

# Yakima Air Terminal/McAllister Field Airport Master Plan Update

City of Yakima Work Session

July 9, 2013



#### **Meeting Goals**

- Summarize the master plan recommendations.
- Discuss the decision-making process used for recommended actions.
- Seek consensus that the plan supports the City's vision for YKM.
- Discuss the remaining steps.
- Project close-out.

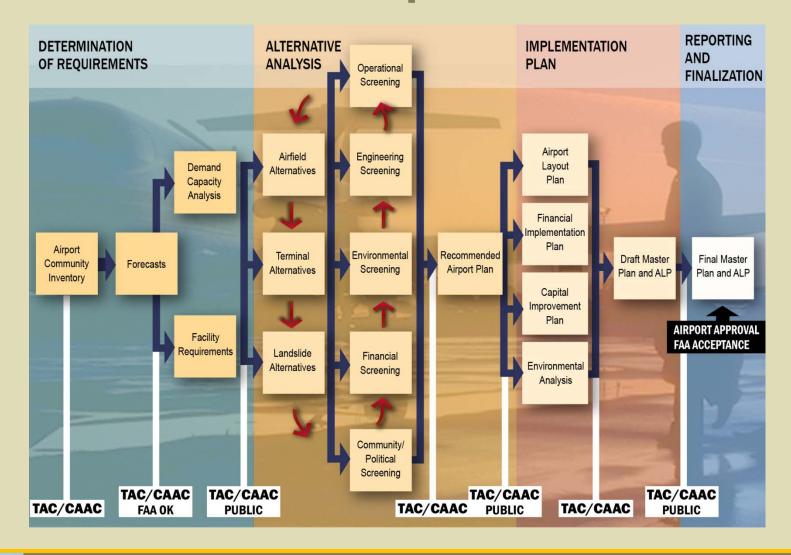


#### **Project Status**

- Inventory of Existing Conditions
- Forecast of Aviation Demand
- Determination of Facility Requirements
- Alternative Analyses
- Airport Layout Plan Needs FAA Approval
- Implementation Plan
- Terminal Building Assessment
- Pavement Conditions Report

