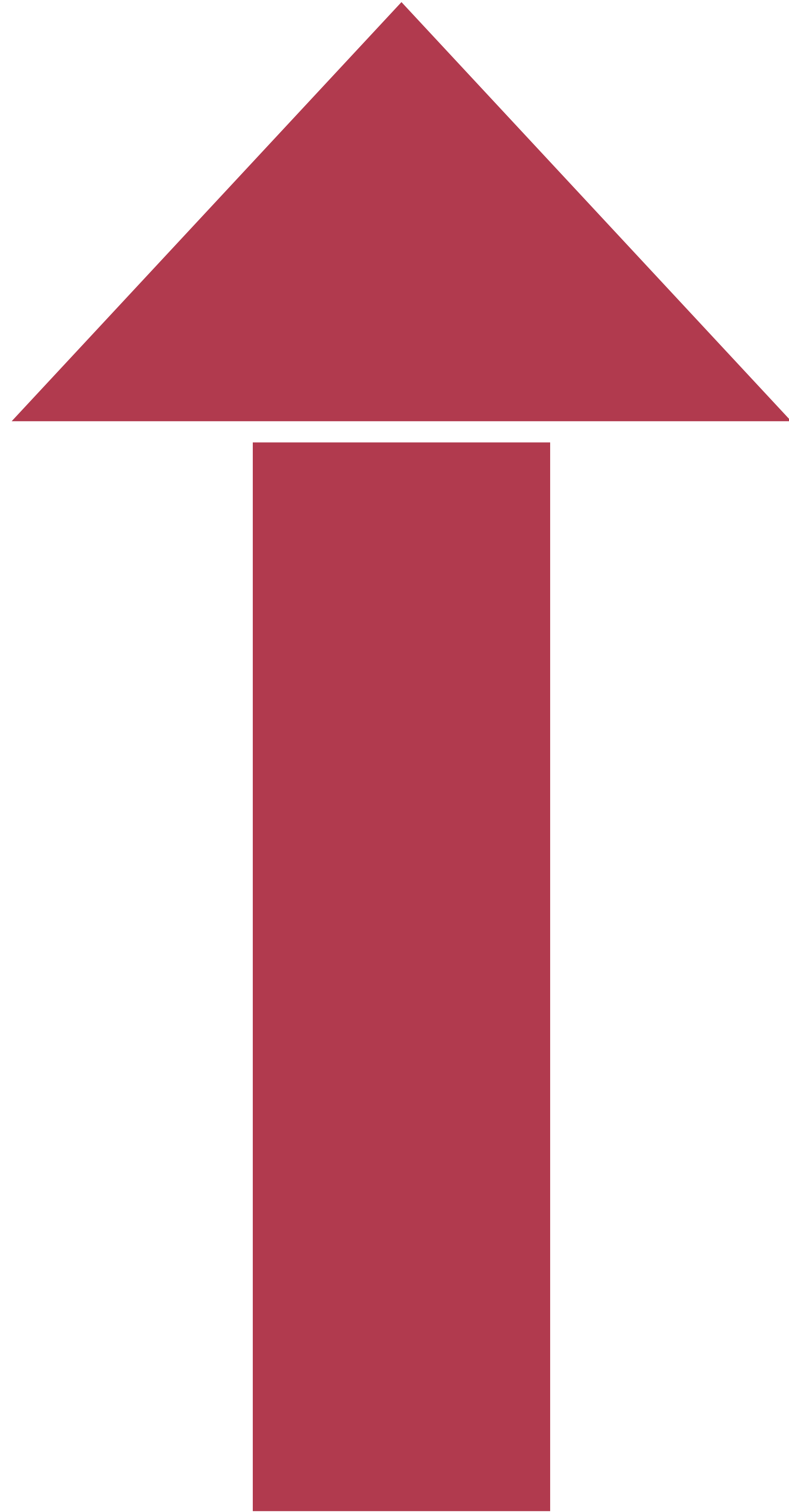


# SUX AIRPORT MASTER PLAN



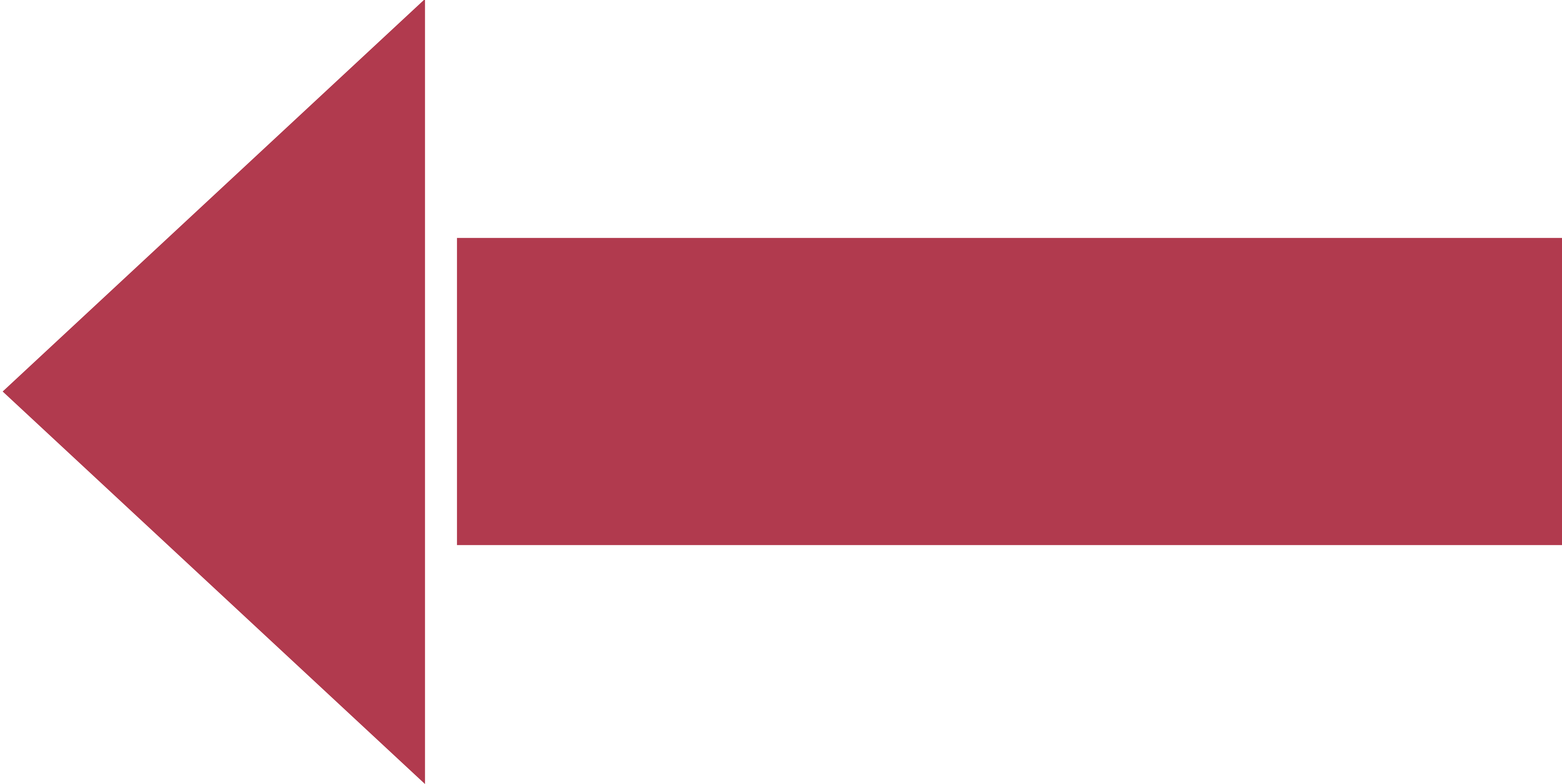


# SUX AIRPORT MASTER PLAN





