

MEETING #5 (FINAL) SUMMARY NOTES

The following is a summary of key topics from the MPAC Meeting #5:

GENERAL MEETING COMMENTS:

Meeting #5 decision items and outcomes:

- Preferred Runway Extension Scenario: **Yes (Scenario B-3 @ 4,300')**
- Future 'Westside' Terminal/Hangar Development Expansion Strategy: **Yes**
- Future 'Eastside' Terminal/Hangar Development Strategy: **Yes**

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

Forecast Chapter Stats:

- Forecast Chapter submitted to FAA for review and approvals on February 20, 2018
- Awaiting FAA Forecast Chapter review-approval

Runway Alternatives:

- Review of the seven runway length scenarios (A, B-1, B-2, B-3, C, D, E)
- Runway scenario comments and preference

RUNWAY LENGTH SCENARIOS (MPAC PREFERENCE)

The following are the individual MPAC member preferences (#) for the runway length scenarios. Scenarios B-2 and B-3 were the most preferred by MPAC. See following exhibits.

#	MPAC Preference Runway Length Scenario (# Preferred):
--	A: 3,650': EXISTING – FAA PISTON AIRPLANE LENGTH (59°F)
1	B-1: 4,000': FAA CURVE/TURBINE PERFORMANCE LENGTH
3	B-2: 4,200': INTERIM FAA LENGTH (TURBINE INSURANCE LENGTH)
5	B-3: 4,300': INTERIM FAA LENGTH (TURBINE INSURANCE LENGTH)
1	C: 4,500': FAA TURBINE/JET LENGTH (75% JET FLEET @ 60% LOAD, 78°F)
1	D: 5,300': FAA ADJUSTED JET LENGTH (SMALL JET BALANCED FIELD, 59°F)
0	E: 5,300': FAA ADJUSTED JET LENGTH (SMALL JET BALANCED FIELD, 78°F)

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Preferred Runway Length Scenarios

The following runway length scenarios are recommended to be carried forward for further PLU Master Plan consideration and implementation:

SELECTED: Runway Length Scenario A (3,650' x 60' to 75') recommended to be carried forward into the PLU Master Plan and shown in the Capital Improvement Plan (CIP) and on the Airport Layout Plan (ALP) as maintaining the existing runway length condition (3,650'), with planned runway widening from 60 to 75 feet.

SELECTED: Runway Length Scenario B-1 (4,000' x 75') recommended to be carried forward into the PLU Master Plan and shown in the Capital Improvement Plan (CIP) and on the Airport Layout Plan (ALP) as a future runway length condition. This scenario does not involve future Airport land acquisition.

RECOMMENDED FOR FURTHER CONSIDERATION AS LONG-TERM PLANNING OPTION: Runway Length Scenario B-2 (4,200' x 75') is recommended to be carried forward for further PLU Master Plan consideration. This scenario would need further coordination with regards to: 1) Pierce County input on the feasibility of airport land acquisition and a preferred 160th Street re-alignment option (stop light signal currently being installed at intersection of 110th Street), and 2) FAA determination on 160th Street potentially transitioning through the future Runway 17 Runway Protection Zone (RPZ).

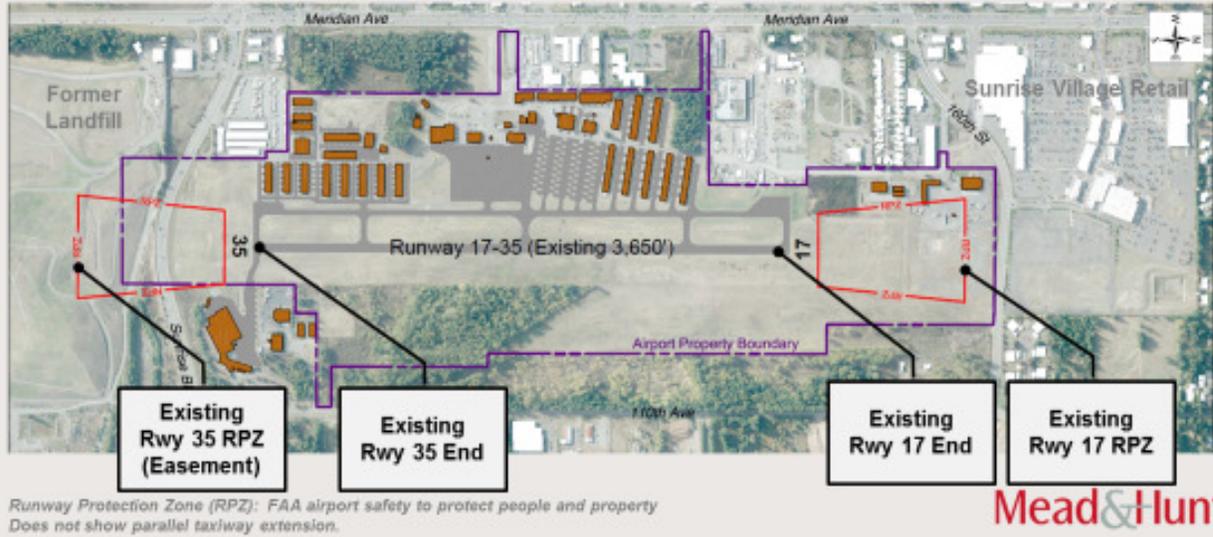
RECOMMENDED FOR FURTHER CONSIDERATION AS LONG-TERM PLANNING OPTION: Runway Length Scenario B-3 (4,300' x 75') is recommended to be carried forward for further PLU Master Plan consideration. This scenario would need further coordination with regards to: 1) Pierce County input on the feasibility of airport land acquisition and a preferred 160th Street re-alignment option (stop light signal currently being installed at intersection of 110th Street), 2) Pierce County input on impacts to the Sunrise Village retail center, and 3) FAA determination on 160th Street potentially transitioning through the future Runway 17 Runway Protection Zone (RPZ).

