

Southwest Wyoming
Regional Airport



Master Plan Study Committee Meeting

August 9, 2023

Agenda

- Introductions
- What is a master plan? (and what its not)
- Study committee responsibilities
- Process and schedule
- Inventory of existing conditions
- Forecasts of aviation demand
- Next steps
- Questions

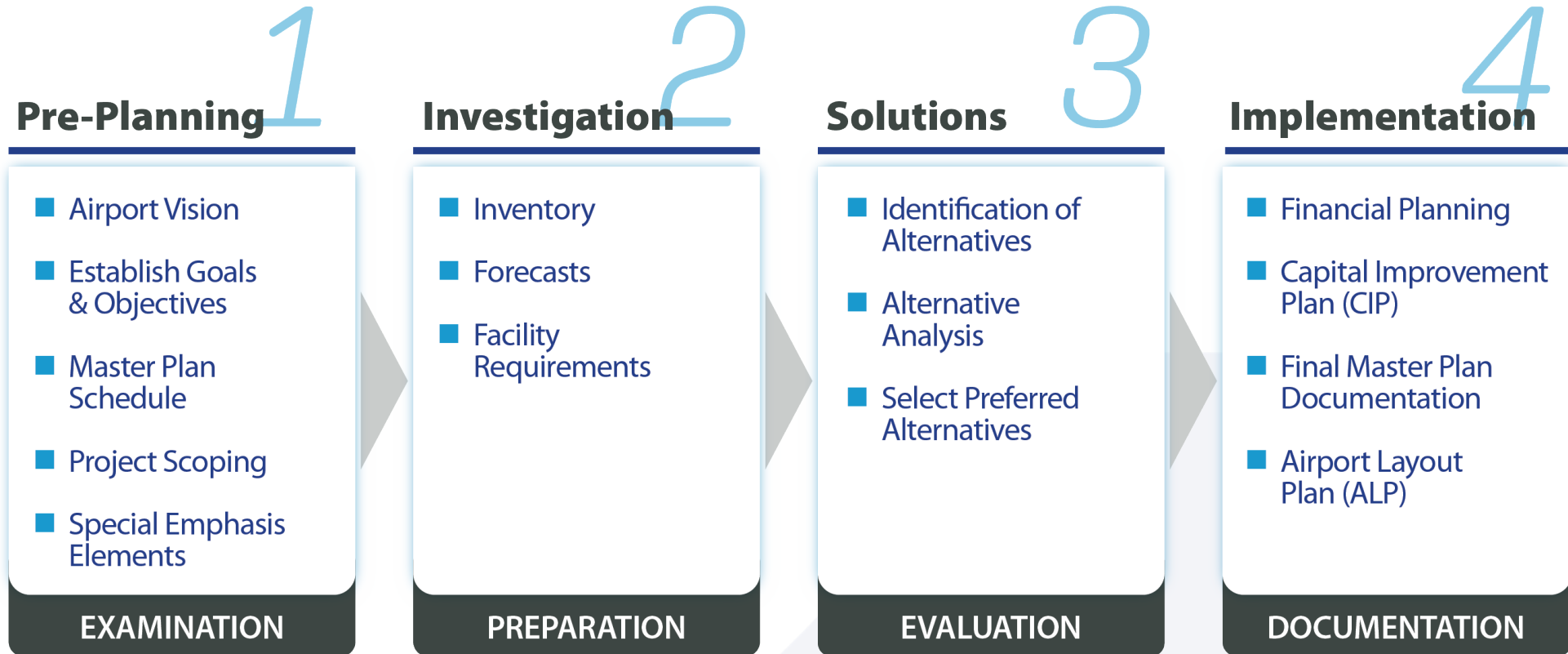


Introductions

- ➔ Airport Staff
- ➔ FAA
- ➔ WYDOT Aeronautics
- ➔ Consultant Team
 - ▶ Ardurra
 - ▶ Mead & Hunt
 - ▶ Shannon & Wilson
 - ▶ Leibowitz & Horton
 - ▶ NV5