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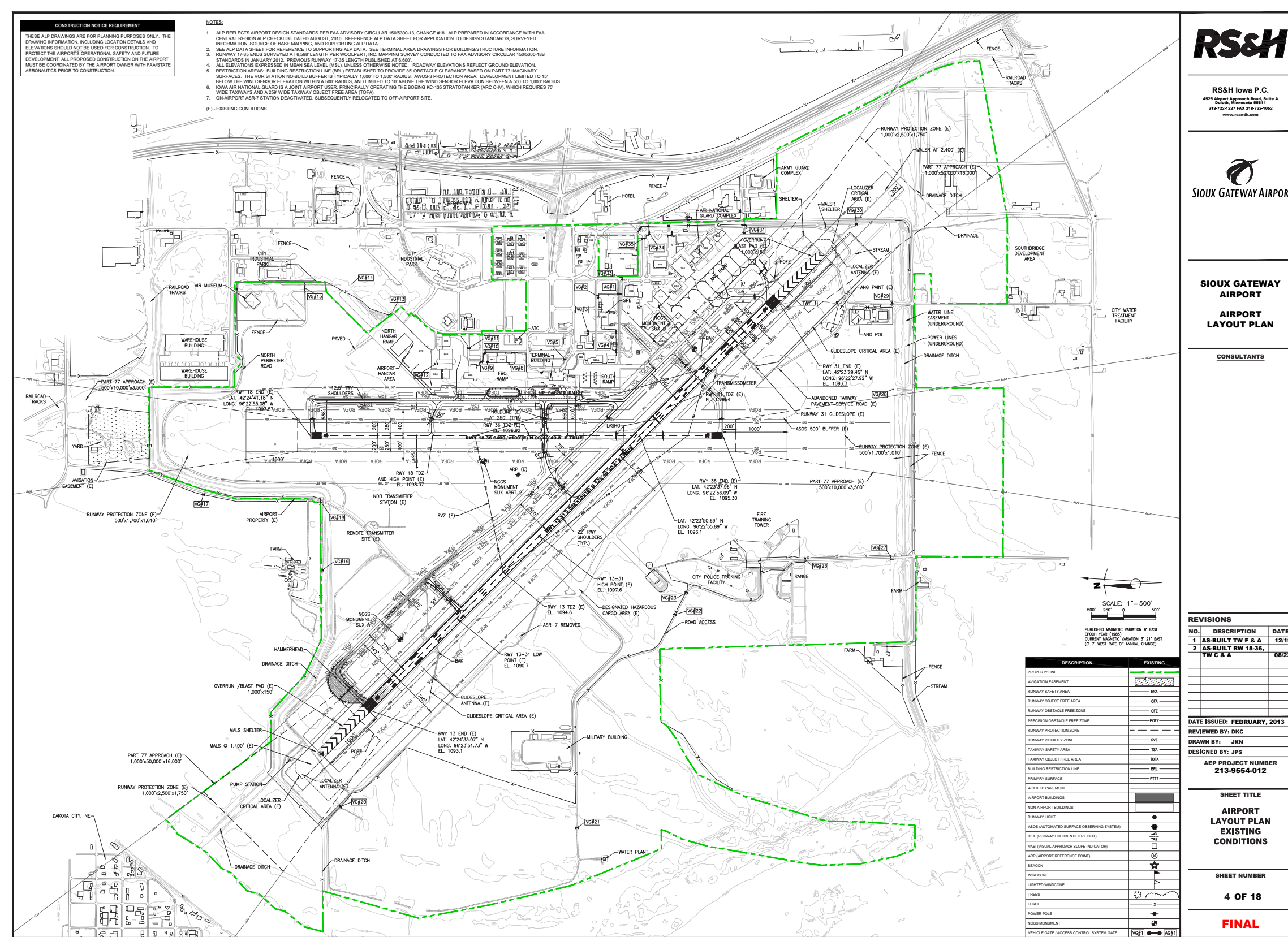
## Welcome to the Sioux Gateway Airport (SUX) Master Plan Public Meeting

