



Ten State Write-Up

Introduction

The Tennessee Department of Transportation Aeronautics Division (TDOT Aeronautics Division) initiated the development of the Tennessee Aviation System Plan (TASP) and companion Statewide Aviation Economic Impact Study to establish a systemwide inventory of needs as well as to provide context and justification of the continued development of the state's aviation system. Aviation planning takes place at all levels of government. At the state level, aviation planning is accomplished through statewide aviation system plans. Similar to other modal transportation plans, such as long-range statewide transportation plans, aviation system plans establish goals for the future development and operation of airport facilities and services that serve the general public. These goals are often established with the input of various stakeholders that provide context to the recommendations developed to meet system needs.

To ensure a thorough evaluation of the goals, objectives, and performance measures developed for the TASP, this effort began with a comprehensive review of all available state aviation system plans to review their goals, objectives, and performance measures prior to establishing those for the TASP. In total, 32 state system plans were reviewed for their applicability to the TASP goals, with approximately 31 states having at least one goal that was similar to a TASP goal(s) and 26 states having more than one goal that were similar to a TASP goal(s). This review enabled the project team to identify common themes in state aviation system goals, including safety and security, infrastructure investment and prioritization, economic impacts, and environmental impacts. Many state aviation system plans also stressed the need for matching aviation system plan goals with other department of transportation modal plan goals, where applicable.

Once complete, the project team identified ten states with the most similar goals to the TASP. The project team then conducted interviews with these states to gather more information on how the goals were used, if they would use them again, and if they have any recommendations for enhancement. This review provides an overview of these interviews and provides a summary of each state's system plan and how their goals matched with the TASP goals.

Key Takeaways

The project team interviewed ten states, who ranged from having last completed an aviation system plan fifteen years ago to currently undergoing a system plan update. States approached their aviation system plans from a range of perspectives, including who was conducting the system plan, how the system plan was organized, and what the central purpose of the system plan was. However, there were several key takeaways that were common to several states' aviation system plans. These key takeaways, including how these takeaways can apply to the TASP project, are listed below.

- **Advisory Committees**

- Seven states used an advisory committee (AC) to help select project goals and provide input throughout the life of the project. In speaking with representatives from states that used advisory committees to determine their goals, most said they were satisfied with the decision to do so. Using an AC to determine goals for an aviation system plan increases the "buy-in" on the plan's outcomes and implementation among members of the aviation community.
- Though not as common as the use of ACs, some states noted the idea of integrating the system plan with other modal office plans or DOT agencies.

These were noted to increase buy-in and support at the agency level as well as increase transparency in other DOT planning, design, and construction projects.

- The TASP can expect similar outcomes as the project team continues to engage with the AC throughout the life of the project. However, several states such as Alabama and South Dakota also discussed the difficulties that arise when the priorities of the AC and the priorities of the office running the aviation system plan do not align. In these instances, it is important that communication and collaboration remain open and ongoing to ensure everyone's priorities are met to the extent possible, and that the goals of the system plan are fulfilled. Although the TASP project team has not run into any major disagreements with the AC yet, it is important to remember these best practices, which may apply in the future.
- **Shifting Project Needs**
 - Several states, such as Alabama, Maine, Massachusetts, South Dakota, and Texas are currently updating or recently completed an update to their aviation system plan after not having done so for ten or more years. These states focused their discussion on how the needs of the aviation system have changed over time, and thus how the focus of the aviation system plan update must be reevaluated. For instance, Alabama and Massachusetts discussed how their current system plan updates were focused on “rightsizing” the aviation system and ensuring that state airports were meeting current user demands. Further, South Dakota discussed how the system plan update was an opportunity to focus on what data they wanted to collect and maintain in order to continue to monitor the efficacy of their system after the completion of the system plan.
 - The TASP project team has also begun the project from a new perspective, having created goals and performance measures that are meant to assess and address the current needs of the aviation system. The TASP project team should continue to assess the needs of the aviation system throughout the life of the project.
- **Successful Implementation of the Aviation System Plan**
 - States ranged in how they have implemented the goals of their system plans after the conclusion of the project. Some states, such as New York and Texas, did not actively implement or monitor their system plans. Other states, such as Wisconsin and Florida, continue to monitor the data collected through their system plan inventory process, through projects intended to update these data (Florida) or through a continuously updated GIS system (Wisconsin).
 - The TASP project team intends to monitor the implementation of their system plan goals after the conclusion of the system plan project. Therefore, the TASP project team should look to states like Florida and Wisconsin for methods on how to do so. The TASP project team can consider some of these methods to keep the system plan updated, either through a formal and periodic update of performance measures or through less formal means.
 - Additionally, numerous states noted the idea of making the goals and objectives of the system plan ‘actionable’ and not just to collect data without a clear action plan. When developing the TASP and the corresponding deliverables, focus should be given to identifying how data will be used, tracked, and updated to ensure that the goals and objectives of the project are truly actionable.

- **Better Engagement of Stakeholders**
 - Almost all states interviewed utilized some form of public involvement program that helped to guide the overall direction of the system plan. Though these stakeholder programs looked different depending on the project – they all sought to ensure that the perspectives of different users were accommodated within the planning effort.

Alabama Department of Transportation – Alabama Statewide Airport System Plan

Summary of System Plan

The Alabama Statewide Airport System Plan was last updated in 2005 (ALSASP 2005), and it was confirmed during the interview that the state is currently updating their plan. However, since the current update is still underway, this section and the interview focused primarily on the ALSASP 2005. The ALSASP 2005 was developed by the Alabama Department of Transportation Aeronautics Division (ALDOT). The purpose of the ALSASP 2005 is:

“...to create tools and processes that will help the general aviation system meet the needs of Alabama’s flying public and statewide economic development objectives.”

Alabama has a limited budget for aviation development, which is funded through a capped aviation fuel tax. Alabama’s aviation funding is also much less than those of surrounding states. Therefore, one of the ALSASP 2005’s main drivers was to prioritize this limited funding. Like the TASP, the first step of the ALSASP 2005 was to develop goals, objectives, and performance measures.

