

# Southwest Region - General Aviation System Plan

**A concept on approach**

Presented to: FAA Partnership Conference

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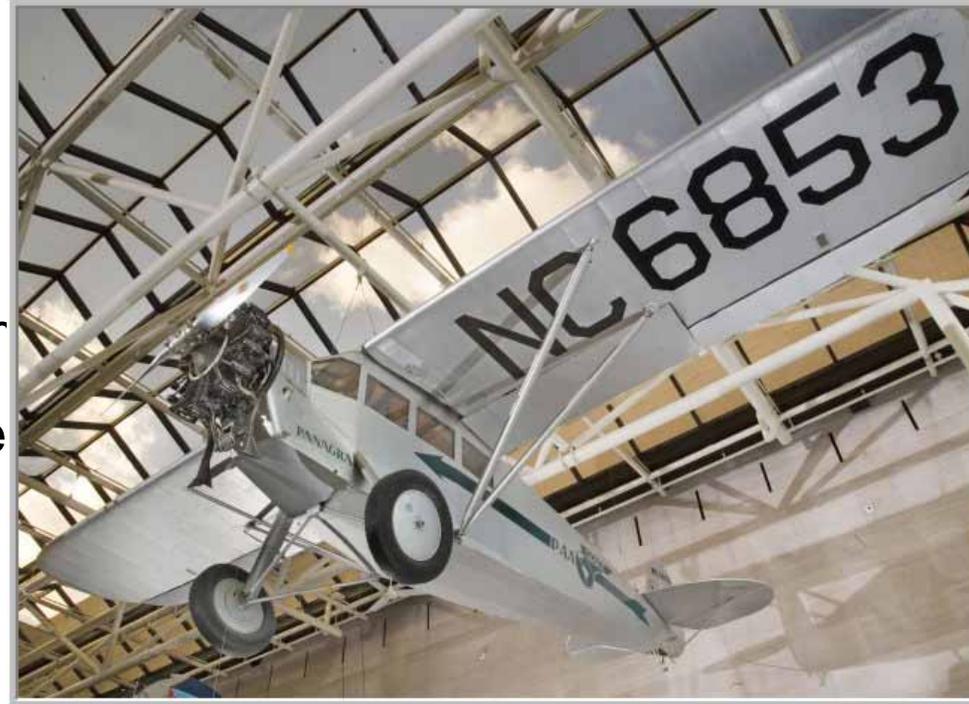


Federal Aviation  
Administration



# System Planning Objectives:

- Evaluate and Communicate the Condition (performance) of the General Aviation Airport System within the Southwest Region
- Identify Current and future System Deficiencies and Resources Required to Improve Performance
- Develop the Next Generation of Air(port) Transportation System (NGATS)



*“Worldly wisdom teaches that it is better for reputation to fail conventionally than to succeed unconventionally.”*

*- John Maynard Keynes*

# Challenges:

- How to Measure GA System Condition and Performance
- 5 States with unique state GA systems
- How to develop metrics that can be reproduced, easily understood by all stakeholders, yet meaningful



# Framework:

- **Subdivide 450 GA Airports, in five states, into logical Groupings or Tiers**
  - Transparent, Repeatable
  - Socio Economic Factors, Total Based Aircraft, Based Jet Aircraft and FAA Service Level Classification
  - Compatible with state system classification
- **Identify Selected “Basic Amenities” for Each Tier**
  - Safety (Standards) and Capacity (Aeronautical Access)
  - Limited to manageable number of items



# Focus Consistent with FAA Mission:

- **Increased Safety**

- Runway Safety Area Compliance with Standards
- Grooving of Jet Capable Runways
- Obstruction Removal

