

Marana Regional Airport

Airport Master Plan

Technical Advisory Committee (TAC)

Meeting No. 1 – Kick off

August 17, 2015



GENESIS
CONSULTING GROUP



ARMSTRONG

Agenda



- Introductions
- Master planning overview
- Committee's role
- Forecasting and Design standards
- Planning considerations
- Key issues
- Public involvement
- Master plan elements
- Timeline
- Next steps



Airport master plan goal



Prepare a master plan that meets Federal Aviation Administration (FAA) design standards and provides for a safe and efficient airport to accommodate existing and future demand



What is a master plan?



- A twenty year plan of development
 - Forecast of expected demand
 - Identification of assets and deficiencies
 - Consideration of development alternatives
 - Preparation of a financial development Plan
- Airport Layout Plan (ALP)
 - Consolidated plan of development
 - Approved by Federal Aviation Administration (FAA)
 - Funding tool

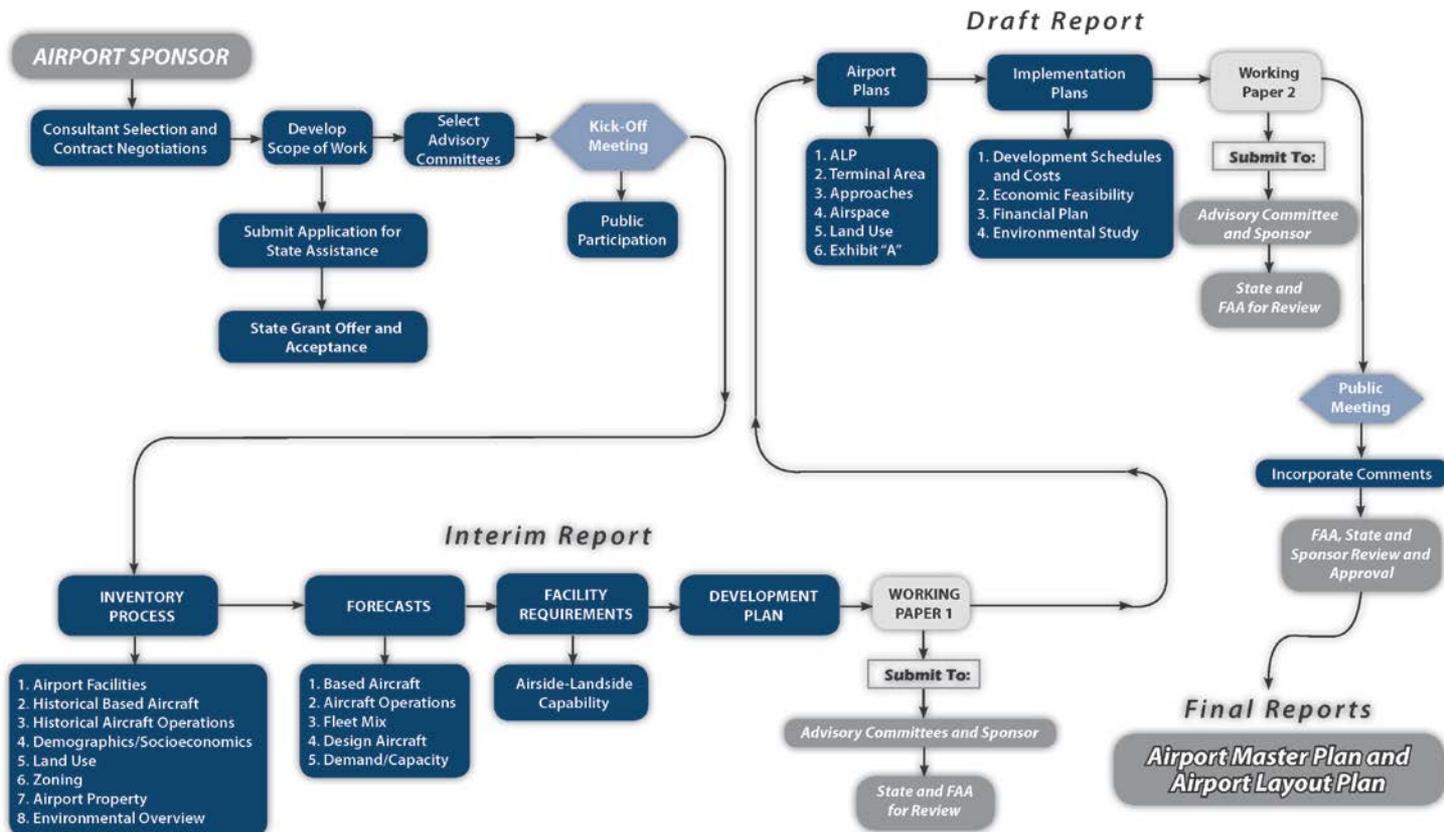


Master Plan Process



AIRPORT MASTER PLANNING

The Route To Success



Technical Advisory Committee role



- Review and provide comments on each interim and draft final document
- Provide guidance on the development of alternatives
- Guide the selection of a preferred alternative
- Meet at scheduled intervals during the study



Aviation demand forecasts



Resources

- Historical based aircraft
- Historical operations
- Transient user data
- FAA terminal area forecast
- FAA form 5010
- Aviation system plans
- US Census Socioeconomic data