Note: Scenario B-2 and B-3 are being further considered by the County, as general planning layout concepts, to determine the feasibility for accommodating proposed Airport land development. If carried forward for the PLU Master Plan, Scenario B-2 and B-3 would likely be considered a phased long-term runway planning extension option, in which long-term is usually considered 10-plus years.

Note: For Scenarios B-2 and B-3, FAA may require supplemental justification data pertaining to project justification, environmental compliance, and airspace factors prior to being submitted for FAA Airport Capital Improvement Plan (ACIP) programming purposes.

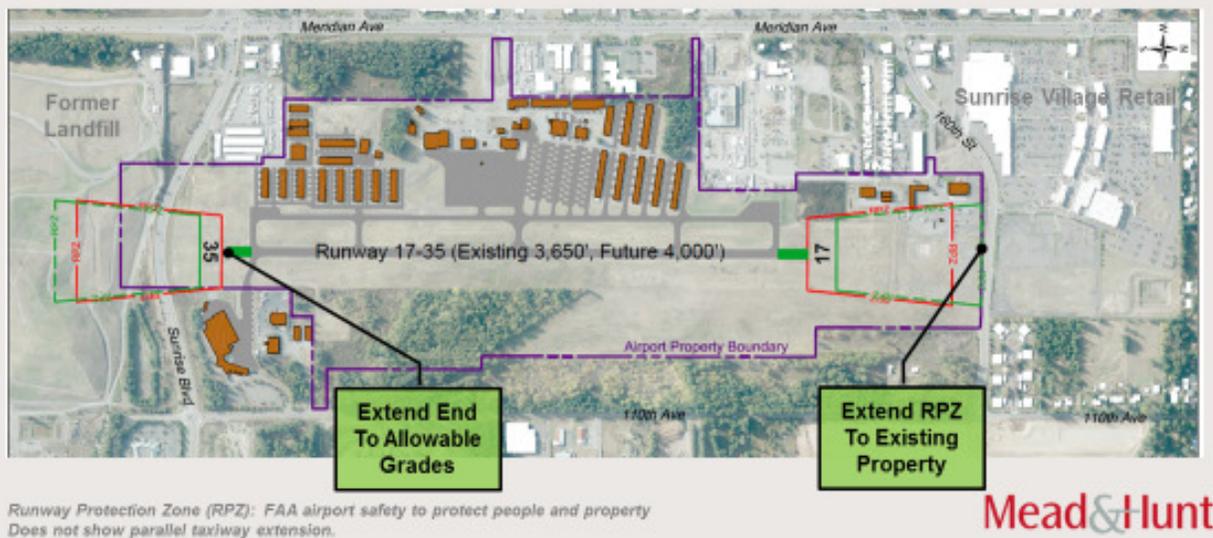
3. Runway Length Options

Scenario A: Existing Length = 3,650'



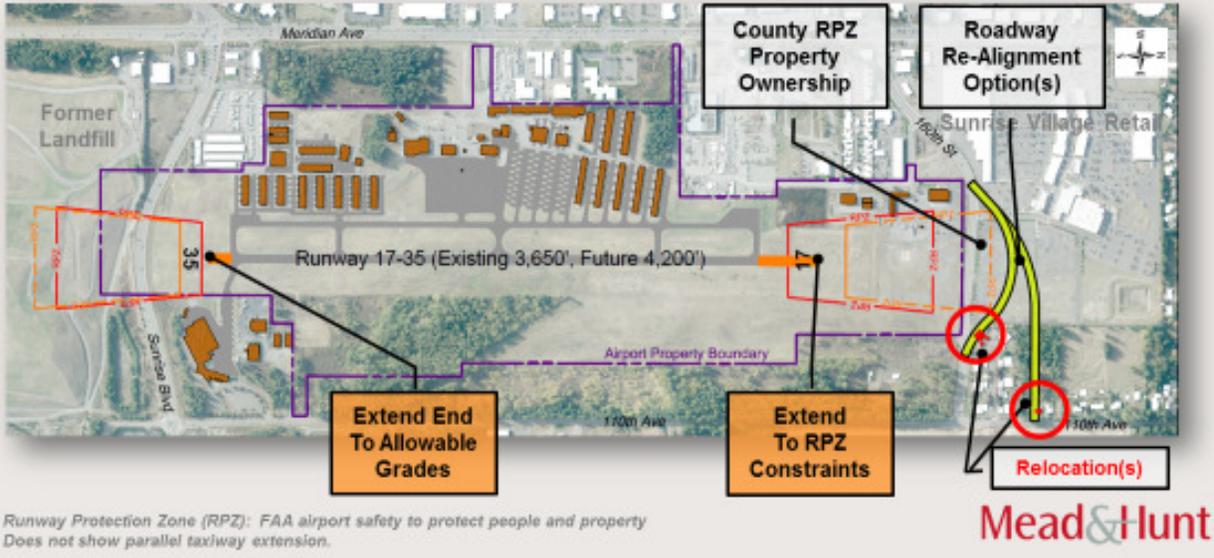
3. Runway Length Options

Scenario B-1: Future Length = 4,000' (150' South | 200' North)



