX? That would be good to know in terms of road management.*
  - Vehicle travel demand is a derivative forecast product based on the ASV forecast. We take into account the population coming into and out of the airport and look at how they get to the airport to understand future transportation capacity needs estimates for PDX.
- *Q: There have been a lot of comments on Facebook from people surprised at how long the walk is due to the construction detours at the airport. For people who have limited mobility that do not fit in a wheelchair, what are their options for reaching Concourses B and E?*
  - A: During the 1.5-year detour, the Port is aware the experience with the bypass is not where we want to be long term. With the new main terminal, wheelchairs are staged in a more convenient location than where they used to be. For those unable to use a wheelchair, we can see if an alternate type of wheelchair is available to accommodate. The Port is interested in hearing comments on this need. Aaron invited people to reach out to him directly. The wheelchair dispatch number is (503) 460-4300. White courtesy phones are available in the elevator cores and airport operators are available from 6 a.m. to 11:30 p.m. Walking distance is something that we will consider as we work on the master plan update.
- *Q: To clarify: airfield capacity is the capacity allowing for planes to take off and land, and does not include air stairs, aircraft parking, etc., correct?*
  - A: Correct, airfield capacity is a simplified assessment of arrivals and departures that includes considering airspace, runways, and major taxi infrastructure. It does not include gates, airstairs, roadways, etc.

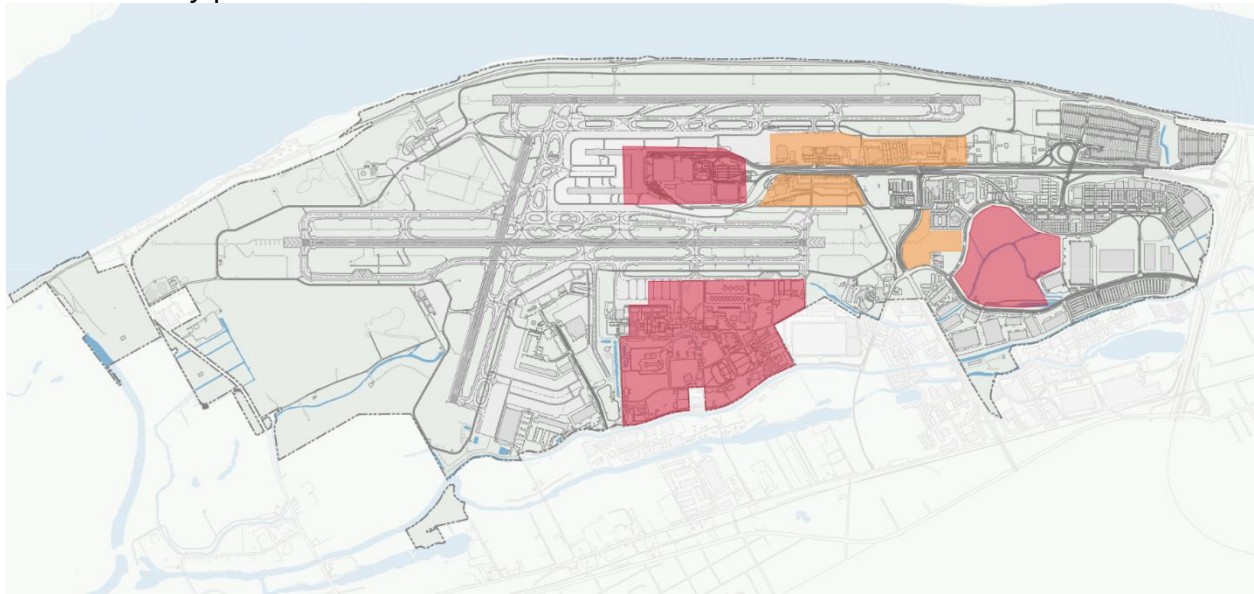
## Public comment

- No public comments were made.