# WHAT IS A MASTER PLAN?

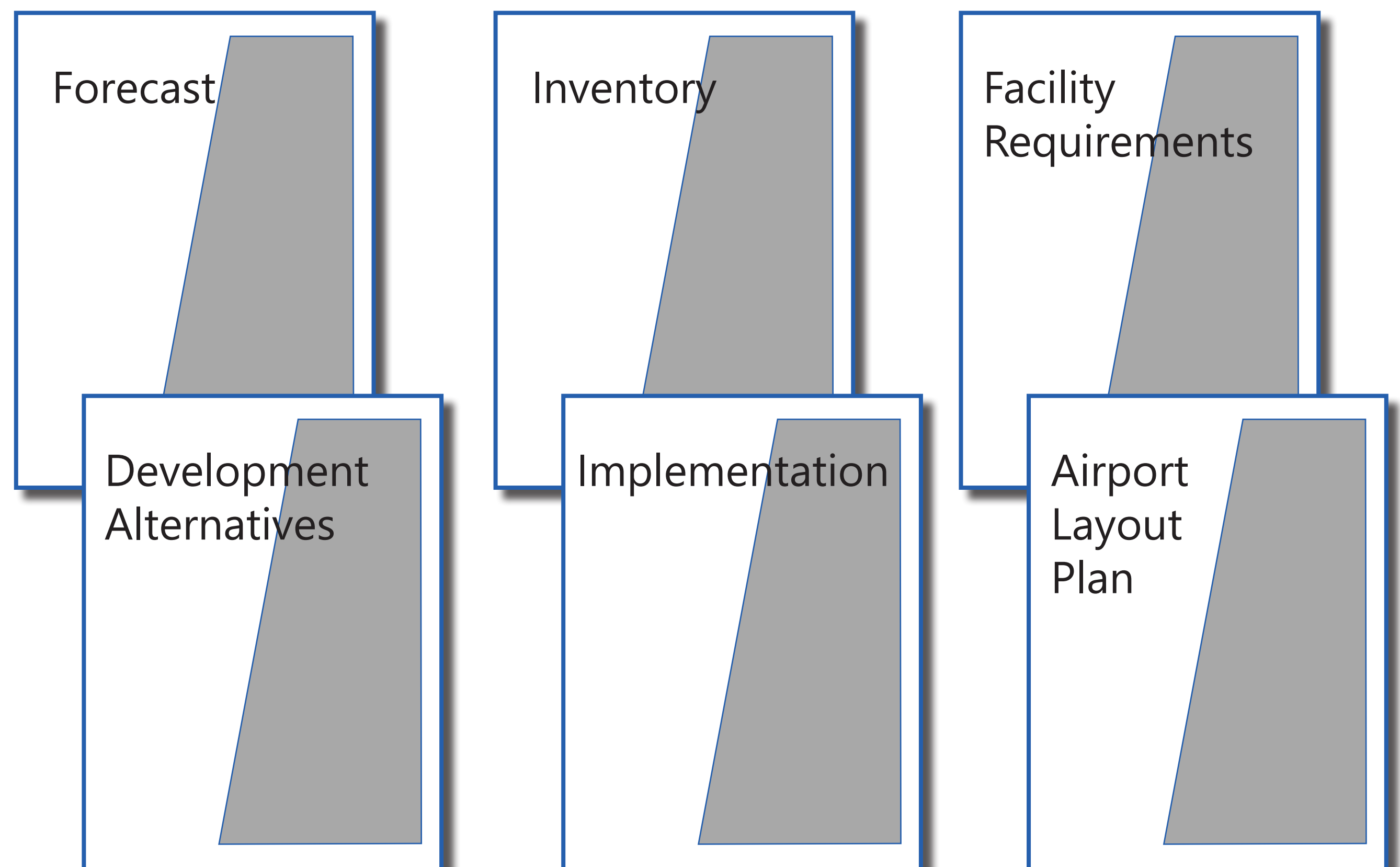
An airport master plan is a comprehensive study of an airport and usually describes the short-, medium-, and long-term development plans to meet future aviation demand.

- FAA Advisory Circular 150/5070-6B, *Airport Master Plans*

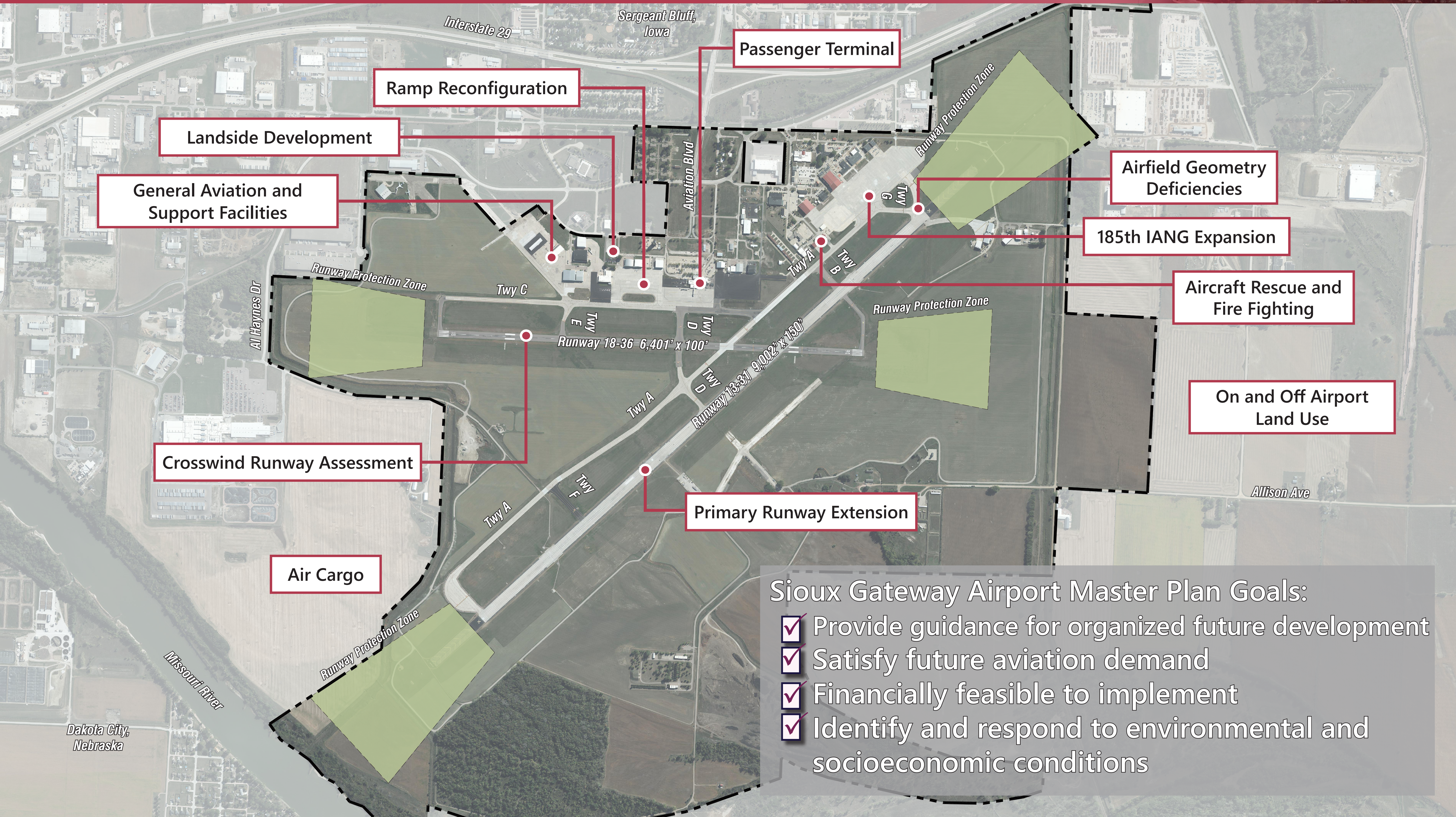
## Airport Layout Plan *(illustrates the plan)*



