Southwest Washington Regional Airport
Airport Master Plan
Planning Advisory Committee Meeting #1
November 1, 2017
Project Team

City of Kelso
• Airport Owner (Sponsor)

Airport Operating Board
• City of Longview
• Cowlitz County
• Port of Longview
• City of Kelso

Century West Engineering
• Airport Planning & Design
• Capital Improvement Program

Quantum Spatial
• AGIS Survey

Parametrix
• Environmental Review

Gibbs & Olson
• Utilities & Airport Inventory
Century West Engineering

Who we are:

- Northwest firm founded in 1969.
- More than 500 airport projects completed throughout the Pacific Northwest.
- Specialize in the planning, design and construction of airport facilities.
National Airport System

• National Plan of Integrated Airport Systems (NPIAS)
• 3,331 NPIAS airports in U.S. (16,029 Non-NPIAS)
• 64 NPIAS airports in Washington
• Only NPIAS airports are eligible to receive FAA funding

FAA funding is available for projects consistent with FAA design standards and included on the FAA-approved Airport Layout Plan
The goal of a master plan is to provide the framework needed to guide future airport development that will cost-effectively satisfy aviation demand, while considering potential environmental and socioeconomic impacts.

FAA Advisory Circular 150/5300-6B, Change 2

The FAA requires that airports periodically update their planning to qualify for project funding.
FAA Airport Master Planning

Airport master plans are prepared to support the modernization or expansion of existing airports or the creation of a new airport. The master plan is the sponsor’s strategy for the development of the airport.

FAA Advisory Circular 150/5300-6B, Change 2

This project will update the previous airport master plan (2011).
FAA Airport Master Planning

FAA Airport Master Plans have a 20-year planning horizon that is divided into three periods:

- Short-term (0-5 years)
- Intermediate-term (6-10 years)
- Long-term (11-20 years)

Airport master plans are normally updated after 10 years, or when changing conditions require.
Public Participation

• The Planning Advisory Committee (PAC) has been assembled to assist the Airport Sponsor and Consultant in developing the master plan update.

• PAC members are responsible for:
  – reviewing and commenting on draft work products
  – attending PAC meetings
  – providing input during the planning process
  – providing local expertise to reflect community interests or concerns
Public Participation

• The master plan will take about 12-18 months to complete and get through FAA review;

• Four PAC meetings are scheduled at key points during the project; and

• There will be a project website where draft work products will be available for public review.
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<th>Part 1</th>
<th>Part 2</th>
<th>Part 3</th>
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<td>Data Collection &amp;</td>
<td>Planning</td>
<td>Supporting Evaluations and</td>
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<td>Analysis</td>
<td>Evaluations</td>
<td>Documentation</td>
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<tr>
<td>• Inventory of Existing Conditions</td>
<td>• Airport</td>
<td>• Airport Capital Improvement Plan (CIP) and Financial Plan</td>
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<td>Alternatives</td>
<td>• Airport Layout Plan</td>
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<td>• Cost Evaluation</td>
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<td></td>
<td>• Environmental Review</td>
<td>• Land Use Planning</td>
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<td></td>
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<td>• FAA Compliance, Solid Waste Recycling</td>
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</table>
FAA Design Standards

• The design standards for an airport are determined by the current and future Critical Aircraft.

• The Critical Aircraft is defined as the most demanding aircraft or grouping of aircraft that make regular use of the airport.

• Regular use is 500 annual operations (takeoffs and landings), including both itinerant and local operations, but excluding touch-and-go operations.
# SOUTHWEST WASHINGTON REGIONAL AIRPORT