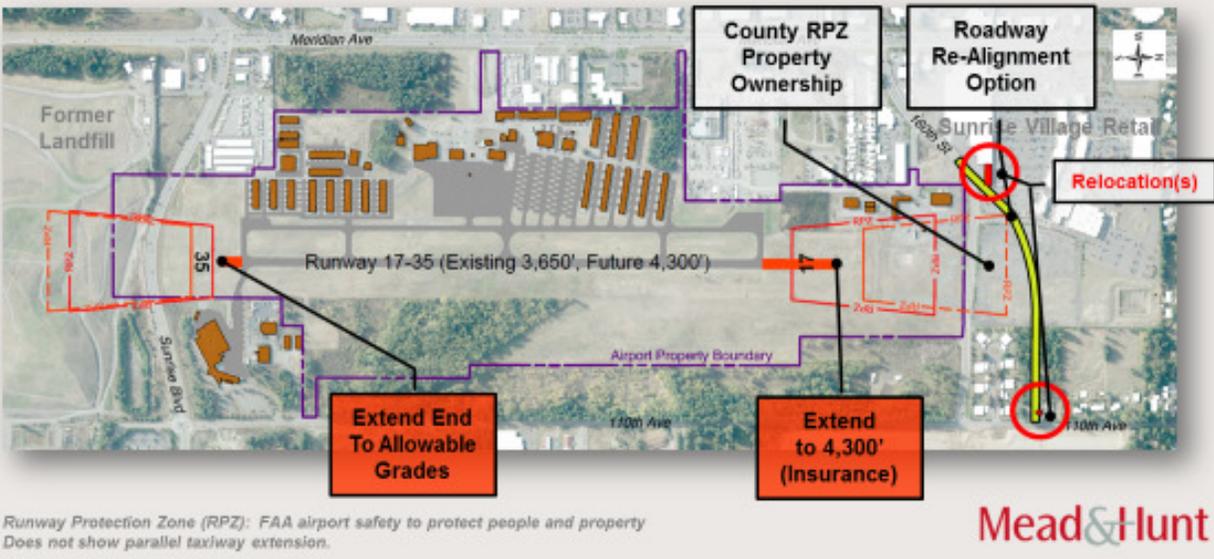
3. Runway Length Options

Scenario B-2: Future Length = 4,200'± (150' South | 400' North)



3. Runway Length Options

Scenario B-3: Future Length = 4,300'± (150' South | 500' North)



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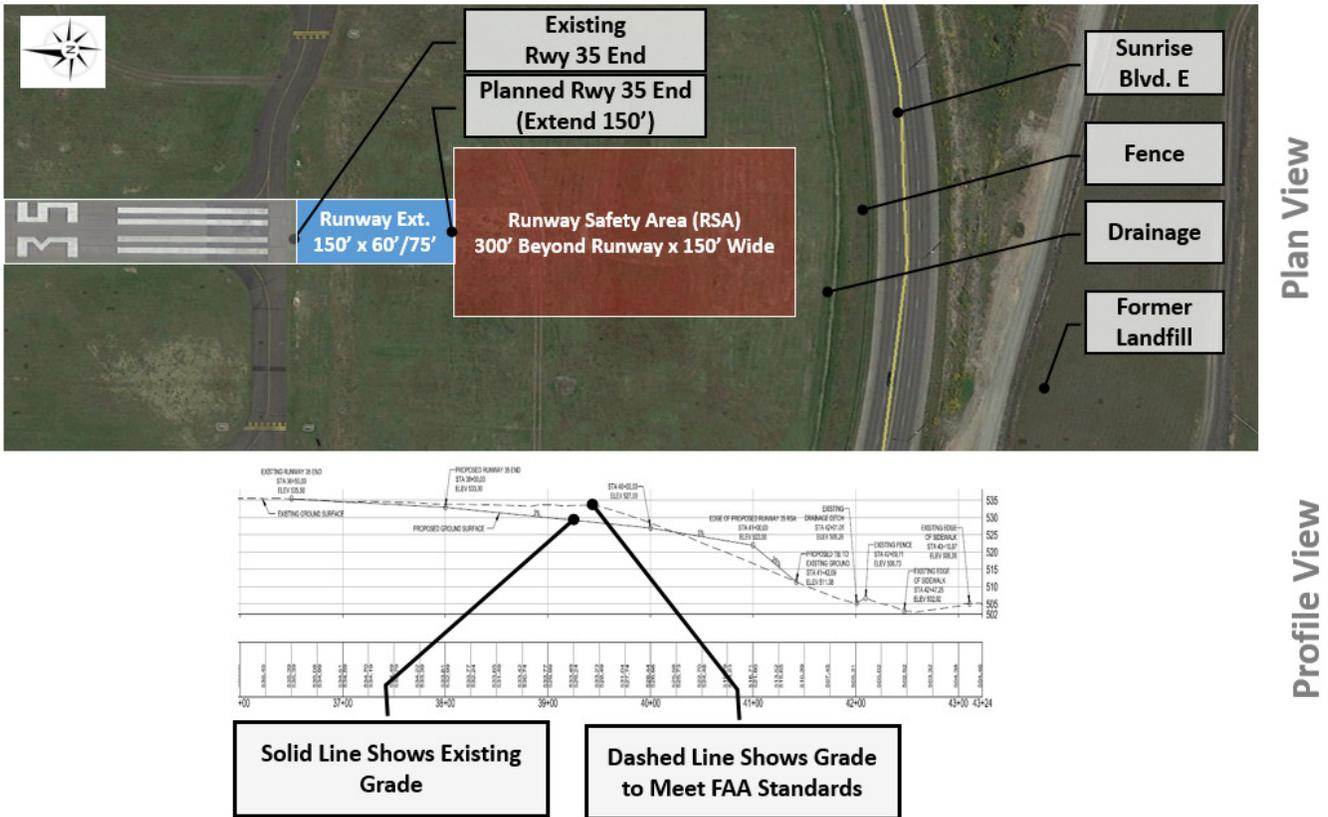
North Runway 17 Extension Constraints:

The north runway end could be extended a maximum of 200 feet without the Runway Protection Zone (RPZ) extending beyond the existing Airport property boundary. An extension beyond 200 feet would entail future airport property acquisition for FAA safety areas, airspace clearances, potential 160th Street re-alignment, and retail center infrastructure impacts. The north end contains an existing airport aviation easement area.

South Runway 35 Extension Constraints:

The south runway end could be extended a maximum of 150 feet, in consideration of FAA runway and taxiway safety areas, terrain contour grades, Airport property ownership boundary, and the Sunrise Boulevard roadway infrastructure. See following exhibit.

PLU RUNWAY 35 EXTENSION: RUNWAY SAFETY AREA (RSA) PROFILE/GRADES



Application of Declared Distances / Displaced Thresholds / Overrun / Stopway / Clearway:

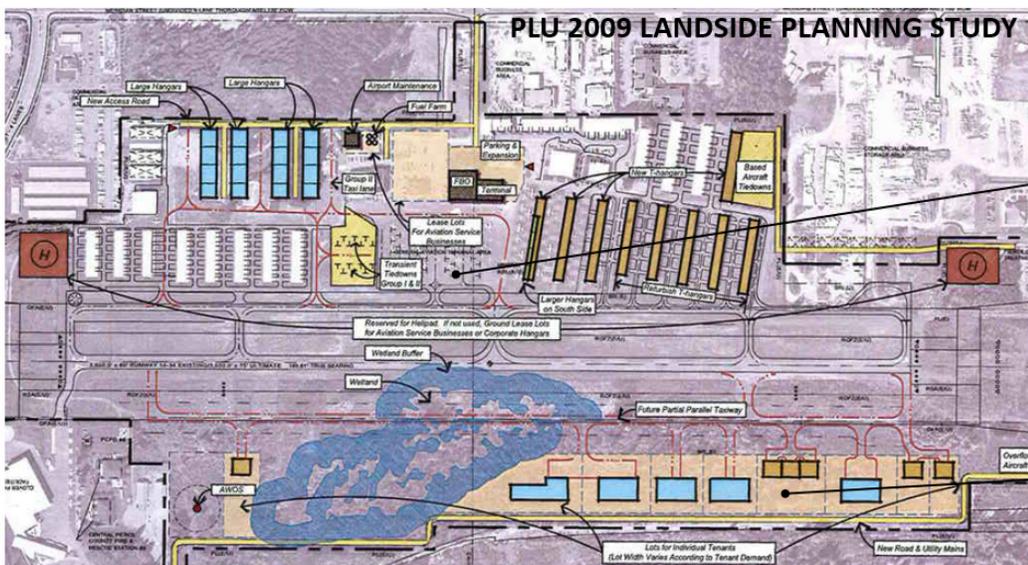
Ideas were discussed about achieving a longer paved runway length, including FAA declared distance standards. These are distances declared available for a turbine powered aircraft's takeoff run, takeoff distance, accelerate-stop distance, and landing distance requirements. The use of declared distances does not change the Runway Protection Zone (RPZ) requirements extending beyond the usable

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runway end. Also, FAA clearway or stopway standards are not in place at PLU, and therefore, would not be applicable for applying FAA declared distance standards. Therefore, the use of declared distances does not provide PLU a usable runway length advantage. Paved blast pads are recommended beyond the future runway ends, however, blast pads are not usable for takeoff and landing distance computations.

Terminal Area Development – Development Concepts

Previous PLU planning efforts will be review for applicability of terminal development concepts to recommend and carry-forward as part of the PLU Airport Master Plan.



