MinnesotaGO
A Collaborative Vision for Transportation

State Aviation System Plan

SASP Advisory Committee – Meeting #2

MnDOT Office of Aeronautics

Agenda

- Introductions
- Progress since last meeting
  - Assessment of Prior Efforts
  - Objectives and Strategies
  - Trends

- BREAK -

- Airport Classification Review
  - Current Minnesota Classifications
  - Other States' Classifications
  - Defining the system


HELLO
my name is
Introductions

SAC Advisory Role

The role of the SAC is to gather the best high-level policy ideas to carry forward to TAC meetings and further refinement by MnDOT.

- We do not need “answers”
- It is great ideas we are after
- This can be the start of the conversation
- Not all ideas will make it in to the plan
  - May be in other plans
  - May be addressed in another way

Looking back...

Assessment of Prior Efforts

Assessment of Prior Efforts

The following groups were consulted and outreach meetings held to gather input on the assessment of prior SASP efforts:

- MnDOT Aeronautics Staff
- SASP Advisory Committee (SAC)
- Technical Advisory Committee (TAC)
- Aviation Consultant Community Workshop
- Aviation Community (Minnesota Airports Conference, Pilot Focus Groups, Drone Focus Group, Numerous airshows and fly-ins)

What Worked Well

- Map graphics in the plan
- SASP level forecast information
- Report card (5-sheet airport information)
- Economic Impact Calculator tool is useful for airports and stakeholders

Challenges

- Does not adequately include drones
- Could better educate public
- Could use additional information on NextGen rollout and impact on Minnesota
- SASP could include a package of tools for sponsors to share results of SASP and its ancillary studies
- Comparison tools/information for airports to compare against average or other airports in their classification
- Clarification on which objectives are requirements versus recommendations

More Challenges

- The plan is very lengthy
- SASP did not contain up to date information after initial publication
- SASP could include recommendations for funding which would help the state prioritize funding decisions
- Clear zone policy should be integrated into SASP
- High level recommendations on the size of the system, is current size adequate, too small, too big?

Objectives and Strategies

Evaluation of Past SASP Strategies

Input from Airports Conference and TAC meeting:

- There are too many strategies
  - Too many strategies dilutes the focus on accomplishing anything
- Some strategies too specific
  - Move to a higher level
  - Allows a work plan to complete the strategy in a flexible and efficient way

SASP Objectives

- 2012 SASP Objectives
  - Safety
  - Mobility
  - Financial Opportunity and Responsibility
  - Operations
  - Asset Management
- SMTP Objectives
  - Open Decision Making
  - Transportation Safety
  - Critical Connections
  - System Stewardship
  - Healthy Communities

Open Decision-Making

- Make transportation system decisions through processes that **are inclusive, engaging and supported by data and analysis.**
  - Leverage data and technology not currently being used
  - Finding better and consistent ways to track operations statewide is important
- Provide for and support **coordination, collaboration and innovation**.
- Ensure **efficient and effective use of resources.**
  - Having a link between the plan and funding is important

Transportation Safety

- **Safeguard** transportation users as well as the communities the systems travel through.
- Apply proven strategies to **reduce fatalities and serious injuries** for aviation.
- Foster a **culture of aviation safety** in Minnesota.
  - Safety regarding drone integration

Critical Connections

- **Maintain and improve multimodal transportation connections** essential for Minnesotans' prosperity and quality of life.
  - Airport accessibility– ease of reaching valued destinations
  - Ensure regional connections
  - Multimodal connections
  - Partner with other organizations to promote aviation tourism connections
  - Last mile airport accessibility
- **Strategically consider new connections** that help meet performance targets and maximize social, economic and environmental benefits.

System Stewardship

- **Strategically** build, manage, maintain and operate all transportation assets.
  - Reasonably priced aviation experiences including certification, fuel purchases, maintenance, and hangar cost
  - Create a NAVAIDS plan to address age of infrastructure and new technology
- Rely on system data and analysis, performance measures and targets, agency and partners' needs, and public expectations to inform decisions.

System Stewardship

- Use **technology** and **innovation** to get the most out of investments and **maintain system performance**.
  - Creative solutions
  - Integrating emerging technologies
- Increase the **resiliency** of the aviation system and **adapt** to changing needs.
  - Create more users
  - Educating the public about the importance of GA and opportunities
  - More inclusive and open
  - System that responds quickly – Flexible system (e.g. drones)
  - Promote resiliency through airport self-sufficiency

Healthy Communities

- Make **fiscally-responsible decisions** that **respect and complement** the natural, cultural, social and economic context.
  - Minimal impact to the environment
- Integrate land uses and transportation systems to **leverage public and private investments**.

Objectives Next Steps

- Recommend moving forward with SMTP
- MnDOT will finalize objective statements

Trends

Why Trends?

- Trends can highlight key topics for the SASP to address
- Engagement can help prioritize among topics and identify areas of emphasis
- Technical and policy analysis related to trends can help inform SASP direction and work plan activities.
- Audience: General Public

SMTP Trends

Climate Change
Environmental Quality

ENVIRONMENT

Urban & Rural Population Trends
Transportation Behavior Changes
Mobility as a Service
Teleworking & e-Shopping

BEHAVIOR

Demographic Trends in Minnesota
Urban & Rural Population Trends
Racial Disparities & Equity
Minnesota's Aging Population
Health Trends in Minnesota

POPULATION

Economic Sectors & Employment Patterns
Freight Rail in Minnesota
Aging Infrastructure
Public-Private Partnerships
New Logistics
Dynamic Road Pricing

