

# WSDOT Aviation Division: Airport Investments

*“Update on the Airport Investment Study”*



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# Agenda

**Welcome and Opening Remarks**

**Administrative Notes**

**Introductions**

**Project Overview**

- Background
- Goals, Objectives and Success Factors
- Process

**Study Committee**

- Roles and Expectations
- Communications Plan

**Baseline Conditions Approach and Progress**

- Local, State, Federal Investments
- Short- and Long-Term Needs

**Questions and Comments**

**Next Steps**

# Administrative Notes

- Restrooms
- Parking area
- Smoking area
- Emergency evacuation / Rally point



# PROJECT OVERVIEW

# Background

- **In 2005**, a WSDOT-sponsored airport pavement study estimated a backlog of nearly **\$163 million** in essential pavement maintenance in our state.
- **In 2009**, the Governor's Aviation Planning Council determined that Washington's aviation system **suffers from a significant funding shortfall** and determined that **\$600 million** is needed to bring all public use airports into compliance with state performance objectives.
- **In 2012**, WSDOT conducted an updated pavement study- released July 2013. Study findings: Pavement conditions **have declined** statewide and with current funding the backlog will increase to **\$257 million**
- **In 2012**, the FAA Modernization and Reform Act increased the required state and local match from 5% to 10%. This placed a **greater financial burden** for airport investments **on state and local governments**. This change alone could require an additional \$1.7 million biennially in state matching funds.
- **In 2012**, WSDOT's Airport Aid Grant program, which only has **\$1 million available per year**, fell far short of funding the **\$4 million requested**.
- **In 2013** the Statewide Capital Improvement Program received airport project requests totaling nearly **\$500 million**.

# Goals and Objectives

The overall goal of the study is to develop a comprehensive basis of the past, current and forecast conditions for Washington State's public use airport infrastructure investments in order to identify and define significant gaps and consequences.

Key Study Objectives include:

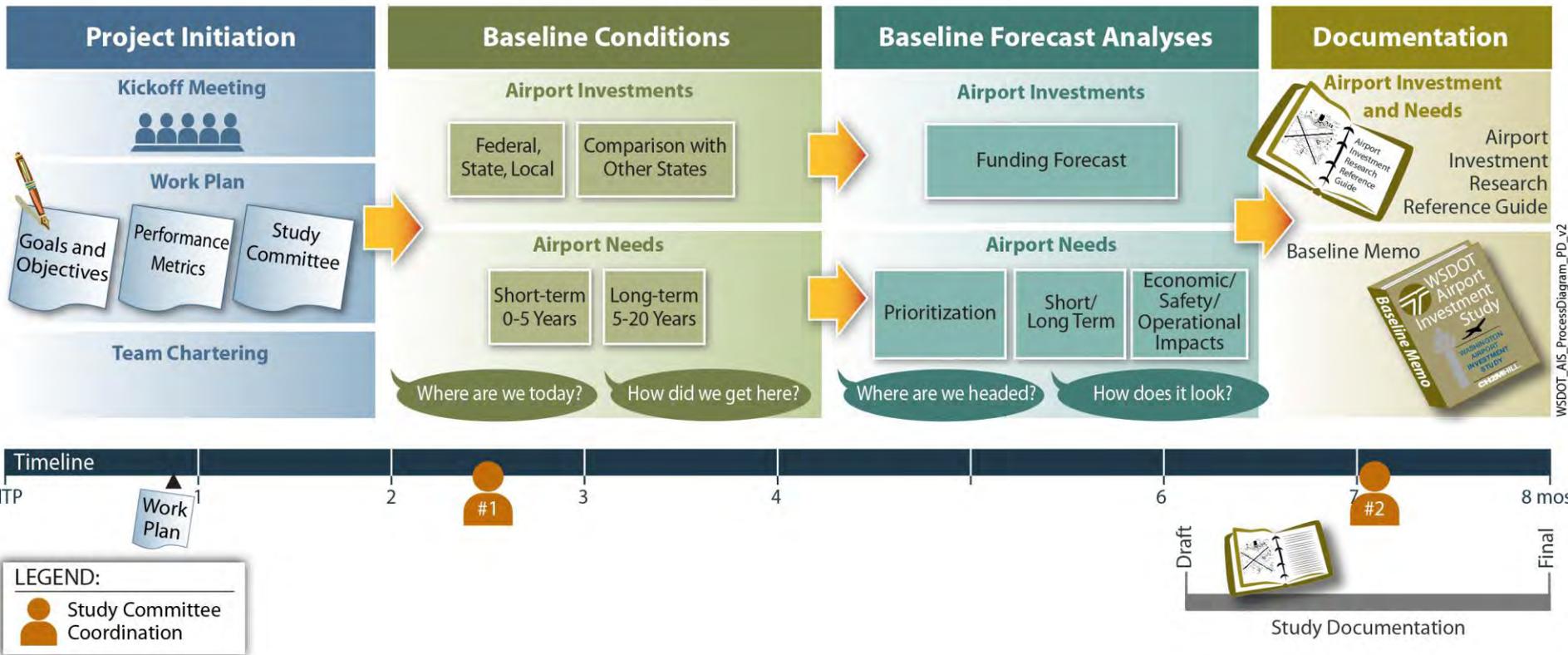
- Evaluate current investment levels for airport preservation and safety projects
- Assess short-term and long-term statewide airport improvement needs
- Determine consequences of doing nothing in terms of economic and aviation system impacts

