2025 North Dakota
State Aviation System Plan and
Aviation Economic Impact Study

Technical Advisory Committee (TAC)

Meeting #2 | August 28, 2025

![2025 North Dakota State Aviation System Plan and Aviation Economic Impact Study]

Project Team

Kimley»Horn
Expect More. Experience Better.

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Airport Planner, East

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Joined by:

Marr Arnold PLANNING

Summer Marr   **Sarah Arnold**

Agenda

1 Technical Advisory Committee (TAC) Role and Purpose

2 Project Overview

3 2025 NDSASP Update

4 System Performance and Aviation Activity Forecasts

5 2025 NDAEIS Update

6 Next Steps

TAC Members

NDAC
Mike McHugh
Kim Kenville

FAA Airports District Office
Brian Schuck

Grand Forks Intl Airport
Ryan Riesinger

Mandan Regional Airport
Lindsay Gerhardt

ND Department of Commerce
Landon Johnson

North Dakota Aviation Association
Tanner Overland

Bismarck Aero – FBO
Jon Simmers

ND DOT
Chad Orn

ND IT Dept – GIS
Bob Nutsch

NPUAS Test Site
Trevor Woods

ND Greater Chamber/Economic Development
Amanda Remynse

AirMed – Air Medical Operator
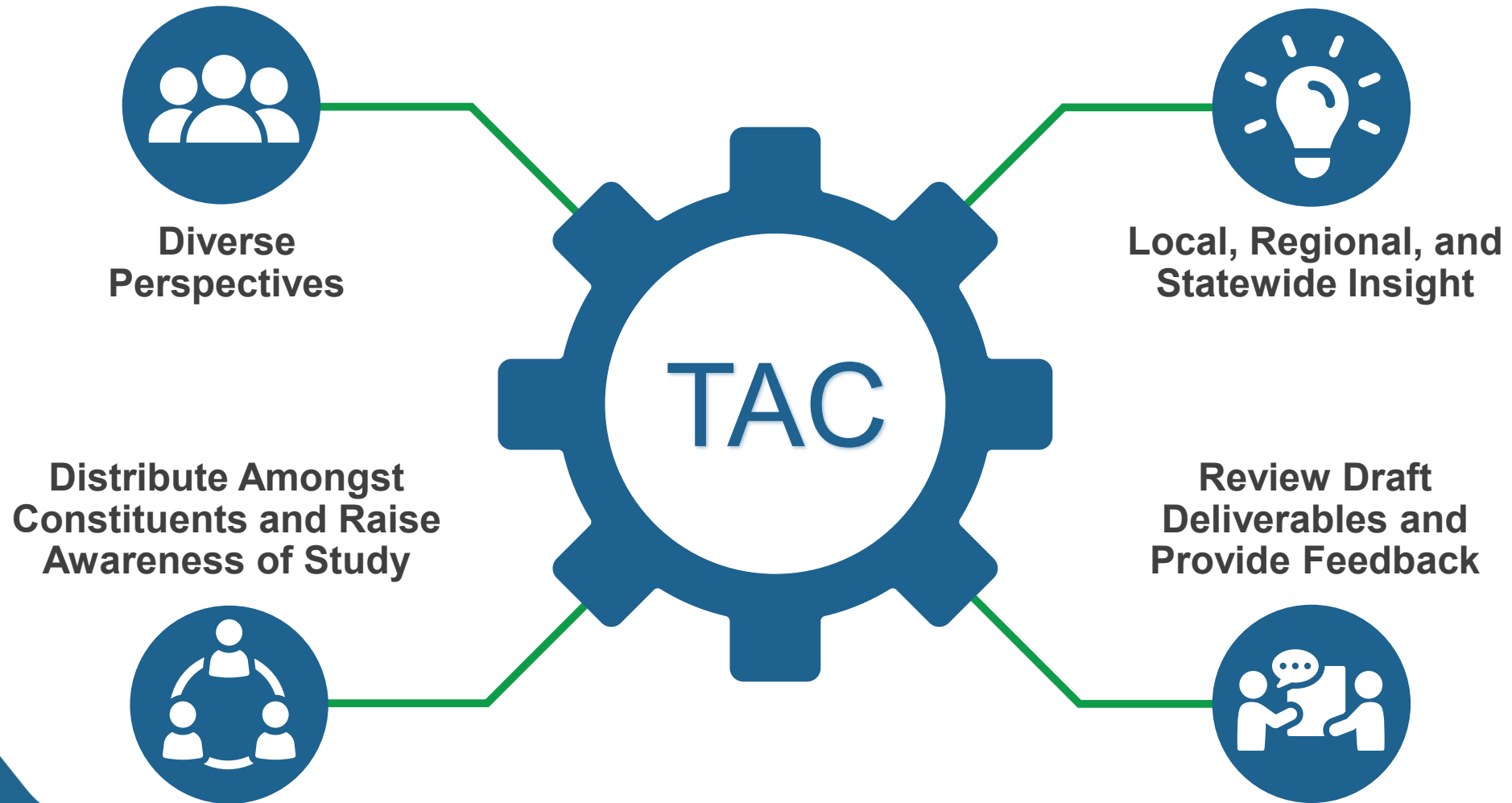*Robert "RD" Reimers*

UND – Aircraft Mechanic
Dan Kasowski

Aerial Applicator
Matt Hovdenes

Project Purpose

Update to 2014 NDSASP

- Provides roadmap for long-term planning
- Guides future decision making
- Identifies system needs

Update to 2015 NDAEIS

- Documents contributions of public-use airports
- Justifies continued investment
- Helps communicate airport benefits and value

Visit the Project Website: https://2025ndsasp.com/

Project Timeline

Legend:
- 💬 Virtual TAC Meeting
- 🔺 Regional Presentations
- ⭐ Fly ND Conference

	Month	2024				2025												2026							
		S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A
Task 1	Study Design	▓																							
Task 2	Project Management	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓
Task 3	Stakeholder Engagement	▓	▓	▓	▓	💬	▓	⭐	▓	▓	▓	▓	💬	▓	▓	▓	▓	▓	💬	⭐	▓	▓	▓	💬	🔺
Task 4	2025 NDSASP Framework (Goals, Performance Measures, Benchmarks)	▓	▓																						
Task 5	Airport Classification			▓	▓																				
Task 6	System Inventory				▓	▓																			
Task 7	Activity Forecasts								▓	▓	▓														
Task 8	System Performance										▓	▓	▓												
Task 9	Issues and Industry Advancements											▓	▓	▓											
Task 10	Recommendations and Cost Estimates based on Findings													▓	▓	▓	▓								
Task 11	Economic Impact Study				▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓								
Task 12	2025 NDSASP and NDAEIS Final Documents																		▓	▓	▓				
Task 13	Website Story Maps and GIS Development																	▓	▓	▓					

2025 North Dakota State Aviation System Plan and Aviation Economic Impact Study

2025 NDSASP Project Update
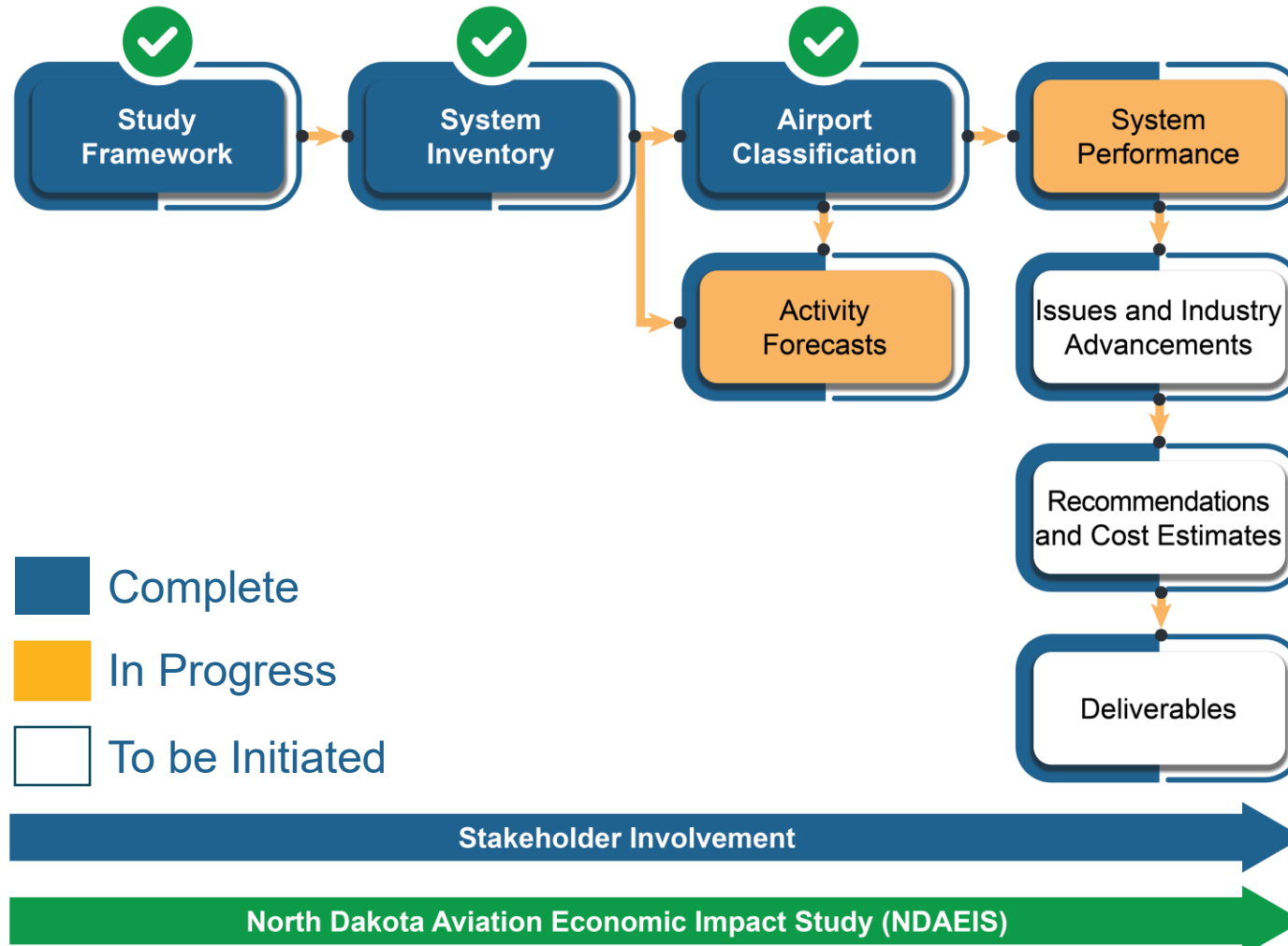
2025 North Dakota State Aviation System Plan and Aviation Economic Impact Study