ECONOMY

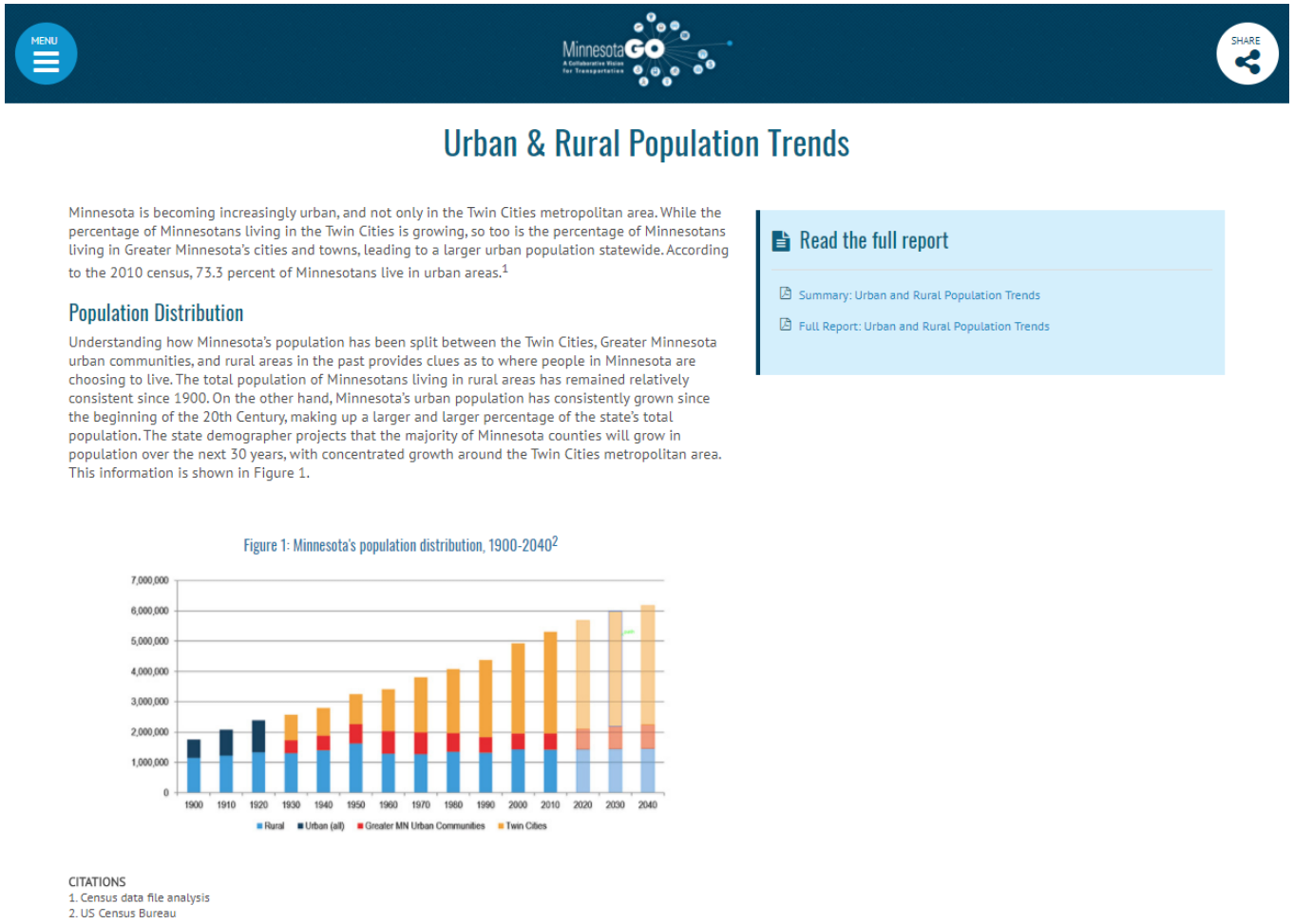
Autonomous Vehicles
Mobile Telecomm & Activity in Motion
Sensors, Monitors & Big Data
Electrification & Alternative Fuels
Unmanned Aircraft Systems/Drones

TECHNOLOGY

Trend Library

Full trend reports and summaries available at:

www.MinnesotaGO.org



Proposed SASP Trends

ENVIRONMENT

Transportation Behavior - Update SMTP Air Service Section

Pilot Trends

BEHAVIOR

Aviation Workforce

POPULATION

Aging Infrastructure – Update SMTP Airport Section

New Logistics – Update Air Cargo portions of SMTP Trend

Projected Revenues – Aviation Projected Revenues

Commercial Service

Aging Aircraft/Fleet Changes

Project Funding

ECONOMY

Electrification & Alternative Fuels – Add section on Aviation Fuel Type Changes

Navigation Technologies

Unmanned Aircraft Systems/Drones – Replace SMTP Trend Paper

TECHNOLOGY

Proposed In-Depth SASP Trends

ENVIRONMENT

Transportation Behavior - Update SMTP Air Service Section

Pilot Trends

BEHAVIOR

Aviation Workforce

POPULATION

Aging Infrastructure – Update SMTP Airport Section

New Logistics – Update Air Cargo portions of SMTP Trend

Projected Revenues – Aviation Projected Revenues

Commercial Service

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Electrification & Alternative Fuels – Add section on Aviation Fuel Type Changes

Navigation Technologies

Unmanned Aircraft Systems/Drones – Replace SMTP Trend Paper

TECHNOLOGY

Example - Commercial Service Trend

- Air Service in Minnesota is continuing to evolve and change.
  - Evolution of air service in Minnesota (MSP and out state)
    - Migration from Northwest/Delta to Skywest and others (Boutique, etc.) and its impact
    - Summarize the expansion and impact of Ultra Low Cost Carriers on the industry and Minnesota
  - Current and project fleet analysis and impact on Minnesota
  - Pilot shortage and pilot contract constraints and impact on Minnesota
  - Historical EAS subsidies and EAS funding history and risks including how they impact Minnesota

Consensus

- Any major concerns with the proposed trends?
- Any major concerns with the trends selected for in-depth review?

Break

Moving forward...

Airport Classification Review

Overview of Classification

Key 

Intermediate 

Landing Strip 

Key Airports

- Paved, lighted runway
- ≥ 5,000 ft of runway
- Accommodates business jets and large multiengine aircraft
- Possible scheduled airfreight and airline service
- Near larger population and economic centers