# Success Factors and Metrics

- A clear and comprehensive study, founded on the best available data that is readily understood, intuitive, and supported by study committee, legislators, airports, and the general public
- A well coordinated, high quality, organized and efficient study that provides:
  - Simplicity for airports to provide crucial inputs
  - Coordinated and meaningful touch points with project stakeholders
  - Recognized value for the State's investment
- Quality metrics as defined in the Project Quality Plan are accomplished.
- Identification and assessment of potential gaps and consequences.



# Study Process



WSDOT\_AIS\_ProcessDiagram\_PD\_V2



# STUDY COMMITTEE

# Committee Roles and Expectations

The Study committee will:

- Provide representation for aviation sectors, including commercial and general aviation, airport associations/organizations, sponsors, aviation agencies, and airport industries
- Act as a sounding board for understanding of project research and analyses
- Be a conduit for external project communications

# Committee Responsibilities

Responsibilities include:

- Attend meetings and contribute to discussions
- Understand and articulate the Committee's purpose and responsibilities
- Represent constituent group by:
  - Communicating perspective on key issues
  - Convey information back to stakeholders
- Review and comment on drafts and inputs throughout the process
- Provide feedback to the project team

# Communications Plan

- Communication protocols
  - E-mails
  - Dialogue
- Communication tools
  - Website (<http://www.wsdot.wa.gov/aviation/AirportInvestmentStudy.htm>)
  - Aviation News service
  - Interested party list
  - Advisory Committee Charge
  - Airport Investment Study folio
  - Study brochure
  - Requested briefings





# **BASELINE CONDITIONS – APPROACH**

# Federal Funds

- Airport Improvement Program (AIP) Funding
  - Revenue Sources
    - Airport and Airways Trust Fund
    - General Fund
  - Legislative Acts
    - Authorizations and Obligations (10-year look)
    - Vision 100 → ARRA → Modernization and Reform Act



# Federal Funds

- AIP Funding
  - Apportionment
    - Entitlement Funds
      - Primary Airports
      - Cargo Service
      - Non-Primary
    - Discretionary Funds
      - High Priority Projects
  - Eligibility
    - Sponsor and Project



