

MAINE STATE AVIATION SYSTEM PLAN



PHASE I – FINAL TECHNICAL REPORT

October 2021



prepared for:

MaineDOT
Bureau of Planning

prepared by:

 **McFarland Johnson**

KEVIN WATERS, DEDICATION

MaineDOT, the MaineDOT Project Team, members of the Project Advisory Committee, and McFarland Johnson, Inc. would like to acknowledge the invaluable and immeasurable contributions of Kevin Waters to aviation in the State of Maine, and the countless people and communities Kevin and his team at Penobscot Island Air (PIA) have served over his 20 at the helm of PIA. Kevin passed in July 2020.

Kevin P. Waters



Source: Penobscot Bay Pilot

The following is reprinted from the Penobscot Bay Pilot.

SOUTH THOMASTON – Kevin P. Waters, 62, heart and soul of Penobscot Island Air, died unexpectedly, with his loving wife, Terry, at his side.

Kevin was born on November 13, 1957 in Mt. Holly, and died on July 5, 2020 in South Thomaston, Maine. In between those times, he did a lot, lived life to the fullest and touched the lives of many people. As Sean Michaud, one of Penobscot Island Air’s pilots stated in the Facebook post announcing Kevin’s passing “Some say there are angels among us, that they were put here to make our lives better...to show us what love and compassion are truly about. If this is true, and I have no reason to believe it is not, heaven took one home last night.”

Kevin Waters, Dedication (continued)

Growing up in North Hampton, New Hampshire, he graduated from Winnicunnett High School in 1975. Kevin's love for sports included participation in varsity football and hockey. Hockey was his passion. He fondly spoke of his father, with a car full of his hockey teammates, driving to early morning weekday practices. Ice times were limited, often with practices held between 4:30 and 5:30 a.m. No other parent would volunteer for this early morning transportation. Kevin cherished those special times spent with his father.

Shortly after graduation, the mountains of Lincoln, New Hampshire and Loon Mountain became home. Kevin's career at Loon Mountain began in snow making, and he soon became a member of the Ski Patrol. The friendships made at Loon Mountain remained very important to Kevin throughout his entire life. Not only did he cherish those friends but had some of the most far-fetched stories of antics that seemed to occur on a regular basis, Kevin loved those days!

It was during that time period that Kevin joined the Coast Guard full time. Key West, Boothbay Harbor and Woods Hole were duty stations for Kevin. The Grenada Conflict provided a back drop for some of the "most colorful" stories imaginable. Kevin was as comfortable on the water as he was in the air. Kevin served a total of eight years in the Coast Guard.

After an Honorable Discharge from the Coast Guard, Kevin's passion for flying took him to flight school in Greeley, Colorado. It was there he earned his multiple engine, instrument and helicopter rating. Kevin loved flying out West but his heart was in New England. Upon graduation, Kevin and his father drove back to New England together. Kevin often spoke about how wonderful it was to spend this time with his Dad, reminiscing about his father's days in the Secret Service's White House Detail serving under Truman, Eisenhower and FDR. Kevin's pride and support of those who serve our communities and country was strongly impacted by his Dad's pride and faith in America.

On June 26, 1993, Kevin married Terry Sinclair at the Children's Chapel in Rockport. Terry was a nurse he had met years earlier while stationed in Boothbay Harbor. They recently celebrated their 27th anniversary.

Kevin's early career in aviation included positions with Atlantic North and Colgan Airlines but it was mid coast Maine that tugged at his heart strings. In 1998, Kevin joined Clint Demons of Penobscot Air, as a line pilot. The business changed hands several times over the next few years, with the last owner abruptly suspending air service several days before Christmas in 2003. Kevin immediately began steps to obtain the necessary FAA documentation, insurance paperwork and rental of an aircraft with the goal of beginning operations as a single pilot operator. None of this would have been possible without the \$17,000 collection initiated on Matinicus. The money was dropped off to Kevin and Terry's house in a brown paper bag, no questions asked. As the saying goes, the rest is history!

Kevin Waters, Dedication (continued)

Since the early days of Penobscot Island Air the company has grown significantly. Kevin truly loved his crew and the customers that he served. They were family. “You count and don’t forget it”, Kevin made everyone feel special, and he truly cared. It didn’t matter who you were, you were important. Kevin’s actions always spoke just as loud as his words. There was no bias, no double meanings, no thought of ‘what’s in it for me?’...Kevin’s heart was bigger than the bay”, as one article several years ago stated. Kevin was just the “real deal”.

Someone recently asked “How can a small company that just moves people, boxes, mail and groceries in banana boxes from one location to another be so special? The response: “I don’t know but ask anyone who has spent any time around Kevin and his crew, maybe they can tell you what the magic is.” Kind of strange today with all of the craziness, anger and hatred in the world, to think that one small company that was started “on a shoe string” could have such a positive impact on a people. Kindness, honesty, respect, trust...maybe a combination...

As Sean Michaud stated in a Facebook post, “He (Kevin) will be missed no doubt...but he will be a part of everything we do at PIA. He will be on every flight, overseeing every boat operation, mingling amongst all of you as you board your next flight and in every one of our deliveries — watching over us. I know this as strongly as I know the sun will rise tomorrow. Rest easy Boatswain, we have the watch...you are relieved of your earthly duties; there are bigger plans for you now.”

Kevin leaves his wife, Terry; sister-in-law, Sally Sinclair who had a very special spot in Kevin’s heart; his beloved black lab Annie and Mattie; Sally’s blond lab; as well as the entire crew at Penobscot Island Air; his extended Knox County family and many, many cherished friends. Kevin will be truly missed by Anne Sinclair and all of the Sinclair children and grandchildren.

Kevin was predeceased by his parents, Edmund and Karleen Waters.

Kevin is survived by his two brothers, Edmund and Bruce and the families.

A Celebration of Kevin’s life [was] held Sunday, July 19, 2020, at 11 a.m., at the Down East Air Hangar at Knox County Airport.

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ACKNOWLEDGEMENTS

prepared for:

MaineDOT
Bureau of Planning

prepared by:

 **McFarland Johnson**

SPECIAL ACKNOWLEDGEMENTS

MaineDOT would like to acknowledge the following individuals and volunteers that have provided valuable input to this effort.

Project Advisory Committee

- Allison Navia, Airport Manager, Sanford Seacoast Regional Airport
- Ann Walko, Flight Instructor & Pilot, Wiscasset Airport
- Evan McDougal, Principal Consultant, MCD Consulting, LLC.
- Jeff Campbell, Airport Supervisor, Millinocket Municipal Airport
- Joshua Dickson, Director of Aviation, LifeFlight of Maine
- Kevin Waters, Owner/Chief Pilot, Penobscot Island Air, *In Memoriam*
- Ken Carle, CFO, Penobscot Island Air
- Paul H. Bradbury, Executive Director, Portland International Jetport
- Pete Marucci, Owner, Mast Cove Seaplane Base; FBO Operator, Bethel Regional Airport; Maine Aviation Career Education (ACE) Camp
- Robert Mockler, Pilot, MMG Insurance
- Sean Collins, Manager, Eastern Region, Aircraft Owners & Pilots Association
- Steve Levesque, Executive Director, Midcoast Regional Redevelopment Authority

Maine Aeronautical Advisory Board (all members involved, past and present)

- Kenneth Ortmann, Belfast Municipal Airport
- Sean Collins, Aircraft Owners and Pilots Association
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- Guy Rouelle, DuBois & King
- Parker Montano, Pine Tree Helicopters
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The MaineDOT Project Team are recognized for their contributions to the project and process:

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SYSTEM MANAGEMENT EVALUATION (APPENDIX E)

MaineDOT would like to acknowledge contributions of the following individuals.

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Introduction

This Chapter marks the beginning of the Technical Documentation that represents the Maine State Aviation System Plan (Plan). This Plan document summarizes and presents the technical work undertaken to develop the Plan’s recommendations, including thoughtful analysis and justification to provide decision-makers a solid basis for investing in the continued maintenance and improvement of public-use airports in the State of Maine. The Plan is intended to inform and support decisions and policy regarding funding and priorities for the following participants, users, and stakeholders:

- Maine Department of Transportation,
- Elected representatives in the State Legislature,
- Airport sponsors (owners), and
- Local communities of elected and appointed officials, and
- Airport and aviation users, and
- The general public.

1.1. PROJECT BACKGROUND

The Maine Department of Transportation (MaineDOT) set forth to develop a strategic update to the State Aviation System Plan (SASP, or MaineSASP) to guide public investments and system direction for the next decade (2021-2030). While technically an update to the 2006 State Aviation System Plan (2006 Plan), MaineDOT’s set expectations at the beginning of the project to conduct a fresh and unfettered strategic analysis of existing functional values provided by the aviation system and the real needs of stakeholders for the long term. The overarching directive is to look toward how the airport system as a whole (and its component individual airports and their facilities) can best be positioned to efficiently and effectively serve Maine’s foreseeable future needs and opportunities.

1.2. KEY GOALS FOR THE STATE AVIATION SYSTEM PLAN

As MaineDOT undertook the early stages of the project, MaineDOT leadership from the Aviation Program in the Bureau of Planning established the following six (6) key goals for the Maine SASP.

Key Goals for SASP

- Understand current and future potential aviation system contributions to meeting expressed societal needs sufficiently to inform the following question: **What compelling public value justifies what degree of state and federal investment toward what end?**
- Identify **trends, gaps, opportunities, and prioritized recommendations** for nurturing key system components, including aviation workforce development

Key Goals for SASP
<ul style="list-style-type: none"> • Use realistic, fiscally constrained life-cycle analyses to foster the development of right-sized facilities affordable for sponsors and investment partners.
<ul style="list-style-type: none"> • Recommend strategies to leverage public investments to generate private investments and public policies that support a safe and efficient airport system.
<ul style="list-style-type: none"> • Develop meaningful and practical metrics to track condition, utilization and performance of the airport system.
<ul style="list-style-type: none"> • Identify and justify necessary and desirable system management functions, including who should perform them and how they should be financed.

Source: MaineDOT, Bureau of Planning, Aviation Program, 2019.

The Key Goals build upon each other and tell a story, which begins with documenting a compelling value to the public of the Maine public-use airport system and aviation. The analysis was designed to identify gaps in facilities and services, opportunities for improvements that are prioritized and capitalize on trends and overcome system deficits or shortfalls. Most importantly, the Plan endeavors to put forth recommendations for improvements that are right-sized and fiscally constrained and leverage public spending to attract private money for a return on the investment of scarce public resources.

Once complete, the SASP will also incorporate metrics that can help MaineDOT and airport sponsors track performance and provide guidance for MaineDOT to improve the Aviation Program where necessary to support implementation of the Maine SASP.

1.3. SUMMARY OF WORK SCOPE & PROJECT APPROACH

In response to the project’s Key Goals, the MaineSASP approach was divided into two phases, where Phase I focused on traditional elements such as inventory and forecasts, but also extensive outreach to stakeholder groups. Phase I efforts reflect the data collection, baseline elements and foundational analysis to inform the broader system plan, and include the following Chapters of this Plan:

- Chapter 2: Stakeholder Outreach
- Chapter 3: Summary of Existing System
- Chapter 4: Aviation Activity Forecasts
- Chapter 5: System Capabilities & Performance Gaps
- Chapter 6: Findings, Priorities & Action Items (from Phase I)

In addition to these Chapters, additional work was conducted and is summarized in several Appendices.

- Appendix A: Study Process Records
- Appendix B: Study Survey
- Appendix C: Airport Profile Summaries

- Appendix D: Peer State SASP Review
- Appendix E: System Management Evaluation
- Appendix F: Washington County Evaluation

The tasks designed for Phase II represent the “*what to do*” and “*how to do it*” elements of the Plan and include the following Chapters:

- Chapter 7: Statewide Strategic Solutions & Costs
- Chapter 8: Economic Impact Analysis & Case Studies
- Chapter 9: Performance Metrics & Systemwide Implementation Plan

Additionally, an innovative solution for this project is the development of a *Dynamic System Planning Technology Solution* for MaineDOT. This technology solution is designed to serve as a centralized, cloud-based dashboard to help MaineDOT aeronautics staff streamline and modernize procedures for grant management and capital improvement plan programs.

1.4. SYSTEM PLANNING PURPOSE & USE

The project approach is designed to deliver a product that meets guidance and requirements of the Federal Aviation Administration (FAA) as set forth in Advisory Circular (AC) 150/5070-7 Change 1, but also meet the needs of MaineDOT and position the system and public-use airports for long-term viability and sustainability.

As described in (AC) 150/5070-7, the main purpose of the airport system planning process is to determine the type, extent, location, timing, and cost of the airport development needed in a state or metropolitan area to establish a viable system of airports. Metropolitan, state, and multi-state aviation system planning fits between the FAA’s national planning effort, as documented in the National Plan of Integrated Airport Systems (NPIAS), and the more comprehensive master plans prepared for individual airports. It feeds information “up” to be consolidated into the NPIAS and “down” to provide goals and development recommendations for individual airports. The airport system planning process also clarifies Federal, state, and local sponsor objectives, and helps make development of airports part of a regional transportation system.

Across the U.S., there are many markets and systems where the divide between struggling airports and successful airports continues to widen. Whether the result of local or regional economics or changes in needs of the local population, the state’s role is really about providing a perspective on what’s needed that’s different from airport master plans that are often competitive or hyper-local in focus. As such, system plans can temper competitive forces by advocating for improvements that respond to systemwide needs.

Finally, without an updated plan, and increasing scrutiny from the FAA for justifying airport projects at the local level, airports may lose footing and become ineligible for important capital projects that help communities. Since the FAA looks to the states as a partner for national ACIP. Not having a plan could – over time – threaten the state’s role as a partner and advocate for themselves, sponsors, and their communities. The SASP helps the state and airports make the best use of state and federal non-primary entitlement funding.

Stakeholder Outreach

2.1. INTRODUCTION

During the course of the state system planning process, the project team interacted with more than 300 pilots, airport managers, state officials, and members of the general public, participating in a variety of different forums from public meetings, conferences, airport site visits, and through online public outreach channels. There is a passion for aviation among aviators and aviation professionals that interact with Maine airports, and a pride to support the system given limited financial resources. Maine pilots and aviation stakeholders shared stories of grassroots community activism to fund projects not eligible or exhausted for federal and state funding, and additionally, they volunteer in their communities to share their passion with the next generation - hosting aviation camps, flight programs, and promoting aviation career paths to youth throughout the state.

This chapter summarizes the various methods the project team utilized to reach stakeholders for the development of the Maine State Aviation System Plan (SASP).

2.2. STAKEHOLDER OUTREACH PROCESS

The plan development process included comprehensive engagement to ensure that the voice of aviation users was reflected in the recommendations of the plan. This approach used direct outreach and on-site visits to speak and interact with system users, in addition to scheduling meetings and discussions with other governmental entities, regional planning and economic development organizations, and tribal organizations. Although these groups may not always be directly involved with the State's airports or their development, understanding of their relationship with state airports and recreational and/or business aviation community ensures that the Maine Department of Transportation (MaineDOT) has a complete picture of usage, needs, strengths, weaknesses, economics, and other issues that may impact state funding investments or policy. Through this mix of meetings, intergovernmental coordination, and outreach to stakeholders, credible stories of aviation's impact were collected, providing a deeper understanding of current and potential issues facing the aviation system. This qualitative stakeholder input helped to capture the role, function, and community importance of each facility and helped to refine the recommendations developed as part of the final outcome of this study.

The following sections summarize stakeholder outreach activities and [Appendix A: Study Process Records](#) includes documentation such as meeting agendas and meeting notes for reference.

2.3. PROJECT GUIDANCE

The Maine SASP was driven by MaineDOT and the Federal Aviation Administration (FAA) who provided project management and advisory services. Additional support, guidance, and data validation was provided by the Maine Revenue Service and other various state agencies. To foster collaboration between MaineDOT and other aviation stakeholders, a Project Advisory Committee (PAC) was established to generate ideas, provide insights, and ensure that goals are met through

measurable actions. In addition to the PAC, the project team regularly reported to the Maine Aeronautical Advisory Board to ensure the Board had a voice in the process.

2.4. STAKEHOLDER GROUPS

The users of Maine’s airport system are diverse, covering a large swath of pilot groups, businesses and industries, government agencies, the general public, and tourists.

2.4.1. Project Advisory Committee (PAC)

A Project Advisory Committee of 12 members was assembled by MaineDOT to represent the public interest of general stakeholders, in addition to aviation and airport users. Three (3) project advisory meetings were held during Phase I of the system planning process. The first meeting took place in January 2020 at the MaineDOT headquarters in Augusta. A second PAC meeting was held in late May 2020 virtually in light of travel restrictions imposed by the COVID-19 pandemic. The third PAC meeting took place in January 2021. Generally, PAC meetings focused on challenges and areas of opportunity the plan could explore, provided a forum for thoughtful discussion, and helped guide the project team through the planning process.

The first meeting of the PAC was January 7, 2020 with all 12 members present. A presentation was given by the project team outlining the project goals and process. PAC members were invited to share an introduction and discuss the biggest achievement they hoped to derive from the SASP. The PAC membership roster is provided in **Table 2-1**.

Table 2-1: PAC Member Roster

PAC Member	Title / Relationship to Aviation System
Paul Bradbury	Executive Director, Portland International Jetport (PWM), Maine’s flagship commercial service airport
Allison Navia	Airport Manager, Sanford Seacoast Regional Airport/Pilot
Evan McDougal	Owner of MCD Consulting LLC/Pilot
Josh Dickson	Aviation Director of Aviation, LifeFlight of Maine/Pilot
Pete Marucci	President, Maine ACE Camp/Owner & Operator of Mast Cove Seaplane Base/FBO Operator at Bethel/Pilot
Jeff Campbell	Airport Supervisor, Millinocket Municipal Airport/Pilot
Steve Levesque	Executive Director, Midcoast Regional Redevelopment Authority/Pilot
Kevin Waters (<i>in memoriam</i>)	Owner and Chief Pilot, Penobscot Island Air
Robert Mockler	Chief Pilot and Maintenance Technician, MMG Insurance
Ann Walko	Flight Instructor & Pilot, Wiscasset Airport, Former Wiscasset FBO Operator
Sean Collins	Eastern Region Manager, Aircraft Owners & Pilots Association (AOPA)/Pilot

Source: McFarland Johnson meeting summary, 2020.

At the first PAC meeting, MaineDOT stressed that fiscally constrained analysis would be necessary to balance the many multimodal needs of the State all of which rely upon a narrow funding base. The project team described that a system management evaluation was being prepared to assess the department's role, funding, and functions in relation to other states, and a catalogue of funding sources would be provided. The effort is included in [Appendix E: System Management Evaluation](#).

The project team indicated that there was no intent to create a 'ranked methodology' to score airports based on facilities or services, but rather the vision was to conduct a geographic assessment to look at an airport's market area and attribute airports based on services and themes determined by extensive survey outreach efforts. These characteristics would then be combined with forecast data to help categorize the State's airports. The remainder of the first PAC meeting involved a discussion of the *Airport Manager Survey*, the key data collection instrument for the project. PAC members helped to craft the format and questions of the survey to be more easily answered directly by airport managers rather than relying on technical specialists and consultants to fill it out for them. By restructuring the survey in this way, the PAC agreed that having airport managers fill out the survey directly would be a productive exercise to help managers assess the strong and weak areas of their respective airports. The project team also agreed that an 'unfiltered' response from each airport would be more substantive in developing themes and understanding the characteristics of the facilities and communities in each area of the State. Questions asked in the *Airport Manager Survey* are discussed in greater detail in [2.5.1 Stakeholders Surveys](#) and the finalized *Airport Manager Survey* can be found in [Appendix B: Study Survey & Interview Instruments](#).

The second PAC meeting convened to focus the discussion on themes that were generated from the *Airport Manager Survey* prepared at the prior meeting. The project team described how responses from airport managers produced unique use characteristics for each system airport and that the characteristics can be aggregated into common themes that appear across the system. One of the first spatial analysis exercise of the projects was introduced, a set a of maps that depicted drive time maps for airports in each FAA asset category (basic, local, regional, and national). The PAC discussed the characteristics and functions of airports in each asset category and suggested that airports with similar functions should be invested in uniformly, and that overlap in service area may not be a redundancy if the airports provide different functions. Additionally, it was added that an airport's function could indicate an airport's current capabilities, including the mission it serves for the community, and lead to a better understanding of what facility improvements may be needed to better meet the respective communities goals. By attributing airports with characteristics derived from the *Airport Manager Survey*, greater insight was provided into each airport functional role and how it serves its community.

To address commercial service airports, the PAC recommended differentiating the roles and characteristics of these airports by analyzing the fleet mix used by commercial air carriers. The PAC believed this element and adding population density to drive time maps would help to show the difference between large commercial service airports like Portland which serves a variety of aircraft sizes versus Essential Air Service (EAS) airports like Knox County and Augusta who typically only see turboprop aircraft for regularly scheduled commercial service. The PAC stressed that although commercial service airports are vital to the tourism and broader Maine economy, the entire system should be promoted and well represented in the system plan. To better capture all

characteristics at each airport, regardless of size, the project team indicated that further surveys were being collected from regional economic development groups and state agencies that utilize the airport system. The Regional Planning and Economic Development Survey is provided in [Appendix B: Study Survey & Interview Instruments](#).

The third PAC meeting’s primary goal was to discuss progress to date and confirm the system-level findings for Phase I of the System Plan with the PAC. Additionally, the approach for Phase II was discussed which will utilize the information and outreach conducted in Phase I to form recommendations regarding facility and policy priorities for the system. At the time of the third PAC meeting, more than 300 stakeholders had been engaged including focused groups with state agencies, outdoor recreation users, and stakeholders from Washington County, an area of special interest in the System Plan. Some of the top findings of the analysis and forecast efforts in Phase I to date included the following:

- 17 airports (nearly 50 percent of system airports) have aging master plans (5-10 years old) or outdated (10+ years old)
- 20 airports (57 percent of system airports) with either aging AWOS II systems or insufficient data.
- Forecasting activity at SASP airports is uncertain. Some may recover post-pandemic and others may continue to decline. Traffic Flow System Management Counts (TFMSC) traffic reports at some SASP airports could indicate recovery at airports experiencing growth in Group II aircraft operations; however, stringent application of “regular use” threshold could be an obstacle to recovery.

In addition to these selected findings, the PAC discussed issues for system airports that included maintenance, funding, facilities & services, traffic activity, and other challenges such as lack of services and remote proximity of many system airports. After discussing each issue comprehensively, the PAC came to consensus on action items that would be advanced to Phase II of the System Plan, which will include final recommendations and an Economic Impact Report.

2.4.2. Maine Aeronautical Advisory Board (MAAB)

The MAAB is an advisory board tasked with advising MaineDOT on all matters related to aeronautics, including recommended changes to state statute. MAAB represents airport managers, aviation design consultants, and the general pilot population. Representing the collective voice of aviation for the State of Maine, the project team engaged the MAAB throughout the system planning process, presenting four (4) project progress updates at scheduled MAAB meetings.

1. At the first MAAB meeting held in October 2019, the project team presented the intended goals of the project, timeline, and a fast-tracked effort to identify and analyze funding sources for aviation, with input solicited from the group. The team also provided initial insights from the funding sources evaluation, including a look at how other states fund their aviation programs, and how Maine compares. Of the respondents, Maine was identified to rank in the bottom quartile for state funding and non-AIP matching funds per airport. Given one of the SASP goals of using realistic, fiscally constrained life-cycle analyses to foster the development of right-sized facilities that are affordable for sponsors, there

was discussion that the group must ensure that the SASP's recommendations make fiscal sense and work for the State of Maine.

2. At the second MAAB meeting held in March 2020, the project team provided a brief update to the Board to discuss the *Airport Manager Survey* that had been distributed to all NPIAS airports in the State for their review and completion. As the primary data collection tool of the system planning process, the team stressed the importance of accurate and thorough completion. At the time of the meeting, 86 percent of airport managers had completed and returned the survey. By the end of the month, 100 percent of *Airport Manager Surveys* had been completed.
3. A third MAAB meeting was held virtually in June 2020. Having received 100 percent of the *Airport Manager Surveys* and a significant number of *Regional Planning and Economic Development Surveys*, the project team discussed the roles and functions of the system with the Board. Given that many airports serve the same functions, a discussion took place to further understand the frequency and scale of functions taking place at airports to better characterize each facility. Input from the Board helped to determine a series of questions that would be used during phone interviews with each airport manager to clarify the aeronautical functions taking place at each airport.
4. The fourth MAAB meeting was conducted in October 2020 prior to the third PAC meeting. The Project Team provided an update on the progress of the project, with a focus on highlighting primary findings of Phase I, which are in the following areas: airport maintenance needs; regional variety to facility and service needs at SASP airports; need for expanded DOT funding and programming; activity levels and outlook; and local/sponsor challenges in maintaining and improving airports.
5. At the fifth MAAB meeting held in March 2021, after the third PAC (final meeting of the PAC for Phase I). The Project Team presented completed Phase I findings and action items, some of which could be addressed now and others that required further analysis in Phase II. The Project Team closed by presenting the Draft Scope of Work for Phase II. The MAAB expressed support for Phase I findings and outcomes and the proposed approach for the Phase II.

2.4.3. NPIAS Airport Managers

Maine's airport managers are responsible for a diverse range of duties and responsibilities. At many of the State's smaller general aviation airports, the duties of the airport manager are performed by the town manager or public works director. Nine (9) airport managers reported being the only dedicated staff member at the airport, while another 13 general aviation airports do not have any airport manager or full-time staff member on-site. Airport managers often not only manage the day to day operations of the facility, ensure compliance with state and federal regulations, and coordinate consultants, tenants, and itinerant pilots, but also forge relationships with their communities to advocate for, and generate interest in the airport. Given the wealth of knowledge these individuals possess, an *Airport Manager Survey* was distributed to each NPIAS airport in Maine. As airport managers, town managers, and public works directors are often the experts of their local airport and its relationship with the community, this key instrument of data collection assists the project team in assessing facility requirements and determining an airport's role which could potentially determine its capital funding priorities. A summary of the content asked in the *Airport Manager Survey* is provided in [2.5.1 Stakeholders Surveys](#).

2.4.4. Privately-Owned Public Use Airports

Although not included in the NPIAS, Maine has a number of privately-owned public use airports that augment the state airport system. These facilities provide access to remote areas of the state or offer landing locations for seaplanes. Many facilities offer businesses and services that can be found at publicly owned airports that are included in the NPIAS. Owners of privately-owned public use airports help to fill in gaps in service and locations that may not otherwise be served by the public airport system. Privately-owned public use airports participated in the SASP by responding to a survey regarding their role, seasonality, services offered, and long-term outlook. **Table 2-2** indicates the participants of this survey.

Table 2-2: Respondents to Privately-Owned Public Use Survey

Airport Name	Airport Role
Millinocket Lake Seaplane Base (70B)	Seaplane Base
Currier’s Seaplane Base (21M)	Seaplane Base
Deblois Airstrip (43B)	Seasonal Hard Surface Runway
Matinicus Island Airport (35ME)	Seasonal Turf Runway
Moosehead Aero Marine (52B)	Seaplane Base
Twitchell’s Airport & Seaplane Base (3B5)	Seasonal Hard Surface & Turf Runway, Seaplane Base
Van Buren Seaplane Base (05B)	Seaplane Base
Bradford Camps (ME3)	Seaplane Base
Rangeley Seaplane Base (M57)	Seaplane Base
Buckhorn Sporting Camps Seaplane Base (78D)	Seaplane Base

Source: McFarland Johnson analysis, 2020.

2.4.5. Regional Planning, Tourism, and Economic Development Organizations

As important as the pilot and aeronautical business alliances are, the communities in which they serve is equally important. Regional Planning Councils (RPCs) and Economic Development Districts (EDDs) have a unique perspective of Maine communities often staffed with professionals from non-aeronautical backgrounds that can provide unique socioeconomic insights, trends of local businesses, and an understanding of the local marketplace that extends far beyond the airport boundary. To engage with these important stakeholders, an additional survey instrument was prepared to better gauge each airports relationship with regional planning, tourism, and economic development groups. The finalized survey for this stakeholder group can be found in **2.5.1 Stakeholders Surveys**. Respondents to the *Regional Planning & Economic Development Survey* are provided in **Table 2-3**.

Table 2-3: Respondents to Regional Planning & Economic Development Survey

Name of Agency	
Androscoggin Valley Council of Governments	Mid-Maine Chamber of Commerce
Doweast Acadia Regional Tourism	Northern Maine Development Corporation
Eastern Maine Development Corporation	Town of Greenville

Greater Houlton Chamber of Commerce	Southern Maine Planning & Development
Greater Portland Council of Governments	Southern Midcoast Maine Chamber of Commerce
Kennebec Valley Council of Governments	Washington County Council of Governments
Midcoast Economic Development ¹	

Source: McFarland Johnson, 2020.

¹ Survey completed by Knox County

Of the respondents, common themes reported by each agency were that airports were generally favorable for economic development and tourism in their regions. Some favorable business considerations were airports that had Foreign Trade Zone status, flying clubs to promote aviation, businesses located on-airport, and those that provided opportunities for economic growth like solar farm/renewable energy development, among others. Most agencies believed that airports in their region were favorable for workforce recruitment and business attraction efforts. Regarding system improvement needs, most agencies responded that regionally connected air service to the state’s major business centers like Portland and Bangor would enhance the goals of their organizations. Additionally, hangar expansion opportunities are viewed as positive investments to improve the airport system. All agencies that responded stated that their local airports were growing and served as a vital mode of transportation in their regions. Without air transportation, no agency believed another mode could provide the same level of flexibility and service as their local airports.

It was also identified that some RPC/EDDs were not as knowledgeable of the aviation facilities in their regions and exposed a greater need for promotion of the airports, their functions, and roles in order to better collaborate with within the community.

2.4.6. Native American Tribes

The Aroostook Band of Micmacs responded to the survey of Economic Development Districts, and MaineDOT noted that there are five American Indian reservations in Maine:

- Aroostook Band of Micmacs
- Houlton Band of Maliseet Indians
- Passamaquoddy Indian Township Reservation
- Passamaquoddy Pleasant Point Reservation
- Penobscot Indian Island Reservation

Princeton Municipal Airport expressed that the Passamaquoddy Indian Township Reservations had approached the airport previously to discuss the facility being a resource for their proposed developments. It will be important to coordinate and aligning goals between SASP airports, MaineDOT, and these communities during the implementation of SASP recommendations.

2.4.7. State Agencies

To further assist in understanding key system components and their functions, a focus group of state agencies was convened to understand how different public departments use and interact

with aviation and airports throughout Maine. The following agencies and attendees that participated in the SASP focus group are provided in **Table 2-4**.

Table 2-4: State Agency Attendees to SASP Focus Group

Airport	Attendee
Maine Forest Service	John Crowley, Chief Ranger Pilot
Department of Marine Resources	Steve Ingram, Pilot Marine Patrol
Department of Emergency Medical Service	Sam Hurley, Director
Department of Economic and Community Development., Office of Outdoor Recreation	Carolann Oullette, Director
Civil Air Patrol – Maine Wing	Lt. Col. Greg Curtis
Maine Air National Guard	Col. Ian Gillis & Col. Dave Pratt
Department of Inland Fisheries and Wildlife	Jeff Beach, Chief Warden Service Pilot

Source *McFarland Johnson, 2020*.

Different agencies interact with the system in different ways, varying from being an active user of airports to relying on the system to further leverage each agency’s mission and goals. The Department of Emergency Medical Services does not actively use the system itself as they are primarily a regulatory agency, however they rely on the aviation system to be an option for patients needing air transport in emergencies. The agency believes given the rural geography and long trips needed to transport patients to regional medical centers, the airport system will become an increasingly important component to ensuring patient and provider safety. Another agency that relies on the airport system to serve their mission is the Office of Outdoor Recreation. It was noted that outdoor recreation is a part of the State’s talent recruitment strategy and that air travel is essential to transport a certain degree of tourists into and out of the Maine woods. The Office of Outdoor recreation noted some challenges in connecting passengers, pilots, and guides “the last mile” from the airport to remote camp sites and believes there will be a continued growth in the use of airports to serve outdoor recreation needs.

Active users of the system include the State’s Forestry, Fisheries, and Military agencies. The Department of Marine Resources has used the airport system since the 1940’s for marine patrol, law enforcement exercises, and for search and rescue operations of commercial fisherman; the agency frequently uses Augusta State Airport and relies on the crosswind runway to be able to serve its mission. There has been discussion to use other airports such as Waterville and Stonington, however the agency noted that obstructions are an issue. Another active user, the Maine Forest Service maintains 10 aircraft (seven helicopters and three fixed-wing aircraft) and employs their own aircraft mechanics and refueling apparatus that consists of eight jet-A fuel trucks. The Forest Service’s primary purpose is for natural resource management, fire protection, search and rescue missions, and medical evacuations. The Forest Service indicated that float plane access in the interior of Maine can be difficult due to a lack of consistent refueling options and that float plane activity at the agency would increase if there was better refueling capabilities.

The Maine Wing of the Civil Air Patrol maintains five aircraft and is called upon by the United States Air Force (USAF) for emergency operations services such as search and rescue missions, disaster photography and damage assessments, and for assistance to the Forest Service. Civil Air Patrol relies heavily on crosswind runways for their fleet of small aircraft and believes the closure of

crosswind runways at airports throughout the state may jeopardize the safety of their missions. The Maine Air National Guard noted that they are heavy users of the airport system and concentrate many of their operations at Bangor International Airport, which they noted a number of facility requirement desires including an engine run-up area and hot cargo pad for loading and unloading of munitions and other explosive material. Lastly, the Department of Inland Fish & Wildlife employs three full-time pilots and maintains four aircraft. The Department stocks fish twice annually and routinely conducts search and rescue missions using any a variety of runways (public and private use) to access lost campers. The Department also routinely uses seaplanes and relies heavily on seaplane service providers such as Twitchell’s Airport and Seaplane base for fueling and services. They also identified that there is no seaplane base south of Twitchell’s that serves fuel which forces emergency providers to expend critical travel time and fuel just to arrive at search areas within the southern region of Maine.

2.4.8. Outdoor Recreation Focus Group

MaineDOT scheduled a virtual meeting October 1, 2020 with representatives from outdoor recreation groups. Table 2-5 provides the names of the organizations that participated.

Table 2-5: Outdoor Recreation Focus Group Attendees

Group	Attendee
Bradley Camps	Float Plane Operator
Maine Mountain Collaborative	Representative
Sunday River Resorts	President
New England Outdoor Center	Representative
Office of Outdoor Recreation	Director

Source: McFarland Johnson, 2020.

This user group articulated the need to access remote regions within Maine for economic development purposes. Float planes are their main source of transportation. The group expressed several constraints with available float plane infrastructure. One being that the primary point of access for out of state tourism is through the two major commercial service airports: Portland International Jetport and Presque Isle International. Portland does not have a readily available seaplane base and requires travelers transport to Highland Lake in the Town of Westbrook about nine (9) miles away, where they use an existing canoe launch. Presque Isle’s seaplane base is much closer off the end of the airport property; however, without docks it requires wading through the shallows by the clientele. The seaplane access near Bangor (Lucky Landing at Pushaw Lake) is widely used and valuable but could be in jeopardy of closure as the owner is considering retirement. The alternative for Pushaw Lake would be Old Town, however this is not convenient for clientele due to the inconvenient routing of public access at the airport. When asked whether amphibious aircraft could solve water access issues, the members explained the financial and weight burden that amphibious float equipment impose noting in some cases that the weight, actually restricts access due to necessary takeoff distance. Weather reporting and Promotion of aviation access was identified as a need that would improve the use of recreational facilities in Maine. This group also identified Twitchell’s Airport and Seaplane Base as a hub for private pilots, float planes and rentals.

Sunday River, a nationally owned ski and golf resort, expressed the abundance of private investment occurring around both Sunday River and the sister mountain, Sugarloaf Resort. It was suggested that due to their own extension plans for development, the likely trend upward in growth will require a discussion of the need for scheduled service within the next decade.