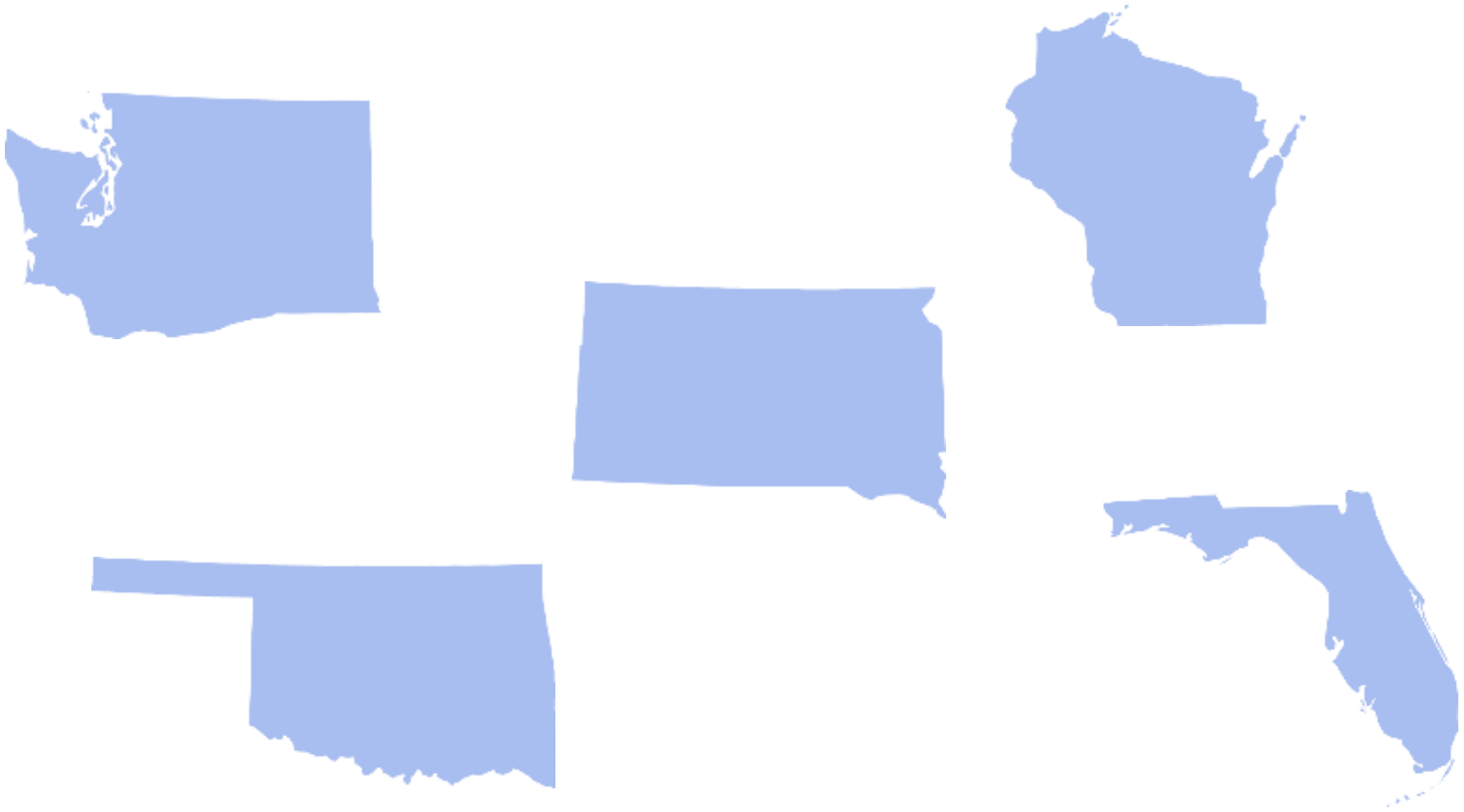
Intermediate Airports

- Paved, lighted runway
- < 5,000 ft of runway
- Accommodates some multiengine and some small business jets
- Often support emergency medical transports and manufactured parts distribution
- Enable direct connections across Minnesota and the Midwest

Landing Strips

- Turf, possibly lighted runway
- Accommodates most single-engine and some multi-engine aircraft
- May be unusable during wet weather and winter months
- Supports agricultural industry

How other states do it



Washington

- **Number of Classifications:** 6
- **Classifications based on:**
  - Primary Aviation Activity at Airport
  - Population Density
  - ARC (Airport Reference Codes)
  - (Based aircraft and paved vs. non-paved at smaller airports)
- **Classifications influence:**
  - Funding? No
  - Project prioritization? Somewhat
  - Minimum System:
    - Requirements? Yes
    - Recommendations? Yes

Notes:

- Contains a clear roadmap for airports seeking to move up or down a classification level

Wisconsin

- **Number of Classifications:** 4
- **Classifications based on:**
  - Activity (based aircraft, # of nearby pilots)
  - Economic Impact (gross regional product, retail sales)
  - Accessibility (nearby population and employment)
  - Facilities (runway length, approach type, weather systems)
- **Classifications influence:**
  - Funding? No
  - Project prioritization? No
  - Minimum System:
    - Requirements? Yes (external to the SASP)
    - Recommendations? Yes

Notes:

South Dakota

- **Number of Classifications:** 5
- **Classifications based on:**
  - Runway length
  - Approach type
  - ARC (Airport Reference Codes)
- **Classifications influence:**
  - Funding? No
  - Project prioritization? Somewhat
  - Minimum System:
    - Requirements? No
    - Recommendations? Yes

Notes:

Oklahoma

- **Number of Classifications: 4**
- **Classifications based on:**
  - Service Level
  - Airport Role/population
  - Design Standard
  - ARC (Airport Reference code)
- **Classifications influence:**
  - Funding? Yes
  - Project prioritization? Yes
  - Minimum System:
    - Requirements? Yes
    - Recommendations? Yes

Notes: Regional meetings allow for interaction and better understanding of economic activity providing a structured process for their continuous system plan

Florida

- **Number of Classifications: 4**
- **Classifications based on:**
  - Role
- **Classifications influence:**
  - Funding? Grouping into categories
  - Project prioritization? No
  - Minimum System:
    - Requirements? No
    - Recommendations? No

Notes:

- FAA Report to Congress National Plan of Integrated Airport Systems (NPIAS) 2017 – 2012
- FAA General Aviation Airports: A National Asset (ASSET 1) and ASSET 2: In-Depth Review of the 497 Unclassified Airports
- FDOT Florida Aviation System Plan 2025
- FDOT Florida's Strategic Intermodal System (SIS)

Discussion | Related to other states

- What do you like about how other states use their classification system?
- What challenges do you see with how a particular state uses its classification system?
- What do you like about other states classification systems? Why?
- What do you not like, or think wouldn't work well in Minnesota, about how other states classify airports?

Minnesota

- **Number of Classifications:** 3
- **Classifications based on:**
  - Runway length
  - Paved vs. non-paved
- **Classifications influence:**
  - Funding? No
  - Project prioritization? No
  - Minimum System:
    - Requirements? Yes
    - Recommendations? Yes

Notes:

Future Minnesota?

- **Number of Classifications: ____**
- **Classifications based on: ____**
- **Classifications influence:**
  - Funding? ____
  - Project prioritization? ____
  - Other? ____
  - Minimum System:
    - Requirements? ____
    - Recommendations? ____

Notes:

Discussion | Current Classification System

- What works well?
  - What are the benefits?
- What are current challenges?
  - What challenges does grouping all paved airports below 5,000 feet together bring? What are the benefits?
  - Key Airports - What are the challenges and benefits of grouping GA and Commercial Service together in this classification?