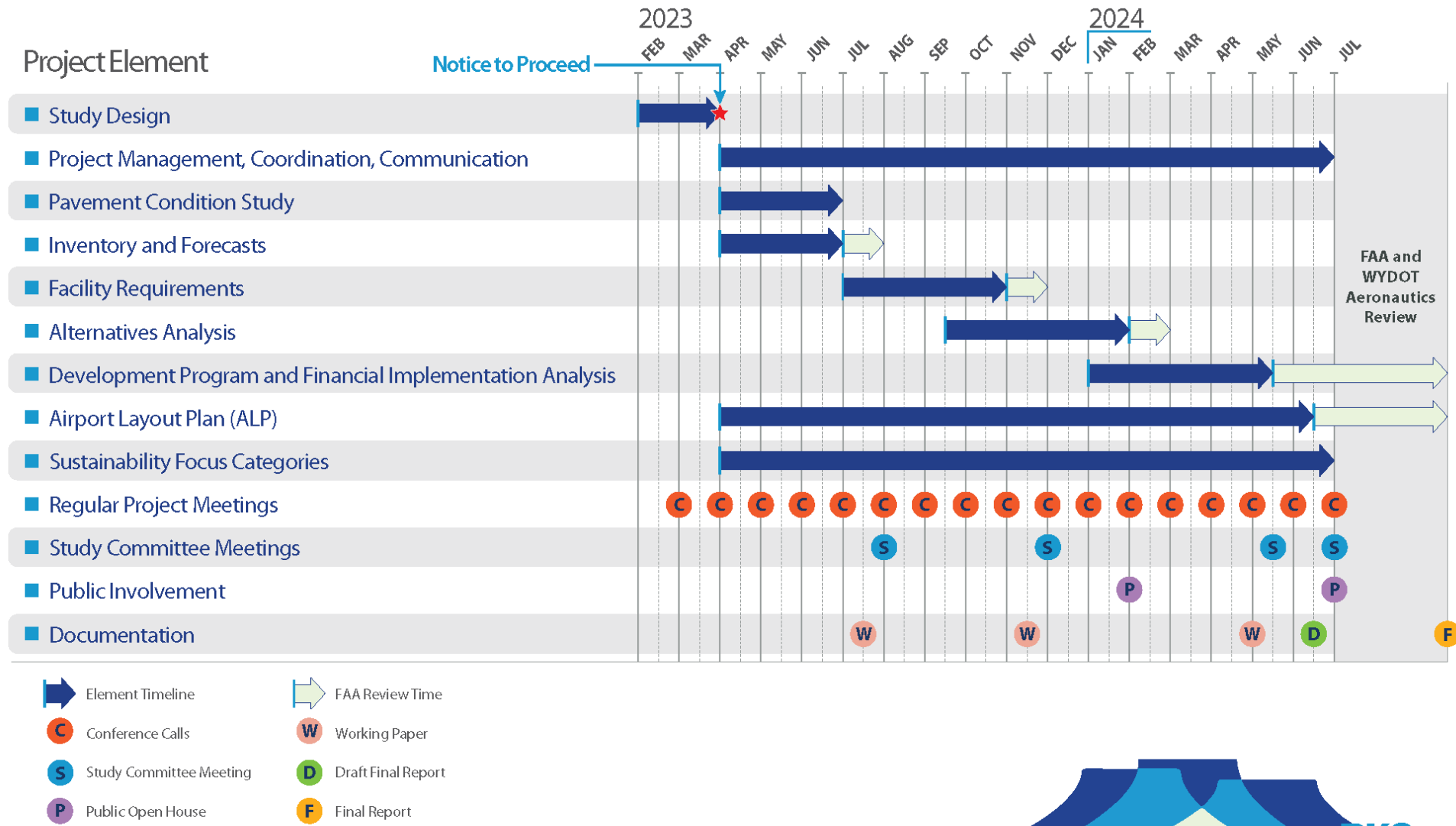
Process



- STUDY COMMITTEE MEETING
- PUBLIC OPEN HOUSE
- COMMUNITY OUTREACH



Schedule



What is an Airport Master Plan

- ➔ **Decision-making tool to guide orderly development of future airport facilities**
 - ▶ Management and operating policies
 - ▶ Layout of airport facilities
 - ▶ Identifies space for future airport development
- ➔ **FAA tool for planning and programming purposes**
 - ▶ Airport Layout Plan (ALP)
 - ▶ Airport Capital Improvement Plan (ACIP)
- ➔ **Provides input related to NEPA**

What a Master Plan is NOT

- ✈ Not a Business Plan
- ✈ Not a Marketing Plan
- ✈ Not a Noise Study

- ✈ A Master Plan is a Physical Development Plan for RKS that Reserves Space for Potentially Needed Facilities

Key Planning Considerations

- Terminal planning integration
- Data collection/AGIS
- Sustainability integration
- Forecasts/facility requirements
- Pavement evaluation/pavement rehabilitation
- GA hangar layout planning
- Financial implementation analysis

Pavement Evaluation Study

➔ Planning level geotechnical evaluation

- ▶ Focus on runways
 - Refine scope and timing
 - Use for 2024 CIP update
- ▶ Includes TW C/D
- ▶ Access road to terminal



Sustainability Incorporation

→ Sustainability definition

- ▶ ““A holistic approach to managing the Airport to ensure the integrity of the Economic viability, Operational efficiency, Natural Resource Conservation, and Social responsibility of the Airport.”

→ Focus Areas

- ▶ Airport Finance
- ▶ Water (resilience/user experience)
- ▶ Energy (resilience/user experience)
- ▶ Adjacent Land Use Combability

→ Alternatives screening criteria

Sustainability Accomplishments

- First airport in Wyoming to install solar array, and is currently using this energy generation to power 50% of FBO and ARFF facility needs
- Awarded grant funding from Rocky Mountain Power
- Recently replaced HVAC and Boiler Systems in the airport terminal
- Upgraded facility, airfield, and street lighting to energy efficient LEDs
- Installed a building automation system
- Installed low-flow water fixtures
- Recycles and aims to divert waste from landfill
- Designed the new SRE, terminal, and airfield lighting vault to accommodate ground and/or canopy solar in the future.

Study Committee Responsibilities

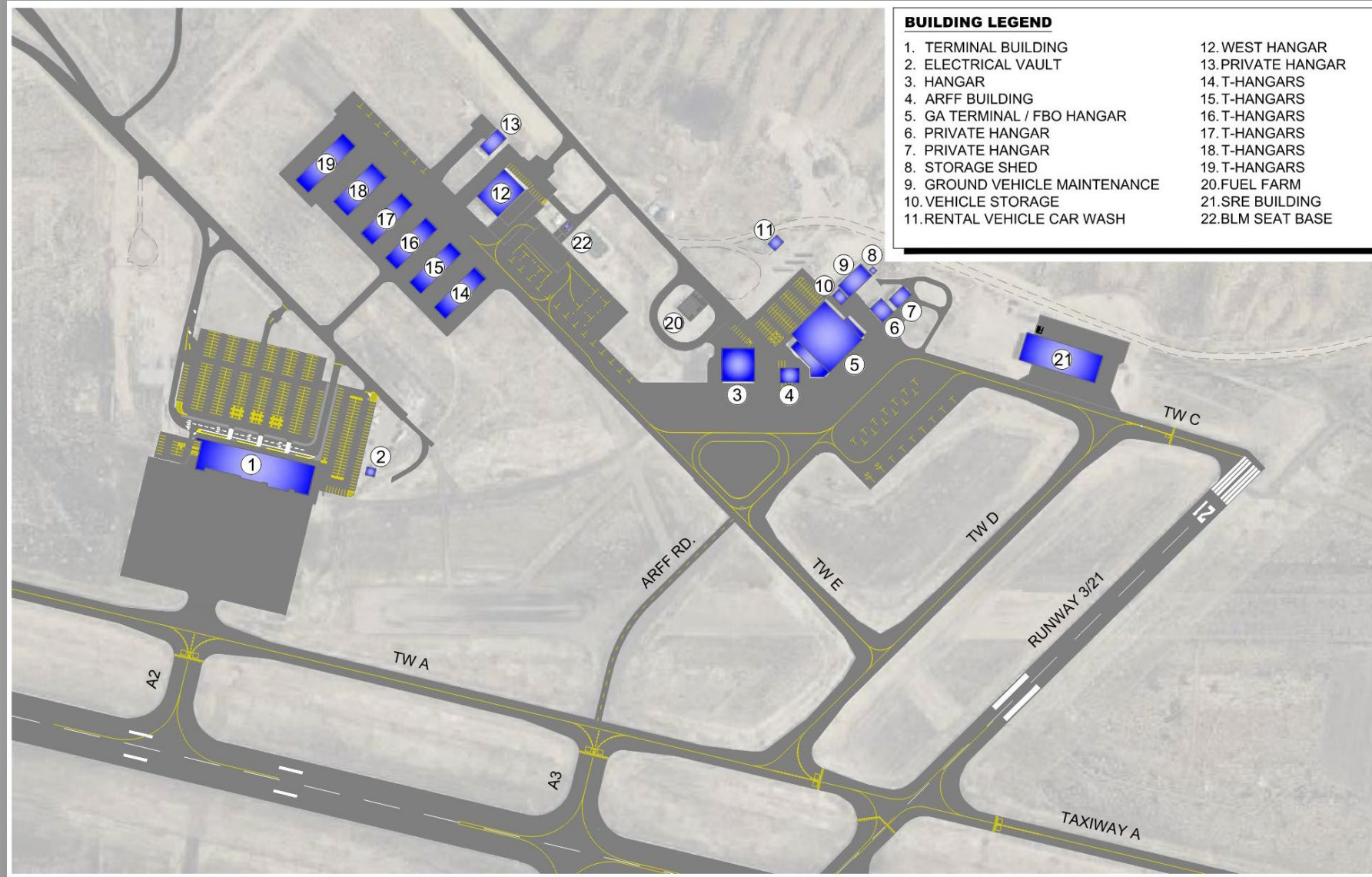
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Study Committee Responsibilities

- Provides input to the project team
- Review and comment on project chapters
- Act as a sounding board for project team on proposed development alternatives
- Represents the interests of the stakeholders
- Represents the interests of the community

Inventory of Existing Facilities

The background features a light blue gradient. On the right side, there are two large, overlapping abstract shapes. The upper shape is a dark blue, curved wedge that points towards the top right. Below it is a larger, lighter blue shape that also curves towards the top right. At the bottom right corner, there is a small, triangular yellow shape.