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



# STUDY FOCUS AREAS

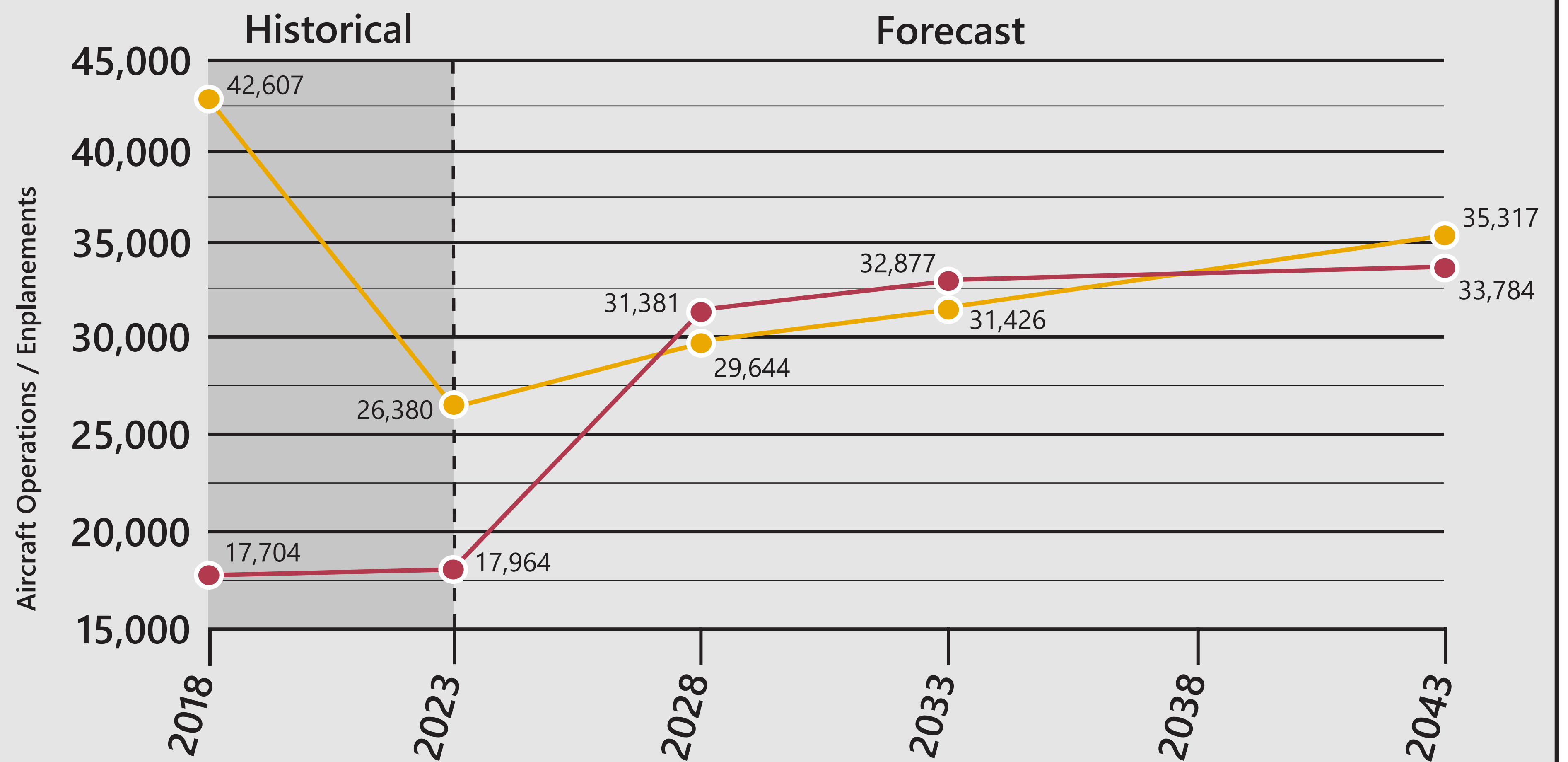


- Sioux Gateway Airport Master Plan Goals:
- ✓ Provide guidance for organized future development
  - ✓ Satisfy future aviation demand
  - ✓ Financially feasible to implement
  - ✓ Identify and respond to environmental and socioeconomic conditions

