



While you're waiting...

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Log onto [menti.com](https://www.menti.com) in your web browser

Enter code: 15 13 20

(We'll be doing some interactive surveying during today's meeting 😊)

Welcome to the First TAC Meeting!
(We need your help in steering this effort)



State Aviation System Plan

“A description and assessment of the performance of the current aviation system as well as guidance for the future development of aviation in Minnesota.”

Provides a 20-year direction

Identifies needs of the system

Minnesota's State Aviation System Plan (SASP)

HELLO

my name is

Introductions

Agenda

- Welcome
- SASP Technical Advisory Committee
 - SASP Overview
 - TAC Purpose and Role
- Assessment of Prior Efforts
- Break -
- SASP Strategies
- Aviation Trends
- Next Steps





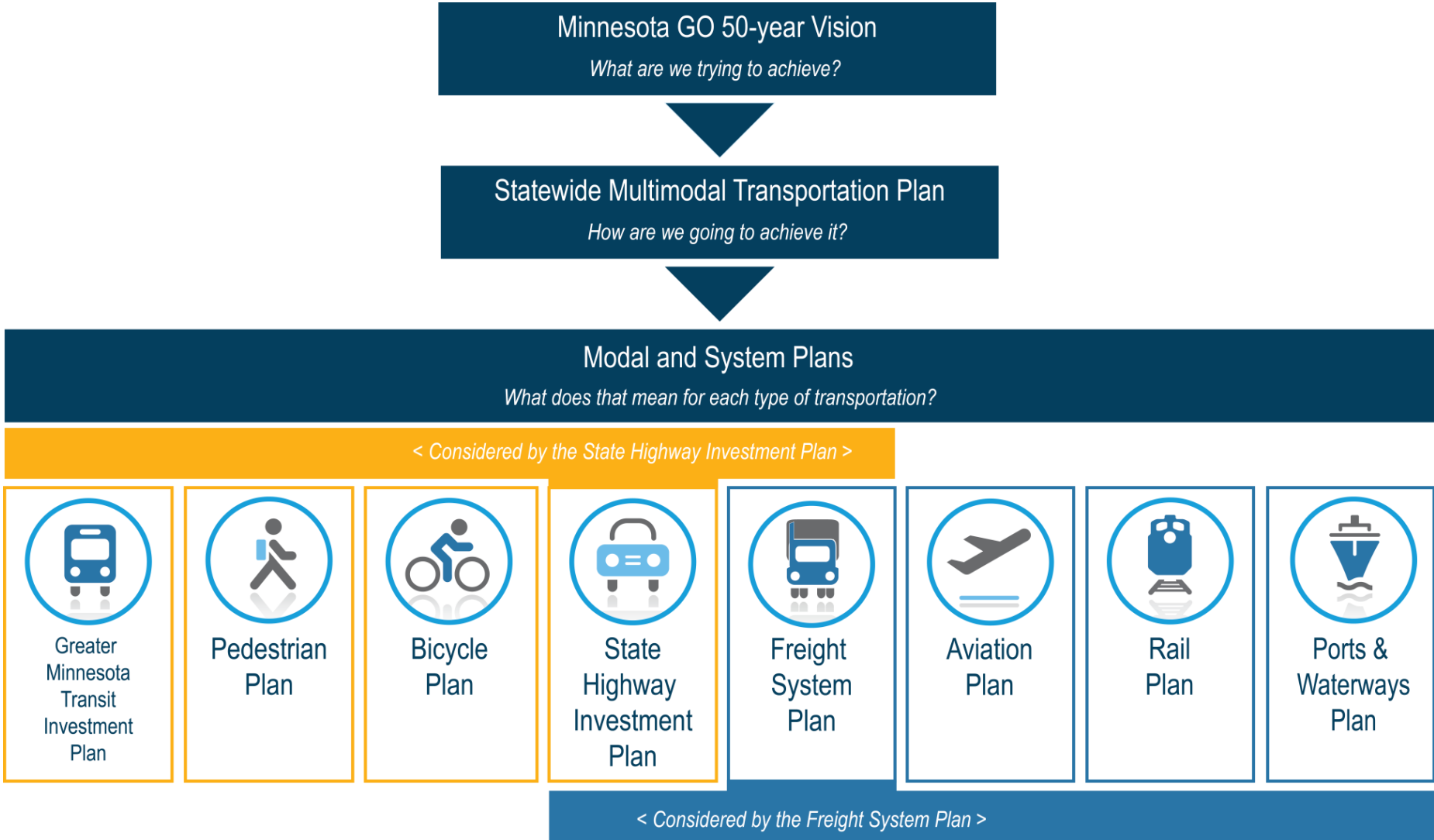
Minnesota **GO**
A Collaborative Vision
for Transportation



