

SCOTTSDALE AIRPORT

### AIRPORT MASTER PLAN

for

# SCOTTSDALE AIRPORT Scottsdale, Arizona

Prepared for the CITY OF SCOTTSDALE

by

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in association with

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## TABLE OF CONTENTS



## SCOTTSDALE AIRPORT Scottsdale, Arizona

## Airport Master Plan

### **INTRODUCTION**

OVERVIEW	i
MASTER PLAN GOALS AND OBJECTIVES	i
Master Plan Tasks	ii:
Baseline Assumptions	ii
MASTER PLAN ELEMENTS AND PROCESS	iv
STUDY COORDINATION	
Chapter One	
INVENTORY	
AIRPORT PLANNING	1-2
National Level	1-2
State Level	
Regional Level	
Local Level	1-4
AIRSIDE FACILITIES	1-5
Runway 3-21	1-5
Taxiways	1-7
•	

## **Chapter One (Continued)**

Pavement Markings	1-8
Airfield Lighting and Signage	1-9
Weather and Communication Aids	1-10
Navigational Aids	
AIRPORT LANDSIDE FACILITIES	1-11
Airport Terminal Area	
Aircraft Hangar Facilities	1-12
Aircraft Parking Aprons	1-13
General Aviation Services	1-13
Automobile Parking	1-15
Park-and-Ride Transit Facility	1-16
Fuel Facilities	1-16
Aircraft Rescue and Firefighting	1-17
Aircraft Wash Rack/Pad	1-17
Security Fencing/Gates	
Utilities	
SCOTTSDALE AIRPARK	
VICINITY AIRSPACE	1-19
Airspace Structure	1-19
Special Use Airspace	1-21
Airspace Control	
Instrument Approach Procedures	
Arrival and Departure Procedures	
Local Operating Procedures	
Noise Abatement Rules and Procedures	
VICINITY AIRPORTS	
AIRPORT CHARACTERISTICS	
Airport Location	
Airport History	
Regional Climate	
Airport Activity	
Capital Improvement History	
AREA LAND USE AND ZONING	
Federal Legislation and Regulations	
Existing Land Use and Zoning	
City of Scottsdale General Plan 2001 and Future Land Use	
Greater Airpark Character Area Plan	
SOCIOECONOMIC CHARACTERISTICS	
Population	
Employment	
Per Capita Personal Income	
ENVIRONMENTAL INVENTORY	
Air Quality	
Coastal Resources	
Department of Transportation (DOT) Act: Section 4(f)	1-38

## **Chapter One (Continued)**

Farmland	1-39
Fish, Wildlife, and Plants	1-39
Floodplains	1-40
Greenhouse Gases and Climate	1-41
Hazardous Materials, Pollution Prevention, and Solid Waste	1-42
Historical, Architectural, Archaeological, and Cultural Resources	
Water Quality	1-43
Wetlands	1-43
Wild and Scenic Rivers	
SUMMARY	
DOCUMENT SOURCES	1-44
Chapter Two FORECASTS	
NATIONAL AVIATION TRENDS AND FORECASTS	
National Trends	
General Aviation Trends	
General Aviation Aircraft Shipments and Revenue	
AIRPORT SERVICE AREA	
SOCIOECONOMIC PROJECTIONS	
Population	
Employment	
FORECASTING APPROACH	
AVIATION FORECASTS	
Registered Aircraft Forecast	
Based Aircraft Forecast	
Based Aircraft Fleet Mix	
General Aviation Operations	
Air Taxi Operations	
Military Operations	
ATCT Count Adjustment	
Annual Instrument Approaches	
Comparison to the FAA TAF	
PEAKING CHARACTERISTICS	
DESIGN AIRCRAFT	
Runway Design Code	
Taxiway Design Code	
Current Design Aircraft	
Future Design Aircraft	
SUMMARY	2-36

