



Yakima Air Terminal/McAllister Field Airport Master Plan Update

TAC/CAAC Presentation

October 8, 2012



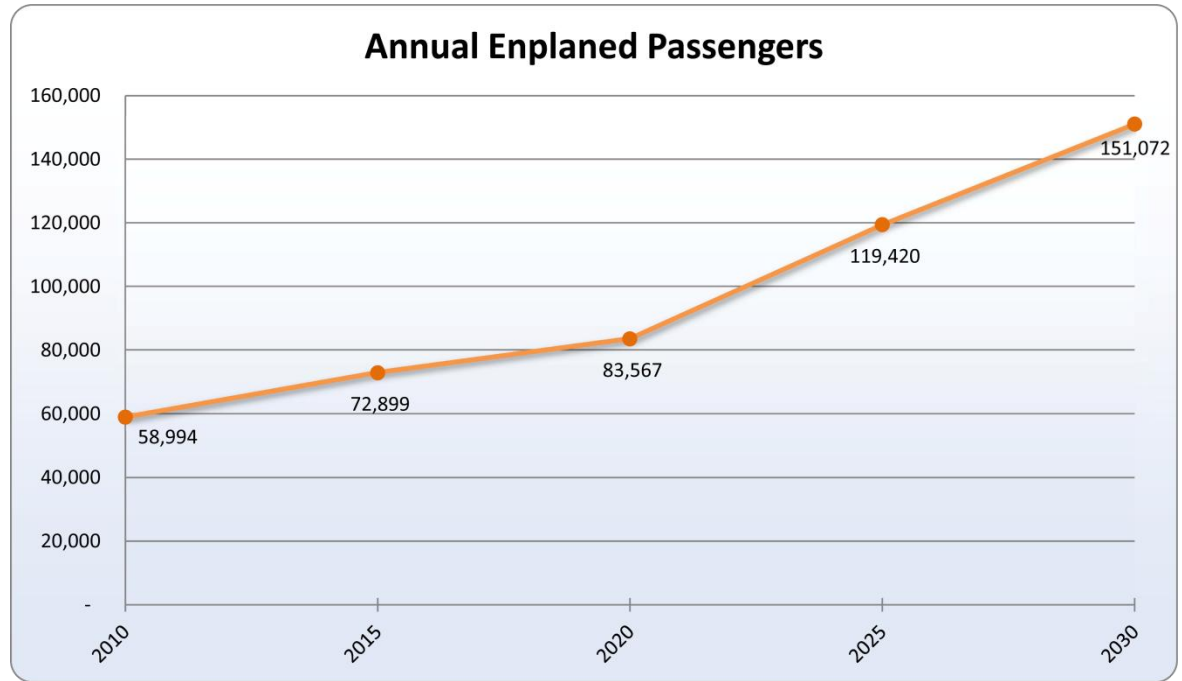
Master Plan Status

- Inventory of Existing Conditions
- Terminal Building Assessment
- Pavement Conditions Report
- Forecast of Aviation Demand – FAA Approved!
- Determination of Facility Requirements
- **Alternative Analyses**
- Airport Layout Plan
- Implementation Plan



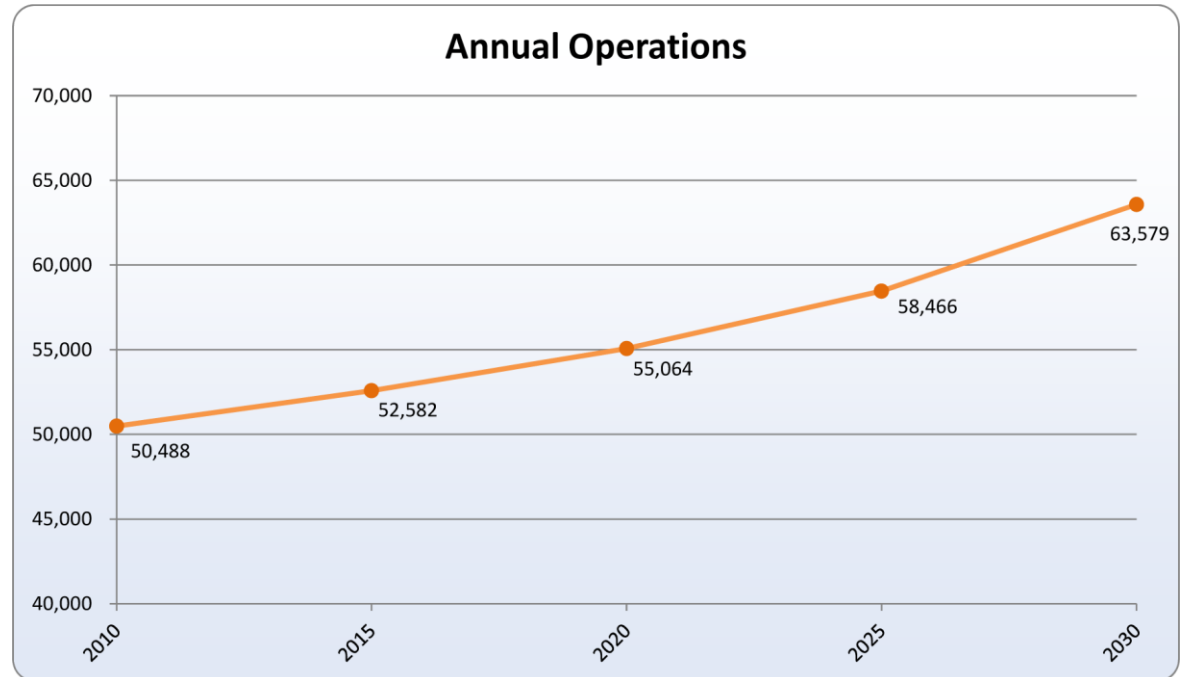
Passenger Demand

- Moderate annual growth in the short-term.
- More of the “potential market” will use YKM by 2020.
- By 2030, more than 150,000 people will enplane at YKM each year.



Operations Demand

- Moderate annual growth is expected through 2030.
- 2030 forecast is for 63,000 annual operations.