## Airport Master Plan

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<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Aircraft Models</th>
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<tr>
<td><strong>A-I</strong></td>
<td>12,500 lbs. or less (small)</td>
<td>Beech Baron 55, Beech Baron 58, Beech King Air 100, Cessna 182, Cessna 402, Cessna 421, Piper Arrow, Piper Cheyenne, Cessna Citation II</td>
</tr>
<tr>
<td><strong>A-II, B-II</strong></td>
<td>12,500 lbs. or less (small)</td>
<td>Super King Air 200, Cessna 441, DHC Twin Otter, Cessna Caravan, King Air C90</td>
</tr>
<tr>
<td><strong>B-II</strong></td>
<td>Greater than 12,500 lbs.</td>
<td>Super King Air 300, 350, Beech 1900, Jetstream 31, Falcon 20, 50, Falcon 200, 900, Citation II, Bravo XLS, Citation CJ8</td>
</tr>
<tr>
<td><strong>A-III, B-III</strong></td>
<td>Greater than 12,500 lbs.</td>
<td>DHC Dash 7, DHC Dash 8, Q-300, Q-400, DC-3, Cornell 580, Fairchild F-27, ATP</td>
</tr>
<tr>
<td><strong>C-I, D-I</strong></td>
<td></td>
<td>Lear 25, 35, 55, 60, Israeli Westwind, HS 125-700</td>
</tr>
<tr>
<td><strong>C-II, D-II</strong></td>
<td></td>
<td>Gulfstream II, III, IV, Canadair 600, Canadair Regional Jet, Lockheed JetStar, Citation X, Citation Sovereign, Hawker 800 XP</td>
</tr>
<tr>
<td><strong>C-III, D-III</strong></td>
<td></td>
<td>Boeing Business Jet B 727-200, B 737-200 Series, MD-80, DC-9, Falcon 70, 100, A319, A320, Gulfstream V, Global Express</td>
</tr>
<tr>
<td><strong>C-IV, D-IV</strong></td>
<td></td>
<td>B-757, B-767, DC-8-70, DC-10, MD-11, L-1011</td>
</tr>
<tr>
<td><strong>D-V</strong></td>
<td></td>
<td>B-747 Series, B-777</td>
</tr>
</tbody>
</table>

## AIRPORT REFERENCE CODES (ARC)
FAA Design Standards

The Design Aircraft directly affects:

- Runway length and width
- Taxiway width
- Pavement strength
- Runway and taxiway protected areas
- Airspace surfaces
Airfield Planning

Review existing airfield needs to provide recommendations for improvements:

- Runway 12/30
- Airfield Geometry
- Taxiway Access
- Lighting
- Visual Navigation Aids
- Signage
Terminal Area Planning

Review existing terminal area needs to provide recommendations for improvements:

- Aircraft Parking (fixed wing, helicopter)
- Aircraft Fueling
- FBO Facilities
- Hangar Development
- Tenant-Specific Needs
- Security
- Vehicle Parking
Airports GIS Survey

• Improved survey for aeronautical, airspace and operations planning;

• Site data will be integrated into FAA GIS database; and

• All future design & construction projects will utilize the survey database.
FAA Funding

- Federal Airport Improvement Program (AIP)
- Program and funding levels authorized by Congress
- The airport is eligible to receive $150,000 per year in “non-primary entitlement” (NPE) grants
- 10% local match required
- Other FAA funds available for high priority large projects on a limited basis
- WSDOT Aviation grants are used to offset local match and fund other projects not eligible for FAA funding
Financial Planning

- Develop financial plan that reflects an understanding of revenue opportunities and anticipated costs
- Develop detailed Capital Improvement Plan (CIP) that meets airport’s financial goals
- Evaluate airport rates and fees (market assessment)
- Define market opportunities and development potential
- Support airport business planning and strategic development process
Land Use Planning

Review on- and off-airport land use planning:

• Existing land uses (aviation, non-aviation, aeronautical, agricultural, industrial, etc.)
• Comprehensive Plan Designations
• Zoning
• Airport Overlay Zoning (multiple jurisdictions)
Changes Since 2011 Airport Master Plan

2017

• Runway crack fill project

2016

• Removed two T-hangars and three conventional hangars west of the runway to eliminate FAR Part 77 penetrations, and removed associated taxilanes.

• Replaced airport beacon
## Airport Activity

<table>
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<tr>
<th>Based Aircraft</th>
<th>Updated Airport Count</th>
<th>2011 Airport Master Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-Engine Piston</td>
<td>54</td>
<td>66</td>
</tr>
<tr>
<td>Multi-Engine Piston</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Turboprop</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Turbojet</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Ultralight</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Glider</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Rotorcraft</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Military</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Based Aircraft</strong></td>
<td><strong>66</strong></td>
<td><strong>74</strong></td>
</tr>
</tbody>
</table>

**Annual Aircraft Operations**

| Annual Aircraft Operations | To be included in the Forecast Chapter | 40,860 |