

Marana Regional Airport

Airport Master Plan

Planning Advisory Committee (PAC)

Meeting No. 2

January 27, 2016



GENESIS
CONSULTING GROUP



ARMSTRONG

Agenda



- Introductions
- Master planning process overview
- Overview of Working Papers
- Business Plan Update
- Next steps
- Q&A



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



Planning Advisory Committee role



- Guide the development of plans for the future of the airport by:
 - Attending PAC meetings and contributing to the process
 - Providing feedback on the documents produced
 - Helping to identify and focus on the key issues
 - Acting as liaisons with the community



Working Paper No. 1 & 2 Overview



- Working Paper No. 1
 - Master Plan Process
 - Inventory of Airport Assets
 - Forecasts of Aviation Demand
- Working Paper No. 2
 - Facility Requirements



Working Paper NO. 1 Overview



- Airport service levels and categories
 - Federal, regional, and state
- Design standards
- Runway wind coverage
- Airside facility inventory
- Landside facility inventory
- Environmental inventory (brief)

 <p>AI Primarily Single-Engine Propeller Aircraft, some light twins</p> <p>Example Type: Cessna 172 Skyhawk</p>	 <p>BI ★ Primarily Light Twin Engine Propeller Aircraft</p> <p>Example Type: Piper Navajo</p>
 <p>BII (<12,500 lbs) Primarily Light Turboprops</p> <p>Example Type: Beechcraft King Air</p>	 <p>BII (<12,500 lbs) Mid sized corporate jets and commuter airliners</p> <p>Example Type: Cessna Citation II</p>
 <p>A/BIII Primarily large commuter-type aircraft</p> <p>Example Type: De Havilland Dash 8</p>	 <p>CI, DI Primarily small and fast corporate jets</p> <p>Example Type: Lear Jet 36</p>
 <p>C/DII ★ Large corporate jets and regional-type commuter jets</p> <p>Example Type: Gulfstream IV</p>	 <p>C/DIII Commercial airliners (approx. 100-200 seats)</p> <p>Example Type: Boeing 737</p>
 <p>C/DIV Large commercial airliners (approx. 200-350 seats)</p> <p>Example Type: Boeing 767</p>	 <p>DV Jumbo commercial airliners (approx. 350+ seats)</p> <p>Example Type: Boeing 747</p>





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	
SCALE: N/A	DATE: 07/2015
DRAWN: LS	FILE: 05060503E
DWG: CM	JOB NO.: 15025

Landside Facility Inventory



Aviation Demand Forecast Overview



Forecasts of Aviation Demand are prime elements in all airport planning activities and key to determining type, size, and timing of future aviation facility development. Considerations include:

- Historical Aviation Activity
- Regional and Industry Trends
- Comparison with other forecasts; TAF's, SASP and Local Plans
- Analysis of based aircraft and operations
- Local factors driving demand
- Evaluate forecast platforms and identify preferred forecast
- Preferred Forecast Summary includes:
 - Operations,
 - Based Aircraft
 - and Related Factors



Current Forecast Status



The completed Aviation Demand Forecast has been submitted to the FAA. Net Results:

- Preferred Forecast supports conservative growth
 - Operations 80,000 to 112,000 by 2035
 - Based Aircraft 260 to 339 by 2035
 - Aircraft Mix trends towards increased use of heavier jets
- Aviation Demand Forecasts have been submitted to the FAA-ADO
 - Initial review completed, minor adjustments being applied to final document
- Forecast Data Provides Development Basis to:
 - Facility Requirements
 - Development Plan
 - Airport Strategic Business Plan



Working Paper No. 2 Overview



- Facility Requirements
 - Identifies the requirements for airfield and landside facilities to accommodate the forecast demand levels at the Marana Regional Airport
 - The facility requirements were based on:
 - Information derived from capacity and demand calculations
 - Design standards from FAA Advisory Circulars
 - Sponsor’s vision for the future of the airport
 - Condition and functionality of existing facilities