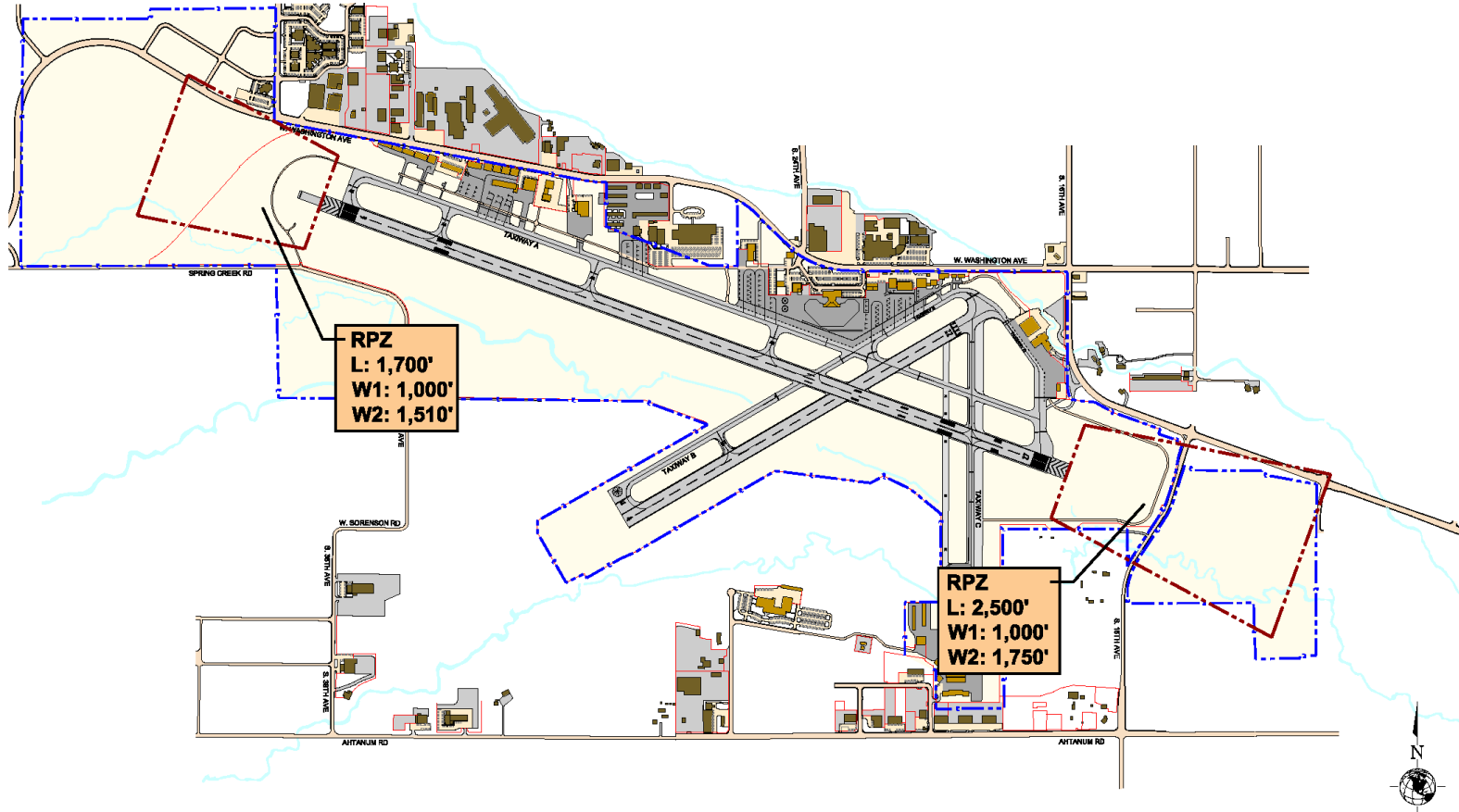
Airfield Requirements

- Runway 9-27 is long enough to support most forecast operations.
- FAA will not support any extension until a specific need arises.
- Should this master plan include a contingency for additional length to allow for economic growth?