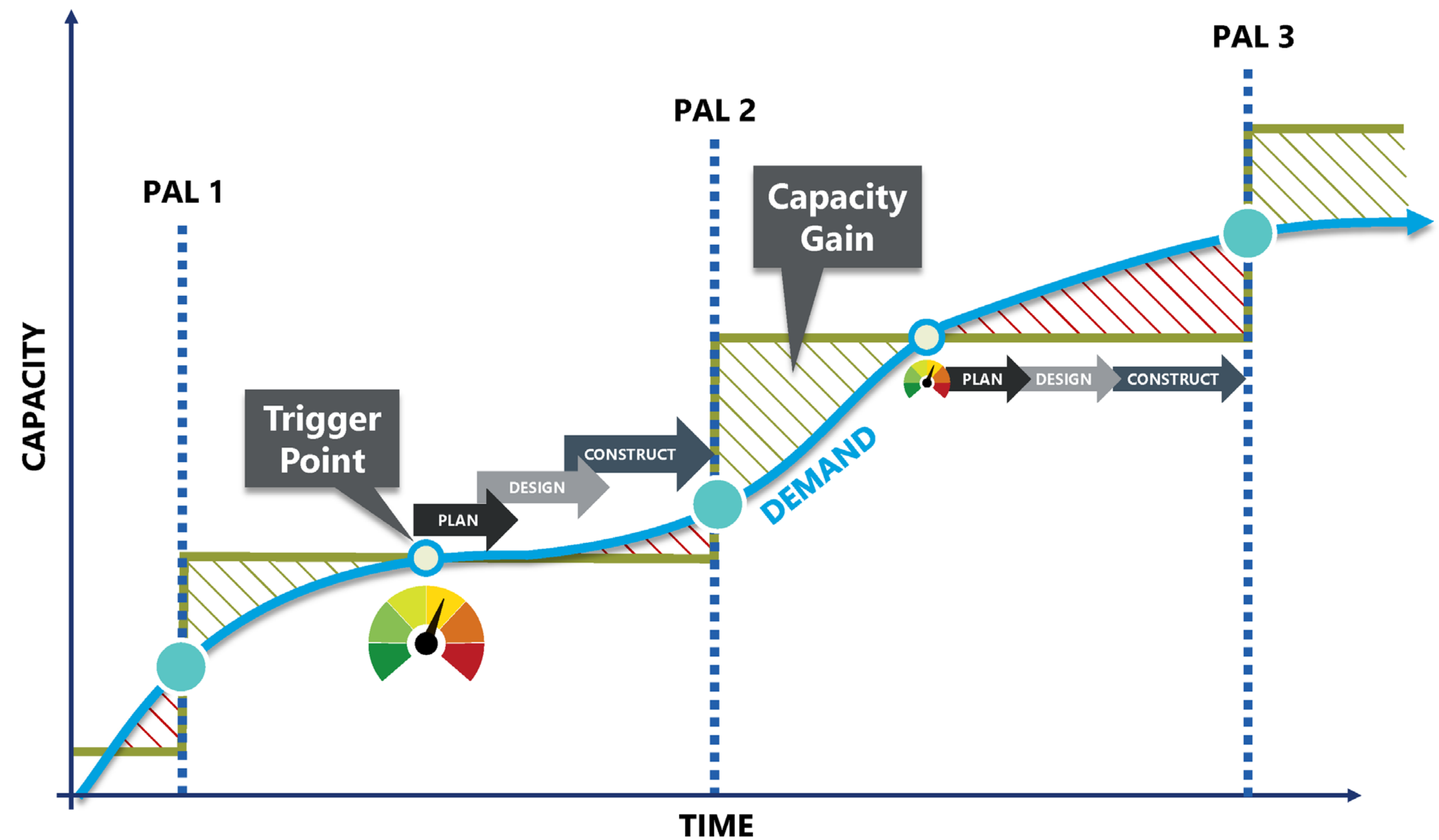
# AVIATION DEMAND FORECAST

## Aircraft Operations and Enplanements

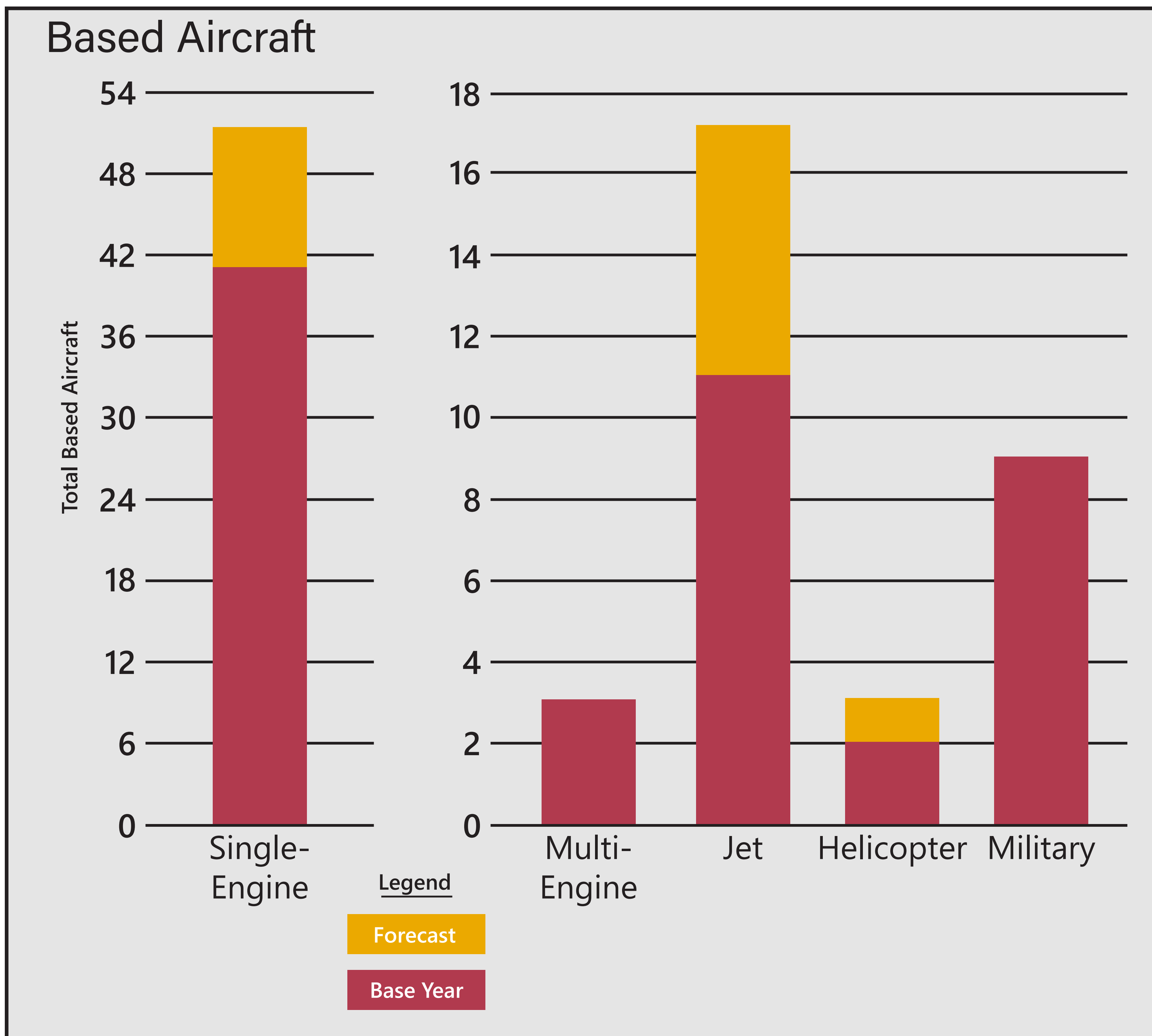
Operations	Base Year (2023)	PAL 1 (2028)	PAL 2 (2033)	PAL 3 (2043)
Passenger	1,419	1,581	1,676	1,884
General Aviation	13,305	23,800	24,300	25,600
Air Taxi	1,421	2,200	2,300	2,500
Military	1,819	3,800	3,800	3,800
<b>Total Operations</b>	<b>17,964</b>	<b>31,381</b>	<b>32,877</b>	<b>33,784</b>
Enplanements	Base Year (2023)	PAL 1 (2028)	PAL 2 (2033)	PAL 3 (2043)
<b>Total Enplanements</b>	<b>26,380</b>	<b>29,644</b>	<b>31,426</b>	<b>35,317</b>



Planning at SUX defines levels of activity (PALs) triggering facility improvements rather than specific years. This helps ensure the plan is flexible and adaptable to accommodate ever-changing circumstances.