State
Aviation
System
Plan

Overview of the SASP and Project Schedule

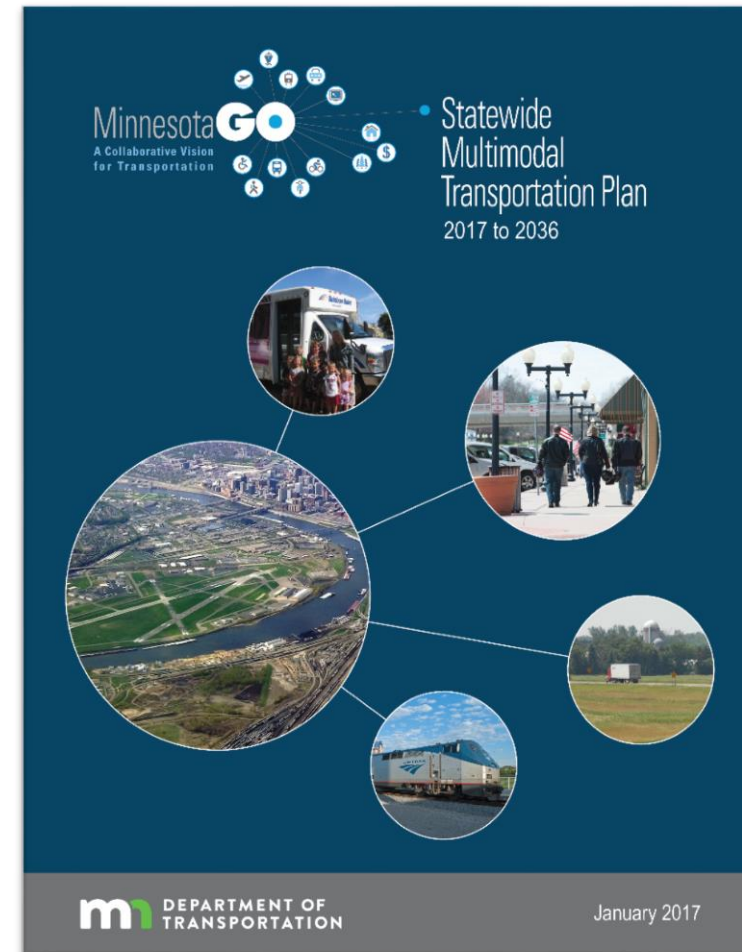
MnDOT Family of Plans



Statewide Multimodal Transportation Plan

What is the SMTP?

- Minnesota's highest level transportation plan
- Translates the Minnesota GO Vision into overarching policy direction for MnDOT and other transportation partners
- 20 year plan, updated every 5 years



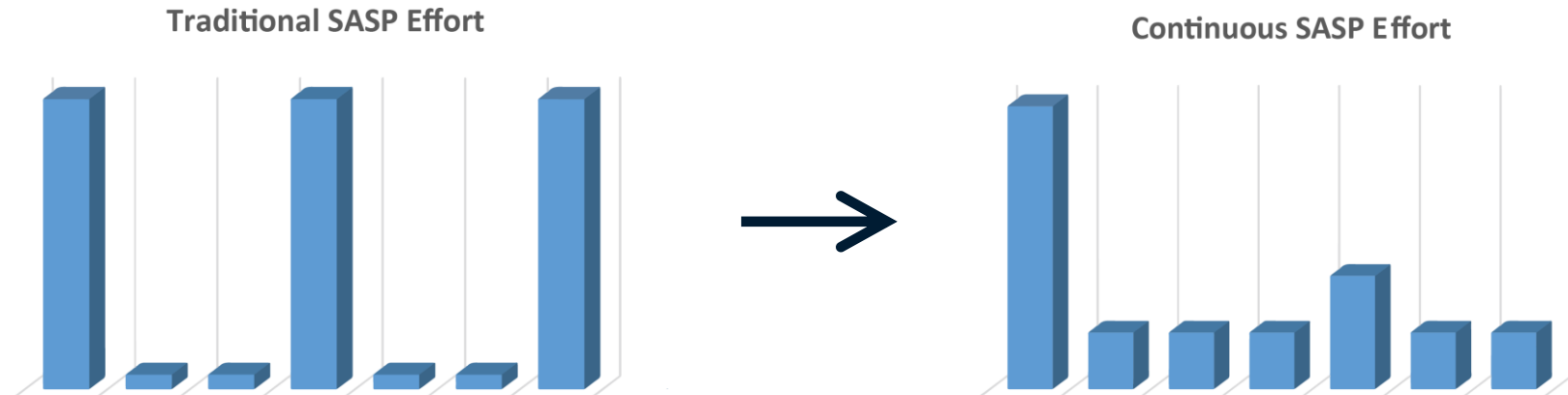
What is a SASP?