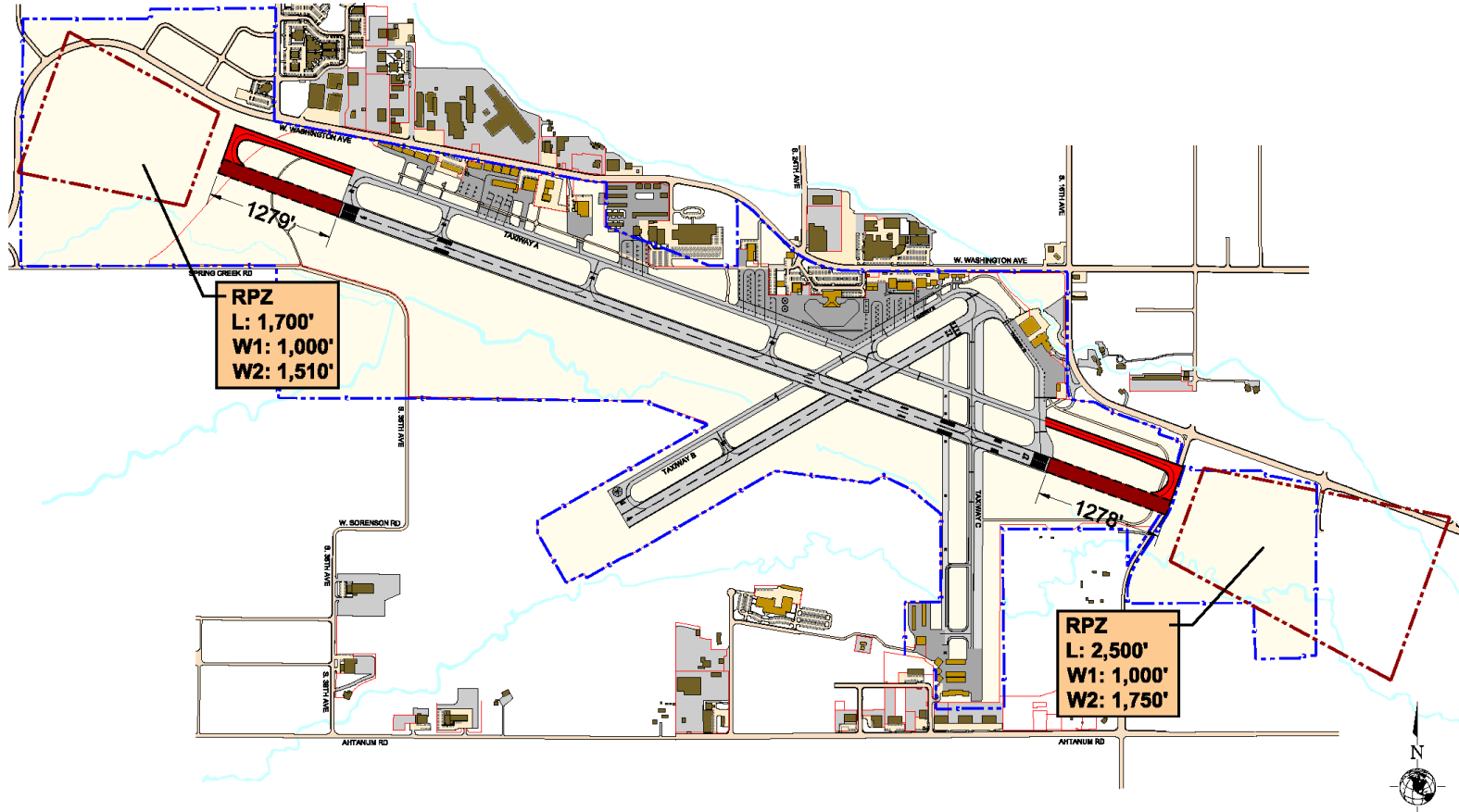
Airfield Alternative 1

Do-Nothing



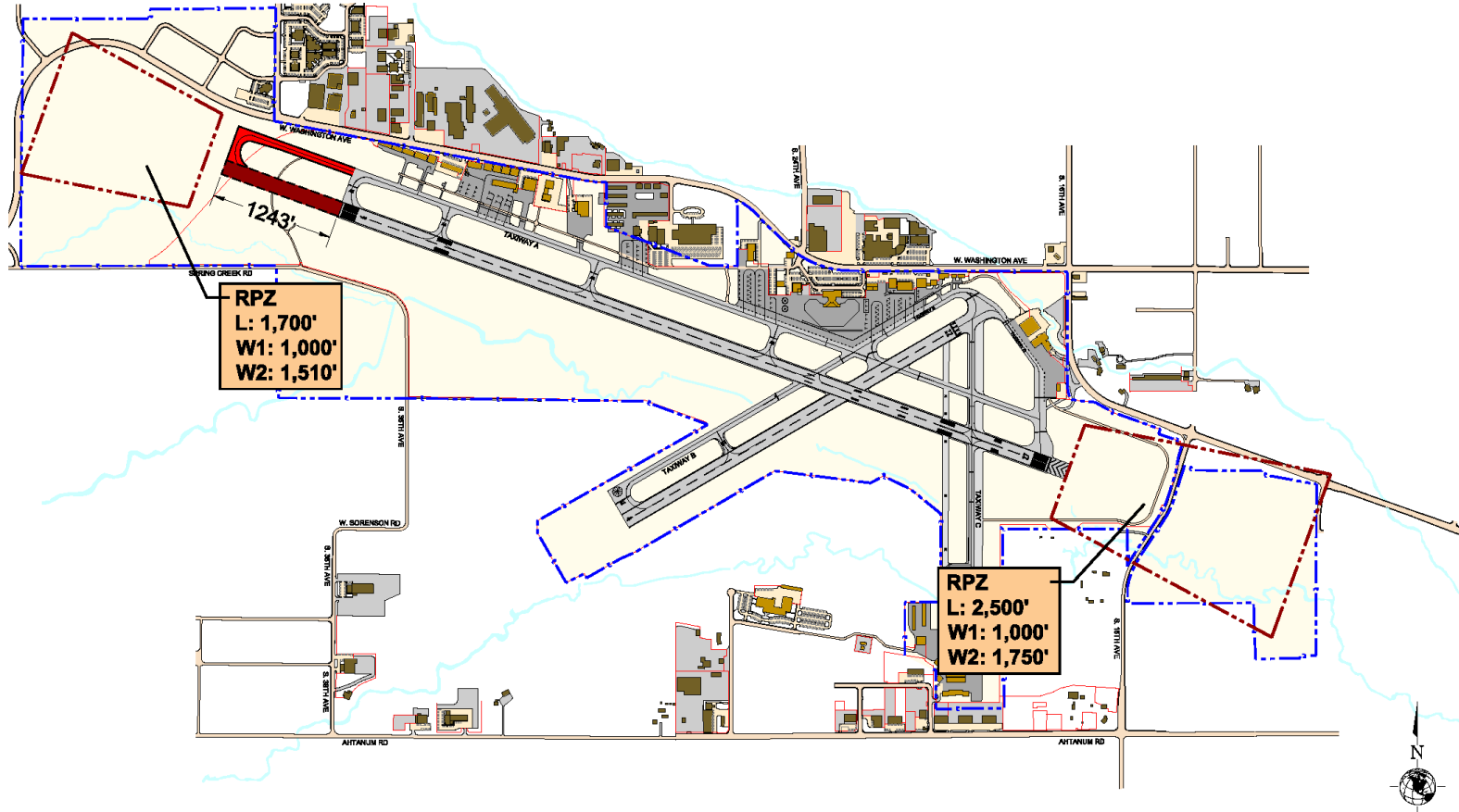
Airfield Alternative 2

Extend to 10,000 feet



Airfield Alternative 3

Extend Within Current Property - 8,847 feet



How Do We Compare the Alternatives?

- Does it meet the forecast need?
- Does it impact the instrument approach?
- How does it impact land use compatibility?
 - Part 77 Surfaces
 - Noise
 - Airport Use Zones
- Are there environmental factors?
- What are the engineering/logistical considerations?
- How much will it cost?