# Chapter Three FACILITY REQUIREMENTS

PLANNING HORIZONS	3-2
Airport Peaking Characteristics	3-3
AIRFIELD CAPACITY AND DELAY	3-3
Factors Affecting Annual Service Volume	3-3
Calculation of Annual Service Volume	3-6
Aircraft Delay	3-7
Capacity Analysis Conclusion	3-8
SAFETY AREA DESIGN STANDARDS	3-9
Runway Design Code	3-9
Declared Distances	3-10
Runway Safety Area	3-12
Runway Object Free Area	3-12
Runway Obstacle Free Zone	3-13
Runway Protection Zones	3-13
AIRSIDE FACILITIES	3-14
Runways	3-15
Taxiways	3-22
Navigational and Approach Aids	3-25
Airfield Lighting, Marking, and Signage	3-27
LANDSIDE FACILITIES	3-28
General Aviation Terminal Services	3-28
Aircraft Hangars	3-30
Aircraft Parking Aprons	3-32
Airport Support Facilities	
SUMMARY	3-40
Chapter Four	
AIRPORT ALTERNATIVES	
NON-DEVELOPMENT ALTERNATIVES	4-2
AIRPORT DEVELOPMENT OBJECTIVES	4-2
REVIEW OF PREVIOUS AIRPORT PLANS	4-3
AIRPORT ALTERNATIVE CONSIDERATIONS	4-4
AIRSIDE DEVELOPMENT CONSIDERATIONS	4-4
FAA Airport Design Criteria	4-4
Critical Design Aircraft	4-7
Runway Dimensional Criteria for RDC D-III Standards	4-7
Implementing RDC D-III Standards	4-9
RDC D-III Standards Summary	4-10
Runway Dimensional Criteria for RDC D-II Standards	4-11
Implementing RDC D-II Standards	4-11
RDC D-II Standards Summary	4-13
Modification to Design Standards	4-13

## **Chapter Four (Continued)**

Runway Hold Line Separation	4-15
Runway Pavement Strength	
Taxiways	
Runway Visual Approach Aids	
Runway Thresholds	
Runway Protection Zones	4-18
Instrument Approach Considerations	
Airside Development Summary	4-21
LANDSIDE DEVELOPMENT CONSIDERATIONS	4-22
Aviation Activity Levels	4-22
Hangar Development	4-23
Interior Vehicle Access	4-23
Building Restriction Line	4-24
Separation Standards	4-25
Landside Alternatives	4-25
Landside Development Summary	4-29
Land Acquisition	4-30
SUMMARY	4-31
RECOMMENDED MASTER PLAN CONCEPT	
AIRSIDE DEVELOPMENT CONCEPT	5-2
Runway Configuration	
Runway Dimensional Standards	
Modification to Design Standards	
Runway Pavement Strength	
Taxiway Construction	
Taxiway Geometry Enhancements	
Instrument Approaches	5-6
Runway Protection Zones	5-7
LANDSIDE DEVELOPMENT CONCEPT	5-8
Aircraft Hangars	5-8
Terminal Area Redevelopment	
Vehicular Access	5-10
Aviation Support Facilities	5-11
Ultimate Land Acquisition	
SUMMARY	5-11

# Chapter Six FINANCIAL PROGRAM/CAPITAL IMPROVEMENTS

AIRPO	ORT DEVELOPMENT NEEDS	6-1
AIRPO	ORT DEVELOPMENT SCHEDULE AND COST SUMMARIES	6-2
	Short Term Program	6-5
	Intermediate Term Program	6-8
	Long Term Program	6-9
	Capital Improvement Summary	
CAPIT	AL IMPROVEMENT FUNDING SOURCES	6-10
	Federal Grants	6-10
	State Aid to Airports	6-13
	Local Funding	
MAST	ER PLAN IMPLEMENTATION	
EXHI	BITS	
A	PROJECT WORK FLOW	after page vi
1A	NPIAS AND FAA ASSET STUDY	after page 1-4
1B	AIRSIDE FACILITIES	after page 1-6
1C	AIRPORT LANDSIDE FACILITIES	after page 1-12
1D	SCOTTSDALE AIRPARK	
1E	AIRSPACE CLASSIFICATION	
1F	AIRSPACE MAP	
1G	INSTRUMENT APPROACH DATA	after page 1-24
1H	PREFERRED OPERATING PROCEDURES FOR FIXED	
	WING AIRCRAFT	after page 1-26
1J	PREFERRED OPERATING PROCEDURES FOR HELICOPTERS.	
1K	VICINITY AIRPORTS	
1L	LOCATION/VICINITY MAP	1 0
1M	HISTORICAL AIRPORT OPERATIONS AND BASED AIRCRAFT.	
1N	TITLE 14 CFR PART 77 SURFACE MODEL	
1P	AIRPORT INFLUENCE AREA AND NOISE OVERLAY ZONES	
1Q	EXISTING LAND USE	
1R	FUTURE LAND USE	
1S	GREATER AIRPARK LAND USE MAP	after page 1-36
2A	U.S. ACTIVE GENERAL AVIATION AIRCRAFT FORECASTS	after page 2-4
2B	LOCATION OF BASED AIRCRAFT	
2C	PRIMARY SERVICE AREA	
2D	REGISTERED AIRCRAFT FORECASTS	
2E	BASED AIRCRAFT FORECASTS	after page 2-20
2F	GENERAL AVIATION OPERATIONS FORECASTS	after page 2-24
2G	AIRPORT REFERENCE CODES	
2H	BUSINESS JET ACTIVITY	
2I	FORECAST SUMMARY	after nage 2-36

