

# SOUTH VALLEY AIRPORT

Public Information Meeting  
**U42 Airport Master Plan**

SLC DEPARTMENT OF AIRPORTS

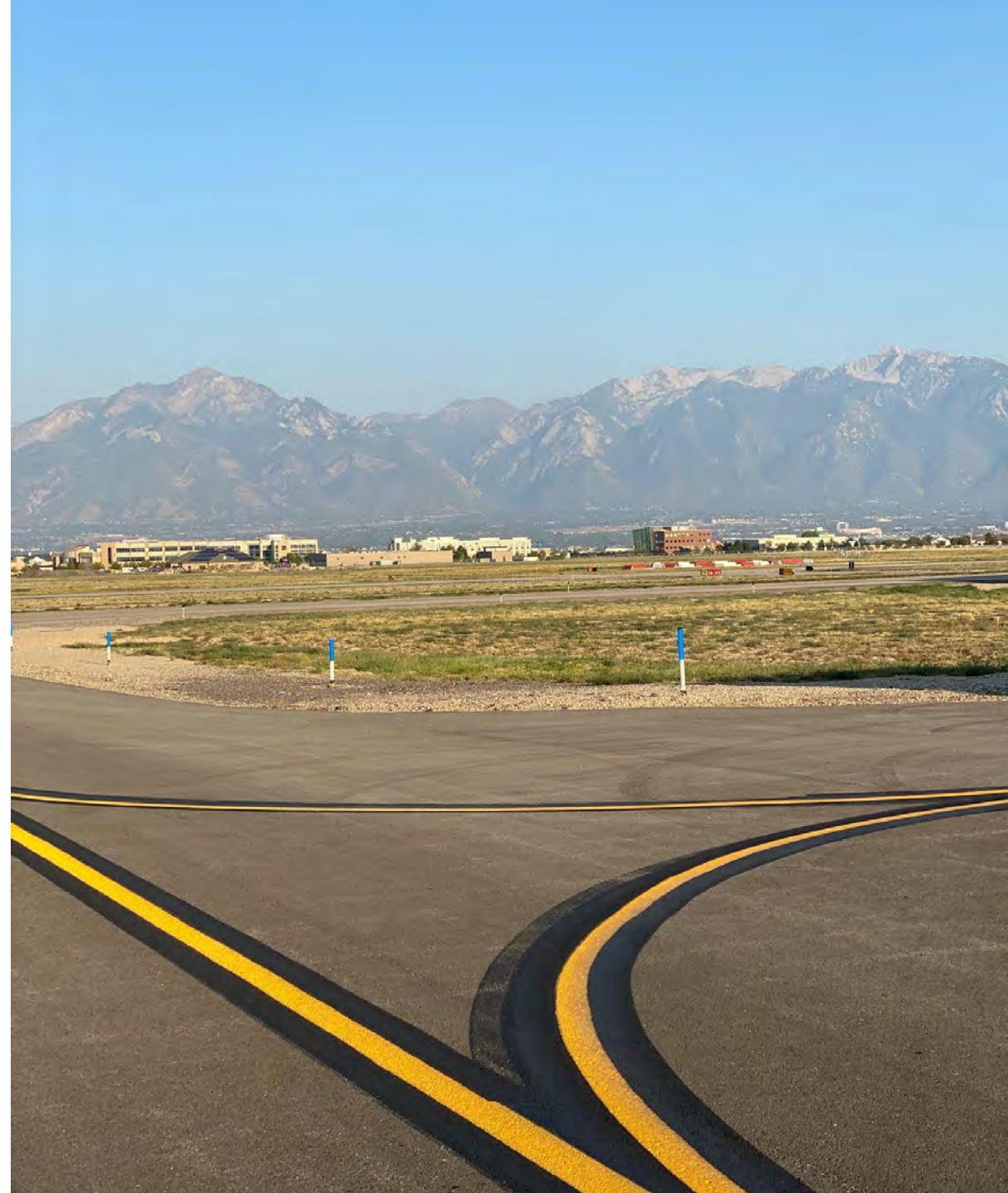


*RS&H*

April 11 | 2023

# Agenda

- » Master Plan Overview
- » Key Study Conclusions
- » Forecast and Requirments Review
- » Alternatives Analysis
- » Next Steps

