

**PLU Airport Master Plan  
Master Plan Advisory Committee (MPAC)  
Meeting #4**

**Mead&Hunt**

**MASTER PLAN ADVISORY COMMITTEE (MPAC) - MEETING #4**

## **MASTER PLAN ADVISORY COMMITTEE (MPAC) MEETING #4 AGENDA & ACTION ITEMS**

Date/Time: **Monday, March 19, 2018 from 1:30-3:30 p.m.**  
Location: Thun Field Airport Office at the Civil Air Patrol building  
16915 - 103rd Ave. E., Puyallup, WA 98374

Meeting #4 will discuss runway and terminal area expansion alternatives, based on the preferred aviation master plan forecasts.

### **Meeting Tasks and Timeline [2 Hours]:**

1. Plan Status [5 Minutes]
2. Preferred Forecasts [15 Minutes]
3. Runway Requirements and Alternatives [45 Minutes]
4. Terminal Area Requirements and Alternatives [45 Minutes]
5. Next Steps – Public Meeting #1 [10 Minutes]

Open Discussion (Consultant Available Following Meeting)

### **MPAC Pre-Meeting Actions:**

- Review Meeting #4 Presentation Material (emailed 1 week prior to meeting)

### **Meeting Handouts:**

- Meeting Agenda
- Runway Length Exhibits
- Terminal Area Expansion Exhibits

**Note:** Presentation materials will be emailed to MPAC prior to meeting.

*Thank you!*

## **MEETING #4 (FINAL) SUMMARY NOTES**

The following is a summary of key topics from the MPAC Meeting #4:

### **GENERAL MEETING COMMENTS:**

Meeting #4 decision items and outcome:

- Plan for Future Business Jet Demand at PLU - YES
- Plan for Future Runway Extension Scenario - YES

PLU Airport Master plan process and status reviewed  
Meeting form available for written meeting comments.

### **Forecast Chapter Stats:**

- Chapter submitted to FAA for review and approvals on February 20, 2018
- Awaiting FAA approval, prior to advancing preliminary master plan development concepts

### **Mission Statement Items:**

- PLU Master Plan mission statement reviewed with MPAC, in consideration of 20-year vision for PLU facility and alternatives.

### **Forecast Critical Aircraft Categories:**

- PLU forecast distinction of the future critical aircraft (turboprop or light/small business jet)
  - PLU Existing Critical Aircraft: Twin Engine turboprop ARC B-II
  - PLU Forecast Critical Aircraft: Light and Small jet ARC BI/II
- Turbine and piston aircraft industry trends were characterized, including aircraft manufacturer production trends and flight utilization hours.

MPAC was supportive of the 'Light/Small Business Jet' as the PLU future critical aircraft.

### **Airfield Alternatives:**

The airfield runway and taxiway system alternatives are evaluated first, as they predominately influence other PLU Airport Master Plan planning items.

**Runway Width:** Runway width recommendations were presented.

- Existing runway width is 60 feet
- The recommended width is 75 feet, to meet FAA standards based on existing conditions

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Slide provided illustration of aircraft wingspans relative to the 60 and 75-foot wide runway. PLU is the only FAA regional general aviation airport within Puget Sound with less than 75-foot runway width.

**Runway Length:** Runway length involves takeoff and landing safety factors, approximately 20 to 30 percent of the total runway length. Aircraft performance requirements were discussed, including FAA safety margin factors. As part of the runway length analysis, takeoff and land distances were adjusted for PLU field elevation and mean maximum temperatures during hottest month. PLU is one of three FAA regional general aviation airport within Puget Sound with less than a 4,000-foot runway width.

Runway Extension Benefits:

The PLU runway extension benefits were reviewed:

- Accommodate higher-performance business aircraft
- Capture a large segment of the general aviation fleet
- Extend runway safety margins
- Attract new revenues based on fuel sales, hangar rents, and support services.

Runway Length Analysis:

The PLU runway length analysis was reviewed based on two methods:

- FAA performance curves (piston, turbine-jet aircraft)
- Aircraft performance (individual and composite aircraft grouping)

Discussion of constrained runway lengths based on aircraft performance and operator requirements. The MPAC identified that 4,200' to 4,300' seems to be the minimum length to accommodate most twin turboprop aircraft, such as the King Air models. Also considered as part of the runway length scenarios were future operating requirements for limited passenger and cargo purposes.