### **EXHIBITS (Continued)**

3A	AIRFIELD CAPACITY FACTORS	after page 3-4
3B	CAPACITY ANALYSIS	after page 3-8
3C	DECLARED DISTANCES	after page 3-12
3D	SAFETY AREA DEFICIENCIES	after page 3-12
3E	WINDROSE	after nage 3-16
3F	AIRSIDE FACILITIES SUMMARY	after page 3-28
3G	LANDSIDE FACILITIES SUMMARY	after page 3-40
4A	2013 ALP DATA SHEET	after page 4-4
4B	2013 ALP DATA SHEETALTERNATIVE CONSIDERATIONS	after page 4-4
4C	AIRCRAFT CLASSIFICATION PARAMETERS	after page 4-6
4D	AIRPORT DESIGN STANDARDS COMPARISON	after page 4-8
4E	AIRSIDE CONSIDERATIONS	after page 4-16
4F	REMOVE DISPLACED THRESHOLDS	after page 4-18
4G	RUNWAY 3 STRAIGHT-IN APPROACH	after page 4-20
4H	RUNWAY 21 STRAIGHT-IN APPROACH	after page 4-22
4J	WEST LANDSIDE REDEVELOPMENT ALTERNATIVE 1	after page 4-26
4K	WEST LANDSIDE REDEVELOPMENT ALTERNATIVE 2	after page 4-28
4L	WEST LANDSIDE REDEVELOPMENT ALTERNATIVE 3	after page 4-28
4M	POTENTIAL PROPERTY ACQUISITION	after page 4-30
5A	MASTER PLAN CONCEPT	after page 5-2
6A	CAPITAL IMPROVEMENT PROGRAM	after page 6-2
6B	CIP DEVELOPMENT STAGING - SHORT TERM PROGRAM	after page 6-6
6C	CIP DEVELOPMENT STAGING – INTERMEDIATE AND	
	LONG TERM PROGRAMS	after page 6-8

Appendix A GLOSSARY OF TERMS

Appendix B SAFETY RISK MANAGEMENT DOCUMENT

Appendix C ENVIRONMENTAL OVERVIEW

Appendix D ECONOMIC BENEFIT ANALYSIS

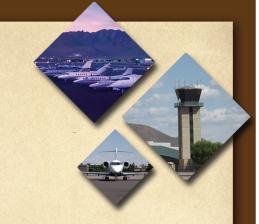
Appendix E AIRPORT LAYOUT PLANS

Appendix F FAA Forecast Approval Letter



## INTRODUCTION





# INTRODUCTION

An Airport Master Plan provides an evaluation of the airport's aviation demand and an overview of the systematic airport development that will best meet those demands. The Master Plan establishes development objectives and provides for a 20-year planning period that details the rationale for various study elements including airside configuration, facility development, on-airport land use recommendations, and support facilities. It also serves as a strategic tool for establishing airport improvement priorities and obtaining federal and state funding.

The Scottsdale Airport Master Plan has been undertaken to evaluate the airport's capabilities and role, to forecast future aviation demand, and to plan for the timely development of new or expanded facilities that may be required to meet that demand. The ultimate goal of the Master Plan is to provide guidelines for the airport's overall

maintenance, development, and operation in an environmentally and fiscally responsible manner while adhering to appropriate Federal Aviation Administration (FAA) safety design standards.

The preparation of this Master Plan is necessary as a timely reassessment of the development direction of Scottsdale Airport in order to meet the needs of a dynamic local economy and ever-changing air transportation industry. The City of Scottsdale has long recognized the importance of air transportation to the surrounding region as well as the unique challenges that operating an airport presents. The investment in an airport yields many benefits to both the community and the region which it serves. With a sound and realistic plan in place, Scottsdale Airport will continue to remain an important link to the regional and national air transportation systems and will maintain



the public and private investments in its facilities.