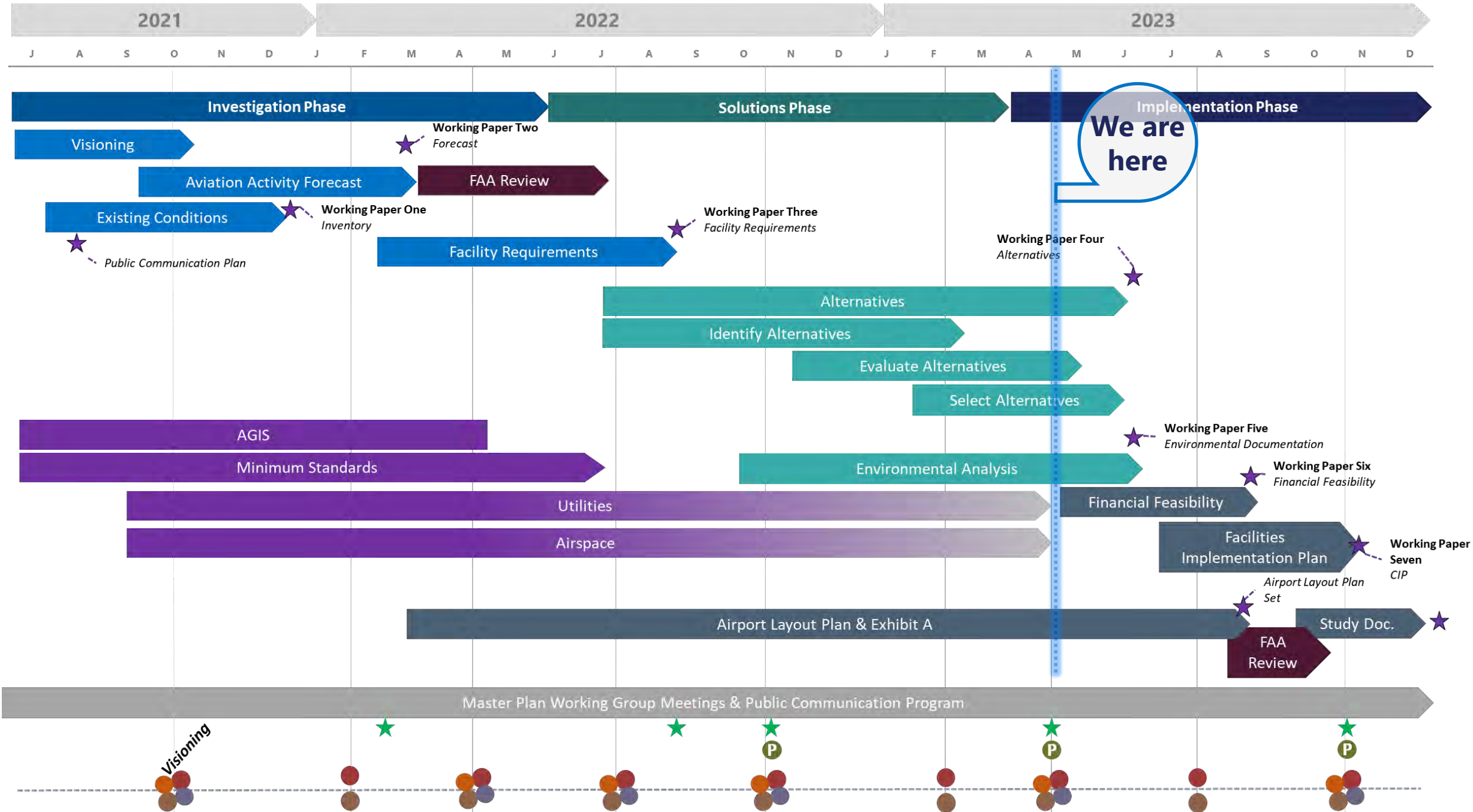




# *MASTER PLAN OVERVIEW*

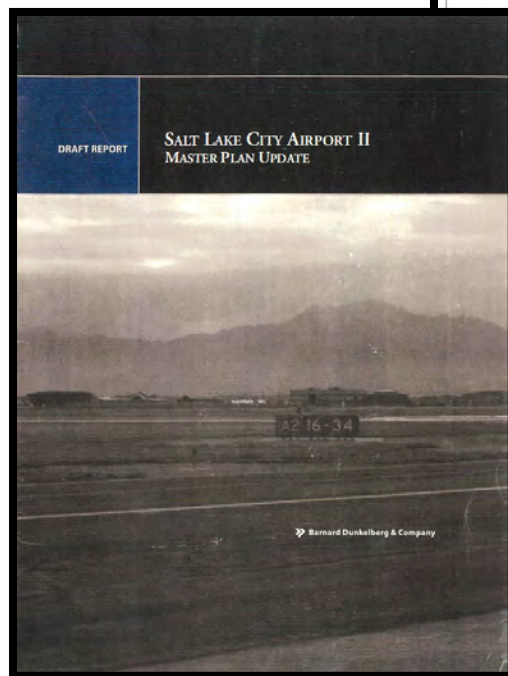


# Master Plan Schedule



# History of planning at U42

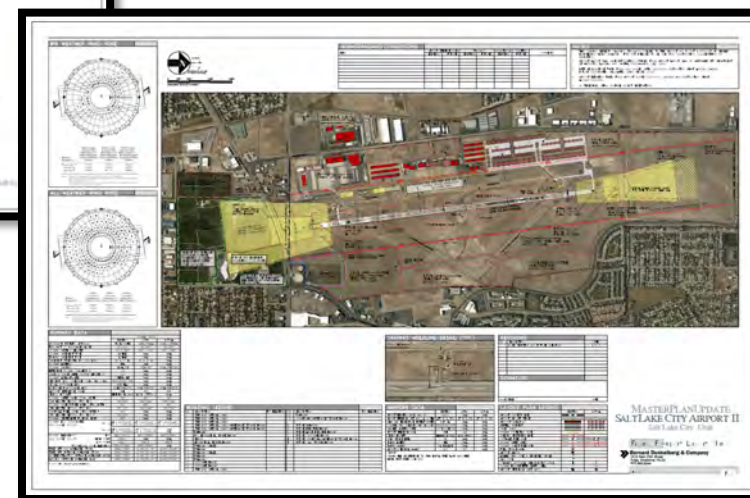
1990 Master Plan



2006 Master Plan



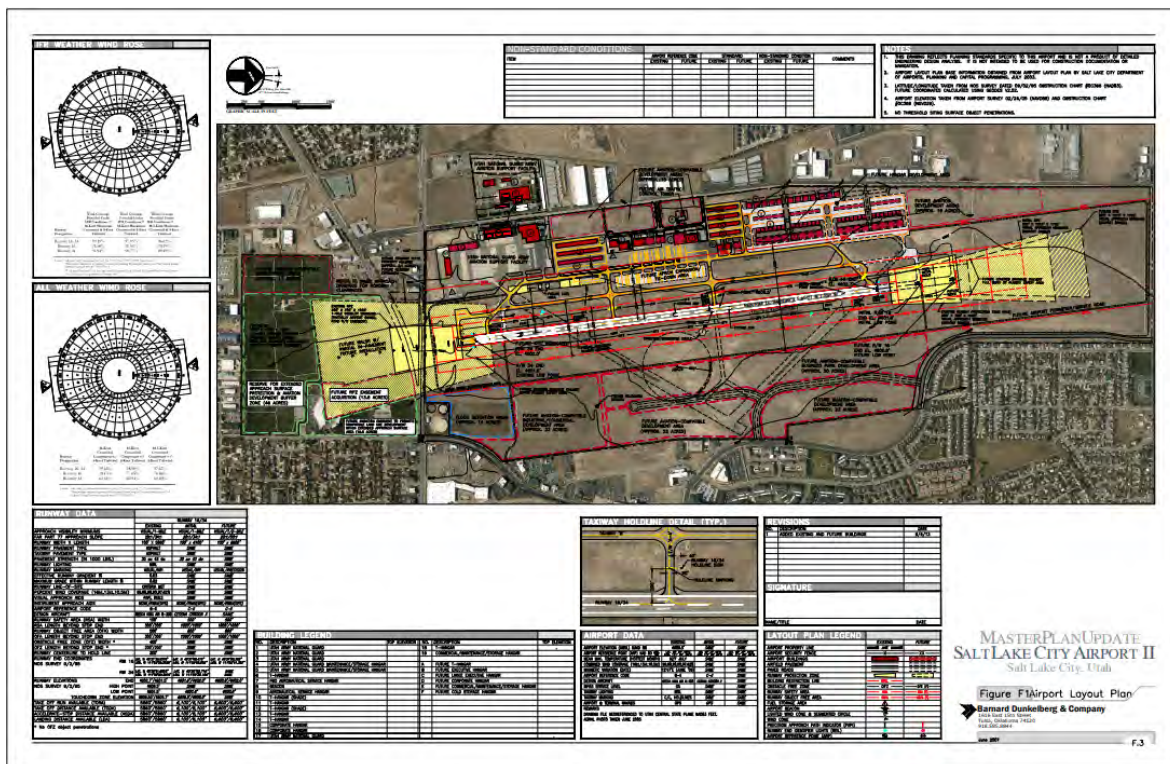
Current 2023 Master Plan





# Master Plan Work Products

## Airport Layout Plan: *(Illustrates the plan)*

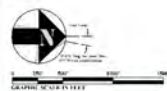
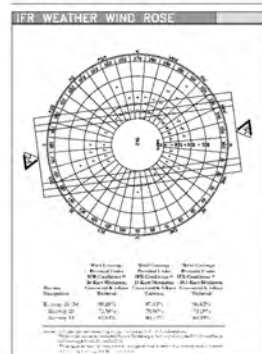


## Technical Report: *(Documents the why and how)*





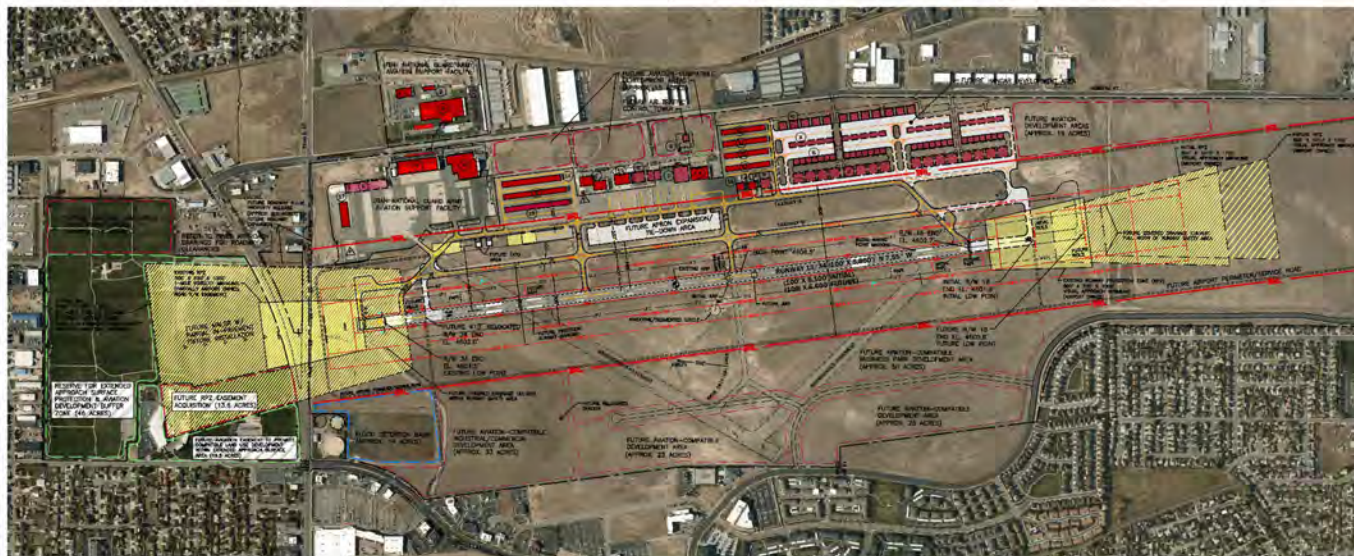
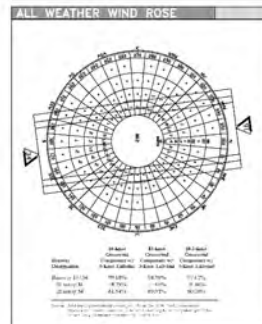
# "Current" Airport Layout Plan



NON-STANDARD CONDITIONS

REV	APPROX. STANDING SURF. (FT/SEC)		SLOPE	NON-STANDARD CONDITION	COMMENTS
	EXISTING	TO BE			

- NOTES
1. THIS DRAWING REFLECTS PLANNING STANDARDS SPECIFIC TO THIS AIRPORT AND IS NOT A PRODUCT OF DETAILED ENGINEERING DESIGN ANALYSIS. IT IS NOT INTENDED TO BE USED FOR CONSTRUCTION DOCUMENTATION OR BIDDING.
  2. AIRPORT LAYOUT PLAN SCALE INFORMATION OBTAINED FROM AIRPORT LAYOUT PLAN BY SALT LAKE CITY DEPARTMENT OF AIRPORTS, PLANNING AND CAPITAL PROGRAMMING, JULY 2003.
  3. LATITUDE/ELEVATION TAKEN FROM MGS SURVEY DATED 04/03/95 (OBSTRUCTION CHART #0304). FUTURE COORDINATES CALCULATED USING DEGREE 19.14.
  4. AIRPORT ELEVATION TAKEN FROM AIRPORT SURVEY 02/24/93 (DRAWING) AND OBSTRUCTION CHART #0304 (MGS020).
  5. NO THRESHOLD SPRING SURFACE OBJECT PENETRATIONS.



RUNWAY DATA

DESCRIPTION	LENGTH	WIDTH	ASPH
DESIGNATED WEATHER AIRSTRIP	1000	60	ASPH
TAI 0001 73 APPROACH SLUR	250	15	ASPH
TAI 0001 73 TAXIWAY	250	15	ASPH
TAI 0001 73 END STOP	100	3	ASPH
TAI 0001 73	100	3	ASPH
TAXIWAY B	30	30	ASPH
TAXIWAY C	30	30	ASPH
TAXIWAY D	30	30	ASPH
TAXIWAY E	30	30	ASPH
TAXIWAY F	30	30	ASPH
TAXIWAY G	30	30	ASPH
TAXIWAY H	30	30	ASPH
TAXIWAY I	30	30	ASPH
TAXIWAY J	30	30	ASPH
TAXIWAY K	30	30	ASPH
TAXIWAY L	30	30	ASPH
TAXIWAY M	30	30	ASPH
TAXIWAY N	30	30	ASPH
TAXIWAY O	30	30	ASPH
TAXIWAY P	30	30	ASPH
TAXIWAY Q	30	30	ASPH
TAXIWAY R	30	30	ASPH
TAXIWAY S	30	30	ASPH
TAXIWAY T	30	30	ASPH
TAXIWAY U	30	30	ASPH
TAXIWAY V	30	30	ASPH
TAXIWAY W	30	30	ASPH
TAXIWAY X	30	30	ASPH
TAXIWAY Y	30	30	ASPH
TAXIWAY Z	30	30	ASPH
TAXIWAY AA	30	30	ASPH
TAXIWAY AB	30	30	ASPH
TAXIWAY AC	30	30	ASPH
TAXIWAY AD	30	30	ASPH
TAXIWAY AE	30	30	ASPH
TAXIWAY AF	30	30	ASPH
TAXIWAY AG	30	30	ASPH
TAXIWAY AH	30	30	ASPH
TAXIWAY AI	30	30	ASPH
TAXIWAY AJ	30	30	ASPH
TAXIWAY AK	30	30	ASPH
TAXIWAY AL	30	30	ASPH
TAXIWAY AM	30	30	ASPH
TAXIWAY AN	30	30	ASPH
TAXIWAY AO	30	30	ASPH
TAXIWAY AP	30	30	ASPH
TAXIWAY AQ	30	30	ASPH
TAXIWAY AR	30	30	ASPH
TAXIWAY AS	30	30	ASPH
TAXIWAY AT	30	30	ASPH
TAXIWAY AU	30	30	ASPH
TAXIWAY AV	30	30	ASPH
TAXIWAY AW	30	30	ASPH
TAXIWAY AX	30	30	ASPH
TAXIWAY AY	30	30	ASPH
TAXIWAY AZ	30	30	ASPH
TAXIWAY BA	30	30	ASPH
TAXIWAY BB	30	30	ASPH
TAXIWAY BC	30	30	ASPH
TAXIWAY BD	30	30	ASPH
TAXIWAY BE	30	30	ASPH
TAXIWAY BF	30	30	ASPH
TAXIWAY BG	30	30	ASPH
TAXIWAY BH	30	30	ASPH
TAXIWAY BI	30	30	ASPH
TAXIWAY BJ	30	30	ASPH
TAXIWAY BK	30	30	ASPH
TAXIWAY BL	30	30	ASPH
TAXIWAY BM	30	30	ASPH
TAXIWAY BN	30	30	ASPH
TAXIWAY BO	30	30	ASPH
TAXIWAY BP	30	30	ASPH
TAXIWAY BQ	30	30	ASPH
TAXIWAY BR	30	30	ASPH
TAXIWAY BS	30	30	ASPH
TAXIWAY BT	30	30	ASPH
TAXIWAY BU	30	30	ASPH
TAXIWAY BV	30	30	ASPH
TAXIWAY BW	30	30	ASPH
TAXIWAY BX	30	30	ASPH
TAXIWAY BY	30	30	ASPH
TAXIWAY BZ	30	30	ASPH

BUILDING LEGEND

NO.	DESCRIPTION	NO.	DESCRIPTION	NO.	DESCRIPTION
1	APRINT NATIONAL GUARD	11	COMMERCIAL/RETAIL/RESIDENT		
2	APRINT NATIONAL GUARD	12	COMMERCIAL/RETAIL/RESIDENT		
3	APRINT NATIONAL GUARD	13	COMMERCIAL/RETAIL/RESIDENT		
4	APRINT NATIONAL GUARD	14	COMMERCIAL/RETAIL/RESIDENT		
5	APRINT NATIONAL GUARD	15	COMMERCIAL/RETAIL/RESIDENT		
6	APRINT NATIONAL GUARD	16	COMMERCIAL/RETAIL/RESIDENT		
7	APRINT NATIONAL GUARD	17	COMMERCIAL/RETAIL/RESIDENT		
8	APRINT NATIONAL GUARD	18	COMMERCIAL/RETAIL/RESIDENT		
9	APRINT NATIONAL GUARD	19	COMMERCIAL/RETAIL/RESIDENT		
10	APRINT NATIONAL GUARD	20	COMMERCIAL/RETAIL/RESIDENT		