Discussion | Potential Classification System

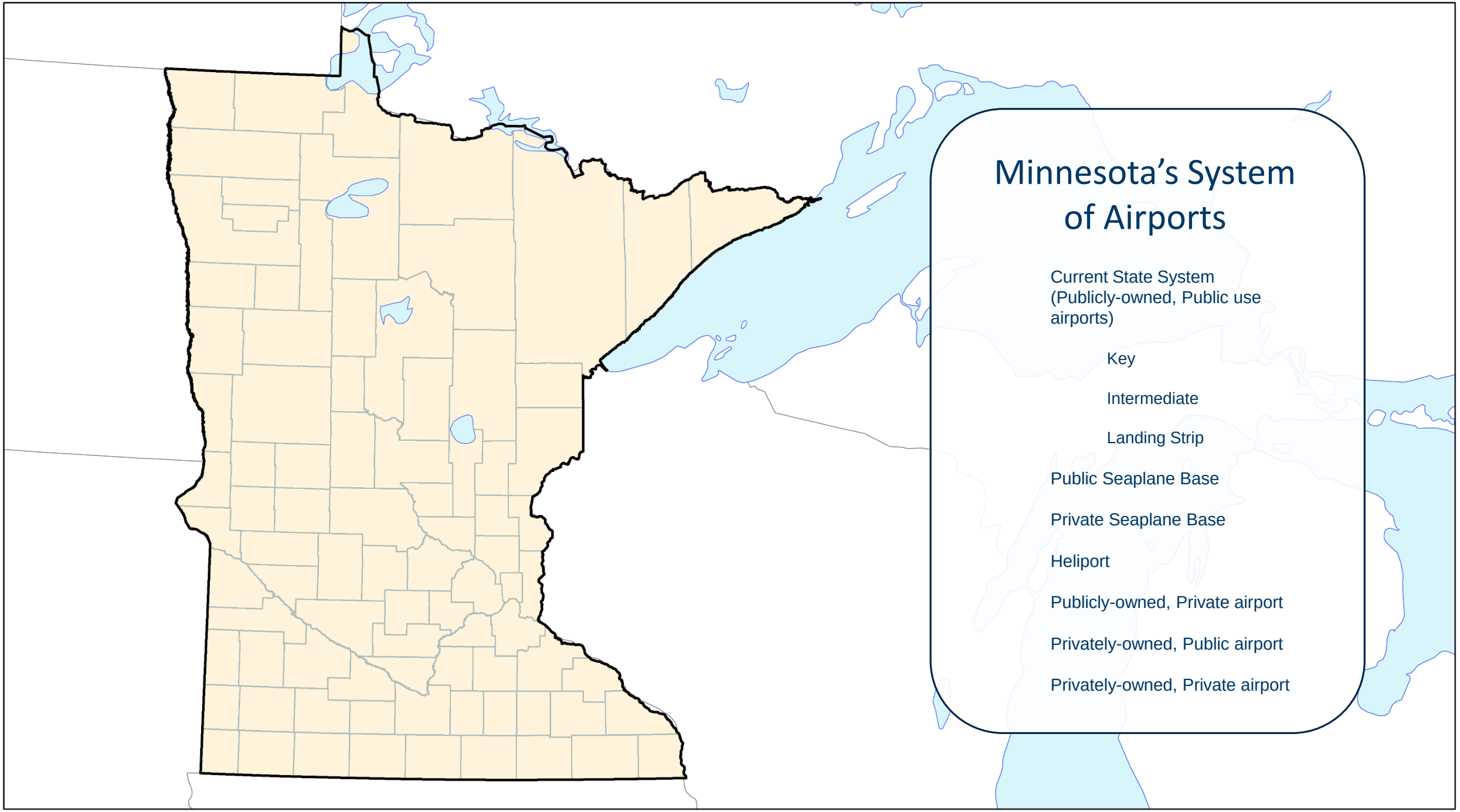
- How could airports be classified differently?
- Should classification be role based or facility based? Note that facilities at an airport don't always match the role that an airport is currently serving.
- If facility based, should it refer to more than runway length?
- What would be the benefits of a role based system?
- What would be the challenges of a role based system?
- How could a role based or facility based classification system inform future changing needs in the system?

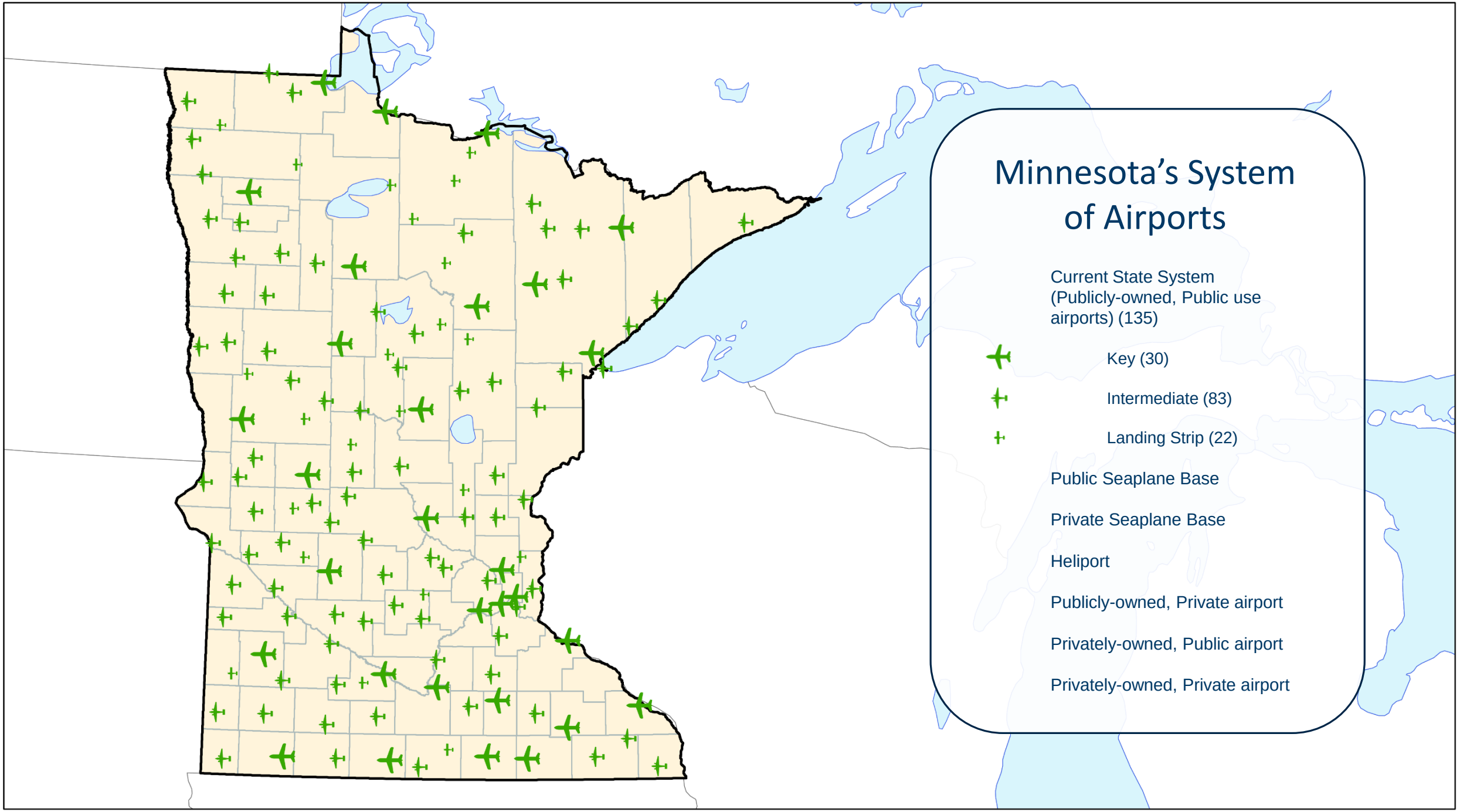
Discussion | Potential Classification System Uses