2025 NDSASP System Performance
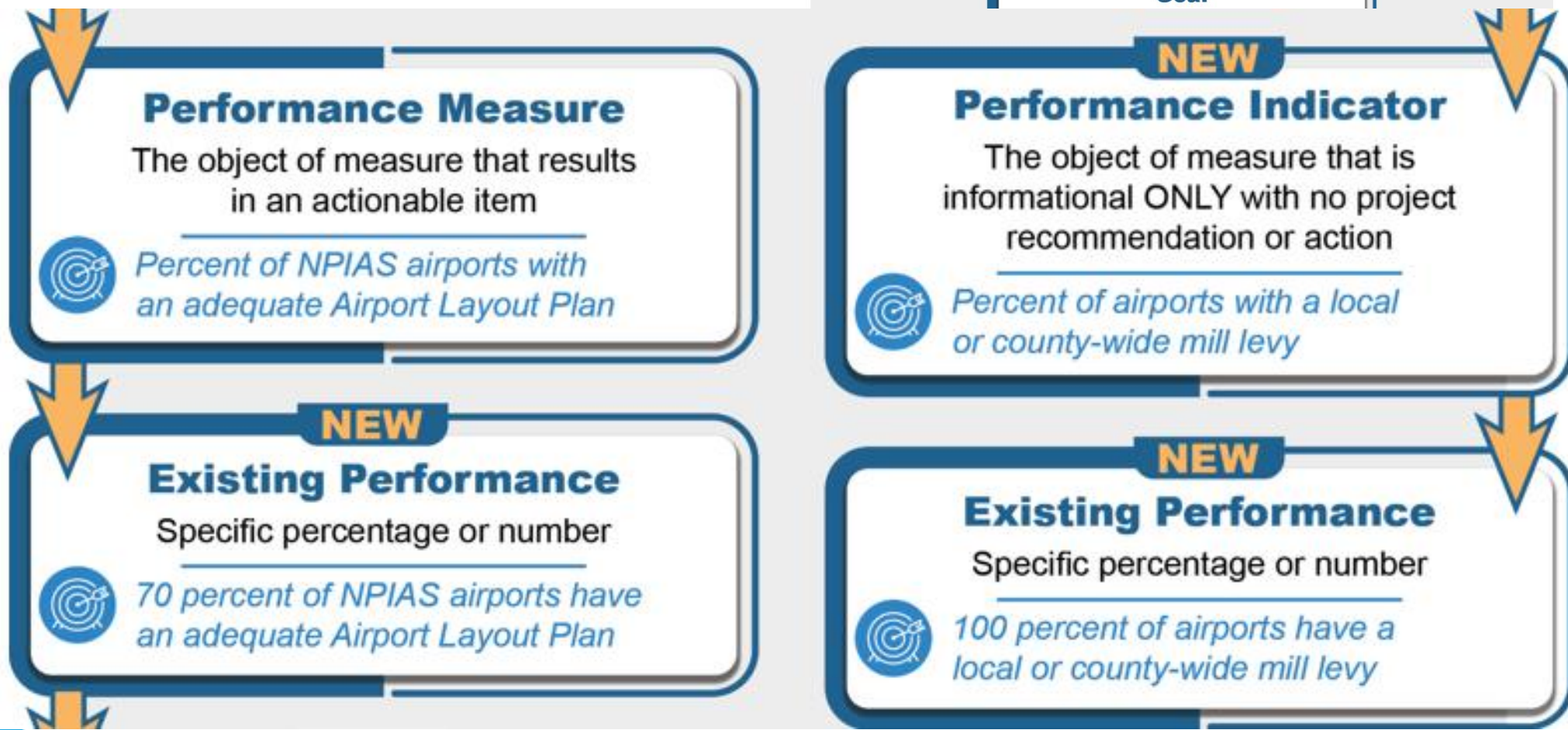
System Performance – Purpose

- **Assesses system performance against defined metrics within each goal**

- **Uses data collected from Airport Sponsors, NDAC, and other State and Federal sources**

- **Tracks performance over time**

- **Informs future system performance targets**

System Goals and Metrics are outlined more in the upcoming slides!

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System Goals

Percent of Airports:
- With Clear Approaches to All Runway Ends
- With Public Gatherings in the RPZs

- Percent of Airports that Meet the Light Business Jet Criteria
- Percent of Area and Population within 30 minutes of Airport that can Meet the Needs of the King Air Emergency Aircraft

Percent of Area and Population:
- Within 30 Minutes of All Public-Use Airports
- Within 30 Minutes of a NPIAS Airport

Percent of Airports:
- Meeting State PCI Thresholds on Primary Runways
- With an Adequate Airport Layout Plan

- Percent of Area and Population within 30 NM of an Airport with On-Site Weather Reporting
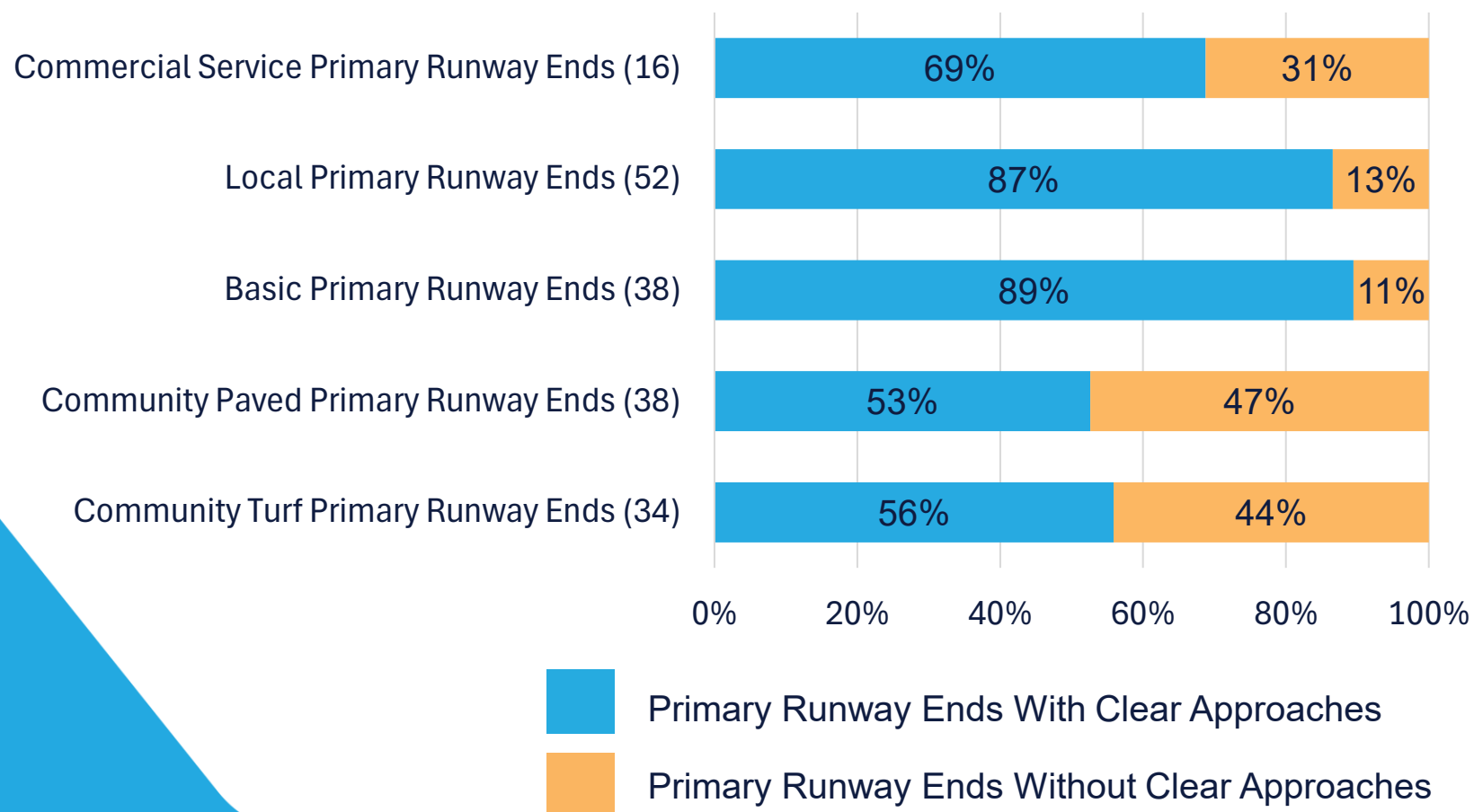- Percent of Airports with Available Covered Aircraft Storage

Percent of Airports:
- That Offer Flight Training
- That Participate in STEM Activities

2025 North Dakota State Aviation System Plan

Maintain a Safe Aviation System

PM: Percent of Airports With Clear Approaches to All Primary Runway Ends

Performance by Classification

Classification	With Clear Approaches	Without Clear Approaches
Commercial Service Primary Runway Ends (16)	69%	31%
Local Primary Runway Ends (52)	87%	13%
Basic Primary Runway Ends (38)	89%	11%
Community Paved Primary Runway Ends (38)	53%	47%
Community Turf Primary Runway Ends (34)	56%	44%