136 public-use airports  
64 eligible for federal funding

# Federal Funds

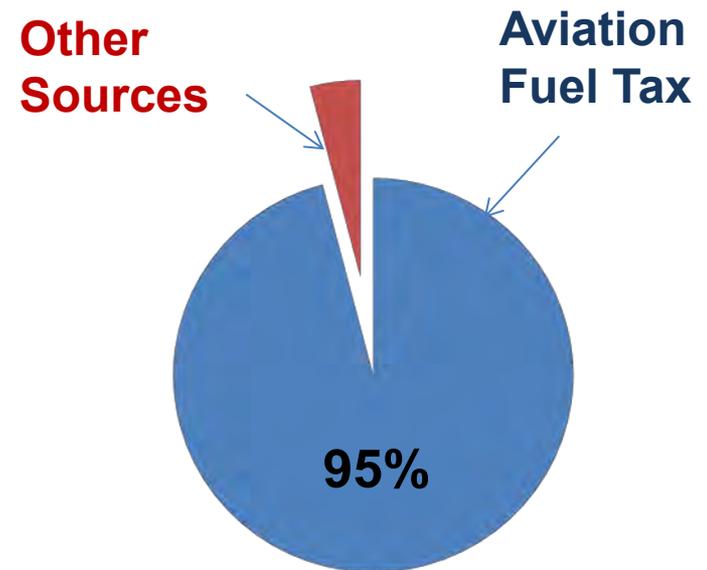
- Forecast of “Status Quo”
  - Funding Source Stability
  - Competing Interests
  - Benchmarks



# Aeronautics Account

Funds the administration of the Aviation Division, support of state and local airports, and maintenance of state-owned airports.

- History of aviation taxes in WA
- Examine revenue sources
  - Define and measure each source
  - Quantify revenue by source
- 10-year revenues/expenditures



# Aviation Tax Comparison

## Other States to be Examined

- At least 6 other states to be compared
- Resources:
  - Conklin & de Decker, *State Aviation Tax Guide*
  - NBAA State Tax Reports
  - AOPA State Government Affairs
  - State Revenue Departments
- Focus on states with robust aviation activity and revenue
- Bookend states
- States within FAA Northwest Region

# Aviation Tax Comparison

## Other States to be Examined

- Categories examined and quantified by state
  - Tax definitions - what taxes are levied
  - Tax measures - what is the tax rate
  - Tax revenue generated
    - Other aviation revenue
  - Investments/expenditures of tax revenue number of airports, by NPIAS and Non-NPIAS, Federal Classification
    - Investment per airport
  - Number of based aircraft per airport
    - Investment per aircraft

# Local Funds

- How are local funds being leveraged for Airport Capital needs?
  - Types of Funds
  - Magnitudes
  - Across Airport Categories



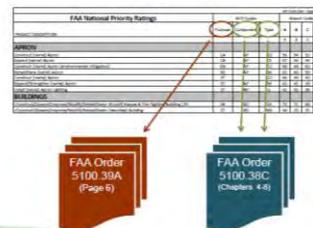
*Oval Office Replica -Meeting Facility*

Jackson County Airport  
Medford, Oregon

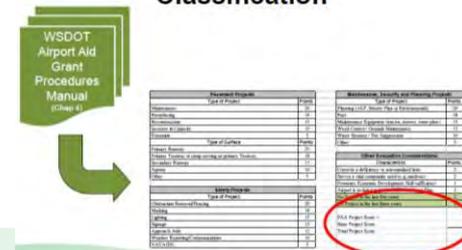
# Airport Needs

- Develop Short-term (0-5 years) CIP & Long-term CIP (6-20 years) for the 136 public-use airports in WA
  - NPIAS and Non-NPIAS
  - Unconstrained Budget View
  - Differentiate Eligible and Non-eligible Projects
  - Review / Assign Project Cost Estimates
  - Assign Project Priority Codes for Analyzing Funding Impacts

Where Do the Scores Come From?



Project Analysis – State Classification



# Short-Term Needs

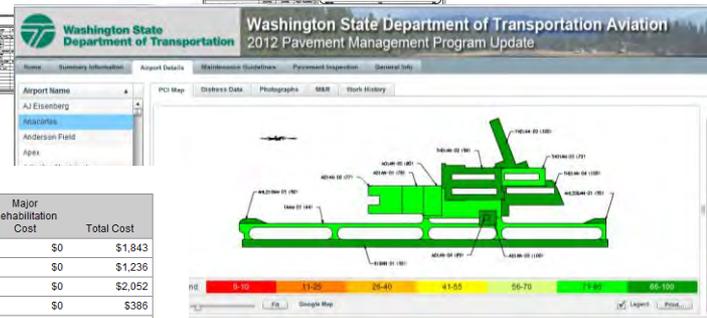
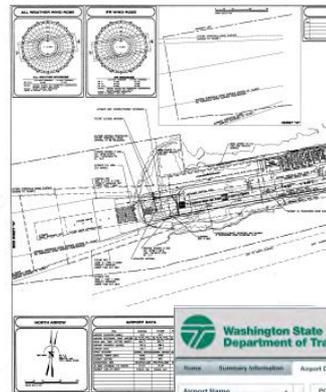
- Leverage Available Data Sources
  - WSDOT SCIP
  - Master Plans / ALPs
  - WSDOT Airport Pavement Management Study
- Airport Survey