## Interactive planning exercise

- Cameron Modjeski and Julie Gueho introduced an airport planning exercise to the PAC in which groups of PAC members were asked to identify the potential location(s) for up to 20 new gates and 70 acres of cargo capacity on a basemap of the airfield. The PAC broke into four groups, three groups in the conference room and one group online. Each group was given shapes to represent runways (orange

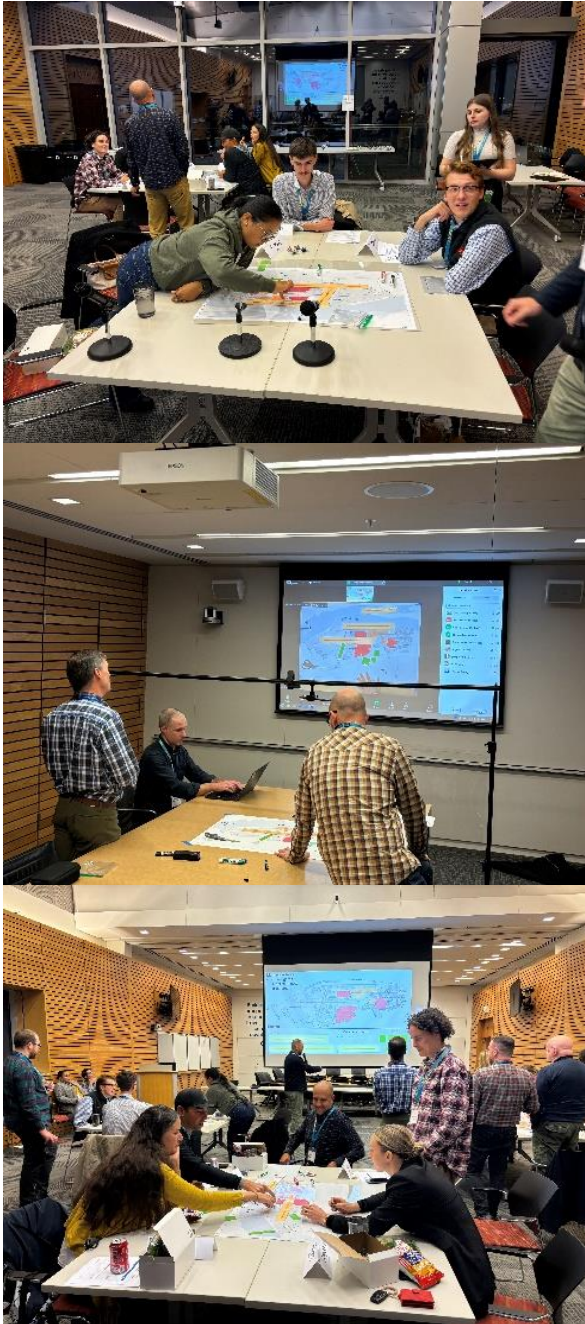
shapes with the runway safety area around them), gates (blue shapes), and cargo (green shapes) to place on the basemap. The basemap included key facilities at the airport, including features shaded out in red and orange. The red areas represented areas that are not off-limits to develop on but would require a high level of justification because they are already planned for specific activities and/or their existing uses would be very difficult to relocate; red areas included the PDX terminal, the Oregon Air National Guard base, and the area designated for future rental car storage. Orange areas represented areas that would be challenging to develop or repurpose and would require tradeoffs; orange areas included uses along the north side of NE Airport Way (general aviation and other hangars), the PDX Cargo Center, and the area on the east side of NE 82<sup>nd</sup> Avenue that is in the runway protection zone.



*Basemap of the airfield*

- While the group members discussed where they would place their shapes, they considered what the rationale was for their placements, tradeoffs for placement, and what kinds of questions they would have if they were airport planners trying to decide where to place future facilities.
- The PAC members were instructed to keep in mind that runways and terminals are big ticket items in a master plan, and everything else gets planned around those key features. Cargo is a major need to consider for commercial service airports, and PDX may need an additional 70 acres of cargo capacity for 2025.
- Planning for future growth involves examining the weakest links in facilities and operations capacity, and cost of different decisions.
- This exercise helped the PAC learn what kind of information is needed to drive decision making.

*Below are some photos of PAC mapping-in-action:*



The PAC then reconvened and each group was asked to present their recommended future layout and the considerations that were discussed during their deliberations.

**Table 1 (virtual):**

- Accessibility was a big priority and consideration. Extending the concourse means you need to consider additional walking length.
- Removed the crosswind runway because it opens opportunities for future development.