Runway Length Scenarios

The PLU runway length scenarios, under consideration, were reviewed:

Runway extension scenario options (A, B, C, D, E) were presented to show expansion potential and limitations. Extension factors discussed included; PLU property boundary, runway protection zone (RPZ), roadway (160<sup>th</sup> Street E) surrounding infrastructure, land uses (PLU Airport Overlay Ordinance), and property interests. Also discussed, for initial consideration, were land acquisition, implementation, and potential FAA funding eligibility.

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RUNWAY EXTENSION SCENARIOS											
Runway Length Characteristics						Aircraft Categories Accommodated					
Runway Extension Scenario	Runway Alignment	Runway Length	North Extension	South Extension	Airport Constraint	Piston (Single)	Piston (Twin)	Turboprop (Single)	Turboprop (Twin)	Business Jet (Light)	Business Jet (Small)
A	Existing	3,650 Feet	0'	0'	Existing Length	X	Most	X	Some	Few	Few
B	Existing	4,000 Feet	200'	150'	Within Airport Property	X	X	X	Most	Most	Some
C	Existing	4,500± Feet	700'	150'	Extend to Retail Building(s)	X	X	X	X	X	Most
D	Existing	5,300± Feet	1,500'	150'	Extend to Residential Boundary	X	X	X	X	X	X
E	New	5,300± Feet	1,500'	150'	Extend to Residential Boundary	X	X	X	X	X	X

Runway Scenario Outcomes (as presented):

- Scenario A: not sufficient to meet PLU airport needs (dismissed)
- Scenario B (B-1): future minimum runway length (consider as interim length)
- Scenario C: future maximum runway length (consider as near-ultimate length)
- Scenario D: not conducive for PLU Airport site
- Scenario E: not conducive for PLU site (runway pivot diminishes potential eastside development)

Scenario B-2 (New Scenario): 4,200' to 4,300' runway length (meet operating/insurance)

MPAC requested further assessment of a 4,200' to 4,300' future runway length, to be considered in meeting a common runway takeoff and landing benchmark for turbine aircraft regulatory and insurance standards. As an option which extends beyond the current Airport property to the northside, the Scenario B-2 analysis involves future coordination for property acquisition, runway protection zone, and possible roadway re-alignment option(s).

The Consultant mentioned that the runway length scenarios may require further user justification, for subsequent County and FAA planning purposes, including user testimonials and letters of support.

**Airfield Capacity:** As PLU approaches a forecast of 130,000± operations per year, the Airport's Annual Service Volume (ASV) approaches 60 percent, and the runway and taxiway system may experience capacity/delay events at certain airfield locations. Per FAA guidance, airfield capacity enhancement project should be planned. The PLU Master Plan will consider and evaluate airfield capacity project improvements, as part of the alternative recommendations.

**Terminal Development Considerations:**

Initial terminal area space allocation and expansion considerations were discussed, including space needs for piston versus turbine aircraft. Turbine aircraft operations require additional space due to the larger footprint of turbines for both hangar size and apron parking. The westside terminal area does not appear to have sufficient ion-fill space for the 20-year demand forecasts; deficient by about 5-plus acres. Redevelopment and eastside terminal expansion are options. The eastside terminal expansion is limited by wetlands. Both westside and eastside terminal developments will need to consider airfield operational capacity. MPAC is supportive of investigating eastside terminal expansion.

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**Hangars:** Keith Kemper inquired about FAA funding for hangars. Jeff Smith stated FAA hangar funding involves eligibility conditions before FAA would participate. Lauren Behm stated that hangar structure improvements would likely be a 100 percent County cost. Lauren mentioned that projects such as runways are normally funded by FAA at 90 percent; in which WSDOT may provide a 5 percent match, and the County provides the remaining 5 percent.

**Helicopter Landing Area / Operations Area:** Discussion helicopter use and dedicated parking at PLU, primarily for search and rescue, fire-fighting, law enforcement. The Plan will identify potential and suitable helicopter landing area(s), for dedicated helicopter use.