2.4.9. Washington County Focus Groups

The previous Maine system plan (2007) found that Washington County has a deficiency in aviation access, and this update to the MaineSASP included a task to explore and update understanding of current needs at SASP airports in the County. The task included research and conversations with aircraft operators and/or business and community users for Eastport Municipal, Machias Valley, Princeton Municipal Airports and Deblois Flight Strip, a state-owned facility. The goal was to identify existing and/or future needs that are not being met and/or opportunities for the future that can improve access or reduce obstacles to social and economic needs for the communities of people and users they serve. The sections below summarize this work, with notes from meetings included in [Appendix A: Study Process Records](#).

- **Regional Airports & Government Focus Group:** Facilitated by regional organizations and MaineDOT, the project team interviewed County officials and key industry representatives to determine air transport needs compared with the current level of facility services available in the County. Specific facility deficiencies were discussed, and the group identified challenges in obtaining funds from the County that has many demands and limited resources to assist in airport development. The group agreed that cooperation and coordination among the region's airports and airport sponsors could help with operating expenses, marketing, and promotion of the region; however, identifying a lead agency for this task will be difficult as airport sponsors and Washington County do not have staffing or leadership capacity available to take on such a regional role or initiative.
- **Air Medical Focus Group:** The project team met with a diverse stakeholder group which represented various rural and regional medical centers, State agencies, and LifeFlight of Maine to determine the air transport needs and facility requirements for emergency air medical services. Chief concerns of LifeFlight included aging AWOS systems that provide limited weather information at rural airports and the limited access to the area for access via fixed-wing aircraft due runway length at Machias Valley Airport. The group agreed that roadway access to areas of Washington County is time-consuming and difficult in poor weather for medical emergency missions, and the challenge of serving these communities will remain so for LifeFlight or medical charter operators without a longer runway in the region.
- **Economic Development Focus Group:** To understand the unique needs of the business community and the airport system's role in the economy, the economic development focus group endeavored to engage business and civic leaders, town/city management, tribal leadership, and economic development corporations to understand how aviation is used to support economic activity throughout the state. Various stakeholders conveyed the importance of the airport system in providing critical access to their businesses, with hunting and camping lodges in the area sometimes seeing as many as 80 percent of guests

arriving by air. Some business owners expressed concerns regarding the reliability of access to the airports due to limited runway length and weather reporting systems which forces employees, clients, and vendors to use other modes to reach their destinations. Scheduled service was identified as a viable option to improve these conditions and would also promote tourism which is the key segment of the Washington County economy.

- **Deblois Flight Strip Focus Group:** Given the historic use of the Deblois Flight Strip by agricultural producers (blueberries) in the region, this focus group endeavored to include MaineDOT staff currently responsible for oversight and maintenance of the facility (which is unattended), a representative from the Town of Deblois, agricultural business owners, LifeFlight, and pilots. MaineDOT staff provided an update on existing activities, maintenance, condition, and funding for the facility. Currently there are no obligations to the FAA. Further discussion should determine the facility's value to the Washington County economy and determine an appropriate path for MaineDOT's continued ownership and operation of the airport.

Findings and conclusions from each focus group meeting are incorporated into the analysis presented in *Chapter 5., System Capabilities & Performance Gaps*, and are documented in a standalone technical memorandum included in *Appendix F: Washington County Evaluation*.

2.5. OUTREACH INSTRUMENTS

To conduct stakeholder outreach, the project team utilized the following methods to reach the diverse group of users and stakeholders of Maine's airport system:

- Stakeholder Surveys
- Event Outreach at Conferences and Events
- Airport Manager Interviews
- Key Informant Interviews
- Site Visits

2.5.1. Stakeholder Surveys

As described, the initial step of the data collection efforts were four stakeholder surveys, each prepared and administered to collect primary data from the following groups:

- Airport Managers
- Regional Planning and Economic Development Districts
- General Aviation Stakeholders
- Privately-Owned Public Use Airport Operators

Each final survey is included in *Appendix B., Study Survey & Interview Instruments*.

2.5.2. Event Outreach at Conferences and Events

Members of the project team attended the 14th Annual Maine Aviation Forum at the Owl's Head Transportation Museum in February 2020. **Figure 2-1** depicts the group gathered for the Maine Aviation Forum in Owl's Head in 2020.

Figure 2-1: Attendees at the 14th Annual Maine Aviation Forum, Owl’s Head, ME



Source: McFarland Johnson, 2020.

The primary attendance group at the Forum consists of the general aviation pilot and aeronautical business community in Maine and allowed the project team to interact with individuals that may not participate in the more formal advocacy and political action groups relating to aviation. A brief presentation was given providing context to the group on the need for the SASP, which has not been completed by the MaineDOT in nearly 15 years. The day-long event was informal, with participants stopping by a booth established by the project team, and through indirect engagement via a one-page survey and conversations with attendees. Pilots and private airport owners acknowledged the State’s fiscal constraints, but shared stories of grassroots fundraising and community support to fund aviation events and facilities. These individuals were targeted for more detailed interviews to capture the qualitative stories that express the spirit and fortitude of Maine aviators.

For early outreach efforts, a member of the project team attended the annual conference of the NASAO held in St. Paul, MN. As the most widely attended industry event for state aviation professionals, this event was utilized to speak directly with other states agencies regarding their programs and the challenges faced in different regions of the country. A survey to gauge factors such as staffing levels, funding levels, and functions provided by each state aviation agency was distributed and ultimately completed by 17 states for a 36 percent response rate. These results were shared with PAC and MAAB groups as information was received and provided the baseline data used in the *System Management Evaluation Report* ([Appendix E](#)).

2.5.3. Airport Manager Interviews

The majority of airport managers, town managers, and public works directors viewed the airport facility as an asset to their community and critical for emergency medical access. However, a series

of consistent themes emerged from the interviews that allowed the project team to better understand the challenges many airports are facing. These challenges included the following:

- Need for additional funding for operations
- Need for additional funding for capital improvement projects
- Assistance with snow removal (both technical assistance and funding assistance)
- Assistance with obstruction & vegetation management
- Assistance with pavement maintenance
- Development of an Airport Manager Manual and Training

In addition to these consistent needs, some facilities also expressed a need for additional hangar development to bring additional revenue to their facilities. Some airports also stressed aging terminal infrastructure and the need for basic facilities such as restrooms or a pilot planning room that are believed to help attract pilots to their facilities. These interviews provided examples of how each airport provided FAA-defined functions to the community. These examples lead to Key Informants who could speak to the specifics of their operations.

2.5.4. Key Informant Interviews

Interviews with airport managers lead to the discovery of individuals referred to the project team as active members of the aviation community who exemplify the types of functions that the airports provide to the community. Although tracking these members down proved to be difficult (outreach achieved just a 25 percent response rate), those that participated yielded additional insight into aeronautical issues in the state. In addition to reiterating themes such as promotion for aviation, workforce constraints, need for seaplane facilities & fuel, need for hangars & maintenance facilities, better weather reporting (specifically cameras), and more awareness for leadership at airports, a majority of responses stated that they would leave the community by relocating or dissolving if the airport closed.

Penobscot Island Air (PIA) identified the high costs of operations, along with the additional burden of supporting maintenance on the island communities such as replacing windsocks, and even supplying stone and gravel for washouts. Identifying the high costs of fares as a deterrent for attracting out of state visitors, an opportunity for public private partnership (P3) assistance with facility maintenance would help their business and attract more people to Maine. Other respondents provided examples of how local support from the airports' leadership in various forms resulted in the increase of business establishment in the community. Couple this reoccurring theme with statements of people interested in starting flight schools, or apprenticeship training and there is a real opportunity within Maine where P3 could be the catalyst for private industry to fill the gaps of facility services. In contrast to supporting the growth of business, some informants identified that public oversight and taxes are a hinderance to their growth and operations. Specifically, the FAA Flight Standards District Office (FSDO) delays in certification of aircraft has made a negative impact on businesses in Maine.

Ultimately, this exercise reinforced the understanding that aviation within Maine is not a series of individual airports, but a network of complex relationships where one airport supports the needs of users at others.

2.5.5. Site Visits

A series of in-person site visits were conducted in July and August 2020 to thoroughly review each airport manager’s survey and seek additional input. Site visits allowed the project team to better understand facility constraints and the local economic activity surrounding each airport in its respective community. Drive times were experienced first-hand. Community character, condition, and airport management personalities were observed in order to understand the subtle uniqueness, or “feeling” of the individual airports that cannot be quantified, or accurately conveyed without experiencing in person. These visits provided a deeper insight to understanding the airport system and will be used to vet analytical findings.

2.6. FINDINGS & THEMES

Review of responses to surveys from airport managers, regional planning and economic development agencies, and general aviation stakeholders identified a number of themes that help to establish each airport’s significance to its community and the broader airport system. These themes were validated by key informant interviews and focus group discussions and were communicated to both the Project Advisory Committee and Maine Aeronautical Advisory Board as a means to validate the scale or breadth of issues in the system. The following common themes emerged from the stakeholder outreach process.

2.6.1. Airport Manager Findings

An abundant amount of information was provided to the project team by Airport Managers. The completeness of responses varied, with some responses omitted to certain questions or vague details provided on others. Attempts were made to obtain greater understanding in these instances during the in-person interview process and through other outreach means. As a result, the following themes emerged as key issues for Maine’s airport managers:

1. Maintenance Challenges

- Snow Removal
- Funding
- Obstruction & Vegetation Management
- Pavement Repairs
- Finding Qualified Workforce

2. Facility Development Needs

- Hangar Development
- Pavement Rehabilitation
- Facility Expansion
- Terminal Improvements (construction, renovation, and rehabilitation)
- Security

3. Financial Needs

- Additional grants/funding sources
- Assistance with Capital Funding Program
- Economic Development Technical Assistance
- Financial Planning

4. Technical Assistance

- General Sponsor Requirements

- Education/Training Programs
- UAV Management Education
- Workforce Development
- Engineering Support
- Design/CAD/GIS support
- Accounting/Procurement Support

Each theme’s prevalence among airports and greater detail of each item is discussed in *Chapter 3: Summary of Existing System*.

2.6.2. Regional Planning and Economic Development Agency Findings

Regional planning and economic development agencies were found to have loose ties with airports in their communities. Although most agencies responded that the airport was a positive asset in their communities, few agencies regularly interact with the airport or have technical knowledge on its functions and capabilities. This stakeholder group did yield insight on some of the State’s unique aviation assets which include the following:

- Seaplane bases provide critical access to many regions and support tourism and travel in their areas. Two particular seaplane bases, Twitchell’s (3B5) in Turner and Rangeley Lake (M57) were both identified as critical for access and services to their communities.
- Oxford County Airport was mentioned that it has become a destination for pilots in the region to take advantage of an aircraft painting business that has recently reopened at the facility.
- Regional jets reportedly rely on Auburn Lewiston Airport to meet their maintenance needs.
- Helping to fuel Maine’s ski tourism industry, Bethel and Stephen A. Bean Municipal Airport were identified as important to the State’s ski industry.
- Multiple agencies reported that regional airports provide access to government agencies like the US Customs and Border Protection, US Coast Guard, Maine National Guard, and others which help with law enforcement and public safety efforts in their communities.

A lack of facilities was identified in the following areas:

- Ground transportation access to airports including public transportation
- Flights to more convenient places (i.e. Boston instead of Newark, NJ from Presque Isle)
- Enhanced training facilities to aid the workforce development efforts of the University of Maine – Augusta
- Modernized hangar facilities to meet wait list demands
- More desirable terminal facilities like neighboring states
- A need for more FBO’s to provide services
- Greater runway length in Washington County to support fixed-wing medical evacuation flights.

Generally, regional planning and economic development agencies identified transportation constraints as barriers to aviation in their regions. From a lack of “last mile” transportation options to limited multimodal connections, many agencies feel that the airports are not well connected by transit to the communities in their region. Agencies believe that increased stakeholder engagement, awareness, and promotion of airports as assets may help in increasing awareness

and use of the facilities. Additional challenges noted were the cost of fuel, aging infrastructure, and lack of business development due to many areas being economically disadvantaged, having limited skilled workforce, and an aging population.

2.6.3. General Stakeholder Feedback

Nearly 40 stakeholders completed the *General Aviation Survey* and identified key system strengths in the variety, number, and geographic distribution of airports. Many respondents are hobbyist/recreational pilots and responded that the airport system is the best way to provide access to Maine’s natural beauty. The survey results expressed the need for a better structure to fund aviation in state via a fuel tax increase or some other method. Regarding the support from the State of Maine, many respondents feel that the MaineDOT is understaffed and underfunded to fulfill the State’s aviation needs.

To develop workforce and increase the number of pilots and passion for aviation, many respondents noted that funding should be directed towards aviation training in primary and secondary schools, and that flight schools and maintenance training programs should be established and well-supported in all areas of the state. An improved collaboration with local businesses and government would assist in demonstrating the value of the airport and improving support in communities that may lead to expanded use and opportunities. General stakeholders feel that with more collaboration, an increase in use and eventually services may occur. Many users feel that lack of awareness and knowledge of local leaders of the airport leads to disinterest and divestment in airports. It was suggested that promotional communication efforts would facilitate the sharing of facility resources and benefits.

Regarding facilities, the following basic level of services were identified as challenges for the general aviation stakeholder group:

- Accurate weather reporting
- Availability of fueling services
- Last mile of transportation
- Pavement conditions
- Lack of FBO’s and maintenance shops
- Lack of support for experimental aircraft
- Dire need for more seaplane infrastructure
- Greater support for unattended airports
- Clear approaches needed at more airports
- More runway/taxiway lighting
- Wi-Fi available at terminals for safety/weather planning

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Summary of Existing System

3.1. INTRODUCTION

This Chapter presents a summary of the existing 35 public-use airports currently identified as part of the Maine State Aviation System. According to the Federal Aviation Administration’s (FAA) Airport Master Records (form 5010), as of July 2020 there are 217 landing sites in the State of Maine. These include all public-use and privately-owned/private-use landing fields, heliports, and seaplane bases. As described in *Chapter 1. Project Introduction*, the Maine State Aviation System Plan (SASP) focuses on the 35 public-use airports included in the FAA National Plan of Integrated Airport Systems (NPIAS) for the 2019-2023 period. It is these facilities that are eligible for federal grant funding under the FAA Airport Improvement Program (AIP).

This chapter presents a summary of the data collected for the SASP, which serves as the foundation for analyses performed and presented in subsequent chapters.

3.1.1. SASP Treatment of Other Maine Airports

As stated, the subject of this SASP is airports included in the NPIAS at the time of this study. However, the FAA updates the NPIAS every two years to review changes that affect airports’ significance to the national air transportation system. As such, airports may be added to or removed from the NPIAS as determined by the FAA.

During the SASP project it was brought to MaineDOT’s attention that the following privately-owned, private-use facility and island community expressed interested in working with MaineDOT to become involved with the NPIAS and become eligible for AIP funding. The following summarizes these facilities and circumstances:

- **Loring International:** located at the former Loring Air Force Base and currently operating as a privately-owned, private-use airport, Loring International is home to the longest runway in the State of Maine. However, it is near both Caribou Municipal Airport and Presque Isle International Airport, which are both currently included in the NPIAS. It is because of this proximity that Loring does not meet one of the qualifications needed to be included in the NPIAS.

The Loring Redevelopment Authority (LRA) is currently courting companies that may be interested in relocating some services to the facilities at Loring. Knowing this, it is believed the LRA is looking to MaineDOT and the FAA to assist in funding needed pavement repairs to help make the airport a more attractive location to the aviation industry. Because it is not a NPIAS airport, it cannot receive FAA funds at this time. While MaineDOT may support the efforts at Loring, the current structure of MaineDOT funding is to provide matching funds to FAA grants to NPIAS airports and does not have a direct mechanism to fund private airfield maintenance. MaineDOT does support the efforts of the LRA in bringing additional aviation businesses and traffic to Maine and will help where they can (such as the PCI

study), and should the airport find a path to be included in the NPIAS will support them to the best of their ability

- **Town of North Haven:** The Town of North Haven is located on North Haven Island in Penobscot Bay and is accessible by boat and aircraft only. The island currently has a couple privately owned airfields but no publicly-owned airport. North Haven receives services such as mail runs, package deliveries, and charter flights to the islands from Penobscot Island Air (PIA) year-round. The runway that PIA has access to year-round is a grass/gravel strip only 900 feet long. In the past, the Town has had agreements with another landowner to utilize their grass strip (which is longer) during the fall, winter and spring months; however, PIA is denied access during the summer.

The community has come to MaineDOT to inquire about the process of building a Town-owned airport with Federal and State funds. This would require acceptance into the NPIAS just as the process that Loring International would have to follow. However, because there is no automotive access to the island, North Haven would be considered a remote access airport and may have a better chance of being included in the NPIAS.

The Town can apply to the FAA to obtain funds to complete an Airport Master Plan Study. These funds can be used with no strings attached and would not require the Town to build an airport. Beyond a master plan study, should the Town further pursue FAA funds to purchase land and complete all necessary surveys (land survey, environmental assessments/environmental surveys, approach surveys and geotechnical surveys), engineering design reviews, approvals, and construction of a runway/airport, the Town of North Haven will be required to agree to and maintain compliance with assurances obligated by the acceptance of FAA funding.

At this time MaineDOT recognizes that the lack of proper-length runway with all-season and safe air access for passengers and cargo to the island is not adequate to properly service people on the island. MaineDOT has indicated its willingness to assist the Town in pursuing the Airport Master Plan and guiding the Town as best it can.

While these facilities are not incorporated into the SASP, this information is important and relevant to the statewide system of airports in Maine.

3.2. EXISTING CONDITIONS DATA & COLLECTION PROCESS

The primary and foundational element of any airport planning study is the collection of data pertaining to SASP airports, which ensures that the most current and accurate information is considered in the study. An extensive process was undertaken to collect current relevant data for the Maine SASP.

As described in *Chapter 2. Summary of Stakeholder Outreach*, airport managers from the 35 subject Maine airports were surveyed to collect primary relevant data pertaining to infrastructure facilities, aeronautical services available, and activity characteristics at each airport. Additionally, each airport manager was interviewed for additional insights pertaining to the function of each airport. The various surveys are provided for reference in *Appendix B. Study Survey & Interview*

Instruments. Each of the completed surveys and interview summaries are on file with the Maine Department of Transportation (MaineDOT).

Additionally, MaineDOT Bureau of Planning provided a quantitative database of information that the Bureau maintains pertaining to facilities, services, and equipment in place at each public use airport. Data published by the FAA, including Airport Master Records, and individual Airport Layout Plans were utilized where necessary. Finally, input provided by key industry representatives and stakeholders listed in Chapter 2 was incorporated in understanding the functions for each airport.

3.3. MAINE SYSTEM AIRPORTS & REGIONAL CONTEXT

This section summarizes general data about SASP airports from a system perspective. Additional data pertaining to individual SASP airports is included for reference in *Appendix C. SASP Airport Inventory Data*, and *Appendix D. Airport Summary Profile Sheets*. **Table 3-1** presents the 35 NPIAS airports in the Maine SASP and **Figure 3-1** illustrates the location of Maine SASP airports and indicates each airport’s NPIAS service category:

Table 3-1: Maine SASP Airports & NPIAS Service Level

Airport Name	ID	Location	NPIAS Category
Auburn/Lewiston Municipal	LEW	Auburn/Lewiston	Reliever/Regional
Augusta State	AUG	Augusta	Commercial/Regional
Bangor International	BGR	Bangor	Primary/Non-Hub
Belfast Municipal	BST	Belfast	General Aviation (GA)
Bethel Regional	OB1	Bethel	General Aviation
Biddeford Municipal	B19	Biddeford	General Aviation
Brunswick Executive	BXM	Brunswick	General Aviation
Caribou Municipal	CAR	Caribou	General Aviation
Central Maine Regional	OWK	Norridgewock	General Aviation
Charles A. Chase Jr. Memorial Field	44B	Dover/Foxcroft	General Aviation
Dewitt Field, Old Town Municipal	OLD	Old Town	General Aviation
Dexter Regional	1B0	Dexter	General Aviation
Eastern Slope Regional	IZG	Fryeburg	General Aviation
Eastport Municipal	EPM	Eastport	General Aviation
Greenville Municipal	3B1	Greenville	General Aviation
Hancock County – Bar Harbor	BHB	Bar Harbor	Commercial
Houlton International	HUL	Houlton	General Aviation
Islesboro	57B	Islesboro	General Aviation
Knox County Regional	RKD	Owls Head	Primary
Lincoln Regional	LRG	Lincoln	General Aviation
Machias Valley Municipal	MVM	Machias	General Aviation
Millinocket Municipal	MLT	Millinocket	General Aviation
Newton Field	59B	Jackman	General Aviation
Northern Aroostook Regional	FVE	Frenchville	General Aviation
Oxford County Regional	81B	Oxford	General Aviation
Pittsfield Municipal	2B7	Pittsfield	General Aviation

Airport Name	ID	Location	NPIAS Category
Portland International Jetport	PWM	Portland	Primary
Presque Isle International	PQI	Presque Isle	Primary
Princeton Municipal	PNN	Princeton	General Aviation
Sanford Seacoast Regional	SFM	Sanford	Reliever
Stephen A. Bean Municipal	8B0	Rangeley	General Aviation
Stonington Municipal	93B	Stonington	General Aviation
Sugarloaf Regional	B21	Carrabassett Valley	General Aviation
Waterville Robert LaFleur	WVL	Waterville	General Aviation
Wiscasset	IWI	Wiscasset	General Aviation

Source: MaineDOT, 2020.

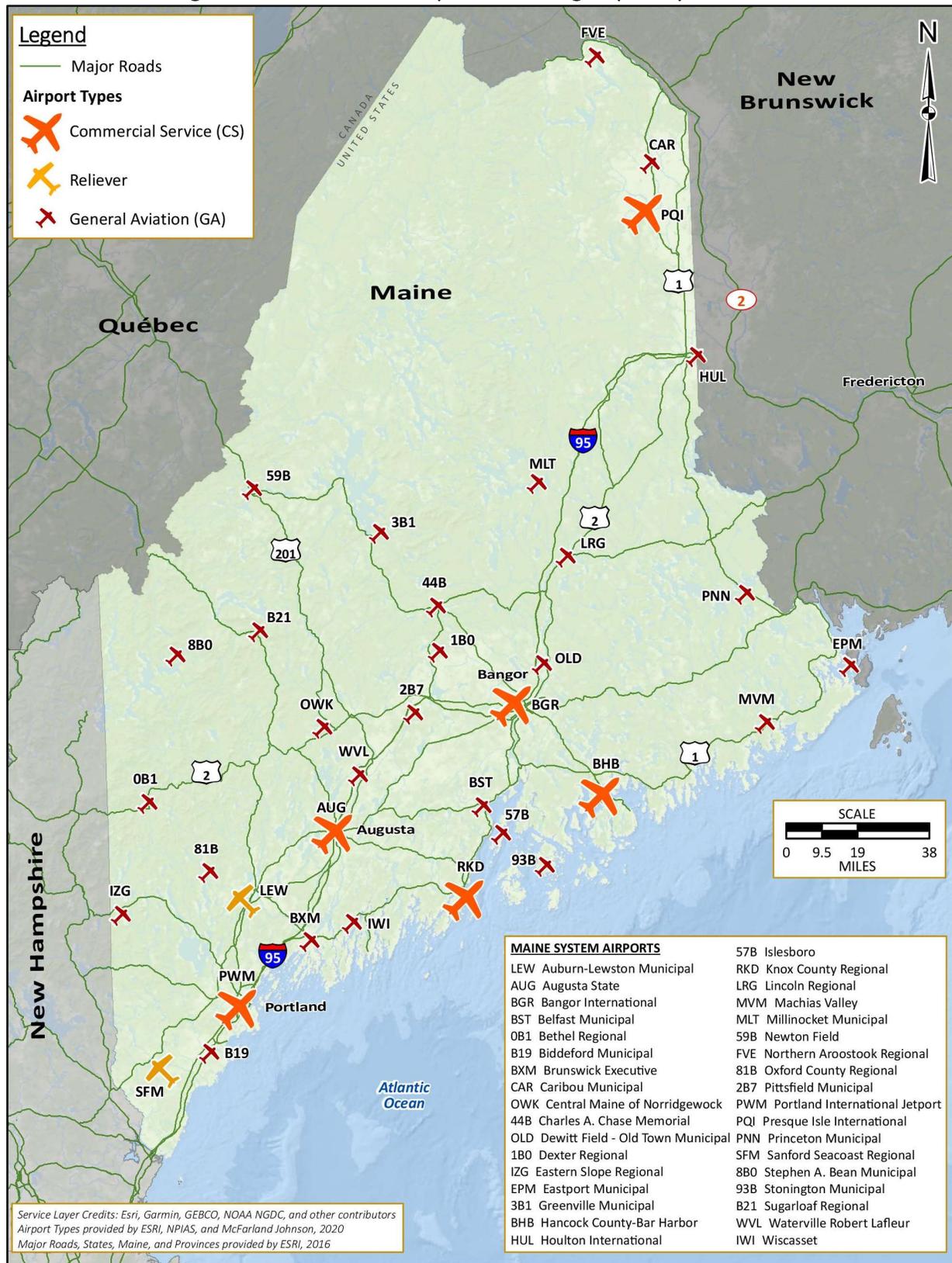
As shown, the Maine state aviation system is comprised of 29 GA airports, two of which are designated as reliever facilities to the six commercial service airports. Augusta State is designated as a commercial service airport in the NPIAS but also given a Regional role; therefore, it is included in this discussion of Regional airports.

Airports in the Maine system, like other components of physical, public-use transportation infrastructure such as local, state, and federal roads, highways, and bridges, represent valuable and critical assets that are relied upon by people, communities, and businesses. As such, airports need to be designed, maintained, and improved upon in order to accommodate future demand. Maine airports play a vital role in the following areas:

- Passenger Service:** From international hubs offering direct flights by major network airlines to domestic and international destinations, to regional airports connecting smaller communities to those hubs, scheduled air service is the backbone of passenger travel, connecting people for business, personal, and leisure travel. Data available from the FAA¹ indicates that Maine’s commercial service airports enplaned about 1.46 million passengers in calendar year 2019.
- Business & Economic Support:** Airports also serve as the base of operations for aeronautical and non-aeronautical operations that service people and businesses, such as aircraft management and charter operators, aircraft maintenance/repair operators, freight and logistics carriers, agricultural applicators for agricultural land, float-plane operators, and corporate flight departments or small business operators. Additionally, airports with an abundance of land are also attractive to non-aeronautical users in need of gentler topography, such as agricultural, solar farms, storage facilities, parks, golf courses, light industrial or low-density business and commercial office facilities.

¹ Air Carrier Activity Information System (ACAIS), Passenger Boarding Data, 2020

Figure 3-1: Maine SASP Airports - Existing Airport System



Source: McFarland Johnson, Inc, 2020.

- **Personal Flying & Community Support:** Airports also serve as community assets for private, recreational flying and supporting business activities such as flight training, sight-seeing, skydiving, banner-towing, aircraft rental, and flying clubs, as well as the activities conducted by the Civil Air Patrol.
- **Air Freight/Cargo:** Airports are the origin and destination for intra- and interstate movement of cargo, raw materials, finished products and goods, domestically and internationally. The Maine islands rely on airports and private carriers delivery of postal and freight delivery operating via contract for the U.S. Postal Service and Federal Express. Bangor International Airport serviced more than 25 million pounds of freight in 2019, ranking 130th among 141 cargo airports². Portland International Jetport is not included in dataset.
- **Military:** Airports serve as hubs for military defense and emergency readiness, which have a large impact on the local population, supporting local employment, business, and economic activity. In Maine, the military retains a presence at Bangor International (101st Air Refueling Wing of the Maine Air National Guard, and the Maine Army National Guard).

Airports in Maine provide crucial links to the state, region, and world. This includes primary and other commercial service airports offering scheduled commercial passenger service, but also in terms of access provided for the most sophisticated and demanding aircraft in the national fleet.

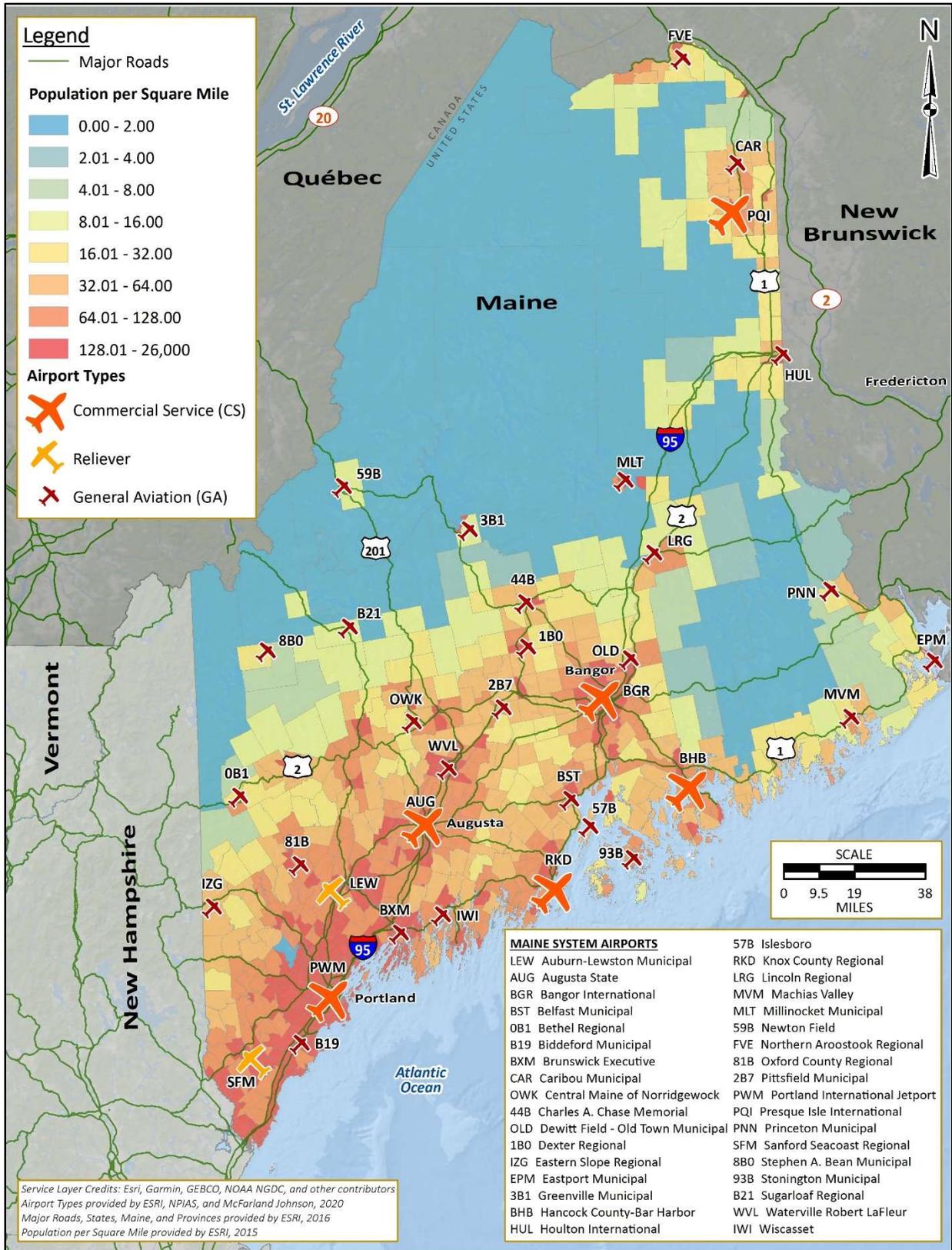
3.3.1. Airports & Regions of Socioeconomic Activity

Generally speaking, people and economic activity concentrate along major highways and thoroughfares. In Maine, much of the population and economic activity is located along Interstate 95, which transverses the state from southwest to northeast through major cities like Portland, Augusta, and Bangor on its way to Canada. It is along this corridor that most of the SASP airports are located, as well as along U.S. Route 1 through the Down East Region of Washington County and north to along the Canadian border through Presque Isle, Caribou, and Frenchville. Offshoots of this main corridor reach into other regions of the state, such as U.S. Route 2 from Bethel to Lincoln, and U.S. Routes 201 and 302 extending to Jackman and Fryeburg, respectively, where SASP airports are located.

As illustrated in **Figure 3-2** and **Figure 3-3**, SASP airports are generally located in the most populated areas of the state, where they serve communities of people and business. Figure 3-2 illustrates Maine population density and Figure 3-3 illustrates the location of top employers in Maine with respect to SASP airports. The majority of the state's population is well serviced by commercial and GA airports. Additionally, Augusta State and Portland International Jetport service the state's two largest employment centers.

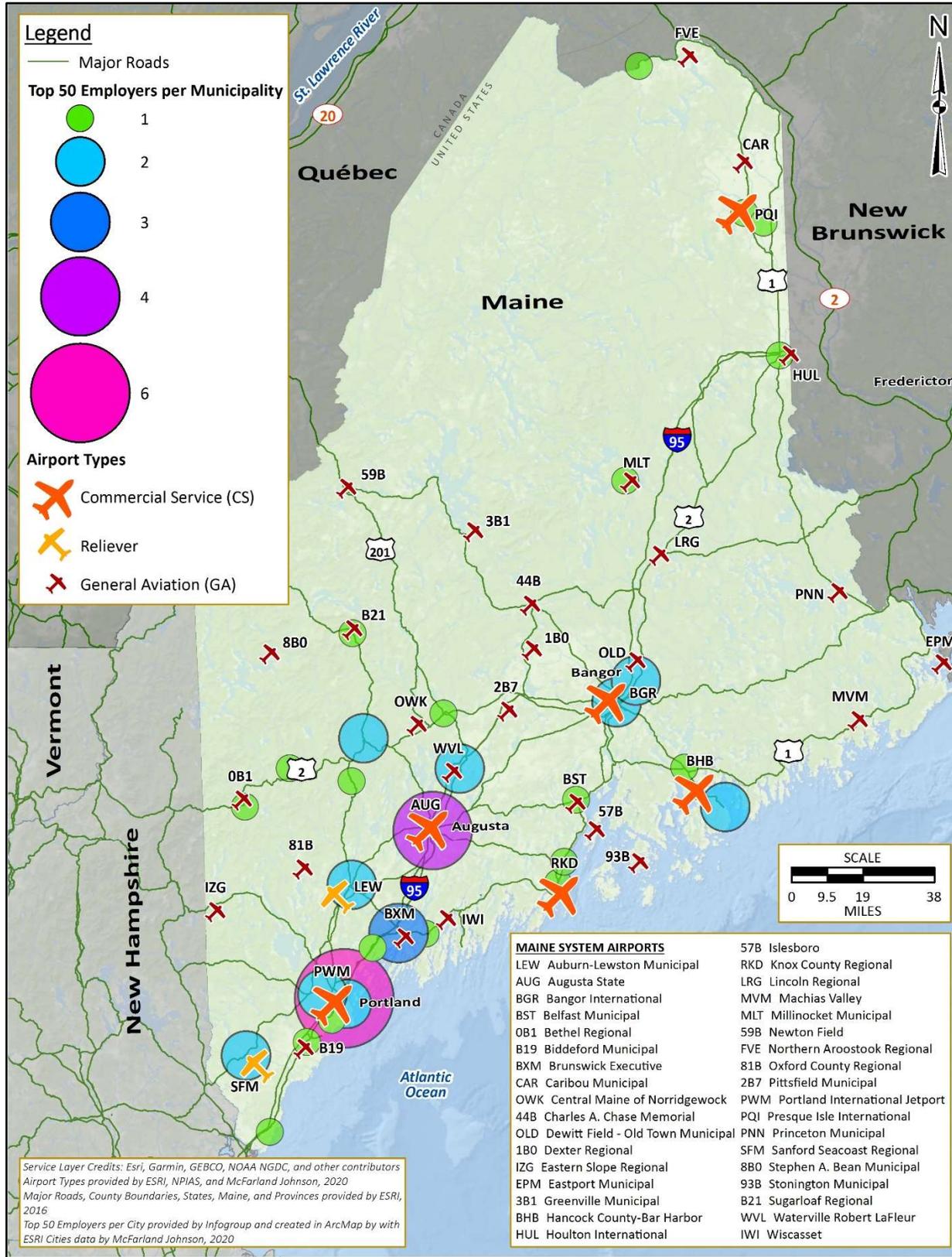
² Ibid.