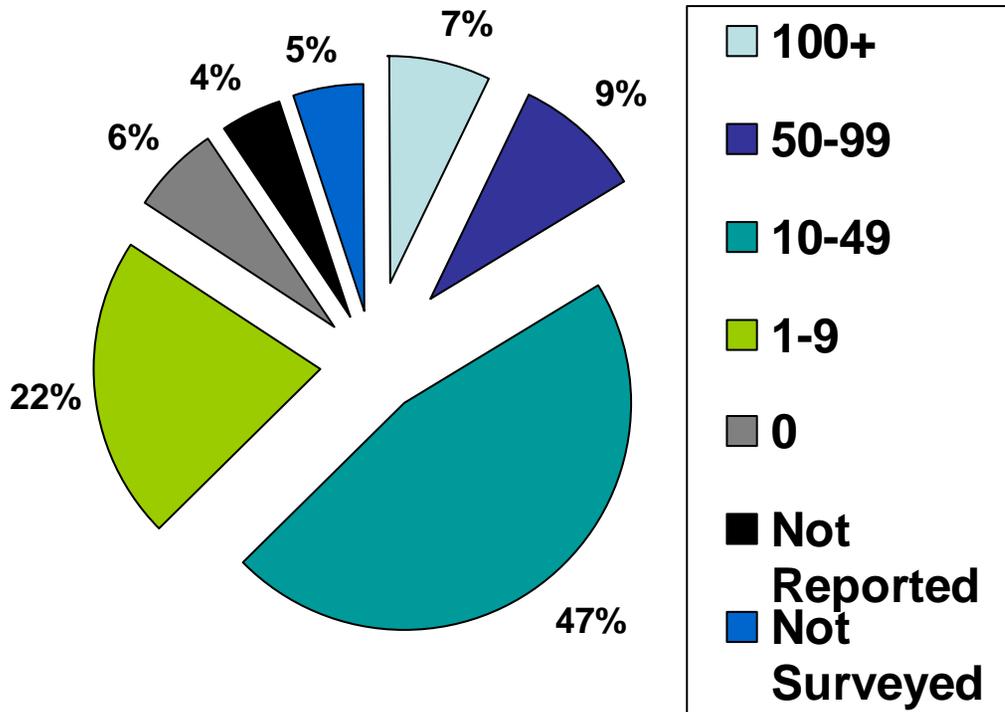
- **Greater Capacity (Aeronautical Access)**

- LPV Approaches (numerous requirements)
- Compatible Land Use and Height hazard Protection in place
- Runway Length, Condition and Strength (Single Wheel Bearing Capacity)