Feature

Airport	RKS - Southwest Wyoming Regional Airport
Area	Taxiway
Feature Type	Sign
Frangible	Yes
Comments	
Lat/Long	41.59837815, -109.08206028



Features

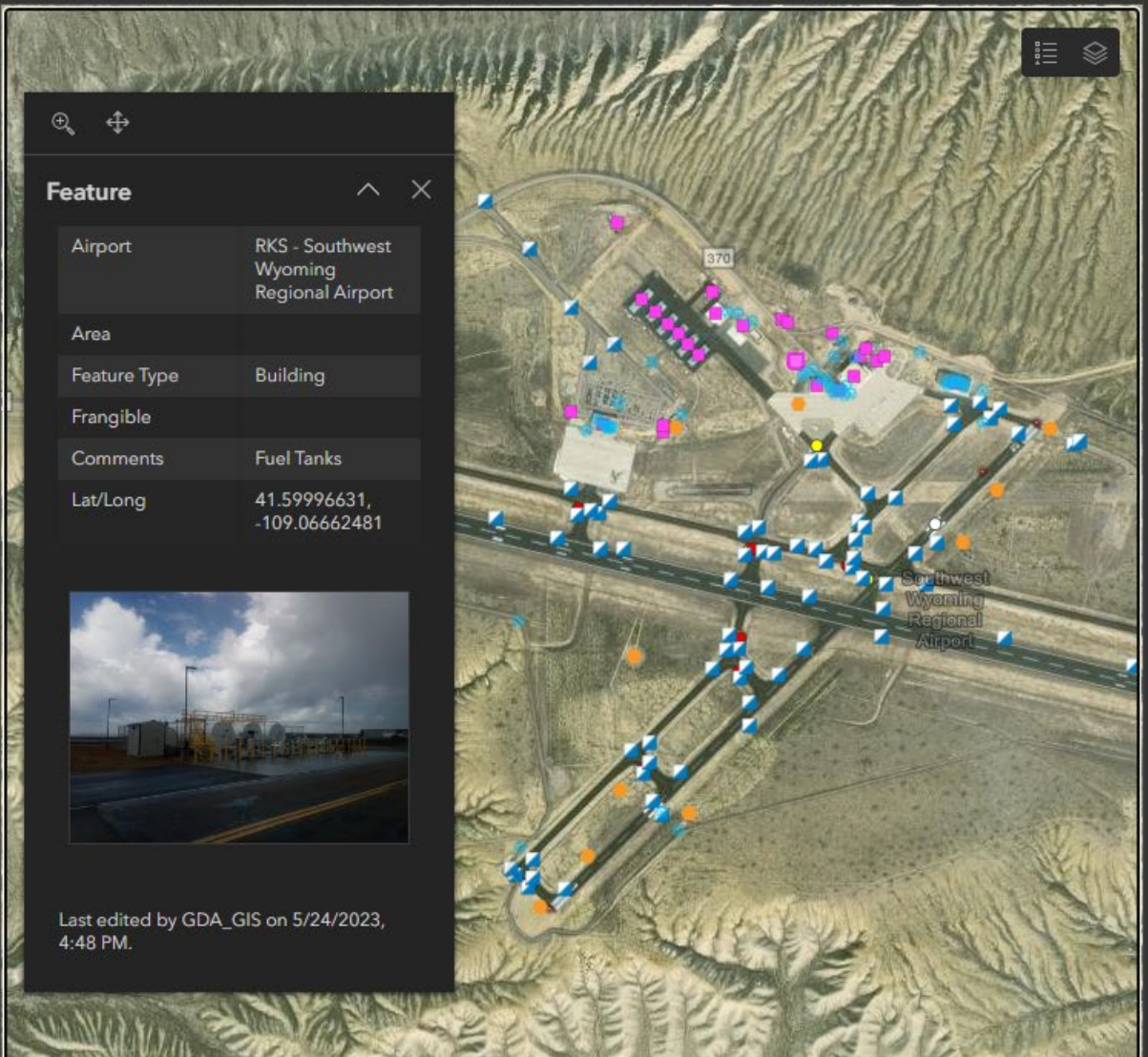
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Frangible

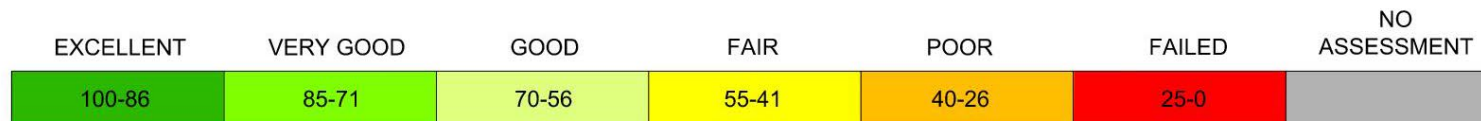
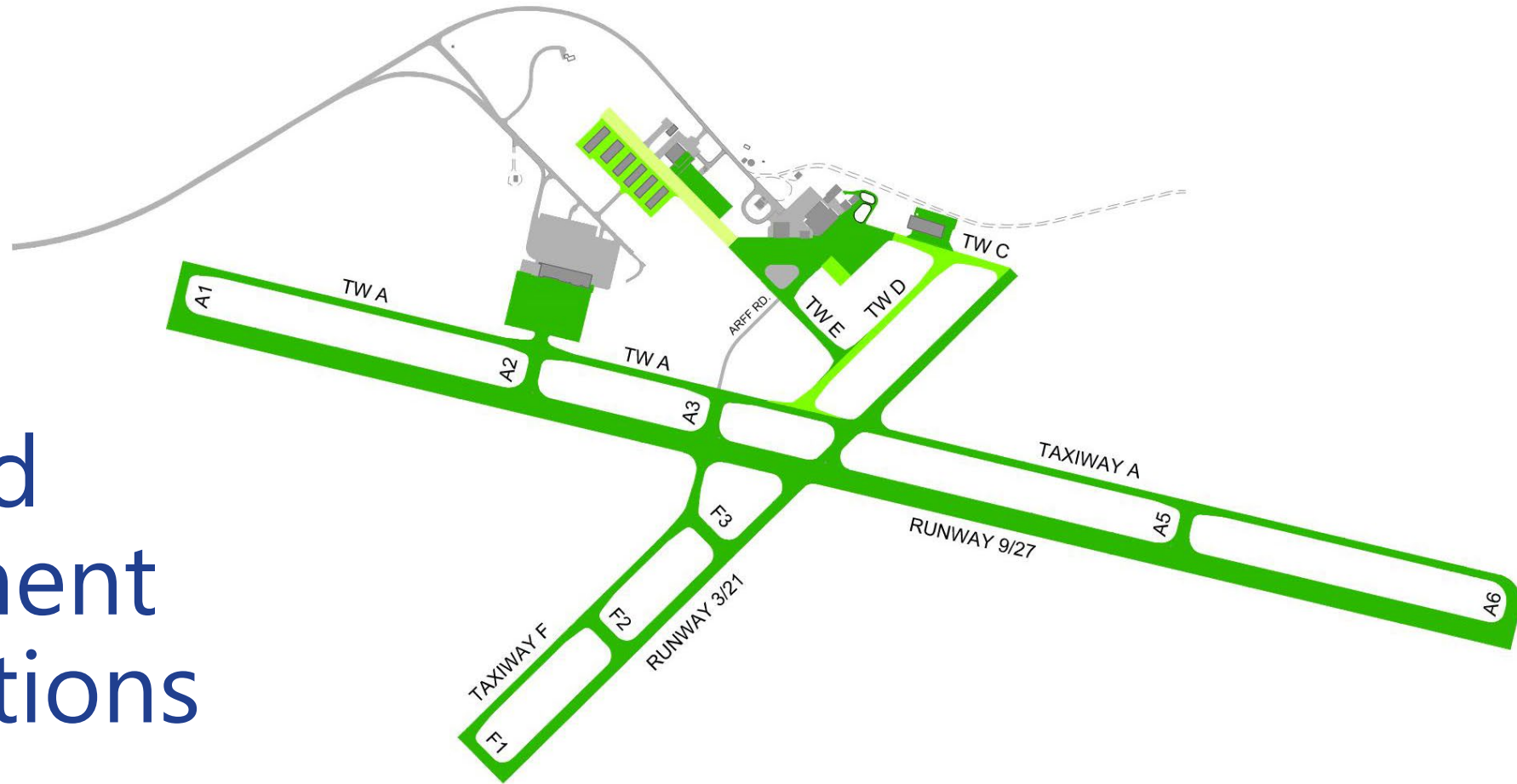
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Non-Frangible