Figure 3-2: Maine SASP Airports & Statewide Population Density



Source: McFarland Johnson, Inc., 2020.

Figure 3-3: Maine SASP Airports & Major Employment Centers



Source: McFarland Johnson, Inc., 2020.

Table 3-2 displays the top 10 largest employers in the State of Maine.

Table 3-2: Maine's Top 10 Employers

Rank	Employer	Location	Employees
1	Army National Guard	Houlton	7,000
2	Maine General – Thayer Center for Health	Waterville	4,000
3	Int'l Assoc. of Machinists and Aerospace Workers	Bath	3,800
4	Northern Light Health - Eastern Maine Medical Center	Bangor	3,544
5	Maine General – Alford Center for Health	Augusta	3,514
6	Mid Coast Medical Group	Brunswick	3,500
7	Togus Veterans Administration Hospital Medical Center	Augusta	3,000
8	Unum: Disability, Life, Financial Insurance	Portland	3,000
9	IDEXX Laboratories Inc.	Westbrook	2,500
10	Maine General - Pen Bay Medical Center	Rockland	2,500

Source: <https://www.careerinfonet.org/>, 2020

While many SASP airports are integrated into the core centers of population and employment activity and benefit from a healthy and diverse user base, other more remote or rural regions of the state serve as critical access points for their communities. It is in these regions, where SASP airports serve as an attractive alternative to long drives for preparedness agencies and medical responders, while also anchoring important local businesses activity and connections to other areas of the state and region. For the purposes of this SASP, airports in the Maine system are categorized into five regions based upon a combination of geographic, population, and economic characteristics. **Table 3-3** shows SASP airports by region.

Table 3-3: Maine SASP Airports by Region

Northern		
Caribou Municipal	Lincoln Regional	Northern Aroostook Regional
Houlton International	Millinocket Municipal	Presque Isle International
Western Mountains		
Bethel Regional	Greenville Municipal	Stephen A. Bean Municipal
Eastern Slope Regional	Newton Field	Sugarloaf Regional
Central		
Auburn/Lewiston Municipal	Charles A. Chase Jr Memorial	Oxford County Regional
Augusta State	Dexter Regional	Pittsfield Municipal
Bangor International	Dewitt Field, Old Town Muni.	Waterville Robert LaFleur
Central Maine Regional		
Coastal		
Belfast Municipal	Islesboro	Stonington Municipal
Brunswick Executive	Knox County Regional	Wiscasset
Hancock County-Bar Harbor		
Southern		
Biddeford Municipal	Portland International	Sanford Seacoast Regional

Washington County		
Eastport Municipal	Machias Valley	Princeton Municipal

Source: McFarland Johnson, Inc., 2020.

The scale of activity from airport to airport in each of these regions can vary widely, but the value of that activity to the people, businesses, and communities they serve are, at times of need, of the utmost importance regardless of volume or frequency. Since each airport in the SASP is different and valuable for different reasons and has needs that vary based on its unique circumstances and user base, the challenge for the state and this SASP is to identify broad issues where the state has a role to help airports meet current and future needs.

In *Chapter 1., Introduction*, the SASP takes aim toward the following two of six key goals:

- Understand current and future potential aviation system contributions to meeting expressed societal needs sufficiently to inform the following question: **What compelling public value justifies what degree of state and federal investment toward what end?**
- Identify **trends, gaps, opportunities, and prioritized recommendations** for nurturing key system components, including aviation workforce development.

The following sections provide more detail regarding the state system of airports to help identify SASP airport roles, functions, and high-level needs as reported by airport managers during the survey and interview process.

3.4. SUMMARY OF MAINE AVIATION SYSTEM

As mentioned, the Maine State Aviation System is comprised of 29 publicly owned, public-use GA airports and six commercial service airports. This section provides a summary of these airports, their role as defined in the NPIAS, and the geographic service or market areas of the statewide system.

3.4.1. General Aviation (GA) Overview

The term “GA” represents all civil aviation aircraft operations other than commercial air carriers and the military. In Maine, the 29 GA airports vary widely in size and facilities, from a 2,099-foot runway on the island of Deer Isle at Stonington Municipal, to a turf runway at Charles A. Chase in Dover-Foxcroft to facilities like Brunswick Executive with parallel 8,000-foot runways and Sanford Seacoast Regional, which boasts a 6,389-foot primary and 4,999-foot crosswind runway system.

Understanding the roles and functions of these airports in the statewide system is benefited by the NPIAS, which since the publication of *General Aviation Airports: A National Asset (ASSET)* in 2012 has assigned roles for airports based upon their contribution to the National Airspace System (NAS).

Table 3-4 presents a summary of GA airport roles as defined in ASSET.

Table 3-4: FAA NPIAS - GA Asset Roles

Role	Definition
National	Supports the national and state system by providing communities with access to national and international markets in multiple states and throughout the United States.
Regional	Supports regional economies by connecting communities to statewide and interstate markets.
Local	Supplements communities by providing access to primarily intrastate and some interstate markets.
Basic	Supports GA activities (e.g., emergency services, charter or critical passenger service, cargo operations, flight training and personal flying).
Unclassified	Provides access to the aviation system.

Source: *General Aviation Airports: A National Asset, 2012*

According to the NPIAS, National airports are generally located within metropolitan areas and near major business centers that support the nation and the world. National airports support operations of the most sophisticated GA aircraft, while also providing an alternative to sometimes congested commercial service airports. The FAA sets the following threshold criteria for airports considered to serve in a National role:

- 5,000+ annual instrument operations, 11+ based jets, 20+ annual international flights, or 500+ annual interstate departures; or
- 10,000+ annual enplanements and at least 1 charter enplanement by a certified air carrier; or
- 500+ million pounds of landed cargo weight annually.

Regional airports are also predominantly located in metropolitan areas and serve relative larger populations. Regional airports support a substantial amount of charter, jet and rotorcraft operations. The FAA sets the following threshold criteria for airports considered to serve in a Regional role:

- Metropolitan Statistical Area (MSA) and 10+ annual domestic flights over 500 miles, 1,000+ annual instrument operations, 1+ based jet, or 100+ based aircraft; or
- The airport is in an MSA, and the airport meets the definition of commercial service.

The FAA has identified Local airports as the backbone of GA in the NAS. Local airports largely support the operation of piston-engine aircraft for personal or business needs. These operations remain within the state or the immediate region. The FAA sets the following threshold criteria for airports considered to serve in a Local role:

- 10+ annual instrument operations and 15+ based aircraft; or
- 2,500+ annual passenger enplanements

Basic airports are typically limited in terms of airside and landside infrastructure and services, and fulfill a singular role linking communities to the national system. The FAA sets the following threshold criteria for airports considered to serve in a Basic role:

- 10+ based aircraft; or
- 4+ based helicopters; or
- The airport is located 30+ miles from the nearest NPIAS airport; or
- The airport is identified and used by the U.S. Forest Service, or U.S. Marshals, or U.S. Customs and Border Protection (designated, international, or landing rights), or U.S. Postal Service (air stops), or has Essential Air Service; or
- The airport is a new or replacement facility activated after January 1, 2001; and
- Publicly owned or privately owned and designated as a reliever with a minimum of 90 based aircraft.

Finally, there are nearly 500 remaining public-use airports that do not meet thresholds for these roles and are therefore termed “Unclassified.”

Maine GA Airports & Roles

Table 3-5 summarizes Maine’s airports by ASSET role, showing three Regional airports, 17 Local airports, 10 Basic airports, and three Unclassified facilities. At the time of this SASP, no GA airports in Maine are classified as serving in a National role.

Table 3-5: Maine GA SASP Airports by Asset Role

Regional Airports		
Auburn/Lewiston Municipal	Augusta State	Sanford Seacoast Regional
Local Airports		
Bethel Regional	Dexter Regional	Millinocket Municipal
Biddeford Municipal	Eastern Slope Regional	Pittsfield Municipal
Brunswick Executive	Greenville Municipal	Waterville Robert LaFleur
Cen. Maine Airport of Norridgewock	Houlton International	Wiscasset
Dewitt Field, Old Town Municipal	Lincoln Regional	
Basic Airports		
Belfast Municipal	Newton Field	Princeton Municipal
Caribou Municipal	Northern Aroostook	Stephen A. Bean Municipal
Eastport Municipal	Oxford County Regional	Sugarloaf Regional
Machias Valley		
Unclassified Airports		
Charles A. Chase Jr. Memorial Field	Islesboro	Stonington Municipal

Source: ASSET, 2012.

While there are no “official” or NPIAS-designated national airports in the state, that does not mean there are no airports that perform in that role. In Maine, this role is fulfilled by Regional and Commercial Service airports. Additionally, **Table 3-6** summarizes validated based aircraft inventory at SASP airports.

Table 3-6: GA Airport Based Aircraft & Operations Data

Airport Name	Based Aircraft				
	Total	Single Engine	Multi-Engine	Jet	Rotor
Regional					
Auburn/Lewiston Municipal	50	37	8	1	4
Augusta State ¹	47	39	8	0	0
Sanford Seacoast Regional	98	81	7	0	10
Local					
Bethel Regional	15	15	0	0	0
Biddeford Municipal	37	36	1	0	0
Brunswick Executive	42	41	1	0	0
Cen. Maine Airport of Norridgewock	26	26	0	0	0
Dewitt Field, Old Town Municipal	37	27	2	0	8
Dexter Regional	18	18	0	0	0
Eastern Slope Regional	33	32	1	0	0
Greenville Municipal	14	13	1	0	0
Houlton International	21	16	4	0	1
Lincoln Regional	24	24	0	0	0
Millinocket Municipal	17	16	1	0	0
Pittsfield Municipal	32	28	4	0	0
Waterville Robert LaFleur	17	14	3	0	0
Wiscasset	32	29	2	0	1
Basic					
Belfast Municipal	15	15	0	0	0
Caribou Municipal	10	10	0	0	0
Eastport Municipal	9	9	0	0	0
Machias Valley	4	4	0	0	0
Newton Field	11	10	1	0	0
Northern Aroostook	9	9	0	0	0
Oxford County Regional	10	8	2	0	0
Princeton Municipal	1	1	0	0	0
Stephen A. Bean Municipal	5	5	0	0	0
Sugarloaf Regional	12	12	0	0	0
Unclassified					
Charles A. Chase Jr. Memorial Field	0	0	0	0	0
Islesboro	0	0	0	0	0
Stonington Municipal	2	2	0	0	0
Totals	648	577	46	1	24

Source: FAA Aircraft Registration Data, August 2020.

^{1/} Augusta State Airport is designated as a commercial service airport in the NPIAS but also given a Regional role in ASSET; therefore, it is included in this discussion of Regional airports.

As shown, a recent inventory of SASP GA airports accounted for 648 total based aircraft, nearly 90 percent of which are single engine piston aircraft. Seven percent of remaining based aircraft in the statewide system are multi-engine aircraft, and about three percent are helicopters. There is one based jet aircraft at Auburn/Lewiston Municipal. Importantly, these based aircraft figures do not include ultra-light aircraft in the state, as such aircraft are not recognized by the FAA for inclusion or categorization of airports in the NPIAS.

Half of the 10 Basic airports in the SASP reported below 10 based aircraft, which may make them at risk of not being included in the next update to the NPIAS. As described, the criteria to be a Basic airport in the NPIAS is 10+ based aircraft plus a handful of other characteristics such as distance from other NPIAS facilities (which addresses the issue of alternative airports as options) and usage by federal agencies. The FAA understands the ebb and flow of market conditions and gains or losses in based aircraft does not characterize the viability of an airport alone. However, steady decreases in based aircraft is one metric that is an early indicator of decreasing utility to local and regional operators for gaining access to and from the location and the National Airspace System.

3.4.2. GA Airport Service Area Coverage

Common practice in aviation planning considers that GA airports typically service a market area of pilots, businesses, and the public located within a roughly 30-minute drive time of the facility. This is linked to one of the FAA’s requirements for adding a facility to the NPIAS, where the location must be at least 30 miles from the nearest NPIAS airport, regardless of state boundaries.

Estimates of the market/service area or geographic reach of each SASP airport were developed using geographic information systems (GIS) software and aggregated to the system level by airport role. The service area of each airport role is a useful metric for expressing and understanding the geographic reach of airports and the functions they provide within their community.

Table 3-7 presents the geographic reach of each set of airport roles in the Maine system in terms of land area (square miles), population, and major employers.

Table 3-7: Maine SASP – GA Airports Service Area Summary

NPIAS ROLE	Square Miles	Population Coverage (State Total ^{1/} %)	Major Employers
Unclassified – 30-min	523	42,713 / (3%)	0
Basic – 30-min	2,388	146,837 / (11%)	6
Local – 30-min	4,041	677,161 / (50%)	34
Regional – 30-min	1,724	407,471 / (30%)	10
Coverage by All GA Airports Combined	7,635	971,821 / (72%)	41

Source: McFarland Johnson Analysis, 2020.

^{1/} Population estimate (1.344 million), U.S. Census Bureau Estimate, 2019.

As shown, the public use airports in the Maine SASP provide coverage for over 7,600 square miles in the state, more than 970,000 residents, and reach 41 of the state’s 50 largest employers. The geographic coverage of SASP airports serving in a Local role is impressive, covering half of the

state's population, and the system of GA airports as a whole reaches more than 72 percent of the state population.

With the addition of 30-minute drive time coverage for commercial service airports, the system provides coverage for over 10,000 square miles, 80 percent of the state's population and reaches 49 of the state's major employers, as summarized in **Table 3-8**.

Table 3-8: Maine SASP – All System Airports Service Area Summary

NPIAS ROLE	Square Miles	Population (%/State Total ¹)	Major Employers
Coverage by All GA Airports	7,635	971,821	41
Commercial Services Airports (additional coverage)	2,447	109,719 / (8%)	8
Combined Coverage by SASP Airports	10,082	1,081,540 / (80%)	49

Source: McFarland Johnson Analysis, 2020.

Figures 3-4, 3-5, 3-6, 3-7 and 3-8 detail the location and coverage of SASP airports, as follows:

- Basic & Unclassified Airports:** generally located in more remote and rural areas of the state, SASP airports serving in a Basic or Unclassified role primarily serve a group of users close to them that do not require long runways or precision instrument approaches to operate. However, transient operators can be limited by facilities at these airports under certain flying conditions, such as medical operators in fixed wing aircraft.

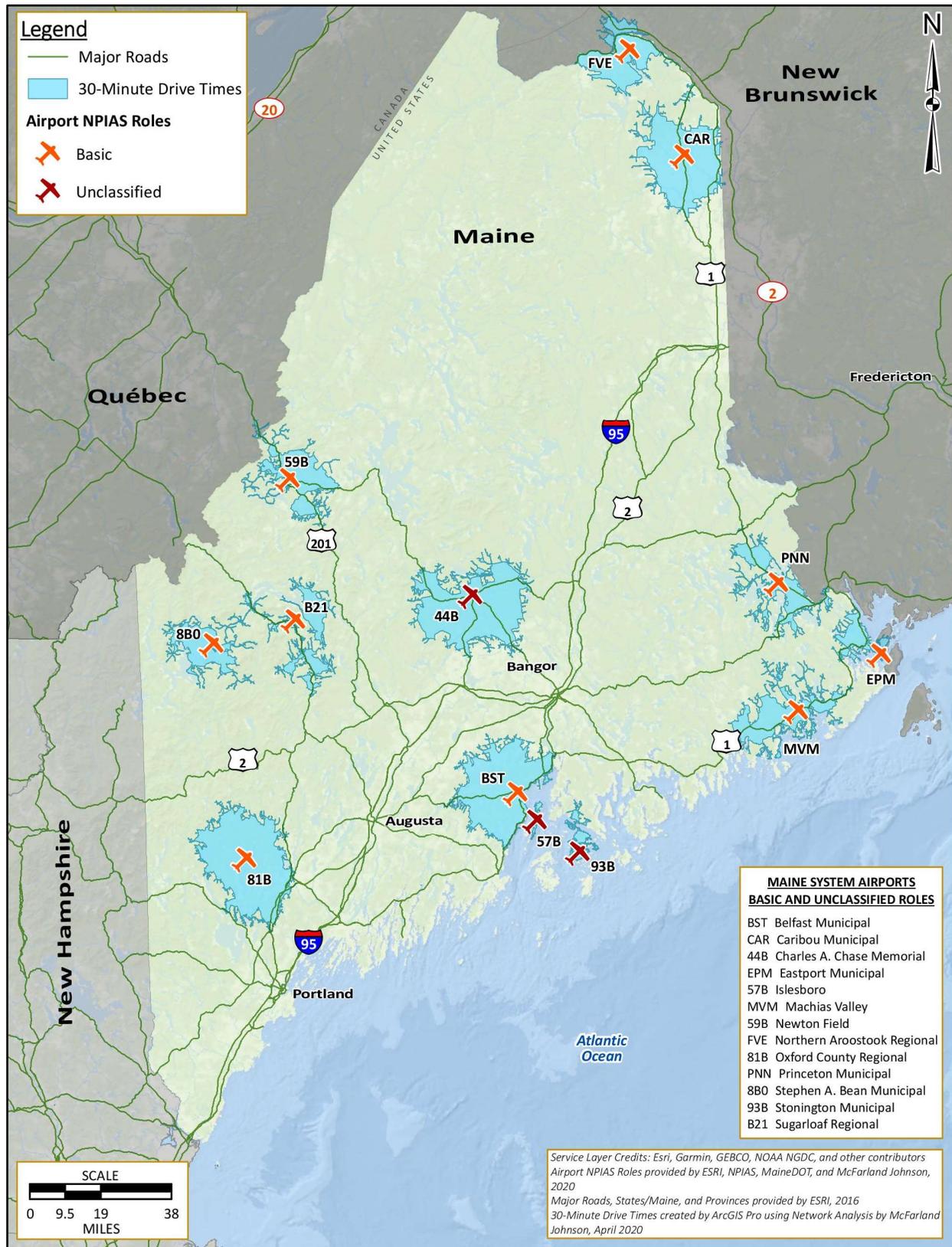
All Basic airports in the SASP have paved runways, ranging from 2,880 feet at Machias Valley to 4,600 feet at Northern Aroostook Regional. Caribou Municipal offers a crosswind runway. All Basic airports provide non-precision instrument approach capability except Newton Field in Jackman (underway as of November 2020), and Machias Valley is the only Basic airport that does not offer fuel. Oxford County Regional and Sugarloaf Regional are the only airports without on-site weather reporting equipment and do not have snow removal equipment.

- Local Airports:** SASP Airports serving in a Local role are generally located along the I-95 and U.S. Route 2 corridor, where there is a concentration of airports. This concentration of facilities means more competition for users, and more options for those users to find facilities, services, and amenities that best match their operating needs.

Local airports in the SASP have paved runways that range from 2,804 feet at Lincoln Regional Airport to parallel 8,000-foot runways at Brunswick Executive and crosswind runways at Central Maine Regional, Dewitt Field-Old Town Municipal, Greenville Municipal, Houlton International, Millinocket Municipal, and Waterville Robert LaFleur. There is a turf crosswind at Dexter Regional.

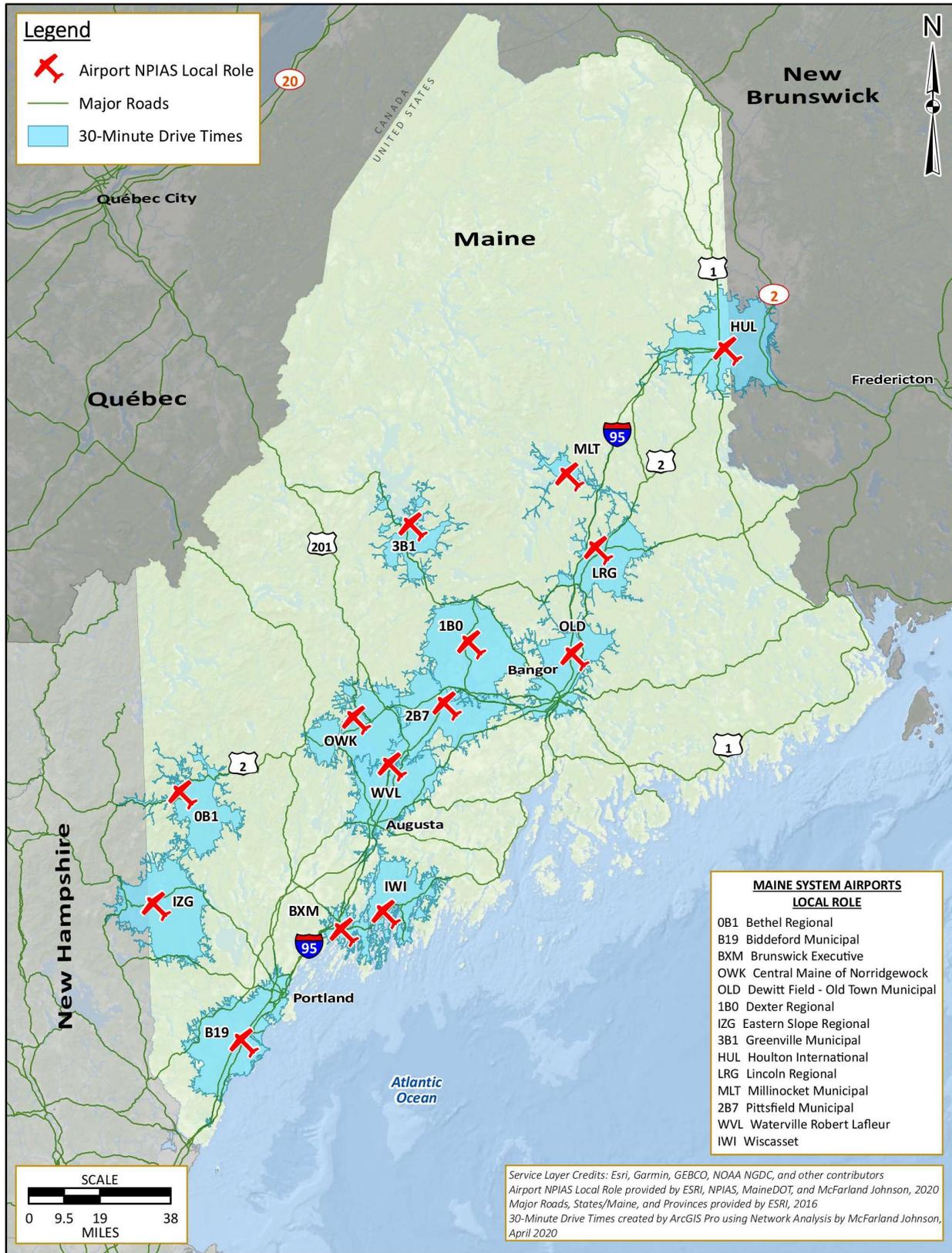
- Brunswick and Waterville offer precision instrument approaches, and all Local airports provide 100LL and Jet A fueling except for Bethel, Biddeford, Central Maine, and Lincoln that do not offer jet fuel. Most airports offer on-site weather reporting except Biddeford,

Figure 3-4: Maine SASP Coverage –Basic & Unclassified Airports



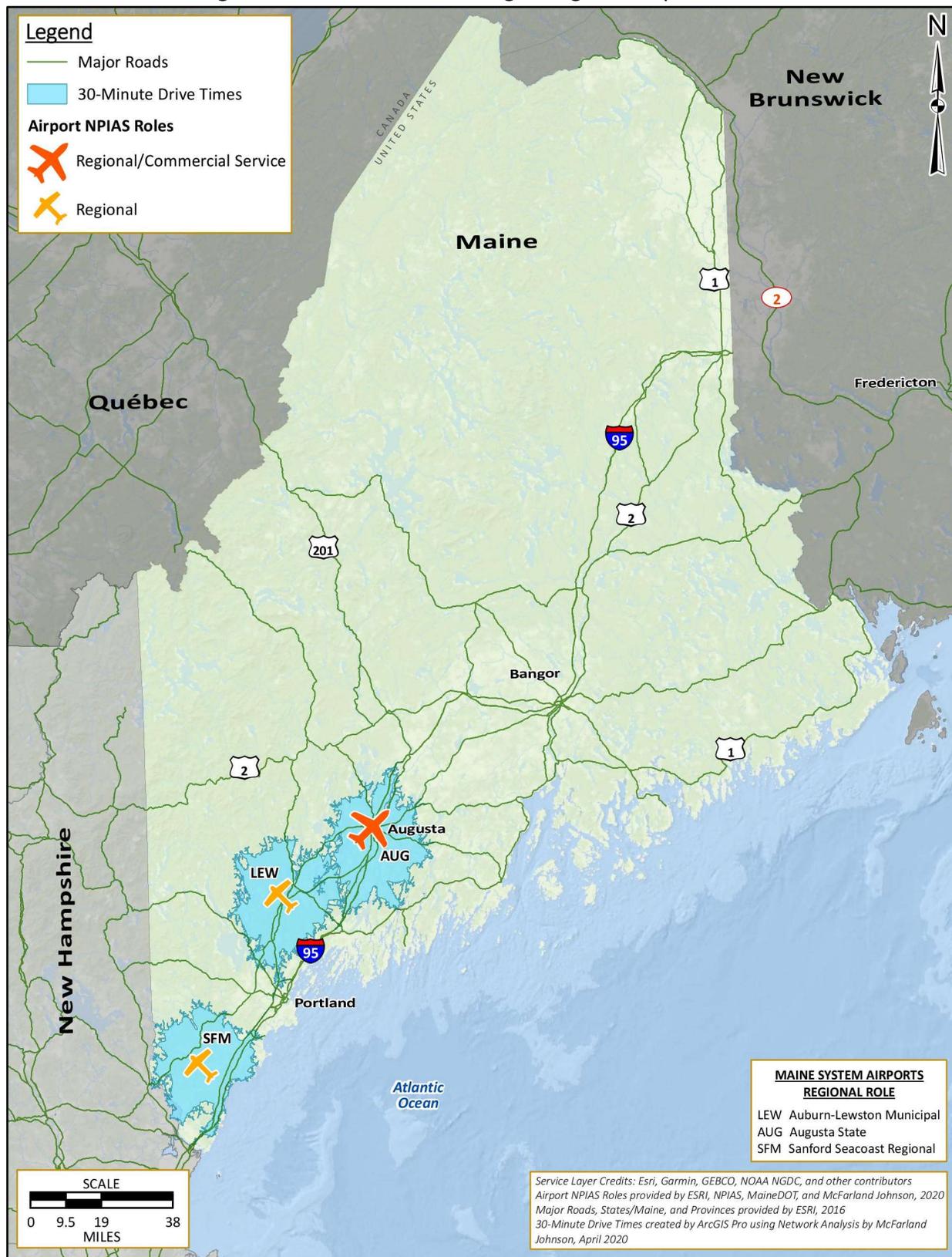
Source: McFarland Johnson, Inc., 2020.

Figure 3-5: Maine SASP Coverage –Local Airports



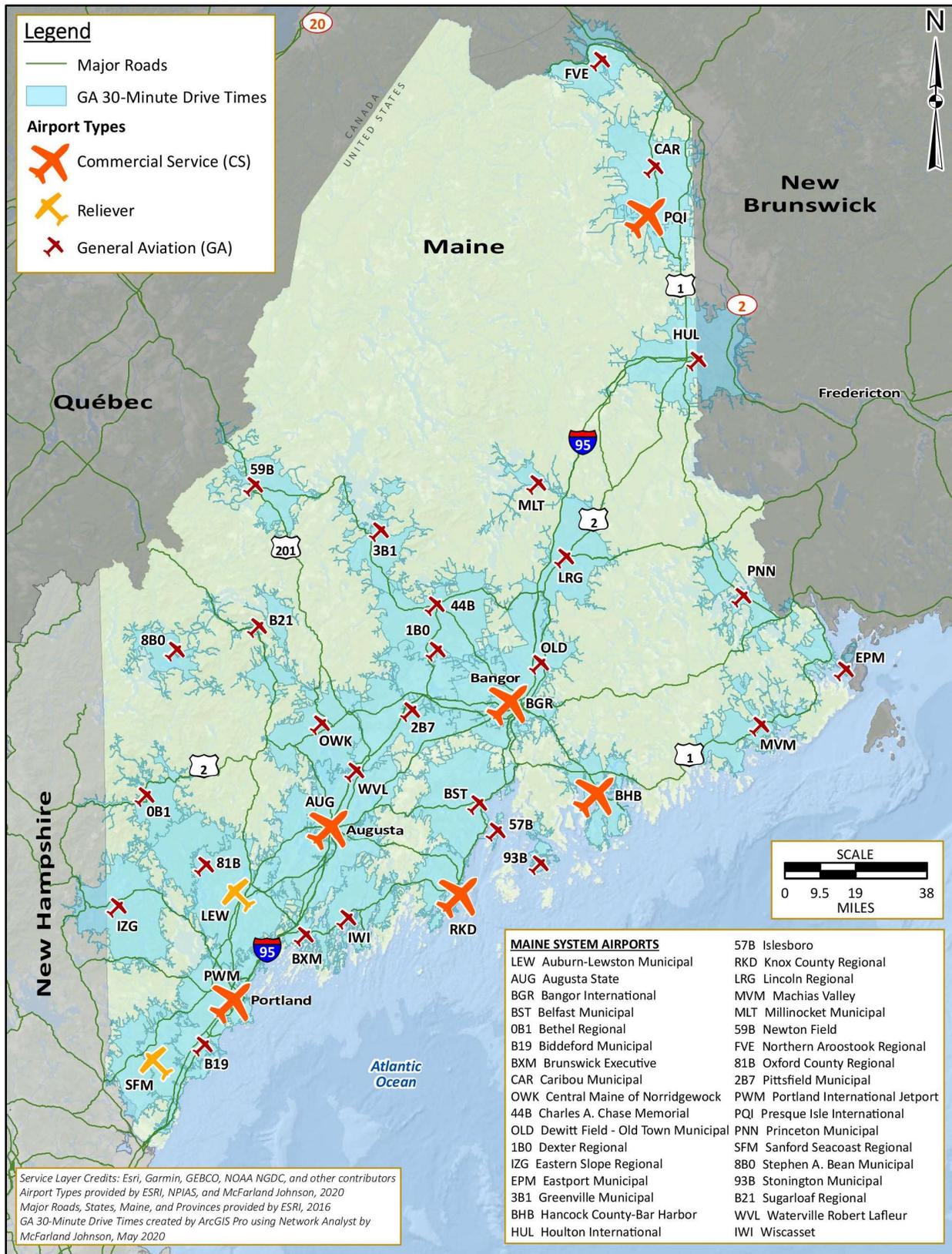
Source: McFarland Johnson, Inc., 2020.

Figure 3-6: Maine SASP Coverage –Regional Airports



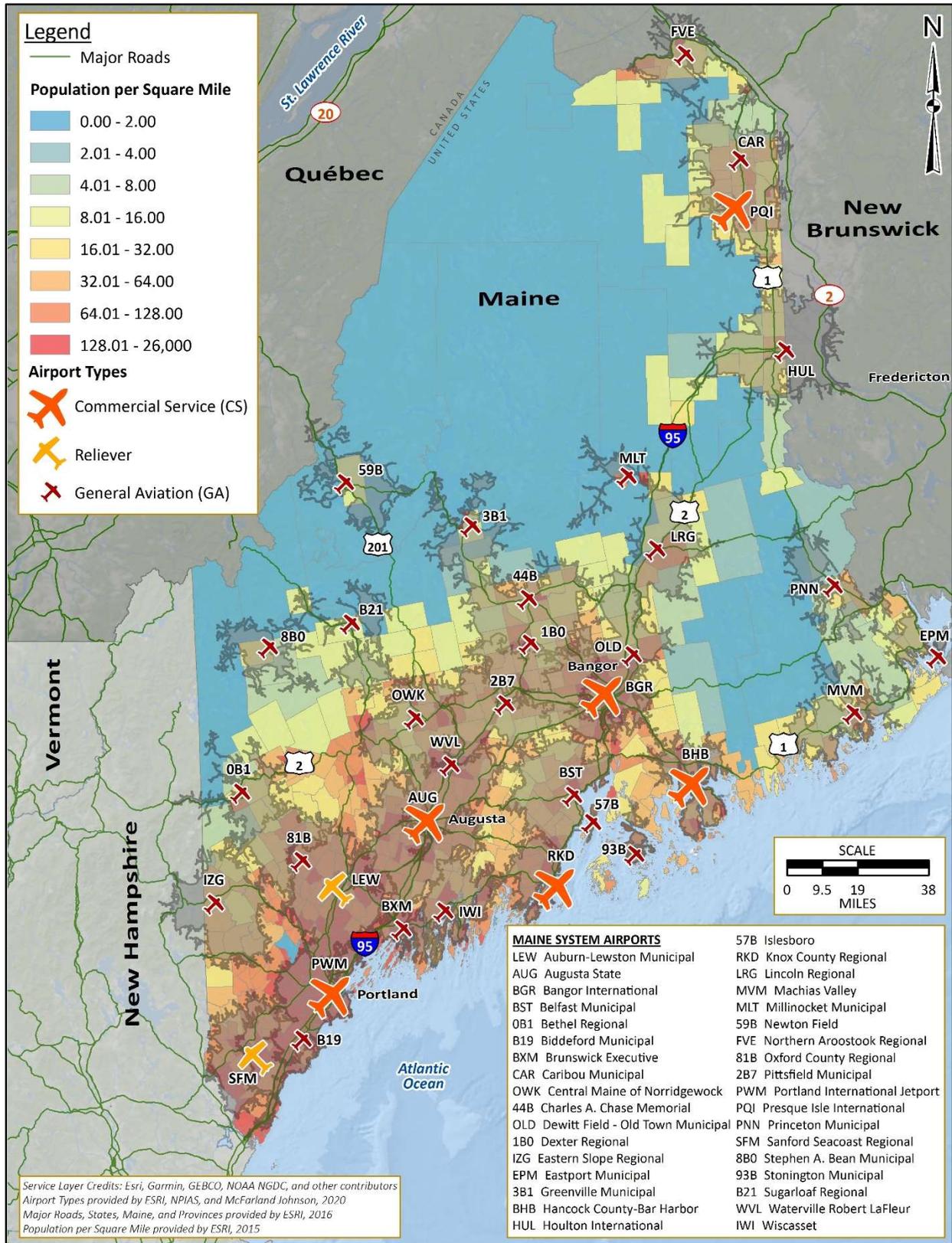
Source: McFarland Johnson, Inc., 2020.

Figure 3-7: Maine SASP Coverage - All SASP Airports



Source: McFarland Johnson, Inc., 2020.

Figure 3-8: Maine SASP Population Coverage – All Airports



Source: McFarland Johnson, Inc., 2020.

Dewitt Field, Dexter, Lincoln and Pittsfield. The only Local airport without snow removal equipment is Bethel Regional.

- Regional Airports:** SASP regional airports are concentrated in Southern Maine, in the most populated areas of the state between Portsmouth, New Hampshire through Sanford to Lewiston and up to the State Capitol in Augusta. A total of just 87 miles separates the three regional airports. Situated between Augusta State and Sanford Seacoast Regional, Auburn-Lewiston being just 40 minutes from the capitol city airport, and just about an hour drive north from Sanford. The airports serving in a Regional role offer primary runways greater than 5,000 feet, with Sanford boasting the longest runway at 6,389 feet. Each Regional Airport also maintains a crosswind runway, which range from 2,613 feet at Augusta State to 4,999 at Sanford. Each Regional airport also offers precision instrument approach capability, 100LL and Jet A fuel, on-site weather reporting, and snow removal equipment.