Primary Runway Systemwide Performance

72% / 28%

Primary Runway Ends With Clear Approaches
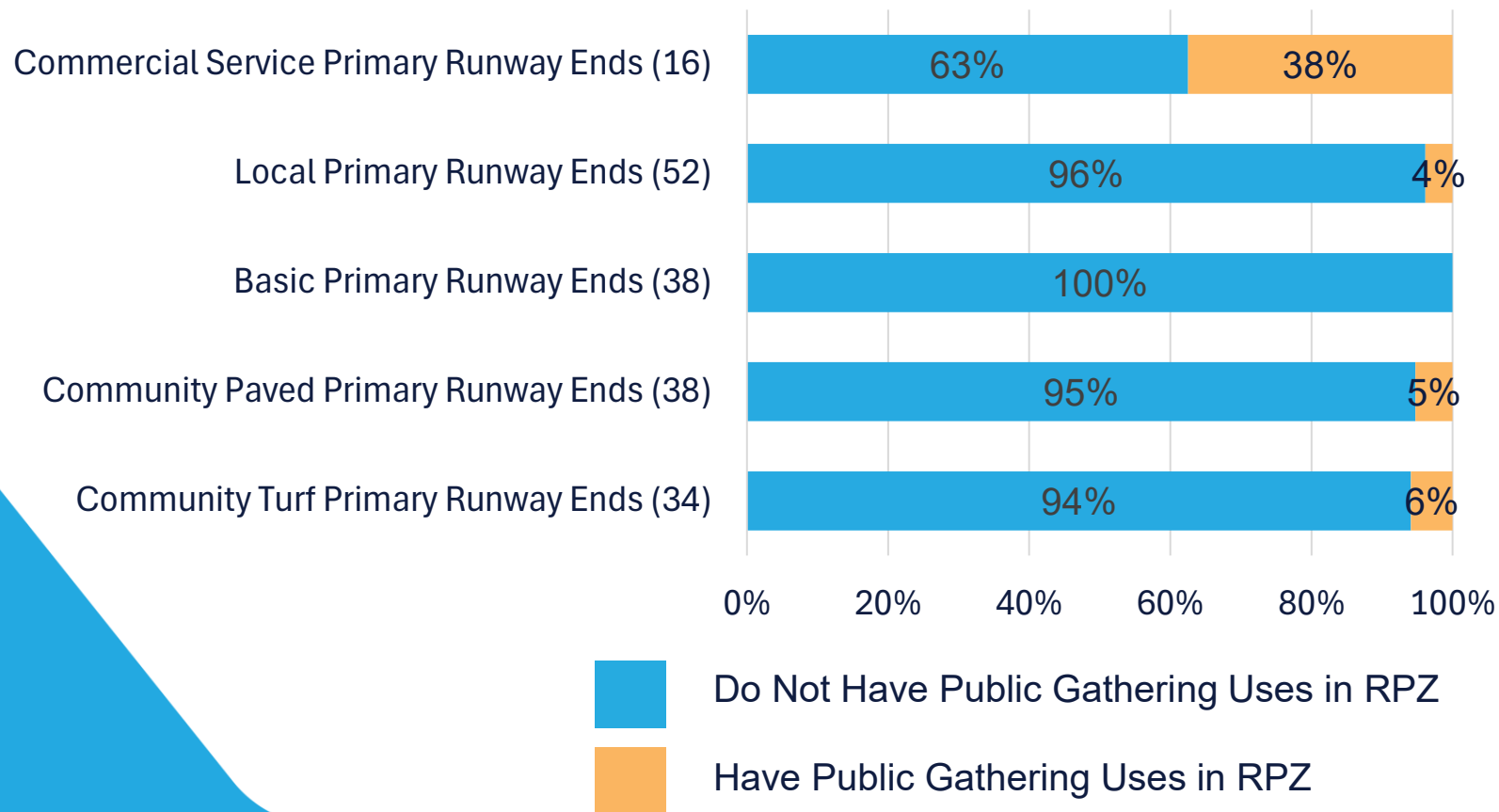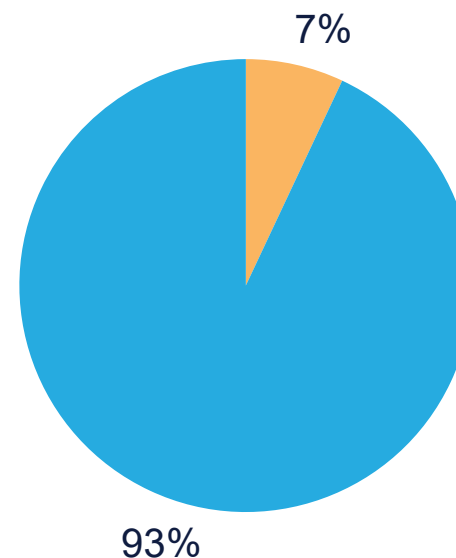
Primary Runway Ends Without Clear Approaches
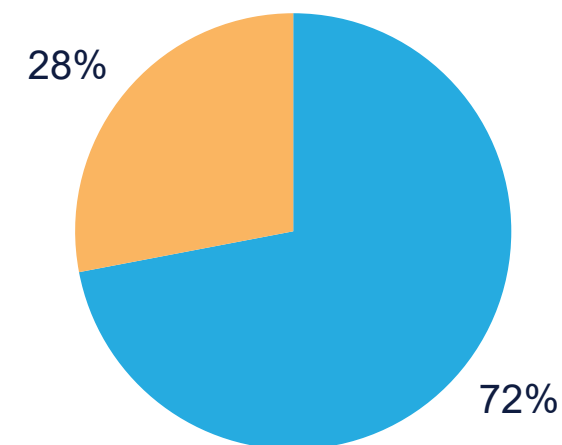
Maintain a Safe Aviation System

PM: Percent of Airports With Public Gatherings in the Primary Runway RPZs

Performance by Classification

Commercial Service Primary Runway Ends (16): 63% / 38%
Local Primary Runway Ends (52): 96% / 4%
Basic Primary Runway Ends (38): 100%
Community Paved Primary Runway Ends (38): 95% / 5%
Community Turf Primary Runway Ends (34): 94% / 6%

0% 20% 40% 60% 80% 100%

Primary Runway Systemwide Performance

7%
93%

■ Do Not Have Public Gathering Uses in RPZ

■ Have Public Gathering Uses in RPZ

PI: Percent of Area and Population Within 30 Minutes of All Public-Use Airports

Promote Aviation System Coverage

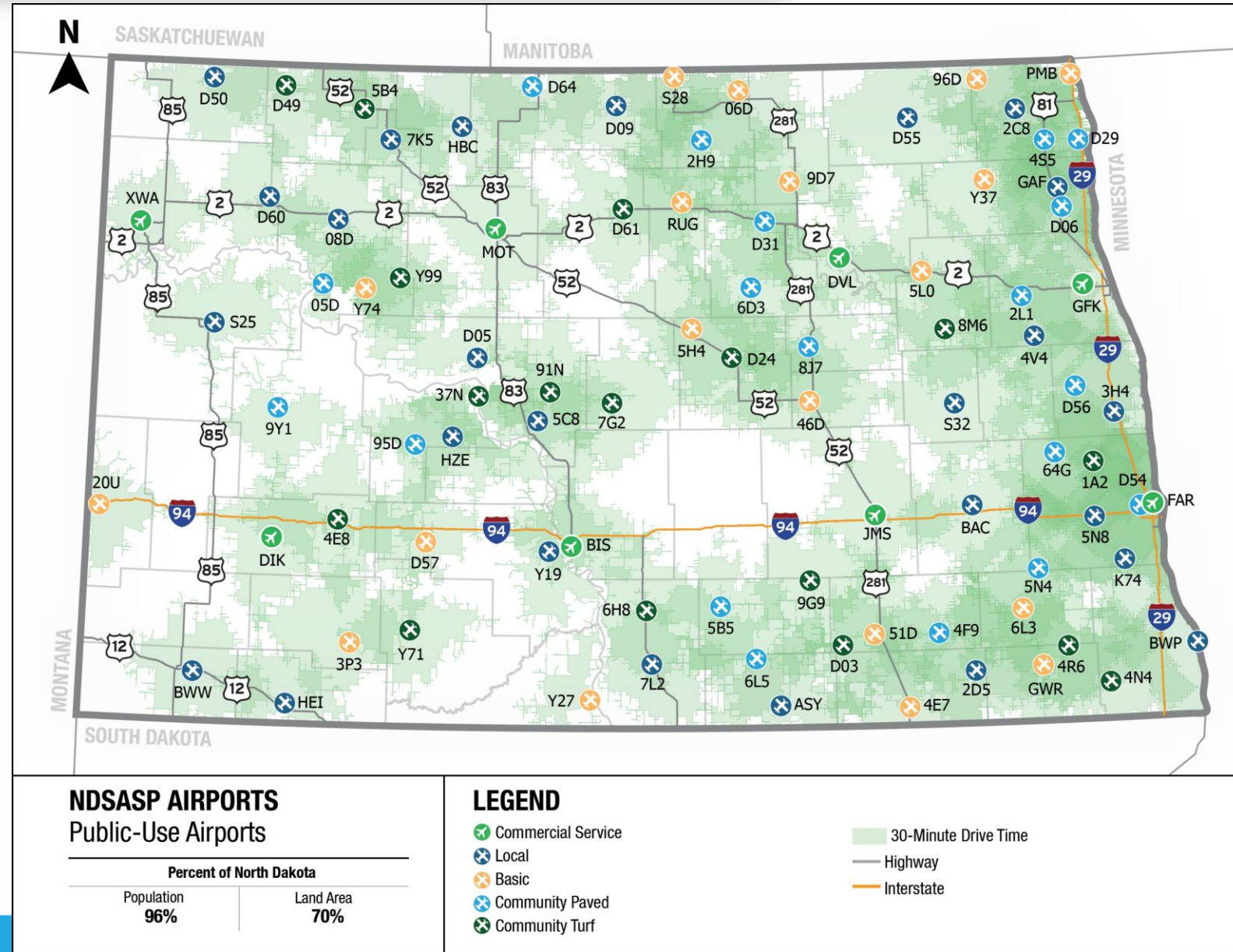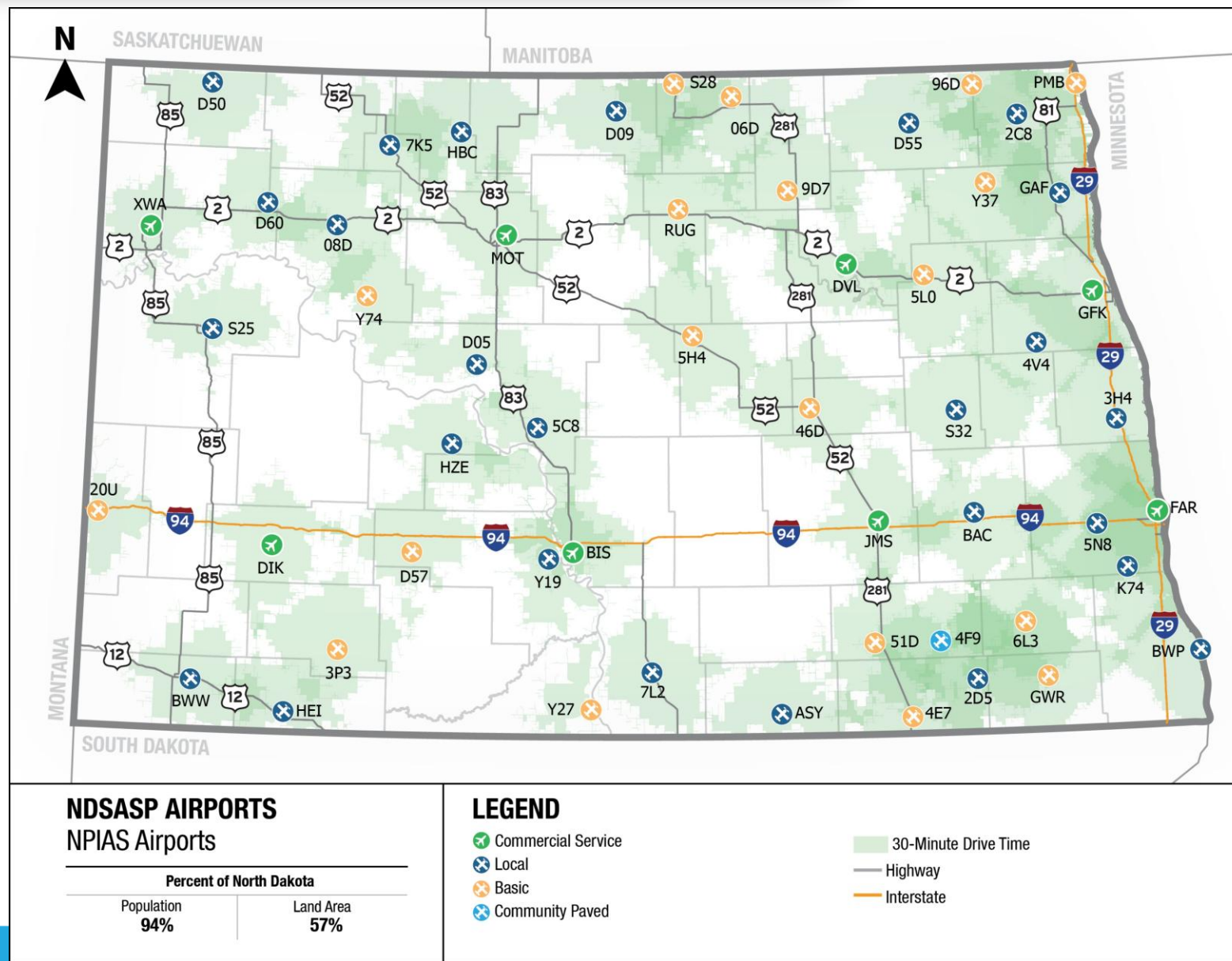| Year	Population Coverage	Land Area Coverage
2014	93%	58%
2025	**96%**	**70%**
Δ	+3%	+12%