# AVIATION DEMAND FORECAST



## Civil Critical Aircraft

**Existing:**  
CRJ-200 (D-II-1B)



**Future:**  
ERJ-175 (C-III-3)



## Military Critical Aircraft

**Existing:**  
KC-135 (C-IV-4)

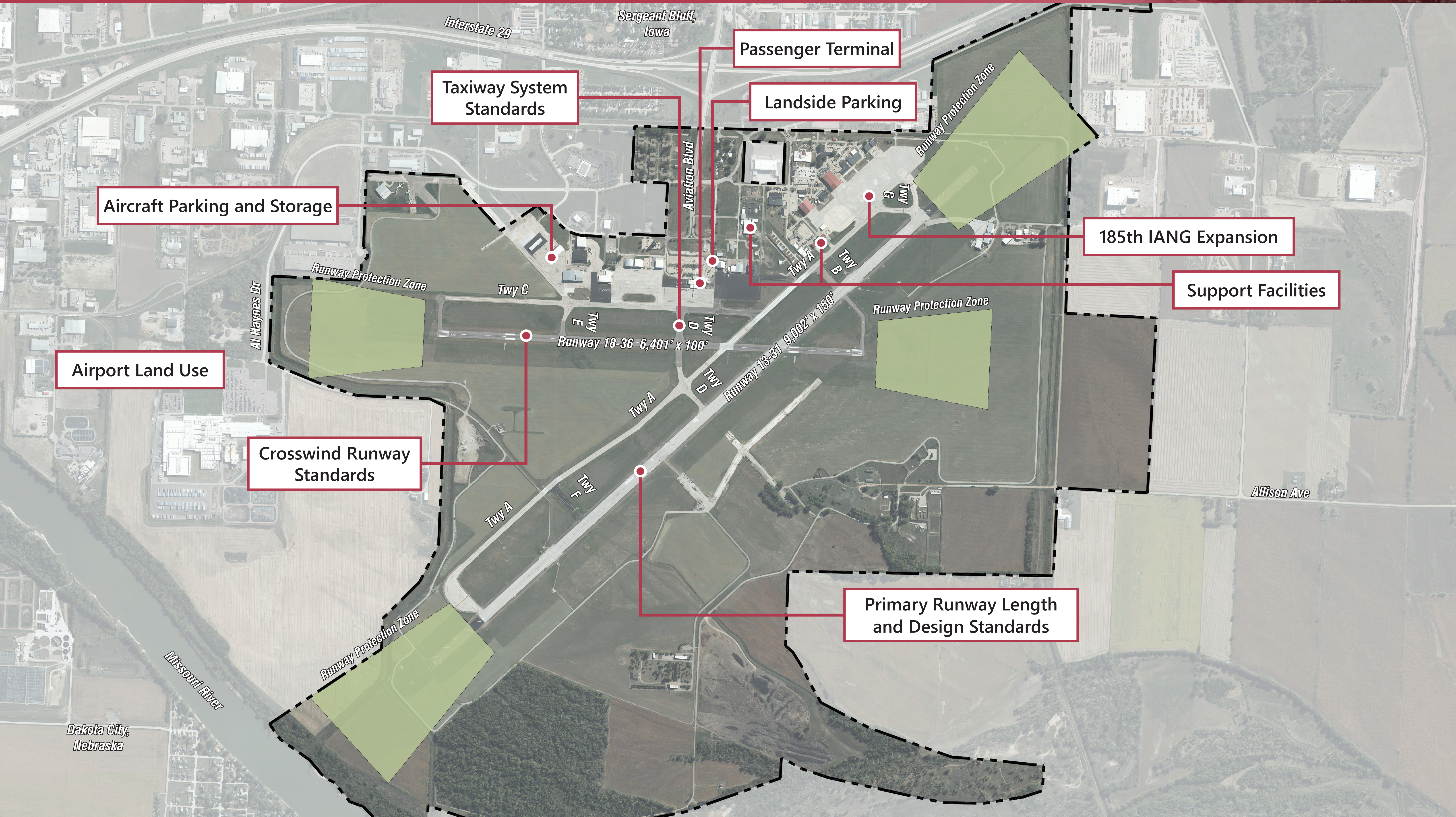


**Future:**  
KC-46 (C-IV-5)





# FACILITY REQUIREMENTS



Interstate 29  
Sergeant Bluff, Iowa

Passenger Terminal

Taxiway System Standards

Landside Parking

Aircraft Parking and Storage

185th IANG Expansion

Support Facilities

Airport Land Use

Crosswind Runway Standards

Primary Runway Length and Design Standards

Dakota City, Nebraska

Missouri River

Allison Ave

Runway Protection Zone

Twy C

Twy E

Runway 18-36 6,401' x 100'

Twy D

Twy A

Runway 13-31 9,002' x 150'