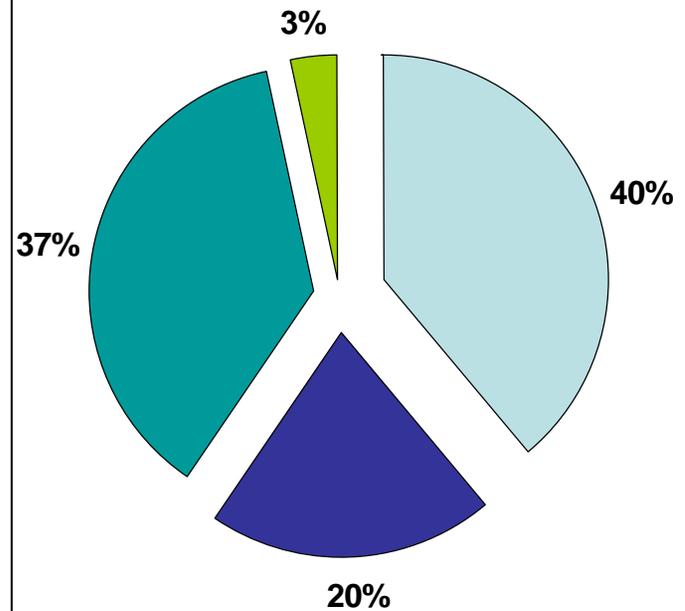


# GA Airport - Based Aircraft Distribution

## Number of Based Aircraft



## Total Based Aircraft



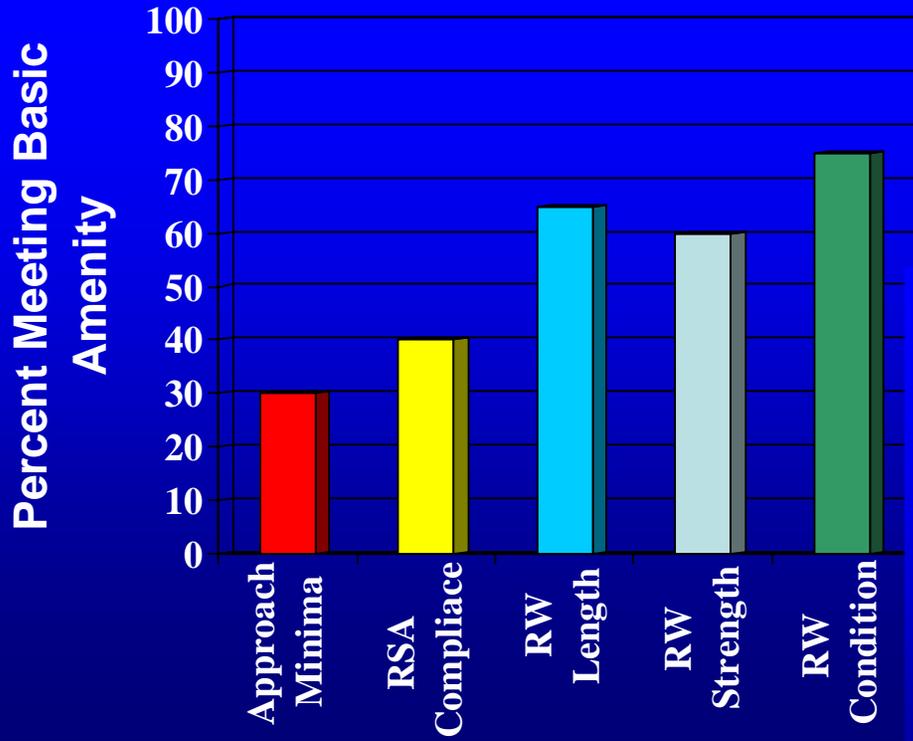
# Basic Amenities (Proposed):

Revised February 2008

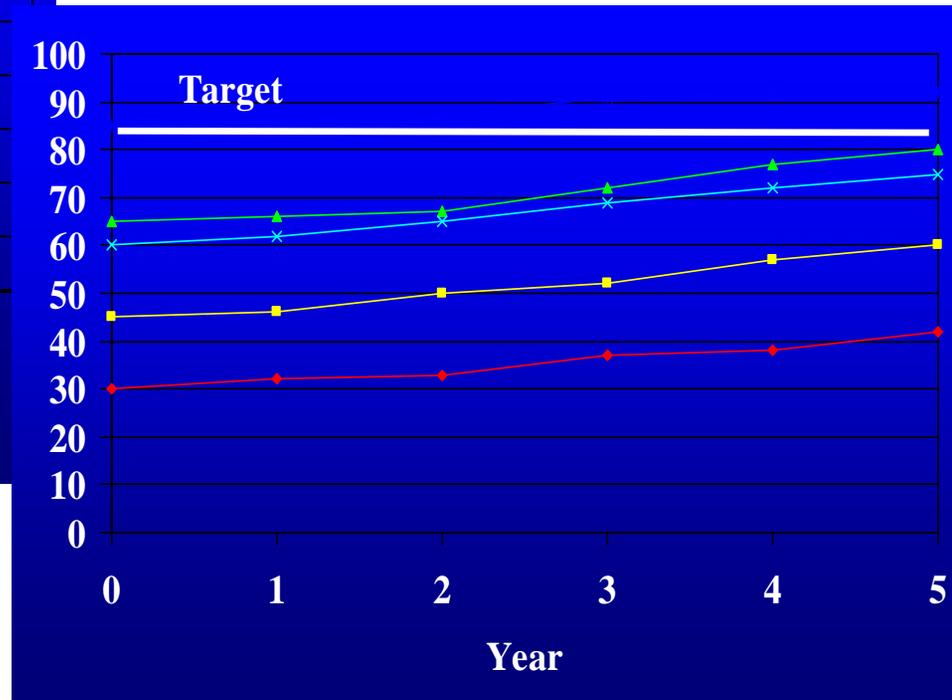
Role/Tier	1	2	3	Draft 4	Data Source
<b>Reporting Amenities*</b>					
<b>Airport Design Category:</b>	C-II	B-1	B-1	A-1	ALP
<b>Primary Runway Length (ft)*</b>	6,000	5,500	5,000	3,500	5010
<b>Pavement Strength, Single Wheel (1,000 Pounds)</b>	60	30	30	12.5	5010
<b>Approach Minima:</b>	200-1/2	250-3/4	300-1	Yes	AVN
<b>Compatible Land Use and Height Hazard Protection</b>	Yes	Yes	Yes	Yes	Airport
<b>Runway Protection Zone Controlled</b>	Yes	Yes	Yes	Yes	Airport
<b>Non Compatible Land Use in RPZ</b>	None	None	None	None	Airport
<b>Grooved Runway (if based turbojets)</b>	Yes	Yes	Yes	Yes	5010
<b>Runway Safety Area Meets Design Standards</b>	Yes	Yes	Yes	Yes	ALP/Airport
<b>Operations (Total)/Capacity (ASV) (w/ATCT)</b>	<80%	<80%			FAA
<b>Runway Condition (Primary Runway)</b>	Good or Better	Good or Better	Good or Better	Fair or Better	5010
<b>On-Airport Weather Reporting</b>	??				Airport
<b>Ground Link Availability</b>	??				Airport
<b>Wind Coverage (Primary&amp;Secondary)</b>	95	95	95		ALP



