

LPV Readiness Dashboard

A Tool for Determining Airport Infrastructure Improvement Needs

Presented to: Airports Conference
LPV Instrument Procedure
Development Session

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Division

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Federal Aviation
Administration



The Challenge

- **Understanding the airport infrastructure requirements for supporting the best possible instrument approach minimums**
- **Obtaining and organizing the information needed to determine infrastructure improvements needs**



The Solution (A Work In Progress)

LPV Readiness Dashboard
Update NACO Data Version

Select an Airport: MWH [LPV References](#) [Airport Layout Plans](#) [AVN IFP Production Plan](#) [NGS Survey Tracking Reports](#) [Published WAAS/GPS Approaches](#)

Airport Data

[AirNav](#) [AVN ACIFP](#) [AVN](#) [NACO](#) [Drawings/Photos](#) [More Airport Data](#) [Aerial Photo](#) [Quad Map](#) [GoogleLocal](#)

Location ID: **MWH** Airport: **GRANT CO INTL**
 State: **WA** City: **MOSES LAKE** District Office: **SEA**
 Based Aircraft: **95** Total Operations: **112,568** Service Level: **CS** RAP Focus Airport: **Yes**

Runway Data

Runway: **04/22** Edge Lights Intensity: **MED** Runway Length (feet): **10,000** Runway Width (feet): **100**
 Aircraft Approach Category: D Airplane Design Group: III

Runway 04	Runway 22
Runway Markings Type: NPI	Runway Markings Type: NPI
FAR Part 77 Category: C	FAR Part 77 Category: C
Object Clear Slope: 50	Object Clear Slope: 50
Approach Lights:	Approach Lights:
PAPI Type: P4L	PAPI Type: V4L
PAPI Glide Path Angle: 3	PAPI Glide Path Angle: 3
PAPI Threshold Crossing Height: 50	PAPI Threshold Crossing Height: 50

Procedure Data

AVN IFP Production Plan Status: Pending	AVN IFP Production Plan Status: Pending
AVN IFP Production Plan Date: 3/15/2007	AVN IFP Production Plan Date: 3/15/2007
LPV Status: Scheduled	LPV Status: Scheduled
Reason Not Recommended: 	Reason Not Recommended:
LPV Year: 2007	LPV Year: 2007
Candidate Minimums: <3/4	Candidate Minimums: <3/4
Candidate IAP: NPV	Candidate IAP: NPV

Survey Data

[Candidate Survey Type Needed: ANAPC surface or better](#) [Candidate Survey Type Needed: ANAPC surface or better](#)

Type: ANAPC	Type: ANAPC
Source: Parsons (WAAS)	Source: Parsons (WAAS)
Status: Needed	Status: Needed
Year Scheduled: 	Year Scheduled:
Date Completed: 	Date Completed:

Supporting Infrastructure

Runway Design Standards [Table 3-1](#) [Table 3-2](#) [Table 3-3](#)

Runway Width Required: **100**

Description	Meets Standards	Action Required
Runway Width:	<input checked="" type="radio"/>	<input type="radio"/>

APV Approach Requirements [Table A16-1B](#) [Tables 2-1 and 2-2](#)

Airport Layout Plan:	<input type="radio"/>	<input type="radio"/>
Minimum Runway Length:	<input checked="" type="radio"/>	<input type="radio"/>
Hold Signs and Markings:	<input checked="" type="radio"/>	<input type="radio"/>
Runway Edge Lights:	<input checked="" type="radio"/>	<input type="radio"/>
Parallel Taxiway:	<input checked="" type="radio"/>	<input type="radio"/>
Runway OFZ:	<input type="radio"/>	<input type="radio"/>

	Rwy 04	Rwy 22	Rwy 04	Rwy 22
Clear Approach Slope:	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
POFZ:	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Runway Markings:	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Approach Lights:	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Approach OFZ:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Threshold Siting Criteria:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

NPIAS Projects

	Planned / Year	Dollars in 1,000's
Parallel Taxiway:	<input type="checkbox"/>	<input type="checkbox"/>
Runway Widening:	<input type="checkbox"/>	<input type="checkbox"/>
Approach Clearing:	<input type="checkbox"/>	<input type="checkbox"/>
Approach Lights:	<input type="checkbox"/>	<input type="checkbox"/>
Runway Extension:	<input type="checkbox"/>	<input type="checkbox"/>
Runway Markings:	<input type="checkbox"/>	<input type="checkbox"/>
Runway Safety Area:	<input type="checkbox"/>	<input type="checkbox"/>

Remarks
 03/01/2006 Needed Surveys List - 04 & 22 - Tier 2
 Only build partial parallel taxiway for runway with ARC: BII.