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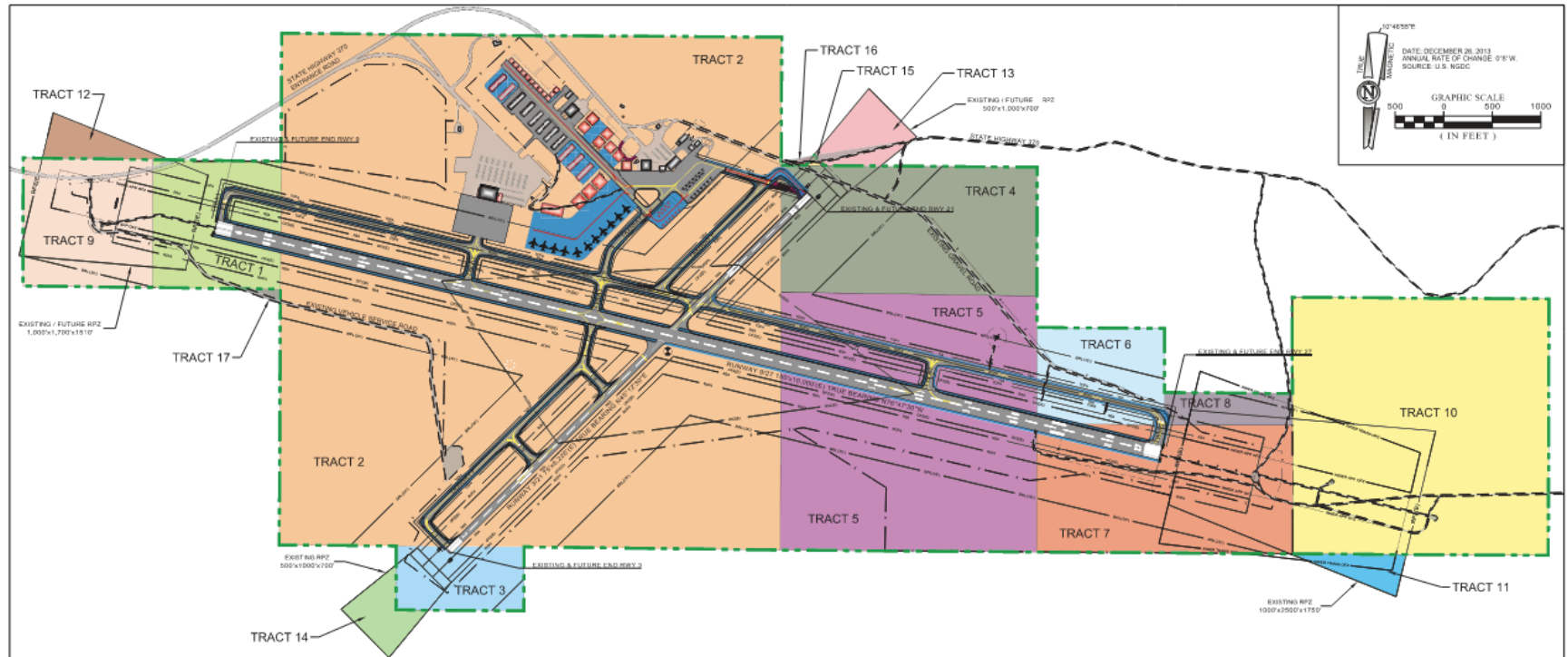


Airfield Pavement Conditions



Source: WYDOT Aeronautics, Airport Pavement Management Program, Ardurra

Exhibit 'A' Property Map



DRAWING LEGEND		
EXISTING (E)	ITEM	FUTURE (F)
	AIRPORT PROPERTY BOUNDARY	
	AIRFIELD PAVEMENT	
	BUILDINGS	
	ROADS	
	GROUND CONTOUR	NA
	FENCE	
	RUNWAY PROTECTION ZONE (RPZ)	
	RUNWAY VISIBILITY ZONE (RVZ)	
	RUNWAY AND TAXIWAY SAFETY AREAS	
	OBJECT FREE ZONE	
	RUNWAY AND TAXIWAY OBJECT FREE AREA	
	BUILDING RESTRICTION LINE (BRL)	
	RUNWAY END IDENTIFIER LIGHTS (REIL)	
	THRESHOLD LIGHTS	