As described in this section, GA airports in the SASP are very well-equipped and cover a large portion of the state’s population and centers of economic activity.

3.4.3. Commercial Service Overview

As mentioned previously, there are six commercial service airports included in the Maine statewide aviation system that are designated as follows in the NPIAS:

- Augusta State – Non-Primary
- Hancock County-Bar Harbor – Non-Primary
- Bangor International - Primary/Non-Hub
- Knox County Regional - Primary/Non-Hub
- Portland International Jetport – Primary/Small Hub
- Presque Isle International - Primary/Non-Hub

As defined by the FAA, these commercial service airport categories are based upon annual enplanement volumes as shown in **Table 3-9**.

Table 3-9: FAA Categories of Commercial Airport Activities

Categories & Statutory Definitions
<ul style="list-style-type: none"> • Nonprimary Commercial Service Airports are Commercial Service Airports that have at least 2,500 and no more than 10,000 passenger boardings each year.
<ul style="list-style-type: none"> • Primary Airports are Commercial Service Airports that have more than 10,000 passenger boardings each year.
<ul style="list-style-type: none"> • Hub categories for Primary Airports are defined as a percentage of total passenger boardings within the United States in the most current calendar year, such that: <ul style="list-style-type: none"> ○ Large Hubs receive 1 percent or more of the annual U.S. commercial enplanements ○ Medium Hubs receive 0.25 to 1.0 percent of the annual U.S. commercial enplanements ○ Small Hubs receive 0.05 to 0.25 percent of the annual U.S. commercial enplanements ○ Non-Hubs less than 0.05 percent but more than 10,000 of the annual U.S. commercial enplanements

Source: Federal Aviation Administration.

These airports perform a broad range of functions as described at the outset of this chapter; a snapshot of each airport is summarized as follows:

- **Portland International Jetport (PWM):** Maine’s flagship commercial service airport serving the state’s largest city, Portland, and the surrounding metropolitan area of nearly 540,000 residents. As a towered airport, PWM offers year-round flights to 15 cities on American Airlines, Cape Air, Delta, Elite Airways, Frontier Airlines, Southwest, and United. 11 additional destinations are offered seasonally when American, Delta, Frontier, JetBlue, Southwest, Sun County Airlines, and United offer additional flight frequencies and destinations for summer travelers. With a diverse mix of air carriers and destinations that range from as far west as Denver, CO (seasonally) and Dallas/Fort Worth (seasonally), in addition to extensive Eastern and Mid-Atlantic region coverage, PWM provides numerous benefits of air carrier choice and destination diversity to the State of Maine. The airport boasts a modern and environmentally sustainable terminal building, completed in 2011, which features the state’s largest geothermal heating and cooling system.
- **Bangor International (BGR):** Joint-use civil/military airport and Maine’s second busiest commercial service airport by passenger enplanements. As a towered airport, daily year-round service is offered to eight destinations by American Airlines, Allegiant, Delta, and United. As one of the first airports in the United States for arriving transatlantic flights with U.S. Customs and Border Protection (USCBP) services, Bangor has a long history as a providing a safe diversion airport, refueling option, and easy alternative to congested USCBP locations in the Northeast Corridor. Arriving military charter flights frequently use Bangor as a refueling location and as a disembarkation point for service members returning home from foreign tours of duty.
- **Presque Isle International (PQI):** Presque Isle is the state’s third busiest airport by passenger enplanements and serves a vast area of northern Maine and northwestern New Brunswick in Canada. As a non-towered airport, daily scheduled commercial service is provided by CommutAir operating as United Express with daily service to Newark Liberty International and Washington Dulles International Airport operated under the U.S. Department of Transportation (USDOT) Essential Air Service program (EAS). The Skyway Industrial Park is located on airport-owned land and houses numerous aeronautical and nonaeronautical businesses, along with a multi-modal facility, in addition to building opportunities for commercial developers. The remote location of Presque Isle makes PQI a critical facility for medical evacuation flights, and to provide emergency services.
- **Knox County Regional (RKD):** Maine’s fourth busiest commercial service airport serving the nearby city of Rockland and broader Midcoast region. The non-towered airport is exceptionally busy in the summer months to serve as a critical connection to the island communities of Midcoast Maine, namely Matinicus Isle, North Haven, and Vinalhaven in Penobscot Bay. Daily scheduled service is provided by Cape Air to Boston under the EAS program. Scheduled service to the islands is provided by Penobscot Island Air which also offers charter and seaplane flights throughout the region, in addition to servicing freight and mail contracts to serve residents of the Midcoast Islands.

- **Hancock County-Bar Harbor (BHB):** Maine’s fifth busiest commercial service airport connects attractions such as Acadia National Park, Bar Harbor, Mount Desert Island, and numerous summer colonies to the national airspace system. As a non-towered airport, daily airline service is offered to Boston by Cape Air under the EAS program and seasonally by Silver Airways with additional service to Boston in the summer months (Memorial Day through Labor Day) when traffic swells with visitors and residents enjoying the scenic region.
- **Augusta State Airport (AUG):** As the only state-owned airport in the NPIAS, the non-towered facility is operated under contract with the City of Augusta. Situated in the state capital, Augusta offers daily scheduled air service by Cape Air under the EAS program.

Table 3-10 presents recent passenger enplanement trends for these airports. As shown, overall enplanements statewide saw modest growth between 2018-2019 driven mostly by Bar Harbor, Portland, and Presque Isle, which offset a decrease at Bangor International.

Table 3-10: Maine SASP - Commercial Service Passenger Enplanements

Airport	Passenger Enplanements		
	2019	2018	% Change
Augusta State	5,454	5,530	-1.4%
Bangor International	325,387	336,410	-3.3%
Knox County Regional	17,166	17,133	0.2%
Hancock County - Bar Harbor	9,782	8,507	14.9%
Portland International Jetport	1,088,728	1,062,873	2.4%
Presque Isle Airport	13,244	10,865	21.9%
Total	1,459,761	1,441,318	1.3%

Source: FAA, Passenger Boarding Enplanement Data, 2020.

Table 3-11 summarizes the types of aircraft based at Maine’s commercial service airports.

Table 3-11: Maine SASP - Commercial Service Airport Based Aircraft

Airport	Based Aircraft				
	Total	Single Engine	Multi-Engine	Jet	Rotor
Augusta State	47	39	8	0	0
Bangor International	32	28	2	1	1
Knox County Regional	63	60	0	3	0
Hancock County - Bar Harbor	27	25	1	0	1
Portland International Jetport ^{1/}	41	30	3	7	1
Presque Isle Airport ^{1/}	18	16	1	1	0
Total	228	198	15	12	3

Source: FAA Aircraft Registration Data, August 2020.

^{1/} Airport Master Record, 9/10/2020.

Among all SASP airports, commercial service airports are the basing location for about 25 percent of all single and multi-engine aircraft, but are home to 12 based jet aircraft, which is 92 percent of all based jets in the SASP. There are only two jet aircraft based at SASP airports located east or north of Knox County Regional (one each at Bangor and Presque Isle). This could be the result of low levels of economic activity outside of the I-95 and U.S. Route 2 corridor.

3.4.4. Commercial Service Airports Service Area Coverage

Similar to that described for GA airports, it is common practice in aviation planning to consider the geographic market area, service area, or “catchment” area of commercial service airports to people and business within a roughly 60-minute drive. Commercial service airport catchment areas can often extend to 90 minutes due to factors such as remote location, service level, direct flights, destinations, and carrier composition.

Just as was done for SASP GA airports, estimates of the market/service area or geographic reach of each commercial service airport in the SASP were developed using GIS software and were aggregated to capture the geographic reach of these airports. **Table 3-12** displays the results of a standard 60-minute drive time analysis.

Table 3-12: Maine SASP – Commercial Service Airports Service Area Summary

NPIAS ROLE	Square Miles	Population Coverage (State Total ¹ /%)	Major Employers
Commercial Service – 60 min	10,113	1,130,570 / (84%)	44

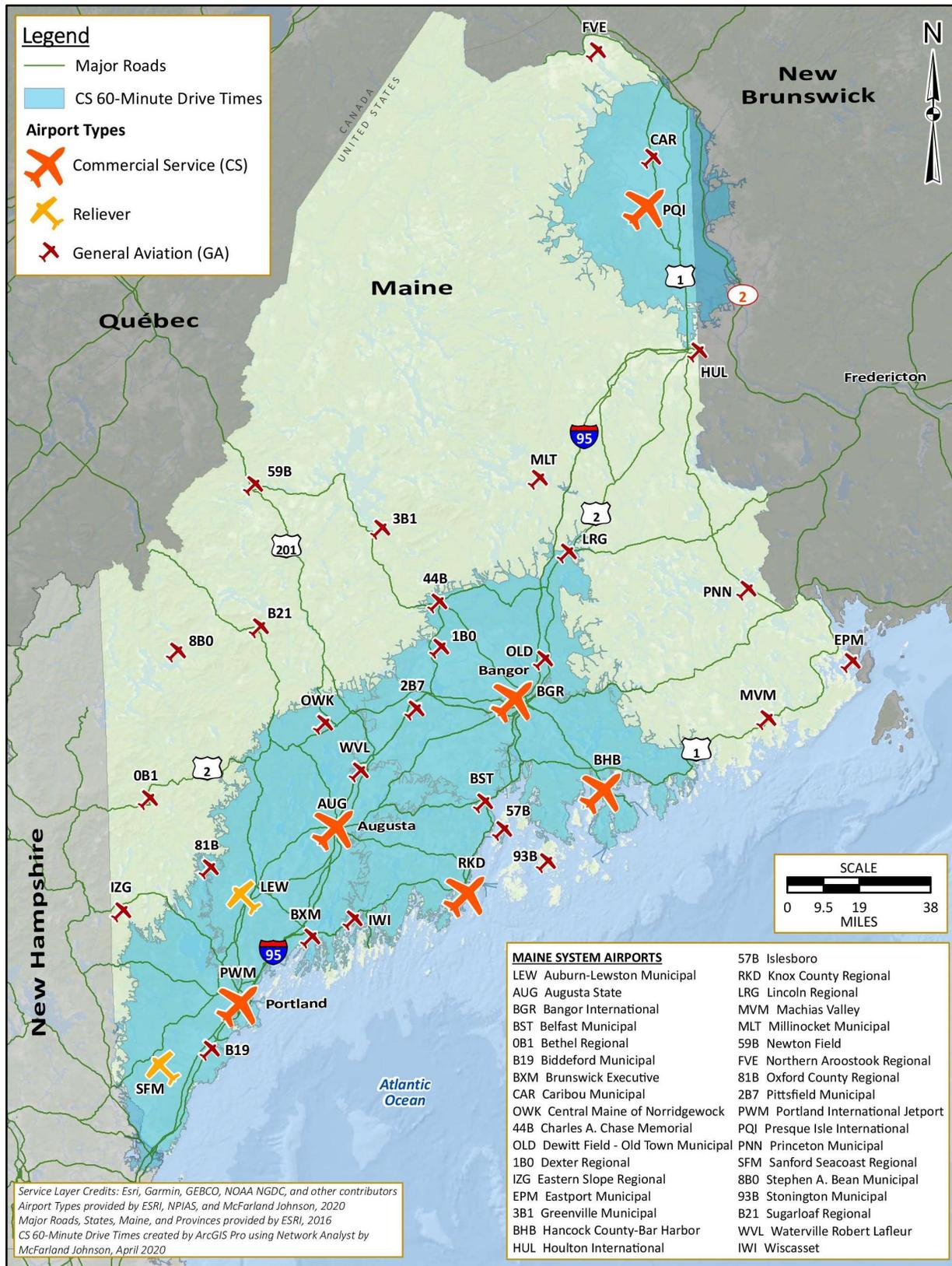
Source: McFarland Johnson Analysis, 2020; US Census Bureau, 2020

Commercial service airports in Maine provide coverage for over 10,113 square miles, approximately 84 percent of Maine residents and 44 of the state’s major employers. **Figure 3-9** presents location and coverage of SASP Commercial Service airports, and **Figure 3-10** illustrates population coverage of commercial service airports in the SASP.

The geographic service area for Portland International Jetport (PWM) stretches northeast along I-95 to areas around Augusta, south to areas around Wiscasset along U.S. Route 1. PWM’s service area also extends southwest to Portsmouth, N.H. The service area for Bangor International (BGR) overlaps PWM’s northernmost customers and may well extend north to areas near Millinocket and reach into the Down East region to provide access for those willing to drive more than an hour. Presque Isle International’s service area is driven by accessibility to U.S. Route 1 from the I-95 terminus at Houlton to north of Caribou and into areas of New Brunswick. EAS flights available at Knox County Regional, Hancock County - Bar Harbor, and Augusta State provide a nice supplement and access to network routes provided through Boston Logan International.

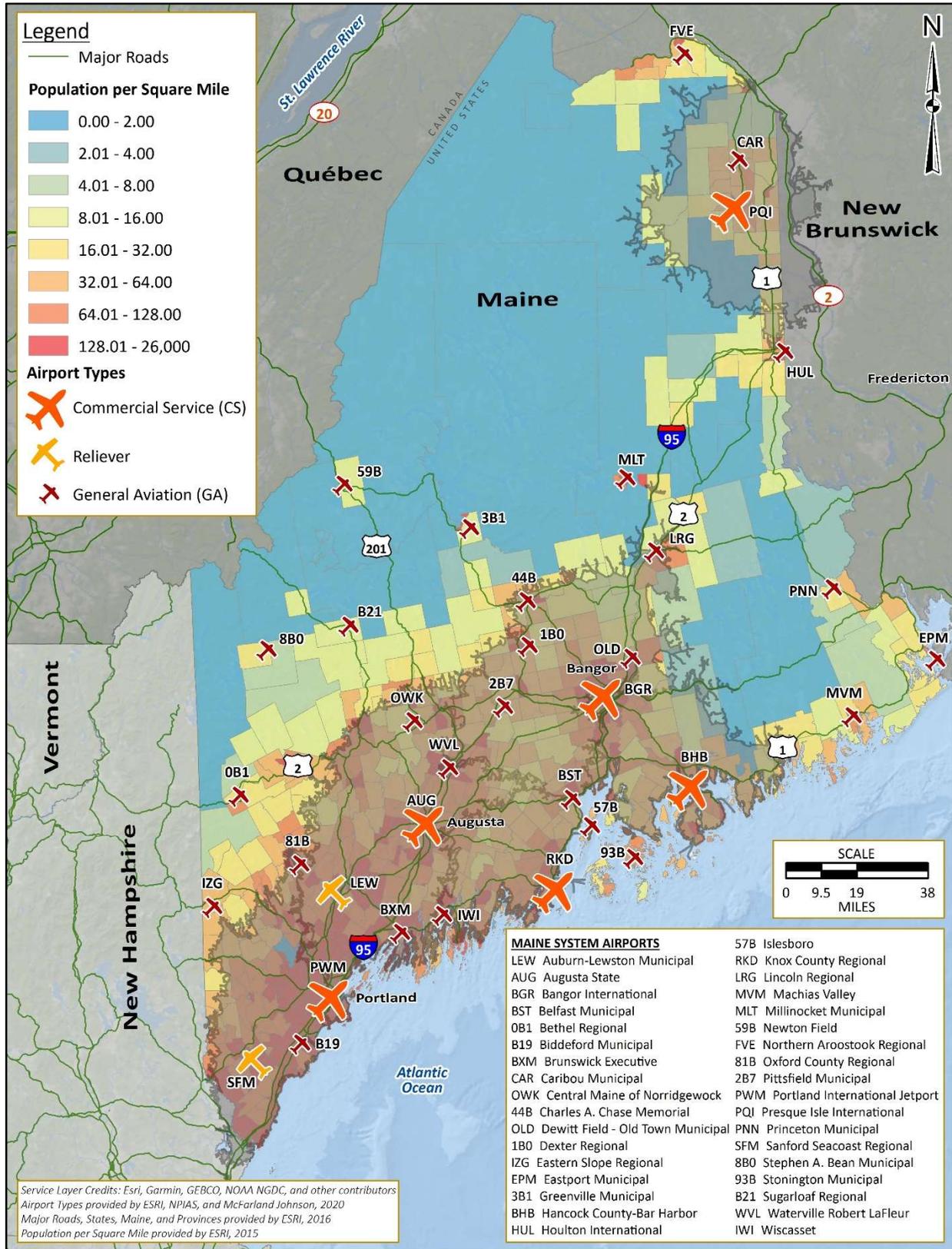
Remote areas in western, northern, and Washington County require up to 2-2½ hour drives between Bangor and Jackman, Rangeley to Bangor or Portland, and Eastport to Bangor, making access to scheduled commercial passenger service less convenient to residents and/or small businesses in those areas.

Figure 3-9: Maine SASP Existing Coverage –Commercial Service Airports



Source: McFarland Johnson, Inc., 2020.

Figure 3-10: Maine SASP Population Coverage – Commercial Service Airports



Source: McFarland Johnson, Inc., 2020.

3.5. AERONAUTICAL FUNCTIONS PROVIDED BY SASP AIRPORTS & AREAS OF NEED

As mentioned in *Section 3.2*, Airport Managers were surveyed and interviewed to collect information pertaining to their airport’s existing conditions and performance. Questions explored issues related to the airport’s role, challenges to maintaining their airport, top facility needs, clarifications regarding the adequacy of existing facilities and services, operations, maintenance, and improvements necessary to accommodate existing and future use.

To understand the value of Maine SASP airports to their communities and the system as a whole, the Maine SASP utilizes guidance available from ASSET, which identifies the types of aeronautical functions serving the public interest. **Figure 3-11** is reproduced from Figure 1 of ASSET, which lists these five functions and the types of activities within each that justify public value in the eyes of the FAA.

Figure 3-11: FAA ASSET Figure 1 – Types of Aeronautical Functions Serving Public Interest

<p>Emergency Preparedness and Response</p>	<ul style="list-style-type: none"> ▪ Aeromedical Flights ▪ Law Enforcement/National Security/Border Security ▪ Emergency Response ▪ Aerial Fire Fighting Support ▪ Emergency Diversionary Airport ▪ Disaster Relief and Search and Rescue ▪ Critical Federal Functions 	
<p>Critical Community Access</p>	<ul style="list-style-type: none"> ▪ Remote Population/Island Access ▪ Air Taxi/Charter Services ▪ Essential Scheduled Air Service Cargo 	
<p>Other Aviation Specific Functions</p>	<ul style="list-style-type: none"> ▪ Self-Piloted Business Flights ▪ Corporate ▪ Flight Instruction ▪ Personal Flying ▪ Charter Passenger Services ▪ Aircraft/Avionics Manufacturing/Maintenance ▪ Aircraft Storage ▪ Aerospace Engineering/Research 	
<p>Commercial, Industrial, and Economic Activities</p>	<ul style="list-style-type: none"> ▪ Agricultural Support ▪ Aerial Surveying and Observation ▪ Low-Orbit Space Launch and Landing ▪ Oil and Mineral Exploration/Survey ▪ Utility/Pipeline Control and Inspection ▪ Business Executive Flight Service ▪ Manufacturing and Distribution ▪ Express Delivery Service ▪ Air Cargo 	
<p>Destination and Special Events</p>	<ul style="list-style-type: none"> ▪ Tourism and Access to Special Events ▪ Intermodal Connections (rail/ship) ▪ Special Aeronautical (skydiving/airshows) 	

Source: ASSET, 2012.

These types and functions help to describe the wide variety of missions being flown and the range of value that airports can provide. Different tenants and operators support these different types of functions in various ways. For example, LifeFlight of Maine provides emergency medical flights on fixed and rotor wing aircraft. Additionally, flight training and special airshows at certain airports lends itself to destination and special event functions which serve the public interest, together maintaining a complimentary aviation system for a multitude of users. **Table 3-13** summarizes these various functions in Maine and notes some of the characteristic agencies supporting these activities.

Table 3-13: Maine SASP - Characteristics of Activities in Maine

FAA Functions Serving Public Interest	Characteristic Activities in Maine
Emergency Preparedness & Response	<ul style="list-style-type: none"> • LifeFlight of Maine • Civil Air Patrol • Down East Emergency Medical Institute • Member Units of the Maine Association for Search & Rescue • Maine National Guard • Maine Forest Service • Maine Department of Marine Patrol • Maine Inland Fisheries and Wildlife • Maine State Police
Critical Community Access	<ul style="list-style-type: none"> • Access to Downeast, Aroostook, The Maine Highlands, Kennebec & Moose River Valley, and the Maine Lakes & Mountains Regions • Penobscot Island Air & Maine Island Connections / Ferry Alternative • Seaplane Pilots Association • Recreational Aviation Foundation (RAF)
Other Aviation Specific Functions	<ul style="list-style-type: none"> • Various FBO’s • University of Maine - Augusta - aviation program • Maine Instrument Flight (MIF)/Southern Maine Aviation – Flight school • Penobscot Island Air • PK Floats – Aviation Manufacturing
Commercial, Industrial, & Economic Activities	<ul style="list-style-type: none"> • Brunswick Landing: Maine’s Center for Innovation • Various Aerial Surveying Firms • Air and Mail Cargo Services • NetJets/WheelsUp/Silver Air – Charter Services • PlaneSense – Fractional Ownership • Maine Mutual Group (MMG) Insurance – Corporate
Destination & Special Events	<ul style="list-style-type: none"> • Maine Flying Club in Orono • Community Airshows and Engagement • Various Skydiving Operators • Various Scenic Flight Operators • Tourism supported at Bar Harbor and Rockland

Source: McFarland Johnson, Inc., 2020.

Of the five key aeronautical functions identified in ASSET, different airports in the system experience different types of aeronautical activities that play a role in the function they serve to their communities. **Table 3-14** presents the top three functions within each Asset role as ranked by SASP airport managers.

As identified by the airport’s ranking of functions at their facilities, the range of activity among SASP GA airports encompasses all functions, which likely varies across the system based on very acute circumstances such as peak seasonal demand, emergencies, and airport role and location. No airport is specialized in a particular function, which means that at any time a function is performed, it is critical to the overall statewide service of SASP airport system.

Table 3-14: Maine SASP - Top 3 Functions of Each SASP Airport

Asset Role – Average Ranking	Emergency	Critical Access	Aviation Specific	Economic Activities	Destination
Regional Airports	1.3	2.7	2.3	2.3	3
Local Airports	2.8	3.4	3.1	1.9	2.1
Basic & Unclassified Airports	2.4	2.2	2.7	2.6	3.2
Systemwide Average Ranking	2	3	3	2	3

Source: Airport manager interviews, 2020.

As indicated:

- Regional Airport Functions:** SASP airports serving in a Regional role identified Destination and Special Events, Critical Community Access, and a tie for third place between Aviation Specific Functions and Commercial, Industrial, and Economic Activities as the top 3 functions performed by tenants and transient operators, which is an indication of the public value provided by their airports to the statewide system.
- Local Airport Functions:** SASP airports serving in a Local role identified Critical Community Access, Aviation Specific Functions, and Emergency Preparedness and Response as the top 3 functions performed by tenants and transient operators, which is an indication of the public value provided by their airports to the statewide system.
- Basic & Unclassified Airport Functions:** SASP airports serving in a Basic or Unclassified role identified Destination and Special Events, Aviation Specific Functions, and Commercial, Industrial, and Economic Activities, as the top 3 functions performed by tenants and transient operators, which is an indication of the public value provided by their airports to the statewide system.

Review of each completed survey provided insights into the key functions, role, and value provided by each SASP airport. **Table 3-15** summarizes this information in the form of a headline that captures the most distinguishing characteristics and value of each SASP airport.

Table 3-15: Maine SASP – Airport Headlines

Airport Summary Characteristics & Headlines	
Auburn/Lewiston Municipal	Full time, 24-hour year-round facility owned and operated by the Cities of Auburn and Lewiston in the southern Maine Lakes & Mountains Region. The airport is staffed by 10 FT and 3 PT employees, including a full-time director. Boasting a 5,000’ primary and 2,750’ crosswind runways, precision approach and full-parallel taxiway, LEW a full-compliment of GA services and amenities including rental cars, hotel discounts, competitive fuel, no ramp fee, on-field maintenance, on-site restaurant & catering, charter services, and deicing for small recreational aircraft up to CRJ700’s. Top based operators include Sky Ward Aviation maintenance, LifeFlight, & Wiggins Air. Top transient users are NetJets, Wheels Up and ExecJet charter operators.
Augusta State	Full time, 24-hour year-round facility owned by State of Maine, Department of Transportation, and operated under contract with the City of Augusta. Situated in the state capitol in the southern Kennebec & Moose River Valley Region, Augusta offers daily scheduled air service by Cape Air under the US DOT Essential Air Service program. AUG is staffed by 3FT & 2PT employees, including a full-time Manager. Offering a 5,000’ primary and 2,613’ crosswind runway system with full-length parallel and precision approach capability, the Airport is serviced by Maine Instrument Flight – a full-service FBO offering 100LL and Jet A fueling, charter services, instruction, aircraft sales and maintenance on airport. Survey noted that the airport would like new hangars to better compete and there is a waiting list. The Airport’s GA terminal offers a compliment of pilot and passenger amenities.
Bangor International	Joint-use civil/military airport and Maine’s second busiest commercial service airport by passenger enplanements. Daily year-round service is offered to eight destinations by American Airlines, Allegiant, Delta, and United. As one of the first airports in the United States for arriving Transatlantic flights with Customs and Immigration facilities, Bangor has a long history as a providing a safe diversion airport, refueling option, and easy alternative to congested Customs locations in the Northeast Corridor. Arriving military charter flights frequently use Bangor as a refueling location and as a disembarkation point for servicemembers returning home from foreign tours of duty.
Belfast Municipal	Centrally located, 4,000’ runway, non-precision approach accommodating some small jet aircraft. Short distance to Town with active summer tourism. Rely on other airports for fueling/Part 135 services. Seaview Aviation FBO.
Bethel Regional	Unattended facility in the western, Maine Lakes & Mountains Region, 20 minutes from New Hampshire border. 1FT/2 PT Town employees assigned to oversee the Airport. An important landing site for emergency medical operations and recreational destinations such as resorts, ponds/lakes, mounting/hiking systems and vacation homes. Self-serve facility with no fees, free parking, plug-in service, battery tenders, and modern terminal.
Biddeford Municipal	Part-time, less than 24-hour facility open year-round with 1 FT/1PT employee in a convenient, South Coast Region location. Desire to be known as great value due to fuel, parking and location; however, limited services, hangar facilities, no Jet A fuel, and shorter runway.
Brunswick Executive	Full-time, less than 24-hour facility open daily year-round in the Portland/Casco Bay Region. Facility is owned by Midcoast Regional Redevelopment Authority and operated under contract with Flight Level Aviation as the FBO. BXM offers a terminal with full-service facilities, amenities and FBO that can accommodate operators of any size. Customs/FIS services identified as a benefit, and 12 on waitlist for future hangars.
Caribou Municipal	Unattended northern airport with dual runways and runway lighting, GPS approach, on-airport weather reporting (ASOS), and self-serve 100LL fueling. Serves as Airport of Entry with on-call FIS. Has a GA terminal available during daylight hours and by appointment after hours.
Central Maine Regional	

Airport Summary Characteristics & Headlines

Part-time, less than 24-hour facility staffed 4 days/week year-round in the Kennebec & Moose River Valley Region. Airport is owned/operated by Town with 3 PT employees, including the Airport Manager. The airport competes on fuel price, notes that on-site aircraft maintenance would be beneficial, and funding is the largest issue for airport.

Charles A. Chase Jr. Memorial Field

Unclassified, unattended airport. Story of successful grassroots advocacy and community support that led to the continued operation when threatened by a solar array development. Also, runway extended by 1,000' funded 100% by private interests. Turf runway with no based aircraft very limited facilities.

Dewitt Field, Old Town Municipal

Full time facility attended less than 24-hours open daily year-round in Maine Highlands Region. Operated by City with 1FT/2PT employees, offers 100LL & Jet A, aircraft storage, terminal with amenities and access to UMO. Tenants offer aircraft maintenance and aerial mapping. Waiting list of 4-8 aircraft for future hangars (wetlands constrain new development). Top users are U. Flying Club, Air Guard Flying Club, ME Army NG.

Dexter Regional

Part-time facility attended mornings owned/operated by the Town of Dexter with 4 PT employees in the Maine Highlands Region. Airport provides a safe landing area for medivac and small business aircraft for 100LL and MO Gas fueling. Relies on other airports for weather reporting, Jet A, FBO services. Compete with other airports on fuel and based aircraft for hangars, and would like to offer FBO services, night operations, and NAVAIDs for IFR.

Eastern Slope Regional

Full time facility attended less than 24-hours open daily year-round in the Maine Lakes & Mountains Region, also serving Mount Washington Valley Region and Conway area of New Hampshire. Owned by the Town and operated under lease by ESAA with 1FT/2PT employees. Primarily serving the regions ski recreational and shopping destinations. New transient hangar coming next year. Compete with airports on fuel price, FBO services and flight training.

Eastport Municipal

Unattended airport. Eastern-most city in U.S. 4,002' runway, runway lighting, visual guidance, non-precision approach and self-serve 100LL and Jet fueling. Serves as Airport of Entry with on-call FIS. Facilities include several hangars and GA terminal with flight planning and wi-fi.

Greenville Municipal

Less than 24-hour facility open daily year-round with 1PT employee in western area of Maine Highlands Region. Operated by the Town, airport offers 100LL, Jet A, and MoGas fueling and aircraft storage and access to recreational destinations. Competes with OWK and 2B7; would like to offer hangar storage.

Hancock County – Bar Harbor

Maine's fifth busiest commercial service airport that connects popular attractions such as Acadia National Park, Bar Harbor, Mount Desert Island, and numerous summer colonies to the national airspace system. Daily airline service is offered to Boston by Cape Air under the US DOT Essential Air Service program and seasonally by Silver Airways with additional service to Boston in the summer months (Memorial Day through Labor Day) when traffic swells with visitors and residents enjoying the scenic region.

Houlton International

Part-time, less than 24-hour facility open weekdays year-round located along I-95 at the US/Canadian border in Aroostook County Region. Operated by Town staff, Public Works Director serves as Airport Director, with 1PT employee. Offers 5,000' runway and crosswind. Offers CBP/FIS, 100LL and Jet A, terminal building with modest amenities, on-site aircraft maintenance services. Relies on other airports to "split" full loads of fuel.

Islesboro

Unclassified, unattended island airport. Likely an important landing site/location, but not significant regular activity. Short 2,400' paved runway. No fueling services offered. Visual approach only.

Knox County Regional

Airport Summary Characteristics & Headlines

Maine’s third busiest commercial service airport serving the nearby city of Rockland and broader Midcoast region. The airport is exceptionally busy in the summer months to serve the summer colonies in Penobscot Bay region. Daily scheduled service is provided by Cape Air to Boston under the US DOT Essential Air Service program. Knox County Regional Airport also serves as a critical connection to the island communities of Midcoast Maine, namely Matinicus Isle, North Haven, and Vinalhaven. Scheduled service to the island is provided by Penobscot Island Air which also offers charter and seaplane flights throughout the region, in addition to servicing freight and mail contracts to serve residents of the Midcoast Islands.

Lincoln Regional

Unattended facility located along the Penobscot River near the town of Lincoln in Maine Highlands Region, just minutes east of I-95 and 40 minutes south of Millinocket. Offers a seaplane base close to recreational areas for boating, fishing, hunting. Survey indicates demand for hangar storage, has terminal with limited services.

Machias Valley Municipal

Unattended airport. Offers 2,880’ runway, lighting, GPS approach, on-airport weather reporting (AWOS). No fueling services.

Millinocket Municipal

Location west of I-95 in the Maine Highlands Region, attended year-round, less than 24-hour part time schedule. Municipally operated by full-time airport manager and 2PT employees. Claims to provide services to business and recreational activities, with no competition to other airports and demand for hangars. Active tenants include recreational aviation businesses (sightseeing, skydiving, rafting), and restorations. Itinerant users recreational.

Newton Field

Unattended airport in Northern Kennebec & Moose River Valley, 2,898’ runway, lighting, GPS approach, on-airport weather reporting (AWOS), and self-serve 100LL fueling.

Northern Aroostook Regional

Northern-most airport in Maine system, operating year-round airport offering 4,600’ paved runway, GA terminal, hangar facilities, lighting, GPS approach, on-airport weather reporting (ASOS), full-service 100LL and Jet A fueling, and a large apron.

Oxford County Regional

Unattended airport owned by County located in Maine Lakes & Mountains Region. Mosher Aviation FBO offers full services including maintenance, painting, storage, inspections. Offers paved 2,997’ runway and 100LL fuel.

Pittsfield Municipal

Centrally located, less than 24-hour facility open year-round operated by Curtis Air (FBO), offering maintenance, terminal building 100LL & Jet A fuel. There is demand for new hangars, would like rental car options. Active based tenants include flight school, summer skydiving, two small business/corporate operators. Summer base for aircraft

Portland International Jetport

Maine’s flagship commercial service airport serving the State’s largest city, Portland, and the surrounding metropolitan area of nearly 540,000 residents. PWM offers year-round flights to 15 cities on American Airlines, Cape Air, Delta, Elite Airways, Frontier Airlines, Southwest, and United. 11 additional destinations are offered seasonally when American, Delta, Frontier, JetBlue, Southwest, Sun County Airlines, and United offer additional flight frequencies and destinations for summer travelers. With a diverse mix of air carriers and destinations that range from as far west as Denver, CO (seasonally) and Dallas/Fort Worth (seasonally), in addition to extensive Eastern and Mid-Atlantic region coverage, PWM provides numerous benefits of air carrier choice and destination diversity to the State of Maine. The airport boasts a modern and environmentally sustainable terminal building, completed in 2011 which features the state’s largest geothermal heating and cooling system.

Presque Isle International

Airport Summary Characteristics & Headlines

Presque Isle is the state’s fourth busiest airport by passenger enplanements and serves a vast area of northern Maine and northwestern New Brunswick province in Canada. Daily scheduled commercial service is provided by CommutAir operating as United Express with service to Newark Liberty International operated under the USDOT Essential Air Program. However, due to the COVID-19 pandemic, this flight and service is temporarily routing to Washington Dulles International Airport. Newark Liberty International service will resume in the future. A large industrial park, the Skyway Industrial Park is located adjacent to the airport and houses numerous aeronautical and nonaeronautical businesses, in addition to building opportunities for commercial developers. The remote location of Presque Isle makes PQI a critical facility to facilitate medical evacuation flights, provide emergency services, and facilitate goods and commerce.

Princeton Municipal

Unattended airport owned by PRAA located in Downeast & Acadia Region on Canadian border, offering CBP/FIS on request. Airport Manager is unpaid volunteer. Sportsman’s paradise.” Offers paved 4,007’ runway and 100LL fuel.

Sanford Seacoast Regional

Full time facility open 24-hours daily year-round in the Southcoast Region, operated by the City of Sanford. Situated equidistant between PSM and PWM, the airport is staffed by 3PT & 2PT employees, SFD is classified as a reliever airport to PWM boasting a 6,389 primary and 4,999’ crosswind runway system with full parallel taxiway and ILS approach capability, modern approach lighting, free parking, flight instruction, maintenance, restaurant, fueling and aircraft parking/storage. Sanford offers full-service executive FBO services, including on-site into-plane catering, community events, MoGas, testing center, multiple hangar options. Top based users are Southern Maine Aviation (FBO) and Pine Tree Helicopters, with high use by itinerant jet charter operators for business and tourism.

Stephen A. Bean Municipal

Unattended airport owned/operated by Town of Rangeley with 1 PT employee. Located in Maine Lakes & Mountains Region, a good site/location for access to recreational activities. Offers 4,299’ runway and 100LL & Jet A fueling.