Twy A

Twy F

Runway Protection Zone

Runway Protection Zone

Twy A

Twy B

Twy G

# FACILITY REQUIREMENTS



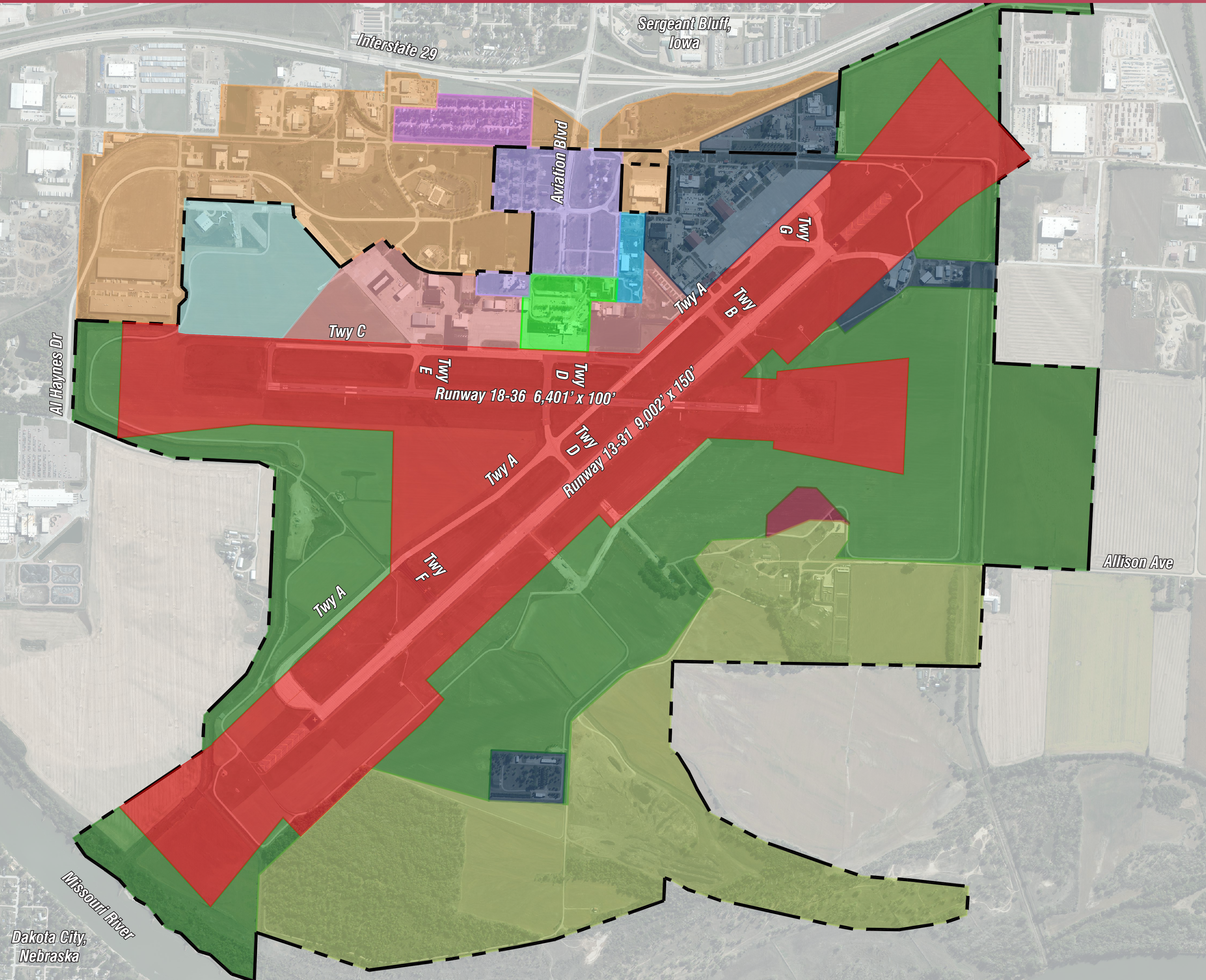
## Military Needs

	<u>PAL 1</u>	<u>PAL 2</u>	<u>PAL 3</u>
Enplanements	29,644	31,426	35,317
Operations	31,381	32,076	33,784
Based Aircraft	76	78	83
<b><u>Airfield</u></b>			
Runway Length	[Red bar]		
Design Standards	[Red bar]		
Taxiways	[Yellow bar]		
<b><u>Airspace and NAVAIDS</u></b>			
NAVAIDS	[Green bar]		
Wind Cone and Segmented Circle		N/A	
<b><u>Passenger Terminal</u></b>			
Terminal Building		N/A	
Terminal Apron		N/A	
Terminal Landside Parking		N/A	
<b><u>Support Facilities</u></b>			
Aircraft Maintenance		N/A	
ARFF	[Red bar]		
Electrical Vault		N/A	
Fuel Farm		N/A	
Maintenance/SRE		N/A	
<b><u>Aircraft Parking</u></b>		N/A	
<b><u>Aircraft Storage</u></b>		N/A	

## Civil Needs

	<u>PAL 1</u>	<u>PAL 2</u>	<u>PAL 3</u>
Enplanements	29,644	31,426	35,317
Operations	31,381	32,076	33,784
Based Aircraft	76	78	83
<b><u>Airfield</u></b>			
Runway Length	[Green bar]		
Design Standards	[Green bar]		
Taxiways	[Yellow bar]		
<b><u>Airspace and NAVAIDS</u></b>			
NAVAIDS	[Green bar]		
Wind Cone and Segmented Circle	[Yellow bar]		
<b><u>Passenger Terminal</u></b>			
Terminal Building	[Green bar]		
Terminal Apron	[Yellow bar]		
Terminal Landside Parking	[Green bar]		
<b><u>Support Facilities</u></b>			
Aircraft Maintenance	[Green bar]		
ARFF	[Red bar]		
Electrical Vault	[Green bar]		
Fuel Farm	[Green bar]		
Maintenance/SRE	[Red bar]		
<b><u>Aircraft Parking</u></b>	[Green bar]		
<b><u>Aircraft Storage</u></b>	[Green bar]		

# AIRPORT LAND USE



The property area of Sioux Gateway Airport includes a total of approximately 2,200 acres, much of which is undeveloped. Existing land uses around the Airport generally include industrial to the north, agricultural and the Missouri River to the west, agricultural and industrial to the south, and residential to the east.

LAND USE LEGEND	
AIRPORT PROPERTY LINE	-----
AIRFIELD OPERATIONS	Red
AIRPORT SUPPORT	Light Blue
COMMERCIAL AIRLINE	Bright Green
GENERAL AVIATION	Pink
MILITARY	Dark Blue
REVENUE SUPPORT (AVIATION)	Light Cyan
AGRICULTURE	Green
COMMERCIAL/INDUSTRIAL	Orange
OPEN SPACE	Mauve
PARK/RECREATIONAL	Light Green
RESIDENTIAL	Purple
REVENUE SUPPORT (NON-AVIATION)	Light Purple

Dakota City, Nebraska

# FUTURE AVIATION TRENDS

## Aircraft and Vehicle Electrification



Sustainable Aviation Fuels (SAF)



Urban Air Mobility (UAM)