Promote Aviation System Coverage

PI: Percent of Area and Population Within 30 Minutes of a NPIAS Airport

Year	Population Coverage	Land Area Coverage
2014	89%	43%
2025	**94%**	**57%**
Δ	+5%	+14%

NDSASP AIRPORTS
NPIAS Airports

Percent of North Dakota

Population	Land Area
94%	57%

LEGEND
- ⊗ Commercial Service
- ⊗ Local
- ⊗ Basic
- ⊗ Community Paved
- 30-Minute Drive Time
- Highway
- Interstate

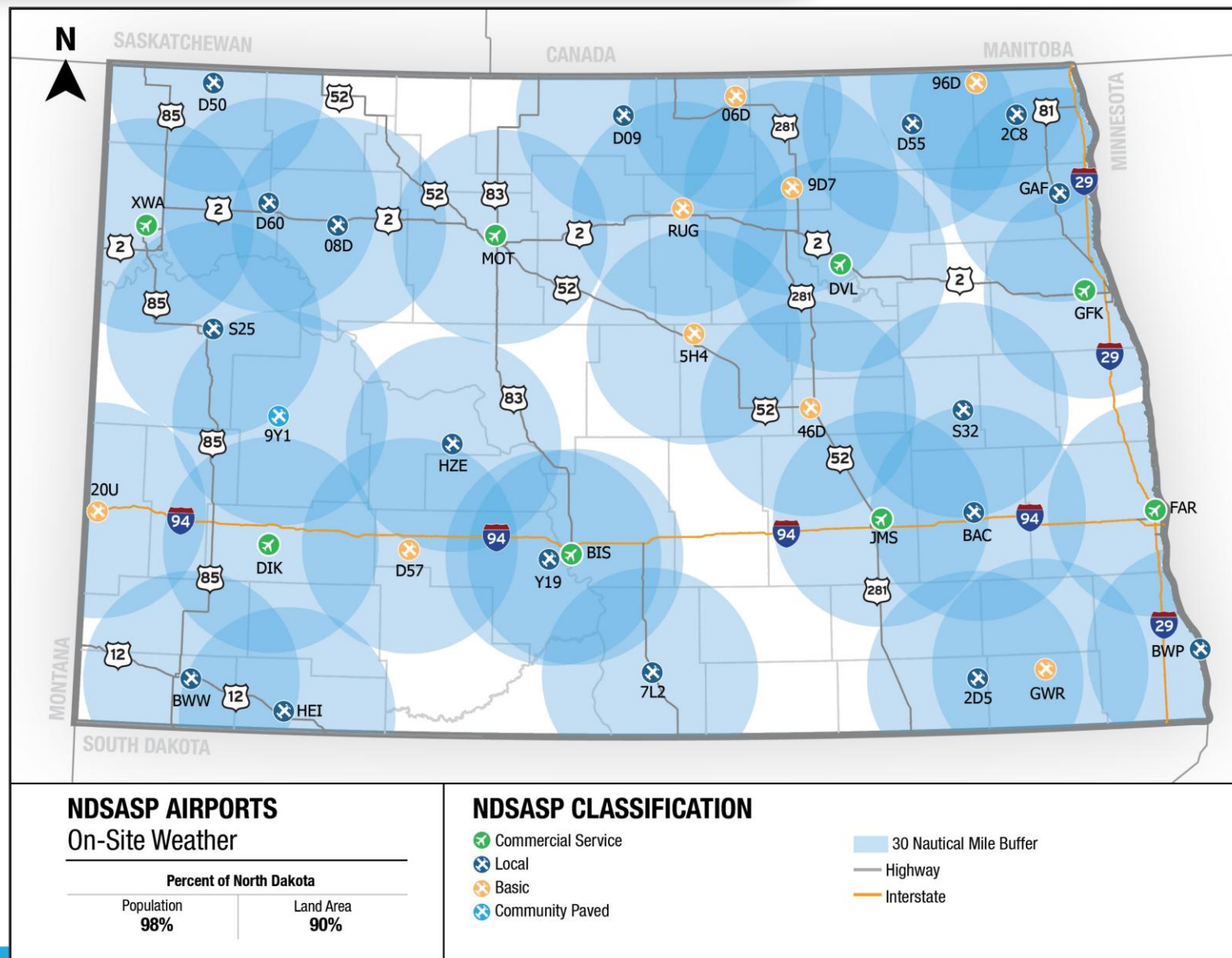**2025 North Dakota State Aviation System Plan**

Provide Air Access to Airports

PM: Percent of Area and Population within 30 Nautical Miles of an Airport With On-Site Weather Reporting (AWOS/ASOS)
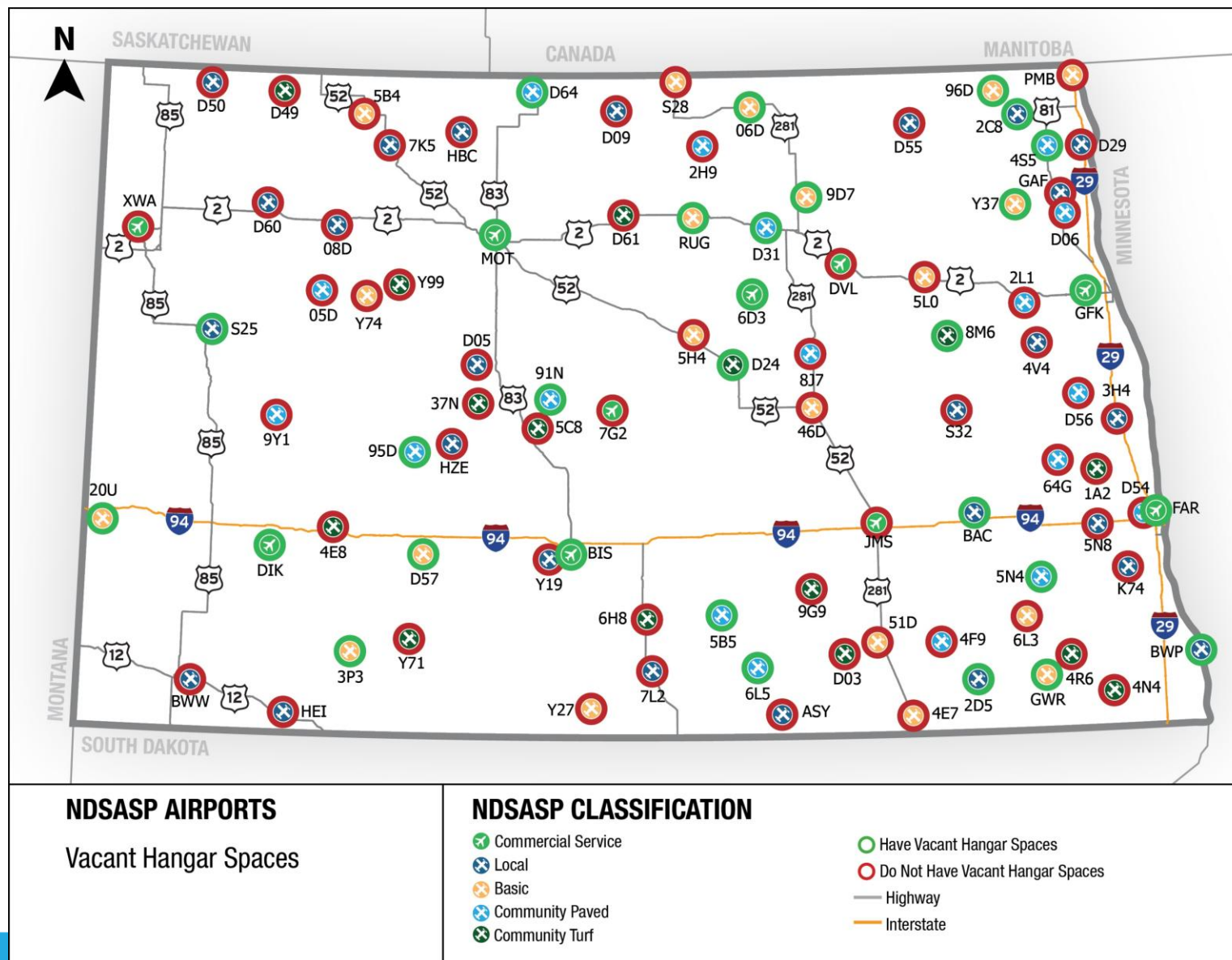
Year	Population Coverage	Land Area Coverage
2014	97%	87%
2025	**98%**	**90%**
Δ	+1%	+3%

NDSAP AIRPORTS
On-Site Weather

Percent of North Dakota

Population	Land Area
98%	90%

NDSAP CLASSIFICATION

- Commercial Service
- Local
- Basic
- Community Paved
- 30 Nautical Mile Buffer
- Highway
- Interstate

Provide Air Access to Airports

PM: Percent of Airports with Available Covered Aircraft Storage

NDSASP AIRPORTS

Vacant Hangar Spaces

NDSASP CLASSIFICATION

- Commercial Service
- Local
- Basic
- Community Paved
- Community Turf

- Have Vacant Hangar Spaces
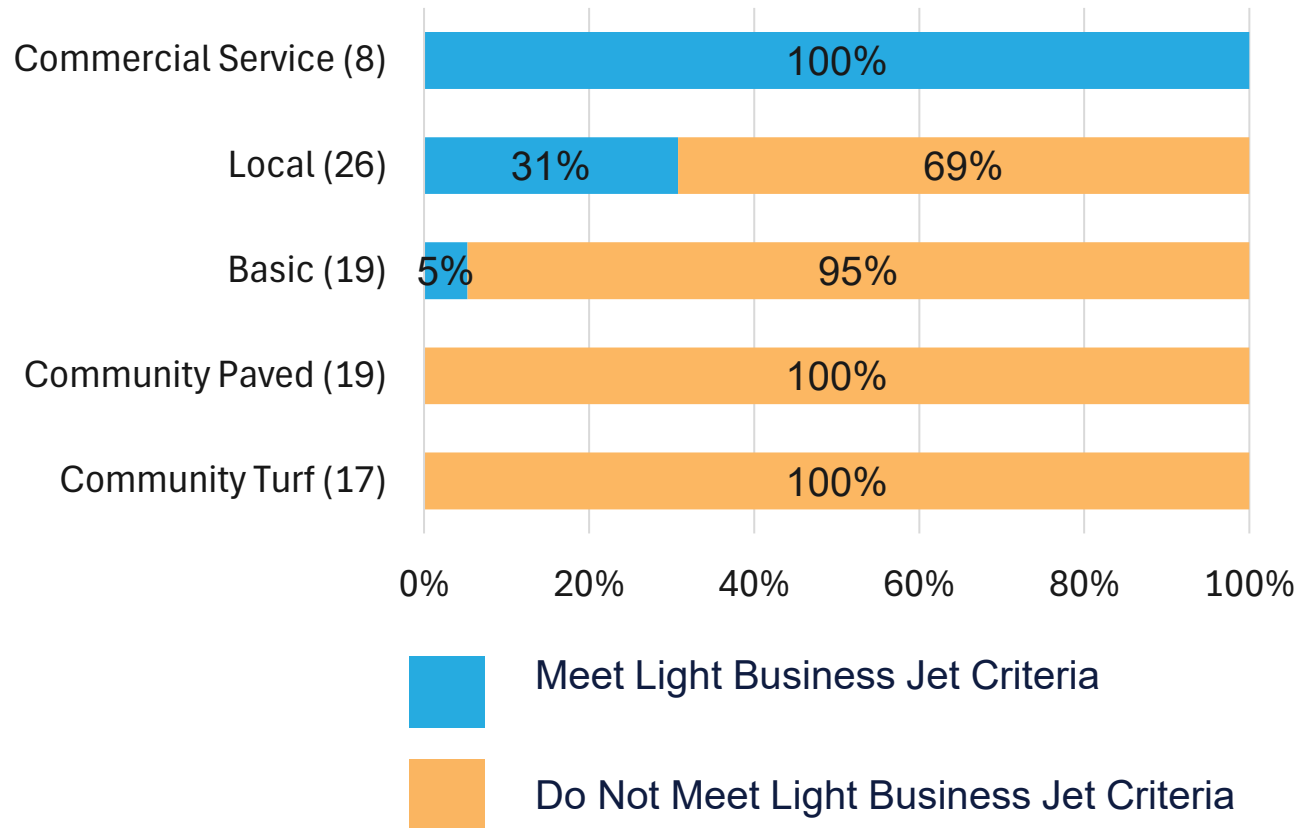- Do Not Have Vacant Hangar Spaces
- Highway
- Interstate