REVISIONS

NO.	DATE	DESCRIPTION	BY	CHKD
1		ISSUED FOR BIDDING		

SIGNATURE

NAME/TITLE DATE

AIRPORT DATA

NO.	DESCRIPTION	NO.	DESCRIPTION	NO.	DESCRIPTION
1	APRINT NATIONAL GUARD	11	COMMERCIAL/RETAIL/RESIDENT		

LAYOUT PLAN LEGEND

NO.	DESCRIPTION	NO.	DESCRIPTION	NO.	DESCRIPTION
1	APRINT NATIONAL GUARD	11	COMMERCIAL/RETAIL/RESIDENT		

MASTER PLAN UPDATE  
SALT LAKE CITY AIRPORT II  
Salt Lake City, Utah

Figure F1 Airport Layout Plan

Barnard Dunkelberg & Company  
7415 FINE LINE DRIVE  
TULSA, OKLAHOMA 74120  
918.746.0244

July 2017

# U42 History & Grant Assurances

Owned by US Govt

Began as an  
Army Base  
In 1942

Ownership Transferred To SLC

Shortly after  
WWII



Accepted Federal Funding

Grant Assurances (Obligations)

U42 has received almost  
\$7.4 million in federal  
funding since 2006



**FAA  
Requirements**



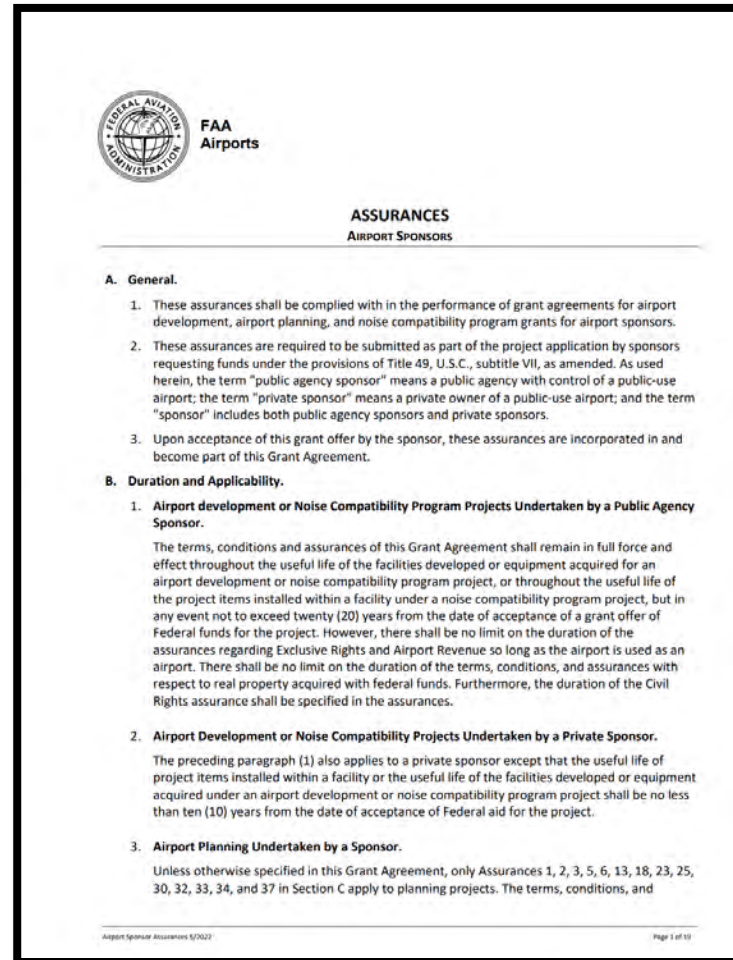
# What Are FAA Grant Assurances?

» When SLCDAs accept funds from the FAA, they agree to 39 obligations or "assurances"

Airport open for public use without discrimination of types of aeronautical activities.

Airport must be self-sustaining by maintaining an appropriate fee and rental structure

All facilities developed with Federal assistance must be made available to government aircraft



All revenues generated by the airport must be used for the capital or operating costs of the airport

Take appropriate action to restrict incompatible land use in the immediate vicinity of the airport.

Airport Layout Plans must be kept up to date at all times

# *KEY STUDY CONCLUSIONS*

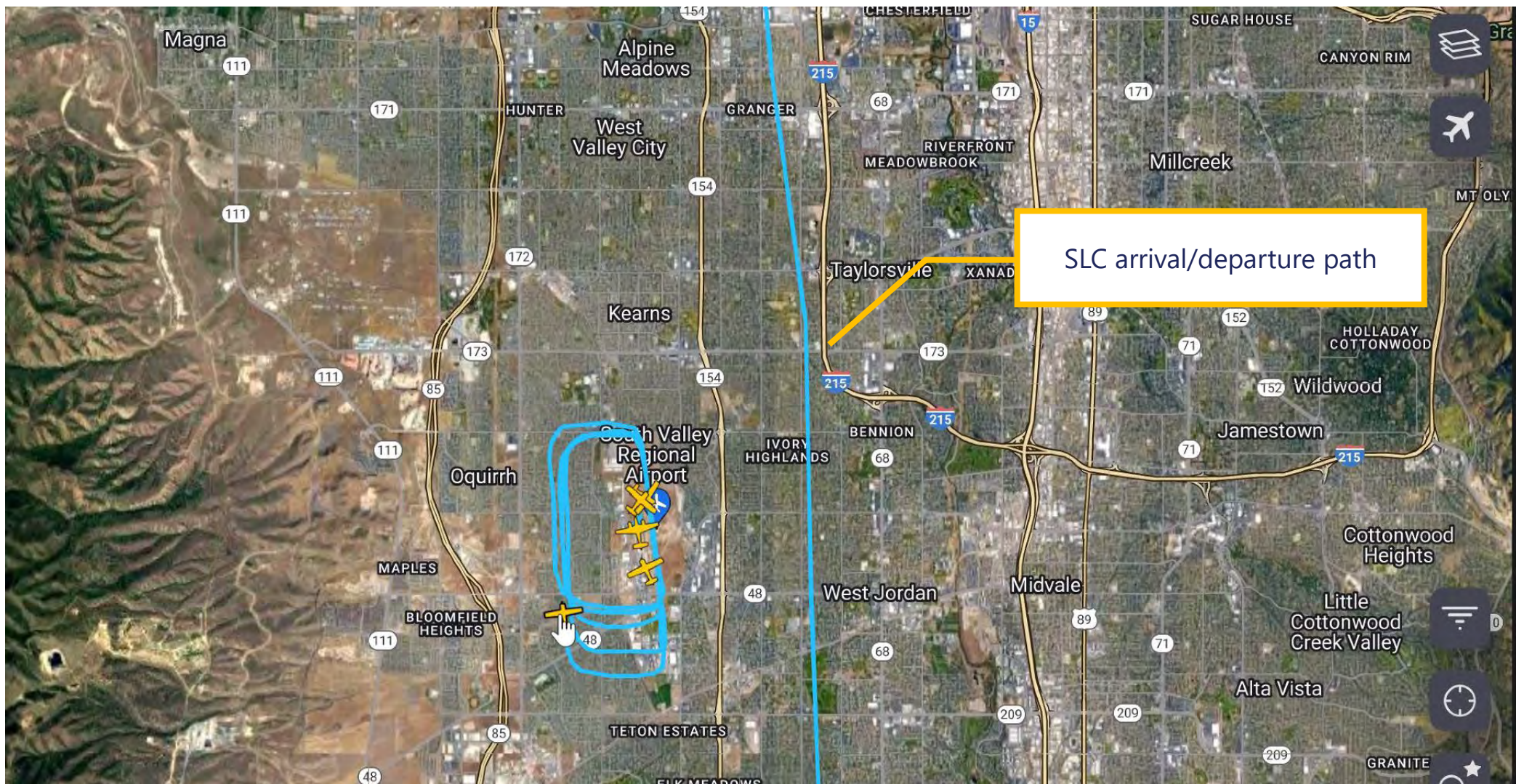




# Airspace – Confirmed Parameters

- » Adjusting runway orientation has little to no benefit
  - Counter-clockwise shift may have slight benefit but conflicts with VFR corridors
  - Clockwise shift is not beneficial as it would conflict with SLC operations
- » Pattern on the east side of the airport will not work with the valley's airspace.
  - FAA confirmed an east side pattern would conflict with arrivals to SLC.
  - TCAS warnings would be constant. Safety would be degraded

# East Side Pattern – Not practical





# ATCT Tower – Land should be preserved

- » Examined 27 airspaces with similar issues as SLC-U42
- » Found 18 conflicted airspaces with Class D resolution (ATCT tower)
  - Majority with 200+ based aircraft
- » Analysis indicates an ATCT tower should be planned for
  - East side location





# VFR Traffic Pattern Analysis

Current CAT A & B VFR Traffic Pattern



Existing VFR traffic pattern tightly situated between VFR corridor and Class B Airspace and all west of the runway to avoid SLC approach traffic



# Land Use – Study in progress

- » Safety Study
  - Runway Protection Zone based study
    - *ACRP reports*
    - *FAA statistics*
- » Fair market rate land appraisal