- Added 70 acres of cargo on the south side near the existing cargo facilities at the Airtrans Center, expanded gates on Concourses C and D, and placed a satellite terminal in the western area for future gate expansion with the idea that this could potentially be connected by a tram.
- Accessibility information was needed to make a good decision, as well as better international arrival plans.
- The international arrivals experience at PDX is not up to "PDX standards" and that this could be improved with the concourse extension(s); a tunnel system could replace the FIS buses.
- Comments from other PAC members:
  - The SW quad area would still be available for future growth.

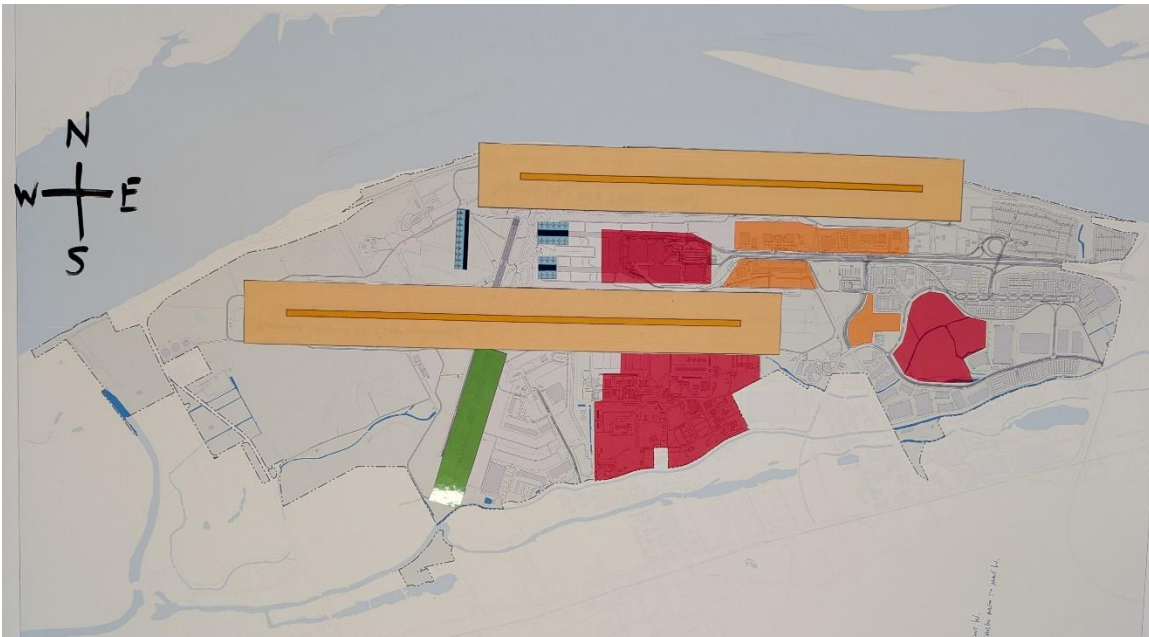


Table 1 (virtual group) Map

**Table 2:**

- Shortened the crosswind runway and moved it west to the end of the south runway.
- Placed cargo where the existing crosswind runway is near the existing cargo facilities at the Airtrans Center.
- Extended Concourses C, D, and E.
- Trying to optimizing operations by putting "like with like" (e.g. all cargo together, more gates near existing gates)
- Considered satellite terminals as well and chose to lengthen the existing ones; Concourse E would extend into the existing Remain Over Night (RON) area, so RON would west of the terminal.
- It was helpful to know that could remove the crosswind runway. For future decisions they would want to know more info about what's needed to determine if existing facilities can be decommissioned, which ones are hard to move (e.g. fuel farm), etc.
- Comments from other PAC members:
  - Liked recognition of "like for like" approach.

