MnSASP Phase II Scope of Work

MnDOT’s Office of Aeronautics (Office) has completed Phase I of the Minnesota State Aviation System Plan (MnSASP, SASP) update. Phase I included an extensive Public Involvement Plan and tasks that resulted in a number of recommendations to carry into the Phase II effort. Phase I built the framework upon which the MnSASP would be built. This framework sets the stage for a continuous SASP which strives to keep data current at all times to better track performance metrics and share progress towards those metrics with aviation stakeholders.

The Selected Responder will complete the following tasks:

Task 1: Validate Recommendations and Deliverables from Phase I

1.1 For this task, the selected responder will review the recommendations, public comment record and all deliverables developed in Phase I for project understanding and validation. This will allow the selected responder to be in a position to provide a valuable second opinion on moving forward. These deliverables will be evaluated to avoid unintended consequences. This exercise will consider scenarios that result in negative outcomes for the aviation system and amend recommendations accordingly.

**Deliverable:** White paper summarizing any recommended changes to Phase I deliverables

Task 2: Analyze Policy Issues

There are a number of issues for which the Office of Aeronautics has no policies or well-defined systems to address. In this task, the selected responder will analyze these issues and provide policy and process recommendations, so the Office is able to provide information to customers in a timely manner. As an example, a recommendation can suggest that the Office conduct rule-making or change statutes. The following is an example list of issues that may be considered. The final list will be determined during project scoping after the contract is awarded.

**Deliverable:** Policy and Process recommendations white paper documenting analysis and recommendation for each selected policy issue

- **a. Operations Counting and Forecasting**

  Obtaining an accurate count of the operations at General Aviation airports has long been difficult. MnDOT has experimented in the past with various means of estimating traffic levels. The Office desires a systematic method to generate a planning-level estimate of operations numbers at non-towered airports.

  Further, it is difficult to forecast activity levels when data on historic and current levels are suspect. Once a systematic method is developed for determining a planning-level estimate of operations is determined, we can then estimate how those levels are likely to change in the future.
b. Residential Through the Fence

Residential Through-the-Fence operations, commonly referred to as “airparks” are perennially proposed to the Office. Historically, the Office has been opposed to these developments, but the Office lacks clear rules to support this position. Since publishing the last SASP, the Federal Aviation Administration (FAA) now supports this type of public airport and has developed the Residential Through-the-Fence Access Toolkit. This analysis will provide the pros and cons of Through-the-Fence operations and provide policy recommendations.

c. Hangar Availability and Funding Participation

Phase I of the SASP identified hangar availability as an issue at many state airports. FAA grant assurances requires airports to strive for self-sufficiency, yet FAA and State programs fund “revenue generating” projects with less desirable participation rates and low prioritization. This analysis will evaluate the pros and cons of further improving the hangar loan program, improving participation rates, and exploring other ways to help airport fund hangar improvements, provide needed aircraft storage, and become more self-sufficient.

d. Airport Closures

Some airport communities no longer find airport investments worthwhile, and instead, request an airport closure. The Office has difficulty balancing the mission of promoting aviation with reducing investment in unwanted facilities. While the Office has procedures to assist communities in closing their airports, the decision making process needs improvement. The selected responder will develop recommendations to revise airport closure procedures to meet statutory requirements, make the process more transparent and responsive, and analyze impacts to the system so that the Office can make well informed decisions.

e. Crosswind Runway Analysis

The FAA has changed funding justification criteria for crosswind runways so that it is nearly impossible to justify a crosswind runway. Communities are increasingly turning to the state to fund crosswind runways that are needed, but not fundable through FAA. The selected responder will develop a decision making model that will take into account local wind coverage needs as well as system needs to aid the Office’s decision making process with regards to eligibility and justification for state-funded crosswinds.

f. Clear Zone Policy and Ownership Analysis

The Office has long had a Clear Zone Policy. Despite this policy’s longevity, there is continued confusion to the requirements of the policy, how it is used in practice, and the level of conformance to the policy. The Office studied Clear Zone ownership in 2016, but has not kept this data current. The selected responder will interpret and develop guidance on the policy to increase office consistency in its application. The selected responder will also update the study conducted in 2016 to determine the current level of compliance with the policy, in terms of clear zone ownership and the type of ownership (fee, easement).
g. Drones