Stonington Municipal

Unclassified, unattended airport. Likely important landing site due to location. Not a lot of activity beyond Penobscot Island Air’s activity.

Sugarloaf Regional

Similar to PNN, Rangeley, Stonington – Sugarloaf is an important landing site due to location, however the airport is unattended and does not report high traffic volumes.

Waterville-Robert LaFleur

Centrally located, roughly ~middle of AUG/OWK/2B7, less than 24-hour facility open year-round operated by 2FT/4PT municipal staff. Convenient to I-95, competes with AUG, would like corporate hangar, maintenance, additional T-hangars. GA terminal attached to hangar does not meet needs, modest amenities. Active tenants include cargo and flight school; itinerant users are Net Jets, Plane Sense, Wheels Up.

Wiscasset

Seasonal facility operating part-time, less than 24-hour facility during spring/summer months and weekends in fall/winter. ~15 miles from BXM, offering terminal building available 24/7 with amenities and competitively priced self-serve 100LL & Jet fuel. Would like additional hangar space. Itinerant users are Plane Sense, Helicopter Service. Lease Option agreements for solar development.

Source: Airport manager surveys, 2020.

However, airport manager interviews indicate that the performance of certain functions at certain SASP airports is difficult. For example, the addition of a Beechcraft King Air 200 fixed wing aircraft (based at Bangor International) to LifeFlight of Maine’s fleet of helicopters (based at BGR, Auburn-Lewiston Municipal, and Sanford Seacoast Regional) was an important addition to provide transport for specialty care to facilities as far away as Durham (NC), Cleveland (OH), and Toronto,

Ontario in Canada. Machias Valley Airport’s existing runway (2,880 feet) is insufficient to support operation of this aircraft. The runway at Stephen A. Bean Municipal has been extended for the precise purpose of improving access for the larger fixed wing aircraft utilized by LifeFlight of Maine, and an extension of the runway at Newton Field is also underway to improve access.

Chapter 5., System Capabilities, Gaps, & Opportunities will further explore which functional categories are underserved or more stressed due to constraints in the existing system.

3.6. SYSTEM & AIRPORT EVALUATION & OBSERVATIONS

Finally, responses to airport manager surveys and inquiries of both regional planning and economic development agencies and general stakeholders provided insights into needs at system airports and a number of themes began to appear. This section presents a snapshot of challenges, needs, and issues reported in these surveys.

3.6.1. Airport Manager Surveys– NPIAS Airports

The airport manager surveys provided an abundant amount of information describing their type of facility. Survey results centered around maintenance challenges and facility development needs, with issues raised distributed as follows:

Maintenance Challenges - the percentage of airport managers reported the following breakdown of maintenance challenges at their airport:

- Snow Removal – 20%
- Funding – 14.9%
- Obstruction & Vegetation Management – 14.9%
- Pavement Repairs – 12.8%
- Finding Qualified Help – 6.4%

Facility Development Needs - the percentage of airport managers reported the following development needs at their airport.

- Hangars – 24.5%
- Pavement Repairs – 16.3%
- Facility Expansion – 13.3%
- Terminal Improvements – 11.2%
- Security – 5.1%
- Obstruction/Vegetation Mgmt. – 3.1%

3.6.2. Regional Planning & Economic Development Surveys

The survey developed for regional planning and economic development agencies provided other insights into needs at SASP airports. Survey responses spoke highly of the unique regional aviation assets and proximity to geographical attractions. Other surveys mentioned that airport facilities were lacking. Specifically, public transportation and modernized hangar facilities are perceived as needs for improvement. The surveys also highlighted needs for the SASP to address, namely preservation of small airports, an economic development plan and multi-modal connections. Nearly every respondent indicated that growth in use of their regional airport facilities was anticipated. **Table 3-16** lists the participants for the survey.

Table 3-16: Maine SASP Regional Planning & Economic Development Survey Respondents

Respondents	
Androscoggin Valley Council of Governments	Kennebec Valley Council of Governments
Aroostook Band of Micmacs	Mid-Maine Chamber of Commerce
Down East Acadia Regional Tourism	Northern Maine Development Commission
Eastern Maine Development Corporation	Southern Maine Planning & Development
Greater Houlton Chamber of Commerce	Southern Midcoast Chamber of Commerce
Greater Portland Council of Governments	Washington County Council of Governments

Source: McFarland Johnson surveys, 2020

3.6.3. General Stakeholders Surveys

Lastly, the survey of general stakeholders was distributed to individual users of SASP airports, either for recreational or business purposes. Over 35 surveys were received, and themes were categorized as follows.

System Strengths

- Variety, number, and geographic location/distribution of airports
- Provide access to Maine’s natural beauty
- Access and use of float planes
- Bangor Air National Guard Base – strategic military location

System Needs

- Aviation Funding
- Expanded introductory aviation and aircraft maintenance training within primary and secondary schools
- Improved collaboration with local and regional governing bodies and businesses
- Promotion of aviation throughout Maine and beyond to entice travel and investment
- Improved access for aeromedical and non-aeromedical transportation
- Basic level of service for users (weather, fuel and transportation options to/from airport were the most often answers)

3.7. PAVEMENT NEEDS

Common themes included issues related to maintenance issues and facility development. Many airport managers responded that pavement maintenance and rehabilitation concerns were a chief concern, specifically pavement maintenance and management. To help airports effectively maintain their pavement infrastructure and improve pavement conditions statewide, MaineDOT conducted a pavement evaluation survey in 2019 and is discussed in greater detail below. This section summarizes the results of the pavement management study.

3.7.1. Summary of 2019 Pavement Management System

Of the 35 airports studied in the System Plan, 28 of these airports were also studied in a 2019 Airport Pavement Management Study (APMS). These 28 included airports included 27 NPIAS

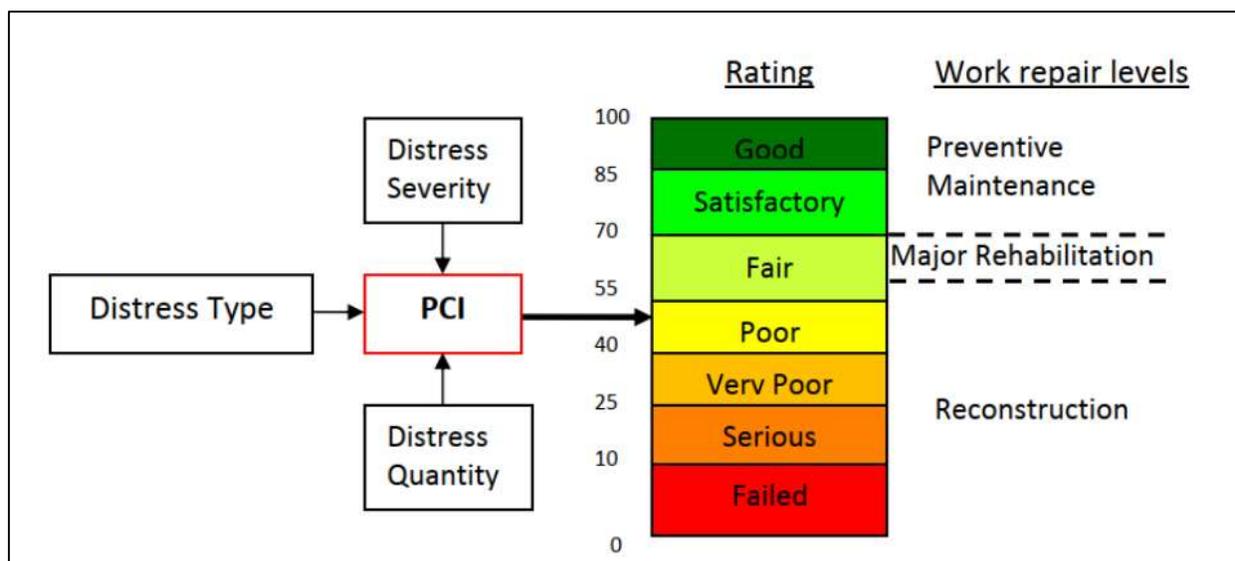
airports and one non-NPIAS airport, Loring International. At this time, neither MaineDOT nor the FAA provides funding to maintain any of the pavements at Loring.

Of the many physical and financial resources expended on airports, pavements represent the single largest capital investment at facilities in the Maine Airport System. The APMS determined that maintaining pavements, the most expensive capital asset at Maine airports, was critical for providing safe facilities and fostering economic opportunity in their respective regions. Timely airport pavement maintenance and rehabilitation (M&R) is crucial because repairs become much more expensive once the conditions deteriorate below certain levels. Additionally, certain airport pavement distresses, such as wide cracking and loose debris, pose a significant safety risk to aircraft. Recognizing a need to protect this critical investment, the MaineDOT maintains an airport pavement management system (APMS).

The APMS provides subject airports, MaineDOT, and the Federal Aviation Administration (FAA) with objective data on airport pavement conditions and is used to proactively anticipate needs and plan for the capital investments required to preserve the system. The total cost of needs determined through this project reflect costs for pavement-related work itself and do not include any additional costs for items such as design, lighting, signage, construction monitoring, marking, or contingency fees.

To represent the current health of pavements, a measure called Pavement Condition Index (PCI) is utilized and is represented by a number between 0 and 100. A pavement with a PCI of 0 would represent a total failure with 100 representing newly constructed pavement. **Figure 3-12** illustrates the PCI rating scale and repair levels.

Figure 3-12: Pavement Condition Index (PCI) Rating Scale and Repair Levels:



Source: MaineDOT APMS Summary Report, DuBois & King & ARA, 2019.

The total amount of pavement studied for the 28 airports was 34 million square feet (SF). Of that amount, the breakdown is as follows:

- Primary Pavements: 16.8 million SF
- Secondary Pavements – Aprons: 10.1 million SF
- Secondary Pavements – Taxiways: 5.6 million SF
- Secondary Pavements – Taxilane: 1 million SF

Looking at all 34 million SF of pavement, the overall pavement system at Maine airports had an area-weighted PCI of 77.63 percent of pavement is at a condition level where preventative maintenance, such as crack sealing is a cost-effective approach to maintaining the pavement. More serious decline represented 37 percent of pavement, where a major rehabilitation or reconstruction would be needed.

The APMS determined that if no funding for pavement major rehabilitation or reconstruction is provided, the overall area-weighted PCI of the system will deteriorate to an estimated 64 and accrue a funding backlog of \$234 million for major rehabilitation and reconstruction by 2023. If all the projects identified as needing pavement major rehabilitation or reconstruction are funded, approximately \$234 million will be needed over the next 6 years: \$48 million for aprons, \$59 million for taxiways, \$7 million for taxilanes, and \$119 million for runways. Approximately \$108 million is needed for NPIAS airport pavement work and \$126 million for non-NPIAS airport pavement work. To achieve the desired pavement condition goal of an area-weighted PCI of 83 for the entire system by 2023, approximately \$30 million of annual funding is needed over the next 5 years. Table 3-17 indicates these funding needs by each pavement maintenance item.

Table 3-17: Pavement Funding Needs by Maintenance Items

Maintenance Item	Average PCI of Item	Total 5-Year Funding Need for Item
Preventative Maintenance	77	\$2,403,900
Major Maintenance and Restoration – Runways	80	\$119,245,908
Major Maintenance and Restorations – Aprons	72	\$48,517,099
Major Maintenance and Restorations – Taxiways	76	\$58,730,176
Major Maintenance and Restorations - Taxilanes	72	\$7,035,175
Major Maintenance and Restoration – All Pavements	77	\$232,855,346

Source: *MaineDOT Airport Pavement Management System Summary Report, DuBois & King & ARA, 2019.*

3.8. SUMMARY

The data and information presented in this chapter and in appendices represents the foundational data and information used as a basis for the SASP. The next chapter, *Chapter 4. Summary of Aviation Activity & Forecasts* will present a forecast of future activity levels that might be anticipated for Maine SASP airports over the next 20 years.

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Aviation Activity & Forecasts

4.1. INTRODUCTION

This chapter examines and projects several components of Maine’s aviation activity. Forecasts developed for this SASP provide insights to guide analysis for future system needs. Projections of aviation activity were prepared for the near-term (2025), mid-term (2030), and long-term (2040) time frames.

The areas forecast for this system plan update include aircraft operations, based aircraft and enplanements where applicable. While the focus for airports such as Portland International Jetport (PWM) and Bangor International Airport (BGR) may often be on passenger enplanements, most of Maine’s airports are general aviation (GA) and as such, the focus of this chapter is on aircraft operations and based aircraft and the demand rationale for each. Projections of aviation demand developed for the system airports are documented in the following sections:

- Forecast Approach & Methodology
- Forecast of Aviation Activity
- Commercial Aviation Overview

The forecasts presented in the following sections are for the purpose of informing this SASP and to serve MaineDOT’s system-wide planning efforts. Forecasts for each airport are not intended to represent the upper limit of activity or the long-term prospects for growth or opportunity at any one SASP airport. This SASP encourages airport sponsors to revisit and update forecasts for their facilities via an update to their airport master plans or airport layout plans (ALP).

4.1.1. Forecasting in Post-COVID-19 Environment

At the time this forecast was developed (fall 2020), there is a great deal of short-term uncertainty and volatility in demand due to the impacts of the global COVID-19/Coronavirus pandemic. The initial sharp reduction in activity and travel bans impacted both commercial and general aviation segments of the market, and uncertainty about the scale and timing of a rebound will persist as passenger and operator confidence strengthens and economic activity recovers.

Short term impacts have had a more sustained effect on commercial passenger travel than general aviation, and air cargo has had to shift from airline aircraft (belly freight) to contracted charter to support major cargo carriers. Initial travel bans and quarantines meant business and leisure travel halted in response to an abundance of caution regarding the risk of transmission during activities that involved large groups.

Looking forward, it is prudent to incorporate a conservative outlook into forecasting of aviation activity in general and for this SASP. Therefore, rather than forecasting significant growth based upon historical trends or decline based upon recent downturns due to the pandemic, the forecast developed for this SASP anticipates that a return to pre-COVID levels of aviation activity is reasonable to plan for over the long-term period (by 2040). Since the timing of such a recovery

and impending changes to system capacity or demand for air travel is not known, the methodology described in the next section takes care to not inflate forecasts of future activity. The methodology also provides for two future activity scenarios: a modest but prolonged period of decline as a reflection of uncertainty about the future, and a steady but conservative rebound as an optimistic perspective that may also be a reasonable outcome.

4.2. FORECAST APPROACH & METHODOLOGY

In the system planning process, activity is most often measured in terms of aircraft operations and based aircraft. An aircraft operation is defined as one takeoff or a landing. A based aircraft is one that is airworthy, operational, and “based” or stored at a specific airport for a majority of the year (i.e., owner has an agreement with the airport for storage and is stored there for more than six (6) months annually). This section describes the approach and methodology developed to forecast operations and based aircraft activity at Maine SASP airports

4.2.1. Forecast of Operations Methodology

In Maine, only Portland International Jetport and Bangor International Airport have air traffic control towers (ATCTs), which are capable of accurate operations counts. At the remaining SASP airports, operations are estimated by other sources, including visual observation by airport managers or staff. The reliability of operations estimates at these airports is uncertain because a number of SASP airports are staffed by part-time managers, volunteers, or in some cases are primarily unattended. For these non-towered general aviation airports, aircraft operations reported by airport managers or other airport staff during updates to the Federal Aviation Administration (FAA) Form 5010 Airport Master Record are captured in the FAA Terminal Area Forecast (TAF). While these sources are useful for broad, multi-state or national inquiry of operational volumes or scale, using either as the basis for forecasting has proven to result in highly inflated and inaccurate results that are not realistic or useful.

To forecast activity for the SASP under these conditions, this forecast formulated an analysis and approach using the following data:

- **Traffic Flow Management System Counts (TFMSC):** The FAA TFMSC source data is created when pilots file flight plans and/or when flights are captured by the FAA’s enroute computers, and includes data for flights that operate under instrument flight rules (IFR). The data includes information on traffic counts by airport or by city pair for various groupings such as by aircraft type or by hour of the day. Most visual flight rules (VFR) and some non-enroute IFR traffic is excluded, which means that the data is not a source for total operations volume for any airport. However, the data that is not included is typically flights by small, Group I aircraft that do not place large demands on SASP airports in terms of approach capability or critical airfield pavement or facilities.
- **General Audio Recording Device (G.A.R.D.) Data:** MaineDOT Aviation has implemented a program to purchase and install G.A.R.D. systems at SASP airports to aid in estimating airport operations. The G.A.R.D. system is a private-party technology solution that is an audio recording system that captures radio transmissions in the vicinity of the airport. MaineDOT has recently executed cooperative agreements with all NPIAS airports in the

system to install the G.A.R.D. system, however at the time of this writing (fall 2020) complete data for 2019 and regular reports have not been provided to MaineDOT for all airports. Therefore, available information was supplemented by 2018 data or a composite of previous year averages by month was compiled to estimate operations that could be used for this forecast.

TFMSC data is available for every SASP airport. Since G.A.R.D. system data was not available for every SASP airport, the forecast methodology uses TFMSC data to estimate current operational volumes at SASP airports where no G.A.R.D. system data counts were available, as follows:

- TFMSC Data/GARD Counts Ratio:** TFMSC data was divided by G.A.R.D. system counts where available to determine the percentage relationship between data sets, by airport. For the purpose of the SASP forecast, the methodology considers this ratio a useful proxy for estimating total aircraft operations. The results were analyzed to assess and generalize these relationships by Asset role. Airports were assigned a ratio based on aggregated data or their actual TFMSC/GARD ratio, whichever was lower. The TFMSC/GARD ratios that were applied for Basic, Local, and Regional SASP airports are shown in **Table 4-1**:

Table 4-1: MaineSASP – Ratio of TFMSC Counts Data to G.A.R.D. System Data

Airport Role ^{1/}	Percentage
Basic Airports	3%
Local Airports	7.5%
Regional Airports	12%

Source: McFarland Johnson Analysis, 2020.

^{1/}Commercial airports were excluded as G.A.R.D. system counts were available for non-towered facilities.

Using this methodology, the forecast established a baseline level of annual operations for every SASP airport based upon available G.A.R.D. system data and assuming that SASP airports within each Asset role category exhibit similar characteristics of scale and user base that drive activity levels. The analysis validates the reasonableness of the methodology because more Group II Plus airports generally account for a higher level of operations by operators of larger and more sophisticated aircraft and pilots more likely to file flight plans. In this way, the TFMSC/GARD data ratio provides valuable insight into the representative activity characteristics of each airport.

From this point, the methodology utilizes the baseline estimate of annual operations and based aircraft¹ to compute operations per based aircraft (OPBA) as a test of reasonableness for the estimate of annual operations activity. OPBA is a commonly accepted industry metric for general aviation forecasting because there is typically a direct relationship between the number of based aircraft and the annual volume of operations that occur at their home airport. The typical range of OPBA for general aviation airports generally falls between 250-350 operations, which translates to about 2 ½ - 3 ½ take-offs or landings each week throughout the year. This range is a generally accepted average; however, exceptions exist for more active business aircraft or at airports with

¹ FAA, National Based Aircraft Inventory Program, validated counts, September 2020.

a based flight school and a significant amount of touch-and-go training operations. Similarly, busy business airports that accommodates a high level of operations by itinerant operators and airports with scheduled commercial service are typically above this range.

- Operations Per Based Aircraft/Ratio:** Annual operations are divided by based aircraft to determine the relationship between based aircraft and operational volume for each SASP airport. Then, the average OPBA was computed for each Asset role (Basic, Local, Regional, Commercial).

Table 4-2 presents baseline operations, based aircraft, and OPBA for SASP airports grouped by Asset role. Based aircraft at the three SASP airports designated as Unclassified by the National Plan for Integrated Airport Systems (NPIAS) are limited with just two based aircraft at Stonington and both Charles A. Chase Memorial and Islesboro showing no based aircraft. Therefore, forecasts were not prepared for unclassified airports using this analysis because activity levels are very low and represent limited and seasonal use only.

Table 4-2: MaineSASP – Estimate of Current Operations, Based Aircraft, and OPBA

Airport	Estimated Annual Operations	Based Aircraft	OPBA Ratio
Basic Airports			
Belfast Municipal	2,899	15	193
Caribou Municipal	6,167	10	617
Eastport Municipal	4,600	9	511
Machias Valley	2,767	4	692
Newton Field	1,133	11	103
Northern Aroostook Regional	6,067	9	674
Oxford County Regional	1,867	10	187
Princeton Municipal	2,933	1	2,933
Stephen A Bean Municipal	1,667	5	333
Sugarloaf Regional	933	12	78
Local Airports			
Bethel Regional	3,450	17	203
Biddeford Municipal	6,227	37	168
Brunswick Executive	24,259	42	578
Central Maine Regional	9,915	26	381
Dewitt Field - Old Town Municipal	1,347	37	36
Dexter Regional	320	18	18
Eastern Slope Regional	4,969	33	151
Greenville Municipal	8,933	14	638
Houlton International	2,600	21	124
Lincoln Regional	213	24	9
Millinocket Municipal	2,340	17	138
Pittsfield Municipal	5,120	32	160

Airport	Estimated Annual Operations	Based Aircraft	OPBA Ratio
Waterville Robert LaFleur	14,307	17	842
Wiscasset	5,733	32	179
Regional Airports			
Auburn-Lewiston Municipal	23,008	50	460
Augusta State	21,993	47	468
Sanford Seacoast Regional	28,010	98	286
Commercial Airports			
Bangor International	44,682	32	1,396
Hancock County-Bar Harbor	22,181	27	822
Knox County Regional	40,189	63	638
Portland International Jetport	58,182	41	1,419
Presque Isle International	9,515	18	529

Source: McFarland Johnson Analysis, 2020.

As shown in Table 4-2, the OPBA produced for a number of general aviation airports in Basic and Local roles is not within the typical range noted of 250-350 per based aircraft. However, the systemwide average OPBA for general aviation airports is 313, which is within that range. This is an indicator that systemwide operational characteristics among SASP airports align well with traditional aviation planning practices and validates the methodology of estimating operations based upon the TFMSC/G.A.R.D. counts ratio data.

For several SASP airports, the OPBA computed was significantly below the systemwide average and the typical range (250-350) for general aviation airports. As shown in Table 4-2, these airports, and their operations, based aircraft, and OPBA are:

Airport	OPBA	Operations	Based Aircraft
• Dewitt Field – Old Town Municipal	36	1,947	37
• Dexter Regional	18	320	18
• Lincoln Regional	9	213	24
• Sugarloaf Regional	78	933	12

Considering the level of based aircraft at these SASP airports, it is likely that their operations are not adequately captured with the TFMSC/G.A.R.D. counts ratio method. Therefore, to improve the estimate of systemwide operations at SASP airports, the methodology applies a conservative ratio of 200 OPBA to estimate operations for these airports. The adjusted estimate of operations for these airports is shown in Section 4.3 where forecasts are presented.

- **Forecasted Rates:** To forecast future operations at SASP airports, the methodology applies the average annual rate for general aviation operations (0.3 percent) published in FAA Aerospace Forecast, Fiscal Years 2020-2040 (Aerospace Forecast) to the OPBA for the forecast period. To forecast operations at SASP commercial service airports, the methodology applies a reduction to the published Aerospace Forecast rate for commercial

airports (2.2 percent) 1.9 percent to be conservative. The methodology concludes with estimates of activity within two future activity scenarios: modest decline and conservative recovery as a reflection of uncertainty about the future.

As described, this forecast methodology was used to estimate a range of annual operations activity at SASP airports that is useful for system-wide planning purposes. Activity at SASP airports that is observed to fall outside of these ranges should be further documented and reviewed as part of an airport's master plan or ALP update effort.

Finally, and as mentioned previously, MaineDOT has recently executed cooperative agreements with all NPIAS airports in the system to install the G.A.R.D. system. Therefore, as G.A.R.D. systems are installed and post-pandemic activity data at SASP airports is captured and reported to MaineDOT, the utility of this SASP forecast will likely diminish beyond the coming 5-year period.

4.2.2. Forecast of Based Aircraft Methodology

The number and type of aircraft based at an airport is an important indicator of the types of activity that occurs there. This is because aircraft have very specific operating requirements that impact runways, approaches, safety areas, apron and hangar storage, fuel types, services, and capacity. The types of aircraft and the needs of their owners or operators also places demands on the airport in terms of terminal facilities, and pilot and passenger services, amenities and support required to accommodate their needs such as auto parking and ground transportation.

For these reasons, based aircraft² is an industry standard metric for evaluating an airport's facility requirements. However, a more important indicator than the sheer number of based aircraft for most general aviation airports is the airport's "critical aircraft." Critical aircraft is defined by the FAA in Advisory Circular 150/5000-17, Critical Aircraft and Regular Use Determination as:

"the most demanding aircraft type, or grouping of aircraft with similar characteristics, that make regular use of the airport. Regular use is 500 annual operations ..."

The determination of an airport's critical aircraft is a specific FAA determination made based upon use and activity forecasts prepared during an airport master plan, which documents the types and timing of improvements necessary to accommodate the critical aircraft safely.

For system planning purposes, a determination of the specific critical aircraft is not as important as a broader understanding of the trends in types of aircraft in use at Maine SASP airports. Therefore, an assessment of the types of aircraft in use provides insights into SASP airports where activities and demand may be changing that can be useful for MaineDOT to consider when evaluating statewide, system-level needs.

² Based aircraft data is collected through the FAA's National Based Aircraft Inventory Program. The inventory is submitted directly by the Airport to the Based Aircraft Inventory Program, which then is used to populate the 5010. Nonprimary airports cannot submit this directly to the 5010.

For these reasons, the approach for forecasting future based aircraft activity at Maine SASP airports is to rely on trends in national active aircraft³ published in *FAA Aerospace Forecast, Fiscal Years 2020-2040 (Aerospace Forecast)* as an indicator of based aircraft activity in Maine. As described in [Section 4.3.2](#), the SASP considers that these trends will have an impact on based aircraft and itinerant activity in Maine, with the timing and scale of impacts at each specific Maine SASP airport remaining uncertain.

Therefore, rather than forecasting volumes of based aircraft for each SASP airport, the approach instead incorporates a review of *changes in SASP airport use by aircraft type*. This review highlights how national trends in active aircraft are having an impact on SASP airports and presents insights into what these changes mean for the future of public use airports in Maine.

4.3. FORECAST OF AVIATION ACTIVITY

The most significant aspect of this SASP forecast and forecast methodology is that it diverges from traditional methods of forecasting for activity at non-towered airports. Traditional methods of forecasting aviation activity at non-towered airports typically incorporate the use of and analysis of future activity under several methods. Once these multiple forecasts are complete, one is selected as the “preferred” forecast based upon some measures of reasonableness or indicators that suggest the preferred forecast method produced the most realistic scenario for use in planning for the near, mid-, and long-term periods.

Rather than calculating future activity levels using multiple methods and selecting one preferred outcome, this SASP utilizes one set of very conservative forecast rates and then incorporates both decline and rebound scenarios that reflect the significant uncertainty of long-term aviation activity nationwide in the post-pandemic environment.

Additionally, this SASP forecast diverges from traditional forecasting methods by establishing base year (2020) operations at non-towered SASP airports using the TFMSC/G.A.R.D. activity counts ratio, rather than data available from the Federal Aviation Administration (FAA) Terminal Area Forecast (TAF) or Airport Master Records, FAA Form 5010. For comparison purposes, the TAF estimates that the Maine system of airports accounted for about 413,000 operations 2019. This SASP methodology estimates that 2020 operations in Maine are less than 393,000, which represents a decrease of five (5) percent systemwide. At just general aviation airports, the SASP methodology estimates that 2020 operations in Maine are about 218,000 where the TAF places operations for the same general aviation airports at nearly 330,000. This represents a nearly 34 percent reduction in systemwide operations at general aviation airports as the starting point for the forecasts presented in this section. This represents a significant “right-sizing” of the future outlook for aviation activity at MaineSASP airports and will serve MaineDOT and the FAA well for planning purposes.

This section presents a forecast of aviation activity that follows the methodology described in [Section 4.2.1](#).

³ The FAA defines an active aircraft is one that flies at least one hour during the year.

4.3.1. Operations

Forecasts were developed for each SASP airport for the near-term (2025), mid-term (2030), and long-term (2040) periods. The forecasts are grouped by Asset role.

Basic Airports

Table 4-3 summarizes the operations forecast for each Basic airport in the Maine SASP. As described in *Chapter 3., Summary of Existing System*, airports designated as serving in a Basic role are typically limited in terms of airside and landside facilities and services, and often fulfill a singular role in providing a critical link for host communities to the regional and national aviation system. As such, Basic airports generally accommodate lower activity levels than other airports, typically below 10,000 annual operations during each year of the 20-year planning period. The low activity is often a function of the remote nature of these facilities, meaning that while operational activity is low, these airports likely represent a vital lifeline to the community and surrounding areas they serve.

The column labeled “Low” in the table represents a *decline* scenario, the level at which annual operations may be if average annual activity declines at a rate of 1.0 percent for the 20-year period. The column labeled “High” in the table represents a *rebound* scenario. This is the upper level at which annual operations could be if average annual activity increases at a rate of 2.0 percent for the 20-year period. These scenarios represent a range of activity possible for the forecast period, which will vary year to year based on demand.

Table 4-3: Basic Airport Operations Forecast

Airport	Current	Forecast			20-Year Range	
	2020	2025	2030	2040	Low	High
Belfast Municipal	2,900	2,900	3,000	3,100	2,400	4,300
Caribou Municipal	6,200	6,300	6,400	6,500	5,000	9,200
Eastport Municipal	4,600	4,700	4,700	4,900	3,800	6,800
Machias Valley	2,800	2,800	2,900	2,900	2,300	4,100
Newton Field	1,100	1,200	1,200	1,200	900	1,700
Northern Aroostook Regional	6,100	6,200	6,300	6,400	5,000	9,000
Oxford County Regional	1,900	1,900	1,900	2,000	1,500	2,800
Princeton Municipal	2,900	3,000	3,000	3,100	2,400	4,400
Stephen A Bean Municipal	1,700	1,700	1,700	1,800	1,400	2,500
Sugarloaf Regional	2,400	2,400	2,500	2,500	2,000	3,600

Source: McFarland Johnson analysis, 2020.

However, as indicated in Table 4-4, use of Basic airports in Maine is not just dependent upon the size of the facility but also needs for access to the regions where they are located, such that:

- **Northern airports** like Caribou Municipal and Northern Aroostook Regional are forecast to be the busiest small airports. Under a *rebound* scenario, these airports could serve an average of 25 daily operations by 2040.

- **Western Mountains airports** such as Newton Field, Stephen A. Bean, and Sugarloaf Regional, and **Washington County airports** such as Machias Valley and Princeton Municipal will be the least active. Average daily operations at these airports under a rebound scenario will likely be less than 20 year-round. An extended decline scenario could mean a year-round average of 5-10 operations daily.

Finally, operations activity at SASP airports serving in a Basic role will also reflect the types of functions these airports fulfill for their user base. While the scale of activity may be low, Basic airports in Maine provide aspects of the following functions for their users and communities and are of high public value:

- Emergency Preparedness & Response
- Critical Community Access
- Other Aviation Specific Functions
- Commercial, Industrial, & Economic Activities
- Destination & Special Events

Local Airports

Table 4-4 summarizes the operations forecast for each Local airport in the Maine SASP. As described in [Chapter 3., Summary of Existing System](#), the FAA has identified Local airports as the backbone of GA in the National Airspace System (NAS). This is true in Maine, as Local airports have elevated operational activity compared to Basic airports and exhibit a more diverse mix of single-engine and larger twin-engine aircraft for business needs within the state or immediate region.

The column labeled “Low” in the table represents a decline scenario, the level at which annual operations may be if average annual activity declines at a rate of 1.0 percent for the 20-year period. The column labeled “High” in the table represents a rebound scenario. This is the upper level at which annual operations could be if average annual activity increases at a rate of 2.0 percent for the 20-year period. These scenarios represent a range of activity possible for the forecast period, which will vary year to year based on demand.

Table 4-4: Local Airport Operations Forecast

Airport	Current	Forecast			20-Year Range	
	2020	2025	2030	2040	Low	High
Bethel Regional	3,500	3,500	3,600	3,700	2,800	5,100
Biddeford Municipal	6,200	6,300	6,400	6,600	5,100	9,300
Brunswick Executive	24,300	24,600	25,000	25,800	19,800	36,000
Central Maine Regional	9,900	10,100	10,200	10,500	8,100	14,700
Dewitt Field - Old Town Municipal	7,400	7,500	7,600	7,900	6,100	11,000
Dexter Regional	3,600	3,700	3,700	3,800	2,900	5,300
Eastern Slope Regional	5,000	5,000	5,100	5,300	4,100	7,400
Greenville Municipal	8,900	9,100	9,200	9,500	7,300	13,300
Houlton International	2,600	2,600	2,700	2,800	2,100	3,900

Lincoln Regional	4,800	4,900	4,900	5,100	3,900	7,100
Millinocket Municipal	2,300	2,400	2,400	2,500	1,900	3,500
Pittsfield Municipal	5,100	5,200	5,300	5,400	4,200	7,600
Waterville Robert LaFleur	14,300	14,500	14,700	15,200	11,700	21,300
Wiscasset	5,700	5,800	5,900	6,100	4,700	8,500

Source: McFarland Johnson analysis, 2020.

The forecast of operations at Local airports in Maine indicates that Brunswick Executive is likely to accommodate the most traffic in terms of annual operations, with annual operations perhaps approaching or surpassing 30,000 by 2040 under the best conditions. Waterville Robert LaFleur, Central Maine Regional, Dewitt Field-Old Town Municipal, and Lincoln Regional round out the top five (5) busiest Local airports, which are all primarily along the I-95 corridor from Augusta to north of Bangor. Forecasted operations at the remaining Local airports reflect a combination of different factors, such as:

- Activity at **Biddeford Municipal** likely benefits from being located in a highly populated area of the state and serves as an alternative to Portland International Jetport and Sanford Seacoast Regional for operators of smaller aircraft.
- Forecasted activity levels for **Eastern Slope Regional** is likely due to the airport’s draw from for recreational activities and ease of access from the Conway area of New Hampshire.
- Lower activity levels at **Dexter Regional** and **Millinocket Municipal** could be based on competition from other nearby airports, so also for **Houlton International**.

As the frequency of use by larger, Group II aircraft and more active users increases from Basic airports to Local airports, so also does the impact and value of activity around the following functions provided for their users and communities:

- Emergency Preparedness & Response
- Critical Community Access
- Other Aviation Specific Functions
- Commercial, Industrial, & Economic Activities
- Destination & Special Events

Regional Airports

Table 4-5 summarizes the operations forecast for each Regional airport in the Maine SASP. As described in [Chapter 3., Summary of Existing System](#), Regional airports are typically located in metropolitan areas, serve larger populations, and experience substantial levels of charter, jet, and rotorcraft operations. Additionally, with no NPIAS-designated National airports in Maine, SASP airports serving in Regional roles also perform as National airports, accommodating the most demanding and sophisticated GA aircraft. Auburn-Lewiston Municipal and Sanford Seacoast Regional are also designated relievers to provide relief during periods of congestion at Portland International Jetport.

The column labeled “Low” in the table represents a *decline* scenario, the level at which annual operations may be if average annual activity declines at a rate of 1.0 percent for the 20-year period. The column labeled “High” in the table represents a *rebound* scenario. This is the upper level at which annual operations could be if average annual activity increases at a rate of 2.0 percent for the 20-year period. These scenarios represent a range of activity possible for the forecast period, which will vary year to year based on demand.