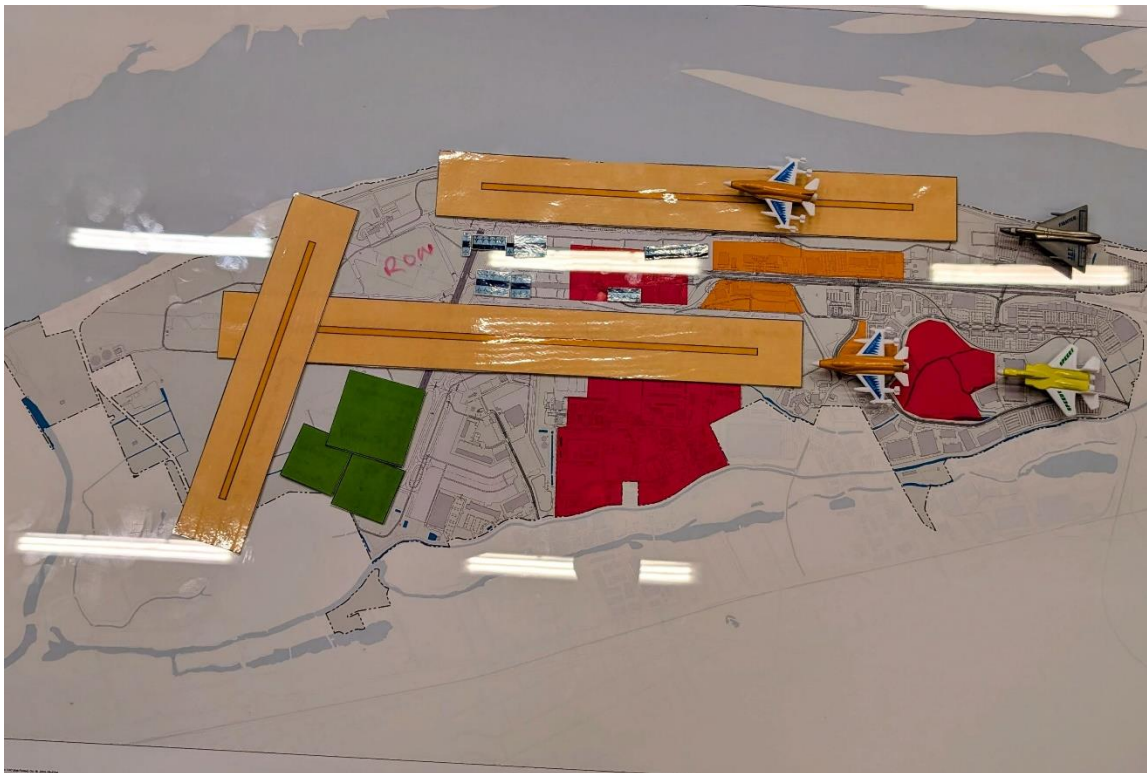


Table 2 Map

**Table 3:**

- Eliminated the crosswind runway.
- Added a third parallel runway, located at Government Island.
- Extended C, D, and E concourses (this would be cost effective), and placed a new cargo area south of the south runway in SW quad.
- Accessibility was a big concern. For wayfinding, it would be good to add signage so travelers know how far they are traveling to get from one point to another, and where they can stop if they need help or rest. Adding redundancy in ways to get help (ex. Sunflower lanyards, a way to contact help outside of customer service hours).



*Table 3 Map*



**Table 4:**

- Discussed adding a satellite terminal or extending Concourse D. How long can we make Concourses C and D with only one taxiway between them (potential bottleneck)?
- Adding a satellite terminal potentially alleviates pressure on existing parking and roadways if there is a different access point.
- Gave priority to ensuring new gates would not impede foot traffic between existing gates. Considering the roadway system for new gates as a reason to place gates elsewhere.
- Another option was to place another terminal south of the south runway, allowing for more parking, and easing pressure from the main terminal if accessed from the south side.
- Removed the crosswind runway.
- Placed new cargo areas in the SW quad.  
Thought about the balance of capacities and try to identify the weak link as well as dependent effects.