Previous PLU Planning Efforts will be Reviewed for Consideration of:

- Hangars (By Type)
- Apron Expansion
- Helicopter Parking
- Redevelopment Area(s)
- Vehicle Access
- Vehicle Parking
- Aircraft Fueling

Previous PLU Planning Efforts will be Reviewed for Consideration of Eastside Applicable Terminal Area Concepts

Terminal Area Development – Westside

- The forecast hangar demands are projected to require more space allocation than provided by the existing 4 to 6 acres of undeveloped westside terminal area, in addition to other non-hangar developments (FBO/SASO structures, other aviation and non-aviation structures).
- With a proposed runway extension, the airport is projected to accommodate larger turbine aircraft traffic in the future, which require a larger dimensional footprint for parking and hangar storage (commonly twice as much as a single-engine piston aircraft).
- The MPAC decided to plan for future acquisition of Terminal Expansion Area Option B on the westside of the airfield. This area would provide an option for further terminal area expansion, in the event the eastside terminal area was delayed or not implemented. The Option B parcel area is approximately 14 acres (2018 assessed value is \$4.8 million and a market value of \$8.5 to 12.0-plus million), zoned as 'Commercial Mixed Use', has existing regional utility connections, is heavily wooded, contains a wetland/buffer area. The Option B site would require a future dedicated taxiway/taxilane airfield corridor and access point to be reserved for future aeronautical planning and re-alignment of the existing Airport hangar vehicle access route. See following exhibit.

4. Terminal Expansion Factors

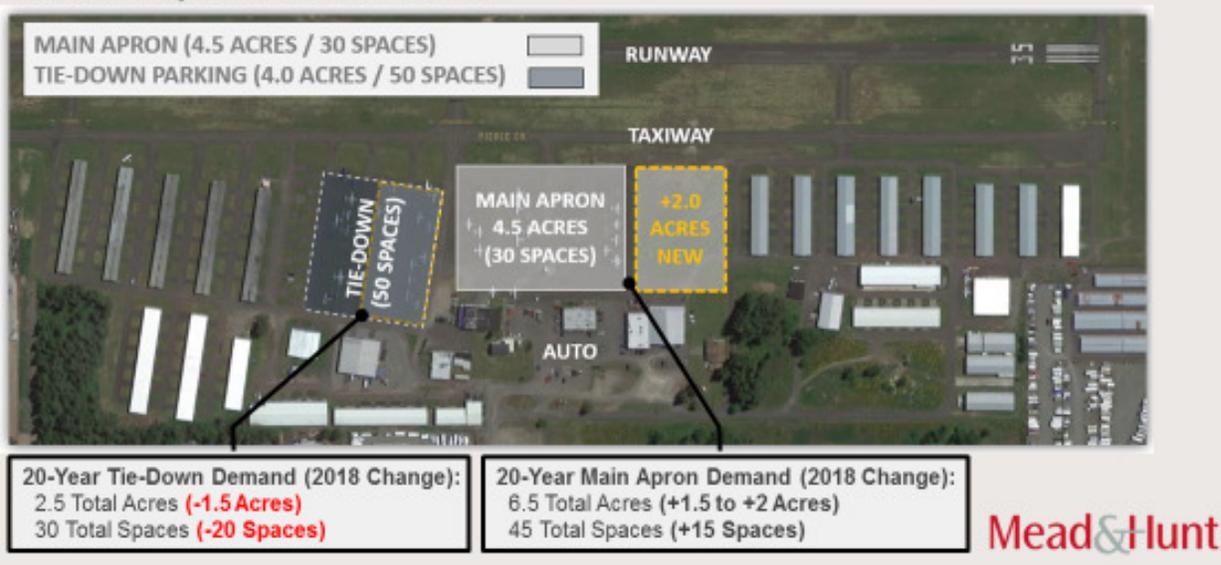
New Terminal/Hangar Site Area Options A and B:



- Recommend expansion of the main paved apron, approximately 1.5 to 2.0 acres, to accommodate future peak-month transient and FBO based aircraft parking positions, including apron areas dedicated to larger (turbine) aircraft parking and aircraft fuel dispensing locations for 100LL (existing) and Jet-A (future). See the following exhibit.