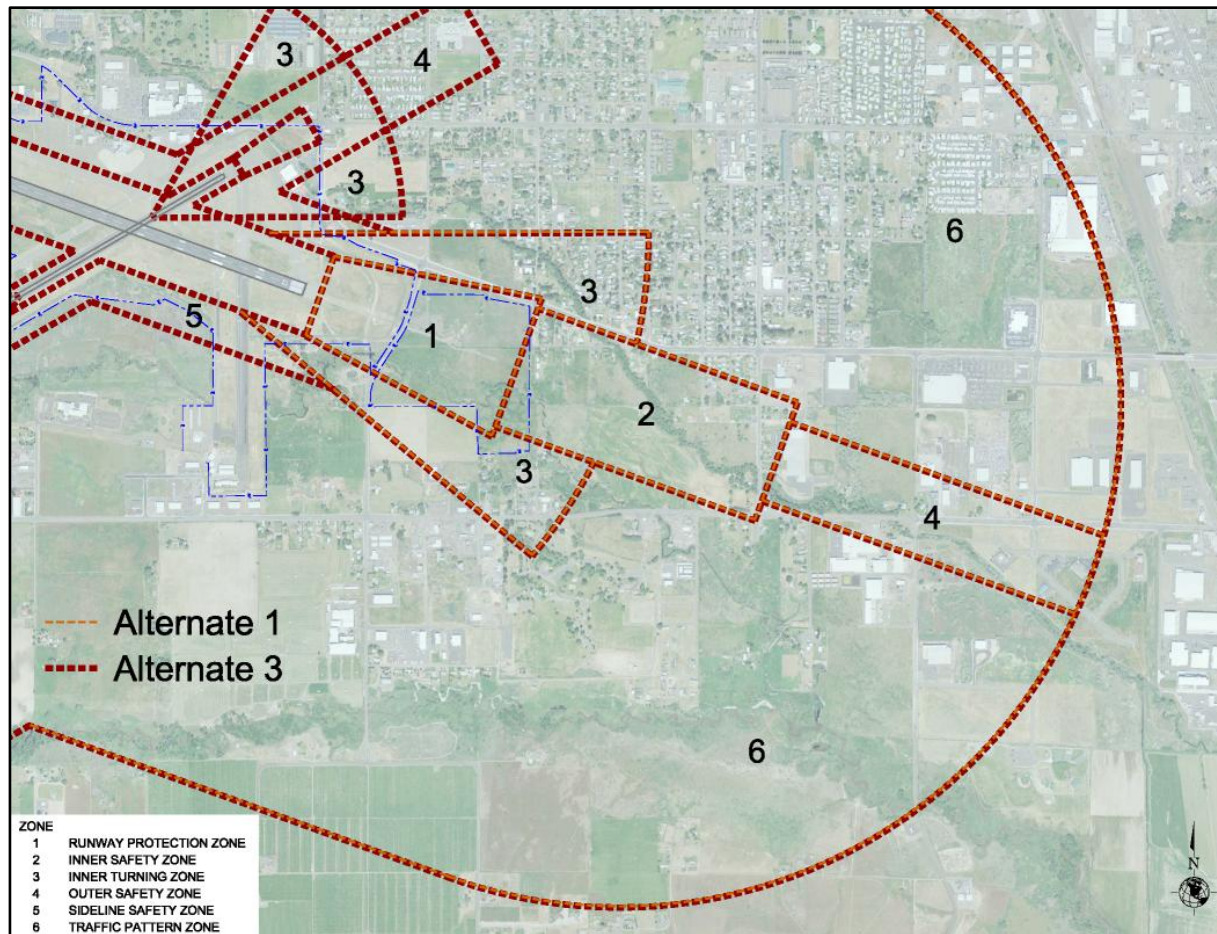
Analyses

	Alternative 1	Alternative 2	Alternative 3
Does it meet the forecast need?	Meets the needs of the critical aircraft and most operations.	10,000 feet exceeds the needs of the aircraft either using YKM or likely to in the future.	8,847 feet of available runway meets the needs of the critical aircraft as well as offers expansion potential to react to unforeseen opportunity.
Does it impact the instrument approach?	No impact on the precision approach to Runway 27.	Runway 27 threshold will move 1,278 feet to the west under this alternative. This would require a reconfiguration of the ILS system and a redesign of the approach procedure.	No impact on the precision approach to Runway 27. Would require relocation of the localizer antenna.
How does it impact land use compatibility?	No off-airport impacts.	Extending the runway on both ends changes the ACOZ in both directions and over three individual jurisdictions.	No off-airport impacts if a displaced threshold is established on Runway 9.
Are there environmental factors?	None	Establishing work zones on both ends of the existing runway adds complications and costs to the implementation.	None
Estimated Cost	None	\$14.5 Million	\$5.8 Million