- “A description and assessment of the performance of the current aviation system as well as guidance for the future development of aviation in Minnesota.”
- Provides a 20-year direction
- Identifies needs of the system



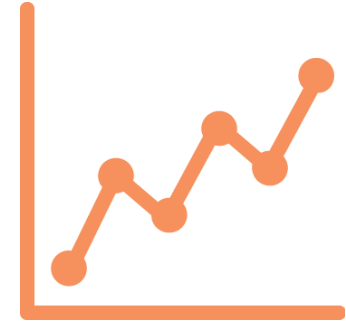
Assessment of Prior Efforts

- Progress on goals/strategies
- Identify Strengths/Weaknesses of 2012 SASP
- Move to Continuous SASP
 - Data always current
 - State of system is always known
 - Leverages existing work



Trends Identification

- Trends affecting the aviation industry will be identified
- Brief summary of trends prepared
- This will help guide the development of metrics



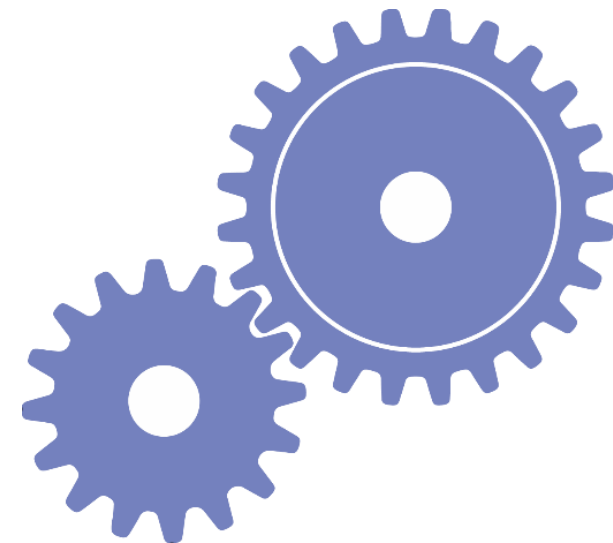
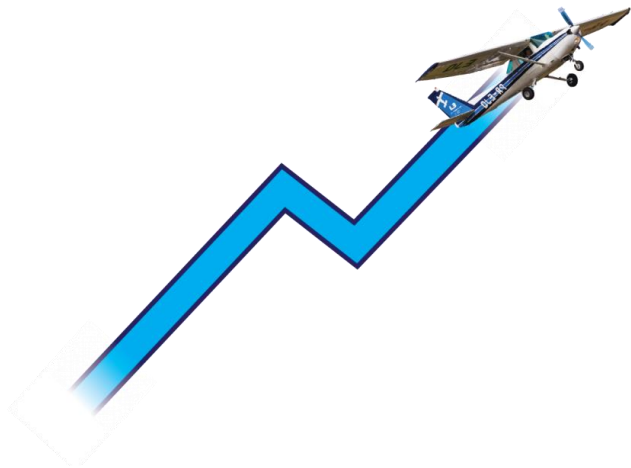
Airport Classification Review

- Defines the system (private, heliports, seaplane, etc.)
- Determines best way to group airports
- Provides common performance metrics



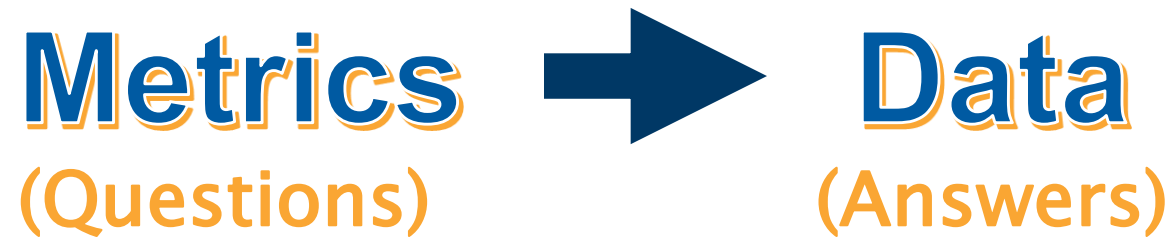
Minimum System Objectives / Performance Measures