4. Terminal Expansion Factors (Westside)

Aircraft Apron and Tie-Down

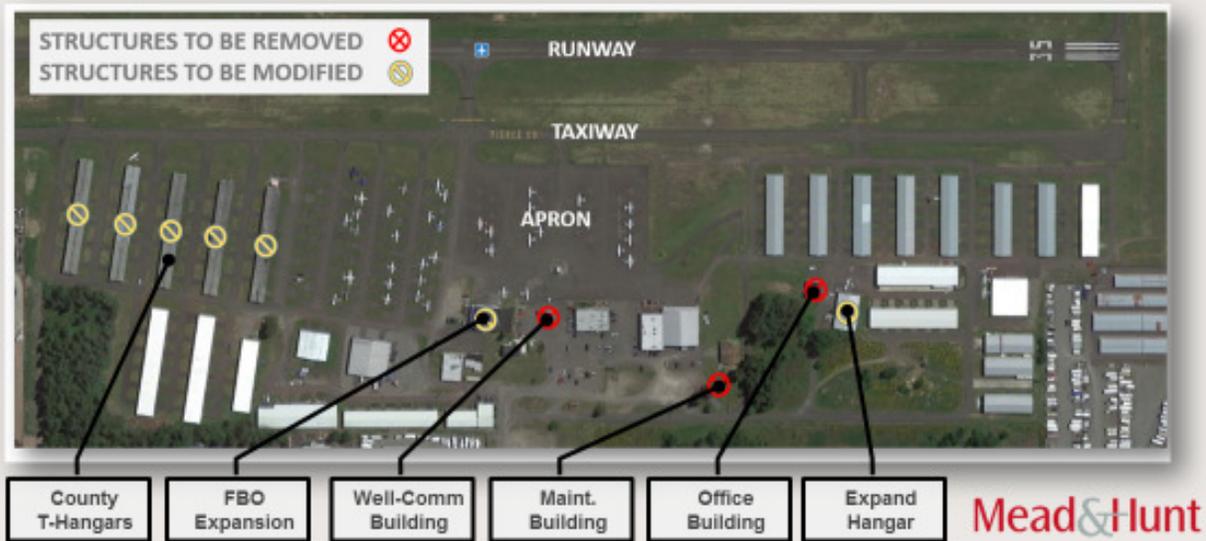


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- The existing tie-down ramp offers more parking positions/area than required for based aircraft owners and tenants. It is recommended a portion of the existing tie-down area be converted into other aviation uses; such as aircraft hangars, fuel storage, or other aviation support structures.
- The MPAC was presented the existing buildings/hangar structures being considered for redevelopment and possible removal-relocation. The following is the recommendation for future building and structure disposition, which is important for identifying terminal area sites to be considered for potential site re-development. This recommendation involves retaining the existing County T-hangars. See the following exhibit.

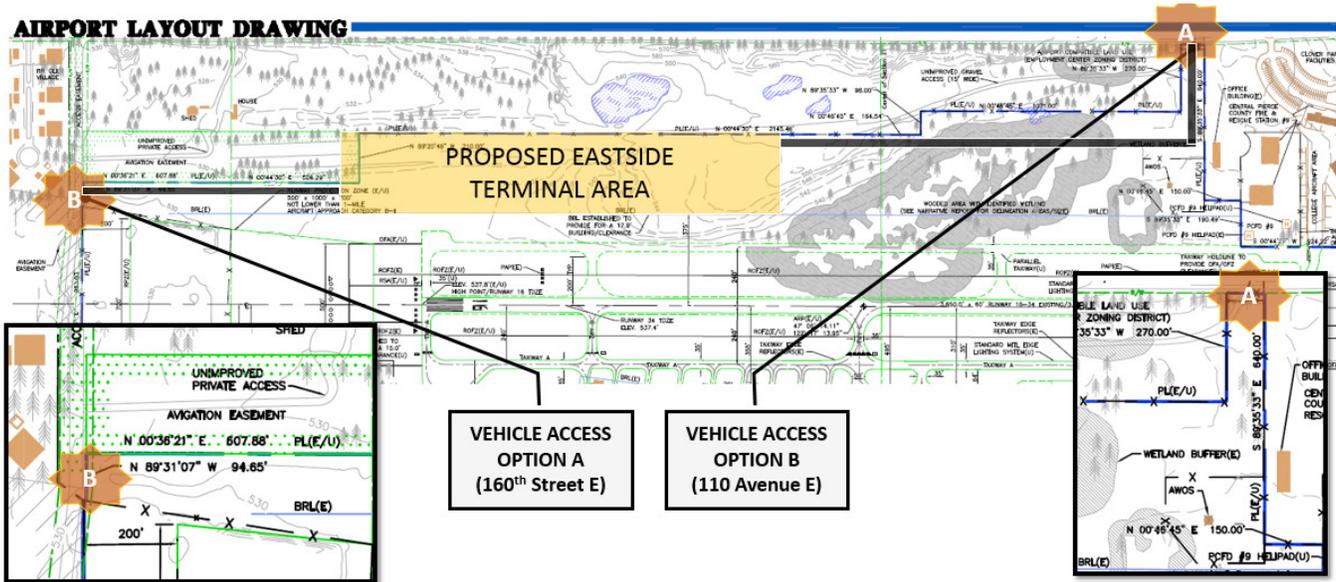
4. Terminal Expansion Factors (Westside)

Future Building/Hangar Disposition (Preliminary):



Terminal Area Development Recommendation – Eastside

- The eastside terminal area provides about 14 acres of suitable development area, without encroaching wooded and wetland/buffer areas. The eastside terminal area would require the construction of airfield infrastructure, utilities, and vehicle access.
- Vehicle access to the eastside terminal area potentially could connect with 110th Avenue towards the east (Access Option A) and/or 160th Street to the north (Access Option B); both options within existing Airport property. Both access options will be reviewed by Pierce County for consistency with County planning and design standards. Option B is preferred by County, with no other County roadway or intersection coordination expected for PLU Master Plan purposes. See the following exhibit.