- Regarding how MnDOT uses the current classification system, what are the benefits and challenges?
- How could MnDOT use the classification of airports differently?
- What problems could MnDOT solve by referring to classification of airports?
- What decisions could the classification of airports inform? At the state level, at the local level, etc.

Discussion | Defining the System

- How should MnDOT define the system?
  - Seaplane bases?
  - Heliports?
  - Private airports?
- What level of involvement should MnDOT have in each?
  - None
  - Acknowledgement in plan and communicate role within system
  - Track metrics & provide recommendations


Minnesota's System of Airports
Current State System (Publicly-owned, Public use airports)
Key
Intermediate
Landing Strip
Public Seaplane Base
Private Seaplane Base
Heliport
Publicly-owned, Private airport
Privately-owned, Public airport
Privately-owned, Private airport


Minnesota's System of Airports
Current State System (Publicly-owned, Public use airports) (135)
Key (30)
Intermediate (83)
Landing Strip (22)
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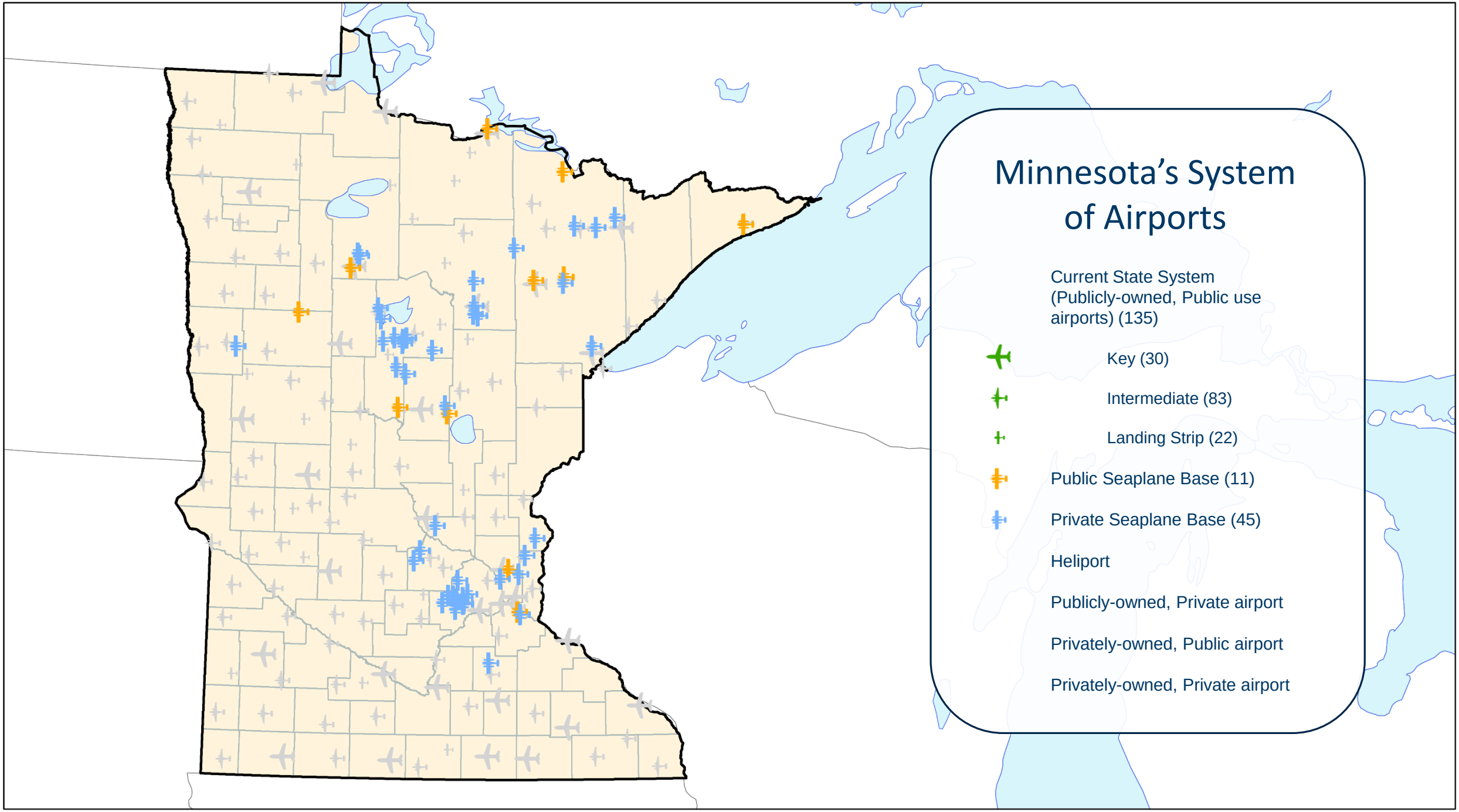
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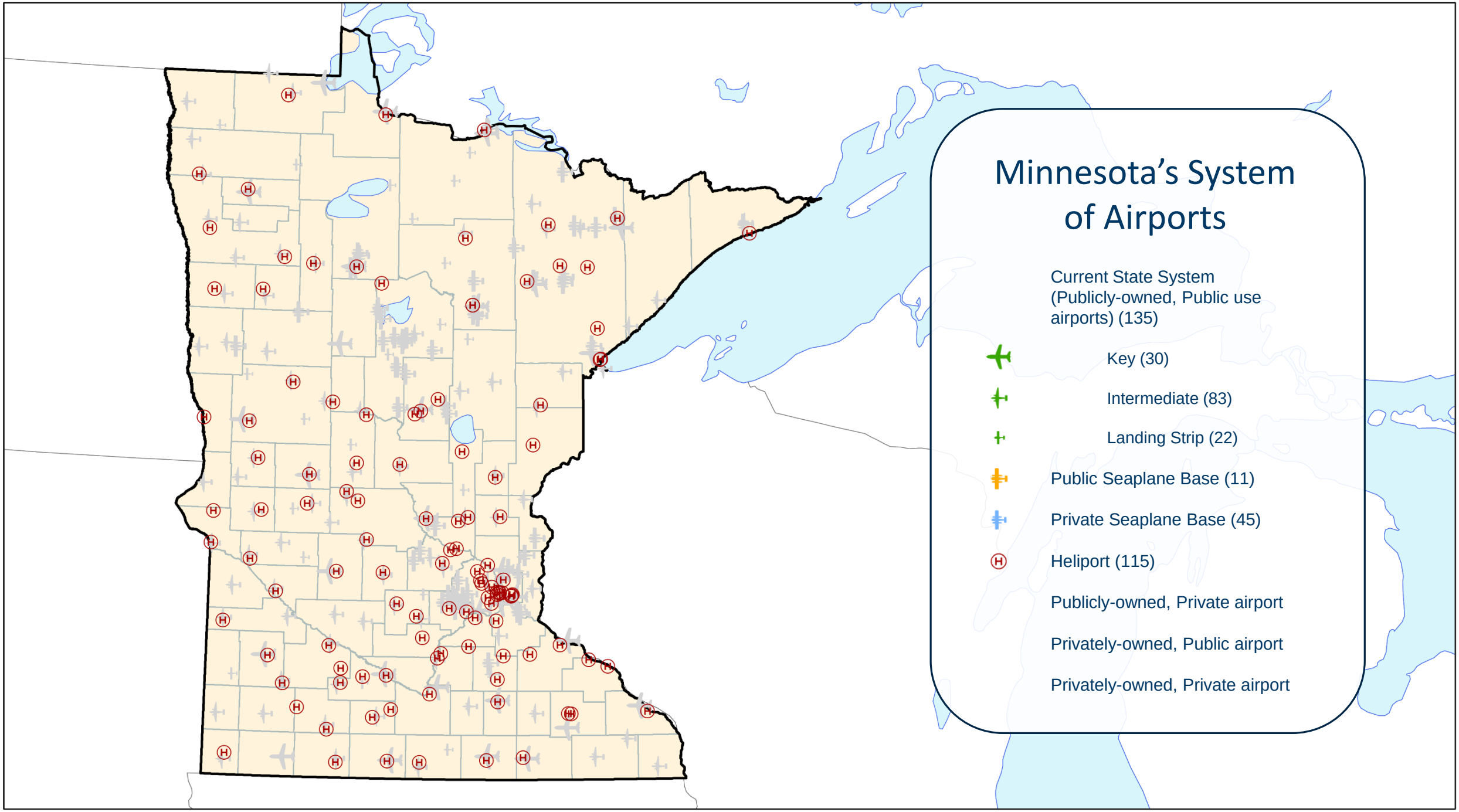
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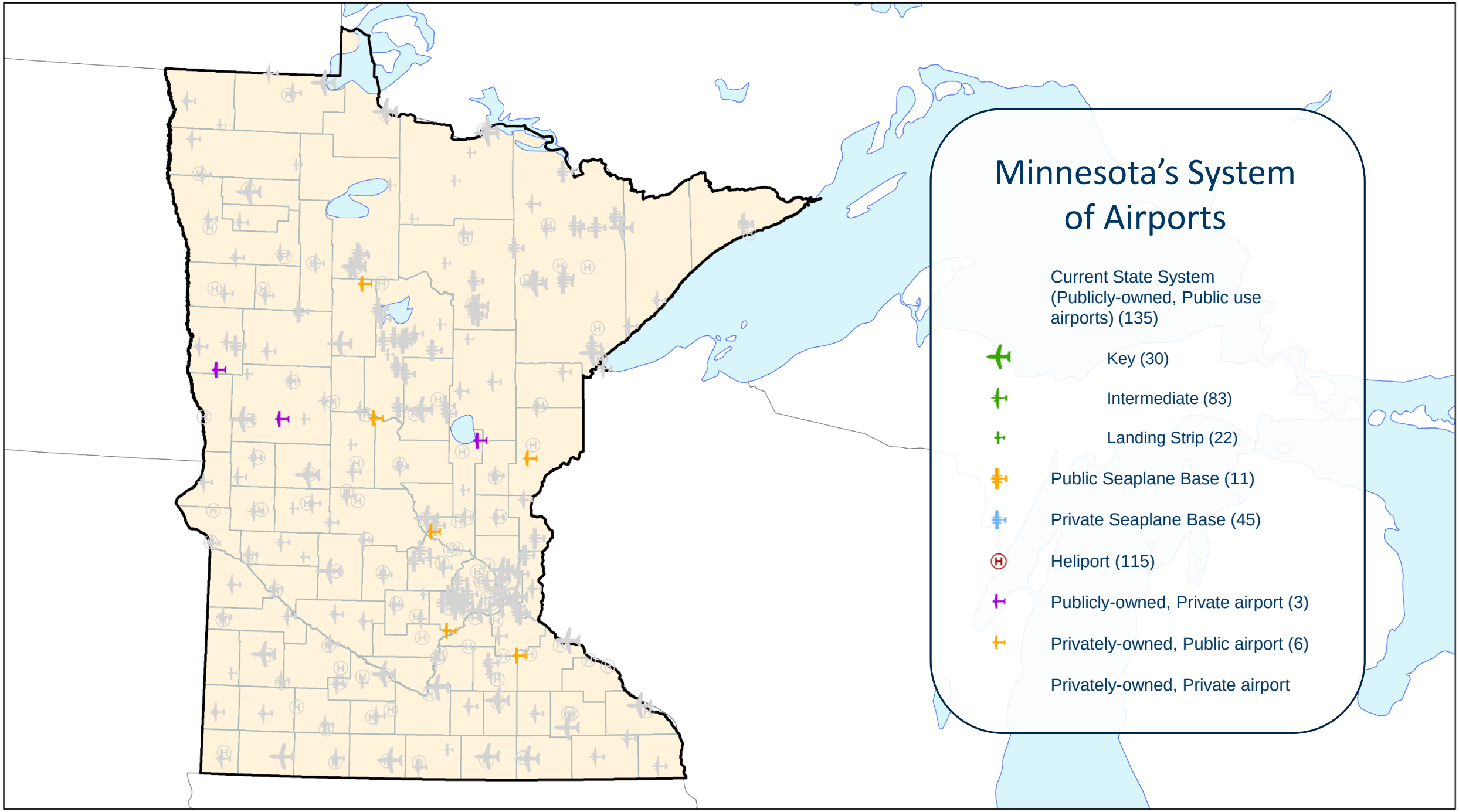
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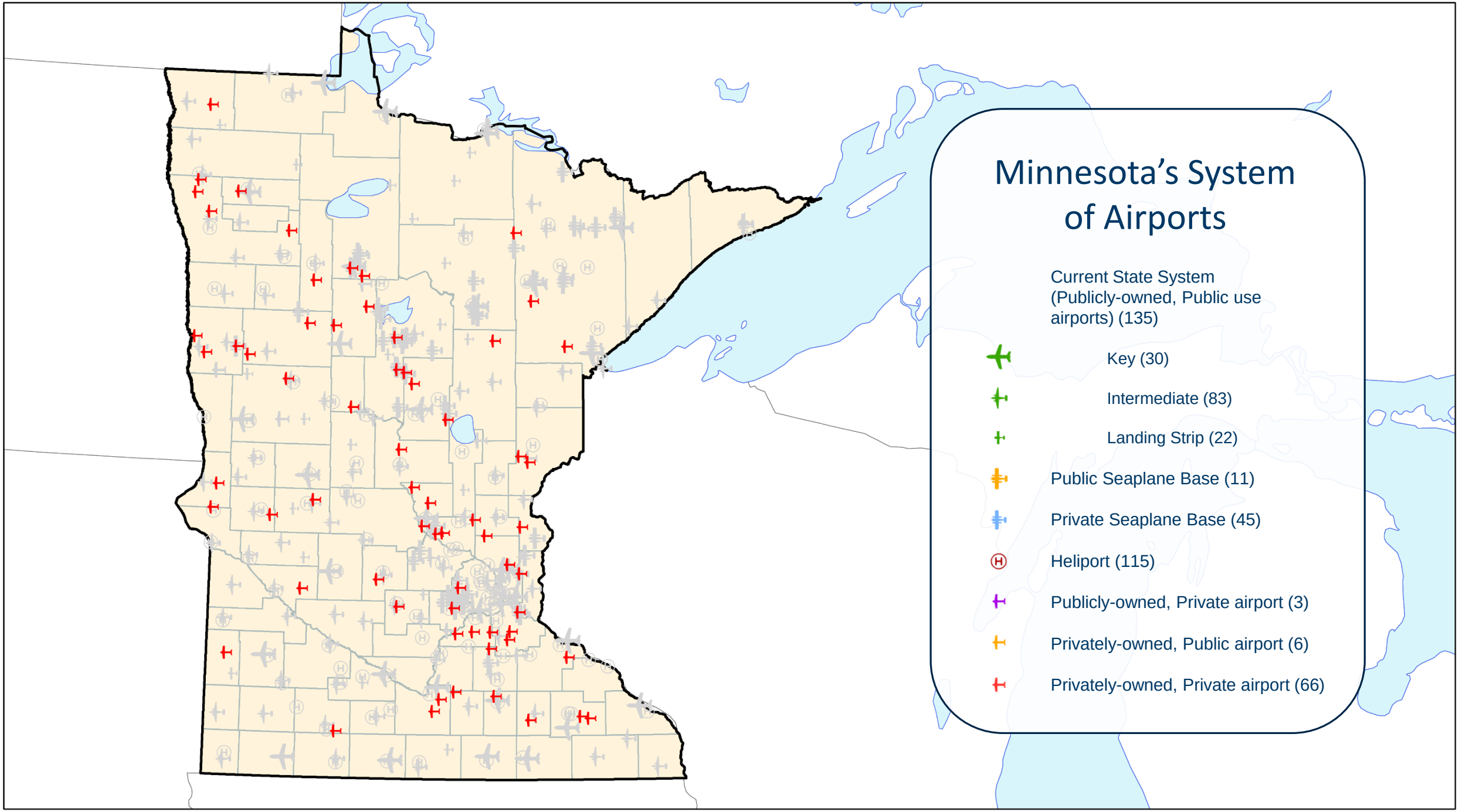