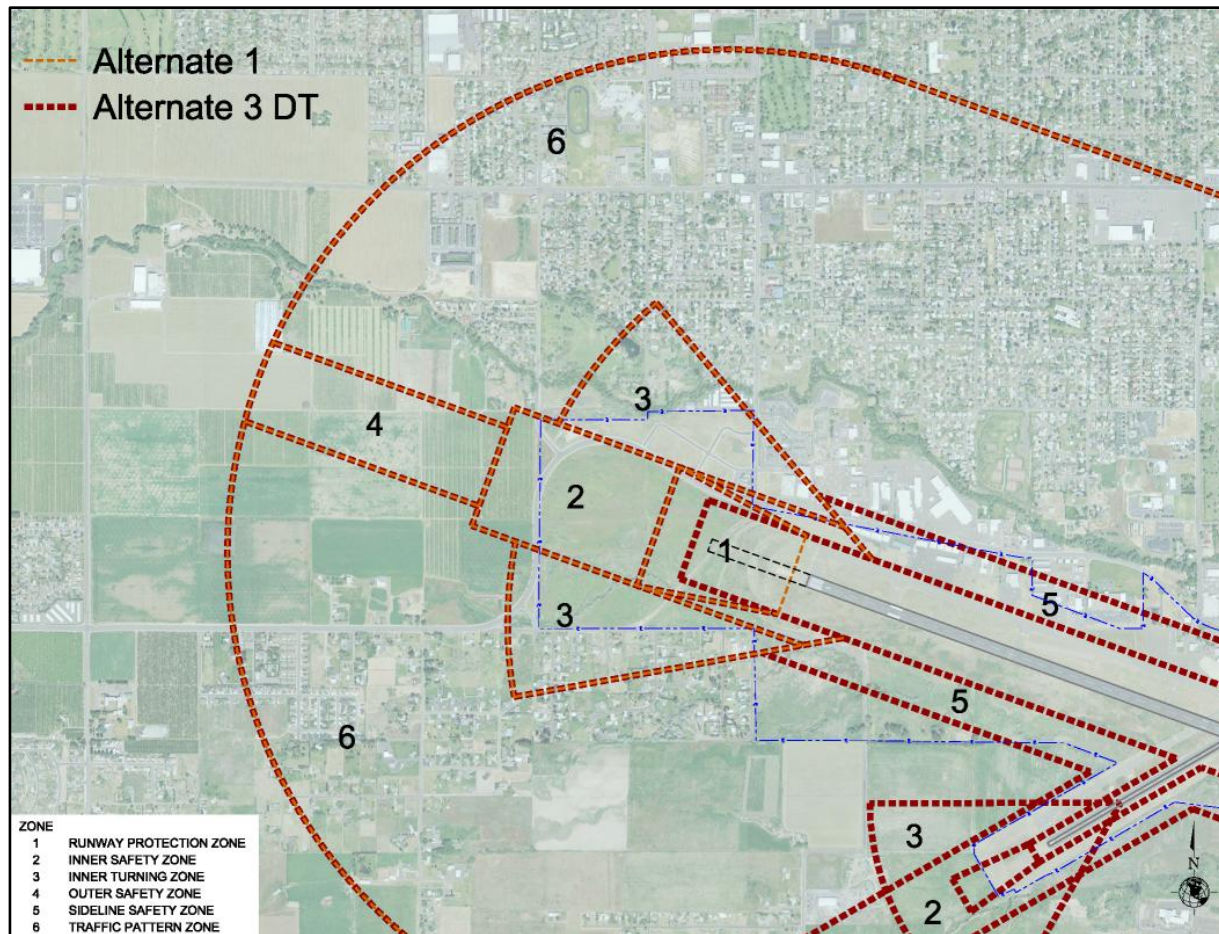
Land Use Impacts

Extend w/in Current Property - 8,847 feet (Rwy 27 Zones)



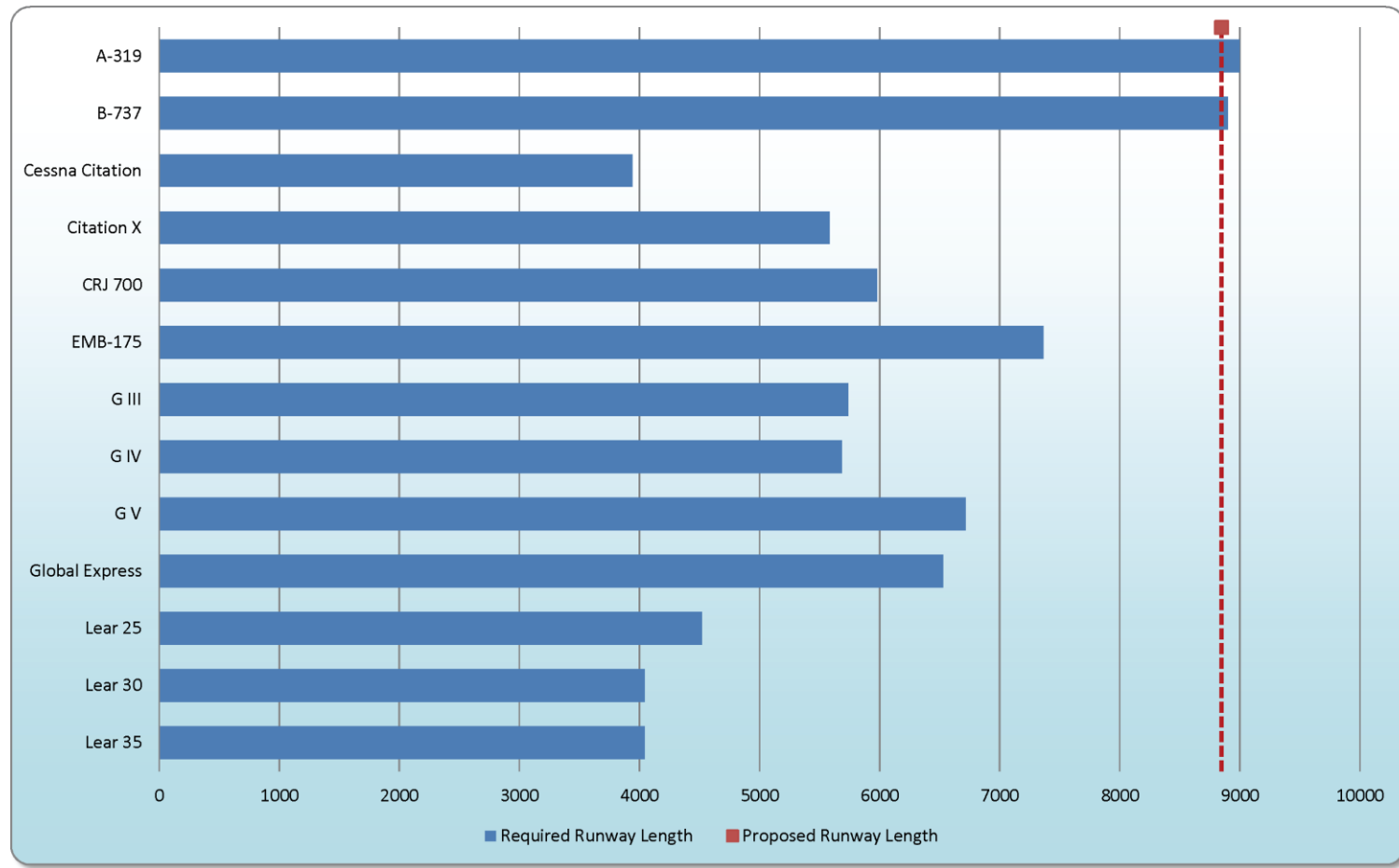
Land Use Impacts

Extend w/in Current Property – Displaced Threshold (Rwy 9 Zones)