The City of Scottsdale is responsible for funding capital improvements at the airport as well as obtaining FAA and Arizona Department of Transportation – Multi-Modal Planning Division – Aeronautics Group (ADOT-MPD – Aeronautics Group) development grants. The Master Plan is intended to provide guidance through an updated capital improvement program (CIP) to demonstrate the future investments required by the City of Scottsdale.

### **OVERVIEW**

On a national level, the events of September 11, 2001, and the repercussion to the national aviation system are still affecting the industry today. One of the most significant effects is the shift of traditional airline passengers to the corporate aircraft fleet. Inconveniences and time lost due to security and large airport congestion have made corporate aircraft use more affordable and attractive. For this reason, general aviation airports in large demand centers, such as the greater Phoenix metropolitan area, need to serve the growing demand. While high oil prices and the economic recession have caused general aviation activity to decline in recent years, general aviation demand is anticipated to rebound and grow as the economy recovers.

On a regional level, the Phoenix metropolitan area is home to an extensive airport network meeting the needs of an array of aviation activities. The role of Scottsdale Airport in this network must be considered throughout this study.

On a local level, the area surrounding Scottsdale Airport supports a diverse and

strong economic base. It provides for a very dynamic environment with abundant business, recreational, and educational opportunities. It is imperative that the airport match the opportunities and facilities that the area provides. This Master Plan will consider not only the facility needs to meet demand, but also methods to ensure that the airport projects a first class image for both the City of Scottsdale and surrounding area.

Scottsdale Airport is a general aviation reliever airport, as defined by the FAA, which serves to help reduce congestion at Phoenix Sky Harbor International Airport by being attractive for use by general aviation users. The airport is included in the FAA's National Plan of Integrated Airport Systems (NPIAS), making it eligible for federal development grants. It is home to more than 400 based aircraft and offers many facilities and a wide variety of aviation services including hangar storage, tiedowns, fuel, maintenance, aircraft charter, rental cars, and office space. The current runway system consists of Runway 3-21, an 8,249-foot by 100-foot asphalt runway. The airport encompasses approximately 335 acres of land. In addition, the Scottsdale Airpark is located adjacent to the airport. It is made up of privately owned commercial and industrial parcels, most of which are provided taxiway or direct access to the airport with proper permission granted from aviation staff. A variety of aviation-related activities occur in the Airpark.

## MASTER PLAN GOALS AND OBJECTIVES

The overall objective of the Airport Master Plan is to provide the City of Scottsdale with guidance for future develop-

ment of the airport and meeting the needs of existing and future users, while also being compatible with area development, other transportation modes, and the environment. This study will identify and provide justification for new priorities. The plan will be closely coordinated with other existing or on-going planning studies in the area, and with aviation plans developed by the FAA and State of Arizona.

Specific goals and objectives of the study include:

- Examine factors likely to affect air transportation demand in the City of Scottsdale and surrounding area over the next 20 years and develop updated operational and based aircraft forecasts.
- Determine projected needs of airport users, taking into consideration recent changes to FAA design standards and continued maintenance, as well as necessary improvements to the airport's infrastructure, to ensure maximum utility of public and private facilities at Scottsdale Airport.
- Be reflective of the goals and visions of the surrounding area, especially those related to quality of life, business and development, and land use.
- Establish a schedule of development priorities, a financial program for implementation of development, and analyze potential funding sources consistent with FAA, ADOT-MPD – Aeronautics Group, and local planning.
- Maintain safety as an essential consideration in the planning and development of the airport.

 Develop active and productive public involvement throughout the planning process.

### MASTER PLAN TASKS

The Master Plan will accomplish the goals and objectives by carrying out the following:

- Determine projected needs of airport users through the year 2032.
- Analyze socioeconomic factors likely to affect air transportation demand in the surrounding region.
- Evaluate existing and future aviation demand in order to provide a vision for future airport development that will optimize airport property and promote aircraft safety.
- Analyze airport safety and security measures and consider further enhancements to accommodate aviation needs of the airport.
- Evaluate land acquisition requirements for future aviation facility development and/or safety requirements.
- Produce current and accurate base maps and Airport Layout Plan (ALP) drawings.