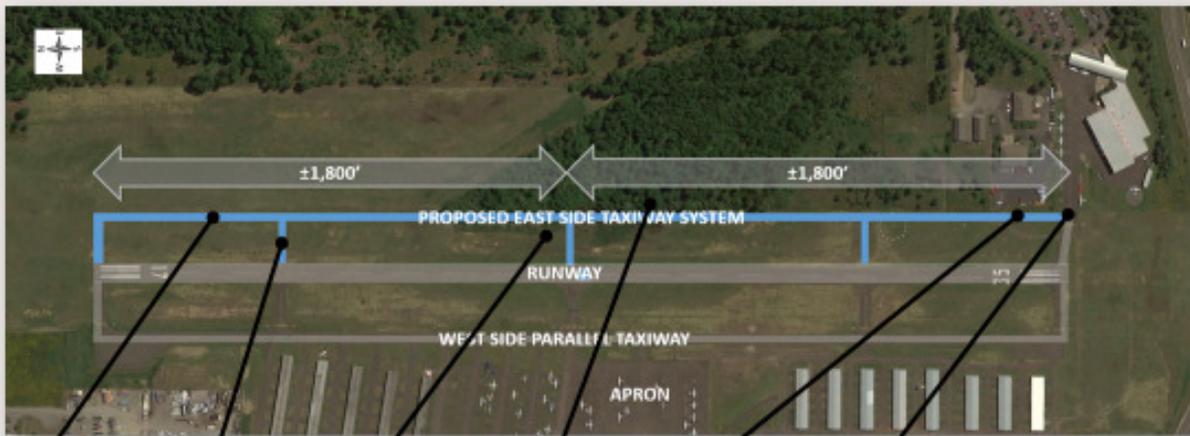


Proposed East Side Parallel Taxiway System

- The proposed eastside parallel taxiway system is recommended to reduce runway crossings (reduce runway incursion risks), increase airfield capacity, and support planned eastside terminal development. The eastside parallel taxiway would likely be a phased development. The northside taxiway section would be beneficial to support the planned eastside terminal development. See the following exhibit.

4. Terminal Expansion Factors (Eastside)

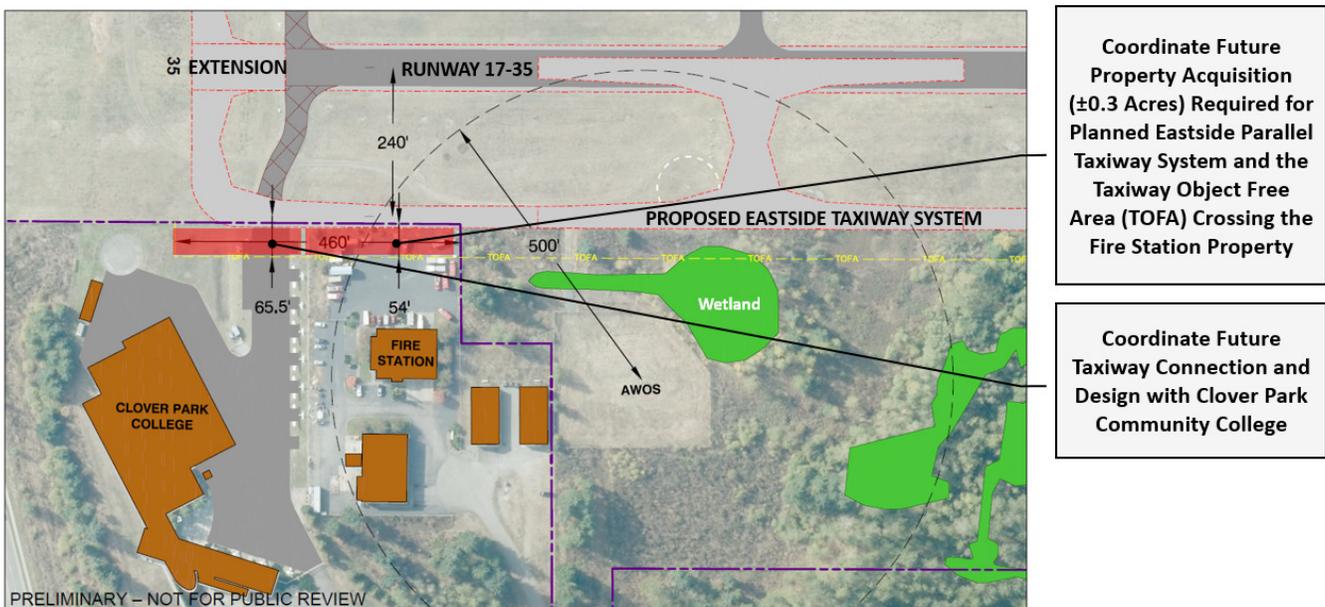
Recommended Eastside Parallel Taxiway System: Factors



- Construction Phasing
 - Taxiway Exit Location(s)
 - Wetlands
 - Tree Removal
 - Fire Station Property
 - College Connection
- Mead & Hunt**

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- The southside parallel taxiway segment would be beneficial to support the college flight training operations. Taxiway development would involve the following factors: 1) phased exit taxiway locations, 2) wetlands, 3) tree removal, 4) fire station property interests to accommodate FAA taxiway safety areas, 5) connection with the Clover College taxiway system, and 6) wind indicator relocation.
- The proposed eastside parallel taxiway system would require property interests from the Fire Station to accommodate the Taxiway Object Free Area (TOFA). The County anticipated the ability to acquire sufficient Airport property interests from the Fire Station and the Clover Park College to accommodate the proposed eastside parallel taxiway system.



PUBLIC OUTREACH MEETING #1 - PRELIMINARY CONSIDERATIONS

- When: Tentatively being considered for late summer, 2018
- Where: PLU Airport
- Location: Outdoor (tent or hangar) or Indoor (FBO building)

Note: Public Outreach Meeting #1 date to be determined based on receiving FAA Forecast Chapter review/approval.