ALSASP 2005 Update Goals Compared to TASP Goals

Four goals were developed for the ALSASP 2005 based on updated federal guidance and the state’s priorities. As shown in the following table, all four of these goals matched TASP goals:

ALSASP 2005 Goal	Related TASP Goal
Goal #1: Provide safe and efficient transportation for people and goods.	Goal #3: Improve the safety and security of airport system users.
Goal #2: Protect the public and private investment in transportation.	Goal #1: Protect and preserve existing airport infrastructure by prioritizing airport system needs.
Goal #3: Provide an interconnected transportation system that supports economic development objectives.	Goal #5: Invest in the airport system and the aviation workforce to support economic growth and competitiveness.
Goal #4: Provide a transportation system that preserves the quality of the environment and enhances the quality of life for Alabama’s citizens.	Goal #4: Maximize federal, state, and local resources to meet the airport’s system needs and minimize environmental impacts.

Summary of ALDOT Interview

Meeting Date: May 11, 2020

Attendees: Frank Farmer, Aeronautics Manager, ALDOT

ALDOT Best Practices: A project AC is most helpful when they are providing meaningful input. The TASP project team should focus on meaningful engagement with the AC, through gathering targeted input and feedback that directly benefits the project's progression. While stakeholders such as the AC may have different priorities than the TASP project team or the state, the TASP project team should strive to incorporate all priorities. Several states, including ALDOT, discussed how the needs of the current system plan have changed in the years since a previous system plan, in this case over the course of fifteen years. Shifting needs necessitated a fresh look at project goals, performance measures, and development. ALDOT discussed how shifting system needs meant reevaluating the necessity of an AC. The TASP project team can learn from ALDOT's reevaluation of stakeholder input in light of shifting project needs. It is important to both include the priorities of a diverse set of stakeholders and to align TASP goals to the current state of the aviation system.

Overview of Discussion: Frank stated that the ALSASP 2005 goals were chosen through a combination of factors. In 2005, the Aeronautics Division had just moved to ALDOT, after previously being its own agency. Therefore, the system plan was a way to establish a baseline to evaluate the entire system as part of the state DOT and determine what the state's priorities would be. While the intent of the new system plan is different, the goals will remain largely the same. For ALSASP 2005, the project team had an Advisory Committee (AC) that provided input on the system plan goals. However, for the current update the project team decided to review the goals internally and then get input through a series of public meetings around the state. As a result, the project team is confident that the goals for both plans were chosen with the input of a diverse group of stakeholders.

The ALSASP 2005 developed a classification system for all the airports, which was used to determine limited funding prioritization. The state allocated money within airport classifications to make sure even less busy and smaller airports could receive some funding. The classification system, and continually evaluating airports against this system, has been the main way ALDOT has kept the system plan's goals and performance measures updated. The focus of the new system plan will be "rightsizing" the system. Frank stated that the new plan will be more interactive, allowing ALDOT to continuously update the system, performance measures, and objectives to keep track of all the airports.

Since the system plan is currently being updated, Frank was able to reflect on how they have improved upon the ALSASP 2005 in the current update. He stated that system plans reflect what is happening in the aviation environment and a state's priorities concerning the aviation system. Whereas the priority of ALSASP 2005 was assessing and maintaining the aviation system, Frank now says that those priorities may not have been the best use of the state's limited funds. Therefore, the plan is now focused on "rightsizing" and ensuring all areas of the state have access to aviation.

Application to TASP: Most states that used ACs were satisfied with their decision to do so. Frank stated that with the system plan update, ALDOT elected not to use an AC. He stated that this was because the project team preferred to accomplish outreach through a series of public meetings and get meaningful input, whereas his AC experience with the ALSASP 2005 was that

the AC would attend meetings but not provide meaningful input. The TASP project team can learn from ALDOT's ALSASP 2005 experience. The focus of the AC should be not only on attendance and participation but providing meaningful input that satisfies the necessity of gaining public input.

Frank also discussed the shifting priorities of the state over the fifteen years since the ALSASP 2005. Whereas the ALSASP 2005 focused on justifying the need for every airport in the system, the current plan is focused on "rightsizing." Similarly, the TASP has had to contend with shifting state priorities, as well as the priorities of a diverse number of stakeholders.

Florida Department of Transportation – Florida Aviation System Plan

Summary of System Plan

The Florida Aviation System Plan (FASP 2035) was last updated in 2017. The FASP was developed by the Florida Department of Transportation (FDOT) Aviation Office (AO) with assistance from the Continuing Florida Aviation System Planning Process (CFASPP). The FASP 2035 is described as:

“...a long-term strategic planning process designed to comprehensively assess all public-use airports in Florida to understand the relationships between these facilities and their unique users.”

Uniquely, the FASP 2035 addressed the state’s seven transportation districts (FDOT Districts) and positioned them as a focal point of the evaluation. The FASP 2035 also provided analysis at the CFASPP region level and within metropolitan areas. Like the TASP, the first step of the FASP 2035 was to develop goals, objectives, and performance measures.

FASP 2035 Update Goals Compared to TASP Goals

Seven goals were developed for the FASP 2035, using stakeholder input and based on updated federal guidance. As shown in the following table, three of these goals matched TASP goals:

FASP 2035 Goal	Related TASP Goal
Goal #1: Provide efficient, safe, and convenient service to Florida’s citizens, businesses, and visitors.	Goal #2: Provide an aviation system with available and cost-efficient transportation options for moving people and freight. Goal # 3: Improve the safety and security of aviation system users.
Goal #2: Contribute to operational efficiency, economic growth, and competitiveness while remaining sensitive to Florida’s natural environment and exhibiting social responsibility.	Goal #4: Maximize federal, state, and local resources to meet the aviation system needs and minimize environmental impacts.
Goal #3: Support and enhance the position of leadership and prominence held by Florida’s aviation industry.	N/A
Goal #4: Protect airspace and promote compatible land uses around public airports.	N/A
Goal #5: Foster technological innovation and support implementation of new technologies.	N/A

Goal #6: Promote support for aviation from business, government, and the public. N/A

Goal #7: Foster Florida's reputation as a military- and aerospace-friendly state. N/A

Summary of FDOT Interview

Meeting Date: April 29, 2020

Attendees: Mike McClure, Aviation System Manager, FDOT Aviation Office

FDOT Best Practices: FDOT has several methods through which they determine the progression of their goals and performance measures, most notably through an annual report. The TASP project team can also consider some of these methods to keep the system plan updated, whether through a formal and periodic update of performance measures or through less formal means. Additionally, the FASP 2035 focused on education and outreach, similar to the TASP. FDOT accomplished this outreach through the CFASPP meeting schedule; the TASP project team can accomplish this through periodic check-ins with stakeholders and through engaging the AC.