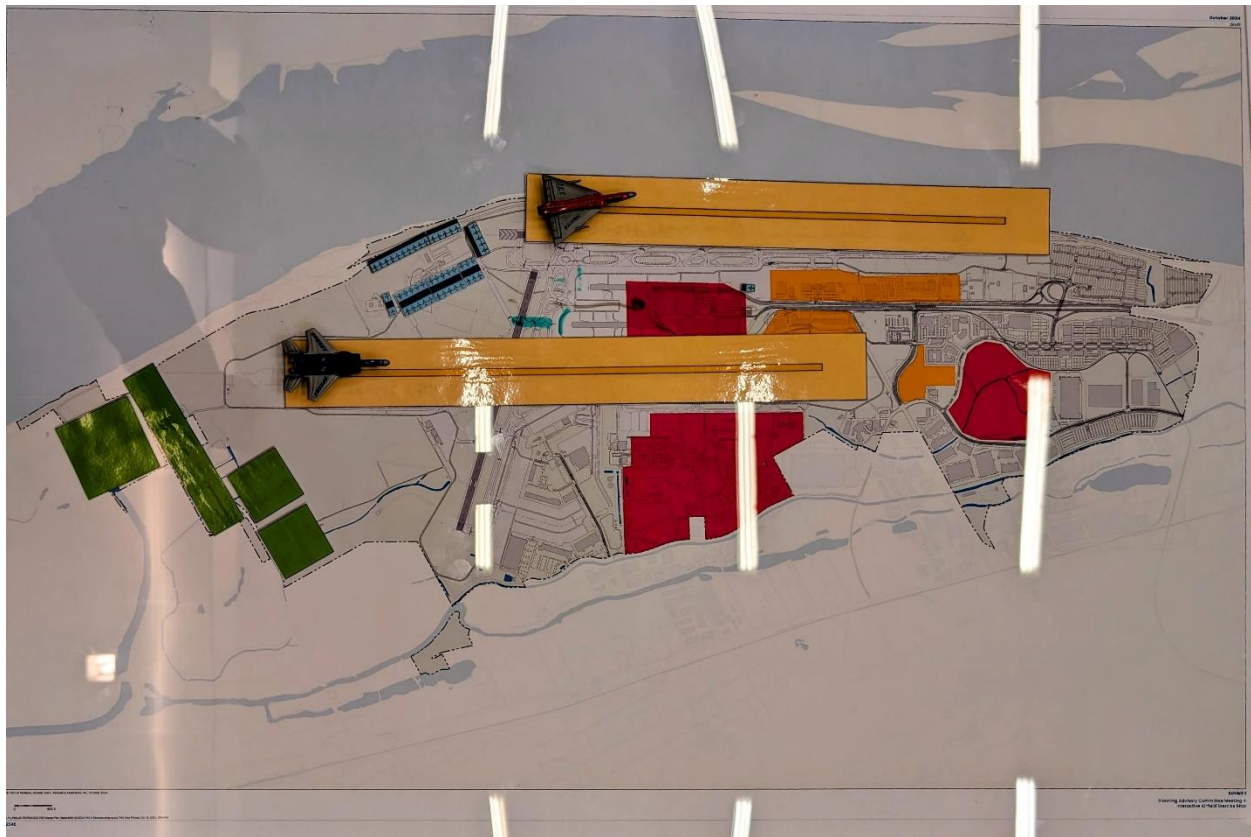


Table 4 Map

Following the group report outs, Cameron invited PAC members to ask any questions that came up for them as a result of the exercise.

- *Q: Would there be any benefits to extending the south runway or existing runways?*
  - A: Both the north and south runways are long enough for any aircraft that would use them through 2045. The north runway was extended in 2009.
- *Q: Where would the third parallel runway go if we were to build it?*
  - A: The location of a future third parallel runway was previously identified south of the existing south runway.
- *Q: If we place a third runway, does it mean PDX is planning on having a new terminal, and if so, can it be linked to other terminals?*
  - A: By the time PDX would have enough demand to warrant construction of a third parallel runway, it would be considered a very large airport. It would require taxiing longer to terminals. At this time PDX has a centralized terminal design, but future master plans could include PDX growing toward a decentralized concept and utilizing trams.
- *Q: What are the logistics involved in decommissioning a runway?*
  - A: Decommissioning requires reporting to the FAA that the runway is closed and would be relatively easy. Then, the runway would have to be removed before the land could be developed on.
- *Q: Are there seismic concerns in the area we have the fire department?*
  - A. Yes, it is located in an area that is highly susceptible to liquefaction. The Port is looking at ways to increase resiliency across the airport; for example, the new fuel farm tanks will include measures to allow for fuel "sloshing" within the tanks (rather than spilling) in the event of an earthquake.