# *FORECAST AND REQUIRMENTS REVIEW*

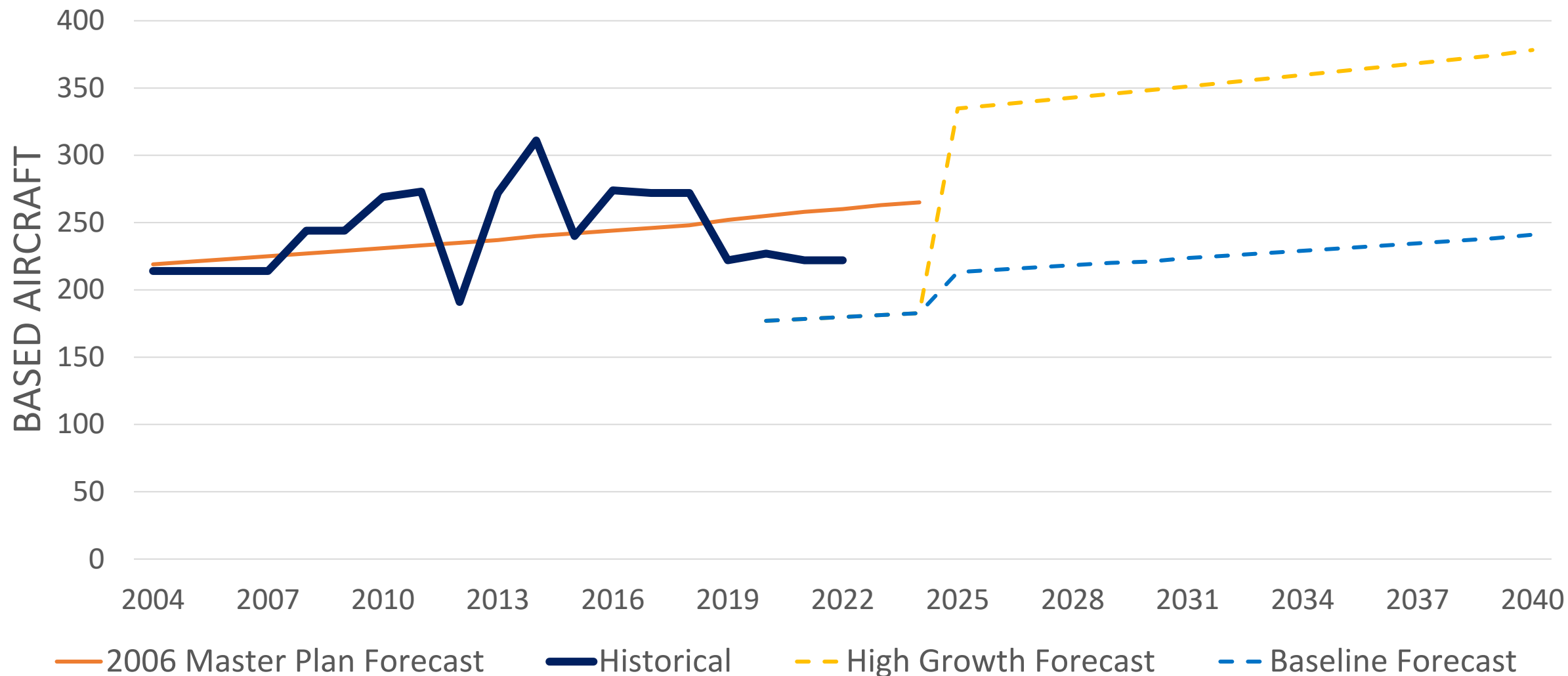




# Aviation Forecast

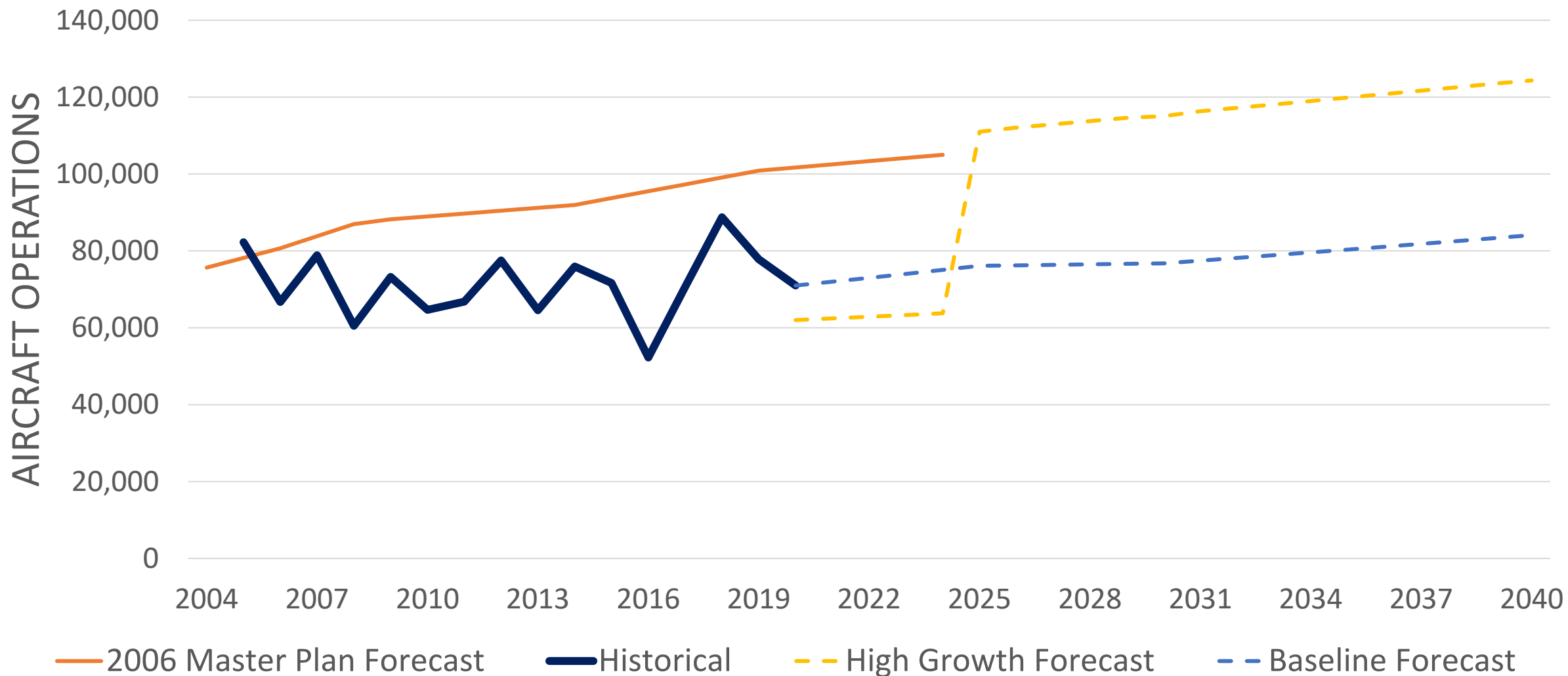
Forecast Year	Planning Activity Level (PAL)	Based Aircraft Base Case	Based Aircraft High Growth	Operations Base Case	Operations High Growth
2020	Base Year	177	177	70,990	70,990
<b>2025</b>	<b>PAL 1</b>	<b>213</b>	<b>335</b>	<b>73,000</b>	<b>111,000</b>
<b>2030</b>	<b>PAL 2</b>	<b>221</b>	<b>348</b>	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

# U42 Forecast Based Aircraft





# U42 Forecast Operations



# Facility Requirements

Facility	Action Needed
Runway Length	Plan for longer runway
Airfield Geometries	Plan for C-II compliance
Airspace and Approach Capability	Plan for better approaches/departures
Runway Protection Zones (RPZ)	Move RPZ off of public building
Support Facilities	Maintenance and Fuel Farm
Aircraft Parking and Storage	Plan for more aircraft storage