Overview of Discussion: Mike stated that the FASP 2035 goals were chosen through a combination of previous system plan goals, department brainstorming, and input from CFASPP meeting. CFASPP is FDOT's way of continuing to monitor the Florida aviation system by having a planning process that includes regular regional meetings with airport representatives, local governments, and consultants. The CFASPP meeting schedule allowed the project team to get information and input on the system goals, as well as the ability to visit airports and meet with representatives all over the state. As a result, the project team is confident that goals were chosen with the input of a diverse group of stakeholders.

FDOT conducts an annual FASP update report as means to keep their goals and performance measures data up-to-date. This report provides data updates for 44 performance measures and indicators that are practical to update annually. FDOT uses this information to inform projects and decision-making and will use this information to inform the goal decision-making process for the next system plan. FDOT also tracks goal progress informally through team meetings in their central office and monthly "task team" meetings with FDOT District coordinators. The FDOT central office and districts meet monthly. Finally, FDOT maintains a central data repository called the "Florida Aviation Database," which, among other data, maintains data relevant to the FASP 2035.

Given the chance, FDOT would determine goals and performance measures slightly differently. Mike stated that he would trim the number of performance measures and focus instead of tailoring deliverables to specific audiences. Mike wants the plan to be something that is useful to Districts and airports day-to-day, and that can be used as a marketing tool in local communities.

Application to TASP: FDOT stated that education and outreach about the FASP 2035 prior to its implementation, primarily through the goal decision-making process but also through continued outreach with CFASPP, has been instrumental in successfully implementing the plan's goals. The TASP project also has an emphasis on education and outreach about the plan, through public participation activities, the Advisory Committee (AC), and the project website. The TASP project team can learn from the successes of FDOT's outreach to fortify its own outreach efforts.

Maine Department of Transportation – Maine Aviation Systems Plan

Summary of System Plan

The Maine Aviation Systems Plan was last updated in 2006 (MASP 2006), and it was confirmed during the interview that the state is currently updating their plan. However, since the current update is still in the planning phases, this section and the interview focused on the MASP 2006. The MASP 2006:

“...provides a general assessment of aviation needs within the State. This Update provides a blueprint for future airport-specific planning that may be undertaken for airports throughout Maine.”

The MASP 2006 was conducted in three phases, with the first phase being the establishment of system goals. The development of the system goals for the MASP 2006 was similar to the process behind choosing the TASP goals, as described:

“To guide the development of the Systems Plan Update, a Project Advisory Committee (PAC) was established....this Committee met to discuss and identify goals for the Maine Airport System. A workshop for the Project Advisory Committee was held in March 2001. At this workshop, the Project Advisory Committee provided valuable input into the identification and refinement of goals for the Maine Airport System.”

Similar to the first TASP AC meeting where the TASP goals were discussed, edited, and confirmed, the MASP 2006 goals were chosen by a PAC. The PAC held a workshop in March 2001 to identify and confirm MASP 2006 goals.

MASP Update Goals Compared to TASP Goals

Seven goals were developed for the MASP 2006, using federal and state objectives, input from the PAC, and MaineDOT staff, and considering the goals of the prior system plan. As shown in the following table, five of these goals matched TASP goals:

MASP Goal	Related TASP Goal
Goal #1: To promote an airport system that improves Maine’s quality of life by supporting health, welfare, and safety-related services and activities.	Goal #3: Improve the safety and security of airport system users
Goal #2: To have an airport system that adequately serves current and forecast demand	Goal #1: Protect and preserve existing airport infrastructure by prioritizing airport system needs
Goal #3: To encourage and recognize system airports that support aviation programs and outreach opportunities in Maine.	N/A

Goal #4: To provide for a safe airport system, as measured by compliance with applicable FAA standards.

Goal #3: Improve the safety and security of airport system users

Goal #5: To advance a system of airports that is supportive of Maine's economy, ensuring that the airport system is matched to Maine's socioeconomic and demographic characteristics

Goal #5: Invest in the aviation system and the aviation workforce to support economic growth and competitiveness

Goal #6: To protect and support an airport system that maintains flexibility to respond to changes in future needs in Maine, while considering the environment

Goal #4: Maximize federal, state, and local resources to meet the aviation system needs and minimize environmental impacts

Summary of MaineDOT Interview

Meeting Date: February 27, 2020

Attendees: Mary Ann Hayes, Multimodal Planning Division Manager at MaineDOT

MaineDOT Best Practices: The TASP can primarily benefit from the difficulties of maintaining and implementing the MASP 2006 goals. MaineDOT stressed that the plan was not useful because it did not take monitoring and implementation of the goals into consideration. By prioritizing goal implementation, the TASP project team can ensure the plan's usefulness. Several states, including MaineDOT, discussed how the needs of the current system plan have changed in the years since a previous system plan, in this case over the course of fourteen years. Shifting needs necessitated a fresh look at project goals, performance measures, and development. MaineDOT discussed how shifting system needs meant reevaluating the structure and goals of the system plan itself. The TASP project team can learn from MaineDOT's reevaluation of the system plan's purpose. It is important to include stakeholder and project team input, while ensuring the TASP is useful in years to come.

Overview of Discussion: Mary Ann stated that the DOT has not used or reevaluated the goals identified in the MASP 2006 and, due to problems with its implementation, no longer consider the plan useful, though she noted that Maine DOT is currently undergoing an update to their system plan.

While the goals of the previous plan may still apply, and while useful and applicable data will be transferred over to the new plan, Mary Ann stated that the new plan is focused on "rightsizing" the airport system and taking a fresh look at the current status of the airport system. In reflecting on how they would have done the plan and goals identification differently, Mary Ann stated that the process behind choosing the goals, which was similar to the TASP process, was beneficial, however, they would prefer to focus on a dynamic document that changes with the needs of the system, rather than a static document.