List of Project(s) (Click on project title to view/edit the project information)

Start Year	Project Title	Project Description	Budget(\$)	Project Category	Work Code(s)	Status	Last Modified Date
2013	GA Apron Rehabilitation Areas 1&6, South Commercial Ramp Rehab and Soil Containment Mods.	Rehab Areas 1 & 6, Commercial Ramp Spot B Rehab, and install environmental spill containment system. Work completed in 2012.	1100000.00	Maintenance	RE,AP,IM	Completed	3/28/2013 9:56:04 AM
2013	Commercial Ramp Remain Overnight (RON) Parking Position - Design and Construction	Remain Overnight (RON) parking positions for aircraft commercial ramp.	2500000.00	Capital	CA,AP,CO	Planned	3/28/2013 9:57:04 AM
2013	General Aviation Apron Rehabilitation (Area 3) - Design	General Aviation Apron Rehabilitation (Area 3) - Design.	100000.00	Maintenance	RE,AP,IM	Planned	3/28/2013 10:09:46 AM
2013	General Aviation Apron Rehabilitation (Area 4) - Design	General Aviation Apron Rehabilitation (Area 4) - Design.					

Exhibit 49: 20-year capital improvement program details

Item	2012 – 2016 projects	Detail cost
A1	Runway 27 RSA, ROFA and approach surface improvements Relocate threshold. Grade and compact RSA and ROFA	\$6,000
A2	RSA improvements at irrigation ditch area See appendix for engineer's detail	\$120,000
A3	Service road signage	\$2,000
A4	Replace runway edge and runway threshold lights Remove all runway lights, threshold lights and cable that can be accessed. Install new runway lights (34) and threshold lights (12) in base cans. Stub up electricity for item A5.	\$150,000
A5	Install Precision Approach Path Indicator (PAPI) system Remove existing VASI and PAPI. Install new, two-light, two-box PAPI system with controller at both runway ends. Use professional system designer and installers.	\$20,000
A6	Install runway hold-line signs (4) and relocate Taxiway D runway hold-line Use retroreflective signs on frangible supports.	\$6,000
A7	Install security cameras that are consistent with WSDOT/Aviation system	\$5,000
A8	Pavement maintenance Weed removal, crack sealing, seal coating and re-painting	\$30,000



ANACORTES AIRPORT - All Plan Years

Plan Year	Branch	Section	Surface Type	Preventive Maintenance Cost	Major Rehabilitation Cost	Total Cost	
2013	A01AN	01	AAC	\$1,843	\$0	\$1,843	
2013	A01AN	02	AAC	\$1,236	\$0	\$1,236	
2013	A01AN	04	PCC	\$2,052	\$0	\$2,052	
2013	TAAN	01	AAC	\$386	\$0	\$386	
2013	TH01AN	01	AAC	\$157	\$0	\$157	
				2013 Total:	\$5,674	\$0	\$5,674
2014						No work identified for 2014	

# Long-Term Needs

- Leverage Available Data Sources
  - Master Plans, ALPs, APMS
  - PSRC's NextGen Gap Analysis
- FAA Design Standards Review (AC 150/5300-13A)
  - Identify Non-standard Issues (i.e., runway width)
  - Form 5010
  - ALPs
- Airport Survey