**Somewhat Deficient**  **Highly Deficient** 



# *ALTERNATIVES*



# U42 *leading* to *trailing* elements

***Leading***

Runway Length & Approaches



Hangar Development & Apron Expansion

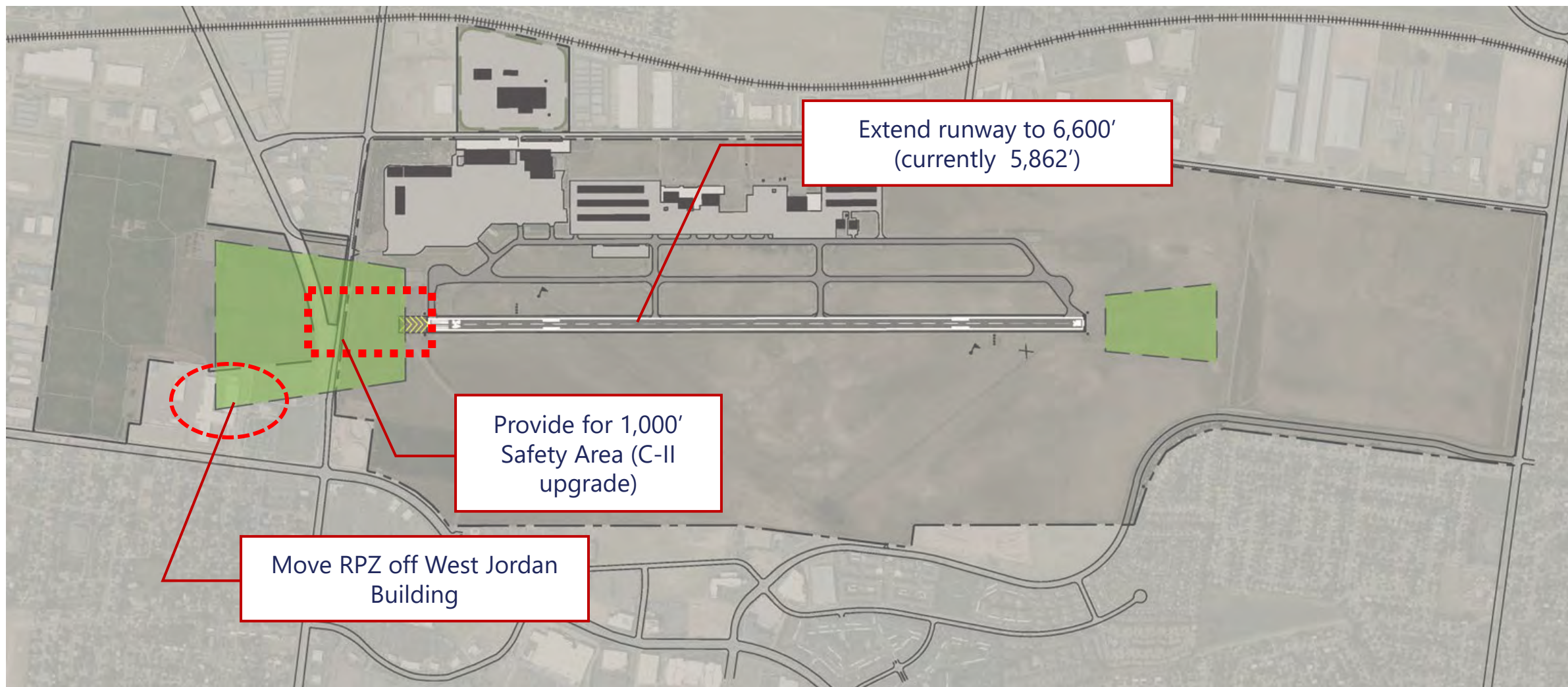
Support Facilities

***Trailing***

Ultimate Land Use – Aero/Nonaeronautical

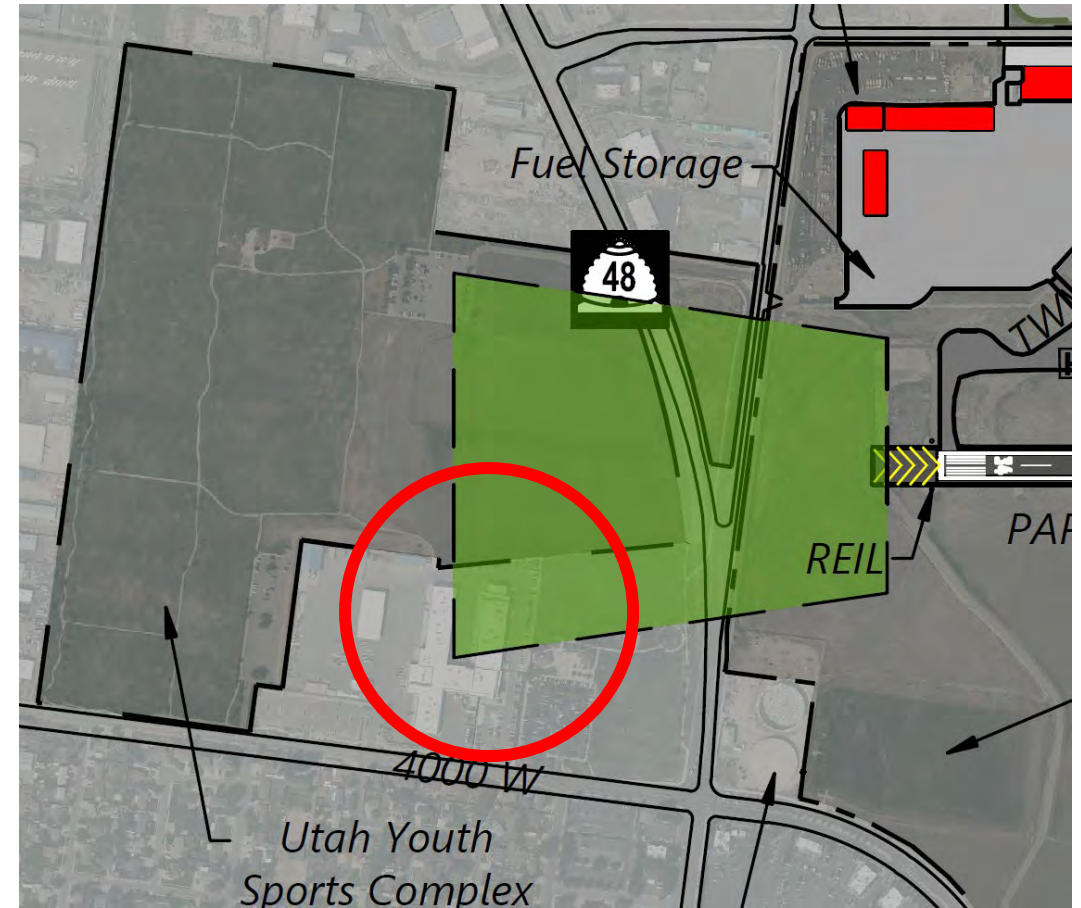


# Runway alternatives objectives



# What is a Runway Protection Zone?

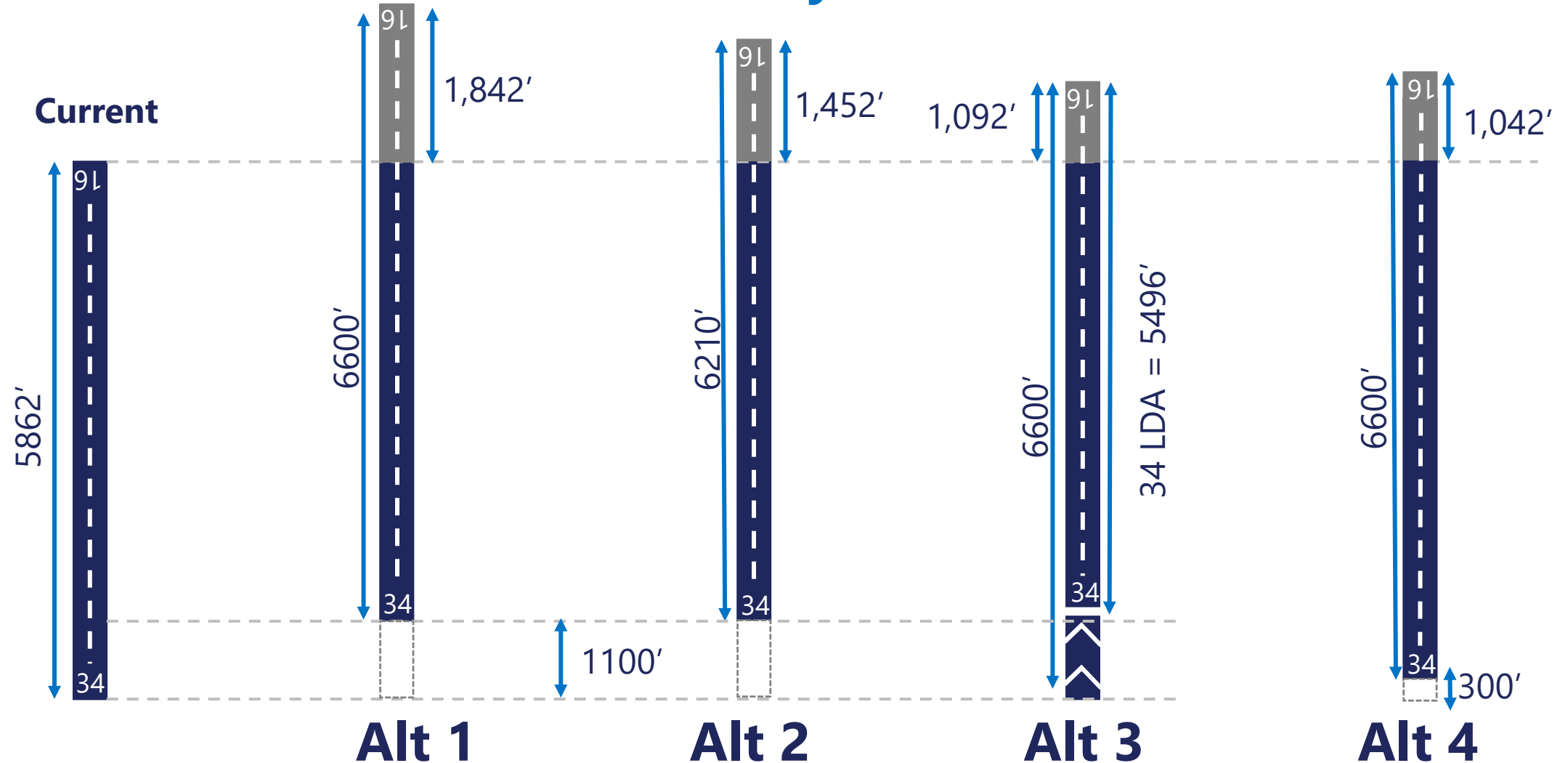
- » Runway Protection Zone (RPZ)
  - “The RPZ function is to enhance the protection of people and property on the ground.”
  - Permissible land uses under an RPZ
    - *Farming*
    - *Irrigation channels*
    - *Airport service roads*
    - *Underground facilities*
    - *NAVAIDS*
    - *Above ground fuel tanks for back up generators for unstaffed NAVAIDS*







# Extension Alternatives Analyzed







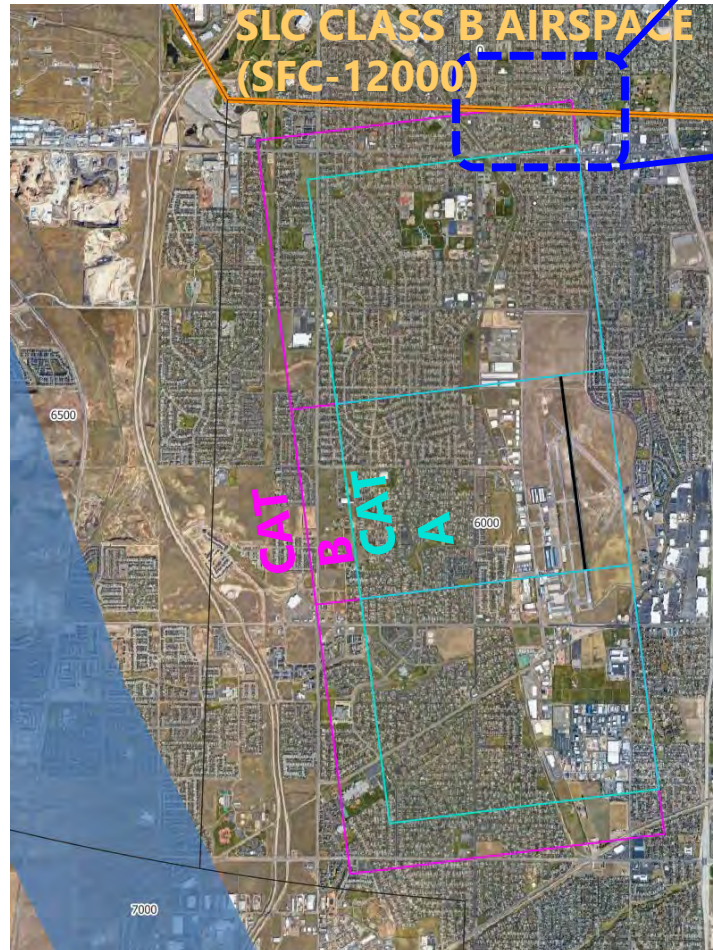


# VFR Traffic Pattern Analysis

Current CAT A & B VFR Traffic Pattern



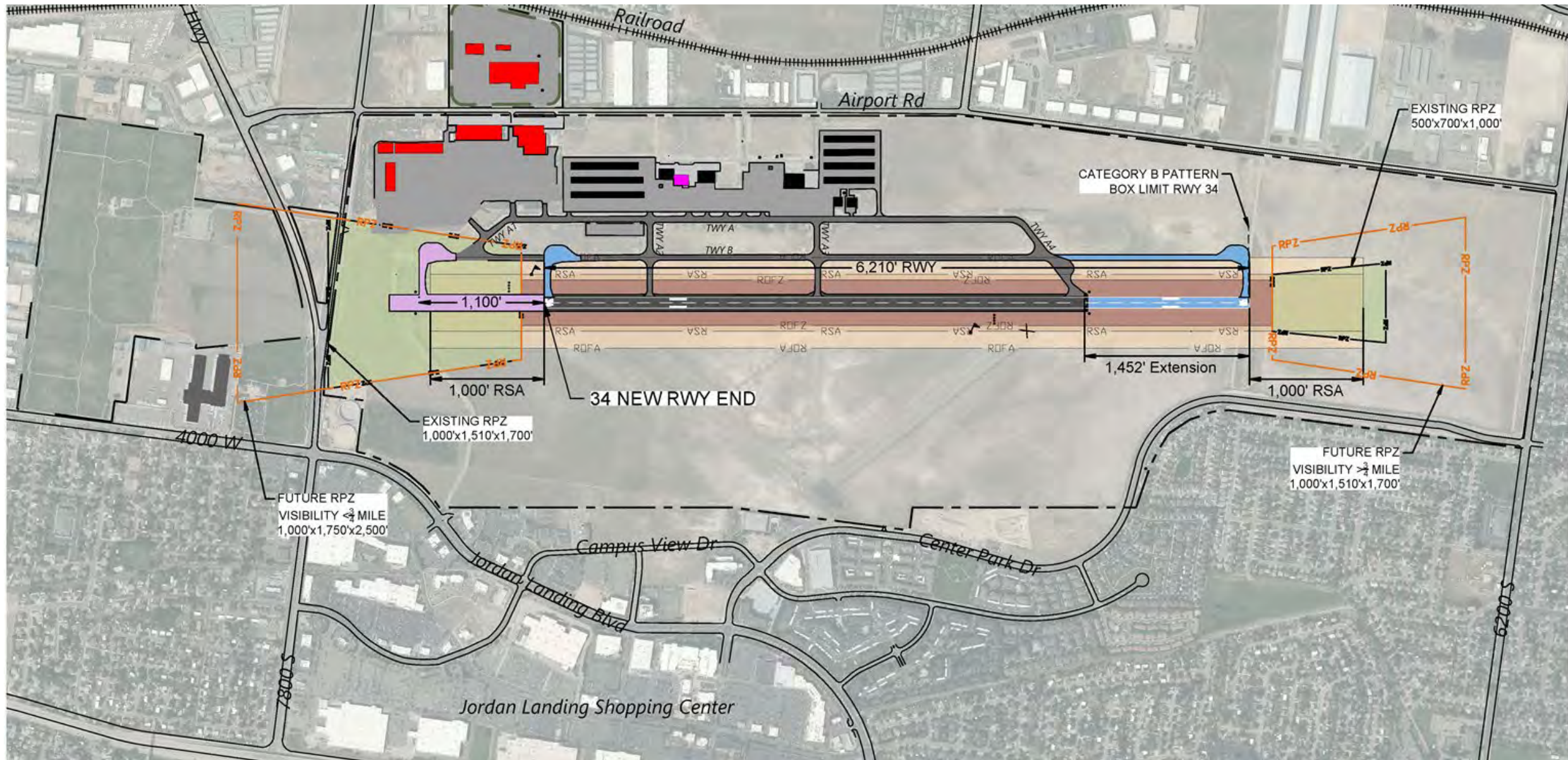
CAT A & B VFR Traffic Pattern for Proposed Alternate #1



