

# Master Plan Update - PAC Meeting #3 of 4

## Ed Carlson Memorial Field - South Lewis County Airport (TDO)



**WHPacific**



April 24, 2014

## Welcome and Introductions

### *Welcome*

### *Introductions*

- Lewis County
- WHPacific
- Federal Aviation Administration (FAA)
- WA State Department of Transportation (WSDOT) Aviation
- Planning Advisory Committee (PAC) - Airport Users, Community Representatives, Other Stakeholders

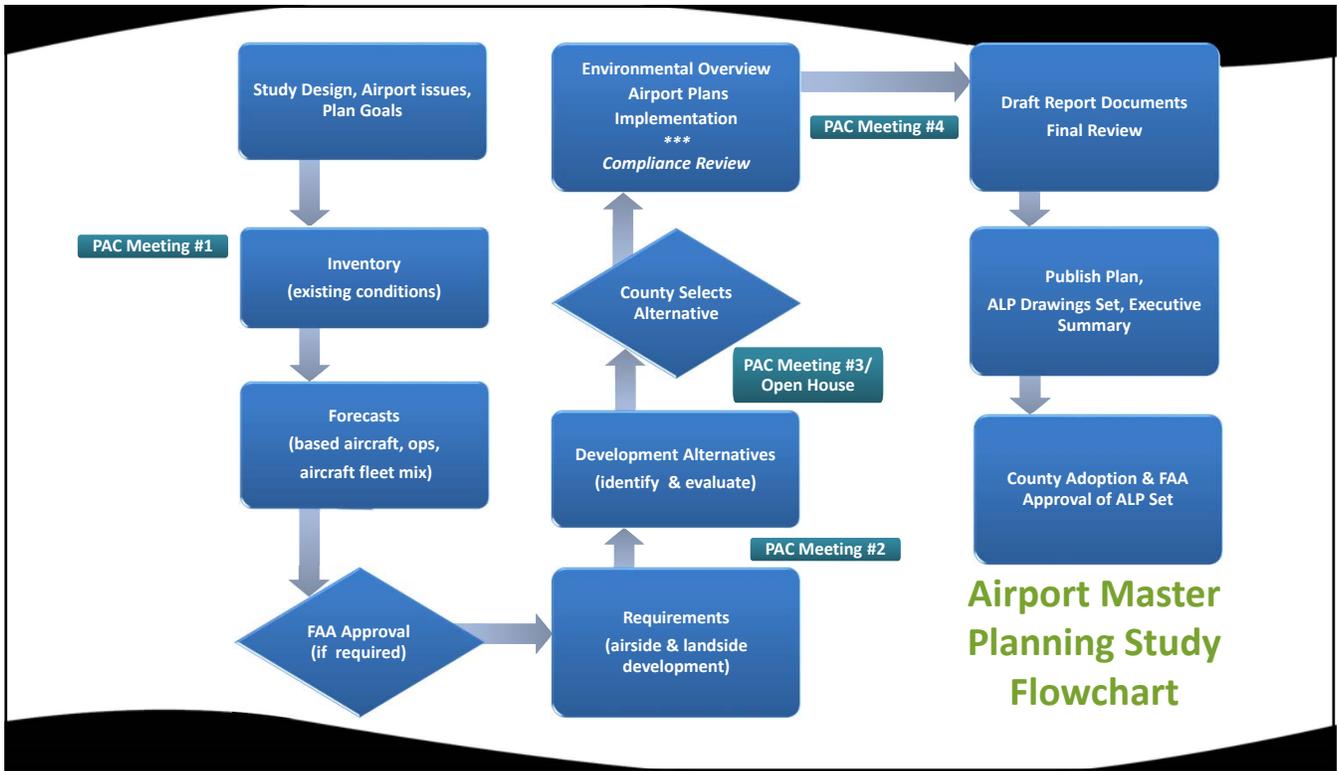
**WHPacific**

# Agenda

- I. Welcome and Introductions
- II. Purpose of Today's Meeting
- III. Recap Study Process and Elements Completed
- IV. Present Development Alternatives (Chapter 4)
  - a. Site Analysis - development opportunities and challenges
  - b. Identification of Alternatives, Common Features
  - c. Comparative Evaluation of Alternatives
- V. PAC Consensus on "Preferred Alternative" Recommendation to Lewis County
  - a. Airside and Landside
  - b. Composite of Most Favorable Features Among the Various Alternatives
- VI. The Next Steps