Record: 1 of 5 (Filtered)



Application Title and Global Links

LPV Readiness Dashboard

[LPV References](#) [Airport Layout Plans](#) [AVN IFP Production Plan](#) [NGS Survey Tracking Reports](#) [Published WAAS/GPS Approaches](#)

Provides web links to the following information resources:

- **LPV References published on Airports intranet site**
- **List of ALP's published on Airports intranet site**
- **AVN IFP Production Plan web page**
- **NGS Survey Tracking Reports web page**
- **Published WAAS/GPS Approaches web page**



Airport Data & Site Specific Web Links

Airport Data

[AirNav](#) [AVN ACIFP](#) [AVN](#) [NACO](#) [Drawings/Photos](#) [More Airport Data](#) [Aerial Photo](#) [Quad Map](#) [GoogleLocal](#)

Location ID: **MWH** Airport: **GRANT CO INTL**

State: **WA** City: **MOSES LAKE**

District Office: **SEA**

Based Aircraft: **95** Total Operations: **112,568** Service Level: **CS** RAP Focus Airport: **Yes**

- **Airport information obtained from NFDC Airport Data and Regional Airport Plan**
- **Web Links to Airport Specific Information**



Runway Data

Runway Data

Runway: **04/22** Edge Lights Intensity: **MED** Runway Length (feet): **10,000** Runway Width (feet): **100**
Aircraft Approach Category: **D** Airplane Design Group: **III**

Runway 04

Runway Markings Type: **NPI**
FAR Part 77 Category: **C**
Object Clear Slope: **50**
Approach Lights:
PAPI Type: **P4L**
PAPI Glide Path Angle: **3**
PAPI Threshold Crossing Height: **50**

Runway 22

Runway Markings Type: **NPI**
FAR Part 77 Category: **C**
Object Clear Slope: **50**
Approach Lights:
PAPI Type: **V4L**
PAPI Glide Path Angle: **3**
PAPI Threshold Crossing Height: **50**

- **Runway Information from NFDC Airport Data**
- **Airport Reference Code (ARC) Information from Airport Planning Documents**



Procedure Data

Procedure Data	
AVN IFP Production Plan Status: Pending	AVN IFP Production Plan Status: Pending
AVN IFP Production Plan Date: 3/15/2007	AVN IFP Production Plan Date: 3/15/2007
LPV Status: Scheduled	LPV Status: Scheduled
Reason Not Recommended:	Reason Not Recommended:
LPV Year: 2007	LPV Year: 2007
Candidate Minimums: <3/4	Candidate Minimums: <3/4
Candidate IAP: NPV	Candidate IAP: NPV

- AVN IFP Production Plan Information
- Procedure Production Status and Proposed Publication Year
- Candidate Minimums and IAP Used to Determine Required Survey Type



Survey Data

Survey Data

Candidate Survey Type Needed: ANAPC surface or better Candidate Survey Type Needed: ANAPC surface or better

Type:	ANAPC ▼	Type:	ANAPC ▼
Source:	Parsons (WAAS) ▼	Source:	Parsons (WAAS) ▼
Status:	Needed ▼	Status:	Needed ▼
Year Scheduled:	<input type="text"/>	Year Scheduled:	<input type="text"/>
Date Completed:	<input type="text"/>	Date Completed:	<input type="text"/>

- Recommended Survey Type Based on Calculated Minimum Needed
- Record of Who is Doing the Survey
- Survey Status and Completion Date



Supporting Infrastructure

Runway Design Standards

Supporting Infrastructure

Runway Design Standards [Table 3-1](#) [Table 3-2](#) [Table 3-3](#)

Runway Width Required:

100

Description

Meets Standards

Action Required

Runway Width:



- **Links to Reference Tables in the Airport Design Advisory Circular**
- **Record of Runway Width Requirement Status**

Supporting Infrastructure

APV Approach Requirements

APV Approach Requirements	Table A16-1B	Tables 2-1 and 2-2		
Airport Layout Plan:	<input type="radio"/>		<input type="radio"/>	
Minimum Runway Length:	<input checked="" type="radio"/>		<input type="radio"/>	
Hold Signs and Markings:	<input checked="" type="radio"/>		<input type="radio"/>	
Runway Edge Lights:	<input checked="" type="radio"/>		<input type="radio"/>	
Parallel Taxiway:	<input checked="" type="radio"/>		<input type="radio"/>	
Runway DFZ:	<input type="radio"/>		<input type="radio"/>	
	Rwy 04	Rwy 22	Rwy 04	Rwy 22
Clear Approach Slope:	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
POFZ:	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Runway Markings:	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Approach Lights:	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Approach DFZ:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Threshold Siting Criteria:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- Status of Airport Infrastructure Criteria**



Supporting Infrastructure NPIAS Projects

<u>NPIAS Projects</u>	Planned / Year		Dollars in 1,000's	
Parallel Taxiway:	<input type="checkbox"/>			
Runway Widening:	<input type="checkbox"/>			
Approach Clearing:	<input type="checkbox"/>		<input type="checkbox"/>	
Approach Lights:	<input type="checkbox"/>		<input type="checkbox"/>	
Runway Extension:	<input type="checkbox"/>		<input type="checkbox"/>	
Runway Markings:	<input type="checkbox"/>		<input type="checkbox"/>	
Runway Safety Area:	<input type="checkbox"/>		<input type="checkbox"/>	

- **Supporting Infrastructure Improvement Projects in our Current National Plan of Integrated Airports System (NPIAS)**

Remarks

Remarks

03/01/2006 Needed Surveys List - 14L - Tier 2
Addition to our 12/01/2005 list
ALS recommended but not required, Table A16-1B Note 11.

- **A Place to Put Additional Information**



Current Status (A Moving Target)

Year	Total	In Production	Published	Recommended	Scheduled
2006	74	41	10	15	8
2007	149	17		40	92

- **Total – Recommended or in AVN IFP Production Plan**
- **In Production – Currently Being Worked On by Flight Procedures**
- **Published – Charts Available for Use**
- **Recommended – Not in AVN IFP Production Plan**
- **Scheduled – Pending Survey or Other Action**