- Well defined criteria for measuring the system
- Identifies gaps where investment needed
- Builds tension in the system to improve



Inventory Needs and Methods

- What data is needed to deliver Minimum System Objectives/Performance Measures
- Where the data comes from and who is to seek it out



- Collect the data identified in Phase 1
- Publish the SASP
- Minnesota Airport Economic Impact Study
- Assess need and plan for implementing statewide
 - Pavement Management Plan
 - Airports GIS
 - Vegetation Management Plan

Statewide Ancillary Studies

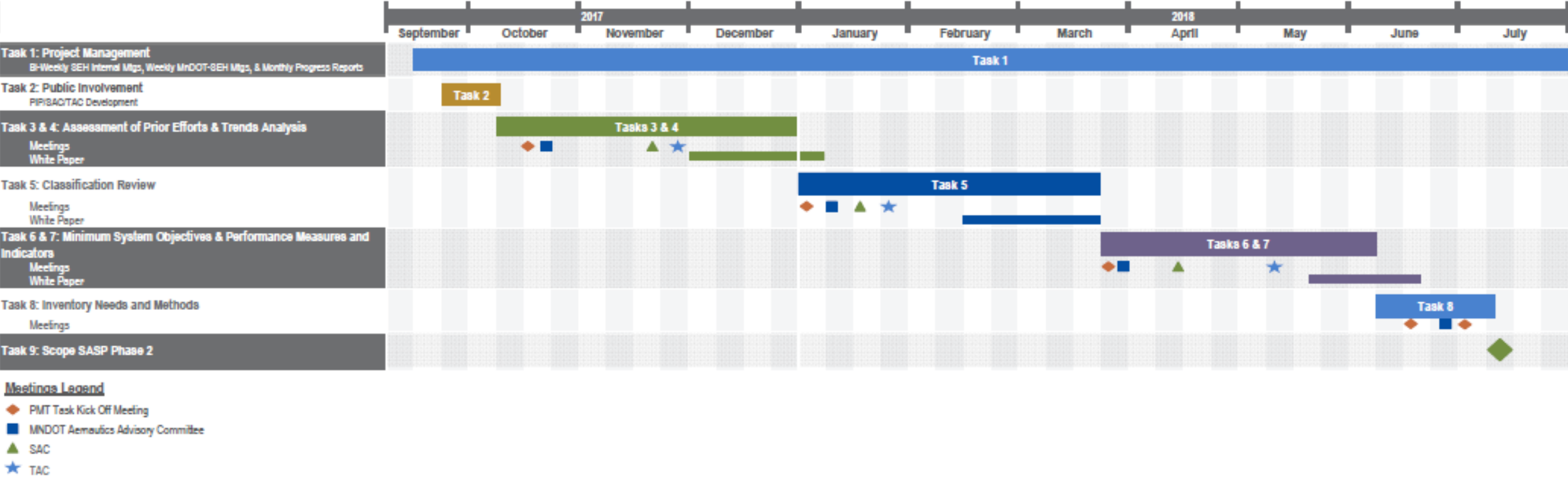
- Possible statewide ancillary studies
 - Air Cargo
 - Air Service
 - Investment Planning
 - Asset Management
 - Economic Impact
 - Others?
- Other discussed in the past
 - Statewide NavAids Plan
 - Aviation Towards Zero Deaths Plan
 - Statewide Pavement Management Plan
 - Statewide GIS Plan
 - Land Use Compatibility Plan
 - Airport Road Access Study
 - Statewide Vegetation Management Study

SAC Ancillary Study Importance Rankings

- 1 Investment Plan:** A 20-year plan for deciding and communicating aviation capital investment priorities for MN's system over the next 20-years
- 2 Economic Impact Study:** A comprehensive study and assessment of aviation's impact on state and local economies.
- 3 Asset Management Plan:** A guide to maximize airport infrastructure management through analysis of life-cycle costs, risk evaluation, and identification of asset condition performance measures and targets.
- 4 Air Service Study:** A statewide study of commercial aviation needs and the various factors influencing air service trends and passenger leakage (choosing another airport over their local one)
- 5 Air Cargo Study:** A study to better understand the role and contribution of Air Cargo in Minnesota
- 6 Other**