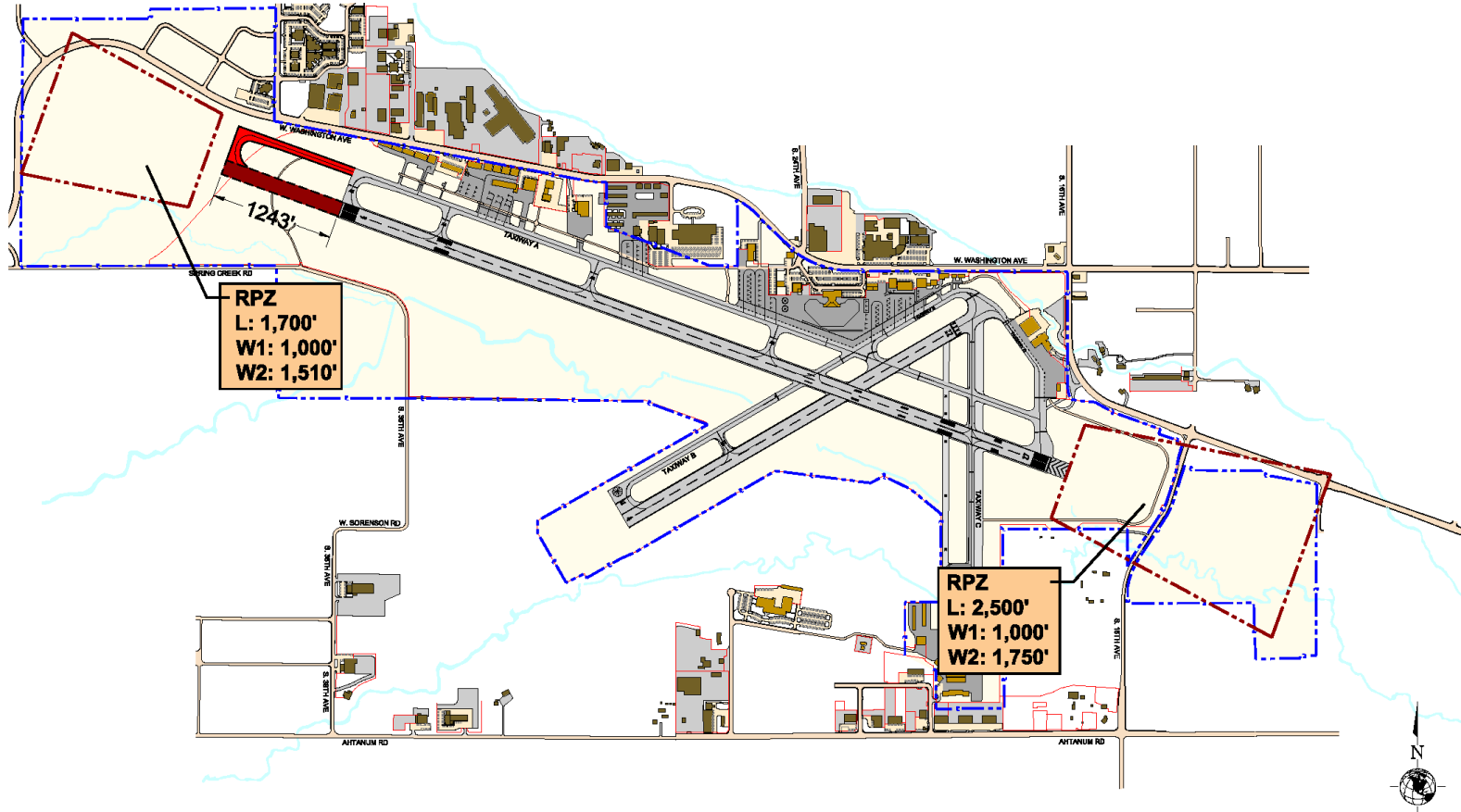


Runway Length

8,847 ft. is sufficient for most aircraft expected to use the airport.



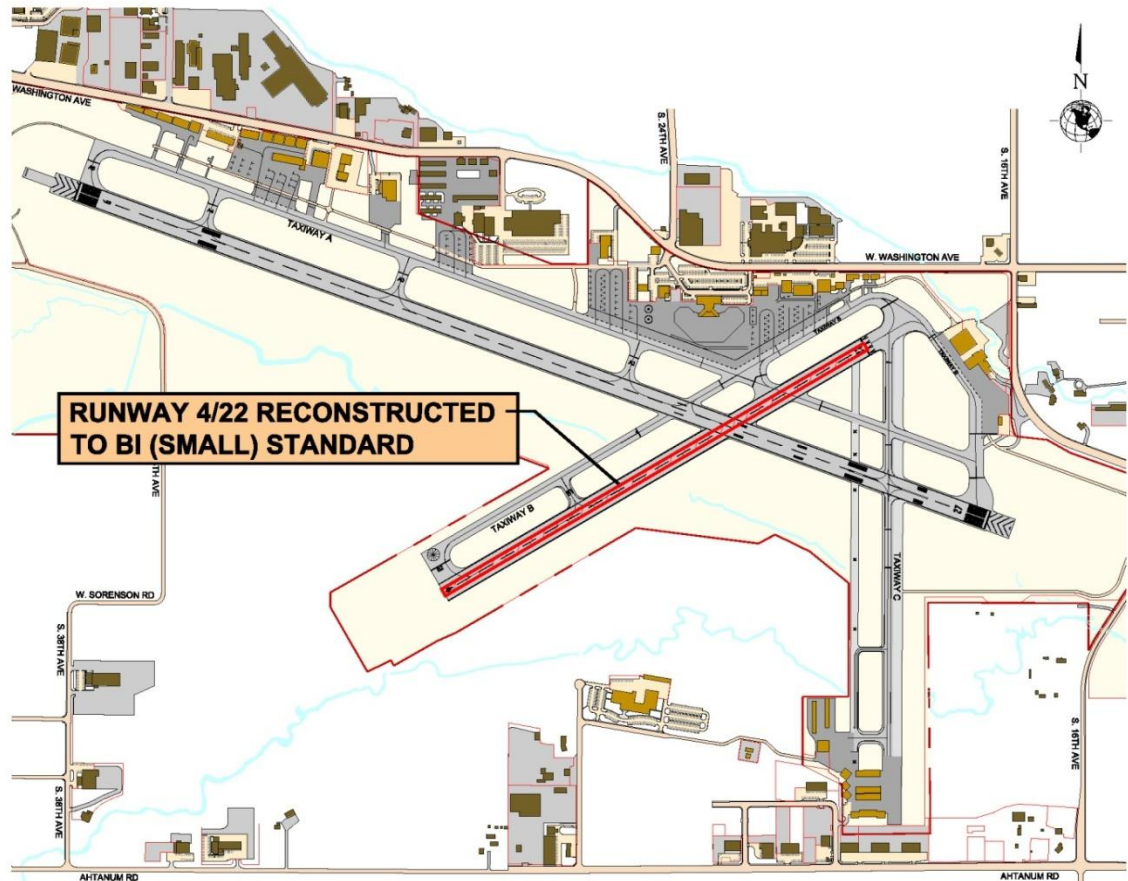
With Threshold Adjustments



Runway 4/22

Evaluation

- Wind coverage for 9-27 is 96.51%.
- Runway 4-22 is used less than 8% of the time.
- Cost of runway rehabilitation is \$1.1 million.
- Cost of rehabilitation is not FAA eligible.
- Maintenance will not be eligible either.