Table 4-5: Regional Airport Operations Forecast

Airport	Current	Forecast			20-Year Range	
	2020	2025	2030	2040	Low	High
Auburn-Lewiston Municipal	23,000	23,400	23,700	24,400	18,800	34,200
Augusta State	22,000	22,300	22,700	23,400	18,000	32,700
Sanford Seacoast Regional	36,700	37,300	37,900	39,000	30,000	54,600

Source: McFarland Johnson analysis, 2020

The forecast of operations at the three Regional airports in Maine indicates that Sanford is likely to accommodate the most traffic, with operations perhaps approaching or surpassing 40,000 annually by 2040 under the most optimistic conditions. The forecast methodology produced similar levels of annual operations forecasts for Auburn-Lewiston and Augusta State. Augusta and Sanford provided reliable G.A.R.D. count data, which increases the accuracy of existing operations counts and reasonableness of their forecasts.

Similar to the differences in the scale of activity between Basic and Local airports, so also is the increase in annual use and diversity of sophisticated aircraft between Local and Regional airports. These characteristics are illustrated by the offerings at these airports, such as:

- **Auburn-Lewiston** is home to numerous small aeronautical businesses, including those offering charter flights, aircraft maintenance, and aircraft sales. Services available also include deicing, engine pre-heats, aircraft cleaning, ground power, and catering. These services are those most in demand by larger aircraft and transient corporate operators.
- Maine Instrument Flight is a full-service FBO at **Augusta State** offering maintenance, air charter, aircraft sales and rentals, and flight training. FBO services include hangars, on-site rental car, pilot shop, pilot lounge, restaurant, catering, and conference room for rent.
- **Sanford Seacoast** is a base of operations for LifeFlight of Maine and has two flight training facilities. Southern Maine Aviation is the FBO. The FBO offers a compliment of services and support for transient corporate business operators including fueling, maintenance, and hangar storage.

The difference between Regional and smaller SASP airports is that activity and operators at the Regional airports are at times the *providers*, or *origin* of services and functions for smaller Local and Basic airports. In this way, Regional airports in Maine might be considered the “exporters” of the services that help the system provide the following functions:

- Emergency Preparedness & Response
- Critical Community Access

- Other Aviation Specific Functions
- Commercial, Industrial, & Economic Activities
- Destination & Special Events

Commercial Airports

Table 4-6 summarizes general aviation operations forecasts for each Commercial airport in the Maine SASP. Commercial airports in the SASP are those with the most robust compliment of facilities and services in the statewide system, allowing year-round, all-weather use by large corporate, regional, and widebody jet aircraft for scheduled passenger service access to the NAS. Augusta State Airport is also included in the forecast of commercial airports due to the facility’s dual role as a general aviation and commercial service airport.

The column labeled “Low” in the table represents a *decline* scenario, the level at which annual operations may be if average annual activity declines at a rate of 1.0 percent for the 20-year period. The column labeled “High” in the table represents a *rebound* scenario. This is the upper level at which annual operations could be if average annual activity increases at a rate of 2.0 percent for the 20-year period. These scenarios represent a range of activity possible for the forecast period, which will vary year to year based on demand.

Table 4-6: Commercial Airport Operations Forecast

Airport	Current	Forecast			20-Year Range	
	2020	2025	2030	2040	Low	High
Augusta State	22,000	22,300	22,700	23,400	18,000	32,700
Bangor International	44,700	49,100	53,900	65,100	36,500	66,400
Hancock County-Bar Harbor	22,200	24,400	26,800	32,300	18,100	33,000
Knox County Regional	40,200	44,200	48,500	58,600	32,900	59,700
Portland International Jetport	58,200	63,900	70,200	84,800	47,600	86,500
Presque Isle International	9,500	10,500	11,500	13,900	7,800	14,100

Source: McFarland Johnson analysis, 2020.

The forecast of general aviation operations at Commercial airports in Maine benefits from accurate operations count data at Portland and Bangor due to their ATCT, and the remaining airports provided reliable G.A.R.D. count data. The use of data from these sources adds confidence to baseline operations levels and forecasts presented in Table 4-6.

Similar to Regional airports in Maine, Commercial airports in the SASP also perform in a National airport role, accommodating the most demanding and sophisticated GA aircraft. This is especially true for Bangor, Knox County, and Portland, which are forecast to accommodate the most annual operations for the period. Additionally, Commercial airports in the SASP are also the *providers*, *exporters*, or *origin* of operators’ services and functions for the rest of the Maine system.

4.3.2. Based Aircraft

As described, a determination of the specific aircraft volumes at Maine SASP airports is not as critical for system planning purposes as a broader understanding of the trends in types of aircraft in use at Maine SASP airports. Therefore, this SASP stipulates that national trends in active aircraft

will affect use of SASP airports by both based and itinerant aircraft, and relies upon insights from real usage data at Maine SASP airports to guide further identification of needs that will affect system-wide planning and development.

Table 4-7 presents historical data published in the Aerospace Forecast that indicates the following changes in active aircraft by type.

Table 4-7: MaineSASP – FAA Aerospace Active Aircraft Fleet Trends – 2010-2019

Aircraft Type	Trend
Fixed Wing Piston Engine	- 1.0 %
Fixed Wing Turbine	2.0 %
Rotorcraft	0.1 %
Experimental Aircraft	1.3 %
Light Sport Aircraft	9.3 %
Total Piston Engine Aircraft	1.0 %
Total Turbine Aircraft	1.8 %

Source: FAA Aerospace Forecast, Fiscal Years 2020-2040.

As indicated in Table 4-8, historical national trends note modest increases in piston engine and turbine-powered aircraft, with the greatest area of growth being light sport aircraft followed by fixed wing turbine aircraft.

Looking ahead, the Aerospace Forecast indicates continued growth in turbine-powered aircraft, decreases in fixed wing aircraft, an increased rate of growth in active rotorcraft, and slowing growth in experimental and light sport aircraft. **Table 4-8** presents the forecast of active aircraft by type published in Aerospace Forecast.

Table 4-8: MaineSASP – FAA Aerospace Active Aircraft Fleet Forecast – 2020-2040

Aircraft Type	Trend
Fixed Wing Piston Engine	- 1.0 %
Fixed Wing Turbine	- 1.8 %
Rotorcraft	1.6 %
Experimental Aircraft	0.9 %
Light Sport Aircraft	3.3 %
Total Piston Engine Aircraft	- 0.9 %
Total Turbine Aircraft	1.8 %

Source: FAA Aerospace Forecast, Fiscal Years 2020-2040.

The Aerospace Forecast growth rates indicate both growth and contractions in sectors of active aircraft in the general aviation fleet. While this is a national projection, these trends incorporate a variety of inputs as documented in the Aerospace Forecast, such as estimates of active aircraft fleet size, hours flown, active pilots by certificate type. Data regarding new aircraft deliveries and from General Aviation and Part 135 Activity Surveys are also included.

Insights that provide depth to these forecasted trends include:

- **Single/Multi-Engine Piston:** Active piston aircraft are anticipated to decline while turbine aircraft are forecast to grow through the planning period. As more pilots and owners are finding advantages via aircraft leasing, renting, fractional ownership, and flying clubs, the number of individually owned piston engine aircraft is decreasing in many regions. While aircraft counts are declining, this will be offset from enhanced utilization from a broader user base not burdened by high entry costs.
- **Turbine/Jet:** Advancements in fuel efficiency and aircraft technology have resulted in a variety of newer aircraft entering the turbine and jet aircraft market and at lower costs. This has increased the number of aircraft in use by business operators, which includes owner lease or purchase, fractional ownership, and charter operators.
- **Light Sport Aircraft:** Light sport aircraft encompass a variety of aircraft including two-seat ultralight-type designs and powered parachutes, as well as composite material aircraft. These aircraft can be heavier and more sophisticated than ultralight aircraft and have weight/performance restrictions that separate them from the single engine piston fleet.
- **Seaplanes:** Maine has a strong community of seaplane operators, some of which are wheel-equipped amphibian aircraft that can land on water or hard surfaces. Seaplanes are often modified versions of fixed-wing piston-powered aircraft.
- **Experimental Aircraft and Gliders:** Experimental aircraft are amateur-built aircraft that are licensed by the FAA. These aircraft are used for non-commercial recreational purposes as are gliders, which are fixed wing aircraft without engines.

The impacts of these trends at Maine SASP airports will vary in timing and degree; however, the scale of these impacts will likely align very closely with the current user base of each airport such that:

- **Basic** – The based aircraft mix at basic airports is predominantly single engine. While single engine aircraft have been declining as older aircraft, like the Cessna 150, age out of the fleet, there is growth opportunity in light sport and experimental aircraft which could counter this decline or provide an opportunity for growth.
- **Local** - The based aircraft mix at local airports is predominantly single engine with some multi-engine piston aircraft. Both single and multi-engine piston powered aircraft are in decline as older aircraft age out of the fleet. There is growth in light sport and experimental aircraft which could counter this decline and some of the busier local airports may see twin-turbine or small jets base at the airport as those are the areas where the GA fleet is growing.
- **Regional** - The based aircraft mix at regional airports includes a diverse cross section of the GA fleet, including based jet aircraft. Since these airports are often busier and have more Group II Plus aircraft, the growth in light sport and experimental aircraft is not as likely as these airports and instead, regional airports are likely to see more growth in light and medium sized GA jet aircraft.

- **Commercial** – Similar to regional airports, commercial airports include a diverse cross section of the GA fleet, including based jet aircraft. In some cases, the increased security requirements at commercial service airports drive more recreational aviation users to other nearby airports to base their aircraft, so the based aircraft totals may be lower than that of regional airports however, the diverse mix including jets will be similar.

4.3.3. Based & Itinerant Aircraft Operating Trends at Maine Airports

Beyond forecasts of annual operations, further analysis was performed using data available from the FAA’s TFMSC database. As mentioned previously, TFMSC data provides insights into use by larger aircraft operators and pilots that file flight plans. Data was collected for the 2010-2019 period and indicates where changes are occurring at SASP airports in terms of the types of aircraft operating. The analysis focuses on operations by Aircraft Design Group II (ADG-II) aircraft or larger, which generally includes a variety of twin-engine aircraft powered by either turboprops or jet engines. These will be referred to as “Group II Plus” aircraft operations.

This review of operational changes and trends at SASP airports is presented by Asset role in the following sections.

- **Basic Airports:** Table 4-9 summarizes average annual operations by aircraft in ADG-II or larger at Maine SASP airports serving in a Basic role, and the average annual growth rates of these operations for the 2010-2019 period.

Table 4-9: Maine SASP – Change in Group II Plus Operations
Basic Airports – 2010-2019

Airport	Average Annual Operations			Avg. Annual (All Groups)	Growth Rate
	B-II	C/D I/II	C/D III/IV		
Belfast Municipal	47	43	0	48	13%
Caribou Municipal	25	0	1	26	39%
Eastport Municipal	23	0	0	24	4%
Machias Valley	6	0	0	6	9%
Newton Field	10	0	0	10	30%
Northern Aroostook Regional	55	2	0	57	17%
Oxford County Regional	7	0	1	7	-23%
Princeton Municipal	20	1	0	20	11%
Stephen A Bean Municipal	20	0	0	20	4%
Sugarloaf Regional	0	0	0	0	N/A
10 Year Basic Average	20	5	0	22	15%

Source: FAA TFMSC, October 2020.

While occurring at relatively low levels, the growth in Group II Plus aircraft operations at Basic airports indicates growth over the past 10 years. As shown in Table 4-9, Northern Aroostook is under the highest demand by larger aircraft; however, this amounts to just more than one (1) operation each week. One exception to the overall growth trend is Oxford County Regional, where Group II Plus operations declined over the period from a high of 25 and 21 in 2011 and 2013, respectively.

Operations at Basic airports are predominantly single engine aircraft. Basic airports can likely expect some growth in these types of operations. Levels can be expected to remain between 0 and 50 operations, but seasonal, event-driven spikes at Northern Aroostook could be higher.

- Local Airports:** Maine SASP airports serving in a Local role have also posted sustained growth in Group II Plus operations over the period. **Table 4-10** summarizes average annual operations by aircraft in ADG-II or larger at Maine SASP airports serving in a Local role, and the average annual growth rates of these operations for the 2010-2019 period.

The level of activity by aircraft in B-II and larger categories at Local airports is higher than similar activity at Basic airports with 115 average annual operations. This average is inflated by the large volume of activity by such aircraft at Brunswick Executive. Local airports can likely expect some operations growth from more Group II Plus aircraft (B-II and or turbine-powered) as newer and more capable aircraft come into the market.

**Table 4-10: Maine SASP – Change in Group II Plus Operations
Local Airports – 2010-2019**

Airport	Average Annual			Avg. Annual (All Groups)	Growth Rate
	B-II	C/D I/II	C/D III/IV		
Bethel Regional	4	0	0	4	20%
Biddeford Municipal	3	0	1	4	-17%
Brunswick Executive	566	244	56	866	11%
Central Maine Regional	7	1	0	7	22%
Dewitt Field - Old Town Muni.	3	0	0	3	-15%
Dexter Regional	0	0	0	1	N/A
Eastern Slope Regional	72	9	1	82	3%
Greenville Municipal	38	2	0	39	-4%
Houlton International	55	8	1	64	17%
Lincoln Regional	3	0	0	3	N/A
Millinocket Municipal	24	5	0	29	6%
Pittsfield Municipal	195	0	1	195	2%
Waterville Robert LaFleur	202	78	10	291	3%
Wiscasset	21	1	0	22	-11%
10 Year Local Average	85	25	5	115	12%

Source: FAA TFMSC, October 2020.

- Regional Airports:** Growth in Group II Plus operations at Regional airports is not as strong as Basic and Local airports. **Table 4-11** summarizes average annual operations by aircraft in ADG-II or larger at Maine SASP airports serving in a Regional role, and the average annual growth rates of these operations for the 2010-2019 period.

Table 4-11: Maine SASP – Change in Group II Plus Operations
Regional Airports - 2010-2019

Airport	Average Annual Operations			Avg. Annual (All Groups)	Growth Rate
	B-II	C/D I/II	C/D III/IV		
Auburn-Lewiston Municipal	749	109	16	875	0.2%
Augusta State	593	151	16	760	-18%
Sanford Seacoast Regional	288	152	18	458	6%
10 Year Regional Average	543	138	17	696	-8%

Source: FAA TFMSC, October 2020.

Much of the decline in the regional Group II Plus aircraft operations category is attributable to changes in service at Augusta State since 2010, when commercial service was operated on a slightly larger aircraft (Beechcraft 1900, a B-II) compared to the current Cessna 402 operated by Cape Air. Operations at regional airports are increasingly diverse between single, multi-engine and jet aircraft activity. As fractional ownership and more efficient corporate aircraft such as the Pilatus PC-12 and Embraer Phenom have come into the market, it has made private air travel more affordable than ever. Increased business use in this market segment has had positive impacts for the service providers at the regional airports of Maine.

- **Commercial Airports:** Commercial airports are highly Group II Plus in nature, accommodating the full range of aircraft in the general aviation fleet and a variety of narrow and widebody aircraft in service by commercial airlines. Portland International Jetport and Bangor International Airport accommodate thousands of Group II Plus operations by aircraft in Group-II and larger categories and are therefore excluded from this particular analysis. Presque Isle International indicates a slight decline.

Table 4-12 summarizes average annual operations by aircraft in Group-II or larger commercial airports in the Maine SASP, and the average annual growth rates of these operations for the 2010-2019 period.

Table 4-12: Maine SASP – Change in Group II Plus Operations
Commercial Airports– 2010-2019

Airport	Average Annual Operations			Avg. Annual (All Groups)	Growth Rate
	B-II	C/D I/II	C/D III/IV		
Augusta State	593	151	16	760	-18%
Bangor International	N/A	N/A	N/A	N/A	N/A
Hancock County-Bar Harbor	2,136	663	192	2,958	-4%
Knox County Regional	993	512	44	1,550	-0.3%
Portland International	N/A	N/A	N/A	N/A	N/A
Presque Isle International	2,940	236	7	3,183	-1%
10 Year Commercial Average	2,023	470	81	2,564	-2%

Source: McFarland Johnson analysis, 2020

GA operations at commercial airports largely reflect patterns shared by Regional airports, and the Essential Air Service (EAS) Program airports illustrate trends that reflect the types of aircraft in use by Cape Air, such as the Cessna 402.

4.4. COMMERCIAL AVIATION OVERVIEW

At airports where scheduled commercial passenger service is available, a key metric for measuring demand is passenger enplanement volumes. An “enplanement” or “enplaned passenger” is generally understood to be an individual passenger boarding a plane at an airport.

The volume and type of passenger enplanements served by commercial service airports drives the sizing of terminal facilities, from passenger parking and ticketing to security screening, and from baggage and holdrooms to secure-side retail and concession needs. For these reasons, and similar to based aircraft and critical aircraft determinations, understanding precise levels of passenger demand is a task more appropriately reserved for airport master planning efforts versus state-wide system planning. This is because terminal area needs are primarily dictated by demands of passenger market, which is the business of commercial airlines and the airports they serve.

Therefore, the purpose of this section of the Maine SASP is not to provide input into the needs of terminal facilities at commercial service airports, but to review passenger activity and the demand outlook for passenger activity at these six airports.

One caveat is at the four commercial airports in the Maine SASP where commercial service is provided under the U.S. Department of Transportation EAS Program. The EAS Program was established to guarantee that small communities that were served by air carriers prior to the Airline Deregulation Act (1978) maintained a minimum level of scheduled service. Since its inception, the EAS Program has evolved to incorporate more stringent performance standards that can affect eligibility and subsidy caps that make providing EAS a challenge in many markets due to low levels of enplanements. In these instances, the State may have a role in supporting the continued provision of EAS service at four SASP airports.

4.4.1. Scheduled/Primary Commercial Service

Table 4-13 summarizes enplanement levels at Portland International Jetport (PWM) and Bangor International Airport (BGR).

**Table 4-13: MaineSASP – Historical Passenger Enplanements
Portland International Jetport & Bangor International Airport**

Airport	2010	2015	2019	CAGR
Portland International	851,566	858,449	1,088,728	3%
Bangor International	416,328	273,829	325,160	-3%
Total	1,267,894	1,132,278	1,413,888	1%
Percent Total	96%	96%	97%	-

Source: FAA, October 2020.

As shown in Table 4-13, PWM and BGR account for 97 percent of enplaned passenger activity in Maine, with both airports showing increasing activity over the last 10 years. An important

characteristic of these two airports is that they serve primarily as points of departure for passengers that originate from Maine. While PWM is considered a small hub airport in the NPIAS due to enplanement volumes, the major network airlines (American, Delta, United) serving these markets do not maintain “hub” stations through which they route connecting flights. Therefore, enplaned passenger activity at these airports are indicators of passenger demand within the geographic markets they serve versus connecting passenger traffic on their way to final destinations. Additional insights and outlook for PWM and BGR include the following:

- Portland International Jetport (PWM):** The busiest airport in Maine in terms of both passengers and cargo, PWM is home to nine (9) airlines serving over two dozen nonstop destinations. Service ranges from nine seat Cessna 402 aircraft with flights to/from Boston up to aircraft with nearly 200 seats serving destinations such as Orlando, Chicago and Denver. In addition to passenger service, scheduled air cargo operations are provided by FedEx as well as feeder service on smaller aircraft for UPS. Importantly, PWM does not offer U.S. Customs and Border Protection (CBP) Federal Inspections Service (FIS) on-site. Therefore, international flights are not available.

A recently completed master plan for PWM includes a detailed forecast of demand that indicates that passenger activity could exceed 1.18 million enplanements by 2035 and total operations nearing 70,000 annually. In 2019, PWM was already ahead of 2025 projections, indicative of a positive growth trajectory.

- Bangor International Airport (BGR):** BGR is the second busiest commercial service airport in Maine in terms of passenger traffic and offers four (4) airlines serving eight (8) nonstop destinations. Service ranges from 50-seat regional jets to New York up to aircraft with over 150 seats serving destinations such as Orlando and Tampa. In addition to passenger service, scheduled air cargo operations are provided by feeder services on smaller aircraft for both FedEx and UPS. The size of the airfield and availability of a Customs/FIS make it a popular airport for international charters and for diversions for trans-Atlantic commercial aircraft.

A master plan update is currently underway and will include a detailed review of demand specific to BGR. Enplanements levels have nearly doubled between the 2010-2019 period, resulting in a positive outlook for passenger demand at BGR.

4.4.2. Essential Air Service

Table 4-14 summarizes enplanement levels at the four EAS airports in the Maine SASP.

**Table 4-14: MaineSASP – Historical Passenger Enplanements
Essential Air Service Airports**

Airport	2010	2015	2019	CAGR
Augusta State	4,300	5,120	5,454	3%
Hancock County – Bar Harbor	11,109	9,579	10,088	-1%
Presque Isle International	15,052	12,928	13,244	-1%
Knox County Regional	17,657	15,730	17,166	0%

Airport	2010	2015	2019	CAGR
Total	48,118	43,357	45,952	-1%
Percent Total	4%	4%	3%	-

Source: FAA, October 2020.

Airports in the EAS Program tend to have stable levels of passenger activity because carrier schedules are dictated by program requirements during the bidding process. The frequencies and aircraft types are set for the service period and seat capacity remains flat.

For nearly 10-years, Cape Air has been the operator awarded with most of the EAS Program routes in Maine, which are operated in a nine-seat twin piston-engine, unpressurized Cessna 402. This aircraft is most popular on short trips under 45-60 minutes as the aircraft does not have a stand-up cabin or a restroom. Presque Isle is located significantly further away and receives a larger subsidy to support service by larger cabin aircraft to account for the greater distance.

- Augusta State (AUG):** Service at AUG is provided to Boston Logan International (BOS) with an average of three daily departures on the Cessna 402. Recent enplanement levels range from 5,000-5,500 annually, which could increase modestly but can be expected to remain below 10,000 throughout the planning period due to constraints of the aircraft and schedules in the EAS Program contract.
- Hancock County - Bar Harbor (BHB):** EAS service at BHB provided to BOS with three daily departures and additional service in the summer of up to eight daily departures on the Cessna 402. Enplanement levels have decreased from 2010 levels when a second EAS provider was awarded for the summer season and operated a larger cabin aircraft but remain steady at approximately 13,000 annually. Future activity will likely be within this range as today’s service remains solely on nine seat aircraft.
- Knox County Regional (RKD):** EAS Service at RKD is provided to BOS via three daily departures and additional service in the summer months of up to six daily departures on the Cessna 402. Recent historical enplanements have been around 7,000-8,000 annually. Similar to BHB, the highest activity during the last 10 years occurred when a second EAS provider was awarded for the summer season and utilized larger cabin aircraft. Future activity will likely be within historical activity ranges due to service on the Cessna 402.
- Presque Isle International (PQI):** EAS service at PQI benefits from use of larger cabin aircraft due to the community’s remote location. Service is operated by United Express with two daily flights on 50-seat regional jet aircraft, one each to Newark Liberty International and Washington Dulles International. The United Express service represents the first national network carrier branded jet service in the airport’s history, which has resulted in higher enplanements. Master plan forecasts indicate that enplanement levels could exceed 20,000 later in the planning period with this type of service.

There are no changes proposed nor anticipated to the EAS Program, although a temporary reduction in service due to COVID-19 pandemic has been allowed. The program frequently comes under scrutiny from groups looking to curb government spending. For these reasons, changes in the EAS Program would not likely benefit existing communities served in Maine. This program

should be monitored and promoted to preserve the resident and economic benefits that are derived from the subsidized air service.

In these instances, the State may have a role in supporting the continued provision of unscheduled charter service operations to the Maine Islands and other remote SASP airports/locations.

4.4.3. Emerging Trends in the Post-COVID Aviation Market

As described in [Section 4.1.1](#), this forecast was developed at a time when there is great uncertainty regarding passenger demand worldwide. The following insights are provided to inform the Maine SASP with context and outlook for passenger activity demand during the short-term period as the economy and aviation industry and travel market recovers:

- **Increased Reliance on Hub and Spoke Model by Network Airlines:** When passenger demand is high, airlines add point-to-point routes in important markets to strengthen their presence and also create capacity for hub routes which take the bulk of traffic to a variety of destinations. When demand is lower, these point-to-point routes are often eliminated as the network carriers still have the ability to fly passengers between the two cities, just with a connection in one of their hubs. Although less desirable for passengers, absent any other non-stop service, flying with a connection is still the most convenient option.
 - *Impacts for Maine:* In a reduced demand environment, airlines may reduce point-to-point flying in favor of access via their hubs resulting in consolidated service to fewer destinations until demand rebounds to pre-COVID levels.
- **Focus on Less Competitive Markets:** During periods of high demand, airlines often compete for market share with deals to attract the market's most frequent fliers. During periods of lower passenger demand, airlines look for less competitive markets that will not have the same downward pressure on fares.
 - *Impacts for Maine:* PWM and BGR could see new routes from existing carriers in an effort to reduce competition and claim premium pricing during peak seasons as an alternative to using those aircraft in more competitive markets with higher price sensitivity. Recent examples include the addition of Saturday-only service on American from PWM to Dallas/Ft. Worth in the summer and Miami in the winter.
- **Permanently Lost Demand:** In the months that followed the initial quarantine and lockdowns, people and businesses found new ways to stay connected. While no method of virtual interface can replace in-person collaboration, it has reduced some segments of commercial passenger demand in the short term and could reduce frequency and type of travel demand for some airports during the short- to mid-term periods.
 - *Impacts for Maine:* Leisure travel is anticipated to rebound more quickly than business travel as access and confidence in international travel remains difficult. This could mean opportunity for lower cost or ultra-low cost carriers at PWM and/or BGR for point-to-point routes as legacy/network carriers focus on reduced schedules and service to hubs.

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System Capabilities & Performance Gaps

5.1. INTRODUCTION

Building upon the summary of the existing system presented in *Chapter 3, Summary of Existing System*, and the evaluation and forecasts of aviation activity in *Chapter 4, Aviation Activity and Forecasts*, this Chapter explores the current capabilities and performance of the Maine State Aviation System. The analysis and findings presented in this Chapter are directly linked to fulfilling the following key MaineDOT goals for the SASP first described in *Chapter 1, Introduction*:

Goal
<ul style="list-style-type: none"> Understand current and future potential aviation system contributions to meeting expressed societal needs sufficiently to inform the following question: <i>What compelling public value justifies what degree of state and federal investment toward what end?</i>
<ul style="list-style-type: none"> Identify trends, gaps, opportunities, and prioritized recommendations for nurturing key system components, including aviation workforce development.

Source: MaineDOT, Bureau of Planning, 2019.

To meet these goals, this Chapter presents analysis and findings in the following sections:

- Capabilities & Performance Evaluation Methodology
- System Capabilities & Performance by SASP Region
- Summary of System-Level Performance & Access Gaps
- Summary of System-Level Planning Issues & Opportunities

The work presented concludes with a summary of planning issues and opportunities and formulates a compelling public value as a basis to justify state investment in the Maine State Aviation System of public-use airports.

Treatment of Commercial Service Airports

As described in *Chapter 3., Summary of Existing System*, Maine's system of public-use airports includes six (6) airports that meet statutory definition as Commercial Service airports¹ as follows:

- **Small Hub:** Portland International
- **Non-Hub Primary:** Bangor International, Knox County Regional, Presque Isle International
- **Non-Primary:** Augusta State, Hancock County-Bar Harbor

¹ Publicly owned airports with at least 2,500 annual enplanements and scheduled air carrier service (§47102(7)). Primary airports are commercial service airports with more than 10,000 annual enplanements (§47102(16)).

Generally speaking, these SASP airports have the most robust complement of facilities, equipment, and services that can accommodate the full-range of aircraft in the active fleet – from small, single engine piston aircraft to passenger aircraft and airlines that operate them. They offer 24-hour, year-round access and equipment and services that can meet the most demanding users’ needs during all weather conditions.

For these reasons, this evaluation of capabilities and performance of SASP airports assumes that Maine’s commercial service airports already perform at a very high level and do not exhibit substantive capability or performance gaps that require assistance by MaineDOT or this SASP. Therefore, commercial service airport’s capabilities and performance are included in this Chapter to reference their contributions to general aviation users in the system or as compliment to other SASP airports rather than to identify performance gaps.

Among Commercial Service SASP airports, Augusta State Airport is also given the Regional role in the National Plan of Integrated Airport Systems (NPIAS) and is therefore included in the following statewide evaluation where the other commercial service airports are not.

5.2. SYSTEM-WIDE CAPABILITIES & PERFORMANCE EVALUATION

To evaluate current capabilities and performance of the Maine State Aviation System, the methodology focuses on complexities of use and access to Maine airports driven by two factors:

- Key System Facilities & Service Components
- Geographic SASP Regions

Airport infrastructure determines which types of aircraft and operators can access the system, attracting some user segments to certain airports or limiting other aircraft and operators to a select set of airports that can accommodate their needs. The same is true of Maine’s natural environment, socioeconomic activity, and seasonal weather conditions, where physical features such as topography, weather/snowfall, or higher-density locations of people and business attracts certain aircraft operators or limits use by others based on their unique needs.

The following sections detail the methodology for evaluating system capabilities and performance.

5.2.1. Key System Facilities & Service Components

The following facility infrastructure and services are considered key components of the system because they determine the types of aircraft that can access SASP airports.

- Runway Geometry, Design Standards, & Crosswinds
- Approach Capability, All-Weather & Year-Round Accessibility
- Fixed Base Operator (FBO), Fueling, & Aircraft Maintenance Services

The complement of facilities and services at Maine SASP airports is the *product* that users *buy* when they take off or land, and it is these facilities and services that attract and retain users. For example, SASP airports with runways of 5,000 feet or longer serving in Regional roles attract use by larger, more sophisticated aircraft and operators. These users demand better instrumentation for lower minimums and precision approaches, vertical guidance, lighting, and terminal area facilities like ground support equipment, paved apron parking or hangar storage. These facilities

are often complemented by services and amenities for pilots and passengers such as ground transportation options, food services, flight-planning rooms, etc.

Airports with shorter runways can accommodate use by some smaller jet aircraft in B-II Approach Category during good conditions but cannot always provide year-round access for these same aircraft during poor weather or visibility. While weather affects users of all aircraft types, the impact of poor flying conditions in Maine drives users of business aircraft to airports that can accommodate year-round use with greater predictability. This results in a natural “sorting” of users in the market amongst system airports such that small airports in a Basic role with short runways in rural areas typically service small, single-engine piston aircraft during conditions where visual or non-precision approach minimums can be met.

Therefore, the evaluation of key airport features and services starts with runway design standards, crosswind runways, and then evaluates weather conditions and approach capabilities.

Runway Design Standards & Crosswinds

Maine SASP airports have primary runways ranging from a short turf strip at Charles A. Chase, Jr. Memorial to robust GA facilities such as parallel 8,000-foot runways at Brunswick Executive and a primary/crosswind pair at Sanford Seacoast Regional of 6,389 and 4,999 feet, respectively.

The driving force behind runway geometry needs and design standards is an airport’s critical aircraft. Described in *Chapter 4., Summary of Aviation Activity & Forecasts*, an airport’s critical aircraft is the most demanding aircraft type that utilizes the airport for at least 500 operations annually.

The determination of an airport’s critical aircraft is a FAA determination made based upon use and activity forecasts prepared during an airport master plan. However, while a determination of critical aircraft for each SASP airport is not the work of this system plan, the State has a role in assessing runway geometry needs across the system of public use airports at a system level to ensure adequate facilities and services that can serve the existing and future needs of those using their system of airports. MaineDOT also has a role because the Bureau of Planning is asked to provide state match grant funding for approved AIP-eligible projects in partnership with the FAA.

The airport master plan documents the Runway Design Code (RDC), which signifies the design standards to which the runway is (to be) built. For airports with more than one runway, the Airport Reference Code (ARC) designation signifies the airport’s highest RDC. While faster and/or larger aircraft may be able to operate safely on the airport, the RDC determines design and construction standards that are required by the critical aircraft.

The date of the most recent master plan and the highest/most demanding future or ultimate RDC or ARC are grouped by role for SASP airports in in **Table 5-1**.

Table 5-1: Maine SASP – GA Airport Master Plans & Runway/Airport Design Codes

Airport Role	Master Plan			Future/Ultimate RDC/ARC						
	Current	5-10 Years	10+ Years	A-I	A-II	B-I	B-II	C-II	C-III	C-IV
Commercial Service ^{1/}	6	-	-	-	-	-	2	1	1	2
Regional ^{2/}	2	-	1	-	-	-	2	1	-	-
Local	6	3	5	1	1	1	8	1	1	-
Basic	5	1	4	2	-	3	5	-	-	-
Unclassified	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	19	4	13	3	1	4	17	3	2	2

Source: MaineDOT, 2020.

^{1/} A targeted AMPU was prepared for Augusta State, including Airport Layout Plan (ALP) in 2015.

^{2/} Includes Augusta State

As indicated in Table 5-1, 13 SASP airports have outdated master plans, nine (9) of which are NPIAS facilities serving in Local and Basic roles. The lack of current master plans at these airports raises questions about each airport’s pavement needs because a determination of critical aircraft and associated airfield design standards has not been revisited in 10 or more years. An additional four (4) airports have master plans showing age (5-10-years old), which might also trigger uncertainty about their needs.

The age of existing master plans at SASP airports is also of concern when determining the long-term need for crosswind runways. Today, Maine SASP general aviation airports boast 10 paved crosswind facilities, ranging in length from 2,301 feet at Waterville Robert LaFleur to 4,000-foot facilities at Central Maine of Norridgewock and Millinocket Municipal. Advisory Circular 150/5000-17 requires that crosswind runways meet *both* wind coverage requirements (generally five percent of total operations) *and* regular use requirements (500 annual operations) for aircraft that would use the crosswind runway.

A complicating factor in the determination of critical aircraft and crosswind needs at SASP airports is the lack of reliable operational counts at some non-towered general aviation airports, an issue that is addressed in *Chapter 4., Summary of Aviation Activity & Forecast*. As presented in that Chapter, the FAA’s Traffic Flow Management System Counts (TFMSC) data was used in concert with G.A.R.D. System data to ascertain operations at SASP airports by aircraft that fly under Instrument Flight Rules (IFR). Since most Visual Flight Rules (VFR) traffic and local traffic is excluded from the TFMSC, the forecast method provides insight into existing and future enroute operators and aircraft types, which could qualify as critical aircraft if they reach regular use threshold of 500 annual operations.

Section 5.3 presents an evaluation of primary and crosswind runway capability and performance by SASP Region.

Approach Capability, All-Weather & Year-Round Accessibility

Weather conditions in Maine present challenges for year-round air travel, especially from November to February, where winter months bring some of the highest snowfall totals in the U.S.

While daily sunshine in early October and late March brings better temperatures and less snow than deep winter, increases in rainfall and cloud cover make instrument approaches and better minimums much more necessary for based and transient operators throughout the Maine system.

Figure 5-1 illustrates the various types of weather systems available at SASP airports, and the location of (6) systems at non-SASP airport and hospital locations. As shown, eight (8) SASP airports do not have on-site weather reporting systems. Ten weather systems at SASP airports are maintained by LifeFlight of Maine.

Among the 35 SASP airports reviewed, 16 had weather data that could be accessed through the National Oceanic and Atmospheric Association’s (NOAA’s) National Centers for Environmental Information (NCEI) which is the FAA’s approved source of weather data. Another 11 airports were close in proximity to other weather stations that could be used for comparison purposes² and one used the FAA’s standard weather data. Average annual snowfall information was also summarized from NOAA and third-party sources to provide more insight into conditions affecting use of SASP airports.

Based on available data, Instrument Flight Rules (IFR) conditions are estimated to occur approximately 16.4 percent of the time systemwide³. **Table 5-2** presents a breakdown of SASP airports and roles by percent IFR conditions among the 27 airports where data was sufficient to assess. Average annual snowfall among all locations was 77 inches. Table 5-2 also includes the number of airports within ranges above and below average.

Table 5-2: Maine SASP – Instrument Flight Rules Conditions & Average Annual Snowfall

Item	IFR Conditions Percentage			Average Annual Snowfall	
	≤ 15%	15-20%	> 20%	Below Avg.	Above Avg.
By Role					
Commercial Service	2	3	-	2	1
Regional ^{1/}	1	2	-	2	-
Local ^{2/}	1	10	-	6	5
Basic ^{2/}	3	1	2	3	7
Unclassified ^{2/}	-	1	1	-	1
Total	7	17	3	13	14

Sources: McFarland Johnson Analysis, 2020.