Minnesota Continuous State Aviation System Plan Phase I Schedule



Phase 1 Schedule



Public Involvement Plan

PIP Philosophy

- Mission: Make the SASP more relevant to more people more of the time
- The users of the SASP know how it could be improved and non-users know what would make it more useful
- The plan will be better for knowing these ideas



Advisory Committees

Advisory Structure

- MnDOT Internal Advisory Group
- SASP Advisory Committee (SAC)
- Technical Advisory Committee (TAC)
- Aviation Consultant Workshops



SASP Advisory Committee (SAC)

- SAC's Purpose - help set policy direction for the SASP
- Generally help decide:
 - what the SASP should and shouldn't look at
 - what things the SASP should and shouldn't be measuring
 - come up with a strategic direction for the SASP



Contrasted with...

SASP Technical Advisory Committee (TAC)

- TAC's Purpose - take the policy directions provided by SAC and turn it into a specific roadmap for SASP success
- When the SAC suggests a certain performance measure, it is the TAC that will define the terms of the measure, and set the bar of success for that measure

Some examples of how that might play out...

Some examples that might play out:

SAC = Strategy Objectives

TAC = Strategic workplan to achieve objectives



SAC = measure system adequacy of airport zoning

TAC = adequacy means an ordinance that meets 95% or state standard

SAC = The SASP should further define intermediate airports into multiple categories

TAC = Intermediate airports less than 3,000' are I-1, 3,000-3,800 I-2, 3.800'-4999', I-3



Assessment of Prior SASP

Task Overview

- Progress on goals/strategies
- Identify Strengths/Weaknesses of 2012 SASP
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Anatomy of the SASP

Objective

What it is:
High-level goal statement

Applicable to:
All aviation partners

Timeframe:
20 years

Performance Measure

What it is:
Metric used to track progress toward the objective

Applicable to:
Varies by measure

Timeframe:
Reported annually

Strategy

What it is:
Overarching direction to support the objective

Applicable to:
Varies by strategy but generally includes multiple partners

Timeframe:
20 years

Work Plan

What it is:
Specific activities that help advance the objective and strategies

Applicable to:
MnDOT Aeronautics

Timeframe:
4 years

Anatomy of the SASP

Discussed Today

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Anatomy of the SASP

Discussed at a Future Meeting

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SASP 2012 Objectives

- **Safety**
 - Enable development of Minnesota's aviation system to minimize and/or reduce aviation fatalities and injuries and also enhance the overall safety of airport operations
- **Mobility**
 - Ensure the people and businesses of Minnesota have convenient access to the air transportation network
- **Financial Opportunity and Responsibility**
 - Improve system airports' ability to become more financially sustainable, attract appropriately planned economic development opportunities, and fit into the context of the community from which it receives support
- **Operations**
 - Ensure the system is operated in a manner that users can rely upon
- **Asset Management**
 - Ensure the structural integrity of existing airport infrastructure to meet the needs of the current system without compromising future needs

SMTP Policy Objectives

- **Open Decision Making**
 - How we make decisions, who is involved and how we communicate those decisions
- **Transportation Safety**
 - Safety of users of the system and the communities the system travels through
- **Critical Connections**
 - Availability and reliability of connections for all modes
- **System Stewardship**
 - Asset management, system management and system resiliency
- **Healthy Communities**
 - The relationship between transportation and the environment, economy, health, land use, etc.

SAC Discussion Outcomes

- What we heard:

- Move from 'mobility' to 'accessibility'
- Safety can sometimes overshadow the importance of other objectives
 - Safety is ingrained in many parts of aviation; however, not yet in drones.
- Focus on system stewardship
- Environment
- Resiliency
- Integration of emerging technologies (could be part of resiliency idea or stewardship)
- Looking towards the future

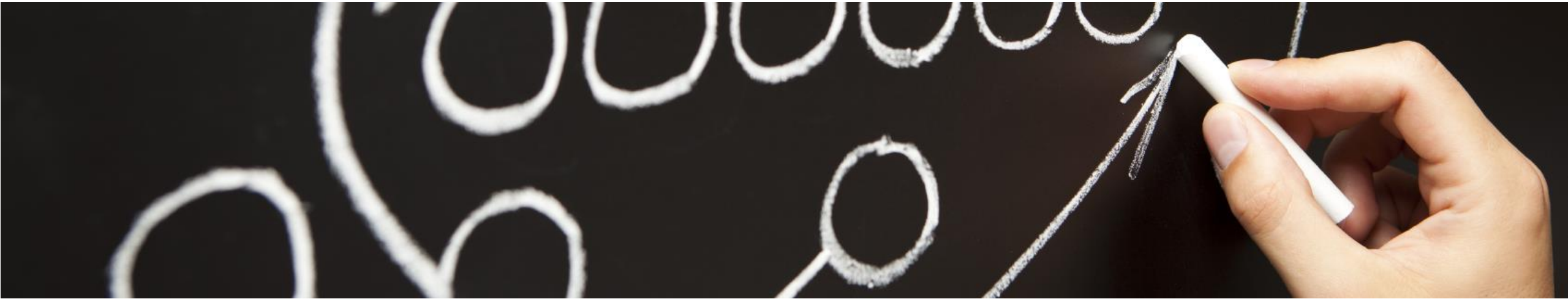
- Themes of:

- Education
- Workforce Development
- Environment





Break



SASP Strategies

Review - Anatomy of the SASP

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Review of Strategies for 2012 Objectives

Safety | Mobility | Financial Opportunity and Responsibility | Operations | Asset Management

Do you agree with how we rated ourselves?

Review of Strategies for 2012 Objectives

Safety | Mobility | Financial Opportunity and Responsibility | Operations | Asset Management

Discuss importance of each Strategy moving forward

- *Rank them most to least, or identify 3 best and 3 to eliminate, etc.*





Trends

Task Overview

“Minnesota is changing. Future changes will create new demands on the transportation system. Learning about these changes is a vital part of planning a safe and efficient transportation system. The Minnesota GO Vision calls for a transportation system that can adapt to whatever the future might hold.”

What is a trend?

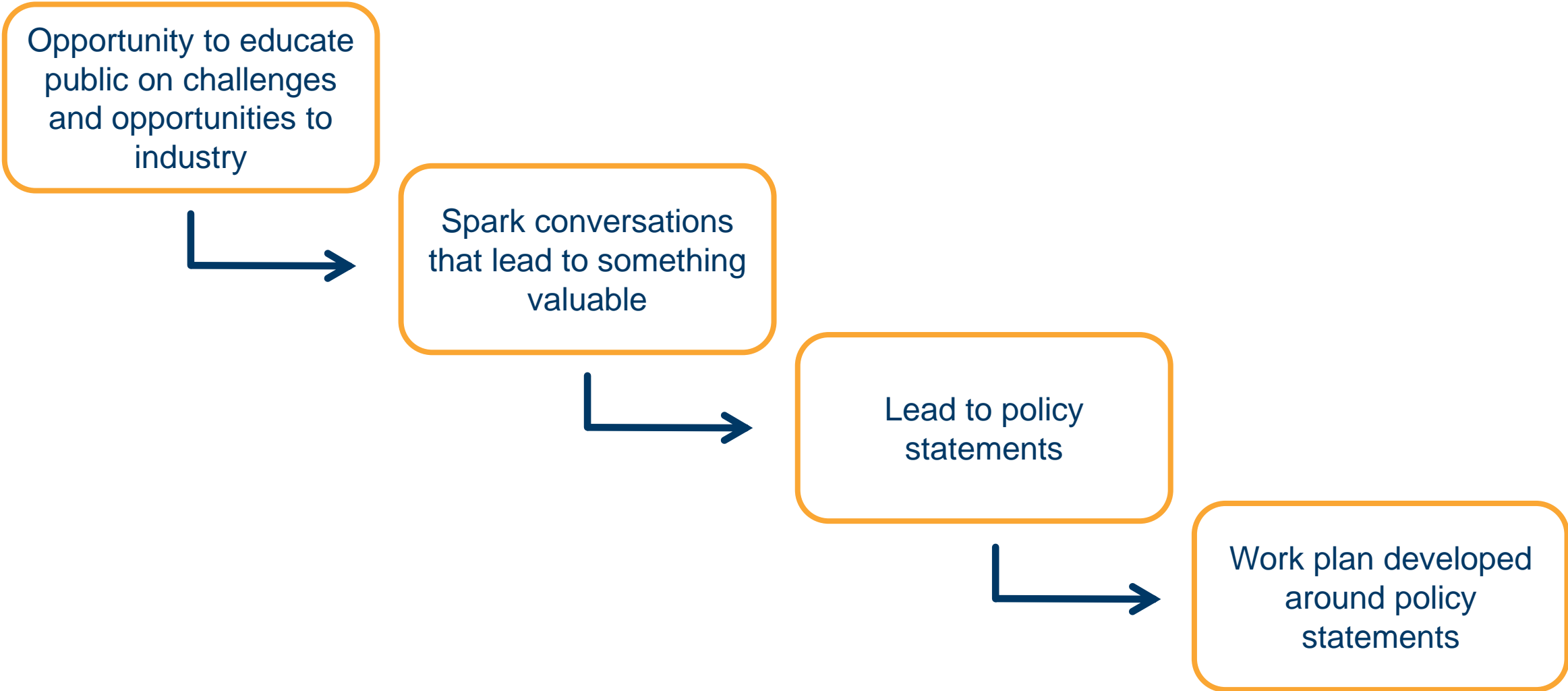
- “A general direction in which something is developing or changing.”
(Google)
- Historical context and future projections
- Problem v. Trend
 - Problem: We have a lot of pavement in poor condition
 - Trend: Our roadway infrastructure is aging and condition will continue to worsen