Existing VFR traffic pattern tightly situated between VFR corridor and Class B Airspace and all west of the runway to avoid SLC approach traffic

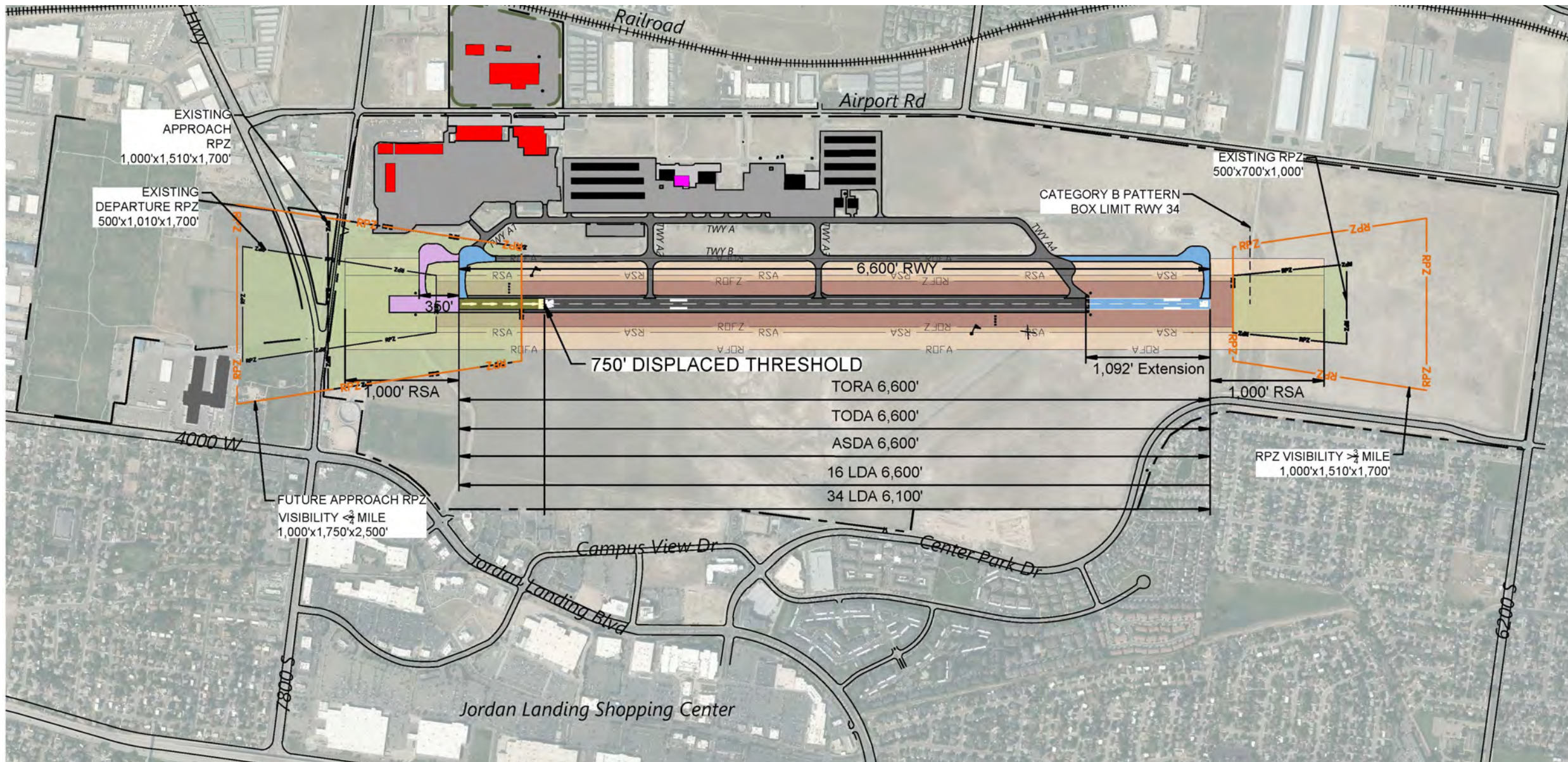


# ALT 2: Runway Shift North – 6,210'



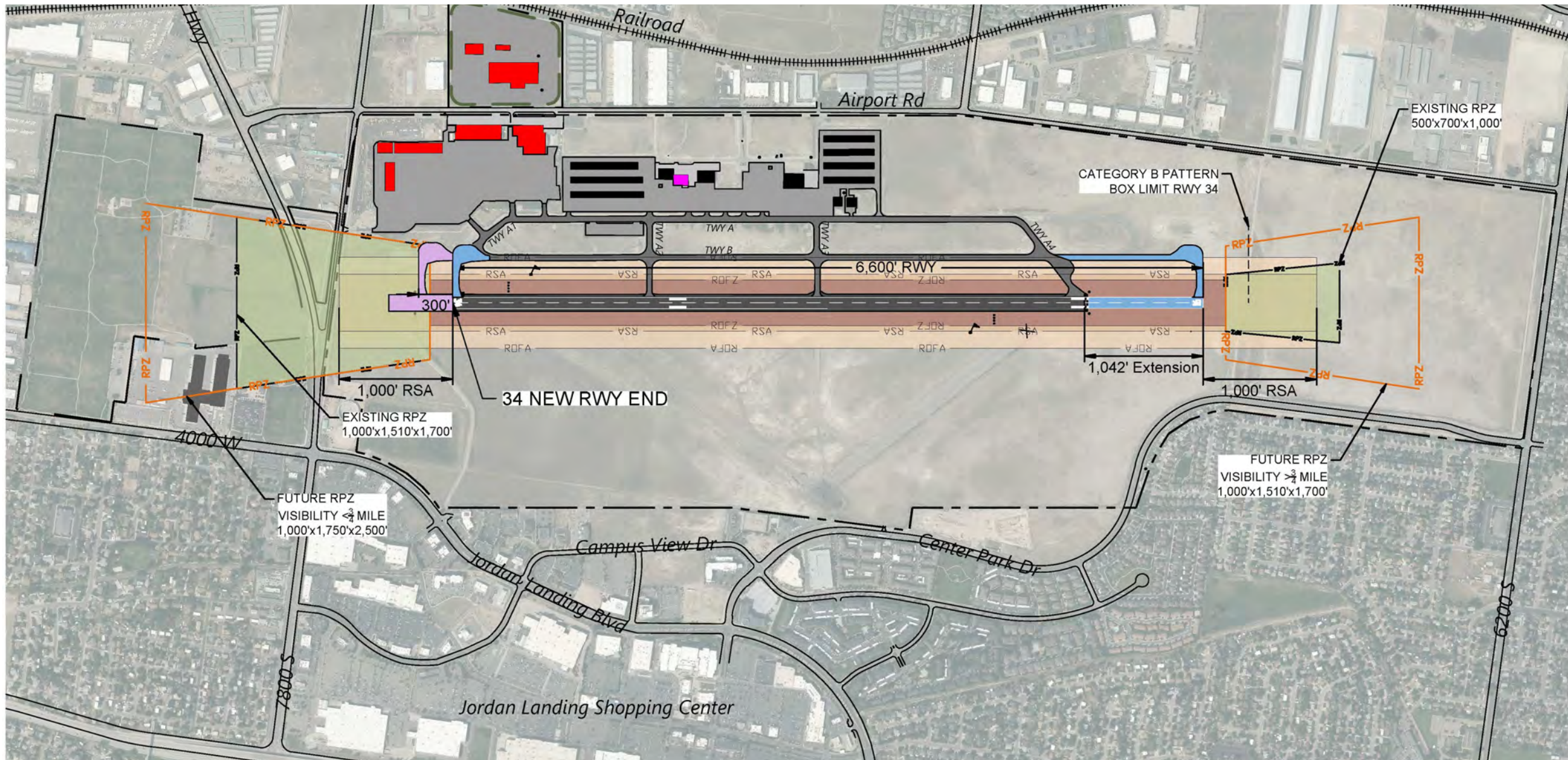


# ALT 3: Declared Distances – 6,600'



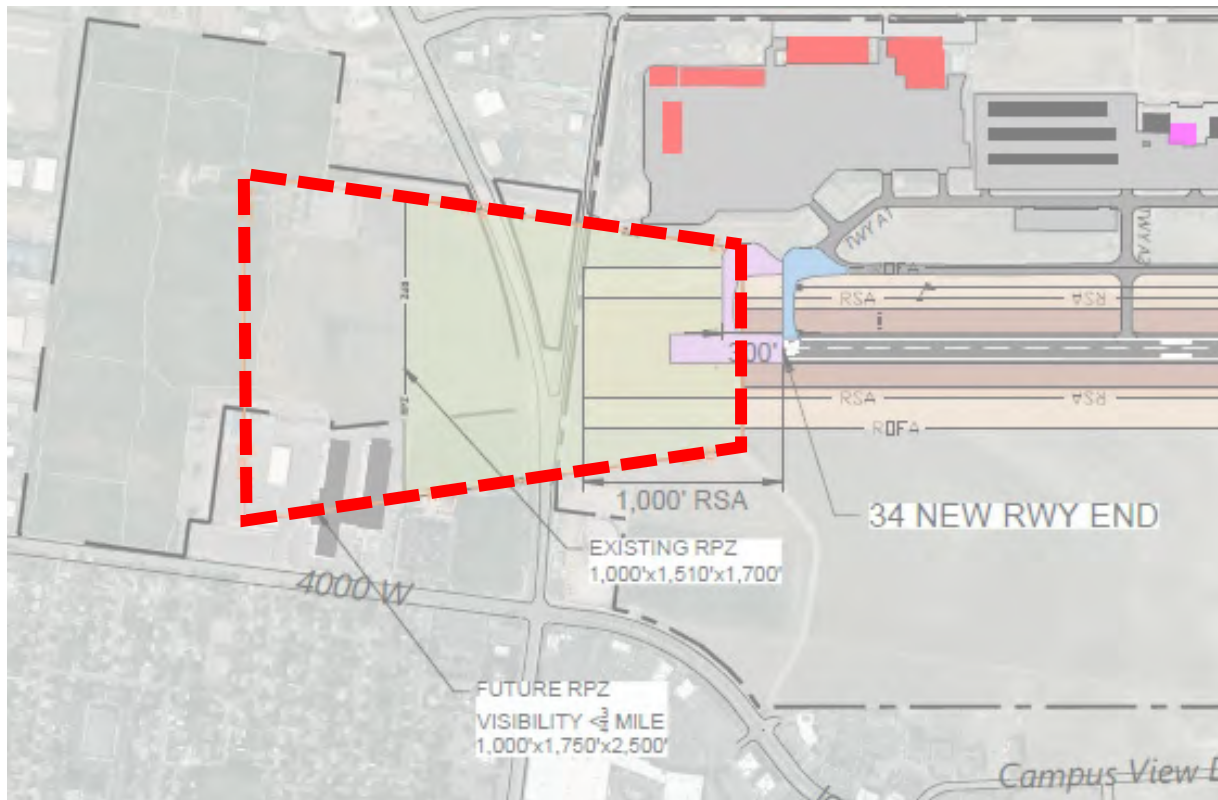


# ALT 4 – No RPZ Enhancement





# Decision to not plan for <3/4 Mile Vis



	<b>Runway Alternative 4</b> <i>No RPZ enhancement</i> 6,600'
Airspace Integration	
Aircraft Performance	
Land Use Integration	
Facility Integration	
ROM Costs	
Carbon Footprint	
FAA Preferences	