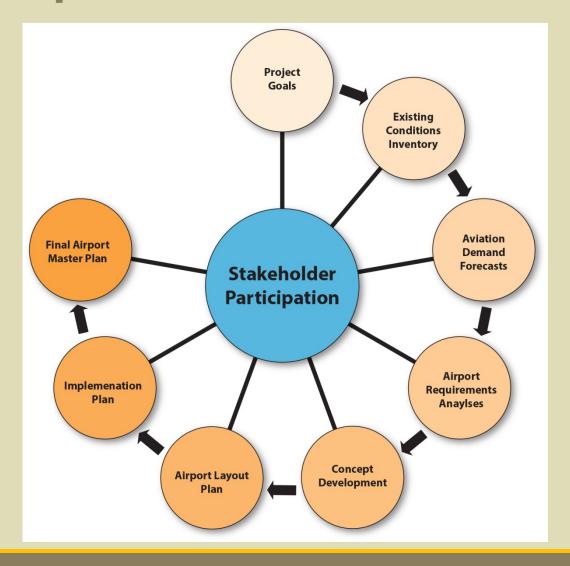


#### **Master Plan Development**





## **Public Input Process**





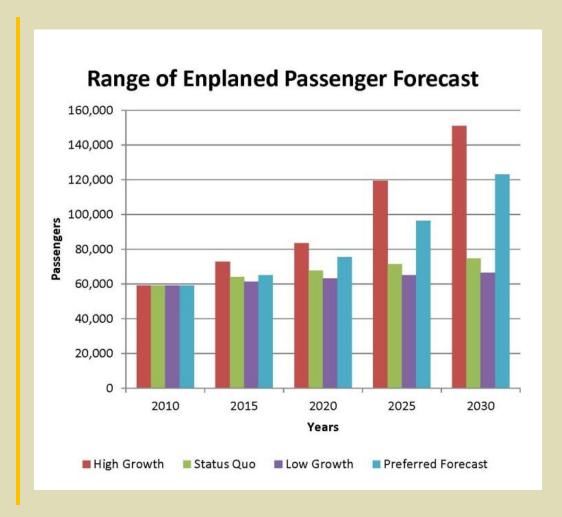
#### **Forecasts of Aviation Demand**

- Determine the airport's role in the aviation system;
- Determine the improvements to the airfield, terminal facilities, apron areas, and airside/landside access circulation and parking facilities needed to accommodate growth in demand;
- Estimate the potential environmental effects, such as noise and air quality, of the airport's operation on the surrounding community; and,
- Evaluate the financial feasibility of proposed capital improvement projects and alternative airport development proposals.



#### **Terminal Demand**

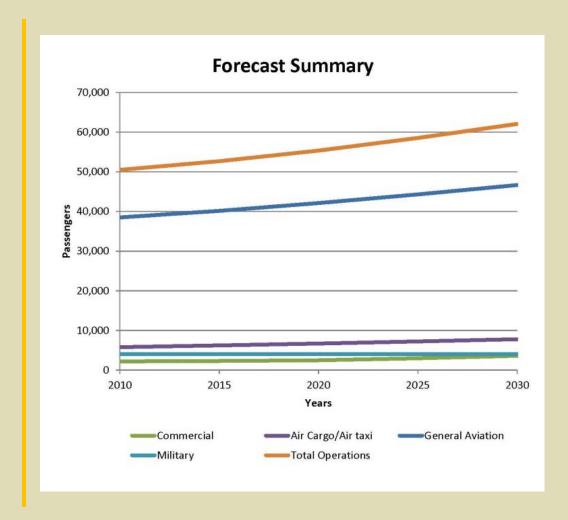
- The number of passengers at YKM is expected to double in 20-years.
- The increase in passengers is likely to result in additional airline(s) operating in the terminal.





#### **Airfield Demand**

- Operations have been relatively stable since the year 2000.
- Moderate growth is expected through the year 2030.





#### The Recommended Airside Plan

- Extend Runway 9/27 to a total length of 8,847 feet.
  - Can be constructed entirely on airport property.
  - Not required based on the 20-year forecast but provides an advantage for attracting new businesses and for comprehensive land use planning.



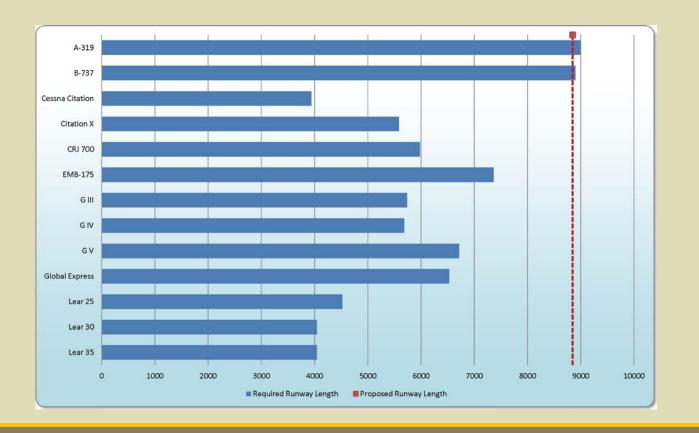
### **Aircraft Takeoff Length Requirements**

- Factors that impact aircraft performance
  - Air temperature operations in hot weather require longer runways
  - Aircraft weight Maximum take-off weight vs. reduced loads
  - Stage length Destination or origin of the flight