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MPAC MEETING #5 ATTENDANCE

#	PLU MPAC Member	MPAC Meeting #5 05-14-2018
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Attendants - #	8
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1	Shelly Schlumpf	
2	Lydia Gathara (or)	
2	John Hinds (or)	
3	Dan Roach	
4	John MacArthur	Attended
5	Jeff Storrar	Attended
6	Robert Rodriguez	
7	Rusty Wilder	
8	Sergeant Chris Adamson	Attended
9	Deputy Chief Pat Donovan	Attended
10	John Hurlbut	Attended
11	Doug Miller	Follow-Up Call
12	Rod Wetherbee	Attended
13	Keith Kemper	Attended
14	Nichole Weber	
15	Hans Kueck	Attended

Other Non-MPAC Stakeholders in Attendance

--	Jennifer Kandel - FAA	Attended
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SUPPORTING INFORMATION

FAA RUNWAY PROTECTION ZONE (RPZ)

FAA Advisory Circular 150/5300-13A , Airport Design

9/28/2012

AC 150/5300-13A

(2) Approach/Departure RPZ. The approach RPZ dimensions for a runway end is a function of the aircraft approach category and approach visibility minimum associated with the approach runway end. The departure RPZ is a function of the aircraft approach category and departure procedures associated with the runway. For a particular runway end, the more stringent RPZ requirements, usually the approach RPZ requirements, will govern the property interests and clearing requirements the airport owner should pursue.

9/28/2012

AC 150/5300-13A

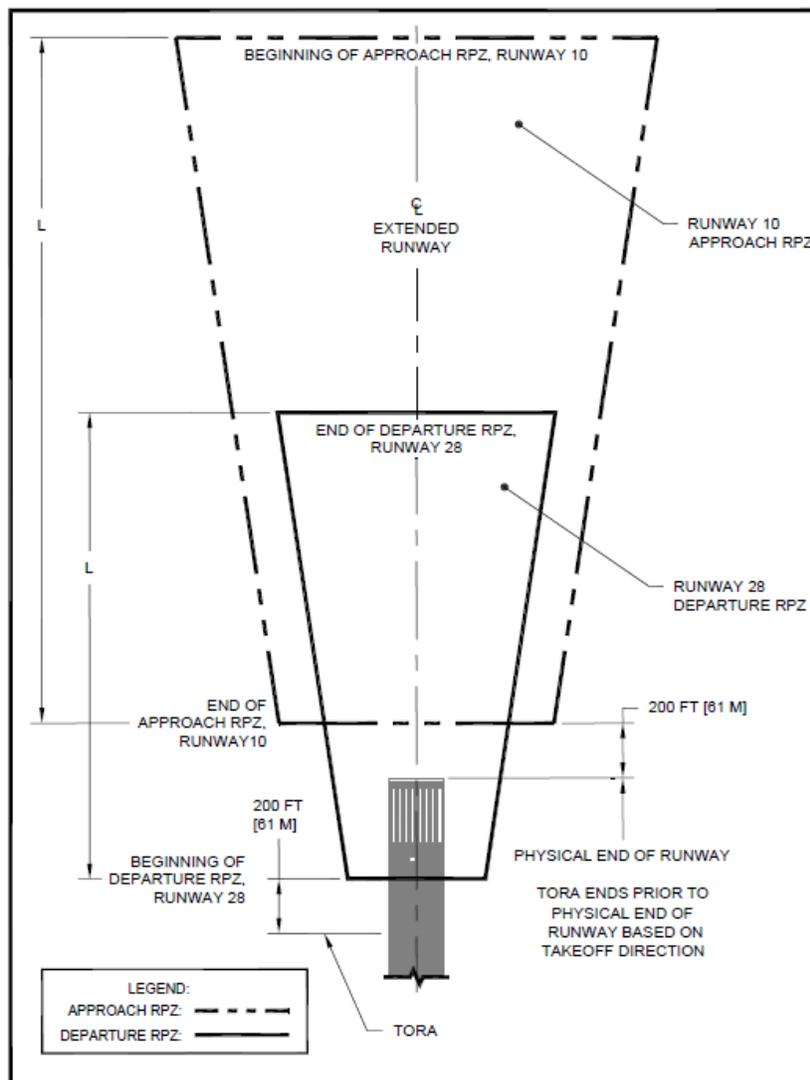


Figure 3-18. Approach and departure RPZs where the Takeoff Run Available (TORA) is less than the Takeoff Distance Available (TODA)

FAA DECLARED DISTANCES

AC 150/5300-13A

9/28/2012

322. Declared distances.

a. Application. Declared distances represent the maximum distances available and suitable for meeting takeoff, rejected takeoff, and landing distances performance requirements for turbine powered aircraft. The declared distances are TORA and TODA, which apply to takeoff; Accelerate Stop Distance Available (ASDA), which applies to a rejected takeoff; and Landing Distance Available (LDA), which applies to landing. A clearway may be included as part of the TODA, and a stopway may be included as part of the ASDA. By treating these distances independently, declared distances is a design methodology that results in declaring and reporting the TORA, TODA ASDA and LDA for each operational direction.