Working Paper No. 2 Overview



ITEM	BASE YEAR (2015)	SHORT-TERM	MEDIUM-TERM	LONG-TERM
RUNWAYS				
12-30				
Runway Design Code (RDC)	Rwy 12: C-II/5000; Rwy 30: C-II/VIS	Same as existing		
Length (ft)	6,901	C-II/5000		
Width (ft)	100	Maintain		
Pavement Strength (lbs)	75,000 S, 100,000 D, 300,000 DT	Same as existing		
Lighting	MIRL	Verify per PCN report; strengthen where needed ¹	Replace with LED	Maintain
Markings	Non-precision	Same as existing	Repaint	Maintain
3-21				
Runway Design Code (RDC)	B-I/5000	Same as existing		
Length (ft)	3,892	Same as existing		
Width (ft)	75	Same as existing		
Pavement Strength (lbs)	75,000 S, 100,000 D 150,000 DT	Same as existing; maintain		
Lighting	MIRL	Same as existing	Replace with LED	Maintain
Markings	Basic	Repaint; Non-precision	Maintain	
TAXIWAYS				
Taxiway A, E, & H				
Taxiway Design Group (TDG)	TDG 3 ²	Maintain existing ²		
Width (ft)	50	Maintain existing		
Lighting	MITL	Same as existing	Replace with LED	Maintain
Markings	Existing	Repaint	Maintain	
Taxiway B				
Taxiway Design Group (TDG)	TDG 2 ²	Maintain existing ²		
Width (ft)	Varies (35'-50')	Maintain existing		
Lighting	MITL	Same as existing	Replace with LED	Maintain
Markings	Existing	Repaint	Maintain	
Taxiway C				
Taxiway Design Group (TDG)	N/A	Reconstruct to TDG-1 ²		Maintain
Width (ft)	40	Reconstruct to 25		Maintain
Lighting	None	Install MITL	Maintain	
Markings	Existing	Repaint	Maintain	
Connector Taxiways A-2 & B-2				
	Non-standard; provide direct access from apron to runway	Relocate/ Reconstruct	Maintain	



Working Paper No. 2 Overview



ITEM	BASE YEAR (2015)	SHORT-TERM	MEDIUM-TERM	LONG-TERM
NAVIGATIONAL AND WEATHER AIDS				
AWOS-3	Yes		Maintain existing	
Rotating Beacon	Yes	Maintain	Replace	
NDB	Yes		Maintain existing	
Approaches	Rwy 3-21: GPS Rwy 12: GPS & NDB	Add RNAV/GPS Runway 30	Maintain	
VISUAL AIDS				
REIL	12-30: Yes 3-21: No	Install on Runway 3-21	Maintain	Replace
PAPI	12-30: 4-light 3-21: 2-light	Maintain		Replace
Wind cone/segmented circle	Yes	Maintain	Replace	
TERMINAL				
General Aviation (sf)	9,500	17,000	21,000	25,000
HANGARS (sf)³				
Conventional (approx. sf)	52,000	80,000	90,000	100,000
T-hangars/shade (approx. sf)	317,000	Maintain existing		10,000
APRONS²				
Tie-down/transient (approx. sy)	150,000	Maintain existing		
VEHICLE PARKING				
Total (spaces/appox. sy)	40/2,500	183-195/ 6,500-7,000	207/7,500	219/8,000
FUEL FACILITY				
Jet A (gal)	12,500	Same as existing		
AvGAS (100LL) (gal)	12,500	Same as existing		
Total (gal)	25,000	Same as existing		
Self-fueling/Credit card reader	Yes; AvGas Only	Maintain existing		
FENCING				
Perimeter	Yes	Maintain existing		
Access Controls	Yes	Maintain existing		Replace

Abbreviations: S = Single-wheel landing gear, D = Dual-wheel landing gear, DT = Dual-tandem landing gear, NDB = Non-directional beacon
 Note. ¹This also applies to certain taxiways and aprons mentioned in this Chapter; the Airport should also verify and strengthen where needed.
²According to the existing design aircraft for the Airport, the taxiways should conform to the standards of TDG 1; the Airport is advised to maintain the existing pavement as is, however it should be noted that the FAA may require that any future reconstruction of taxiways should be designed and built to TDG 1 (or whichever TDG corresponds to the existing design aircraft). ³Hangar and apron development will depend on actual demand.
 Source: ACI, 2016



Business Plan Update



Initial meetings and start up processes complete;

- Mission, Vision, and Value Statements Established
- SWOT Workshop Complete
- Goals and Objectives Established
- Data gathering and review of published documents continues
- Contributions from:
 - Airport
 - Town of Marana
 - Pima County
 - Chamber of Commerce



Business Plan Update



One-on-one interviews have started

- Interview with Airport Director
- Interview with FBO
- Future meeting will be scheduled with
 - Town of Marana, Economic Development
 - Town of Marana, Planning
 - Pima County
 - Chamber of Commerce
 - Others



Business Plan Update



Airport Strategic Business Plan documentation

- Overview of AVQ current business operations, administrative structure, standards and regulations
- Potential aviation activities, benefits and impacts on the airport.
- Market options based on Mission, Vision, and Values statements, and on SWOT analysis
- Airport development scenarios, market focus, assessment of the physical, and financial implications of each

Airport Strategic Business Plan Timeline

Draft No 1 of the Strategic Business Plan – May 2016



Public involvement



Dedicated Master Plan and Strategic Business Plan reporting site at flymarana.com

- Technical Advisory Committee
- Planning Advisory Committee
- Strategic Business Plan Committee
- Working Papers published January 2016

Documents include presentations, meeting reports and working papers.



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 – January 2016**
- Working paper no. 3 – May 2016
- **Committee meeting no. 3 – June 2016**
- Draft final report – August 2016
- Final report – third quarter of 2016
- Entire process should take about one year



Next Steps



- Obtain feedback from the committees
- Prepare development alternatives
- Submit Working Paper No. 3 to the committees
- Hold committee meeting no. 3



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