Enhance
Quality
of Life

PI: Percent of Airports That Meet the Light Business Jet Capability Criteria
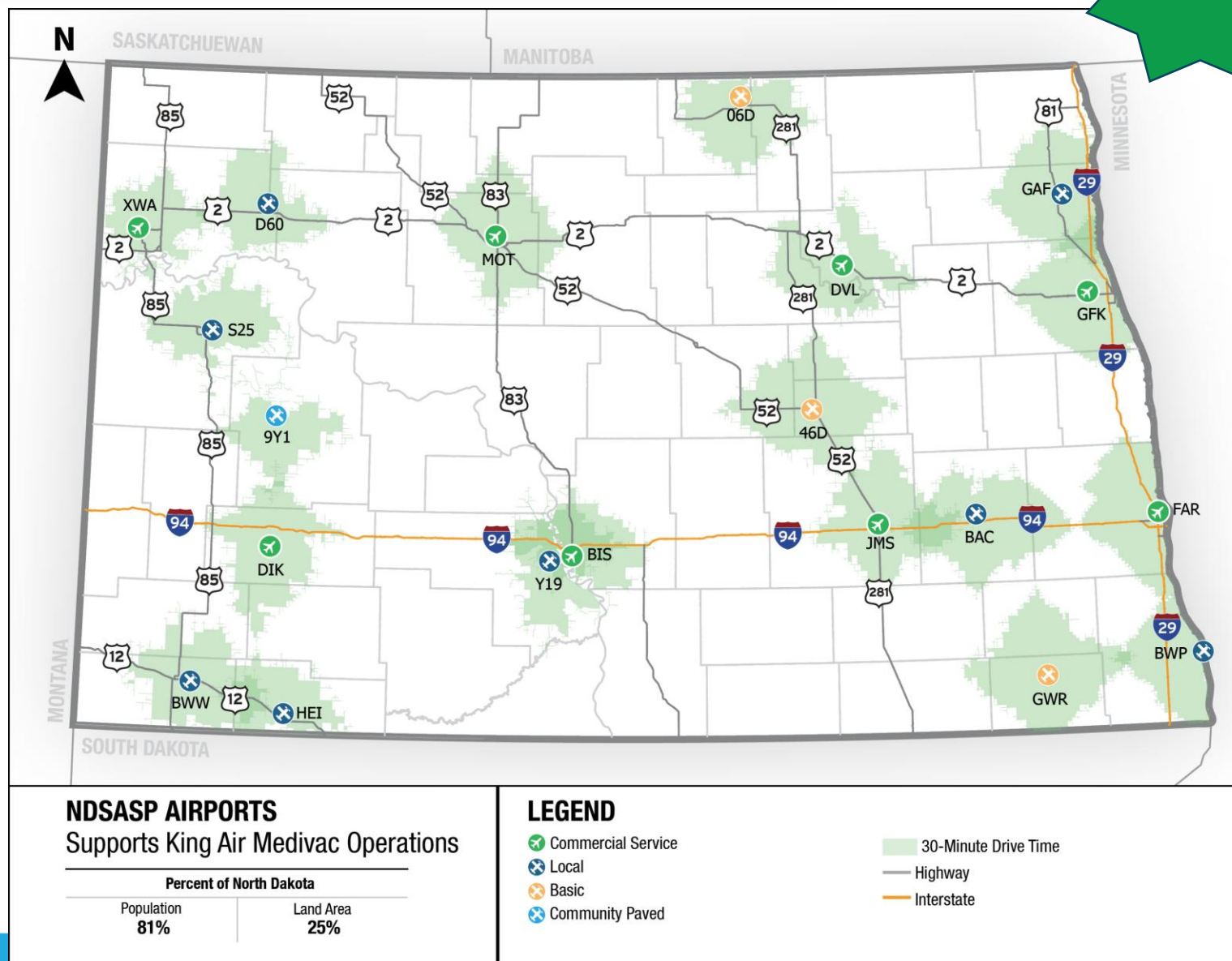
New!

Performance by Classification

Classification	Meet	Do Not Meet
Commercial Service (8)	100%	
Local (26)	31%	69%
Basic (19)	5%	95%
Community Paved (19)		100%
Community Turf (17)		100%

0% 20% 40% 60% 80% 100%

Systemwide Performance

19%

81%

■ Meet Light Business Jet Criteria

■ Do Not Meet Light Business Jet Criteria

Enhance Quality of Life

New!

PI: Percent of Area and Population Within 30 Minutes of an Airport That Can Meet the Needs of the King Air Emergency Aircraft
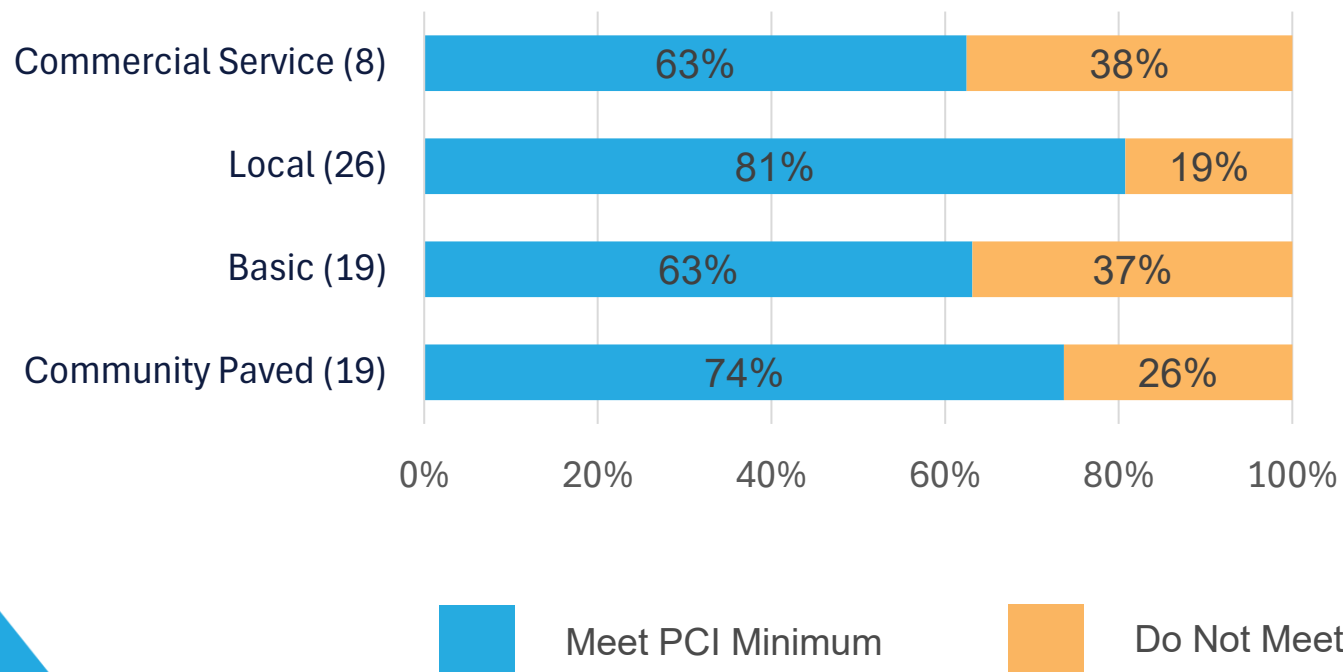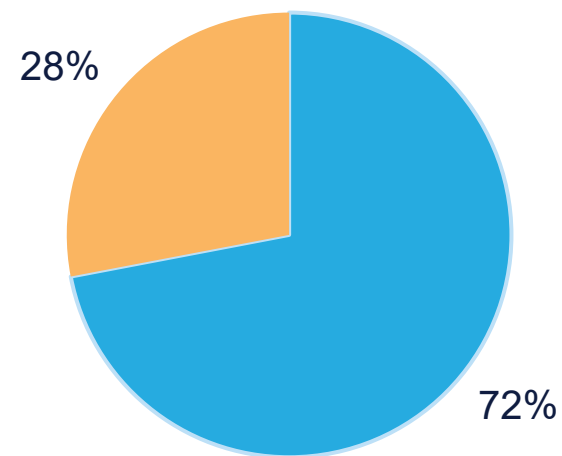