## PAC Next Steps

- Suzanne reviewed the PAC workplan and gave an overview of upcoming meetings.
- The next meeting is planned for Dec. 9 and will cover facility requirements and a continuation of the airfield and terminal alternatives discussion.
- There may be a slight change in the timeline, and another meeting might be added between December and March. The project team will be in touch with PAC members if there is an update to the meeting schedule.
- Suzanne thanked the PAC members for being part of a great meeting. She asked PAC members to please take the evaluation survey and adjourned the meeting.

## Meeting Summary

# PDX 2045 Planning Advisory Committee Meeting 4 Make-Up Sessions

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For all make-up sessions, the sessions covered the same materials and objectives as PAC Meeting #4 held on Oct. 21, including an overview, airfield tour recap, airfield capacity findings, and airfield planning exercise. The meeting materials and airfield tour materials are available on [www.pdx2045.org](http://www.pdx2045.org). The following summarizes the questions, discussion items, and recommendations from the airfield planning exercise from each of these make-up sessions.

### Make-Up Session I

November 12, 2024

10:30 AM – 12:00 PM

Port of Portland HQ, Chinook Room and Zoom

PAC Members: David Van't Hof, Keith Miller, Maryhelen Kincaid, Matthew Hodson, Mychal Hornbeck

Port of Portland: Aaron Ray, Evan Howington, Jennifer Rabby

### Airfield capacity findings

- *Q: Does PDX have the ability to shift flight times to even out the “peaks”?*
  - A: Flight schedules are set by airlines. The busy times at PDX are typical of a west coast airport.
- *Q: The finding that we have sufficient capacity through 2045 and do not need additional runways should be shared with the CAC and nearby neighborhoods (including Concordia, Cully, Hayden Island, Columbia-Bridgeton, and downtown Vancouver). Can this be shared with the noise office to relay to people that complain about noise?*
  - A: Yes. The Port will be sharing updates on the master plan internally and this is information that can be shared more broadly. The project team hopes to have an update on public outreach by the next PAC meeting.
- *Q: Did noise contours influence the forecast?*
  - A: No. The forecast was not influenced by noise contours. The forecast is unconstrained.
- *Q: Are military flights and changes in their fleet included in the forecast?*
  - A: Yes. The Air National Guard recently prepared their projected flight information for an Environmental Assessment document. This information was incorporated into the master plan forecast.
- *Q: Is the crosswind runway (Runway 3-21) used?*
  - A: The crosswind runway is sometimes helpful from an operational perspective; however, the wind conditions that it was built to address are now happening infrequently to the point that it would no longer be eligible

for federal funding. Aircraft technology has improved over the years and now generally allows them to land in different wind conditions, so the airlines often choose not to use the crosswind runway even when wind conditions might warrant its use.