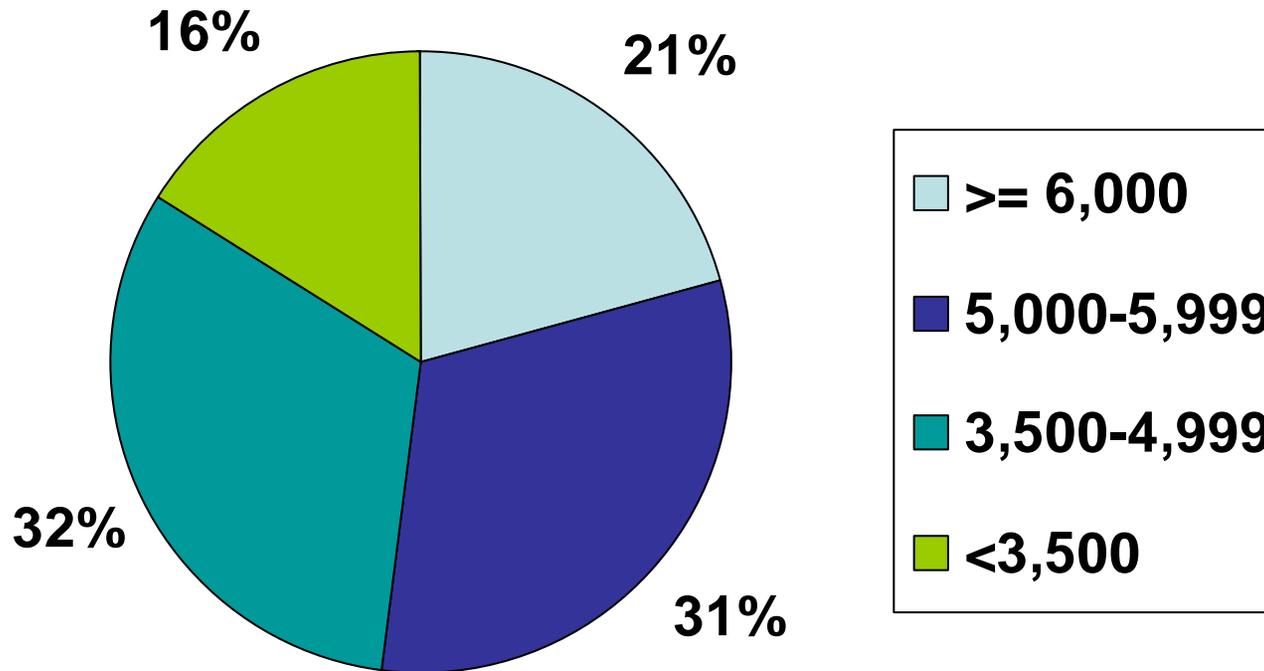
# System Performance – An Illustration



Baseline



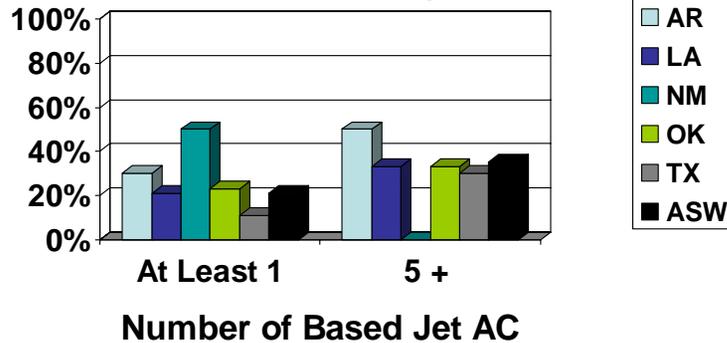
# Runway Length Distribution – Longest Runway