**County Master Plan (Alternatives) Review Process:**

The County review process of PLU Master Plan recommendations was discussed. Councilman Dan Roach stated that he values the MPAC group. Councilman Roach recommended engaging the County Economic Development and Executive office staff, to provide awareness and evidence of PLU Master Plan findings.

**Next Meeting Preview:**

Previewed discussion for PLU operations capacity limitations and some preliminary solutions including an east side parallel taxiway and east ramp development.

**MPAC Action Items:**

1. MPAC Comments on Meeting #4  
Provide by April 2
2. Decide Runway Length Scenarios – to carry forward as part of PLU Master Plan  
Decide by April 16
3. Consider Public Outreach Meeting #1 logistics (preferred on-Airport meeting site)

**Project Team Action Items:**

1. Develop exhibit for 4,200' to 4,300' Runway Scenario for MPAC review  
County Airport Staff: Identify property ownership north of 160<sup>th</sup> Street
2. Provide Runway Protection Zone (RPZ) background for MPAC review
3. Arrange County executive coordination of PLU master plan recommendations

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**MPAC MEETING #4 ATTENDANCE**

#	PLU MPAC Member	MPAC Meeting #4 03-19-2018
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	<b>Attendants - #</b>	<b>12</b>
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1	Shelly Schlumpf	Attended
2	Lydia Gathara (or)	
2	John Hinds (or)	
3	Dan Roach	Attended
4	John MacArthur	Attended
5	Jeff Storrar	Attended
6	Robert Rodriguez	
7	Rusty Wilder	Attended
8	Sergeant Chris Adamson	Attended
9	Deputy Chief Pat Donovan	
10	John Hurlbut	Attended
11	Doug Miller	Attended
12	Rod Wetherbee	Attended
13	Keith Kemper	Attended
14	Nichole Weber	Attended
15	Hans Kueck	Attended

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SIGN-IN SHEET  
PLU AIRPORT MASTER PLAN  
MEETING DATE: \_\_\_\_\_



Name:	Affiliation:	Signature
1. <i>Aaron Stearns</i>	<i>Behler SD</i>	<i>[Signature]</i>
3. <i>John MacArthur</i>	<i>USDOT AVIATION</i>	<i>[Signature]</i>
2. <i>Bob Wilbur</i>	<i>Spencer Aircraft Registration</i>	<i>[Signature]</i>
3. <i>John Harbort</i>	<i>Pulaski River</i>	<i>[Signature]</i>
4. <i>Doug Wilcox</i>	<i>Franklin</i>	<i>[Signature]</i>
5. <i>Nichole Weber</i>	<i>SHAC</i>	<i>Nichole Weber</i>
6. <i>[Signature]</i>	<i>Transportation Member</i>	<i>[Signature]</i>
7. <i>[Signature]</i>	<i>PL East-Dev</i>	<i>[Signature]</i>
8. <i>Laurell Rebold</i>	<i>PL A3F</i>	<i>[Signature]</i>
9. <i>Rusty Windsor</i>	<i>PCSD</i>	<i>[Signature]</i>
10. <i>[Signature]</i>	<i>TEAC</i>	<i>[Signature]</i>
11. <i>[Signature]</i>	<i>PCSD</i>	<i>[Signature]</i>
12. <i>[Signature]</i>	<i>Mead &amp; Hunt</i>	<i>[Signature]</i>
13. <i>[Signature]</i>	<i>Mead &amp; Hunt</i>	<i>[Signature]</i>
14. _____	_____	_____
15. _____	_____	_____



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PUBLIC

SIGN-IN SHEET  
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MEETING DATE: \_\_\_\_\_

	Name (Please Print):	Zip	Email (If Desire Notifications)
1	Lt. Ed Hrivnak, Central Pierce Fire & Rescue, station 69 Pierce Co. Airport.	98374	253-691-4422 ehrivnak@central.piercefire.org.
2	Allison Needles	98374	allison.needles@puyallupherakl.com
3	JEFF STORVAL	98104	jstorval@pski.org
4	DAN ROACH	98391	
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