## Required Runway Length at YKM

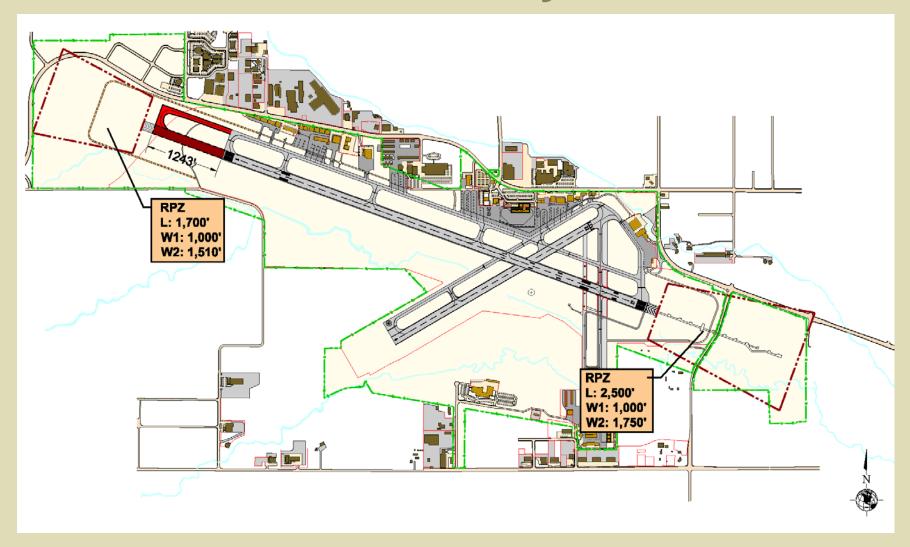
8,847 feet is sufficient for most aircraft expected to use the airport on a hot day.