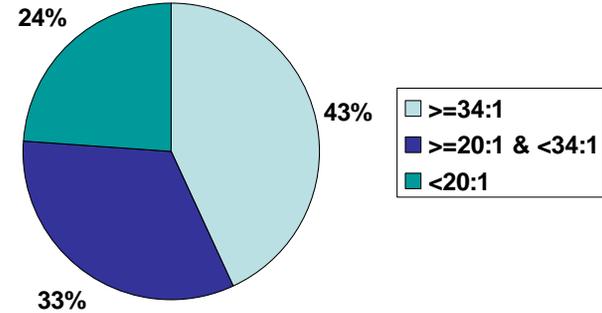
Data: 5010 Published February 14, 2008

# Current Conditions – Longest Runway at Airport

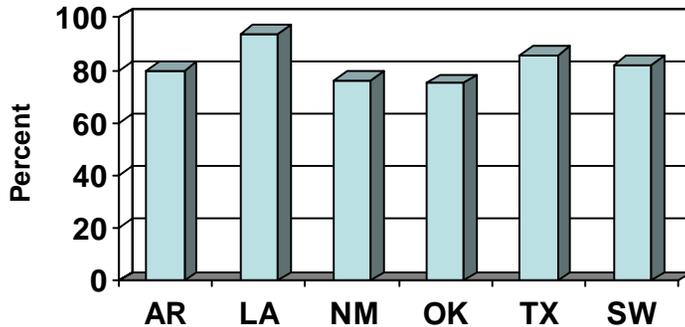
Grooved Runways at Airports with Based Turbojets



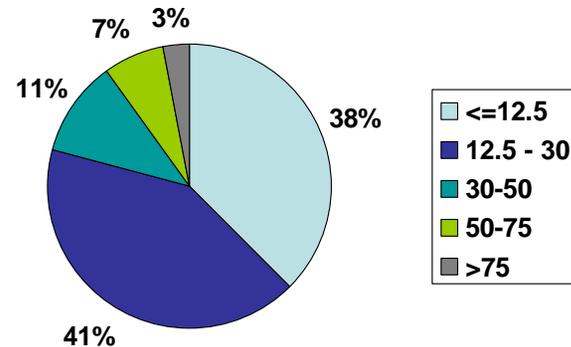
Runway Approach Clearance Slope



Runways in Good or Excellent Condition



Runway Gross Weight Strength (Single Wheel - 1,000 lb)



Data: 5010 Published February 14, 2008

# Summary – Benefits

- Supports System and Investment Evaluation
- Allows System-Based Investment Decision Input
- Supports the Next Generation of Air(port) Transportation System (NGATS)
- Provides a Rational Methodology for Developing System Needs (NPIAS)
- Is Compatible with variable State/Metropolitan System Plans



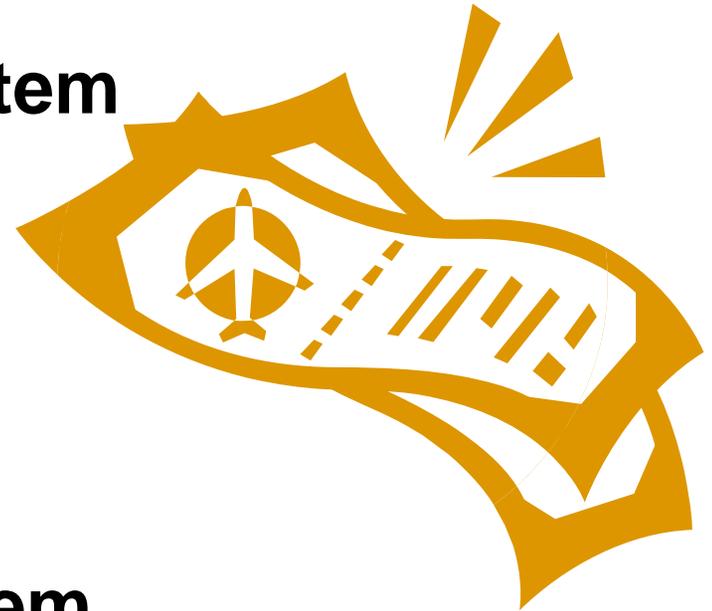
# Classification and Amenities Do Not:

- Provide a sole basis for AIP investment
- Restrict or Limit an Airport with Justified Needs
- Create De facto Design Standards
- Provide Automatic Funding Justification
- Support funding Low Benefit-Cost Projects



# Next Steps?

- **Baseline 5-State Region**
  - Standard data fields
- **Support State and MPO System Plans**
- **Gather Data**
- **Analyze System Condition**
- **Communicate**
- **Evaluate and Facilitate System Improvements**



*“If you really want to understand something –  
just try to change it.”*

# Have a Great Conference!

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