NDSASP AIRPORTS
Supports King Air Medivac Operations

Percent of North Dakota	
Population 81%	Land Area 25%

LEGEND

- ✈ Commercial Service
- ✈ Local
- ✈ Basic
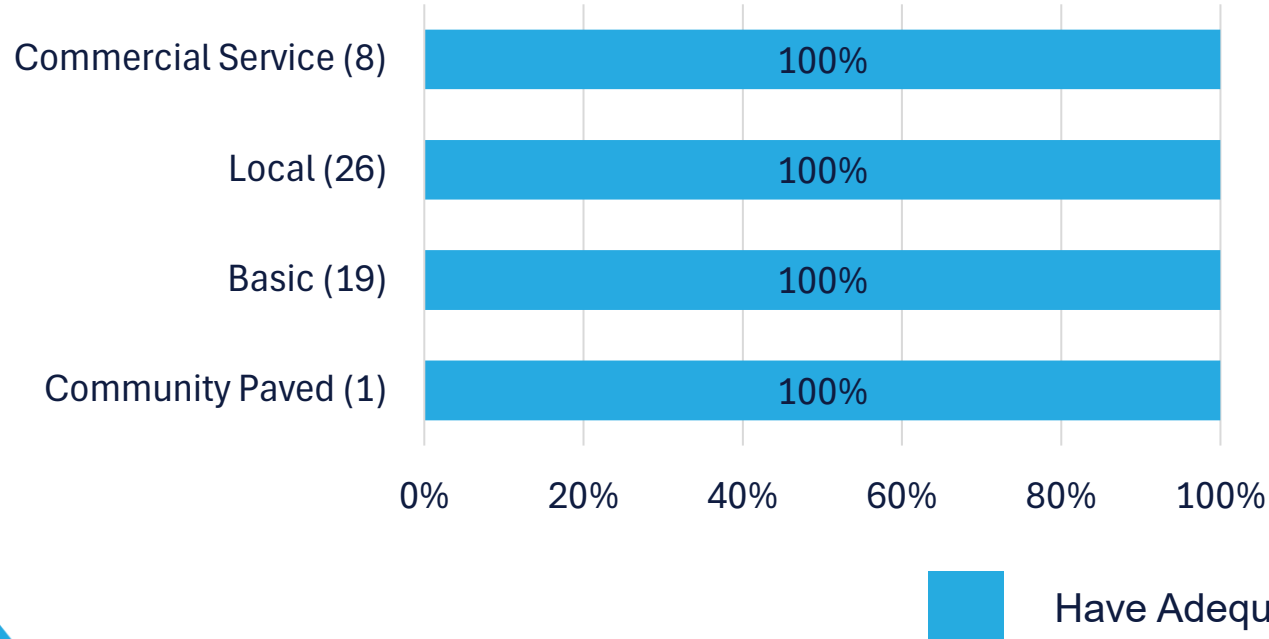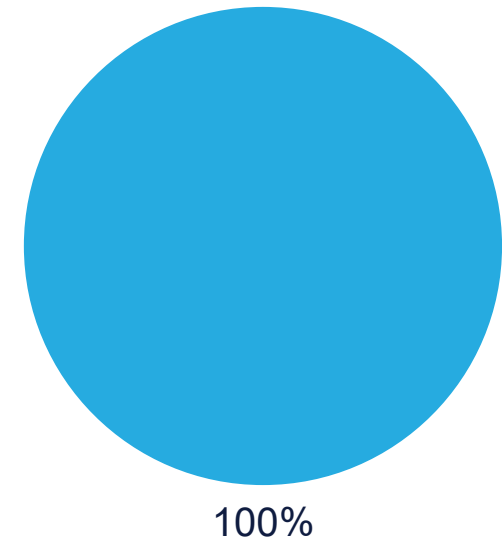- ✈ Community Paved
- 30-Minute Drive Time
- Highway
- Interstate

Preserve Airport Infrastructure

PM: Percent of NPIAS Airports With an Adequate Airport Layout Plan

Performance by Classification

Classification	Have Adequate ALP
Commercial Service (8)	100%
Local (26)	100%
Basic (19)	100%
Community Paved (1)	100%

0%   20%   40%   60%   80%   100%

■ Have Adequate ALP

NPIAS Performance

100%

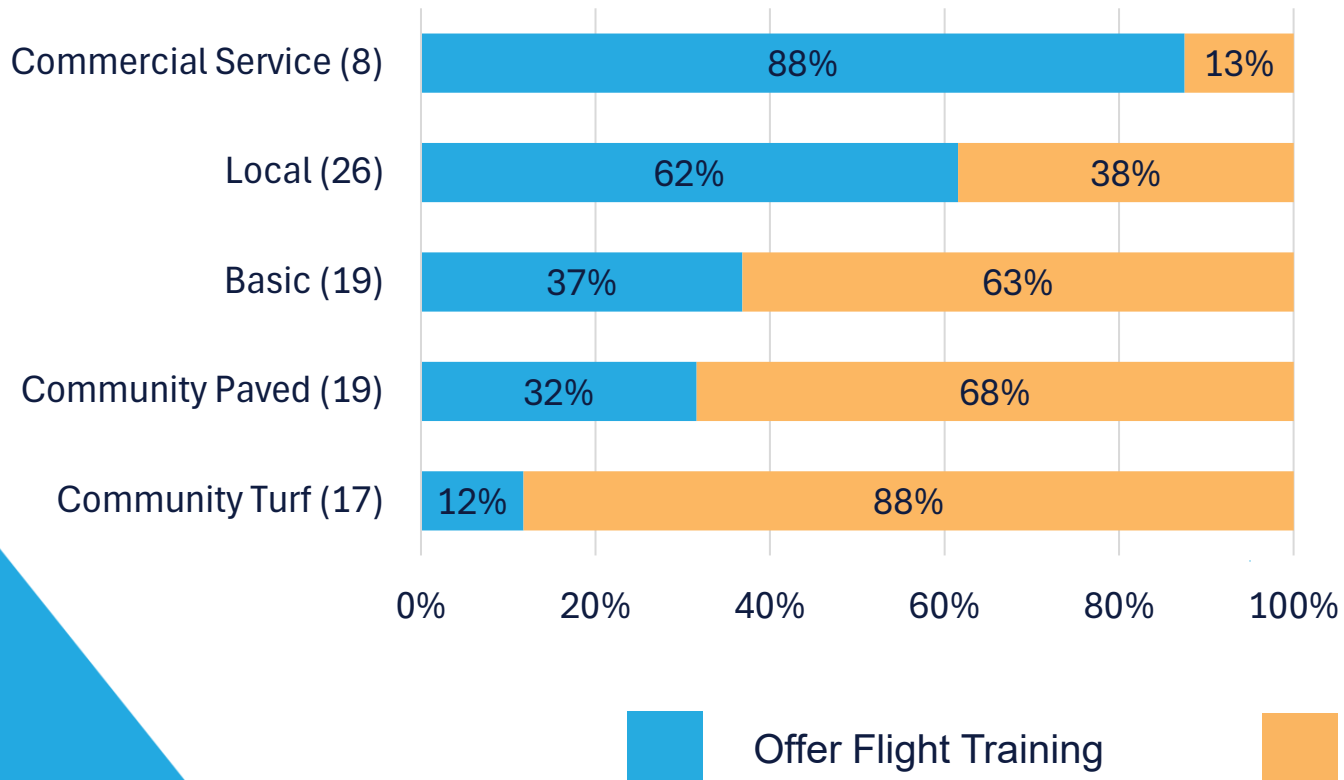2014 Results: 91% of airports met the state ALP threshold.

Support Aviation Education and Industry Advancement
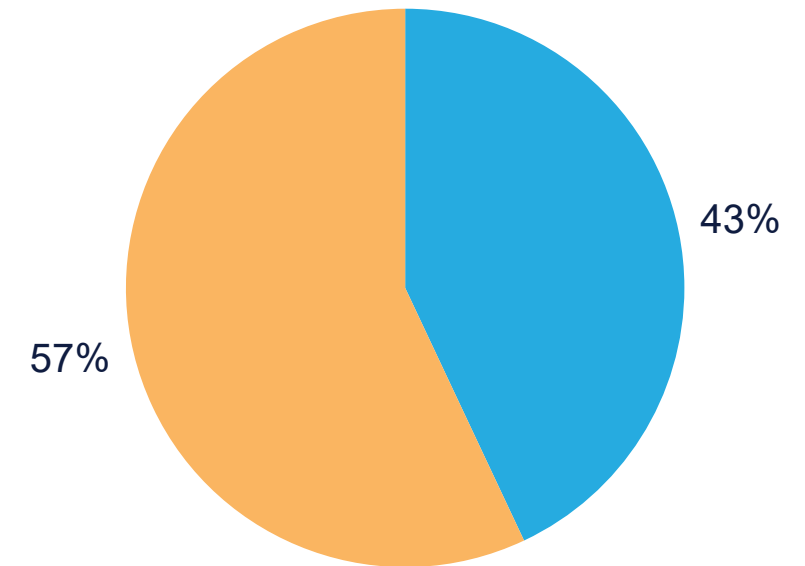
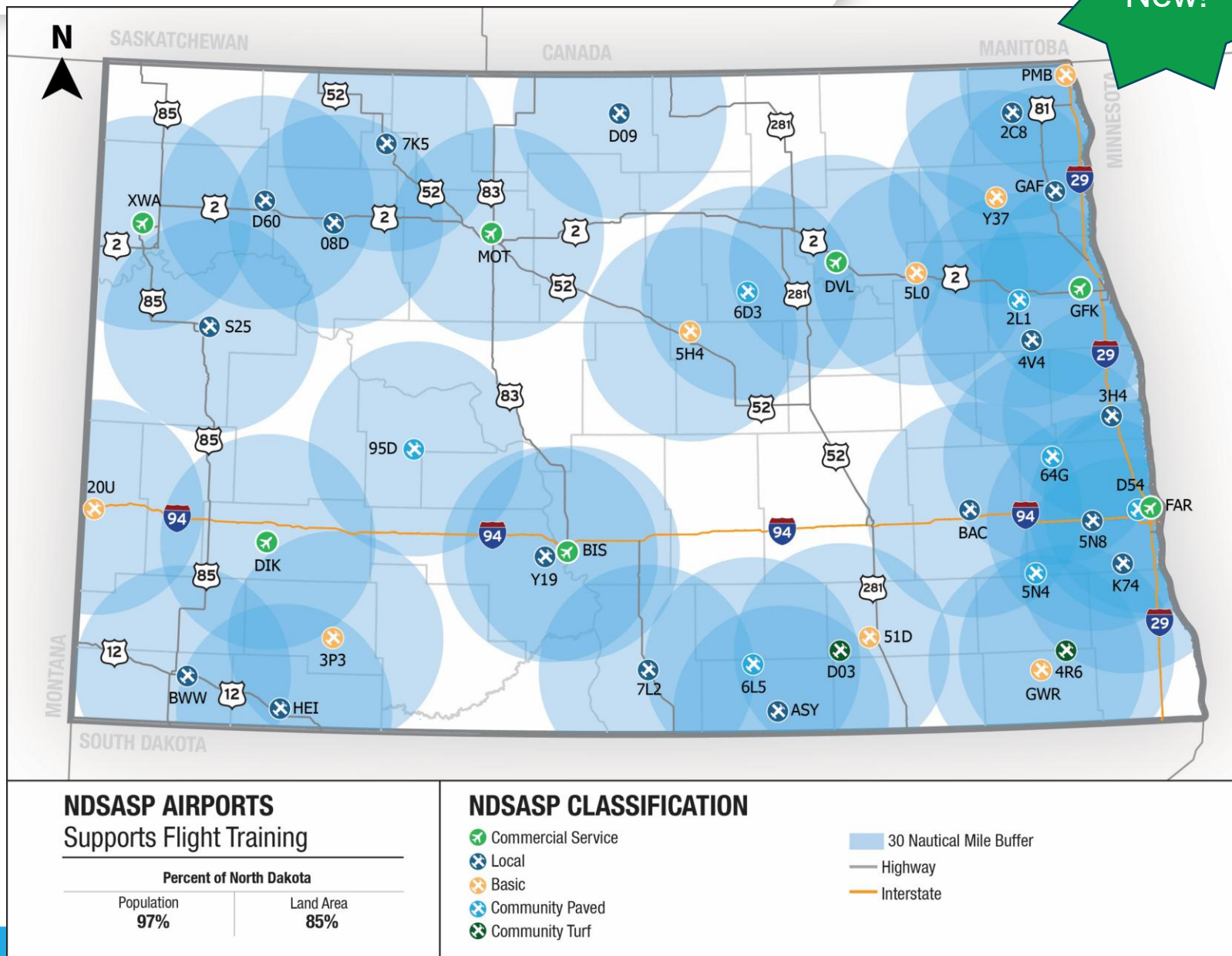# PI: Percent of Airports That Offer Flight Training

New!