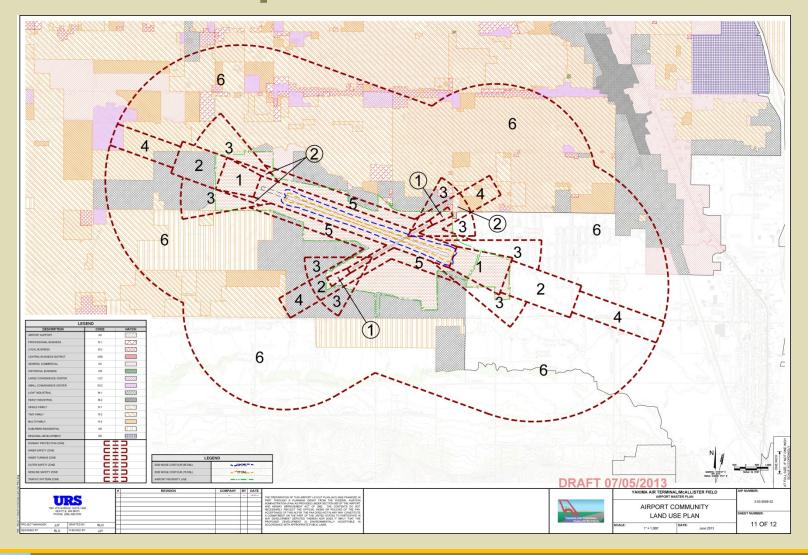


## **Recommended Runway Extension**





## **Land Use Impacts**



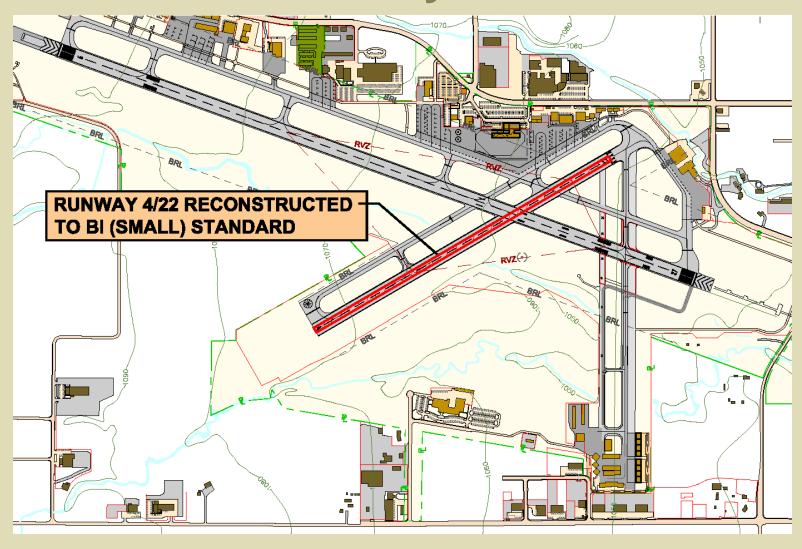


#### The Recommended Airside Plan

- Runway 4/22
  - Maintain operations until maintenance and rehabilitation projects are no longer feasible.
  - Designate as a B-1 (small) runway to minimize rehabilitation and maintenance costs.
  - Cost estimated to be \$2.5 million
- Realign access taxiways to eliminate direct runway access.
  - Required to reduce the potential for runway incursions.
  - Provides for decision points in taxiing as recommended in new FAA AC 150/5300-13A.



## Reconstruct Runway 4/22



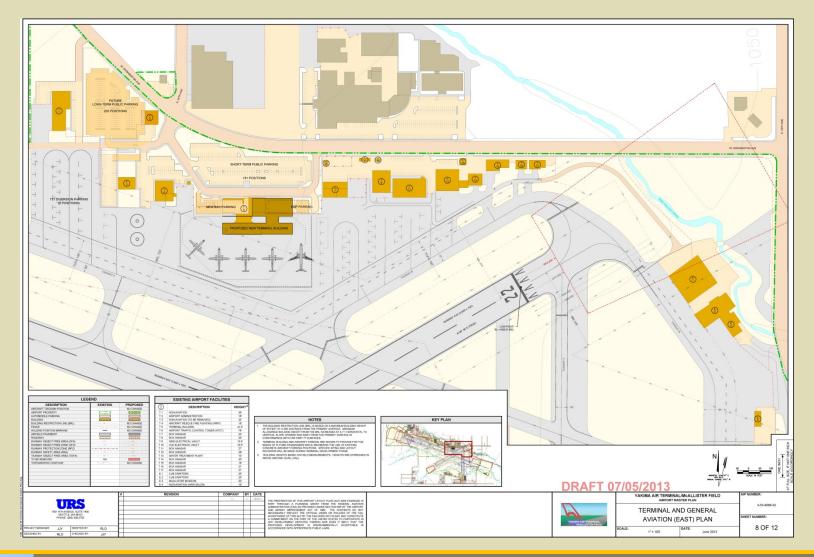


## Recommended Terminal and General Aviation Development Plan

- Construct a new terminal building at the existing site.
  - Maintains use of existing apron area, access and parking facilities.
  - Less expensive than moving terminal area \$21 million
- Continue to provide opportunities for General Aviation expansion.
  - Purchase, rehabilitate, and reuse Noland-Dekoto facilities.
  - Invest in taxiway and infrastructure improvements to support south GA area expansion.
    - Parallel access taxiway to provide two-way traffic flow
    - Partial parallel taxiway to runway threshold to eliminate intersection crossings and reduce runway incursion potential