Application to TASP: As the project team continues to develop the TASP, keeping the goals and objectives actionable should be a top priority. This will include thorough data collection, keeping data organized and streamlined, innovation in the data analysis, and making the results

of the study user friendly to increase the likelihood that they will continue to be implemented after the study has completed.

In speaking with Mary Ann and with representatives from other states that used AC's to help finalize their goals, most said they were satisfied with the decision to do so. Mary Ann stated that using an AC to determine and finalize system goals made the direction of the MASP 2006 applicable to stakeholders and increased buy-in on the plan's results. TASP can expect similar outcomes as the project team continues to engage with the AC throughout the life of the project.

Massachusetts Department of Transportation – Massachusetts Statewide Airport System Plan

Summary of System Plan

The Massachusetts Statewide Airport System Plan (MSASP) was last updated in 2010. The Massachusetts Department of Transportation (MassDOT) Aeronautics Division undertook the MSASP to:

“...provide an analysis of the statewide airport system that will produce an extensive assessment of the condition of the current system, as well as a plan for meeting its current and future needs.”

The MSASP was intended to provide MassDOT with the steps to facilitate the aviation system’s long-term development and help the state decide where and how to invest in the aviation system. In order to do so, the first step of developing the MSASP was to identify their vision, goals, and measures. The MSASP defined their goals as providing “the markers for tracking progress toward [their] vision,” and coordinated the goal selection with the state DOT, its consultants, and an advisory committee, a process similar to the TASP process of choosing goals.

MSASP Goals Compared to TASP Goals

Six goals were developed for the MSASP, which all detail how MassDOT Aeronautics Division intends to implement their vision for their aviation system. As shown in the following table, three of these goals matched TASP goals:

MSASP Goal	Related TASP Goal
The Commonwealth of Massachusetts should be served by a system of airports that are safe, secure, and meet applicable FAA design standards that will satisfy the current and future needs of aviation.	Goal #3: Improve the safety and security of airport system users
The Commonwealth of Massachusetts should be served by a system of airports that complies with all federal, state, and local environmental regulatory requirements.	N/A
The Commonwealth of Massachusetts should identify the economic impact of the Massachusetts’ system airports and the economic benefit of incremental investment in the aviation system.	Goal #5: Invest in the aviation system and the aviation workforce to support economic growth and competitiveness
The Commonwealth of Massachusetts should be served by an efficient airport system with sufficient facilities and services to maintain the airport and address the	Goal #1: Protect and preserve existing airport infrastructure by prioritizing airport system needs

current/future needs of the aviation community.

The Commonwealth of Massachusetts should be served by a system of airports that promote and support aviation educational programs and community outreach programs. N/A

The Commonwealth of Massachusetts should be served by a system of airports that support integration with other modes of transportation. N/A

Summary of MassDOT Aeronautics Division Interview

Meeting Date: February 19, 2020

Attendees: Denise Garcia, Manager of Aviation Planning

MassDOT Best Practices: MassDOT stressed the education and outreach aspects of the MSASP, stating that these practices have been instrumental in implementing the plan’s goals. The TASP also has an emphasis on education and outreach. The TASP project team should use the AC, stakeholder interviews, the project website, and other outreach efforts to learn how to best implement TASP goals and keep the plan useful. MassDOT also discussed aligning the MSASP with other departmental planning goals. The TASP project team should continue to consider how the TASP affects and is affected by other TDOT planning initiatives.

Overview of Discussion: MassDOT stated that the goals were chosen by starting with MassDOT’s overall mission and then working down - the process behind choosing the goals was driven by what was important to MassDOT Aeronautics Division, including following FAA standards; preserving the existing system, and; focusing on key issues of the aviation system (such as UAS and environmental issues). In implementing the MSASP goals, MassDOT stated that education and outreach about the plan has been key. They have also integrated aviation with other MassDOT modal offices to identify common goals. MassDOT stated that the biggest change since the implementation of the 2010 study is how well coordinated MassDOT is now with other DOT and regulatory agencies. Following the 2010MSASP, the Aeronautics Division operated in a silo, so branching out and better engaging with partners across the state has been a huge benefit.

Application to TASP: MassDOT stated that education and outreach about the MSASP has been instrumental in successfully implementing the plan’s goals. The TASP project also has an emphasis on education and outreach about the plan, through public participation activities, the advisory committee (AC), and the project website. The TASP project team can learn from the successes of MassDOT’s outreach to fortify its own outreach efforts.

MassDOT also discussed better aligning aviation initiatives with other DOT transportation offices. This is a point that the TASP project team can consider moving forward. By making the aviation system plan goals applicable to other modal offices, the TASP team can improve “buy-in” on the plan and its goals while also improving planning efforts across the department.

Minnesota Department of Transportation – Minnesota State Aviation System Plan

Summary of System Plan

The Minnesota Department of Transportation (MnDOT) State Aviation System Plan was last updated in 2012 (SASP 2012), and it was confirmed during the interview that the state is currently updating their plan. However, since the current update is still in the planning phases, this section and the interview focused on the SASP 2012. The primary objective of the SASP 2012 is to:

“provide the state with excellent planning tools to assist in making informed decisions guiding the development of Minnesota’s system of airports and expending funds in a cost-effective manner.”

MnDOT stated that “the intent for this plan is that it be accepted and embraced by the Minnesota aviation community, regulatory and funding agencies, the general public, and lawmakers.” The first section of the SASP 2012 provides an introduction and overview of the system goals.

SASP Goals Compared to TASP Goals

Five goals were developed for the SASP 2012, which all detail how MnDOT intends to implement their vision for their aviation system. As shown in the following table, four of these goals matched TASP goals:

SASP Goal	Related TASP Goal
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.	Goal #3: Improve the safety and security of aviation system users.
Mobility: Ensure the people and businesses of Minnesota have convenient access to the air transportation network.	N/A
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.	Goal #2: Provide an aviation system with available and cost-efficient transportation options for moving people and freight. Goal #5: Invest in the aviation system and the aviation workforce to support economic growth and competitiveness.
Operations: Ensure the system is operated in a manner that users can rely upon.	N/A

Asset management: Ensure the structural integrity of existing airport infrastructure to meet the needs of the current system without compromising future needs.