Why did the SMTP use Trends?

How we used trends:

- Trends highlighted key topics for the SMTP to address
- Engagement helped prioritize among topics and identify areas of emphasis
- Technical and policy analysis related to trends helped to refine the SMTP policy direction and work plan activities

Influence of Trends



Full trend reports and summaries available at:

www.MinnesotaGO.org



Urban & Rural Population Trends

Minnesota is becoming increasingly urban, and not only in the Twin Cities metropolitan area. While the percentage of Minnesotans living in the Twin Cities is growing, so too is the percentage of Minnesotans living in Greater Minnesota's cities and towns, leading to a larger urban population statewide. According to the 2010 census, 73.3 percent of Minnesotans live in urban areas.¹

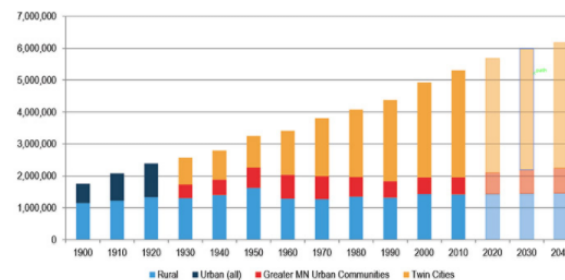
Population Distribution

Understanding how Minnesota's population has been split between the Twin Cities, Greater Minnesota urban communities, and rural areas in the past provides clues as to where people in Minnesota are choosing to live. The total population of Minnesotans living in rural areas has remained relatively consistent since 1900. On the other hand, Minnesota's urban population has consistently grown since the beginning of the 20th Century, making up a larger and larger percentage of the state's total population. The state demographer projects that the majority of Minnesota counties will grow in population over the next 30 years, with concentrated growth around the Twin Cities metropolitan area. This information is shown in Figure 1.

Read the full report

- Summary: Urban and Rural Population Trends
- Full Report: Urban and Rural Population Trends

Figure 1: Minnesota's population distribution, 1900-2040²



CITATIONS

- Census data file analysis
- US Census Bureau

SMTTP 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

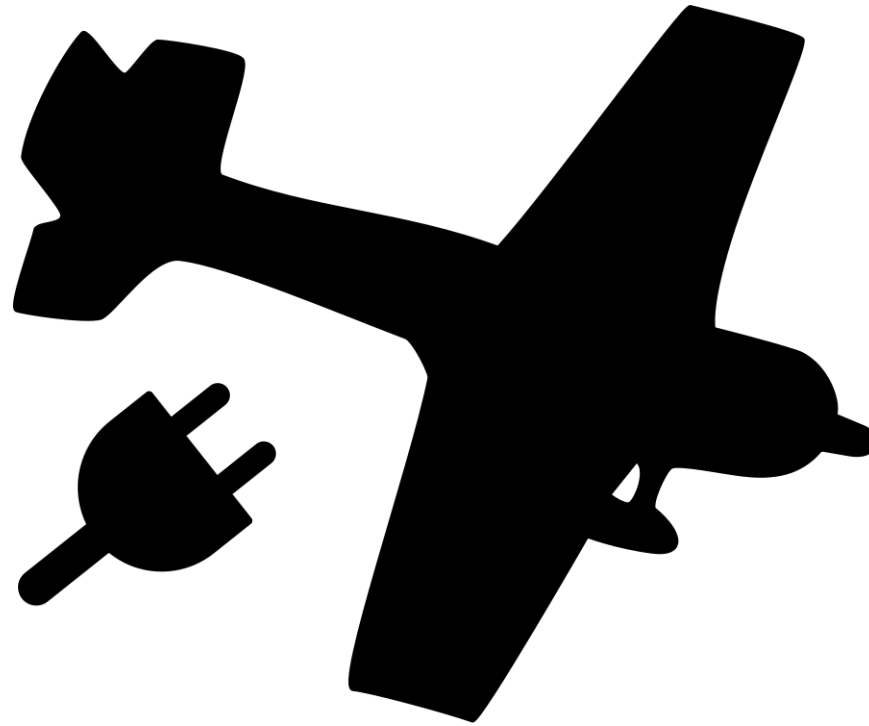
POPULATION

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



Aviation Trends collected thus far...