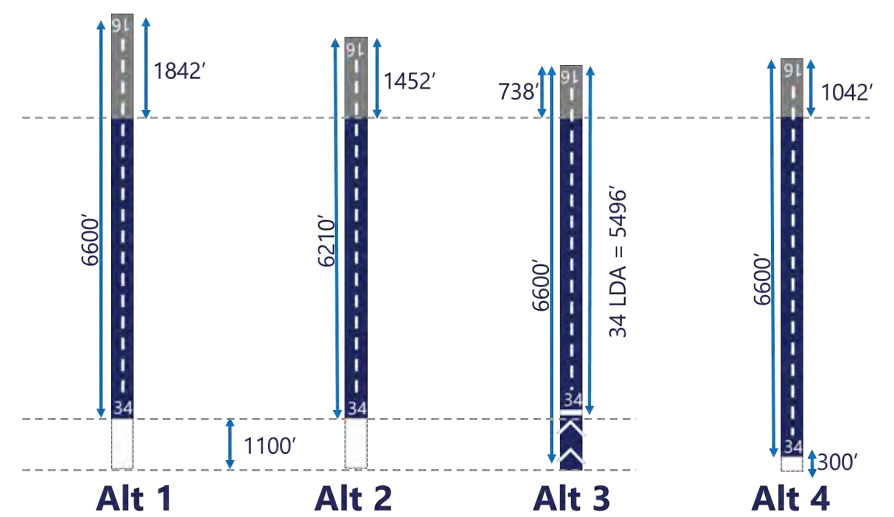


# U42 typically available to arriving aircraft

- » A level above 95% is essentially hub airport level reliability
- » Indicates that significant investments on the airport to achieve lower minimums are not necessary at this time.

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0:00	98.0%	97.2%	100.0%	99.8%	99.6%	100.0%	100.0%	99.8%	100.0%	98.2%	98.9%	96.7%
1:00	97.6%	97.5%	100.0%	99.3%	100.0%	100.0%	100.0%	100.0%	100.0%	98.3%	98.9%	96.5%
2:00	95.2%	98.2%	100.0%	100.0%	99.8%	100.0%	100.0%	99.4%	99.8%	97.9%	98.9%	96.2%
3:00	95.4%	98.5%	99.8%	99.8%	99.6%	100.0%	100.0%	99.8%	99.6%	98.2%	99.6%	96.1%
4:00	98.5%	99.0%	100.0%	99.5%	100.0%	100.0%	100.0%	100.0%	99.4%	98.2%	99.3%	96.4%
5:00	97.6%	99.0%	99.1%	99.5%	100.0%	100.0%	100.0%	100.0%	99.8%	98.2%	99.4%	95.7%
6:00	98.0%	99.2%	99.3%	99.8%	100.0%	100.0%	100.0%	100.0%	99.8%	98.1%	98.9%	96.0%
7:00	98.3%	98.5%	98.9%	99.8%	100.0%	100.0%	100.0%	99.8%	100.0%	97.8%	99.3%	95.5%
8:00	96.5%	97.3%	99.1%	100.0%	100.0%	99.8%	99.6%	99.6%	100.0%	97.9%	99.6%	96.0%
9:00	98.0%	97.5%	99.3%	99.5%	100.0%	99.8%	100.0%	100.0%	100.0%	98.8%	98.9%	95.5%
10:00	97.4%	96.7%	98.2%	100.0%	99.6%	99.6%	99.8%	100.0%	98.9%	99.8%	100.0%	98.1%
11:00	97.0%	99.5%	98.4%	99.8%	100.0%	99.8%	100.0%	99.8%	98.9%	99.4%	99.8%	99.5%
12:00	99.8%	99.5%	99.8%	99.8%	99.8%	100.0%	100.0%	100.0%	99.2%	98.8%	100.0%	99.3%
13:00	98.2%	98.7%	99.6%	100.0%	99.6%	100.0%	99.6%	99.6%	99.4%	99.4%	98.7%	98.8%
14:00	98.7%	98.7%	99.3%	99.8%	99.8%	99.8%	100.0%	100.0%	99.4%	99.8%	98.7%	98.8%
15:00	98.6%	98.2%	100.0%	100.0%	99.6%	100.0%	100.0%	99.8%	100.0%	99.6%	99.3%	99.5%
16:00	98.6%	98.4%	100.0%	100.0%	100.0%	100.0%	100.0%	99.8%	99.8%	100.0%	99.1%	98.3%
17:00	98.5%	98.4%	99.3%	99.3%	99.5%	100.0%	100.0%	99.8%	100.0%	99.8%	99.1%	97.6%
18:00	97.8%	98.4%	99.8%	98.8%	98.7%	99.8%	98.6%	99.4%	99.8%	99.8%	99.8%	97.1%
19:00	97.1%	98.4%	99.5%	98.8%	99.1%	99.3%	99.8%	99.6%	100.0%	99.8%	100.0%	96.4%
20:00	97.6%	98.4%	99.3%	100.0%	99.8%	99.8%	99.5%	99.2%	99.8%	99.8%	100.0%	96.1%
21:00	97.6%	97.9%	99.5%	100.0%	99.1%	99.5%	99.8%	99.8%	99.6%	99.4%	99.3%	96.6%
22:00	97.2%	98.7%	99.8%	98.8%	100.0%	99.8%	100.0%	99.8%	100.0%	99.2%	100.0%	96.1%
23:00	98.0%	98.4%	100.0%	100.0%	100.0%	99.3%	99.6%	99.8%	100.0%	99.0%	99.3%	96.9%
Day	98.1%	98.3%	99.3%	99.7%	99.7%	99.8%	99.8%	99.8%	99.6%	99.2%	99.3%	97.9%
Night	97.4%	98.4%	99.7%	99.6%	99.7%	99.8%	99.9%	99.7%	99.8%	98.7%	99.4%	96.4%
24 Hours	97.7%	98.3%	99.5%	99.7%	99.7%	99.8%	99.8%	99.8%	99.7%	99.0%	99.4%	97.1%

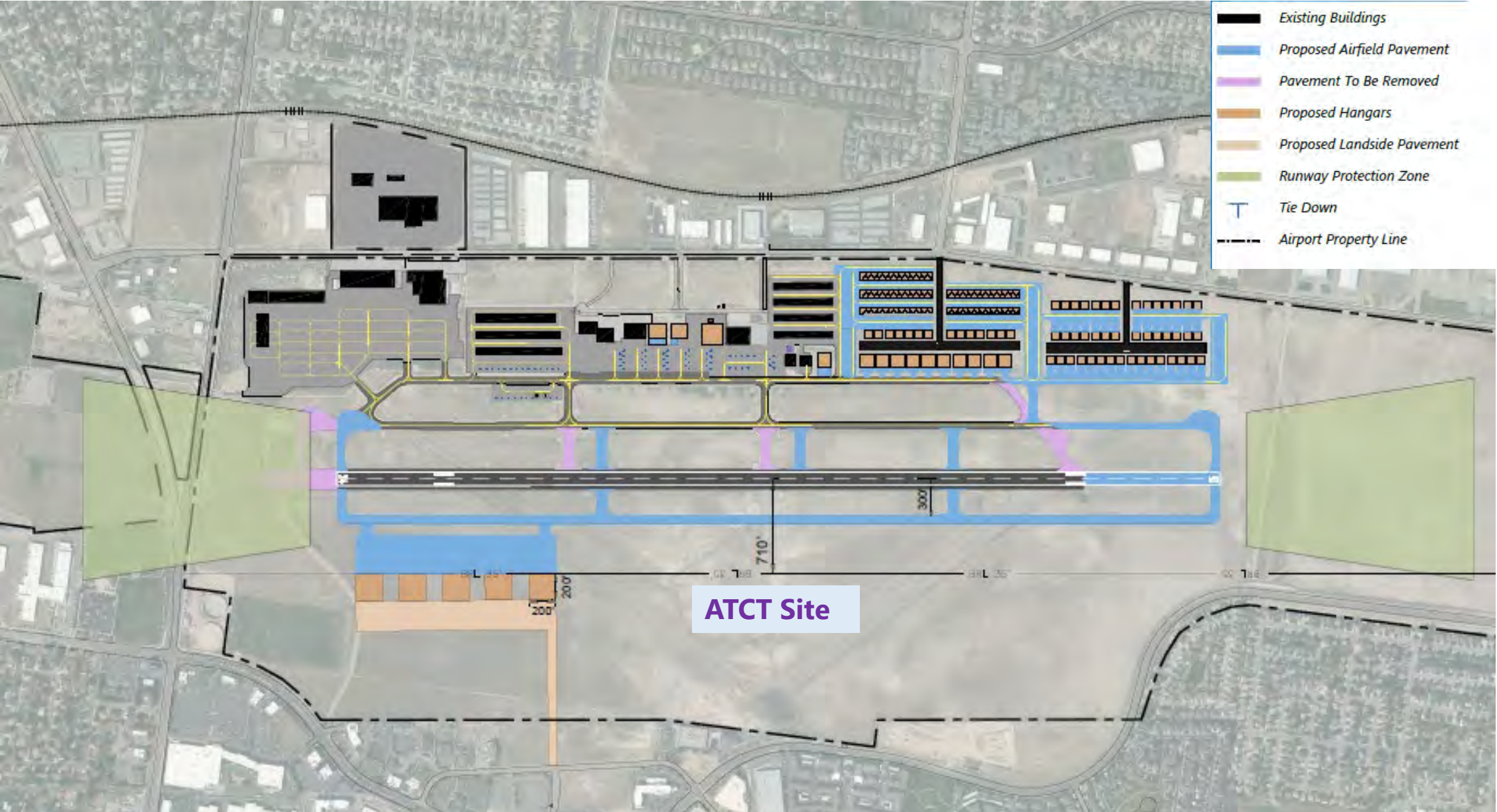
# Runway Alternative Evaluation



	<b>Runway Alternative 1</b> <i>Shift N into Class B</i> 6,600'	<b>Runway Alternative 2</b> <i>Shift N w/out Class B</i> 6,210'	<b>Runway Alternative 3</b> <i>Declared Distances</i> 6,600'	<b>Runway Alternative 4</b> <i>No RPZ enhancement</i> 6,600'
Airspace Integration	CAT B Pattern			
Aircraft Performance		Shorter Runway	Shorter LDA RWY 34	
Land Use Integration	RPZ compliance	RPZ compliance	RPZ compliance	RPZ compliance
Facility Integration				
ROM Costs				
Carbon Footprint				
FAA Preferences			Uneven Declared Distance	