Goal #1: Protect and preserve existing airport infrastructure by prioritizing airport system needs.

Summary of MnDOT Interview

Meeting Date: April 28, 2020

Attendees: Rylan Juran, Aviation Planner

MnDOT Best Practices: Like many other states in this review, MnDOT was satisfied with their decision to create an AC, and was particularly satisfied with the AC's input on project goals. Using an AC to determine goals for an aviation system plan increases the "buy-in" on the plan's outcomes and implementation among members of the aviation community. The TASP can expect similar outcomes as the project team continues to engage with the AC throughout the life of the project. However, MnDOT noted that the project team occasionally disagreed with the AC and other stakeholders regarding project priorities. The TASP project team can learn from MnDOT's experience settling disagreements and crafting project priorities that were agreeable to all stakeholders.

Overview of Discussion: Rylan was not employed with MnDOT at the beginning of SASP 2012, but surmised that the goal selection process was a combination of AC input and consideration of priorities from other MnDOT planning documents. He noted that performance measures were legacy items that had been tracked for a long time within the department, as well as newer measures that were added as part of SASP 2012. As part of 2020 system plan update, the project team has decided to minimize the number of performance measures to focus on items the department would regularly use and had control over. Additionally, the project team established an AC as part of the 2020 system plan update which has already determined new system goals. The AC tried to align new system plan goals with wider agency planning goals and objectives, and found they were similar to the SASP 2012 goals.

For SASP 2012, the department has not kept track of the goals' progress. Rylan noted that this lack of utilization of the SASP 2012 has been a major driving point behind the 2020 system plan update, as the project team wants to create a document the department will actually use. The project team is using fewer performance measures in the 2020 system plan update in an effort to keep them continuously updated and keep data continuously current. The project team is focusing on how performance measures and goals are affecting day-to-day decision making and project prioritization. The project team is also undergoing a more extensive outreach effort to ensure the new plan is useful to a wide variety of users.

Application to TASP: Like TASP, the SASP goals were selected through a brainstorming session with an Advisory Committee. In speaking with Rylan and with representatives from other states that used advisory committees to determine their goals, most said they were satisfied with the decision to do so. Using an AC to determine goals for an aviation system plan increases the "buy-in" on the plan's outcomes and implementation among members of the aviation community. The TASP can expect similar outcomes as the project team continues to engage with the AC throughout the life of the project.

Rylan also noted that the project team disagreed with some stakeholders about what performance measures to include. While the project team wanted to trim certain infrequently

updated performance measures, stakeholders wanted to continue to collect this information. The project team ultimately decided on a compromise; they would keep some of these infrequently updated performance measures based on the priorities of the stakeholders. The TASP can use this experience to inform handling disagreements with system stakeholders by reaching a compromise all parties can agree to.

New Hampshire Department of Transportation – New Hampshire State Airport System Plan

Summary of System Plan

The New Hampshire State Airport System Plan (NHSASP) was last updated in 2015 by the New Hampshire Department of Transportation (NHDOT) Bureau of Aeronautics. The NHSASP aimed to be:

“the guide to maintain and develop the system of airports in New Hampshire, ...stressing the...broad-based analysis of connectivity and access between airports in the system.”

The first task in the NHSASP was the establishment of facility and service objectives, which the NHSASP stated would “serve as the benchmark to measure the effectiveness of the current and future system,” which is a philosophy shared by the TASP. The goals were identified as a visioning exercise with NHDOT Bureau of Aeronautics staff.

NHSASP Goals Compared to TASP Goals

Five goals were developed for the NHSASP, which all detail how NHDOT Bureau of Aeronautics intends to implement their vision for their aviation system. As shown in the following table, four of these goals matched TASP goals:

NHSASP Goal	Related TASP Goal
Goal #1: Provide a safe, secure, and efficient transportation system	Goal #3: Improve the safety and security of airport system users
Goal #2: Maximize economic value of the New Hampshire airport system	Goal #5: Invest in the aviation system and the aviation workforce to support economic growth and competitiveness
Goal #3: Promote and educate stakeholders on the importance of the state’s aviation system	N/A
Goal #4: Enhance, preserve, and maintain state aviation system assets	Goal #1: Protect and preserve existing airport infrastructure by prioritizing airport system needs
Goal #5: Maximize and diversify connectivity for state aviation users	Goal #2: Provide an aviation system with available and cost-efficient transportation options for moving people and freight

Summary of NHDOT Bureau of Aeronautics Interview

Meeting Date: February 26, 2020

Attendees: Carol Niewola, Senior Aviation Planner at NHDOT Bureau of Aeronautics

NHDOT Best Practices: Like many other states in this review, NHDOT was satisfied with their decision to create an AC, and was particularly satisfied with the AC’s input on project goals.

Using an AC to determine goals for an aviation system plan increases the “buy-in” on the plan’s outcomes and implementation among members of the aviation community. The TASP can expect similar outcomes as the project team continues to engage with the AC throughout the life of the project. NHDOT also considered the use of interactive tools in the NHSASP, as a way to increase the plan’s usefulness to stakeholders and as a means to continually update the plan. While the NHSASP did not ultimately include such tools, similar tools are used by other system plans and should also be considered by the TASP project team.

Overview of Discussion: Carol stated that goals were chosen through a brainstorming and scoping charette with the NHDOT Bureau of Aeronautics consultants. The team determined several functions and results that they were hoping the system plan could do, then prioritized the resultant goals based on what was most feasible and cost-effective.

As part of the brainstorming session, the team discussed issues that had arisen since the last system plan (completed around 2003), including technology changes (such as drones) and changes to the economy (such as the economic downturn). The brainstorming session also considered what the state might be dealing with in the future and what tools and resources were necessary to address these.

While evaluating the goals of the NHSASP is a priority for the NHDOT Bureau of Aeronautics, due to personnel changes and other tasks taking precedence, staff have not had a chance to thoroughly evaluate goal implementation. During the brainstorming session that identified NHSASP goals, staff also discussed the possibility of interactive tools and charts within the NHSASP to assist with monitoring goal implementation. While they ultimately did not receive this deliverable, Carol stated that this would be an ideal way to continue to make NHSASP and goal implementation relevant after the close of the project.