## Purpose of Today's Meeting

To present, discuss, and evaluate the various development alternatives by feature so the PAC may select a "preferred alternative" (most favorable features) to recommend to Lewis County for review and approval



## Study Elements

- Study Design ✓
- Intro/Issues and Goals ✓
- Public Involvement Program<sup>1</sup>
- Inventory ✓
- Forecasts<sup>2</sup> ✓
- Facility Requirements ✓
- Alternatives ✓
- Airport Plans
- Implementation
- Compliance Review
- Master Plan Report
- Executive Summary Report

<sup>1</sup> Ongoing <sup>2</sup> Submitted for FAA review/approval

## PAC and Public Meeting Schedule

Meeting #	Topics/ Focus	Date
PAC 1	Master Plan Update Process, Issues and Goals	March 27, 2013
PAC 2	Inventory, Aviation Forecasts, Facility Requirements	September 5, 2013
PAC 3 Public 1	Airport Development Alternatives and Evaluation, Identify Preferred Alternative	April 24, 2014
PAC 4	Airport Layout Plan Drawings, Capital Improvement Plan, Draft Final Report	Jul 2014*

\*Tentative – dependent on County selection of Preferred Alternative; to be confirmed 30 days prior to meeting.

## Alternatives - Key Terms

- Design Aircraft - most demanding, 500+ annual itinerant ops
- Airport Reference Code (ARC) → B-I, B-II
- Runway Design Code (RDC) → B-II
  - Aircraft Approach Category - approach speed
  - Airplane Design Group - wingspan, tail height
  - Approach Visibility Minimums
- Taxiway Design Group (TDG)
- Small (12,500 lbs. or less) vs. large (>12,500 lbs.) aircraft

*Note: Key terms are important to development alternatives*

# Alternatives - Key Terms

## Runway Design Code (RDC) Classifications

Aircraft Approach Category (AAC)		
AAC	Approach Speed	
A	Less than 91 knots	
B	91 knots to 120 knots	
C	121 knots to 140 knots	
D	141 knots to 165 knots	
E	Approach speed 166 knots or more	

Airplane Design Group (ADG)		
Group #	Tail Height (ft)	Wingspan (ft)
I	< 20'	< 49'
II	20' to < 30'	49' to < 79'
III	30' to < 45'	79' to < 118'
IV	45' to < 60'	118' to < 171'
V	60' to < 66'	171' to < 214'
VI	66' to < 80'	214' to < 262'

Approach Visibility Minimums	
RVR (ft)	Flight Visibility Category (statute mile)
4000	Lower than 1 mile but not lower than ¾ mile (APV ¾ but < 1 mile)
2400	Lower than ¾ mile but not lower than ½ mile (CAT-I PA)
1600	Lower than ½ mile but not lower than ¼ mile (CAT-II PA)
1200	Lower than ¼ mile (CAT-III PA)

Source: FAA AC 150/5300-13A



## Sample Aircraft

 <p><b>A-I</b> 12,500 lbs. or less (small)</p> <p>Beech Baron 55 Beech Bonanza Cessna 182 Piper Archer Piper Seneca</p>	 <p><b>B-I</b> 12,500 lbs. or less (small)</p> <p>Beech Baron 58 Beech King Air 100 Cessna 402 Cessna 421 Piper Navajo Piper Cheyenne Cessna Citation I</p>	 <p><b>A-II, B-II</b> 12,500 lbs. or less (small)</p> <p>Super King Air 200 Cessna 441 DHC Twin Otter Cessna Caravan King Air C90</p>	 <p><b>B-II</b> Greater than 12,500 lbs.</p> <p>Super King Air 300, 350 Beech 1900 Jetstream 31 Falcon 20, 50 Falcon 200, 900 Citation II, Bravo XLS+ Citation CJ3</p>	 <p><b>A-III, B-III</b> Greater than 12,500 lbs.</p> <p>DHC Dash 7 DHC Dash 8 Q-300, Q-400 DC-3 Convair 580 Fairchild F-27 ATR 72 ATP</p>
 <p><b>C-I, D-I</b></p> <p>Lear 25, 35, 55, 60 Israeli Westwind HS 125-700</p>	 <p><b>C-II, D-II</b></p> <p>Gulfstream II, III, IV Canadair 600 Canadair Regional Jet Lockheed JetStar Citation X Citation Sovereign Hawker 800 XP</p>	 <p><b>C-III, D-III</b></p> <p>Boeing Business Jet B 727-200 B 737-800 Series MD-80, DC-9 Fokker 70, 100 A319, A320 Gulfstream V Global Express</p>	 <p><b>C-IV, D-IV</b></p> <p>B-757 B-767 DC-8-70 DC-10 MD-11 L 1011</p>	 <p><b>D-V</b></p> <p>B-747 Series B-777</p>