## Airfield overview

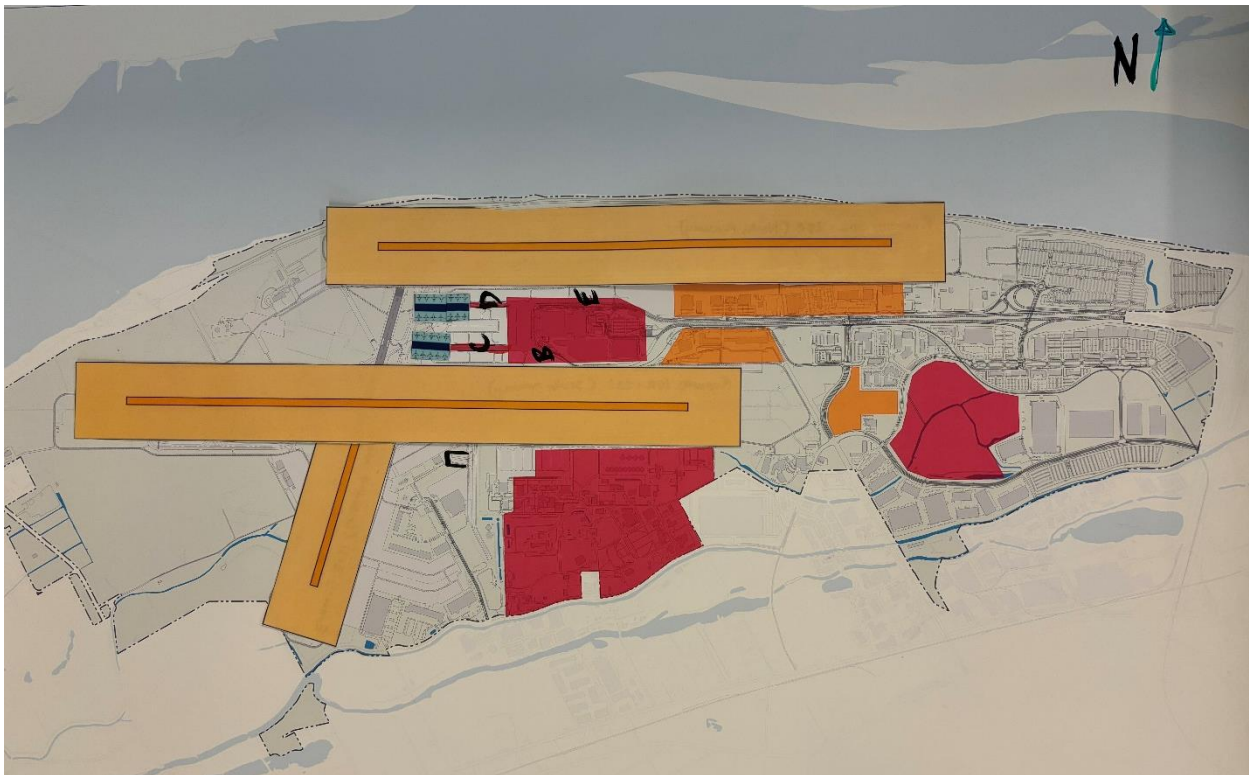
- Since some participants were unable to attend the airfield tour, Jennifer provided a high-level overview of major features of the airfield on an aerial map, including locations of the three runways, the fire station (ARFF), the Air Trans Center, PDX Terminal, Oregon Air National Guard, PDX Fuel Farm, and Southwest Quad.
- *Q: Will environmental concerns regarding development in the Southwest Quad be represented on Port boards? Flights could be disturbing to endangered species, such as the Western Meadowlark.*
  - *A: The Port will engage the appropriate subject matter experts in the master plan process. In 2025, there will be agency outreach as well as public outreach.*
- *Q: Could the Southwest Quad be used as a limited duration solar field since it is already disturbed?*
  - *A: The Port is already looking into opportunities for solar arrays in cooperation with Bonneville Power Administration (BPA). The first one was installed on 33<sup>rd</sup> Avenue. There is now an effort to identify other locations on airport land.*

## Interactive planning exercise

*PAC Make-up Session 1 mapping-in-action:*



- Small cargo feeder planes (UPS, FedEx) use the crosswind runway to land, but they only need 3,000 feet; this is especially helpful when one of the parallel runways is closed for maintenance and because the crosswind runway is close to the cargo facilities; recommend keeping a shortened (3,000-foot) crosswind runway
- Considered shifting the south runway to the west to open up the central area near the terminal; this would likely have greater impacts on neighboring residences and businesses; planes already fly really low over the marinas as they approach the south runway from the west
- Considered realigning the crosswind runway to a 90-degree angle with the south runway to extend Concourses C and D, but this change is not really needed if a 3,000-foot length is used for the crosswind runway instead
- Add gate capacity where we can most efficiently move people; considered extending each of the concourses or adding a mid-field connector with an automated people mover to connect; recommend extension of Concourses C and D, but need to consider the implications of the single taxilane between those concourses and consider whether there is a new form of people moving to get people to the ends of Concourses C and D
- If people movers are included to address walking distances, they need to consider ADA; for example, people using walkers are not supposed to use the conveyor belt style moving walkways
- The group ran out of time to discuss where cargo expansion could be located; but it was noted that landside access (roadways) is crucial for cargo facilities