Harvey Field (S43) NextGen Implementation Plan	
PROJECT DESCRIPTION	Total \$
Prepare Obstruction Survey per AC 150/5300-16, -17 and -18	\$ 100,000.00
Relocate Powerlines	\$ 86,000.00
Obstruction Removal (Trees)	\$ 25,000.00
Pave and Light Existing Turf Runway 15L/33R (1865' x 60')	\$ 680,400.00
Convert Existing Asphalt RWY 15/33 to Parallel TWY including MITL	\$ 450,000.00
Relocate Airport Way	\$ 625,000.00
Extend Runway 15/33 to 2400' x 60'	\$ 1,200,000.00
Install Automated Weather Observation System (AWOS)	\$ 165,000.00
	<b>\$3,311,400.00</b>

Table 3-8. Runway design standards matrix

Aircraft Approach Category (AAC) and Airplane Design Group (ADG):  
(select from pull-down menu at right)

A - I

ITEM	DIM <sup>1</sup>	Visibility Minimums			
		Visual than 1 mile	Not Lower than 3/4 mile	Not Lower than 3/4 mile	Lower than 3/4 mile
<b>Runway Design</b>		Refer to paragraphs 302 and 304			
Runway Length	A	60 ft	60 ft	60 ft	100 ft
Runway Width	B	10 ft	10 ft	10 ft	10 ft
Shoulder Width		80 ft	80 ft	80 ft	120 ft
Blast Pad Width		100 ft	100 ft	100 ft	100 ft
Blast Pad Length		10.5 knots	10.5 knots	10.5 knots	10.5 knots
Crosswind Component					
<b>Runway Protection</b>					
<b>Runway Safety Area (RSA)</b>					
Length beyond departure end	10,11 R	240 ft	240 ft	240 ft	600 ft
Length prior to threshold	P	240 ft	240 ft	240 ft	600 ft
Width	C	120 ft	120 ft	120 ft	300 ft
<b>Runway Object Free Area (ROFA)</b>					
Length beyond runway end	R	240 ft	240 ft	240 ft	600 ft
Length prior to threshold	P	240 ft	240 ft	240 ft	600 ft
Width	Q	400 ft	400 ft	400 ft	800 ft

**AirportIQ™ 5010** Airport and Rep

Airport Name: ELMA MUNI  
FAA Site: 26196-A

Data Effective Date: 10/17/2013  
Provided By: GCR Inc.

General Information	Services & Facilities	Based Aircraft & Operations	Runway Information	Remarks
Element Number	Remark Text			
A040	RWY 07/25 SW END THLD LGTS 2-360 DEG GREEN; 2-360 DEG RED; NE END THLD LGTS 4-180 DEG GREEN & 180 DEG RED. NSTD MIRL. RY 25 DSPLCD THLD UNLIGHTED; 2095 FT OF RY 07/25 AVBL FOR NIGHT OPNS.			
A042	RWY 07 RWY ID NONSTANDARD DIMENSIONS.			
A042	RWY 25 RWY ID NONSTANDARD DIMENSIONS.			
A057	RWY 25 RWY 25 APCH RATIO 3:1 MEASURED AT DSPLCD THR.			
A058	RWY 07 RWY 07 +25 FT TREES 0-200 FT FM THLD, 60 FT L.			
A058	RWY 25 BRUSH 30 FT L +3 FT RISE 3 FT FROM THLD ON CNTRLN; +3 FT ROAD AT 38 FT; 25 FT BRUSH & TREES 60-200 FT FROM THLD.			
A081	ACTVT NSTD MIRL RY 07/25 - CTAF.			

# Airport Survey

- General Airport Planning Information
- Short and Long-Term Airport Needs Review
- Airport Use and Benefits
- Local Funding Resources



# Consequences Evaluation

- Economic Impacts
  - Wages, Jobs, Total Economic Activity
  - Tax Revenue
- Impacts to Airport Users
  - 17 aviation related activities per Aviation Economic Impact Study
- Impacts to Facilities and Operations
  - Safety
  - Capacity
  - Pavement Management

# Summary

- Study Outcome
  - Statewide Short- and Long-Term Needs
  - Baseline Forecast Revenues
  - Gap Identification
  - Associated Consequences
- Committee Involvement
  - Input from Multiple Perspectives
  - Methodology and Data Validation



# QUESTIONS AND COMMENTS



# NEXT STEPS



**THANK YOU!**