SOUTH VALLEY AIRPORT

Public Information Meeting U42 Airport Master Plan



October 18 | 2022

Agenda

- » Master Plan Overview
- » Aviation Demand Forecast
- » Facility Requirements
- » Next Steps



MASTER PLAN OVERVIEW







Master Plan Process



- Inventory existing conditions
 - Facilities and equipment



- Forecast aviation demand
 - Aircraft operations and based aircraft



- Determine future facility requirements
 - Airfield, navigational aids, and supporting facilities
 - Aircraft parking/storage, access roads/parking, and utilities



- Identify and evaluate development alternatives
 - Demand-driven solutions
 - Financial feasibility



Master Plan Work Products

Airport Layout Plan: (Illustrates the plan)



Technical Report: (Documents the why and how)





AVIATION DEMAND FORECAST







The Forecast Projects...

Based aircraft --- How many aircraft hangars and tiedowns

Operations --- How many landings and departures



Critical aircraft --- The size of aircraft the airport will be planned for



U42 historically has been flat



RS&H



Tenant Survey Results – 195 Responses

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Own/lease at Salt Lake City International Airport (SLC)

Own/lease at Tooele Valley Regional Airport (TVY)

76

Own/lease at South Valley Regional Airport (U42)

53

Not a tenant with Salt Lake Department of Airports (SLCDA)



Tenant Survey Results – High Growth





Aviation Forecast

Forecast Year	Planning Activity Level (PAL)	Based Aircraft Base Case	Based Aircraft High Growth	Operations Base Case	Operations High Growth
2020	Base Year	177	177	70,990	70,990
2025	PAL 1	213	335	73,000	111,000
2030	PAL 2	221	348	76,000	115,000
2040	PAL 3	241	378	82,000	125,000



Critical Aircraft is Validated

	Aircraft	AAC	ADG	TDG
Existing Critical Aircraft	Beechcraft Super King Air	В	II	2A
	Beechcraft Super King Air	В	П	2A
Future Critical Aircraft	Cessna Citation X+	С	П	1B
	Composite	С	П	2A





Airport Reference Code

» Aircraft Approach Category (AAC)
 – What is the landing speed?

- » Airplane Design Group (ADG)
 - How much space does it take up?
 - Length? Wingspan? Tail height?

- » Taxiway Design Group (TDG)
 - Landing gear dimensions?
 - Required turning radius?

FAA AC 150/5300-13B, Airport Design

AAC	Approach Speed
А	Approach speed less than 91 knots
В	Approach speed 91 knots or more but less than 121 knots
С	Approach speed 121 knots or more but less than 141 knots
D	Approach speed 141 knots or more but less than 166 knots
E	Approach speed 166 knots or more

Group #	Tail Height (ft)	Wingspan (ft)
I	< 20'	< 49'
Ш	20' - < 30'	49' - < 79'
III	30' - < 45'	49' - < 118'
IV	45' - < 60'	118' - < 171'
V	60' - < 66'	171' - < 214'
VI	66' - < 80'	214' - < 262'





FACILITY REQUIREMENTS







U42 AIRPORT FACILITIES







Facility Requirments

Facility	Adequate/Deficient
Runway Length	
Runway Capacity	
Runway Wind Coverage	
Runway Safety and Object Free Areas	
Taxiway Geometry	
Dual Parallel Taxiways	
Airspace and Approach Capability	
NAVAIDS	
Runway Protection Zones (RPZ)	
Support Facilities	
Aircraft Parking and Storage	



Runway Length

» Airport Layout Plan (ALP) ultimate length carried forward



	Aircraft	Required Runway Length	Current Runway Length 5,862 Feet
ate	Turboprop		
iate	Pilatus PC-12NG	4,123'	\checkmark
	Cessna 208 Caravan	4,045'	\checkmark
	SOCATA TBM 850	3,882'	\checkmark
	Mitsubishi MU-2	4,750'	\checkmark
	Cessna 441 Conquest II	3,883'	\checkmark
	Beechcraft King Air 200	4,820'	\checkmark
	Business Jet		
and the second of the second s	Cessna Citation X	6,557'	×
	Eclipse 500	4,297'	\checkmark
	Cessna Sovereign	3,645'	\checkmark
	Cessna CJ2+	5,337'	\checkmark
	Falcon 900EX	5,836'	\checkmark
	Cessna 560XLS	6,248	×
5,862'	Current Length	2	

415' Offset

6,600 Feet – Proposed on Prev. ALP

Runway Capacity





Runway Wind Coverage



Crosswind Component	All-Weather Wind Coverage	IMC Wind Coverage
10.5 Knots	99.05%	98.98%
13 Knots	99.63%	99.70%
16 Knots	99.90%	99.97%



Runway Safety and Object Free Areas



- » Runway Safety Area for C-II goes to 1,000' (in length)
- » Runway Object Free Area (ROFA) goes to 800' (in width)
 Approach > 3/4 mile and C-II standards



Taxiway Geometry





Taxiway Geometry





Dual Parallel Taxiways





Airspace and Approach Capability



- » U42 low level flight cannot be seen by TRACON
 - Limits potential enhancements
- » Solutions:
 - ATCT (remote or locally staffed)
 - Would require Class D airspace
 - ADS-B receivers to increase S56 awareness on the airfield





Runway Protection Zone (RPZ)





Support Facilities





Aircraft Parking and Storage



- » High Growth forecast scenario
 - 359 total hangars by PAL 3
 - Total of 198 new hangars to plan for

Hangar Type	Existing	PAL 1	PAL 2	PAL 3
T-Hangar Units	113	+102	+9	+19
Box Hangars	2	+49	+4	+10
Corporate Hangars	2	+4	+0	+1

SVR RSSH

Next Steps

- » Alternatives development and evaluation
- » Continue stakeholder committee meetings
 - Next Public Open House early 2023
- » Preferred alternative selection
- » Implementation and financial planning



Draft Reports Available Online

» <u>https://slcairport.com/about-the-airport/master-plan</u>

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