Drones, also known as Unmanned Aerial Systems (UAS), Remotely Piloted Vehicles, and others, have been an emerging topic since the 2012 SASP was published. There is intense interest in how the next SASP will include drones, and how drones will ultimately be incorporated into the National Airspace System. The selected responder will develop policy recommendations to help the Office remain at the forefront of this emerging technology.

h. Last Mile Connection Opportunity

Airports are seldom the final destination for airport users. It is vitally important that pilots and passengers have access to surrounding communities. Access to ground transportation via a courtesy car is a preferred method for accessing communities from airports. In addition to courtesy cars, other modes of travel such as transit, ride-sharing, biking, and walking provide vital links to communities. The selected responder will perform an analysis to determine the level of community multi-modal access and develop recommendations for increased mobility, including courtesy car funding, state purchase of vehicles, trail connectivity to airports, and best practices from other states.

i. Spaceport and Hypersonic Feasibility Analysis

Technological advancements in space travel have resulted in horizontal launch spaceport opportunities being considered in states and regions that were never historically considered due to their position on Earth. However, spaceports are now being considered at much higher latitudes (i.e. Colorado). In addition, hypersonic aircraft are being developed that could greatly reduce travel times. These technologies are now national conversations and have the potential to disrupt the aviation industry.

The selected responder will conduct a planning-level analysis to review Minnesota’s existing airport facilities and evaluate them against known horizontal launch requirements (e.g. runway length) and anticipated limitations on hypersonic aircraft. Locations of existing aerospace industry clusters will also be considered in the analysis.

Task 3: Advise on Navigational Systems Plan

Minnesota owns and operates a robust system of Navigational Systems. These include weather, navigational aids, and lighting systems that aid pilot navigation at airports. Some of these systems are being phased-out in favor of satellite based systems. The Office has conducted an inventory to identify the number and types of navigation systems owned by the State. The selected responder will advise the Office in refining plans for the future of these assets. The plan could include decommissioning considerations, replacement and modernization planning, installation and funding planning, consideration of transfer of FAA facilities scheduled for decommissioning (VOR MON), and other decision making tools to help the Office manage its system of navigational systems.
**Task 4: Validate and Modify Phase I Data Acquisition Plan**

Data acquisition is costly and time consuming. It is important that only relevant data is collected, while ensuring that all relevant data has been accounted for. The selected responder will examine the Data Acquisition Plan developed during Phase I. The Data Acquisition Plan may need to be updated to reflect any changes that may occur in performance of Task 1. There may also be data requirements to properly perform the analyses of issues analyzed in Task 2.

**Deliverable:** Updated Data Acquisition Plan to reflect changes identified in Task 1 and identified in Task 2

**Task 5: Acquire data**

This task involves collecting the data required for the SASP. The selected responder will execute the updated Data Acquisition Plan developed in Task 4.

**Deliverable:** A database with current data

**Task 6: Develop Data Management Plan**

Keeping data current is vital to ensure it can be used for decision making. This task involves developing a Data Management Plan that identifies the official source of data, who is charged with collecting and maintaining data, and how often the data should be updated.

**Deliverable:** A comprehensive data management plan

**Task 7: Develop and Deliver Database System and Display Dashboard**

The Office holds accountability as a core value. Accountability is achieved through transparency and the sharing of information. To fully realize the benefits of the new continuous SASP concept, data must be accessible by all stakeholders. A database system that is capable of displaying performance metrics in an easy to understand format is critical. The Phase I effort identified a number of features desirable of a display dashboard:

- Multiple modules to provide different functions including: Capital Improvement Program (CIP), Airport Layout Plan (ALP) review, Performance Metric visualization, airport project prioritization, etc.
- Remote log-in infrastructure capable of assigning access levels to various modules
- End-user manipulation so the Office is able to make changes to data and data display

For this task, the selected responder will develop and deliver a system capable of delivering this feature set.
Task 8: Conduct Public Involvement

Phase I included extensive public involvement. This was designed to better understand the needs of users of the system in order to develop the framework for Phase II. Phase II will largely consist of validating and executing the plans developed as part of Phase I. Therefore, public involvement will look very different from Phase I. At a minimum, formal adoption of the SASP requires a public comment period so that the public may provide feedback on the State’s Vision for aviation. The selected responder will support the Office with statutory and agency requirements for a public comment period and hearings, including other related activities.