Evaluation

- ▶ Local trends
- ▶ Regional trends
- ▶ National trends
- ▶ Relationship to other airports
- ▶ Reasonableness of past forecast strategies

Results

- ▶ Based aircraft with fleet mix
- ▶ Annual operations by type
- ▶ Peak operations
- ▶ Instrument operations
- ▶ *FAA approval required*



Existing/Future Critical Aircraft



- Maximum Takeoff Weight
- Aircraft Approach Category
 - Approach speed
- Airplane Design Group



Existing design aircraft



- Runway 12-30
 - Canadair Challenger 600
 - Maximum take-off weight: 47,450 lbs.
 - Aircraft Approach Category C
 - Approach Speed = 133 knots
 - Airplane Design Group II



Existing design aircraft



- Runway 3-21
 - King Air 100
 - Maximum take-off weight: 11,800 lbs.
 - Aircraft Approach Category B
 - Approach Speed = 111 knots
 - Airplane Design Group I



Runway Design Code (RDC)

Runway 12-30
C/II/5000

Runway 3-21
B/I/5000



AI

Primarily Single-Engine Propeller Aircraft, some light twins

Example Type: Cessna 172 Skyhawk



BI

Primarily Light Twin-Engine Propeller Aircraft

Example Type: Piper Navajo



BII

(<12,500 lbs)
Primarily Light Turboprops

Example Type: Beechcraft King Air



BII

(>12,500 lbs)
Mid-sized corporate jets and commuter airliners

Example Type: Cessna Citation II



A/BIII

Primarily large commuter-type aircraft

Example Type: De Havilland Dash 8



CI, DI

Primarily small and fast corporate jets

Example Type: Lear Jet 36



C/DII

Large corporate jets and regional-type commuter jets

Example Type: Gulfstream IV



C/DIII

Commercial airliners (approx. 100-200 seats)

Example Type: Boeing 737



C/DIV

Large commercial airliners (approx. 200-350 seats)

Example Type: Boeing 767



DV

Jumbo commercial airliners (approx. 350+ seats)

Example Type: Boeing 747



Airport master plan typical issues



Technical Issues

- ▶ Runway length
- ▶ Runway safety area
- ▶ Project cost
- ▶ Engineering constraints
- ▶ Role in regional airport capacity

Stakeholder Issues

- ▶ Airport, town, county, users, tenants, FAA and ADOT
- ▶ Economic impact
- ▶ Safety
- ▶ Runway use
- ▶ Budget
- ▶ Schedule

Community Issues

- ▶ Community concerns
- ▶ Noise
- ▶ Infrastructure impacts
- ▶ Economic impact
- ▶ Environment





1 AIRPORT RESTAURANT



2 EAST HANGAR APRON T-HANGAR



3 ELECTRICAL BUILDING



4 FBO MAINTENANCE HANGAR 1



5 AIRCRAFT SHADE STRUCTURE



6 NORTH ACCESS ROAD



7 WEST HANGAR APRON T-HANGARS



8 TERMINAL - FBO FACILITY



9 SELF-SERVE FUEL ISLAND



10 FBO AVIONICS SHOP, HANGAR AND AIRPORT ADMINISTRATION OFFICE



11 AIRPORT VEHICLE PARKING LOT



12 AIRPORT ENTRANCE SIGN



13 SOUTH HANGAR APRON T-HANGARS



14 OUTDOOR SEATING AREA



15 FUEL STORAGE TANKS



16 FBO HANGAR 2



17 PACIFIC AERO VENTURES



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MARANA REGIONAL AIRPORT MARANA, ARIZONA	
EXHIBIT B	
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Planning considerations



- Factors influencing aviation demand
- Apron and terminal area layout
- Future hangar locations and sizes
- Airside and landside requirements
- Future instrument approaches and visibility minimums
- Land use compatibility
- Flight training
- Helicopter activity



Key Issues



What are the key issues that we should focus on?



Public involvement



- Document review
- Public informational meeting
- Meeting comment forms
- Emails, regular mail
- In-person meetings (as needed)
- Executive summary brochure



Master Plan Elements



Master Plan Elements	Working Papers and Final Document	Meetings
Committee Meeting No 1		
Airport Inventory		
Aviation Forecasts	Working Paper No 1	
Facility Requirements		
Development Alternatives	Working Paper No 2	
Committee Meeting No 2		 
Airport Layout Plans		
Environmental Overview		
Implementation and Financial Plan	Working Paper No 3	
Committee Meeting No 3 and Public Informational Meeting		 
Final Document Preparation	Final Document	



Master Plan Timeline



- Notice to Proceed (NTP) – July 2015
- **Committee meeting no. 1 – August 2015**
- Working paper no. 1 – November 2015
- Working paper no. 2 – January 2016
- **Committee meeting no. 2 – February 2016**
- Working paper no. 3 – May 2016
- **Committee meeting no. 3 – June 2016**
- Draft final report – July 2016
- Final report – third quarter of 2016
- Entire process should take about one year



Next Steps



- Obtain feedback from the committees
- Complete inventory and aviation forecasts
- Submit Working Paper 1 to the committees
- Submit aviation forecasts to the Sponsor and FAA for approval
- Prepare facility requirements and alternatives
- Submit Working Paper No. 2 to the committees
- Hold committee meeting no. 2



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