Performance by Classification

Classification	Offer Flight Training	Do Not Offer Flight Training
Commercial Service (8)	88%	13%
Local (26)	62%	38%
Basic (19)	37%	63%
Community Paved (19)	32%	68%
Community Turf (17)	12%	88%

Systemwide Performance

43%

57%

■ Offer Flight Training   ■ Do Not Offer Flight Training

PI: Percent of Area and Population within 30 Nautical Miles of an Airport that Offers Flight Training

Support Aviation Education and Industry Advancement
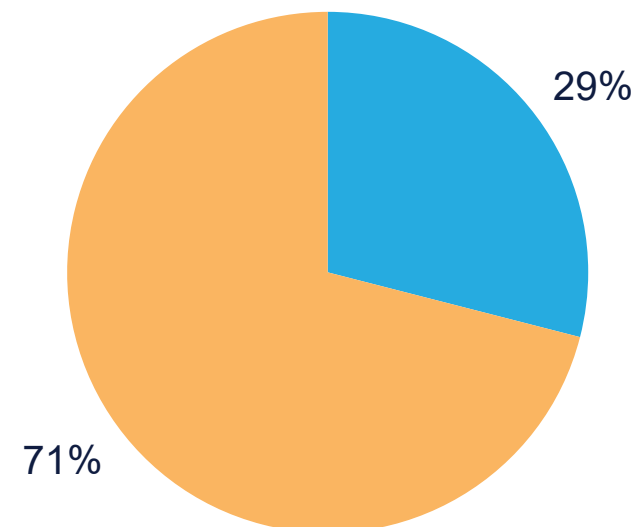
New!

NDSASP AIRPORTS
Supports Flight Training

Percent of North Dakota

Population	Land Area
97%	85%

NDSASP CLASSIFICATION

- Commercial Service
- Local
- Basic
- Community Paved
- Community Turf

- 30 Nautical Mile Buffer
- Highway
- Interstate

2025 North Dakota State Aviation System Plan

Support Aviation Education and Industry Advancement

PI: Percent of Airports that Participate in STEM Activities (Tours, Classroom Visits, etc.)
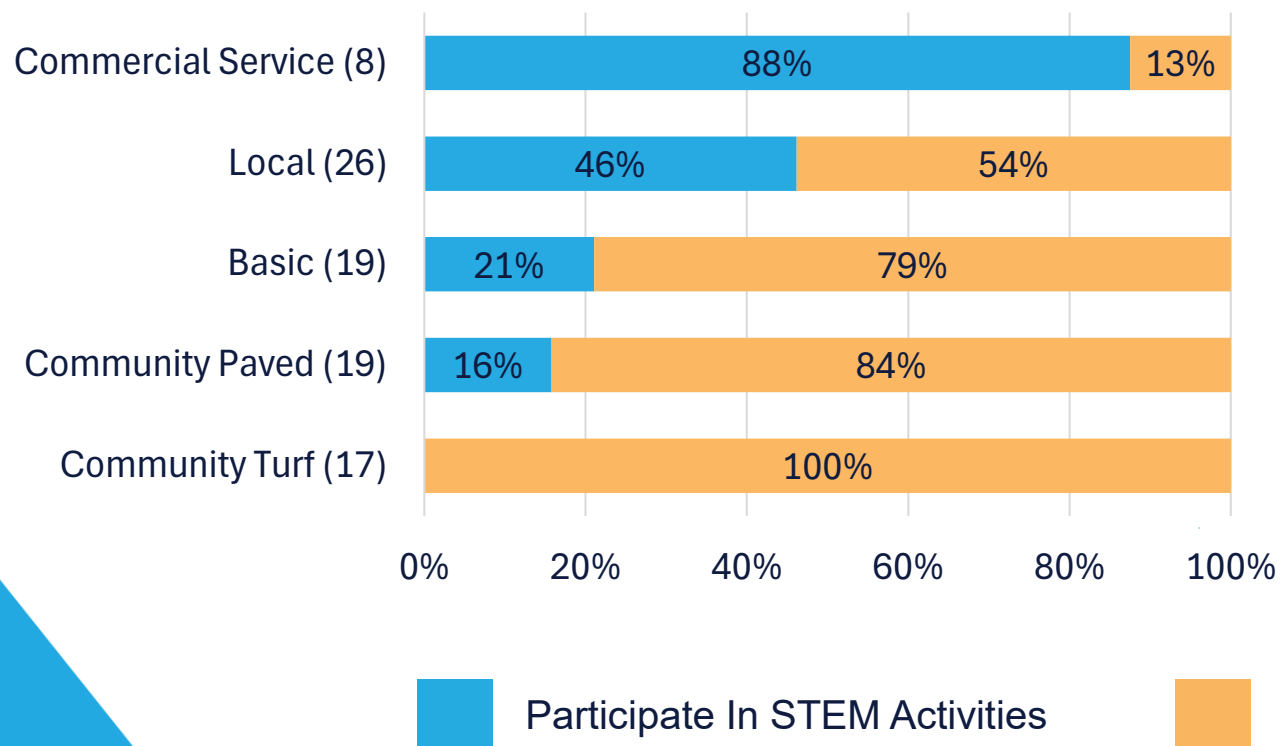
New!

Performance by Classification

Classification	Participate	Do Not Participate
Commercial Service (8)	88%	13%
Local (26)	46%	54%
Basic (19)	21%	79%
Community Paved (19)	16%	84%
Community Turf (17)		100%

Systemwide Performance

29%

71%

Participate In STEM Activities

Do Not Participate In STEM Activities

2025 NDSASP Activity Forecasts

Aviation Activity Forecast - Purpose

Why We Forecast:

- Support infrastructure planning and investment decisions

- Guide analysis for future development

- Required by FAA Advisory Circular (AC) 150/5070-7, The Airport System Planning Process

What We Forecast:

- Enplanements

- Commercial Service Operations
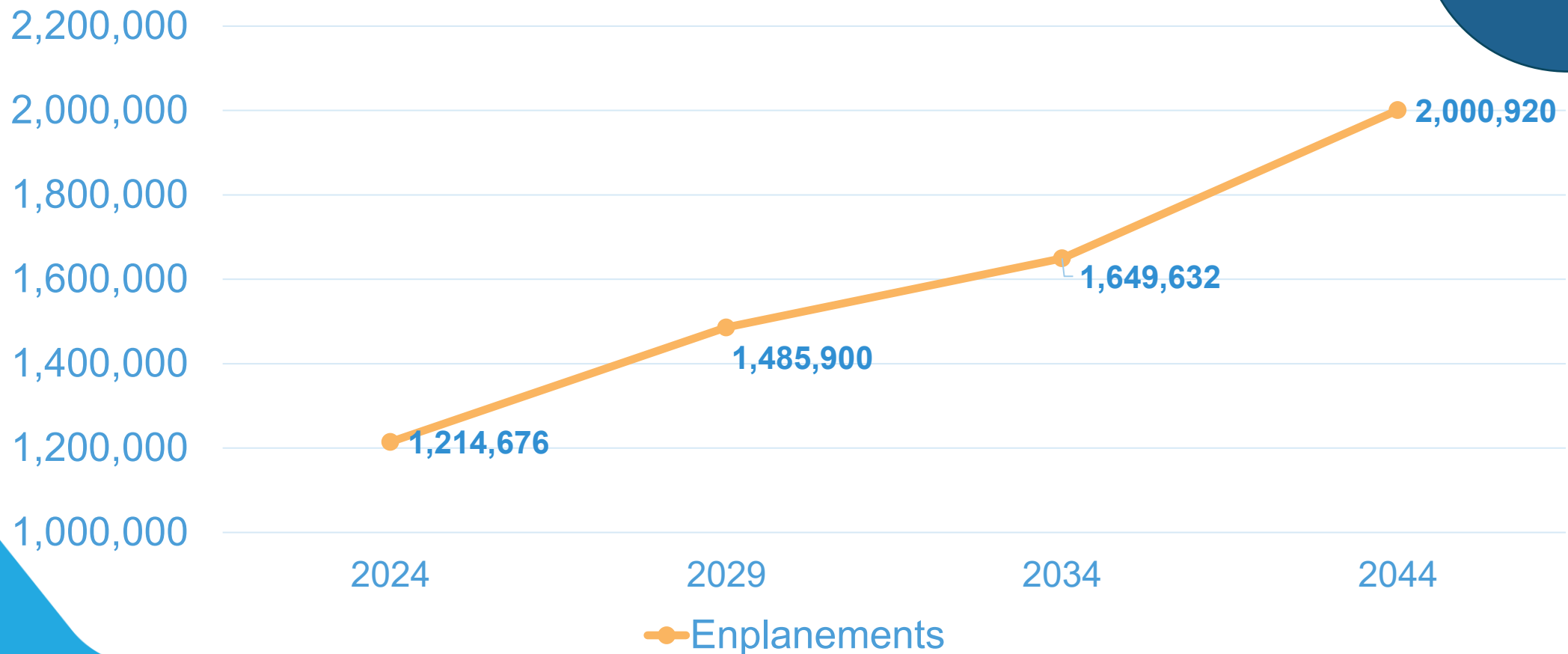
- Based Aircraft

- General Aviation Operations

FAA Alignment:

- TAF forecasts were adopted for the eight CS airports

- Forecasts are aligned with the FAA's TAF methodology

- FAA acceptance is necessary
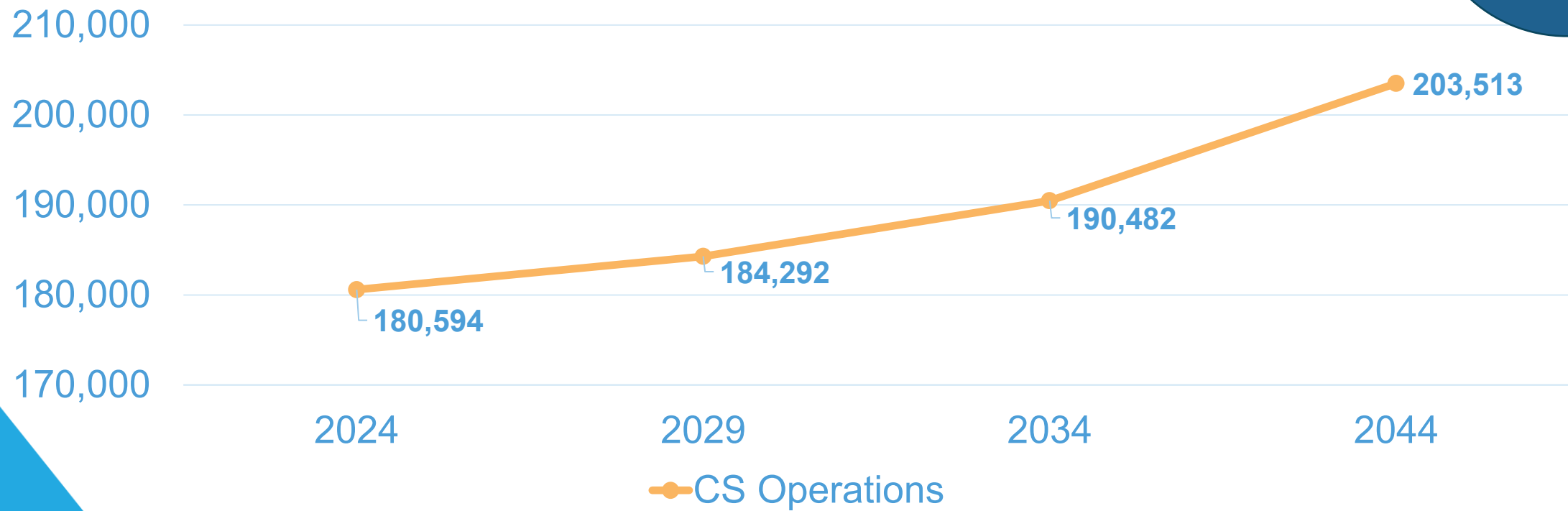
Commercial Service Enplanements Forecast