Task 9: Produce and Publish MnSASP Document

Ultimately, the MnSASP is a document. The document will live online as a webpage, and the information in it must be relevant, simple to access and navigate, and easy to consume for the public at-large, as well as for specific stakeholders. Essential themes of the SASP should be communicated by graphics, charts, and table as often as possible. For this task, the selected responder will produce a document that is suitable for upload to MnDOT’s website to include individual pages with the necessary charts, graphics, and links to make the SASP accessible to all. A format suitable for printing must also be developed.

Task 10: Develop Implementation Plan

The implementation plan is how the MnSASP is transformed from a concept on a shelf into a future that is different from the status quo of today. The selected responder will develop an implementation plan that considers all the other tasks of this effort. The implementation plan should encompass a number of parts including:

a. Investment and Scenario Plan

An Investment Plan will ensure that the objectives and strategies identified in the plan will be achieved through targeted investment in airport infrastructure. The investment plan may consider project prioritization and selection as well as how to best manage airport assets. Scenario planning will be utilized to identify and consider projections and forecasts relating to planned investments, expected funding resources available, and other factors which may not be guaranteed in the future.

b. Policy Plan

The Policy Plan identifies a number of policies that MnDOT Aeronautics should update or develop to more fully realize the goals of transparency and accountability. Policies may be needed to address the issues that were studied through the project or to more effectively and transparently communicate current practices. The Policy Plan may call for rules or statute changes.
c. Action (Work) Plan

The Action Plan identifies other work items for the Office and stakeholders that aim to achieve the objectives and strategies of the plan. It could identify additional items that would improve system performance, based on measures, or other means of increasing the Office’s response to customer needs. It should also identify follow-on planning studies that will fully develop the Office’s “family of plans.”

**Deliverable:** A comprehensive Implementation Plan

### Deliverable Standards

#### Plain Language and Accessibility Standards

**Plain Language.** Except for designs, plans, layouts, maps and similar documents, the successful responder must provide all deliverables in “Plain Language”. Executive Order 14-07 requires the Office of the Governor and all Executive Branch agencies to communicate with Minnesotans using Plain Language. As defined in Executive Order 14-07, Plain Language is a communication which an audience can understand the first time they read or hear it. To achieve that, the successful responder will take the following steps in the deliverables:

- Use language commonly understood by the public;
- Write in short and complete sentences;
- Present information in a format that is easy-to-find and easy-to-understand; and
- Clearly state directions and deadlines to the audience.

**Accessibility Standards.** Except for designs, plans, layouts, maps and similar documents, the successful responder agrees to comply with the State of Minnesota’s Accessibility Standard (https://mn.gov/mnit/assets/Stnd_State_Accessibility_tcm38-61585.pdf) for all deliverables under this contract. The State of Minnesota’s Accessibility Standards entail, in part, the Web Content Accessibility Guidelines (WCAG) 2.0 (Level AA) and Section 508 of the Rehabilitation Act, as amended. The successful responder’s compliance with the State of Minnesota’s Accessibility Standard includes, but is not limited to, the specific requirements as follows:

- All videos must include closed captions, audio descriptions and a link to a complete transcript;
- All documents, presentations, spreadsheets and other material must be provided in an accessible format. In addition, the successful responder will provide native files in an editable format. Acceptable formats include InDesign, Word and Excel; and
- All materials intended for downloading and printing such as promotional brochures, must be labeled as such and the content must additionally be provided in an accessible format.