### **BASELINE ASSUMPTIONS**

A study such as this typically requires some baseline assumptions that will be used throughout the analysis. The baseline assumptions for the Scottsdale Airport Master Plan include:

- Scottsdale Airport will continue to operate as a publicly owned general aviation reliever airport through the planning period.
- The other regional general aviation airports in the greater Phoenix metropolitan area will remain open for the foreseeable future.
- Scottsdale Airport will continue to seek general aviation and corporate business aviation based tenants and transient operations.
- The aviation industry on the national level will grow as forecast by the FAA in its annual Aerospace Forecasts.
- The socioeconomic characteristics of the region will remain as forecast by the Maricopa Association of Governments (MAG).
- Both a federal and state program will be in place through the planning period to assist in funding future capital development needs.

### MASTER PLAN ELEMENTS AND PROCESS

The Master Plan is being prepared in a fashion pursuant to the scope of services that has been coordinated with the City of Scottsdale and the FAA. The study has 11 elements that are intended to assist in the identification of future facility needs and which provide the supporting rationale for their implementation.

Element 1 – Study Initiation includes the development of the scope of services, budget, and schedule. A Planning Advisory Committee (PAC) will be formed and study material will be assembled in a workbook format. General background information will be established that will include outlining the goals and objectives to be accomplished during the Master Plan.

**Element 2 – Inventory** summarizes facilities and operational data, weather conditions, population and economic data, vicinity land uses, and environmental conditions of the airport and surrounding area. New aerial photography and planimetric mapping of the airport will also be obtained to aid in the study process.

**Element 3 – Forecasts** examines the potential aviation demand for based aircraft, annual operations, peaking characteristics, and annual instrument approaches at the airport over a 20-year period.

**Element 4 – Facility Requirements** establishes the critical aircraft and physical planning criteria based upon AC 150/5300-13A, *Airport Design*, in preparation of a needs assessment for airside and landside facilities.

Element 5 – Airport Alternatives considers a variety of solutions to accommodate projected airside and landside facility needs through the long term planning period. An analysis is completed to identify the strengths and weaknesses of each proposed development alternative, with the intention of determining a single direction for development.

**Element 6 – Recommended Master Plan Concept** provides both a graphic and narrative description of the recommended plan for the use, development, and operation of the airport following input from the PAC, FAA, ADOT-MPD – Aeronautics Group, City of Scottsdale officials, and the general public.

Element 7 – Financial Program/Capital Improvements focuses on the capital needs program which defines the schedules, costs, and funding sources for the recommended development projects. A detailed CIP is included in this element. In addition, an economic benefit analysis is conducted to measure and analyze the economic impacts of Scottsdale Airport and those portions of the Scottsdale Airpark that are provided taxiway or direct access to airport property. Benefit measures include total economic activity (revenues), payroll, employment, and tax revenues.

**Element 8 – Environmental Evaluation** analyzes potential environmental impacts generated by the recommended development program.

**Element 9 – Airport Plans** is developed to depict existing and proposed facilities. The drawing set meets the requirements of the FAA and ADOT-MPD – Aeronautics Group and replaces the ALP drawings approved by the FAA in 2012.

Element 10 – Public Coordination and Communication provides opportunities to inform the public on the Master Plan process. Working papers are prepared at various milestones in the planning process. A series of PAC meetings and public workshops are also planned during the process to discuss study findings. A project website and study initiation brochures are also developed to aid in disseminating information related to the Master Plan.

Element 11 – Final Reports and Approvals provide documents which depict all the findings of the study effort and present the study and its recommendations to appropriate local organizations. The final document incorporates the revisions to previous working papers prepared under earlier elements into a usable Master Plan document. The approval process includes a recommendation of the Master Plan document by the Airport Advisory Commission to the Scottsdale City Council for ultimate approval/adoption.

### STUDY COORDINATION

The City of Scottsdale initiated this Master Plan to reevaluate and adjust, as necessary, the future development plan for Scottsdale Airport. The last Master Plan for the airport was completed in 1997. The ALP was more recently revalidated in 2012. The Scottsdale Airport has received a grant from the FAA to conduct this Master Plan. The FAA grant covers 91.06 percent of the fixed-fee project cost, with the City of Scottsdale's Aviation Enterprise Fund providing a grant match of 4.47 percent and ADOT-MPD - Aeronautics Group providing the remaining 4.47 percent match.

The Airport Master Plan is prepared in accordance with FAA requirements, including Advisory Circular (AC) 150/5300-13A, *Airport Design* (as amended), and AC 150/5070-6B, *Airport Master Plans*. The scope of services, budget, and schedule has been approved by the City of Scottsdale following review and approval by the FAA.