Carol stated that she would not change the goal selection process. The brainstorming session they undertook with their consultants felt “honest,” as everyone had the opportunity to contribute with what they thought would help the system or what they were struggling with.

Application to TASP: While NHDOT Bureau of Aeronautics has not had the chance to evaluate their goals, the TASP project can still learn from the selection process behind the NHSASP goals. Like TASP, the NHSASP goals were selected through a brainstorming session with Bureau of Aeronautics staff. This helped Bureau of Aeronautics staff become invested in the plan, its outcomes, and its success. TASP can expect similar outcomes as the project team continues to engage with the rest of the TDOT Aeronautics staff throughout the life of their project, seeking their input and ways for them to get involved. This will not only increase “buy-in” on the TASP and its results, but will improve the plan itself.

The NHSASP goals brainstorming session also included the possibility of developing interactive tools and charts within the plan to assess goals after plan implementation. While Carol stated that these tools didn’t ultimately come to fruition, this is something the TASP project team can explore. Further, this anecdote highlights the fact that there are continual improvements to consider concerning the TASP deliverables.

New York State Department of Transportation – New York State Airport System Plan

Summary of System Plan

The New York State Department of Transportation (NYSDOT) State Airport System Plan (SASP) was last updated in 2018. The NYSDOT identified the primary purpose of the SASP was to:

“evaluate the current condition of the New York State airport system, determine roles of the state’s airports and evaluate these facilities as an integral part of a comprehensive transportation system.”

Because of this evaluation, NYSDOT and other stakeholders were able to identify feasible and necessary airport improvements throughout the state. The first section of the SASP focuses on its vision, goals, and performance measures, which provide “a baseline for evaluating the state’s public-use airport system.”

SASP Goals Compared to TASP Goals

Five goals were developed for the SASP, which all detail how NYSDOT intends to implement their vision for their aviation system. As shown in the following table, four of these goals matched TASP goals:

SASP Goal	Related TASP Goal
New York will be served by a system of airports that is safe, efficient, and meets applicable design standards.	Goal #3: Improve the safety and security of airport system users
New York will be served by a system of airports whose roles are sufficient to meet the current and projected aviation demand within the natural, social, and economic environment.	Goal #4: Maximize federal, state, and local resources to meet the aviation system needs and minimize environmental impacts
New York will be served by a system of airports whose roles and functions are compatible within their communities and the National Plan of Integrated Airport System (NPIAS).	N/A
New York will be served by a system of airports whose infrastructure needs are understood such that projects to sustain and improve the system can be analyzed when developing policies and programs.	Goal #1: Protect and preserve existing airport infrastructure by prioritizing airport system needs
New York will be served by a system of airports that adopts strategies to maintain financial self-sufficiency while contributing to	Goal #2: Provide an aviation system with available and cost-efficient transportation options for moving people and freight

the economic well-being of the state and the local economy.

Summary of NYSDOT Interview

Meeting Date: February 27, 2020

Attendees: Gerardo Mendoza, Bureau Director at NYSDOT

NYSDOT Best Practices: Like many other states in this review, NYSDOT was satisfied with their decision to create an AC, and was particularly satisfied with the AC's input on project goals. Using an AC to determine goals for an aviation system plan increases the "buy-in" on the plan's outcomes and implementation among members of the aviation community. The TASP can expect similar outcomes as the project team continues to engage with the AC throughout the life of the project. NYSDOT also discussed incorporating the needs and priorities of a variety of stakeholders. Like the SASP, the TASP is the product of a variety of stakeholders. While stakeholders such as the AC may have different priorities than the TASP project team or the state, the TASP project team should strive to incorporate all priorities.

Overview of Discussion: Gerardo stated that goals were chosen by an AC that consisted of airport representatives with input from Aircraft Owners and Pilots Association (AOPA). Gerardo stressed that the SASP was developed with the stance that airports are a public utility and a critical part of the transportation network, which provide a unique service to many people. The NYSDOT considers airports a system of assets that need to be preserved and kept in good shape, enough to fulfill the needs of the state and the airport users. The overall goal of the SASP was thus to preserve the existing system and fulfill the needs of the likes of airlines and big jets but also single engine planes that go to remote areas

While evaluating the goals of the SASP is a priority for NYSDOT, the plan is also relatively new, and the department has not had the opportunity to evaluate the implementation of its goals. However, Gerardo also stated that NYSDOT is satisfied with the outcomes of the SASP and the overall planning process. The SASP has a good balance of supporting the system of airports and work with airport owners to develop a strategic plan, while using federal, state, and local resources.

Application to TASP: While NYSDOT has not had the chance to evaluate their goals, the TASP project team can still learn from the selection process behind the SASP goals. Like TASP, the SASP goals were selected through a brainstorming session with an Advisory Committee. In speaking with Gerardo and with representatives from other states that used advisory committees to determine their goals, most said they were satisfied with the decision to do so. Using an AC to determine goals for an aviation system plan increases the "buy-in" on the plan's outcomes and implementation among members of the aviation community. The TASP can expect similar outcomes as the project team continues to engage with the AC throughout the life of the project.

Gerardo also stressed balancing the needs of the state, airports, and airport users in the SASP. Doing so, he believed, resulted in an aviation plan that was useful to everyone. Similarly, the TASP project should prioritize balancing the needs of Tennessee's many aviation stakeholders, while wisely using federal, state, and local resources.

South Dakota Department of Transportation – South Dakota State Aviation System Plan

Summary of System Plan

The South Dakota Department of Transportation Air, Rail, and Transit program (SDDOT) State Aviation System Plan (SDSASP) was last updated in 2010, and it was confirmed during the interview that the state is currently updating their plan. Since the current update is nearly finalized, this section and the interview focused on the current system plan (2020 SDSASP). The primary purpose of the 2020 SDSASP was identified as:

“to study and assess the condition, performance, interaction, and needs of system airports. [The 2020 SDSASP] is intended to guide decisions and educate those who oversee the system, including local, state and federal policy makers, the South Dakota Aeronautics Commission (SDAC) and SDDOT staff.”