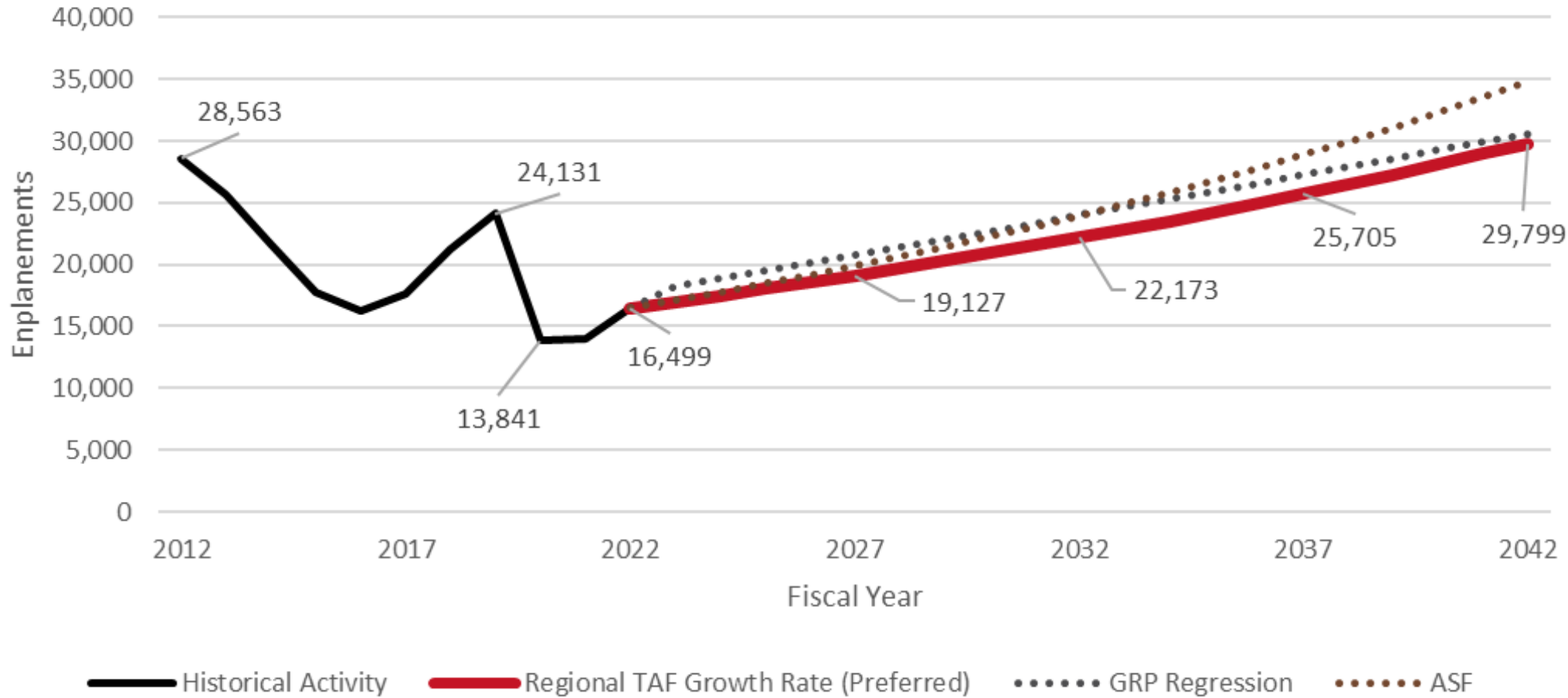
AIRPORT PROPERTY INTEREST										
TRACT No.	ACREAGE	LOCATION	GRANTOR	GRANTEE	TYPE OF INTEREST	BOOK AND PAGE	DATE ACQ.	PURPOSE OF ACQ.	FEDERAL PROJECT NO.	
1	48	SE 1/4 NE 1/4 SEC. 25	ROCK SPRINGS GRADING ASSOCIATION	ROCK SPRINGS-SWEETWATER COUNTY JOINT POWERS AIRPORT BOARD	FREE SAMPLE	BOOK 137, PAGE 154	5/25/1941	AERONAUTICAL	--	
2	822.11	ALL SEC. 30	UNITED STATES OF AMERICA	ROCK SPRINGS-SWEETWATER COUNTY JOINT POWERS AIRPORT BOARD	PATENT	BOOK 226, PAGES 70-72	2/21/1958	AERONAUTICAL	BLM LAND TRANSFER / PATENT 152176	
3	18.90	N 1/2 NE 1/4 NW 1/4 SEC. 31	ROCK SPRINGS GRADING ASSOCIATION	ROCK SPRINGS-SWEETWATER COUNTY JOINT POWERS AIRPORT BOARD	FREE SAMPLE	BOOK 137, PAGE 154	5/25/1941	AERONAUTICAL	--	
4	79.83	S 1/2 NW 1/4 SEC. 29	ROCK SPRINGS GRADING ASSOCIATION	ROCK SPRINGS-SWEETWATER COUNTY JOINT POWERS AIRPORT BOARD	FREE SAMPLE	BOOK 137, PAGE 154	5/25/1941	AERONAUTICAL	--	
5	160	SW 1/4 SEC. 29	ROCK SPRINGS GRADING ASSOCIATION	ROCK SPRINGS-SWEETWATER COUNTY JOINT POWERS AIRPORT BOARD	FREE SAMPLE	BOOK 137, PAGE 154	5/25/1941	AERONAUTICAL	--	
6	38	S 1/2 N 1/2 NW 1/4 SE 1/4 & S 1/2 NW 1/4 SE 1/4 SEC. 29	ROCK SPRINGS GRADING ASSOCIATION	ROCK SPRINGS-SWEETWATER COUNTY JOINT POWERS AIRPORT BOARD	FREE SAMPLE	BOOK 882, PAGE 892	8/25/1977	AERONAUTICAL	A.P. PROJECT NO. 3-58-0025-81	
7	88	S 1/2 SE 1/4 SEC. 28	ROCK SPRINGS GRADING ASSOCIATION	ROCK SPRINGS-SWEETWATER COUNTY JOINT POWERS AIRPORT BOARD	FREE SAMPLE	BOOK 882, PAGE 892	8/25/1977	AERONAUTICAL	A.P. PROJECT NO. 3-58-0025-81	
8	19	S 1/2 S 1/2 NE 1/4 SE 1/4 SEC. 29	ROCK SPRINGS GRADING ASSOCIATION	ROCK SPRINGS-SWEETWATER COUNTY JOINT POWERS AIRPORT BOARD	FREE SAMPLE	BOOK 882, PAGE 892	8/25/1977	RPZ	A.P. PROJECT NO. 3-58-0025-81	
9	48	SW 1/4 NE 1/4 SEC. 29	ROCK SPRINGS GRADING ASSOCIATION	ROCK SPRINGS-SWEETWATER COUNTY JOINT POWERS AIRPORT BOARD	FREE SAMPLE	BOOK 882, PAGE 892	8/25/1977	RPZ	A.P. PROJECT NO. 3-58-0025-81	
10	160	SW 1/4 SEC. 29	UNITED STATES BLM	ROCK SPRINGS-SWEETWATER COUNTY JOINT POWERS AIRPORT BOARD	PATENT	BOOK 716, PAGES 940-940	1/26/1981	RPZ	BLM LAND TRANSFER / PATENT 841881	
11	1.22	PT. SEC. 29	ROCK SPRINGS GRADING ASSOCIATION	ROCK SPRINGS-SWEETWATER COUNTY JOINT POWERS AIRPORT BOARD	AVIGATION EASEMENT	BOOK 882, PAGE 892	8/25/1977	RPZ	A.P. PROJECT NO. 3-58-0025-81	
12	7.88	PT. SEC. 29	ROCK SPRINGS GRADING ASSOCIATION	ROCK SPRINGS-SWEETWATER COUNTY JOINT POWERS AIRPORT BOARD	AVIGATION EASEMENT	BOOK 882, PAGE 892	8/25/1977	RPZ	A.P. PROJECT NO. 3-58-0025-81	
13	10.83	PT. NW 1/4 SEC. 29	ROCK SPRINGS GRADING ASSOCIATION	ROCK SPRINGS-SWEETWATER COUNTY JOINT POWERS AIRPORT BOARD	AVIGATION EASEMENT	BOOK 886, PAGES 1337-1362	8/8/1977	RPZ	A.P. PROJECT NO. 3-58-0025-11	
14	8.08	PT. NW 1/4 SEC. 31	ROCK SPRINGS GRADING ASSOCIATION	ROCK SPRINGS-SWEETWATER COUNTY JOINT POWERS AIRPORT BOARD	AVIGATION EASEMENT	BOOK 886, PAGES 1337-1362	8/8/1977	RPZ	A.P. PROJECT NO. 3-58-0025-11	
15	8.23	PT. NW 1/4 SEC. 29	ROCK SPRINGS GRADING ASSOCIATION	ROCK SPRINGS-SWEETWATER COUNTY JOINT POWERS AIRPORT BOARD	FREE SAMPLE	BOOK 887, PAGES 1366, 1368	7/8/1987	RPZ	A.P. PROJECT NO. 3-58-0025-11	
16	3.30	PT. NW 1/4 SEC. 29	ROCK SPRINGS GRADING ASSOCIATION	ROCK SPRINGS-SWEETWATER COUNTY JOINT POWERS AIRPORT BOARD	AVIGATION CONSTR. EASEMENT	PENDING	PENDING	FENCE	A.P. PROJECT NO. 3-58-0025-12	
17	8.64	PT. SE 1/4 SEC. 28	ROCK SPRINGS GRADING ASSOCIATION	ROCK SPRINGS-SWEETWATER COUNTY JOINT POWERS AIRPORT BOARD	AVIGATION CONSTR. EASEMENT	PENDING	PENDING	FENCE	A.P. PROJECT NO. 3-58-0025-12	