Evaluation In Progress ■
 Favorable ■
 Less Favorable ■
 Least Favorable ■

# Ultimate Development Alternative





# North Hangar Development Comparison



**2006 Airport  
Layout Plan**



**2023 Master Plan  
ultimate concept**

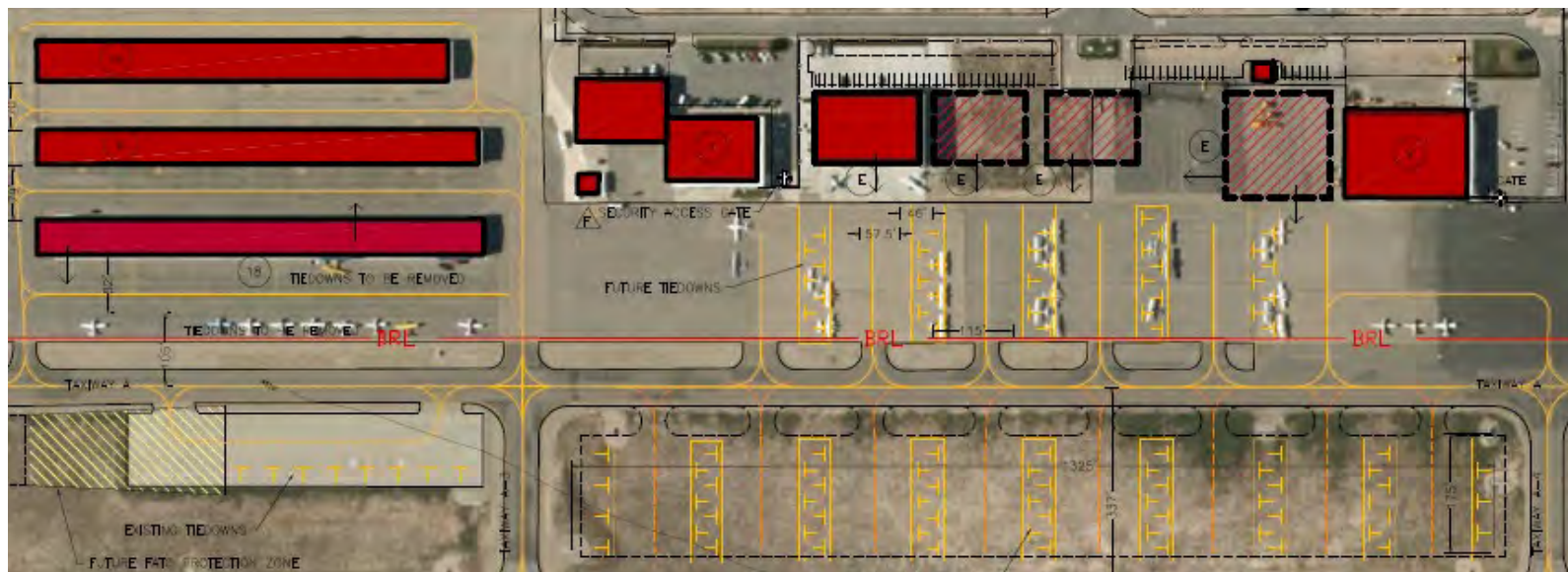




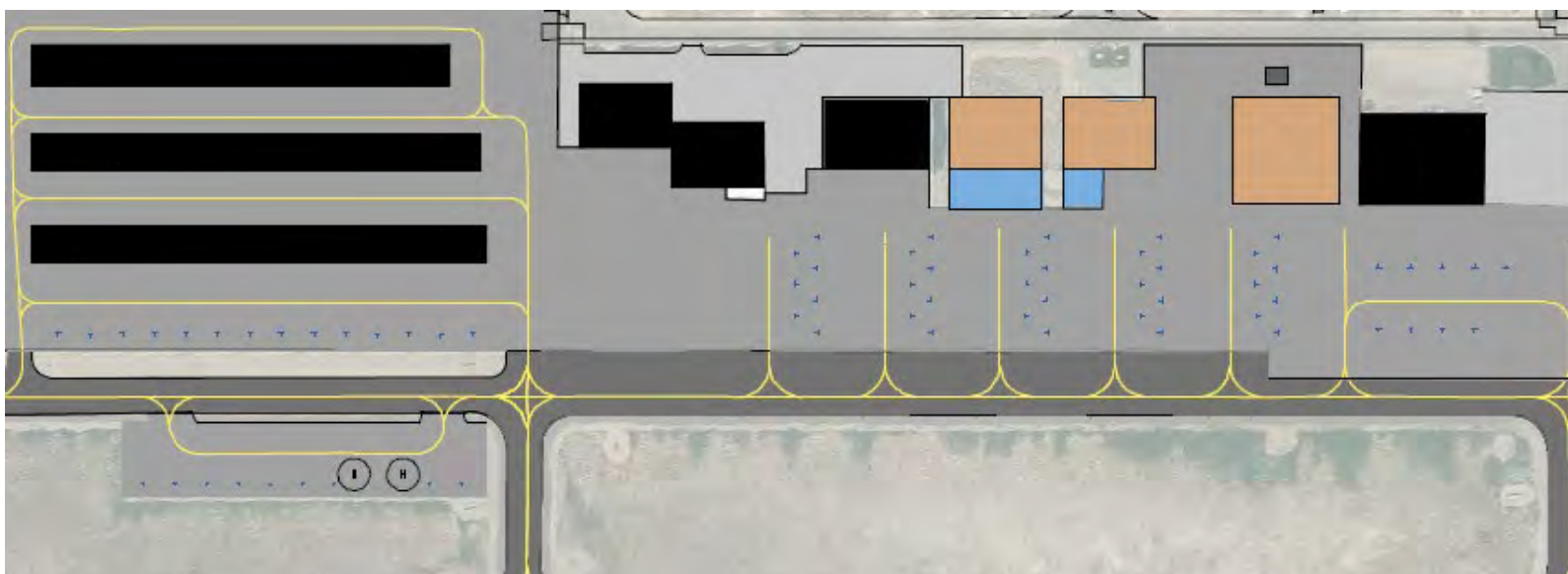
# South Hangar Development Comparison



**2006 Airport  
Layout Plan**



**2023 Master Plan  
ultimate concept**







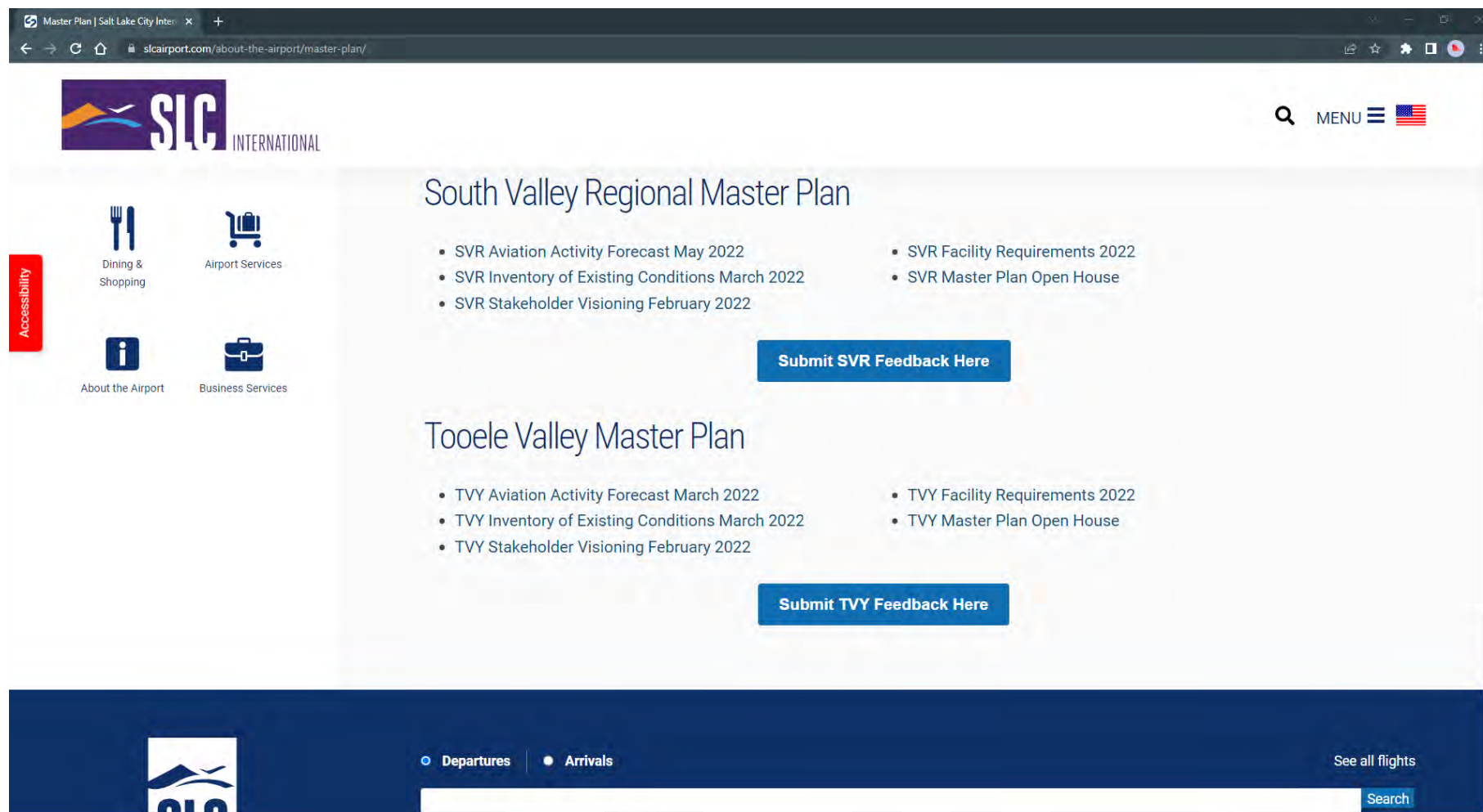


# Next Steps

- » Preferred alternative selection
- » Implementation and financial planning
- » Stakeholder committee meetings
  - Next Public Open House expected fall 2023

# Draft Reports Available Online

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



The screenshot shows a web browser window displaying the website [slcairport.com/about-the-airport/master-plan/](https://slcairport.com/about-the-airport/master-plan/). The page features the Salt Lake City International Airport logo and navigation links for Dining & Shopping, Airport Services, About the Airport, and Business Services. A red 'Accessibility' button is visible on the left. The main content area is divided into two sections: 'South Valley Regional Master Plan' and 'Tooele Valley Master Plan'. Each section lists draft reports and includes a 'Submit Feedback Here' button.

**South Valley Regional Master Plan**

- SVR Aviation Activity Forecast May 2022
- SVR Inventory of Existing Conditions March 2022
- SVR Stakeholder Visioning February 2022
- SVR Facility Requirements 2022
- SVR Master Plan Open House

**Submit SVR Feedback Here**

**Tooele Valley Master Plan**

- TVY Aviation Activity Forecast March 2022
- TVY Inventory of Existing Conditions March 2022
- TVY Stakeholder Visioning February 2022
- TVY Facility Requirements 2022
- TVY Master Plan Open House

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