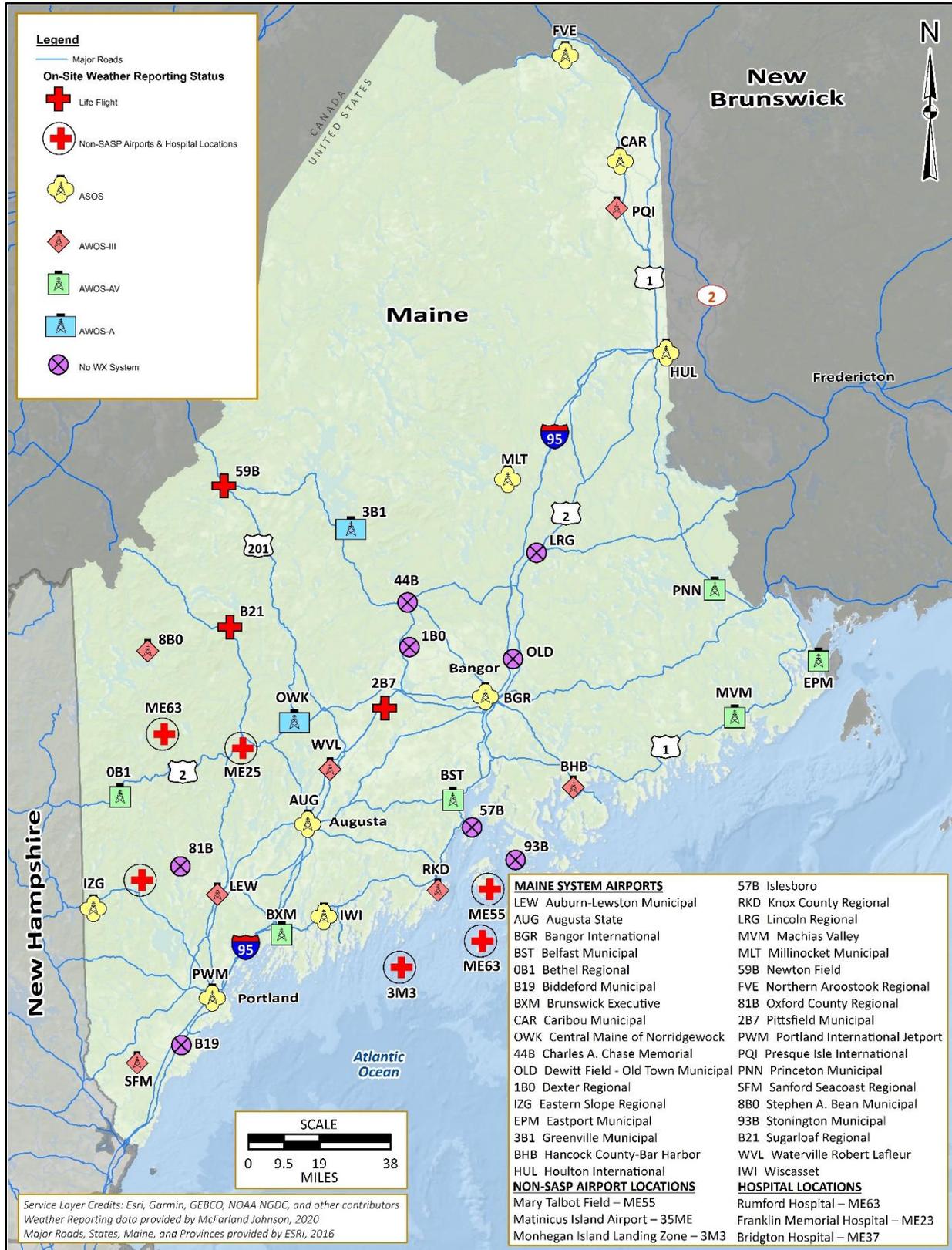
^{1/} In this table Augusta State is included as a Regional airport.

^{2/} Data not available for three (3) Local airports, four (4) Basic airports, and one (1) Unclassified airport.

² As listed alternatives for flight planning purposes on Airnav.com.

³ National Centers for Environmental Information (NCEI), National Oceanic and Atmospheric Association (NOAA’s), August 2020.

Figure 5-1: Maine SASP - On-Site Weather Reporting Systems



Source: McFarland Johnson, Inc, 2020.

As shown in Table 5-2, nearly half (49 percent) of SASP airports (including commercial service airports) experience IFR conditions from 15-20 percent of the time. This translates to up to 75 days each year, or greater. Additionally, 40 percent of communities with SASP airports typically experience higher than average snowfall. Importantly, and as noted, there are eight SASP airports where data was not sufficient to include.

There are 18 weather systems in the state, including those at 10 SASP airports, that are not accessible via the FAA’s National Airspace Data Interchange Network (NADIN) because they are of a type that do not supply the type or format of weather data required. These systems are reaching the end of their useful life and need to be replaced with systems that can be included in NADIN.

Based on the analysis of weather conditions data and instrument approach visibility minimums, SASP airports were categorized by the percentage of the time they closed (i.e., when visibility minimums were lower than the lowest instrument approach, including circling approaches). **Table 5-3** presents estimates of annual closure rates.

Table 5-3: MaineSASP – Annual SASP Airport Closure Rates

Item	Closure Rate Percentage		
	< 5%	5-10%	> 10%
By Role			
Commercial Service	3	2	-
Regional ^{1/}	2	1	0
Local ^{2/}	4	6	1
Basic ^{2/}	2	3	1
Unclassified ^{2/}	-	-	2
Total	11	12	4

Sources: McFarland Johnson Analysis, 2020.

^{1/} In this table Augusta State is included as a Regional airport.

^{2/} Data not available for three (3) Local airports, four (4) Basic airports, and one (1) Unclassified airport.

As shown in Table 5-3, 12 SASP airports (34 percent of the system) experience conditions where closure can occur 5-10 percent of the time annually. Out of the 30 SASP airports with general aviation roles⁴ five (5) airports offer precision instrument approaches and 21 SASP airports offer non-precision approaches. Four (4) SASP airports offer only visual approaches. Most SASP airports have instrument approach visibility minimums greater than ½ mile up to and including 1-mile visibility.

Among the seven airports with the lowest approach minimums, two airports (Augusta State and Knox County Regional) experienced closure rates of more than 5 percent due to poor visibility. Airports that experience conditions that required closure greater than 10 percent of the time

⁴ As described in *Chapter 3., Summary of Existing System*, Augusta State Airport is designated a Commercial Service Airport in the NPIAS but is also given a Regional general aviation role.

include two visual-only airports and Lincoln Regional, which has instrument approach procedures in place. Stonington Municipal had the highest closure rate of nearly 18 percent.

While a determination of each SASP airports' wind coverage or approach requirements is a topic for consideration in an airport master plan, the system-wide issue identified in the previous section – critical aircraft requirements and lack of reliable operational counts – is made more acute when considering access during poor flying conditions. This is because Maine weather shortens the flying season and makes reaching the FAA requirement for determining design standards (500 annual operations) difficult for certain airports. Therefore, while many SASP airports may meet requirements for aircraft currently using their facilities, including their critical aircraft, there is uncertainty as to how these airports continue to service needs of users as their needs or aircraft fleet change in a manner that can justify FAA eligibility for changes to design standards.

The issues of weather conditions and approach capability has an impact on year-round accessibility to Maine SASP airports, and by extension to the communities of people and businesses these airports serve.

Importantly, the needs of various aircraft and users at SASP airports vary in several ways, including the type of user (i.e., individual, public agency, business/corporate, airline) and their mission for operating an aircraft (i.e., leisure/recreation, government operations, business purposes, passenger transport). In Maine, these needs also vary by region and the types of primary functions SASP airports fulfill. The intersection of these issues is the focus of [Section 5.3](#), which summarizes these issues by SASP Region.

Fixed Base Operator (FBO), Fueling, & Aircraft Maintenance Services

As described at the outset of this section, the facilities and services at Maine SASP airports is the *product* that users *buy* when they take off or land, and it is these facilities and services that attract and retain users. Beyond the safe operation of aircraft at an airport, users require a variety of services to meet the mission of their flights. Primarily, these can be categorized under FBO services, fuel, and maintenance. The offering of services by FBOs vary based on market demand like any other business, so some provide more than others depending upon the composition of their user base.

Figure 5-2 identifies the 20 SASP airports that offer FBO services, and the 15 that do not.

Figure 5-3 illustrates the 30 SASP airports that offer fueling services, including three (3) that have seaplane fueling facilities.

Figure 5-4 19 SASP airports with aircraft maintenance providers on-site.

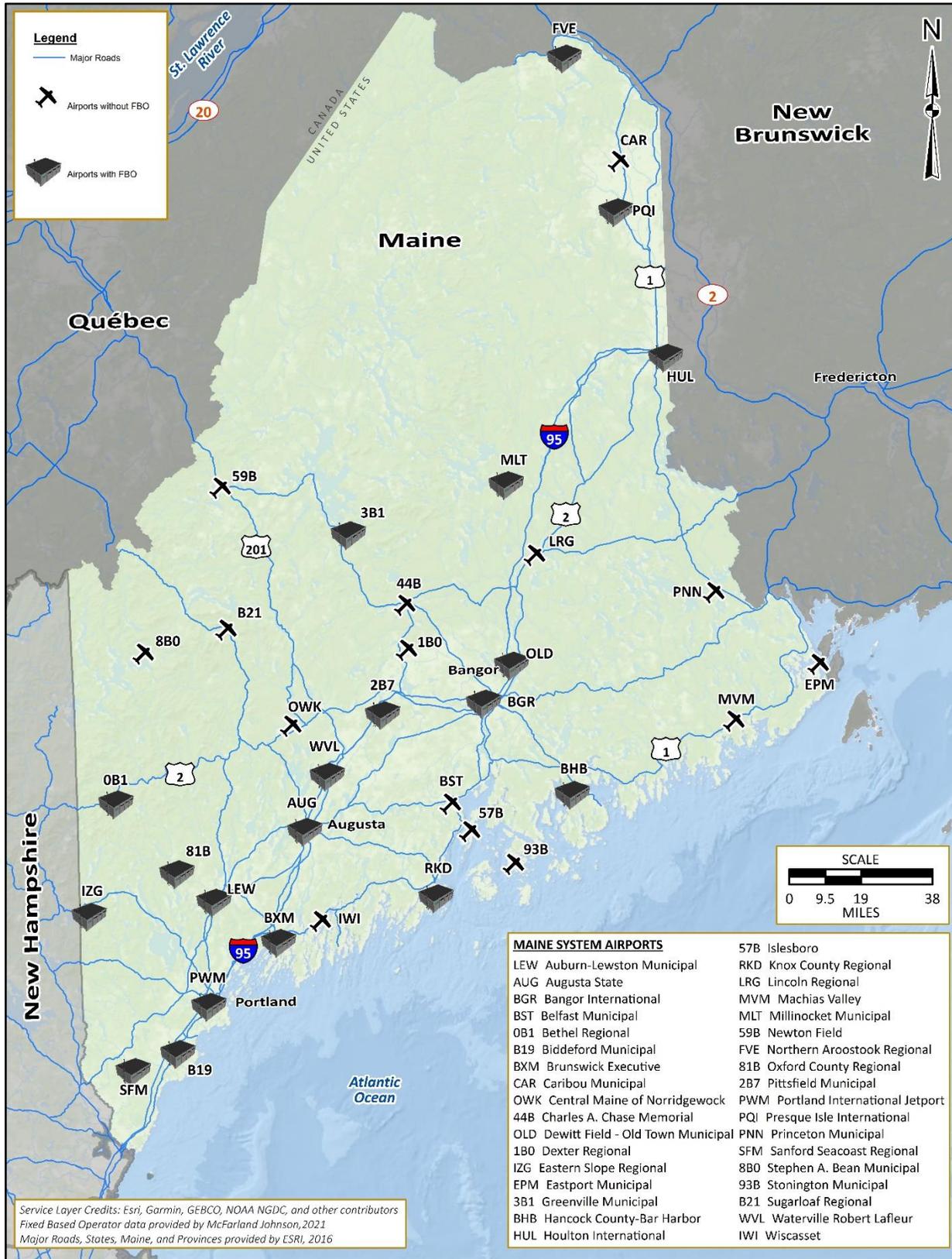
Table 5-4 summarizes the composition of FBO, maintenance, and other services at SASP airports, and notes those airports where fueling services is offered by sponsors.

Table 5-4: MaineSASP – Summary of FBO, Maintenance & Fueling Services at SASP Airports

Airport	FBO	Maintenance & Other Services	Fuel
AUBURN/LEWISTON MUNI	Y	Maintenance	Sponsor
AUGUSTA STATE	Y	Full service	
BANGOR INTL	Y	MRO	
BELFAST MUNI	N	Flight training, light maintenance	
BETHEL RGNL	N	Maintenance	Sponsor
BIDDEFORD MUNI	Y	N/A	Sponsor
BRUNSWICK EXECUTIVE	Y	Concierge, hangars, MRO, maintenance, flight training, Drone pilot training	
CARIBOU MUNI	N	N/A	Sponsor
CENTRAL MAINE ARPT OF NORRIDGEWOCK	N	N/A	Sponsor
DEBLOIS FLIGHT STRIP	N	N/A	
DEWITT FLD-OLD TOWN MUNI	Y	Maintenance, flight training	Sponsor
DEXTER RGNL	N	N/A	Sponsor
EASTERN SLOPES RGNL	Y	SASO, maintenance, flight training	Sponsor
EASTPORT MUNI	N	Maintenance	Sponsor
GREENVILLE MUNI	Y	Maintenance	Sponsor
HANCOCK COUNTY-BAR HARBOR	Y	Fuel, hangars, flight training, maintenance	
HOULTON INTL	Y	Maintenance	Sponsor
KNOX COUNTY RGNL	Y	Fuel, hangars, flight training	
LINCOLN RGNL	N	N/A	Sponsor
MACHIAS VALLEY	N	N/A	
MILLINOCKET MUNI	Y	N/A	Sponsor
NEWTON FIELD	N	N/A	Sponsor
NORTHERN AROOSTOOK RGNL	Y	Flight Training	Sponsor
PRESQUE ISLE INTERNATIONAL	Y	Fuel, hangars	Sponsor
OXFORD COUNTY RGNL	Y	Maintenance, rental, flight training	Sponsor
PITTSFIELD MUNI	Y	Maintenance, fuel, flight training	
PORTLAND INTL JETPORT	Y	Maintenance, fuel, flight training	
PRINCETON MUNI	N	N/A	Sponsor
SANFORD SEACOAST RGNL	Y	Maintenance, fuel, hangars, flight training/testing	
STEPHEN A. BEAN MUNI	N	Maintenance, fuel, flight training	
STONINGTON MUNI	N	N/A	
SUGARLOAF RGNL	N	Flight Training	Sponsor
WATERVILLE ROBERT LAFLEUR	Y	Flight Training	Sponsor
WISCASSET	N	N/A	Sponsor

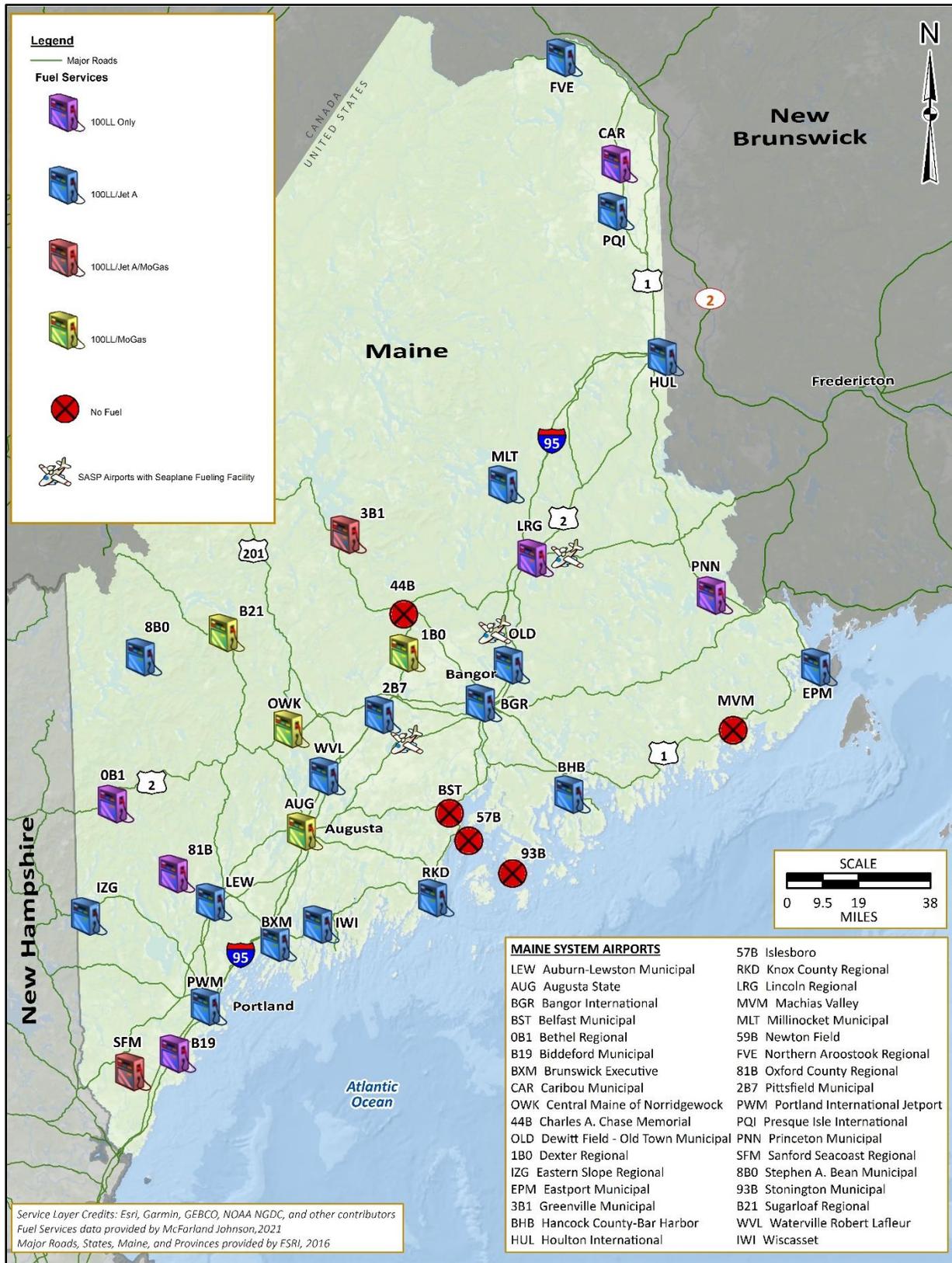
Source: MaineDOT, 2021.

Figure 5-2: Maine SASP – FBO Services



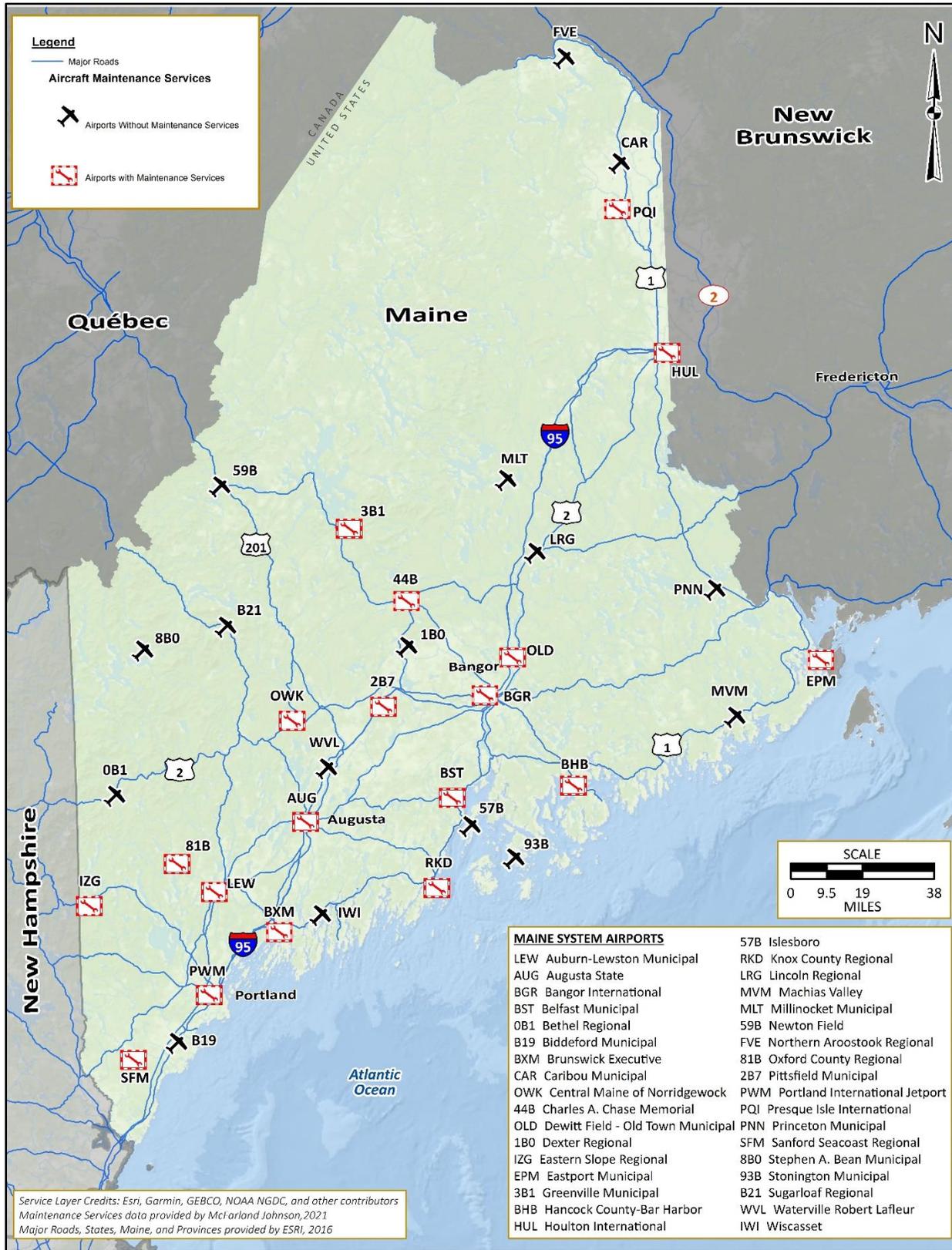
Source: McFarland Johnson, Inc, 2020.

Figure 5-3: Maine SASP – Fueling Services



Source: McFarland Johnson, Inc, 2020.

Figure 5-4: Maine SASP – Aircraft Maintenance Services



Source: McFarland Johnson, Inc, 2020.

Together, the compliment of services available at SASP airports is representative of the market demand for such in each region of the state, but also the talent and business interests. In this regard, there could be a modest market for aircraft maintenance and other aviation services at airports where none currently exists; however, talent and business interests may not align with that market.

However, the availability of fuel is at times a safety consideration, and there are five (5) airports that do not offer fuel. Three of these airports are small, unattended airports that have such low levels of activity that they are unclassified by the FAA in the NPIAS airports (Charles A. Chase Memorial, Stonington, and Islesboro). Dexter Regional is close to Charles A. Chase Memorial for those operators needing fuel. The remaining two airports without fuel – Belfast Municipal and Machias Valley - received FAA grants in 2021 to install fuel farms for 100LL. The City of Belfast may expand to provide Jet A. Machias Valley’s facility could be expanded in the future if required.

5.2.2. Geographic SASP Regions

The State of Maine is a vast land area that offers regions of coastal to mountainous terrain. Elevation ranges from sea level along the coast to the areas reaching 4,249 feet at Sugarloaf Mountain in the Western mountainous region that includes the Appalachian Trail, which terminates at Mt. Katahdin (5,269 feet) in Baxter State Park. Population and economic activity have concentrated in and around areas conducive to development, along I-95, and US Routes 1 and 2 through Washington County.

For the purpose of this analysis, six (6) SASP Regions are established based upon roadway access, population, economic activity, topography, and weather conditions. The SASP regions are:

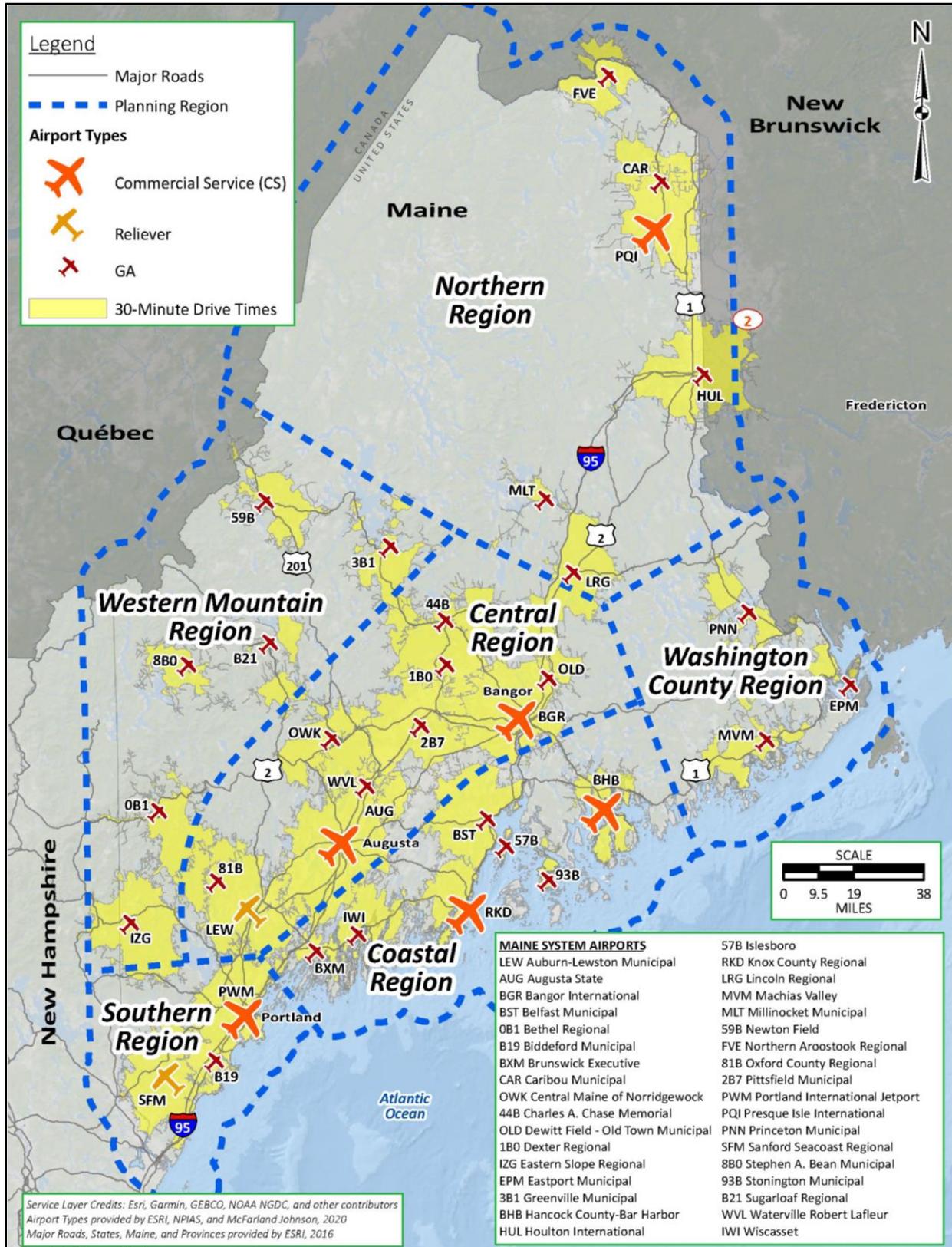
- **Northern:** characterized by unique use and needs associated with remote location.
- **Western Mountains:** reflects unique use and needs associated with mountainous topography.
- **Southern:** based upon the use and needs associated with high concentration of people and socioeconomic activity.
- **Central:** an area of the state that enjoys good roadway access via Interstate 95, and a concentration of people and socioeconomic activity.
- **Coastal:** characterized by the unique use and needs of coastal communities and islands.
- **Washington County:** reflects the remote nature of these coastal and northern airports.

As described, these SASP regions reflect a combination of geographic, physical/natural, socioeconomic, and are for planning purposes in this SASP. The boundaries of these regions are useful for the purposes of this analysis of SASP airports but should not be construed to imply that they represent limits to airport market areas or segments of users operating within them at any given time. **Figure 5-5** illustrates the SASP regions and system airports within each region.

The remaining sections of this Chapter present an assessment of findings by region and summaries of performance, gaps, and opportunities in the following sections:

- System Capabilities & Performance by SASP Region
- Summary of System-Level Performance & Access Gaps
- Summary of System-Level Planning Issues & Opportunities

Figure 5-5: Maine SASP – State Aviation System Planning Regions



Source: McFarland Johnson, Inc.

5.3. SYSTEM CAPABILITIES & PERFORMANCE BY SASP REGION

This section highlights the interconnectedness of key system facilities and service components and their impact on capabilities and performance by SASP regions.

5.3.1. Northern Region

The Northern Region is comprised of the following six (6) SASP airports. As illustrated by **Figure 5-6**, these airports serve the eastern portion of the region along the I-95/U.S. Route 2 corridor north from Lincoln to Houlton, continuing north along U.S. Route 1 to Presque Isle and Caribou and further along State routes 161/162 to Frenchville at the Canadian border.

Table 5-5: Maine SASP – Northern Region Airports

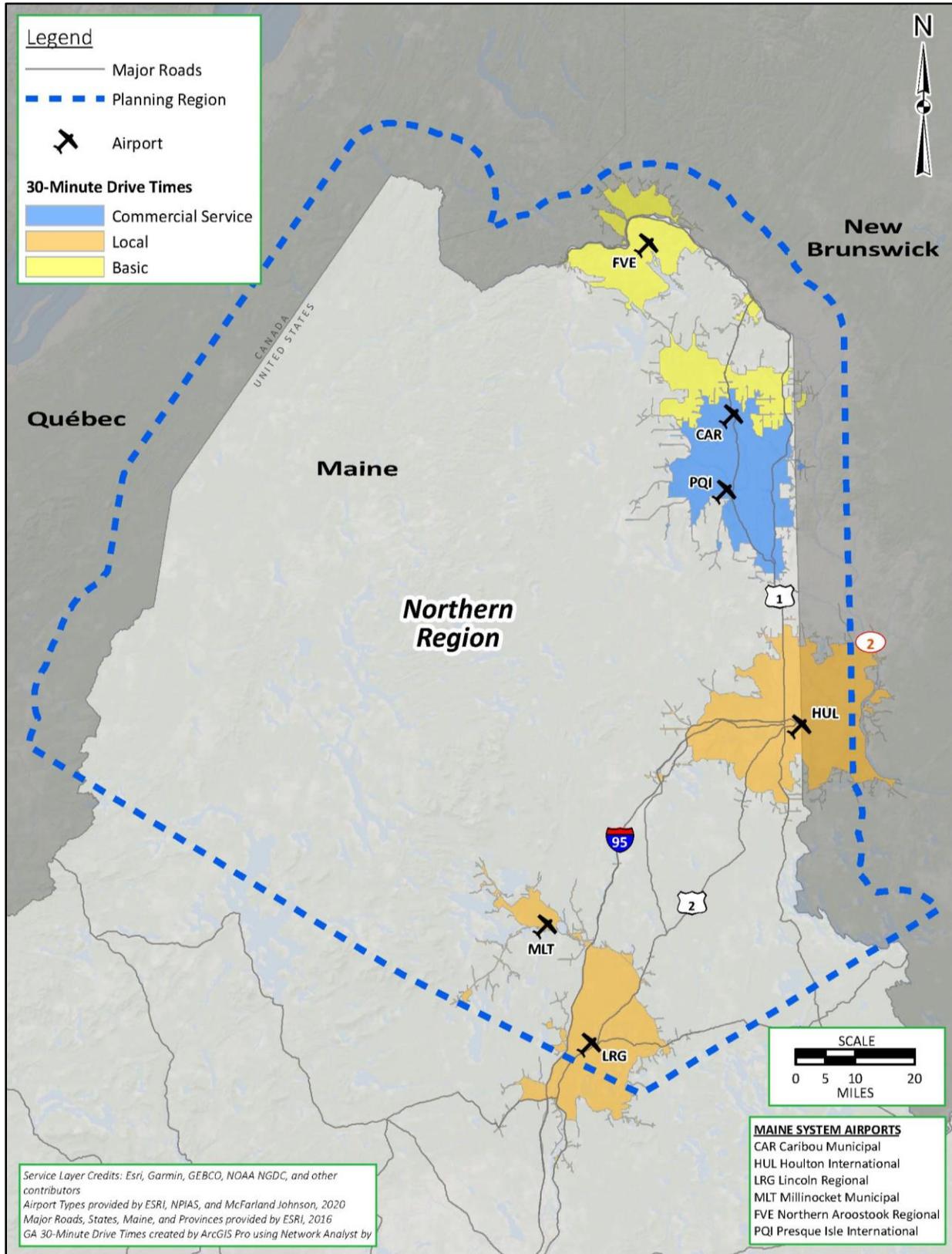
Airport	Role	Function
Caribou Municipal	Basic	Destination
Houlton International	Local	Emergency Preparedness
Lincoln Regional	Local	Economic Activities
Millinocket Municipal	Local	Economic Activities
Northern Aroostook Regional	Basic	Destination
Presque Isle International	Primary	Commercial Service

Source: McFarland Johnson Analysis, 2020.

The primary functions provided by these facilities as reported by airport managers reflect the primary activities occurring at their facility and their role. For example, Basic airports in the Northern Region are seen as Destination and Special Events centered facilities to their primary market and user base; Presque Isle International is a Primary Commercial Service airport for the region. The user base at two Local airports reflects an elevated level of Commercial, Industrial, and Economic activities, and Houlton International's user base is reportedly a higher concentration of Emergency Preparedness and Response operators.

Considering system-wide issues surrounding critical aircraft determinations and crosswind runway needs as described in [Section 5.2.1](#), **Table 5-6** summarizes information related to runway facilities available, the RDC or ARC for each airport, which indicates the size of aircraft for whom the airfield is designed to accommodate as the critical aircraft, and the age of SASP airport master plans in the Northern Region. Four (4) of the six (6) SASP airports in the Northern Region have paved crosswind runways, the longest of which is 4,000 feet at Millinocket Municipal and the shortest is 2,700 feet at Houlton International. Lincoln Regional offers a water landing for aircraft on floats (seaplane) in the Penobscot River north of the airfield.

Figure 5-6: Maine SASP – Northern Region



Source: McFarland Johnson Analysis, 2020.

Table 5-6: Maine SASP – Northern Region Airports – Runway Facilities & Design Standards

Airport	Master Plan Need ^{1/}	Primary Runway	Crosswind Runway	RDC / ARC
Caribou Municipal	Outdated	4,003 x 100	3,016 x 75	B-II
Houlton International ^{2/}	Aging	5,015 x 100	2,700 x 60	B-II
Lincoln Regional	Outdated	2,804 x 75	(water)	B-II
Millinocket Municipal ^{3/}	Aging	4,713 x 99	4,000 x 100	B-I
Northern Aroostook Regional	Current	4,600 x 75	-	B-II
Presque Isle International	Current	7,441 x 150	6,000 x 1,00	C-II

Source: MaineDOT, 2020.

^{1/} Master Plan Need is based upon the date of the most recent Airport Layout Plan (ALP) signed by the FAA or knowledge of existing master plans in process of being updated. Airports noted either do not have a current ALP or are awaiting signature by the FAA.