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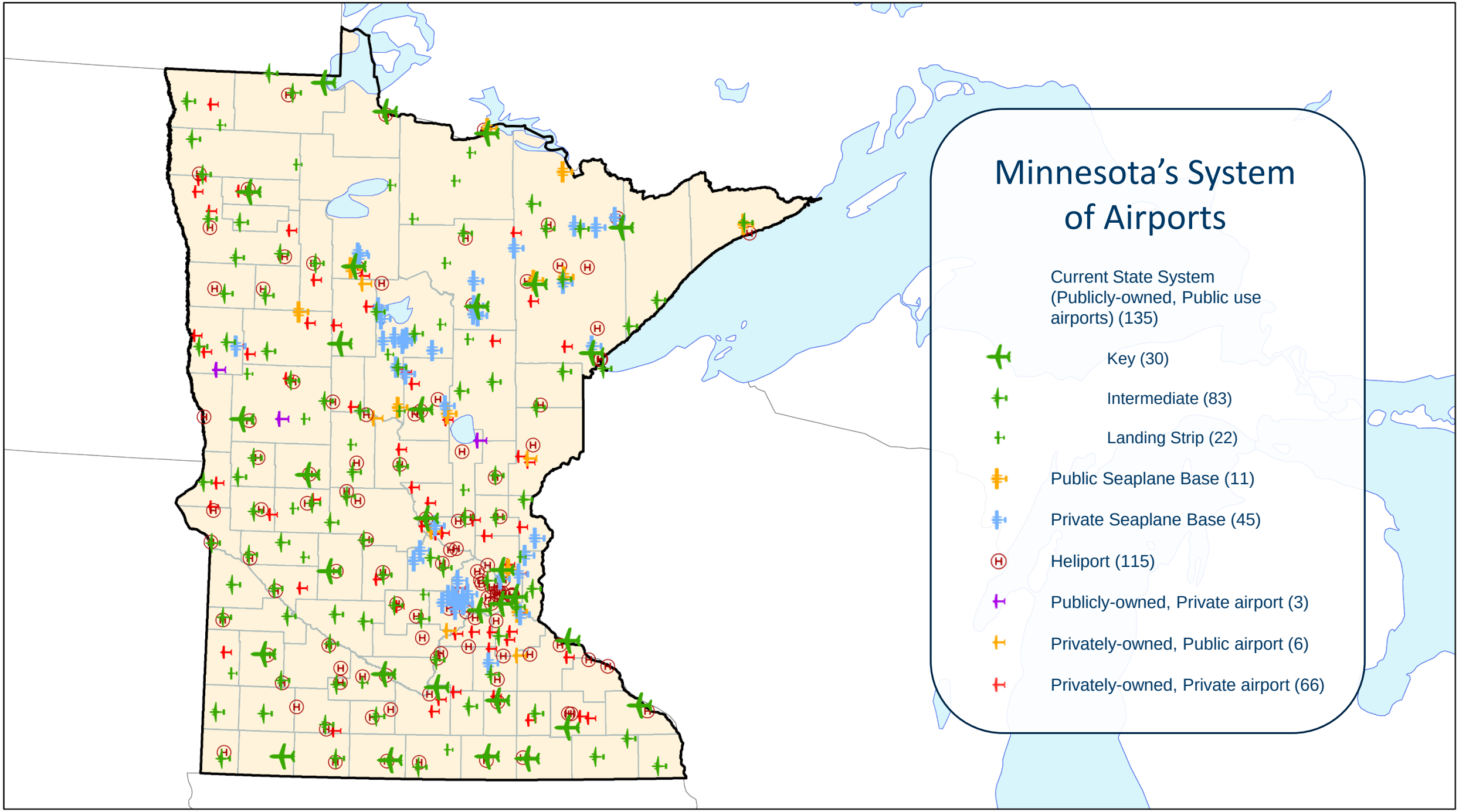
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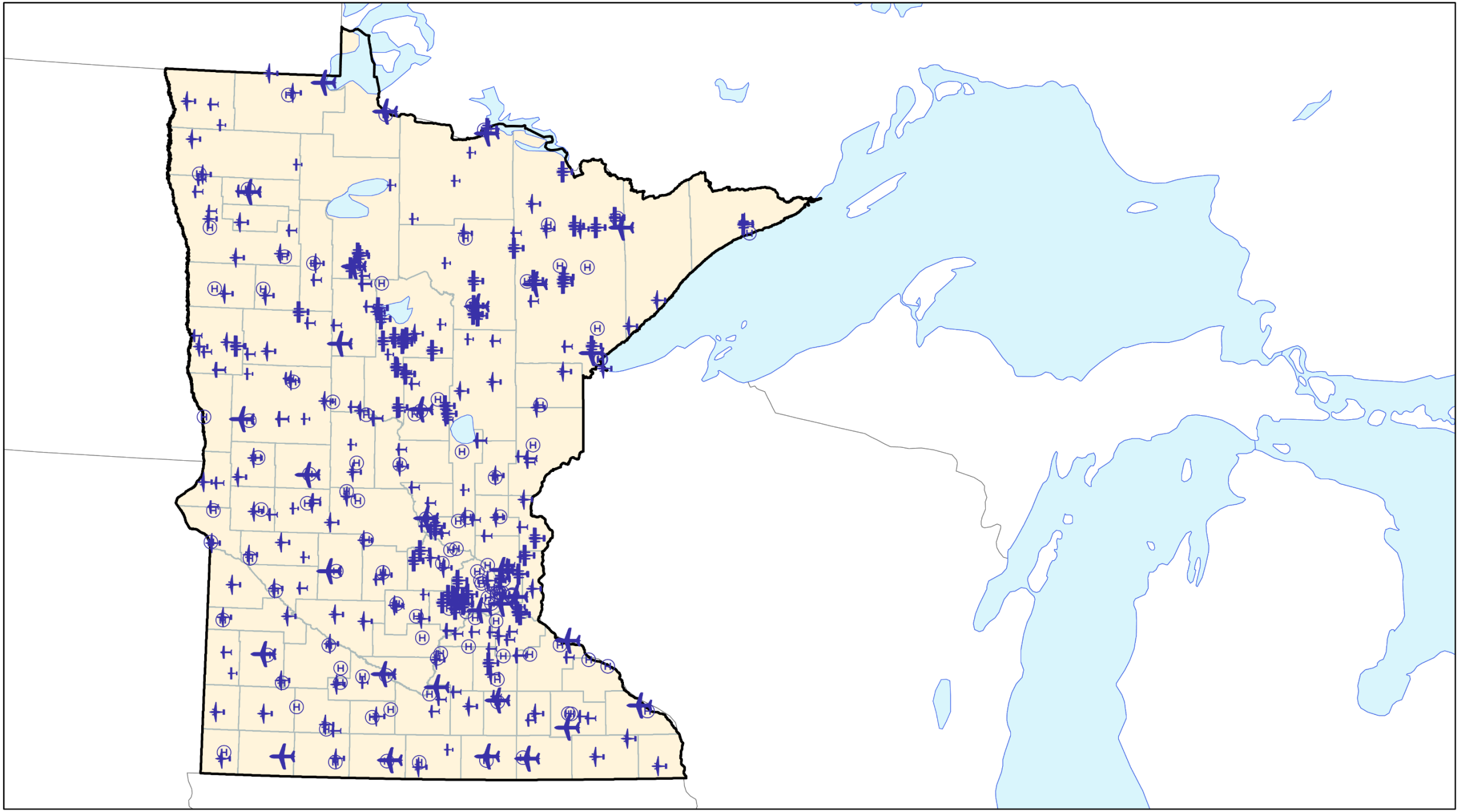

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Next Steps

In the meantime

- TAC Meeting in two weeks – February 28th
- Business-based Outreach

Wrap-up

- Meeting recap
- Next Meeting – April 12th
  - Agenda Topics
    - Minimum System Objectives
    - Performance Measures

Thank you!