*Make-up Session 1 Map*

## Make-Up Session 2

November 20, 2024

10:00 AM – 11:00 PM

Port of Portland HQ, Celilo Room

PAC Members: Pete DeVasto

Port of Portland: Aaron Ray, Evan Howington, Jennifer Rabby

### Airfield capacity findings

- *Q: Where are the construction cranes?*
  - A: The cranes are near the terminal; they are being used to set the columns for the new roof. When those are raised, we work closely with the air traffic control tower.
- *Q: How many operations are on the crosswind runway?*
  - A: Only arrivals are currently using the crosswind runway, and its less than 1%. The forecast model for the master plan does not assume any use of the crosswind runway; we have sufficient airfield capacity without that runway. The forecast also shows that we do not need to build the third parallel runway (as shown on the airport layout plan) within the next 20 years.
- *Q: Are we looking at an increase in larger planes in the future?*
  - A: The model assumes a block of time for each aircraft to land or depart, regardless of size. Larger aircraft require slightly more separation in landing times, but its relatively negligible. The airfield can accommodate larger aircraft into the future.
- *Q: As air traffic grows, there will be more aircraft on both runways. Do we have the capabilities for simultaneous landings on the parallel runways?*
  - A: The north and south runway are 3,500 feet apart, which is the required separation for simultaneous landings. We currently have better instrumentation (ILS) on the south runway than the north runway; however, we are planning to upgrade the instrumentation on the north runway to ILS in anticipation of closing the south runway for the seismic resiliency work. That would then support simultaneous landings in the future.
- *Q: Would you have to add an arresting cable on the north runway?*
  - The Oregon Air National Guard would need to look at that. They are getting new aircraft, which could affect whether that is needed.

## Interactive Planning Exercise

*PAC Make-up Session 2 mapping-in-action:*



- Remove Runway 3-21 to free up space and convert it to a taxiway
- Concourse D is the first priority for more gates since it is not as long as Concourse C and you can get gates on both sides (unlike Concourse E)
- Add 6 gates to Concourse C and 2 (to 4?) gates to Concourse E
- Potentially use new gates at the end of Concourse D for international gates
- Moving walkways would help people with disabilities, as well as older travelers that get tired from a long walk
- Preference for a longer walk to an existing concourse over a new satellite concourse; a satellite concourse could be difficult for accessibility mapping, although an underground tunnel would be preferable to a bus
- If the crosswind runway were converted to a taxiway, it would make sense to construct an additional cargo center on the west side of that taxiway so it's still close to the AirTrans Center; move the big carriers, like UPS, to a new facility over there



Make-up Session 2 Map

### Make-Up Session 3

November 21, 2024

3:00 – 4:30 PM

Zoom

PAC Members: Heather King, Roger Gonzalez, Xavier Phanthongphay

Port of Portland: Aaron Ray, Jeff Broderick, Jennifer Rabby

### Airfield capacity findings

- Q: Which facilities go into calculating airfield capacity?
  - A: Anywhere that a plane is moving (runways, taxiways) is part of the capacity analysis. Airplane parking is not part of the capacity analysis, but will also be looked at in the master plan.
- Q: Why won't FAA fund Runway 3-21?
  - A: Weather is not severe enough that the current fleet cannot safely use the parallel runways. At PDX the wind is consistent (and getting more consistent) from the east and west rather than north and south.



## Interactive Planning Exercise

*PAC Make-up Session 3 mapping-in-action:*



- Remove Runway 3-21 so that Concourses C and D could be extended
- Add new cargo area across the crosswind runway alignment and into the Southwest Quad, west of the existing Air Trans Center so that it would have roadway access and be close to the existing cargo area
- Extend Concourses C and D to add more gates; add more gates to Concourse D (6-8 gates) so that it becomes the same length as Concourse C (add 2-4 to that concourse)
- Extending concourses needs to include assistance/services for people that are not able bodied; in addition to moving walkways for walkability, additional pet relief areas should be planned
- Considered adding a third parallel runway west of the terminal between the two existing parallel runways; however, in bad weather the new middle runway would not be usable because it would be too close to the other runways; the group decided not to include this in their recommendations since a third runway is not needed in the next 20 years
- Considered whether additional cargo should be located west of the terminal with access via Marine Drive, but ultimately decided it would be preferable to locate new cargo close to the existing cargo facilities in the Air Trans Center
- The group discussed whether the plan would take away the ability to ever construct a third parallel runway and where that would go. It would probably still be on the south side of the airfield, but adjusted from the alignment as shown on the airport layout plan so that it would not impact the Columbia Slough. Many of the cargo buildings would be at the end of their useful life by that time, so the cargo area could potentially be reconfigured to be located between the two southernmost parallel runways.



*Make-up Session 3 Map*