## Alternatives - Minimum Requirements

### *Runway*

- Length - adequate in 20-year planning period
- Width - B-II → 75' minimum (existing 150')

### *Hangars*

- Hangars filled
- Future - 6 based aircraft + additional maintenance space

### *Auto Access, Parking*

- Improve access, designate parking

## Alternatives

### *Site Analysis*

- Development Opportunities
- Development Challenges

### *Alternatives - various concepts for development*

- No Action
- Three Airside & Landside Build Alternatives\*

\* Common features include taxiway widening, main access road realignment, airport ops area fencing, vehicular and pedestrian access, aircraft tiedown area relocation

## *Development Opportunities*

- Large undeveloped area on south side
- Undeveloped land adjacent to southern property boundary
- Undeveloped land on the north side
- Existing utility infrastructure on north side
- Accessible utility expansion for south side
- Roadways for additional access and attraction of aviation-compatible businesses

## *Development Challenges*

- Wetlands within and near the Airport
- Existing development near the Airport, lack of available land that could be acquired to support future expansion
- Close proximity of Jackson Highway and Buckley Road—roads inside Runway Protection Zone (RPZ) of Runway 06
- Lack of utilities on south undeveloped parcel
- Lack of utilities to the east of existing airport development on north side

# No Action Alternative

## *Highlights - No Action / No Build*

- No airside or landside development
- Maintenance only

# Alternative A1

## *Highlights*

- Runway extension (1721') to east for total 6,200'
- Serves demand beyond 20-year planning window
- Accommodates B-II large aircraft (12,500 - 60,000 lbs)
- Roadways remain in Runway Protection Zone (RPZ)
- Common features

## Alternative A2

### *Highlights*

- Relocate Runway 6 (west end) threshold 379' for reduced total length of 4,100'
- Partially addresses FAA issue with roadways in RPZ - outer 1/3 of RPZ
- Accommodates B-II small aircraft (less than 12,500 lbs)
- Common features

## Alternative A3

### *Highlights*

- Relocate Runway 6 (west end) threshold 379' for reduced total length of 4,100'
- Fully addresses FAA issue with roadways in RPZ by realigning Jackson Hwy and ending Buckley
- Accommodates B-II small aircraft (less than 12,500 lbs)
- Common features

# Alternative L1

## *Highlights*

- B-I on north side and B-II on south side w/new apron
- All inside existing airport property boundary
- Serves demand within 20-year planning window and limited demand beyond 20 years
- South side development requires access, utility infrastructure, and addressing wetlands
- Future Fixed Base Operator (FBO) location
- Possible AWOS locations (weather equipment)
- Common features

# Alternative L2

## *Highlights*

- B-I and B-II on north side
- Land acquisition on north side
- No development on south side
- Serves demand within 20-year planning window and limited demand beyond 20 years
- FBO, Fire Station
- Common features

## Alternative L3

### *Highlights*

- B-I on north side, B-II on south side, new apron both sides
- Less Land acquisition on north side
- Serves demand within 20-year planning window and limited demand beyond 20 years
- FBO, Fire Station
- Common features

## Comparative Evaluation

### *Key Considerations / Evaluation Criteria*

- Responsive to long-term demand
- Flexibility in long-term development
- Availability of airport property; land acquisition
- Community compatibility
- General magnitude of cost/feasibility of phased funding
- Known/documented environmental issues
- Transportation access/circulation

# PAC Consensus on “Preferred Alternative” Recommendation to the County

## The Next Steps

- Present the PAC’s “preferred alternative” to the public at the Open House for review/comment
- Submit the PAC’s “preferred alternative” with public input to the County for review and approval
- Complete remaining elements of the Master Plan based on the “preferred alternative”
- Schedule the final PAC Meeting