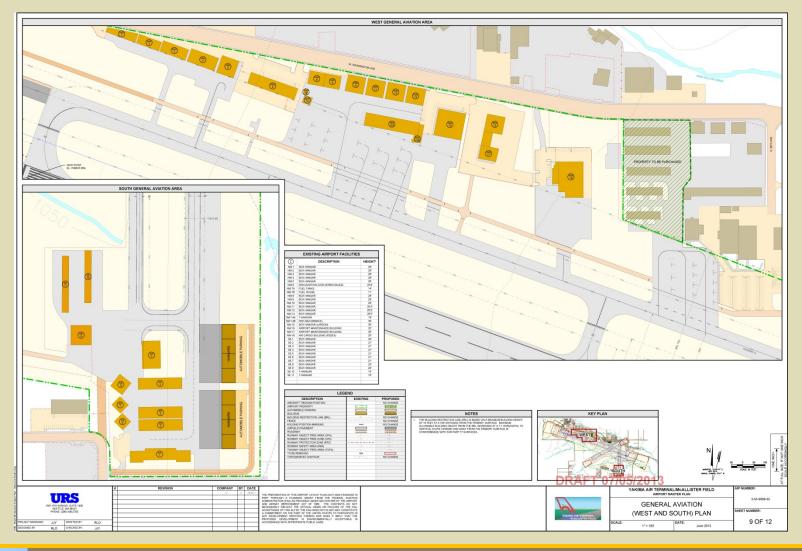


#### **Terminal Area Plan**



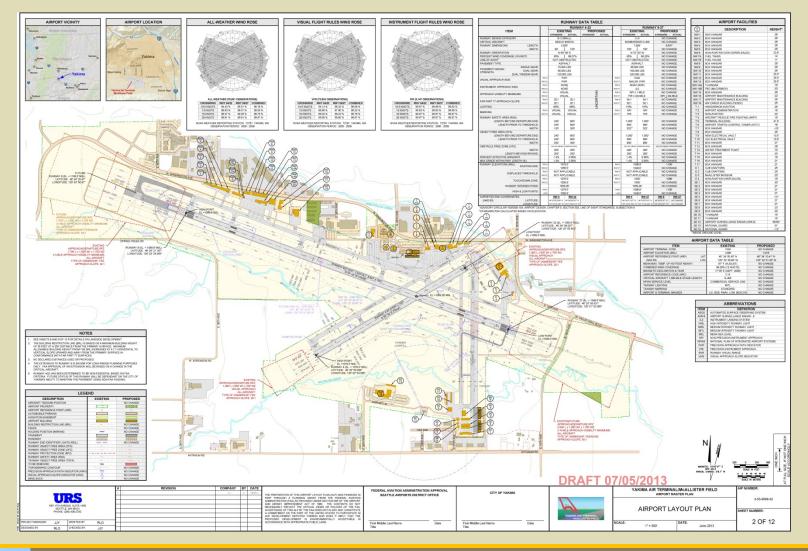


#### **General Aviation Plan**





## **Airport Layout Plan**



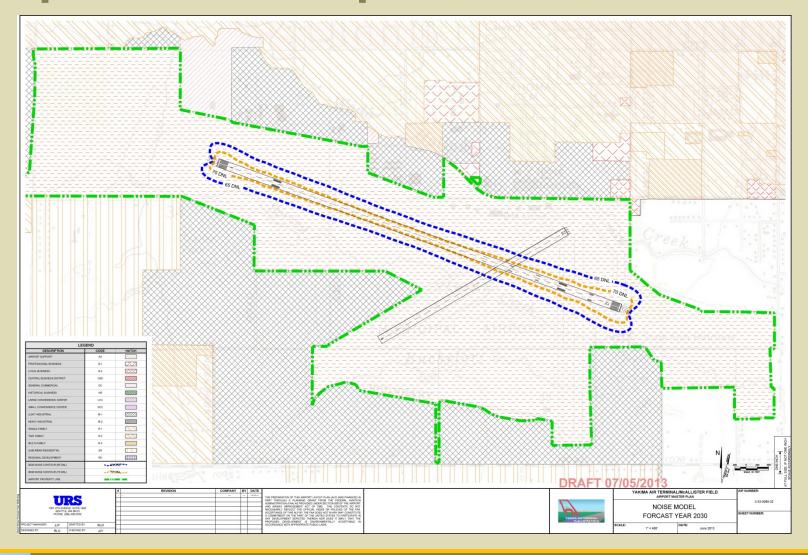


#### **Environmental Consequences/Impacts**

- None identified.
- Detailed environmental analyses will be required before runway extension and terminal development.
- Aircraft noise will not be an issue.



## **Airport Noise Map**





### **Financial Analysis**

- Estimated cost of required improvements is \$36,000,000.
- A large portion of this is ELIGIBLE for funding under the AIP (\$30,000,000).
  - Entitlement funding is \$1,000,000 per year
  - Discretionary funding may be available for safety or capacity related projects
- Remainder to be funded with PFC income, rates and charges or other sources.
  - PFC's equal to approximately \$300,000 per year
  - Rates and Charges used for O&M at airport



#### **Questions - Concerns**