Similar to the TASP, the first step of the 2020 SDSASP development was identifying system goals. The 2020 SDSASP stated that “these goals determine how measurement of the system’s performance is conducted and ultimately the recommendations that result when a system plan is completed.”

SDSASP Goals Compared to TASP Goals

Three goals were developed for the SDSASP, which all detail how SDDOT intends to implement their vision for their aviation system. As shown in the following table, all three of these goals matched TASP goals:

SDSASP Goal	Related TASP Goal
Safety & Security: To provide a safe and secure system of airports.	Goal #3: Improve the safety and security of airport system users.
Maintenance & Development of Infrastructure: To provide an airport system that meets current and future user needs.	Goal #1: Protect and preserve existing airport infrastructure by prioritizing airport system needs.
Accessibility to Users: To provide a system of airports that is accessible from the ground and the air.	Goal #2: Provide an aviation system with available and cost-efficient transportation options for moving people and freight

Summary of SDDOT Interview

Meeting Date: April 29, 2020

Attendees: Jon Becker, Aeronautics Planning Engineer, SDDOT Air, Rail, and Transit program

SDDOT Best Practices: Like many other states in this review, SDDOT was satisfied with their decision to create an AC, and was particularly satisfied with the AC’s input on project goals. Using an AC to determine goals for an aviation system plan increases the “buy-in” on the plan’s outcomes and implementation among members of the aviation community. The TASP can expect similar outcomes as the project team continues to engage with the AC throughout the life

of the project. Several states, including SDDOT, discussed how the needs of the current system plan have changed in the years since a previous system plan, in this case over the course of ten years. Shifting needs necessitated a fresh look at project goals, performance measures, and development. SDDOT discussed how shifting system needs meant reevaluating the input of several stakeholders and the necessity of including new stakeholders. The TASP project team can learn from SDDOT's reevaluation of stakeholder input in light of shifting project needs. It is important to both include the priorities of a diverse set of stakeholders and to align TASP goals to the current state of the aviation system.

Overview of Discussion: The state's first aviation system plan was completed in 2010, and the 2020 SDSASP is the first update to that plan. Now that they are updating the system plan, the project team used what they have learned over the past 10 years since the first system plan and input from staff and consultants to tweak the previous system plan goals for the 2020 SDSASP. Since the aviation office is very small, more involved with airports at the ground level, and less involved in system planning, they relied heavily on the consultant for their experience and expertise. The project team also solicited input through a Project Advisory Committee (PAC). The PAC was comprised of diverse stakeholders with a broad range of industry knowledge and experience in airports, aviation, and other related fields.

Jon stated that the previous system plan was primarily used to inform the state's capital improvement plan (CIP), and that the state was not focused on keeping the goals and performance measures updated. The 2020 SDSASP is their effort to update the goals. Jon also stated that for the current plan, the project team had a couple of different priorities. For instance, they had a few specific data points they wanted to collect, such as counting airports with weather reporting and turf crosswind runways, whereas for the previous system plan they collected a more general level of data that didn't necessarily relate to any specific data needs. Jon stated that the goals were the same for both plans, but the data collected to accomplish these goals were slightly different.

Application to TASP: Like the TASP, the SDSASP goals were selected with input from aviation staff and an Advisory Committee. In speaking with Jon and with representatives from other states that used advisory committees to determine their goals, most said they were satisfied with the decision to do so. Using an AC to determine goals for an aviation system plan increases the "buy-in" on the plan's outcomes and implementation among members of the aviation community. The TASP can expect similar outcomes as the project team continues to engage with the AC throughout the life of the project.

Jon also discussed the importance of deciding on project data priorities. He discussed how priority needs had changed over the ten years between the original plan and the 2020 SDSASP, and how incorporating those needs without compromising the input of various stakeholders was challenging. Similarly, through the project AC and input from a diverse group of aviation professionals, TASP is also trying to balance the needs of several stakeholders while remaining true to the plan's vision.

Texas Department of Transportation – Texas Airport System Plan

Summary of System Plan

The Texas Department of Transportation (TxDOT) Texas Airport System Plan (TxASP) was last updated in 2010. The TxDOT stated that the airports in the TxASP are:

“those that have been identified as being the most essential to the nation’s air transportation system” and that the objective of the TxASP “is to direct state and federal resources to the airports that can best support the plan’s goals of increasing system capacity; providing access by air to centers of population, industry, agriculture and natural resource development; and fostering economic development.”

The first section of the TxASP is an overview of the document’s structure, including system goals and objectives. TxASP identifies its primary goals as “to develop a statewide airport system to provide adequate access by air to the population and economic activity centers of the state, and to provide timely development and maintenance of the airport system.”

TxASP Goals Compared to TASP Goals

Four goals were developed for the TxASP, which are further articulated through the primary objective, which is “to provide air service based on level of services required throughout the state.” As shown in the following table, three of these goals matched TASP goals:

TxASP Goal	Related TASP Goal
Provide adequate access by air to the population and economic activity centers of the state	Goal #5: Invest in the aviation system and the aviation workforce to support economic growth and competitiveness
Provide timely development and maintenance of the airport system	Goal #1: Protect and preserve existing airport infrastructure by prioritizing airport system needs
Maximizing economic benefit and ROI to the state, local communities, counties, and cities from development of the airport system	Goal #5: Invest in the aviation system and the aviation workforce to support economic growth and competitiveness
Integrating the airport system effectively with other transportation modes	N/A

Summary of TxDOT Interview

Meeting Date: February 19, 2020

Attendees: Kari Cambell, Director, Grant Management

TxDOT Best Practices: TxDOT stressed the importance of maintaining data after the conclusion of the system plan. As the TASP data collection process begins to wrap up, now is the perfect time to consider how project data can be maintained to continuously update the goals of the system plan even after the system plan itself has been concluded. For instance, the TASP project team can periodically update data points based on department priority.

Overview of Discussion: TxDOT is currently planning an update to their system plan. TxDOT stressed that they have a very large aviation system (278 airports). For their system plan update, TxDOT stated that they would like a much more comprehensive view of their aviation system and to better understand the value of their infrastructure. Therefore, TxDOT would like to include goals that determine what it would take to maintain their system at the current level.