Terminal Requirements

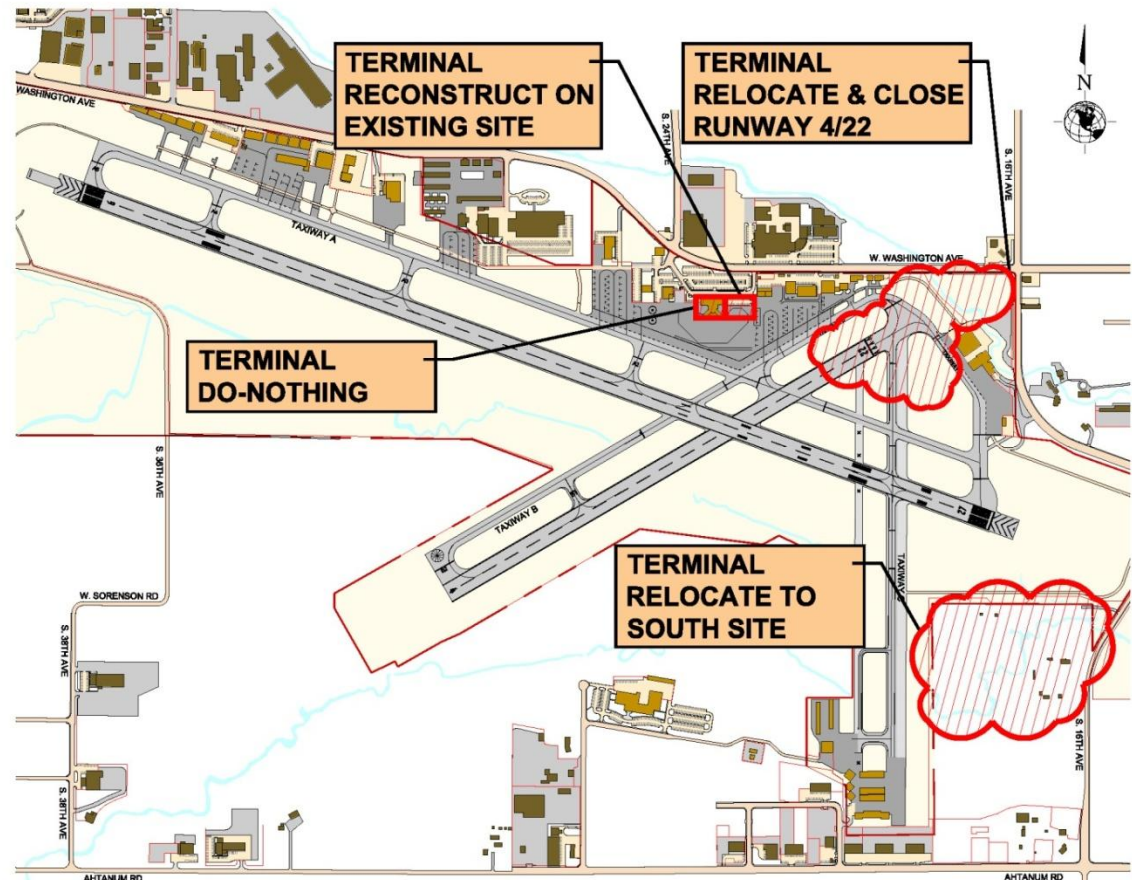
- The passenger terminal building requires short-term maintenance and improvement before 2015 and building expansion prior to 2025.



Terminal Alternatives

Evaluation Factors

- Airspace.
- Available land.
- Expandability/flexibility.
- Community access.
- Adjacent land uses.
- Design issues.
- Estimated cost.



Terminal Evaluation

	Do-Nothing	Reconstruct on Existing Site	Relocate and Close Runway 4/22	Relocate to The South Side
Airspace –Meets FAR Part 77 Criteria	Yes	Yes	Yes	Yes
Available Land	Yes	Yes	Yes	No
Expandability/ Flexibility	Yes	Yes	Yes	Yes
Community Access	Yes	Yes	Yes	Change
Compatibility with Adjacent Land Uses	Yes	Yes	Yes	Yes
Design Issues	Rehabilitate existing building while maintaining operations.	Siting building to use parking and aprons efficiently.	None	Creating new access.
Estimated Cost	\$6.5 Million	\$15 Million	\$20.4 Million	\$20.4 Million