Source: Beta Technologies



Sustainable Microgrids and Clean Energy

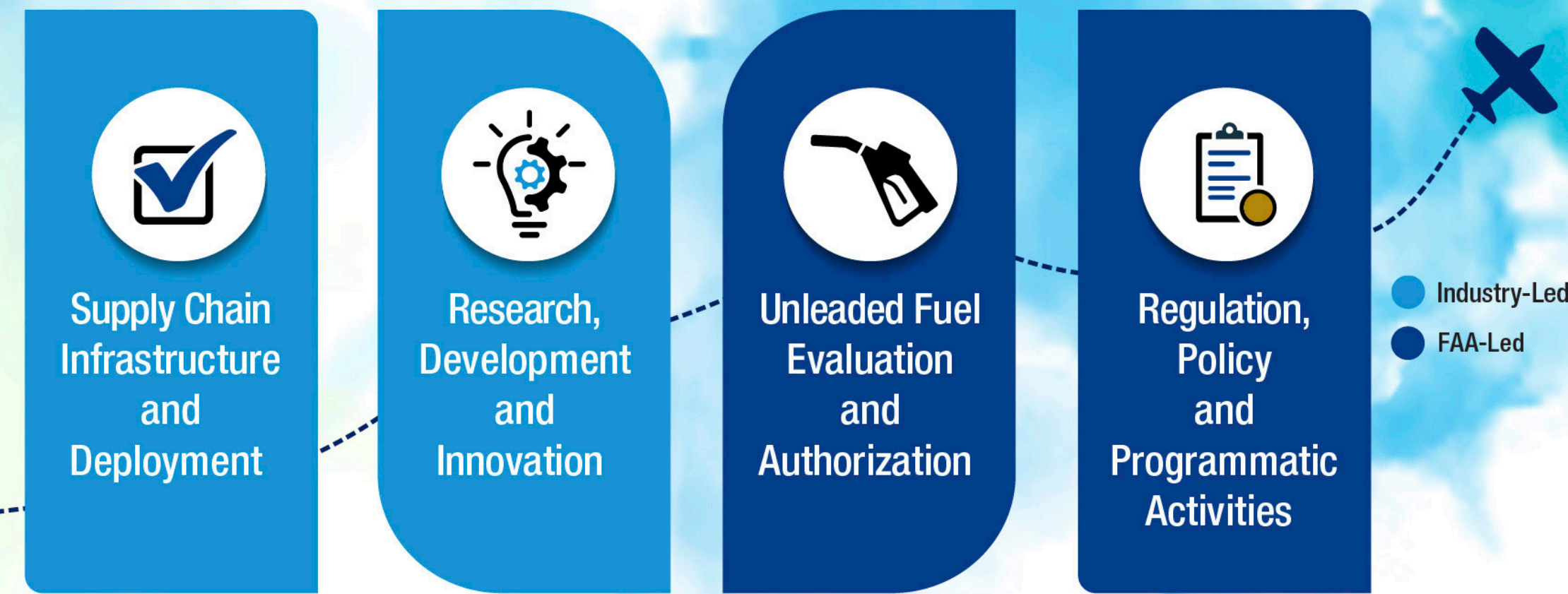


Autonomous Aircraft and Vehicles

## A Path to a Lead-Free Aviation System

Source: Federal Aviation Administration

AvGas Lead Elimination



## Eliminate Aviation Gasoline Lead Emissions (EAGLE)

Scan to learn more about how FAA is partnering with the aviation community to safely eliminate leaded aviation fuels in piston-engine aircraft by the end of 2030.



## Electric Vertical Takeoff and Landing (eVTOL)



Advanced Air Mobility (AAM)

Source: Joby Aviation

# WHAT'S NEXT?

## » Documentation Phase

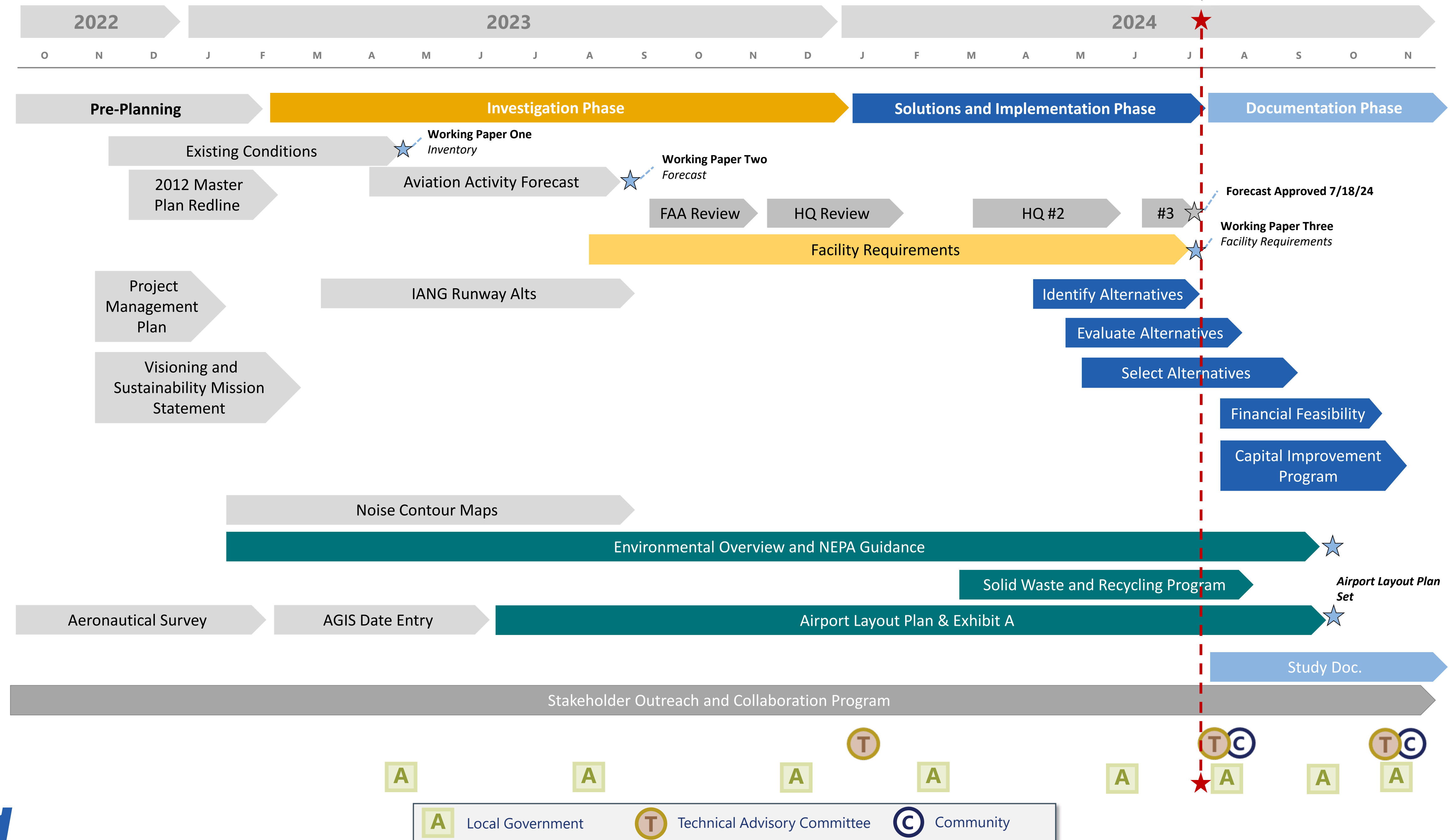
- Generate and Evaluate Development Alternatives
- Assess Financial Feasibility
- Program Improvements in Practical Plan

## » Public Engagement

- Open House #2: Fall 2024

## Project Schedule

*We are here*



Do you have any concerns or comments that you would like to share? Scan the QR Code below to visit [www.suxmasterplan.com](http://www.suxmasterplan.com).