	ROCK SPRINGS - SWEETWATER COUNTY AIRPORT AIRPORT LAYOUT PLAN		ISSUE RECORD		EXHIBIT 'A' AIRPORT PROPERTY MAP			SHEET NO. 17 of 17
	DES: B.A.V.	NO.	BY	DATE				
	DRN: A.P.A.							
	CHK: S.E.S.							
APP: D.F.N.					AIR PROJ. NO. 3-58-0025-28 AVIATION PROJ. NO. RKS-28 DATE: APRIL, 2015			

Forecasts of Aviation Demand

The background features a light blue gradient. On the right side, there are large, overlapping abstract shapes in dark blue, medium blue, and yellow, which appear to be stylized representations of growth or demand curves.

Enplanements



Source: Federal Aviation Administration 2022 Terminal Area Forecast published in 2023
 Projections: Mead & Hunt, Inc. (2023)

Peak Month Average Day Enplanement Forecast

Year	Projected Total Annual Enplanements	Peak Month Projected Enplanements	PMAD Projected Enplanements
Base Year			
2022	16,499	1,650	53
Projections			
2027	19,127	1,913	62
2032	22,173	2,217	72
2037	25,705	2,571	83
2042	29,799	2,980	96

Source: Federal Aviation Administration 2022 Terminal Area Forecast published in 2023
 Projections: Mead & Hunt, Inc. (2023)

Air Carrier Operation Projections

Year	Annual Departures by Type				Total Dep	Total Ops
	CRJ-200/550 (50 seats)	ERJ-175 (76 seats)	737-700 (150 seats)	737-800/MAX 8 (> 150 seats)		
Base Year						
2022	480	-	-	-	480	960
Projections						
2027	234	234	52	-	520	1,040
2032	-	468	39	15	522	1,044
2037	-	468	35	25	528	1,056
2042	-	468	26	35	529	1,058

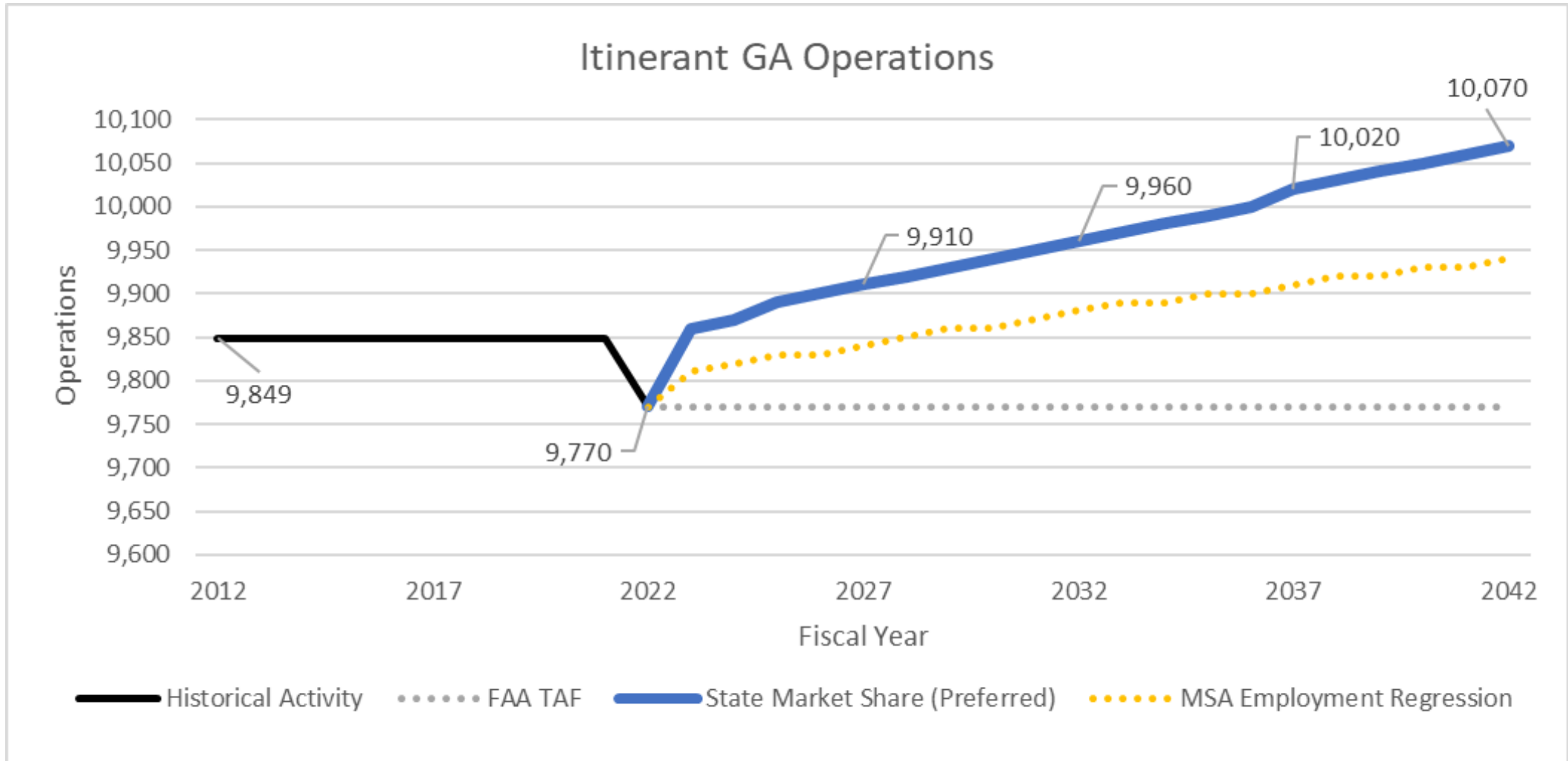
Source: Federal Aviation Administration 2022 Terminal Area Forecast published in 2023