2024-2044 CAGR: 2.53%

- 1,214,676 (2024)
- 1,485,900 (2029)
- 1,649,632 (2034)
- 2,000,920 (2044)

Enplanements

Based Aircraft Forecast

2024-2044 CAGR: 0.80%

Based Aircraft forecast values by year:
- 2024: 1,857
- 2029: 1,934
- 2034: 2,016
- 2044: 2,178

Legend: Based Aircraft
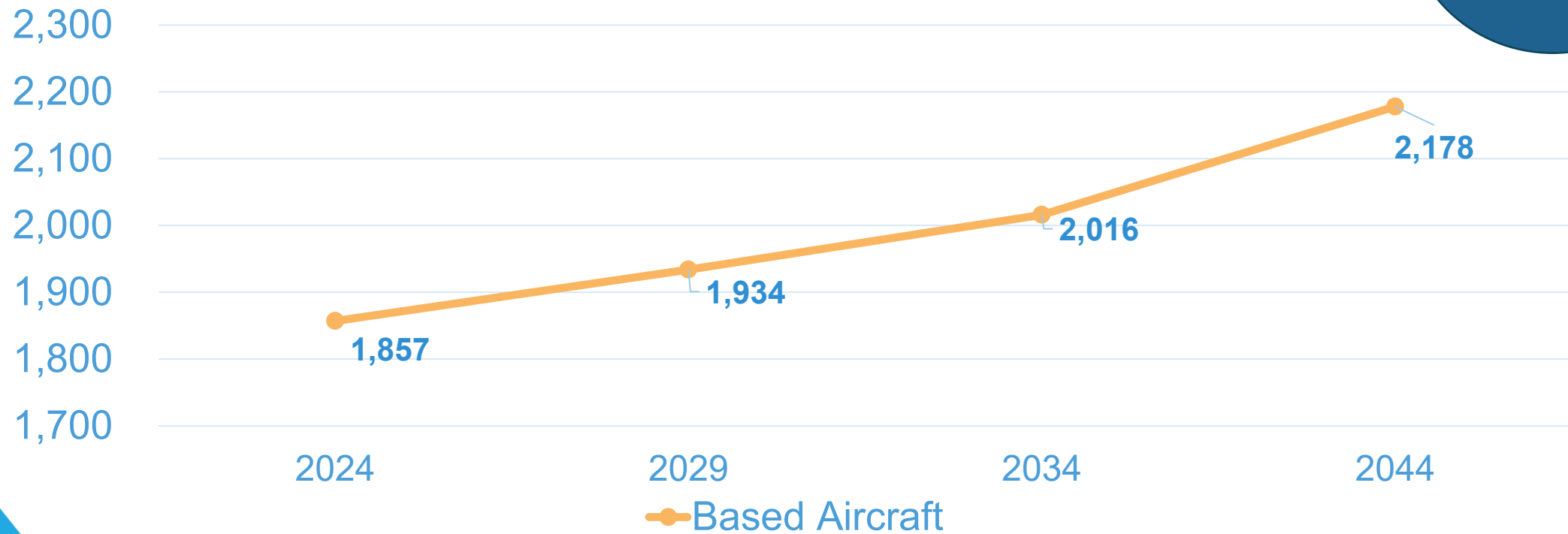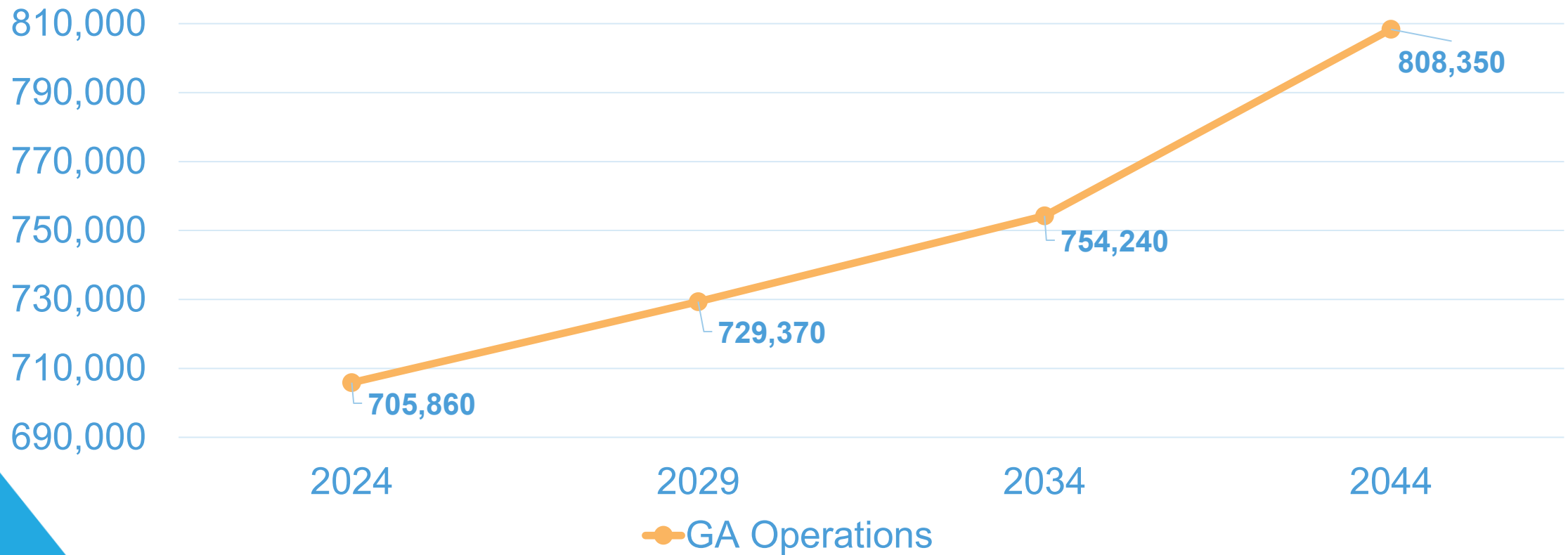
NDSASP Next Steps

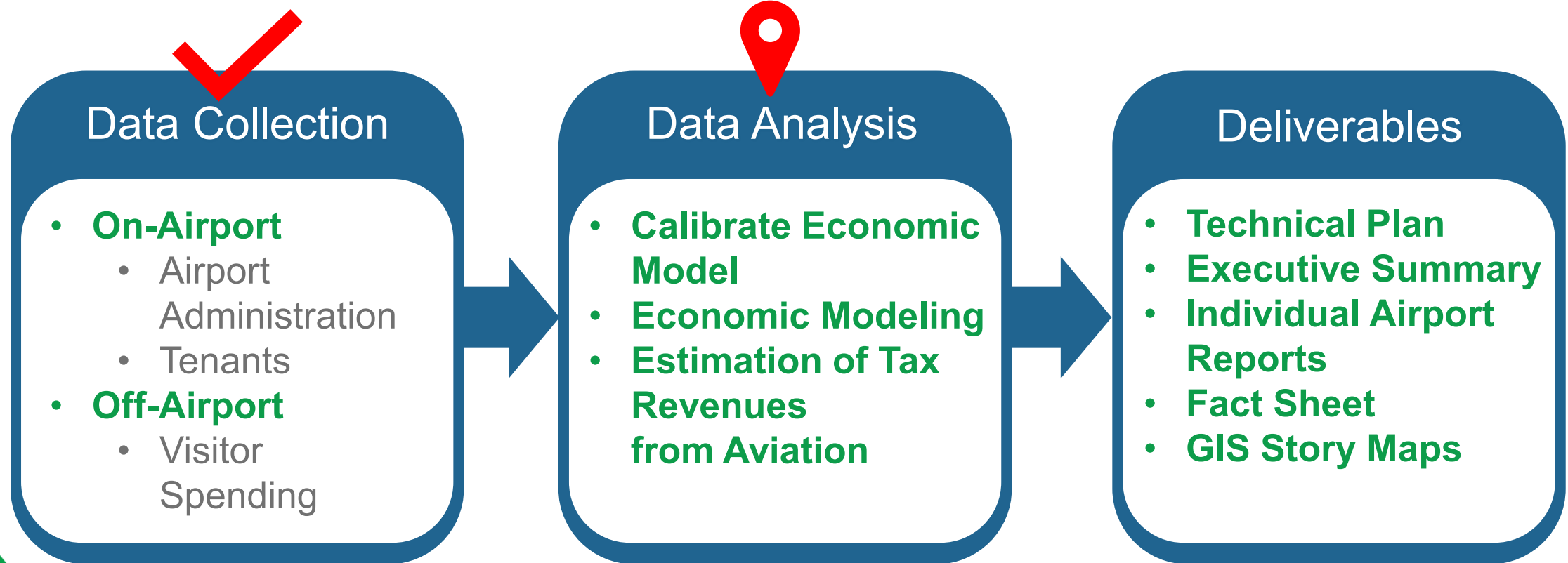- Finalize System Inventory chapter
- Finalize System Performance chapter
- Finalize Aviation Activity Forecast chapter
- Initiate Trends and Issues effort
- Initiate Recommendations and Cost Estimates effort

2025 North Dakota Aviation Economic Impact Study

2025 NDAEIS Update

NDAEIS Process

Data Collection

- **On-Airport**
  - Airport Administration
  - Tenants
- **Off-Airport**
  - Visitor Spending

Data Analysis

- **Calibrate Economic Model**
- **Economic Modeling**
- **Estimation of Tax Revenues from Aviation**

Deliverables

- **Technical Plan**
- **Executive Summary**
- **Individual Airport Reports**
- **Fact Sheet**
- **GIS Story Maps**

Overview of Preliminary Data Results

185 Airport Tenant Businesses Surveyed

Accounting for ~3,000 Employees!

Over **1,000** Visitors Surveyed

$ **12 MILLION** In tenant capital Improvements recorded

Workforce Needs

Mechanics

Customer Service

Avionic Technicians

Sales

Ground Support

NDAEIS Next Steps

- **Finalize Data Cleaning**
  - Airport Manager Survey
  - Airport Business Tenants
  - Visitor Spending

- **Data Confirmation**
  - Opportunity for NDAC and Airports to review data prior to modeling

- **Model Impacts**

- **Produce Deliverables**

Questions?

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