Environment

- Community development encroaching on airports

Aviation Trends collected thus far...

Behavior

- Pilot Shortage
- Commercial service trends
- Essential Air Service
- FAA's introduction of unclassified airports
- Increased specialization impacting workforce
- Rigorous pilot licensing requirements
- Increased demand for expedited cargo delivery

Aviation Trends collected thus far...

Population

- Pilot Shortage
- Commercial service trends
- Lack of qualified mechanics

Aviation Trends collected thus far...

Economy

- Increased cost of becoming a pilot
- Increased airport funding needs
- Aging aircraft
- Increased airport project costs
- Changing Fed/State/Local funding levels
- Use of bonding to fund airport projects

Aviation Trends collected thus far...

Technology

- Drones
- Fleet changes
- Fuel type changes
- Shift from ground to satellite navigation

Aviation Trends collected thus far...

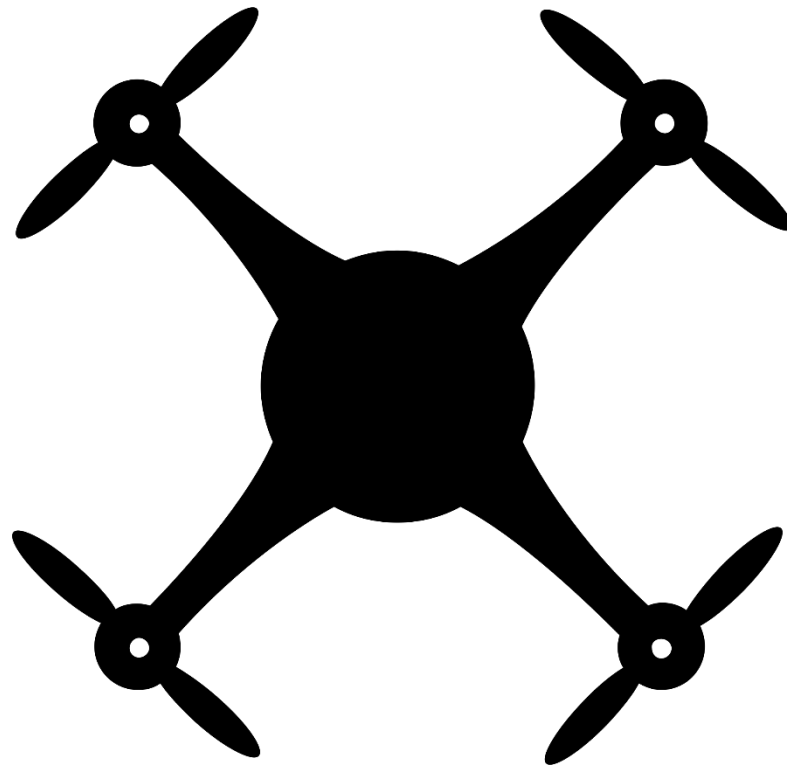
Community development encroaching on airports
ENVIRONMENT

Pilot Shortage
Commercial service trends
Essential Air Service
FAA's introduction of unclassified airports
Increased specialization impacting workforce
Rigorous pilot licensing requirements
Increased demand for expedited cargo delivery
BEHAVIOR

Pilot Shortage
Commercial service trends
Lack of qualified mechanics
POPULATION

Increased cost of becoming a pilot
Increased airport funding needs
Aging aircraft
Increased airport project costs
Changing Fed/State/Local funding levels
Use of bonding to fund airport projects
ECONOMY

Drones
Fleet changes
Fuel type changes
Shift from ground to satellite navigation
TECHNOLOGY





Next Steps

In the meantime

- Pilot Focus Group – December 7th
- Assessment of Prior Efforts White Paper
- Trends White Papers

- Meeting recap
- Next Meeting – January 31st
 - Agenda Topics (Airport Classification Review)
 - Preferences? (duration, time of day)
- Public Engagement
 - Other groups for our ‘Additional Outreach’?

Thank you!