Projections: Mead & Hunt, Inc. (2023)

Air Taxi Operation Projections

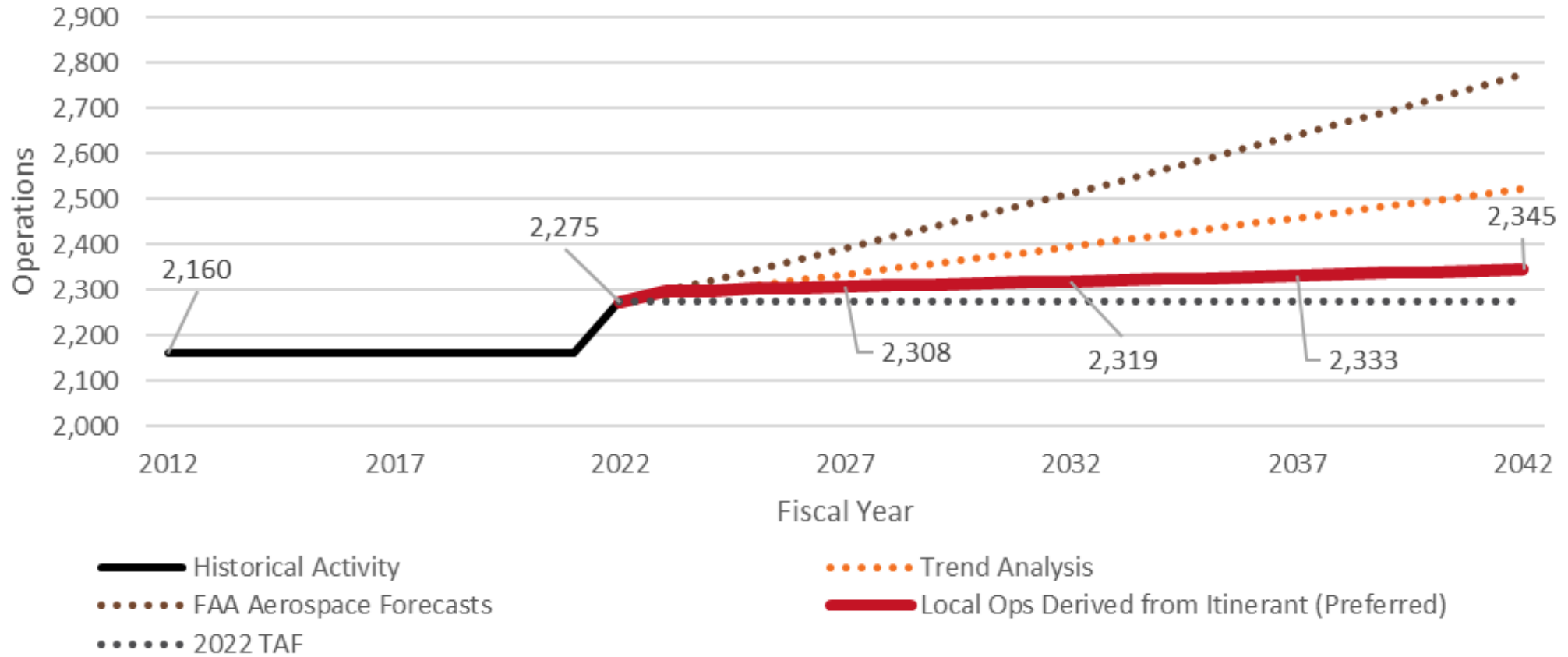
Year	Air Carrier Operations	Air Taxi Operations	Total Commercial Operations
Base Year			
2022	960	3,614	4,574
Projections			
2027	1,040	3,649	4,689
2032	1,044	3,764	4,808
2037	1,056	3,873	4,929
2042	1,058	3,996	5,054
CAGR '22-'42	0.5%	0.5%	0.5%

Source: Federal Aviation Administration 2022 Terminal Area Forecast published in 2023;
 Projections: Mead & Hunt, Inc. (2023)



Source: Federal Aviation Administration 2022 Terminal Area Forecast published in 2023;
 Projections: Mead & Hunt, Inc. (2023)

Local GA Operations



Source: Federal Aviation Administration 2022 Terminal Area Forecast published in 2023;
 Projections: Mead & Hunt, Inc. (2023)

Military Operation Projections

Year	TAF
Base Year	
2022	55
Projections	
2027	55
2032	55
2037	55
2042	55
CAGR '22-'42	0.00%

Source: Federal Aviation Administration 2022 Terminal Area Forecast published in 2023;
 Projections: Mead & Hunt, Inc. (2023)

Peak Month Average Day Operations Forecast

Year	Total Projected Ops	Peak Month Ops	PMAD Ops
Base Year			
2022	13,036	1,341	43
Projections			
2027	13,313	1,370	44
2032	13,378	1,377	44
2037	13,464	1,385	45
2042	13,528	1,392	45

Source: RKS ADS-B data (2022)
 Projections: Mead & Hunt, Inc. (2023)



Based Aircraft Projections

Source: Federal Aviation Administration 2022 Terminal Area Forecast published in 2023; Projections: Mead & Hunt, Inc. (2023)

Year	Forecasting Methodologies																		
	TAF						State Market Share						Preferred						
	Single Engine	Multi Engine	Jet	Heli	Exp	Total	Single Engine	Multi Engine	Jet	Heli	Exp	Total	Single Engine	Multi Engine	Jet	Heli	Exp	Total	
Base																			
2022	35	5	0	1	3	44	35	5	0	1	3	44	35	5	0	1	3	44	
Proj																			
2027	35	5	0	1	3	44	37	5	0	1	2	45	37	5	2	2	4	50	
2032	35	5	0	1	3	44	38	5	0	1	2	46	38	5	2	2	4	51	
2037	35	5	0	1	3	44	39	5	0	1	2	47	39	5	2	2	4	52	
2042	35	5	0	1	3	44	39	5	0	1	2	47	39	5	2	2	5	53	
CAGR '22-'42	0%	0%	0%	0%	0%	0%	0.5%	0%	0%	0%	-2%	0.3%	0.5%	0%	200%	3.5%	2.6%	0.9%	