Recommendation

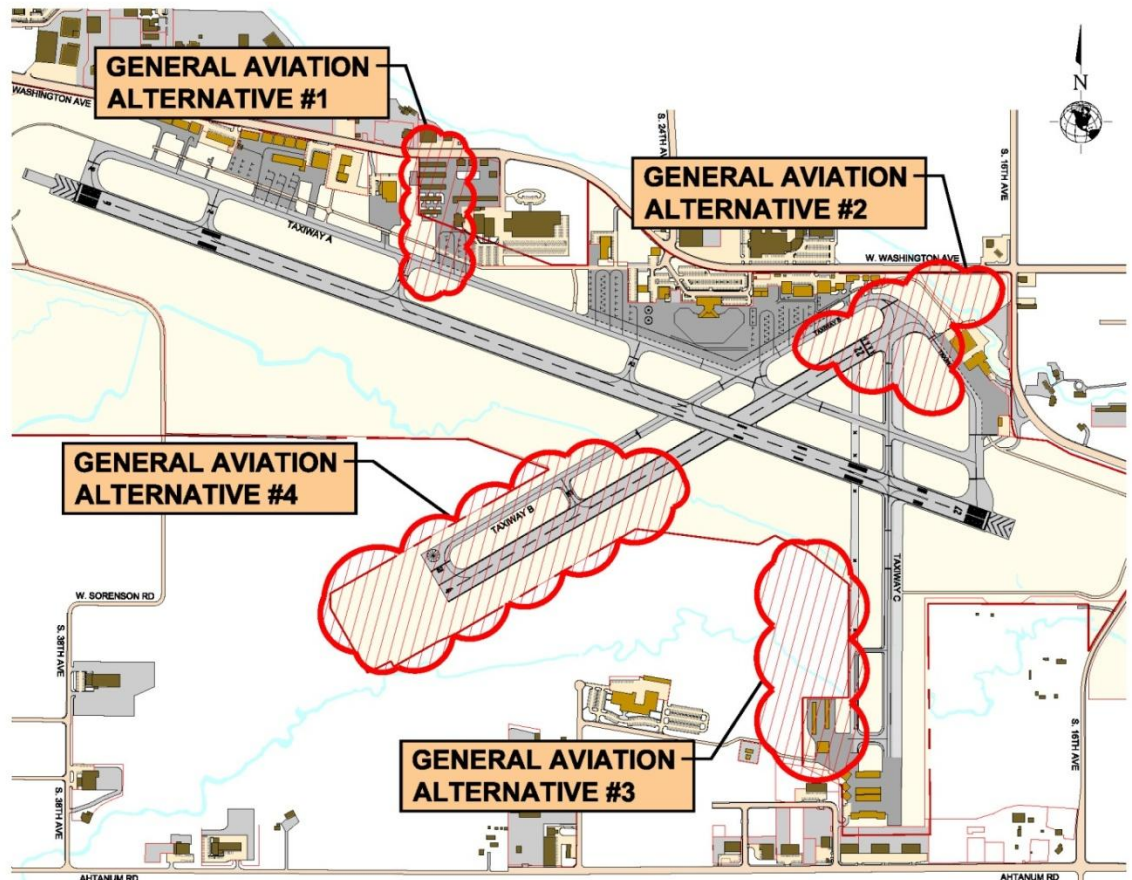
- Build a new terminal adjacent to the existing site to take advantage of the apron, parking and access.



General Aviation Alternatives

Evaluation Factors

- Airspace.
- Land availability.
- Adaptability.
- Compatibility with adjacent land use.
- Environmental issues.
- Estimated cost.



GA Expansion

	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Meets FAR Part 77 Criteria	Yes	Yes	Yes	Yes
Sufficient Land Available	Area will need to be purchased.	Yes	Requires purchase of 14 acres of land.	Additional land would be needed to provide access.
Can Site Adapt to Unforeseen Needs	Existing hangar development	Yes	Yes	Yes
Compatibility with Adjacent Uses	Yes	Yes	Yes	Yes
Environmental Issues	None	None	Consideration needs to be given to both Spring and Bachelor Creeks.	Consideration needs to be given to both Spring and Bachelor Creeks.
Design Issues	Existing hangar development.	Development cannot occur unless Runway 4-22 is closed.	Development in this area should include a parallel access taxiway and a new parallel taxiway connection to runway end 27.	Development cannot occur unless Runway 4-22 is closed and new access road linkage will be needed.
Estimated Cost	\$1.5 Million	\$4.5 Million	\$9.1 Million (includes new taxiways)	\$5.8 Million (includes new taxiways)



Recommendation

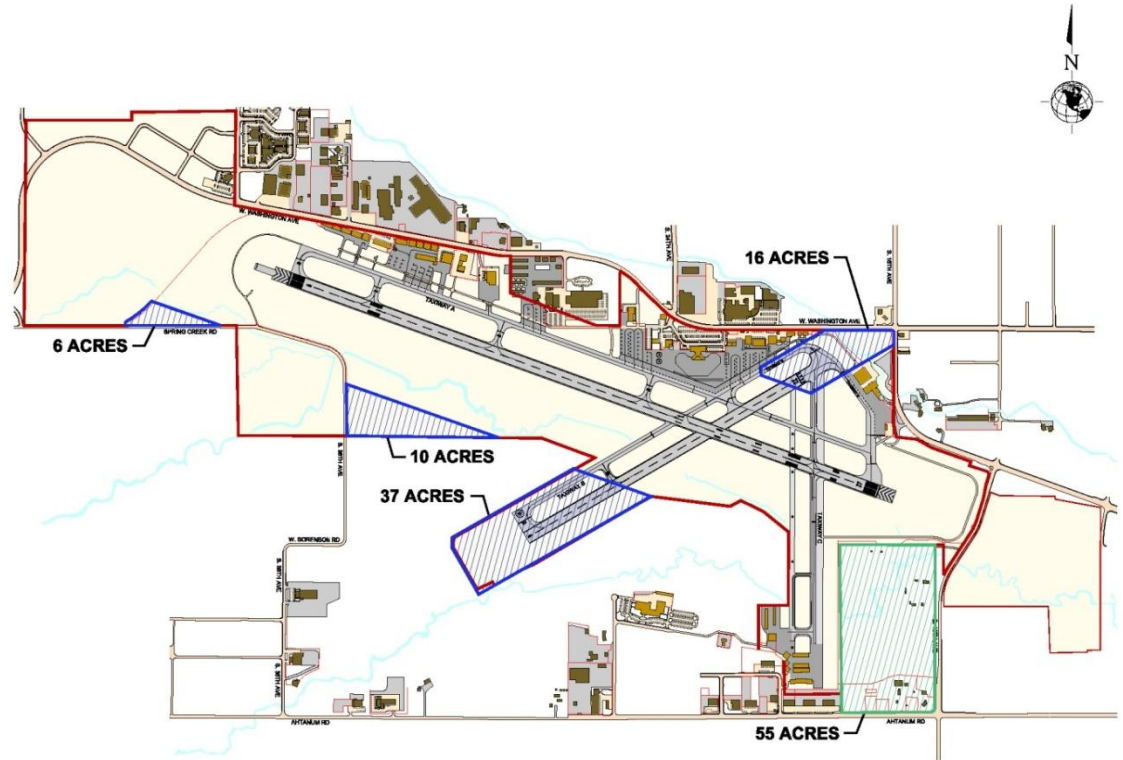
- Purchase the Noland Dekoto hangars in the short-term.
- Direct any additional GA expansion to the south end.
- If Runway 4-22 is deactivated, Alternative 2 could be open for bid.



Other

Recommend that all unused land with airfield access be preserved for:

- Heavy maintenance and overhaul (M&O) facilities.
- Aircraft manufacturing.
- Aviation-related industrial.
- Aviation-related commercial.



Questions - Concerns