To assist in the development of the Master Plan, a cross-section of community members and aviation groups with a vested interest in Scottsdale Airport has

been identified to act in an advisory role in the development of the Master Plan through the formation of a PAC. The PAC consists of federal, state, and local agencies, airport tenants, and general public representatives. Members of this PAC reviewed working papers and provided comments throughout the study to help

ensure that a realistic, viable plan was developed. **Table A** provides a list of the PAC members for the Scottsdale Airport Master Plan. The study schedule has called out five points during the process when the PAC convened to discuss issues related to the Master Plan.

TABLE A			
Master Plan	- Planning Adv	isory Committee	
Scottsdale Ai			
Last Name	First Name	Title	Representing
Mascaro	Gary	Aviation Director	City of Scottsdale - Aviation Department
Hobbi	Bob	Commissioner	Scottsdale Airport Advisory Commission
Schuckert	William	Commissioner	Scottsdale Airport Advisory Commission
Gibson	Greg	General Manager	Signature Flight Support
Wright	Matthew	General Manager	Landmark Aviation
Williams	Mike	Assistant Manager	Federal Aviation Administration
Duran	Jaime	Special Projects Officer	Federal Aviation Administration
		Airport Projects Planning Man-	
Potts	Kenneth	ager	ADOT-MPD - Aeronautics Group
Gillies	Bill	Airspace Manager	Arizona Military Airspace Working Group
Strow	Tim	Transportation Director	Maricopa Association of Governments
Rosen	Arthur	Representative	Aircraft Owners and Pilots Association
		Western Regional Representa-	
Howard	Stacy	tive	National Business Aviation Association
			FAA Western Terminal Operations -
Jacobs	Jacqueline	Air Traffic Manager	Scottsdale ATCT
Bowman	Tom	Terminal District Manager	Phoenix TRACON
			City of Scottsdale - Economic Develop-
Casey	Danielle	Director	ment Department
Meyer	John	Designated Broker	Airport Properties Specialists
Keely	Jim	Founding Partner	Colliers International
Ojeda	Ruben	Manager	Arizona State Land Department
Ready	Brian	Co-Chair	Phoenix Airspace Users Working Group
Murphy	Jay	Owner	Murphy Ventures, LLC
Ex-Officio Me	embers		
		Aviation Planning and Outreach	
Ferrara	Sarah	Coordinator	City of Scottsdale - Aviation Department
Read	Chris	Airport Operations Manager	City of Scottsdale - Aviation Department

Open house public workshops were also held to present preliminary findings and solicit comments from the general public. Four public workshops were scheduled during the Master Plan. The study is expected to take approximately 18 months to complete, including FAA review of the sponsor-approved ALP drawings.

**Exhibit A** provides a graphical depiction of the elements and process involved with the study. The draft working papers have been made available to the public on the Scottsdale Airport's website at <a href="https://www.scottsdaleairport.com">www.scottsdaleairport.com</a>.

## **Master Plan Process**



### STUDY INITIATION

- Scope of Service
- Establish PAC
- Goals and Objectives



### INVENTORY

- Airport Facilities
- Area Socioeconomic Data
- · Airspace and Air **Traffic Activity**
- Local Planning and Land Use • Project Web Site
- Airport Access and Parking, Utilities, and **Aerial Photography**



#### **FORECASTS**

- Based Aircraft and Fleet Mix
- Annual Operations





and Strength

### **FACILITY REQUIREMENTS**

- Design Categories
- · Runway Length
- Support Facilities Taxiways
- Hangar Facilities
- Aprons Terminal Building
  - Navigational Aids





### **AIRPORT ALTERNATIVES**

- Evaluate Development Scenarios
  - Airside - Landside







### **RECOMMENDED MASTER PLAN CONCEPT ENVIRONMENTAL OVERVIEW**

- Detailed Master Plan Facility Review/Evaluation of NEPA and Land Use Plans
- **Environmental Categories**
- Noise Exposure



### FINANCIAL PLAN / CAPITAL IMPROVEMENTS

- Airport Development Schedule
- Economic Benefit Study
- Cost Estimates
- Funding Sources





### AIRPORT LAYOUT PLANS

- Airport Layout Plan • Landside Drawing
- Airspace/Approach Drawings
- On-Airport Land Use Plan
- Property Map