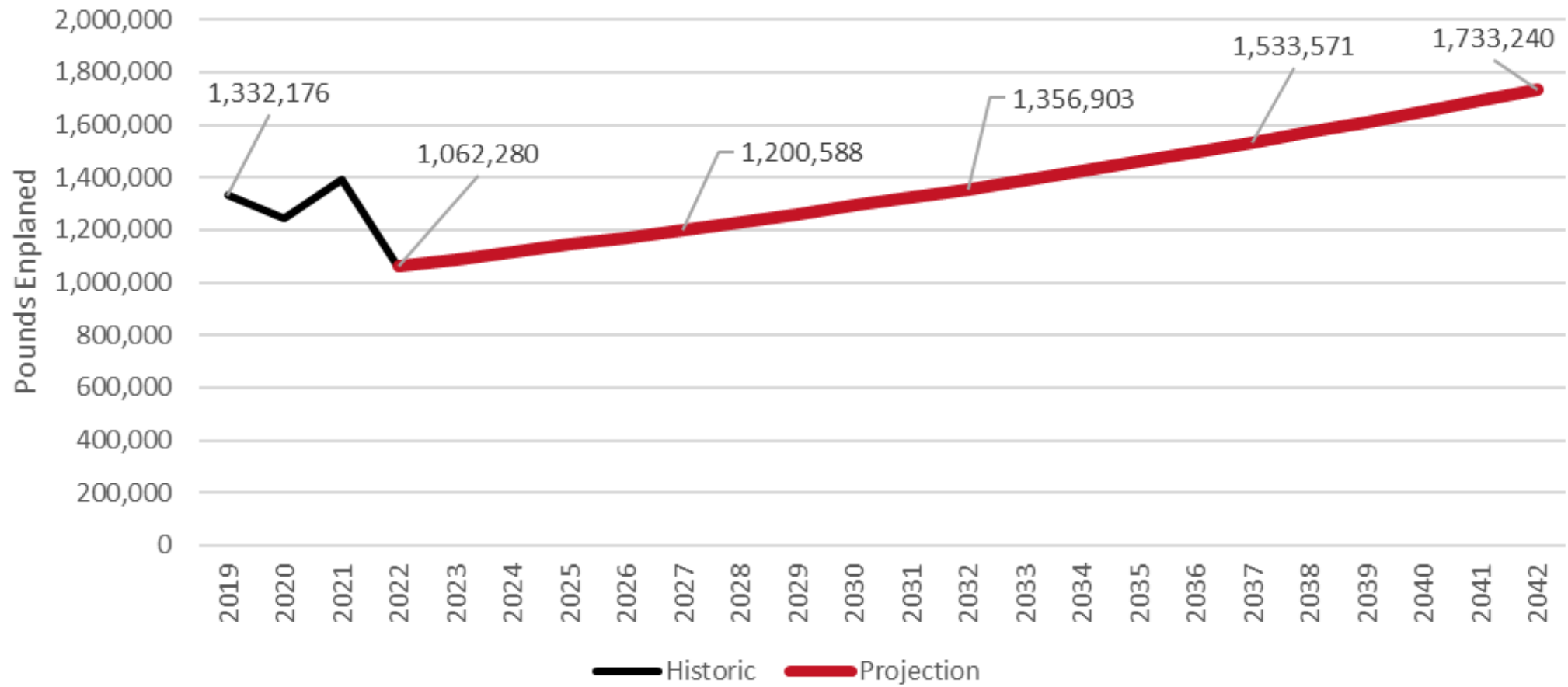
Fleet Mix Operations Projections

Year	Piston	Turbopro p Single	Turbopro p Twin	Small Jet	Medium Jet	Large Jet	Air Carrier	Military	Total
2022	8,990	3,350	2,335	254	653	78	960	55	16,674
2027	9,051	2,770	2,990	273	700	83	1,040	55	16,962
2032	8,987	2,809	3,015	318	817	97	1,044	55	17,142
2037	8,900	2,849	3,042	371	952	113	1,056	55	17,338
2042	8,778	2,889	3,068	432	1,110	132	1,058	55	17,524
CAGR	-0.12%	-0.74%	1.38%	2.69%	2.69%	2.69%	0.49%	0.00%	0.25%

Note: Small, medium, and large jet classifications based on business jet types that operated at RKS in 2022. No narrowbody or widebody types typically classified as “large” operated at RKS in 2022.
 Source: Federal Aviation Administration 2022 Terminal Area Forecast published in 2023; Federal Aviation Administration Traffic Flow Management System Counts database, Fiscal Year 2022
 Projections: Mead & Hunt, Inc. (2023)



Enplaned Air Cargo Projections



Source: Southwest Wyoming Regional Airport records (2023)
Projections: Mead & Hunt, Inc. (2023)

Existing Critical Aircraft

ARC Classification	2022 Operations	Representative Types
A-I	358	Mitsubishi Marquise/Solitaire, Cirrus SR 22
A-II	1,064	Pilatus PC-12, DeHavilland Twin Otter
B-I	572	Beech King Air 90, Cessna CitationJet/CJ1
B-II	1,858	<u>Cessna 208 Caravan</u> , <u>Swearingen Metroliner</u>
B-III	2	CASA CN-235
C-I	24	BAe HS 125/700-800/Hawker 800, Bombardier Learjet 60
C-II	1,082	<u>Mitsubishi CRJ-200</u> , <u>Embraer ERJ-145</u>
C-III	8	Bombardier BD-700 Global Express
C-IV	2	Boeing KC-135 Stratotanker
D-I	6	Bombardier Learjet 35/36
D-II	26	Gulfstream IV/G400
D-III	6	Gulfstream 650
No Data	130	n/a
TOTAL	5,138	

Note: Representative critical type shown as underline
 Source: Federal Aviation Administration Traffic Flow Management System Counts Database (2022)

Air Carrier Critical AC GA Critical AC

Future Critical Aircraft

ARC Classification	2042 Proj Ops	Representative Types
A-I	5,173	Mitsubishi Marquise/Solitaire, Cirrus SR 22
A-II	2,372	Pilatus PC-12, DeHavilland Twin Otter
B-I	3,990	Beech King Air 90, Cessna CitationJet/CJ1
B-II	3,264	<u>Cessna 408 SkyCourier, Swearingen Merlin 4/4A Metro2</u>
B-III	4	CASA CN-235
C-I	55	BAe HS 125/700-800/Hawker 800, Bombardier Learjet 60
C-II	296	Bombardier Challenger 300, Learjet 70/75
C-III	1,076	<u>Embraer 175, Bombardier BD-700 Global Express</u>
C-IV	55	Boeing KC-135 Stratotanker
D-I	14	Bombardier Learjet 35/36
D-II	59	Gulfstream IV/G400
D-III	14	Boeing 737-800/MAX 8; Gulfstream 650
No Data	1,152	n/a
TOTAL	17,524	

Note: Representative critical type shown as underline
 Source: FAA TFMSC database (2022); Projections: Mead & Hunt, Inc. (2023)

Air Carrier Critical AC	GA Critical AC
-------------------------	----------------

Next Steps

The background features a light blue gradient. On the right side, there are two overlapping abstract shapes: a dark blue shape on top and a medium blue shape below it, both with curved, upward-sloping edges. At the bottom right corner, a small portion of a yellow shape is visible.

Next Steps

- Submit forecasts for FAA approval
- Continue pavement strength evaluation
- Conduct facility requirements evaluation
- Develop sustainability initiatives and screening criteria
- Prepare development alternatives
 - ▶ Next Study Committee meeting anticipated late Fall/early winter

Questions & Comments

The background features a light blue gradient on the left side. On the right, there are several overlapping, curved shapes in shades of dark blue, medium blue, and a small sliver of yellow at the bottom right corner.

Thank You!



Mead
& Hunt

The text 'Mead & Hunt' is displayed in a red, serif font, with the ampersand in a smaller size and a different shade of red.