TxDOT has not monitored the implementation of their deliverables, but did mention that for the next system plan, they want to be able to update it every few years. They would update the document for legislative meetings and other important events that could have an impact on their funding. Another goal they have for the update is for its implementation and update to be realistic and more self-explanatory.

Application to TASP: TxDOT stressed the importance of understanding the value of their infrastructure and being able to maintain the data collected through the aviation system planning process. Similarly, the TASP project team is partially basing the data collection effort on understanding the value of its current infrastructure and how this can be leveraged to continue achieving the goals of the TASP. Several states, including TxDOT, discussed different methods of maintaining data after data collection efforts have concluded. As the TASP project team wraps up the data collection efforts, it is also the perfect time to consider how data may be maintained after the project itself concludes.

Wisconsin Department of Transportation – Wisconsin State Airport System Plan

Summary of System Plan

The Wisconsin State Airport System Plan (WSASP) was last updated in 2015, with data collection efforts beginning in 2012. The WSASP provides:

“...an inventory and evaluation of the Wisconsin Airport System’s 98 airports and an implementation plan to meet established goals and objectives.”

Unlike other states interviewed as part of this review, the Wisconsin Department of Transportation developed a Geographic Informational System (GIS) database of the Wisconsin Airport System. This GIS database is directly related to the implementation of the state’s aviation system goals:

“This database allows the BOA [Bureau of Aeronautics] to continuously assess and monitor various system-wide conditions and performance-related measures. In addition, it allows for the uniform evaluation of various improvements implemented as part of the airport planning and programming cycles.”

Similar to the first TASP Advisory Committee (AC) meeting where the TASP goals were discussed, edited, and confirmed, the WSASP goals were initially developed by an internal working group and then confirmed by a project AC. WSASP stated that:

“The purpose of this plan is to establish a vision, develop and evaluate system goals, and provide a framework to meet current and future needs for the preservation and enhancement of the airport system.”

WSASP Goals Compared to TASP Goals

Five goals were developed for the WSASP, which all detail how the Wisconsin Department of Transportation, Bureau of Aeronautics, intends to implement their vision for their aviation system. As shown in the following table, three of these goals matched TASP goals:

WSASP Goal	Related TASP Goal
Provide a safe and secure aviation system	Goal #3: Improve the safety and security of airport system users
Support a system of airports that is readily accessible from the ground and the air	N/A
Provide airport infrastructure to attract business-supporting economic growth	Goal #5: Invest in the aviation system and the aviation workforce to support economic growth and competitiveness
Provide a system of airports that meets existing and future needs	Goal #1: Protect and preserve existing airport infrastructure by prioritizing airport system needs

Provide a system of airports that addresses community and environmental compatibility

Goal #4: Maximize federal, state, and local resources to meet the aviation system needs and minimize environmental impacts

Summary of WDOT Interview

Meeting Date: April 8, 2020

Attendees: Judy Harding, Program and Policy Analyst, Wisconsin Department of Transportation Bureau of Aeronautics.

WDOT Best Practices: Like many other states in this review, WDOT was satisfied with their decision to create an AC, and was particularly satisfied with the AC's input on project goals. Using an AC to determine goals for an aviation system plan increases the "buy-in" on the plan's outcomes and implementation among members of the aviation community. The TASP can expect similar outcomes as the project team continues to engage with the AC throughout the life of the project. Also like other states, WDOT discussed the importance of keeping project data current in order to continue to monitor the implementation of project goals. In this case, WDOT uses a GIS database to continuously monitor project data and respond to inquiries related to the system plan. The TASP can consider similar tactics to keep project data up-to-date. For instance, the TASP project team can periodically update data points based on department priority.

Overview of Discussion: Judy stated that goal selection was completed in the beginning of the system planning process. The project team first looked to the Wisconsin Department of Transportation multimodal plan (Connections 2030) goals for inspirations for WSASP goals. WSASP had an in-house (Wisconsin DOT) working group, mainly consisting of employees from the Bureau of Aeronautics (BOA). The consultant for the WSASP project facilitated the work group, which primarily consisted of the BOA management team, Wisconsin DOT data analysts, Wisconsin DOT aviation experts, and a couple of specialists in the Wisconsin DOT aviation office (programming, for example). The Consultant guided this group through a process to choose the goals. In addition to the internal group, the project team had an advisory group consisting of airport managers, planners, and other individuals in the aviation field. The WSASP project team presented the advisory group with draft goals that they provided feedback on, although they largely agreed with the project team.

Wisconsin DOT primarily keeps their data up-to-date using a continuously updated GIS database. All of the information that was collected as part of WSASP and all of the information that was in the airport report cards is in the database. The database enables Wisconsin DOT to have graphics and spreadsheets that show progress that has been made since the plan was completed, and Judy frequently pulls spreadsheets to show progress to management. Population data is the only data that are not continually updated in the GIS database. However, these data will be updated in the next system plan update, which Judy hopes will be next year (2021) after the 2020 Census is complete.

Judy stated that she would not have done anything different to choose the WSASP goals and personally liked that the brainstorming was done in house. Additionally, it was helpful to have the Connections 2030 goals as a jumping-off point. The workflow of determining the goals in-house and then giving them to the task force/stakeholders to review was seamless and got good results.

Application to TASP: The WSASP team has been very successful in implementing and using the results of their study, and the TASP team can look to this project for inspiration of how to do the same. The WDOT BOA uses a GIS database containing the results of the WSASP data collection efforts to stay up-to-date on the assessment of the study's goals. However, they also use this database to respond to inquiries about the implementation of their goals. Through engagement of their internal and external stakeholders with the working group and AC, the WDOT BOA encouraged confidence in the results and reliability of their data and study, as evidenced by the fact they have frequent data requests. The TASP project team can also encourage such confidence by the continual engagement of the AC throughout the life of the project. Further, the TASP project team can explore ways to make system plan data readily accessible to stakeholders, as WDOT BOA has done through their GIS database.

In speaking with Judy and with representatives from other states that used advisory committees to determine their goals, most said they were satisfied with the decision to do so. Judy stated that the two-step process of first determining the draft goals using an internal working group and then having the project AC confirm these goals was an efficient system that got good results. TASP can expect similar outcomes as the project team continues to engage with the AC throughout the life of the project.