^{2/} Houlton International received a grant for their Master Plan in 2015, which was completed in 2019. The Master Plan is awaiting signature by the FAA.

^{3/} Millinocket Municipal received a grant to update their Master Plan in 2020.

For the purpose of this analysis, “Outdated” Master Plans are those 10 years of age or older. “Aging” Master Plans are those from 5-10 years in age. “Current” Master Plans are those completed within the last five (5) years.

Presque Isle is currently updating its master plan, and Northern Aroostook Regional is the only other airport with a current ALP signed by the FAA. All SASP airports in the Northern Region are designed to service B-II or smaller aircraft and Presque Isle can accommodate C-II aircraft, which includes mid- and large-cabin business jets and the regional jets in use by United Airlines.

In terms of year-round, all-weather accessibility, SASP airports in the Northern Region experience high frequency of IFR conditions and some of the most significant snowfall in the State. **Table 5-7** summarizes approach capability, snowfall, percent of time under IFR conditions and percent of observations where conditions do not meet minimums and are closed to operations.

Table 5-7: Maine SASP – Northern Region Airports – Weather Data, Conditions, & Closure Rates

Airport	Approach (P/NP/V)	AWOS	Avg. Annual Snow (in.)	% IFR	% Closed
Caribou Municipal	Non-Precision	Y	109	13%	3%
Houlton International	Non-Precision	Y	93	17%	5%
Lincoln Regional ^{1/}	Non-Precision	N	84	17%	11%
Millinocket Municipal	Non-Precision	Y	86	17%	4%
Northern Aroostook Regional	Non-Precision	Y	97	21%	5%
Presque Isle International	Precision	Y	90	11%	1%

Source: McFarland Johnson Analysis, 2020.

^{1/} Weather data available for Millinocket Municipal used.

Since Lincoln Regional does not have an on-site Automated Weather Observing System (AWOS), data from Millinocket Municipal’s system was utilized for the analysis. It is possible that weather conditions at Lincoln are less severe than those at Millinocket, which could mean less frequent IFR conditions; however, closure rates at Lincoln will likely be higher than Millinocket or even Dewitt Field, Old Town Municipal due to better approach minimums at those facilities⁵.

As described in *Chapter 4., Summary of Aviation Activity & Forecast*, future activity at SASP airports in the Northern Region will likely continue to reflect characteristics of their current user base and function, with scale of activity aligned with the size of the market they service and role such that:

- **Basic** – Operations at Caribou and Northern Aroostook basic airports are predominantly single engine operators and more complex Group II operations ranging between 0 and 50 on average each year.
- **Local** – Operations at Houlton, Lincoln, and Millinocket will remain slightly more complex in nature and some of these facilities may experience growth in more complex aircraft (B-II and or turbine-powered) as existing or new operators introduce them to the market.
- **Commercial** – GA operations at Presque Isle can be expected to be increasingly diverse fleet of users, trending toward larger and higher performance equipment.

Table 5-8 summarizes forecast highlights for SASP Airports in the Northern Region.

Table 5-8: Maine SASP – Northern Region Airports – Forecast Highlights & 20-Year Outlook

Airport	All Operations		Complex Operations	
	High Annual	Peak Day	Avg. Annual	Growth Rate
Caribou Municipal	7,740	42	26	39%
Houlton International	2,448	10	64	17%
Lincoln Regional	9,150	38	3	0%
Millinocket Municipal	2,937	12	21	6%
Northern Aroostook Regional	4,569	16	57	17%
Presque Isle International	25,604	88	2,564	-1.25 %

Source: McFarland Johnson Analysis, 2020.

As indicated, the highest volume, frequency, and complex operational activity by large aircraft might be anticipated at Presque Isle; however, activity by larger aircraft is increasing swiftly at Caribou Municipal (37 percent annually). On an annual basis, it appears that Houlton International and Northern Aroostook Regional will likely accommodate more than one flight weekly by larger, more sophisticated, and demanding Group II as compared to Caribou and Millinocket Municipal where such operations will be about twice monthly.

⁵ Published Approach Procedures, Skyvector.com, August 2020.

Table 5-9 summarizes system-wide planning issues, performance, gaps, and outstanding questions related to SASP airports in the Northern Region.

Table 5-9: Maine SASP – Northern Region Airports – Summary Report Card

System-wide Issues	Airports	
Aging Master Plans & Uncertain Critical Aircraft Needs	Caribou Municipal Houlton International	Lincoln Regional Millinocket Municipal
Uncertain Crosswind Runway Usage	Caribou Municipal Houlton International	Millinocket Municipal
Most Challenging Weather Conditions	All Airports	
Highest Levels of Activity	Presque Isle International Millinocket Municipal	Caribou Municipal
Most Demanding Users	Presque Isle International Northern Aroostook Regional	Houlton International
Geographic Redundancies & Gaps	Description	
Redundancies in Market Area, Facilities, or Services	<ul style="list-style-type: none"> Caribou Municipal and Presque Isle International Lincoln Regional and Millinocket Municipal 	
Gaps in Market Area, Facilities or Services	<ul style="list-style-type: none"> Clear geographic gap over North Woods Houlton International and Millinocket Municipal 	

Source: McFarland Johnson Analysis, 2020.

5.3.2. Western Mountains Region

The Western Mountains Region is characterized by the state's largest lakes and popular ski resorts, and a portion of the Appalachian Mountains stretching from the New Hampshire border north and east along Canada to include the following six (6) SASP airports. As illustrated by **Table 5-10**, Eastern Slope Regional and Bethel Regional Airports in the southern part of the region benefit from better ground access than do Sugarloaf Regional, Stephen A. Bean, and Newton Field.

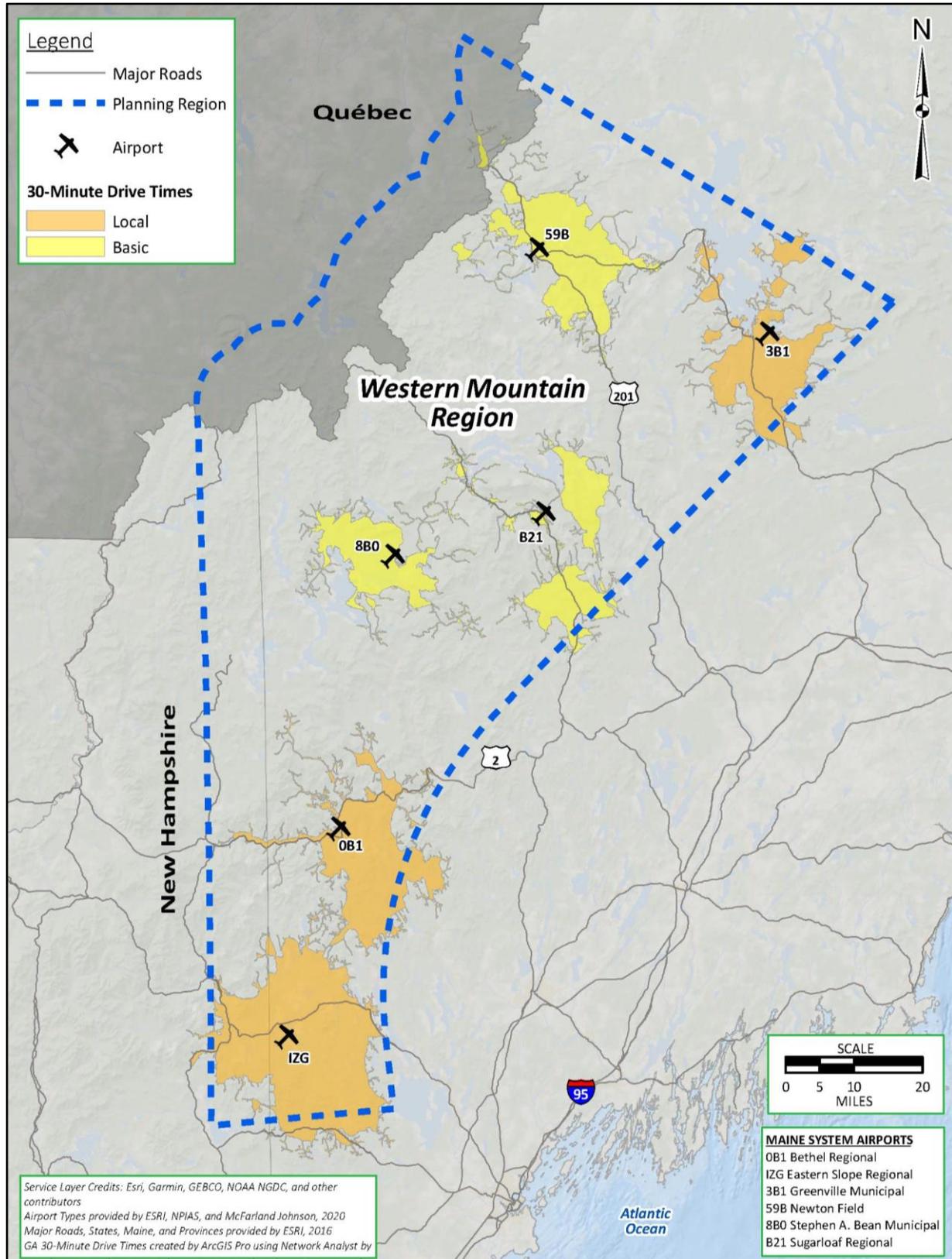
Table 5-10: Maine SASP – Western Mountains Region Airports

Airport	Role	Function
Bethel Regional	Local	Destination
Eastern Slope Regional	Local	Economic Activities
Greenville Municipal	Local	Destination
Newton Field	Basic	Emergency Preparedness
Stephen A. Bean Municipal	Basic	Destination
Sugarloaf Regional	Basic	Aviation Specific

Source: McFarland Johnson Analysis, 2020.

The primary functions provided by these facilities as reported by airport managers reflect the activities and purpose of operators utilizing each facility and their role provides insight into the

Figure 5-7: Maine SASP – Western Mountains Region



Source: McFarland Johnson Analysis, 2020.

scale of those activities. In this region, both Basic and Local airports are seen as Destination and Special Events centered facilities, such as Greenville Municipal, which serves as a gateway to the middle of the Maine and Moosehead Lake. For Eastern Slope, the primary user base represents higher frequency of use for business and charter operators, making its primary function trend toward Commercial, Industrial, and Economic Activities and local impacts.

Considering system-wide issues surrounding critical aircraft determinations and crosswind runway needs as described in [Section 5.2.1](#), [Table 5-11](#) summarizes information related to runway facilities available, the RDC or ARC for each airport, which indicates the size of aircraft for whom the airfield is designed to accommodate as the critical aircraft, and the age of SASP airport master plans in the Western Mountains Region. Greenville is the only airport with a paved crosswind runway. Stephen A. Bean Municipal has the longest runway due to a recent extension to accommodate the Beechcraft King Air B200 operated by LifeFlight of Maine, a B-II aircraft.

**Table 5-11: Maine SASP – Western Mountains Region Airports
Runway Facilities & Design Standards**

Airport	Master Plan Need ^{1/}	Primary Runway	Crosswind Runway	RDC / ARC
Bethel Regional	Aging	3,818 x 75	-	B-II
Eastern Slope Regional	Outdated	4,200 x 75	-	B-II
Greenville Municipal	Current	4,000 x 75	3,001 x 75	B-II
Newton Field ^{2/}	Current	2,898 x 60	-	B-I
Stephen A. Bean Municipal	Current	4,299 x 75	-	B-II
Sugarloaf Regional	Aging	2,900 x 75	-	A-I

Source: MaineDOT, 2020.

^{1/} Master Plan Need is based upon the date of the most recent Airport Layout Plan (ALP) signed by the FAA or knowledge of existing master plans in process of being updated. Airports noted either do not have a current ALP or are awaiting signature by the FAA.

^{2/} Newton Field received grants in 2020 and 2021 to expand its runway to 3,600' by 75'.

As shown, Bethel Regional's master plan is showing age (2008) and Sugarloaf Regional's most current master plan has not been signed by the FAA. All SASP airports in the Western Mountains Region are designed to service B-II or smaller aircraft. Sugarloaf is the most limited facility serving the small single-engine piston aircraft small twin-engine aircraft like the Piper Seneca and some users of very light jets like the Eclipse 500 under the best weather conditions.

In terms of year-round, all-weather accessibility, SASP airports in the Western Mountains Region experience high frequency of IFR conditions and remote airports such as Newton, Sugarloaf, and Stephen A. Bean see some of the most significant snowfall totals in the state. While all SASP airports in the region have on-site AWOS systems, the lack of data for Bethel Regional, Greenville Municipal, Newton Field, or Sugarloaf Airports is because their systems are not AWOS-III or better, which means they are not capable or qualified to be uploaded to NADIN. Additionally, these systems are old and prone to failure. Due to Sugarloaf's proximity to Stephen A. Bean, weather data from Stephen A. Bean was used to assess frequency of IFR conditions and closure rates. This approximation does not account for the microclimate that Sugarloaf likely experiences being nestled between two mountains within the Carrabassett Valley. While both facilities have non-

precision, GPS (circling) approaches, the minimums available at Sugarloaf make that approach not much improved over a visual approach whereas Stephen A. Bean’s approach minimums provide for better access in poor weather. There are also runway-specific non-precision approaches being developed for Stephen A. Bean Municipal

Table 5-12 summarizes approach capability, weather conditions, and percent of observations that represent IFR conditions and percent of observations where conditions do not meet minimums and are closed to operations.

**Table 5-12: Maine SASP - Western Mountains Region Airports
Weather Data, Conditions, & Closure Rates**

Airport	Approach (P/NP/V)	AWOS	Avg. Annual Snow (in.)	% IFR	% Closed
Bethel Regional ^{1/}	Non-Precision	Y	76	N/A	N/A
Eastern Slope Regional	Non-Precision	Y	76	15%	8%
Greenville Municipal ^{1/}	Non-Precision	Y	92	N/A	N/A
Newton Field ^{1/}	Non-Precision	Y	108	N/A	N/A
Stephen A. Bean Municipal ^{2/}	Non-Precision	Y	122	14%	6%
Sugarloaf Regional ^{3/}	Non-Precision	Y	105	14%	14%

Source: McFarland Johnson Analysis, 2020.

^{1/} No weather data available through NADIN.

^{2/} Weather data available for Stephen A. Bean was limited to 2017-2019.

^{3/} Weather data from Stephen A. Bean was used for Sugarloaf Regional.

As described in **Chapter 4., Summary of Aviation Activity & Forecast**, future activity at SASP airports in the Western Mountains Region will likely continue to reflect characteristics of their current user base and function, with scale of activity aligned with the size of the market they service and role such that:

- **Basic** – Operations at Newton, Stephen A. Bean, and Sugarloaf are predominantly single engine operators with some light twin-engine and perhaps very light jet operations, and more complex Group II operations well below 50 on average each year. It is important to note that many of these operations are critical air medical flights.
- **Local** – Operations at Bethel, Eastern Slope, and Greenville Municipal will be slightly more robust in volume, and some facilities may experience growth in more complex aircraft (B-II and or turbine-powered) as existing or new operators introduce them to the market.

O summarizes forecast highlights and growth outlook for SASP Airports in the Western Mountains Region.

Table 5-13: Maine SASP – Western Mountains Region Airports
Forecast Highlights & 20-Year Outlook

Airport	All Operations		Complex Operations	
	High Annual	Peak Day	Avg. Annual	Growth Rate
Bethel Regional	4,331	24	4	20%
Eastern Slope Regional	6,237	26	82	3%
Greenville Municipal	6,728	37	39	-4%
Newton Field	854	3	10	30%
Stephen A. Bean Municipal	1,255	7	20	4%
Sugarloaf Regional	703	4	0	N/A

Source: McFarland Johnson Analysis, 2020.

As indicated, the most activity might be anticipated at Local airports (Bethel, Eastern Slope, and Greenville) in terms of annual or peak day operations; however, activity at Bethel Regional does not include operations by a growing number of larger, more sophisticated and demanding Group II aircraft as compared to other Local airports or even Stephen A. Bean Municipal, which has seen an average of 20 operations by larger aircraft annually over the last 10 years. Activity by larger aircraft at Eastern Slope Regional reflects a strong seasonal use and a market area that reaches into areas near Conway, New Hampshire. **Table 5-14** summarizes system-wide planning issues, performance, gaps, and outstanding questions related to SASP airports in the Western Mountains Region.

Table 5-14: Maine SASP – Western Mountains Region Airports – Summary Report Card

System-wide Issues	Airports	
Aging Master Plans & Uncertain Critical Aircraft Needs	Bethel Regional Eastern Slope Regional	Sugarloaf Regional
Uncertain Crosswind Runway Usage	Greenville Municipal	
Most Challenging Weather Conditions	All Airports.	
Highest Levels of Activity	Bethel Regional Eastern Slope Regional	Greenville Municipal
Most Demanding Users	Eastern Slope Regional	
Geographic Redundancies & Gaps	Description	
Redundancies in Market Area, Facilities, or Services	Geographic/Market Redundancies not Evident	
Gaps in Market Area, Facilities or Services	Gaps between Airport Market Areas based upon Topographic Features and Limited Roadway Access.	

Source: McFarland Johnson Analysis, 2020.

5.3.3. Southern Region

The Southern Region is comprised of three (3) SASP airports, as illustrated in **Figure 5-8** these airports serve the southern corner of the state along the I-95/U.S. Route 1 corridor north from Portsmouth, New Hampshire to areas near Brunswick and Lewiston.

Table 5-15: Maine SASP – Southern Region Airports - Runway Facilities & Design Standards

Airport	Role	Function
Biddeford Municipal	Local	All
Portland International	Primary	Commercial Service
Sanford Seacoast Regional	Regional	Emergency Preparedness

Source: McFarland Johnson Analysis, 2020.

Similar to airports in Northern and Western Mountains Regions, the primary functions provided by airports reflect the primary activities occurring at their facility and the scale of those activities. First, Portland International is a small hub commercial service airport, but also provides a base of operations for 40 aircraft, including seven (7) jets and a few multi-engine aircraft. The service area shown for Portland is a 30-minute drive time that represents its immediate service area for general aviation aircraft owners, operators, and passengers. This is not the same as Portland’s catchment area for commercial passengers, which – depending upon seasonal destination offerings - could stretch to areas beyond a 60-minute drive.

Primary function reported for Sanford Seacoast Regional is Emergency Preparedness, which is one of three bases utilized by LifeFlight of Maine for their fleet of three, twin-engine Agusta 109E helicopters. Sanford is also the home base for numerous other large aircraft and operators, which makes Sanford’s primary function include Aviation Specific activities.

The airport manager reports that the primary functions of Biddeford Municipal include all types of operators providing emergency preparedness and response, critical community access, aviation specific activities, commercial and economic activities, and destination/special events.

Table 5-16 summarizes information related to runway facilities available, the RDC or ARC for each airport, which indicates the size of aircraft for whom the airfield is designed to accommodate as the critical aircraft, and the age of SASP airport master plans in the Southern Region.

Table 5-16: Maine SASP - Southern Region Airports - Runway Facilities & Design Standards

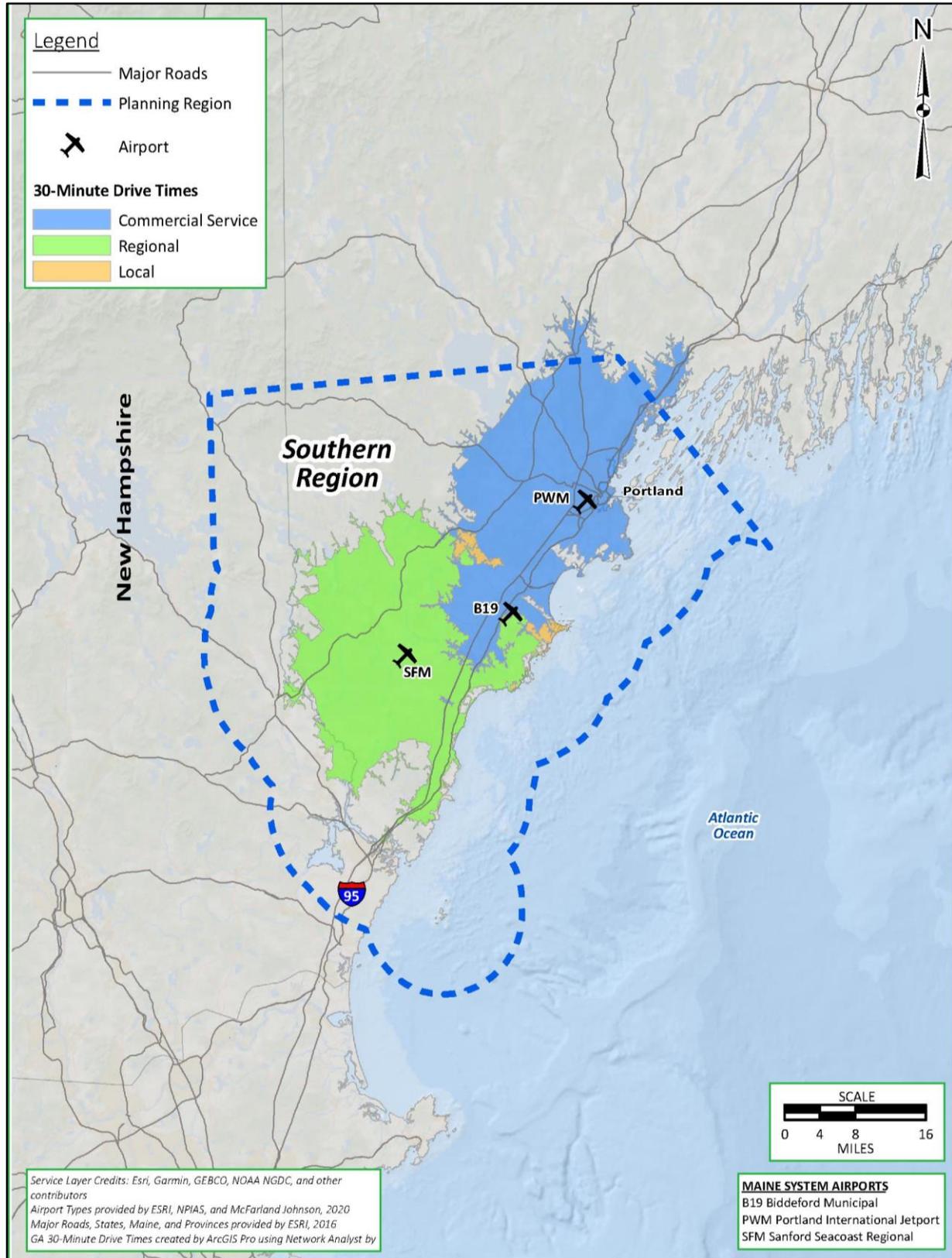
Airport	Master Plan Need ^{1/}	Primary Runway	Crosswind Runway	RDC / ARC
Biddeford Municipal	Outdated ^{2/}	3,000 x 75	-	A-II
Portland International	Current	7,200 x 150	6,100 x 150	D-IV
Sanford Seacoast Regional	Current	6,389 X 100	4,999 X 100	C-II

Source: MaineDOT, 2020.

^{1/} Master Plan Need is based upon the date of the most recent Airport Layout Plan (ALP) signed by the FAA or knowledge of existing master plans in process of being updated. Airports noted have either do not have a current ALP or are awaiting signature by the FAA.

^{2/} Biddeford Municipal is in the early stages of updating their Master Plan.

Figure 5-8: Maine SASP – Southern Region



Source: McFarland Johnson Analysis, 2020.

Considering that Biddeford Municipal does not have a crosswind runway and the current RDC/ARC is A-II, only changes to runway width eligibility may be anticipated as an outcome of the Master Planning process for that airport. Any reduction in runway width at Biddeford Municipal does not likely pose a significant issue on a system-wide basis for the state.

As shown, Sanford and Portland have crosswind runways and Biddeford is the only airport with an out-of-date master plan or ALP. Airports in the Southern Region are designed for to accommodate very different critical aircraft. Portland can service Boeing 757 aircraft operated by FedEx. Sanford’s facilities are designed for use by large-cabin business jets like the Challenger 600 or Gulfstream 300 and up to 70-seat regional jets. Biddeford is a small airport and is limited to use by single and small twin-engine aircraft.

In terms of year-round, all-weather accessibility, SASP airports in the Southern Region experience some of the mildest winters and lower accumulating snowfall, but high frequency of IFR conditions such as fog, freezing rain, and ice/snow mix due to their location along the coast. **Table 5-17** summarizes approach capability and percent of the time operations are under IFR conditions and closure rates.

**Table 5-17: Maine SASP - Southern Region Airports
Weather Data, Conditions, & Closure Rates**

Airport	Approach (P/NP/V)	AWOS	Avg. Annual Snow (in.)	% IFR	% Closed
Biddeford Municipal ^{1/}	Non-Precision	N	60	14%	9%
Portland International	Precision	Y	62	13%	0%
Sanford Seacoast Regional	Precision	Y	60	14%	3%

Source: McFarland Johnson Analysis, 2020.

^{1/} Weather data from Sanford Seacoast Regional used for Biddeford Municipal.

Similar to other airports where AWOS equipment is not installed, the analysis utilized Sanford weather data for Biddeford to estimate IFR conditions and closures. This approximation does not account for the fact that Sanford is further inland than Biddeford and some coastal fog may not be recorded. The non-precision approach at Biddeford does not offer similar minimums as those at Sanford or Portland, which results in higher rates of closure during poor weather than at other airports.

As described in *Chapter 4., Summary of Aviation Activity & Forecast*, future activity at SASP airports in the Southern Region will be driven by their current user base and each airport’s function, with Portland and Sanford accommodating a significant volume of operations:

- **Basic** – Operations at Biddeford, while dwarfed by those at Sanford and Portland, are very similar in scale to those forecast for Greenville and Eastern Slope in the Western Mountains Region, and Millinocket and Caribou in the Northern Region. Operations by larger, Group II aircraft have been minimal over the last 10 years and may stay low unless Sanford is unable to accommodate those users.

- **Regional & Commercial** – GA operations at Portland and Sanford are significant and are expected to continue growing as their users expand and transition their fleets toward higher performance equipment.

Table 5-18 summarizes forecast highlights for SASP Airports in the Southern Region.

**Table 5-18: Maine SASP - Southern Region Airports
Forecast Highlights & 20-Year Outlook**

Airport	All Operations		Complex Operations	
	High Annual	Peak Day	Avg. Annual	Growth Rate
Biddeford Municipal	7,816	32	4	17%
Portland International	101,731	418	N/A	N/A
Sanford Seacoast Regional	46,809	160	458	6%

Source: McFarland Johnson Analysis, 2020.

As indicated, the most activity is anticipated at Portland and Sanford in terms of annual volume, peak day operations, and use by larger, more sophisticated, and demanding Group II aircraft.

Table 5-19 summarizes system-wide planning issues, performance, gaps, and outstanding questions related to SASP airports in the Southern Region.

Table 5-19: Maine SASP – Southern Region Airports – Summary Report Card

System-wide Issues	Airports	
Aging Master Plans & Uncertain Critical Aircraft Needs	Biddeford Municipal	
Uncertain Crosswind Runway Usage	None.	
Most Challenging Weather Conditions	None.	
Highest Levels of Activity	Portland International	Sanford Seacoast Regional
Most Demanding Users	Portland International	Sanford Seacoast Regional
Geographic Redundancies & Gaps		
Redundancies in Market Area, Facilities, or Services	<ul style="list-style-type: none"> • Biddeford Municipal and Sanford Seacoast • Biddeford Municipal and Portland International • Sanford Seacoast and Portland International 	
Gaps in Market Area, Facilities or Services	<ul style="list-style-type: none"> • Geographic/Market Gaps not Evident 	

Source: McFarland Johnson Analysis, 2020.

5.3.4. Central Region

The Central Region is comprised of 10 SASP airports. As illustrated by **Table 5-20**, these airports serve an area of the state from north of Portland along the I-95 corridor through Lewiston, Augusta, and Waterville to north of Bangor including Old Town. Many of these towns sponsor their own airport, ranging in size from Charles A. Chase, Jr. Memorial with a turf runway to five airports with crosswind runways such as Augusta State. This is the region of the state with the most SASP airports.

Table 5-20: Maine SASP – Central Region Airports

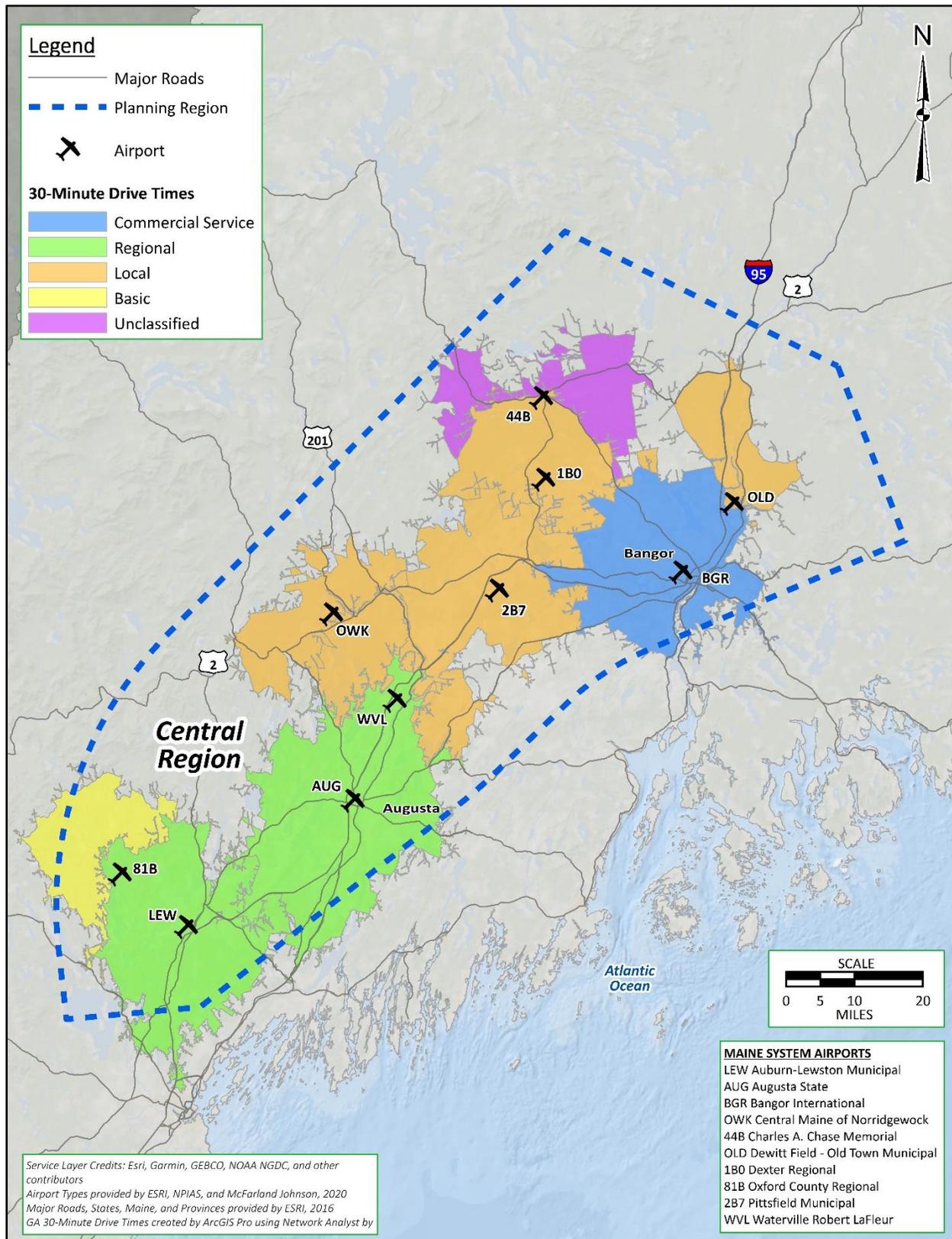
Airport	Role	Function
Auburn-Lewiston Municipal	Regional	All
Augusta State	Regional	Aviation Specific
Bangor International	Primary	Commercial Service
Central Maine Regional	Local	Economic Activities
Charles A. Chase, Jr. Memorial	Unclassified	Emergency Preparedness
Dewitt Field, Old Town Municipal	Local	Destination
Dexter Regional	Local	Emergency Preparedness
Oxford County Regional	Basic	Critical Access
Pittsfield Municipal	Local	Economic Activities
Waterville-Robert LaFleur	Local	Economic Activities

Source: McFarland Johnson Analysis, 2020

The primary functions provided by these facilities as reported by airport managers reflect the full range of activities occurring at SASP airports, from Critical Community Access at Oxford County and Destination-centered due to the University of Maine campus in Orono. The Central Region benefits from the highest densities of population and economic activity in the state, and most SASP airports in the region play a larger role in supporting local business. Finally, the Central Region is bookended by Bangor International in the north and Portland International in the south, which, in concert with the GA airports account for and attract the critical mass of aviation origination and destination activities in the state.

Considering system-wide issues surrounding critical aircraft determinations and crosswind runway needs as described in **Section 5.2.1**, **Table 5-21** summarizes information related to runway facilities available, the RDC or ARC for each airport, and the age of SASP airport master plans in the Central Region. Half of the 10 SASP airports in the Region have paved crosswind runways.

Figure 5-9: Maine SASP – Central Region



Source: McFarland Johnson Analysis, 2020.

Table 5-21: Maine SASP – Central Region Airports - Runway Facilities & Design Standards

Airport	Master Plan Need ^{1/}	Primary Runway	Crosswind Runway	RDC / ARC
Auburn-Lewiston Municipal	Aging	5,001 x 100	2,750 x 75	B-II
Augusta State	Current	5,001 x 100	2,613 x 75	B-II
Bangor International	Current	11,440 x 200	-	D-IV
Central Maine Regional	Outdated ^{2/}	4,000 x 100	3,998 x 80	B-II
Charles A. Chase, Jr. Memorial	Current	2,926 X 75	-	A-1
Dexter Regional	Current	3,008 x 75	-	A-I
Dewitt Field, Old Town Municipal	Outdated	4,001 x 75	2,802 x 75	B-II
Oxford County Regional	Outdated ^{2/}	2,997 x 75	-	B-I
Pittsfield Municipal	Current	4,003 x 100	-	B-II
Waterville Robert LaFleur	Aging	5,500 x 100	2,301 x 60	C-II

Source: MaineDOT, 2020.

^{1/} Master Plan Need is based upon the date of the most recent Airport Layout Plan (ALP) signed by the FAA or knowledge of existing master plans in process of being updated. Airports noted have either do not have a current ALP or are awaiting signature by the FAA.

^{2/} The master plan for Central Maine Regional is under a 2017 grant, and the master plan for Oxford County Regional is under a 2016 grant.

As shown, three SASP airports in the Central Region have Master Plans or ALPs that are beyond 10 years old; Auburn-Lewiston has an ALP that was updated in 2013 but has not been signed by the FAA, and Waterville-Robert LaFleur’s ALP is over 6 years old. SASP airports in the region are designed to service all sizes of B-II or smaller aircraft, with Waterville’s airfield boasting a C-II standards. Bangor International is the largest facility with regional jet service offered by the network airlines and Allegiant’s fleet of Airbus 319 and 320. Bangor is also home to the 101st Air Refueling Wing of the Maine Air National Guard, which operates the KC-135 Stratotanker.

In terms of year-round, all-weather accessibility, SASP airports in the Central Region experience high frequency of IFR conditions and more moderate snowfall, aside from Charles A. Chase, Jr. Memorial in Dover-Foxcroft and Dexter Regional, which experience some weather similar to SASP airports in the Northern Region. **Table 5-22** summarizes approach capability, weather conditions, and percent of observations that represent IFR conditions and percent of observations where conditions do not meet minimums and are closed to operations. Half of the airports in the Central Region do not have on-site weather reporting equipment; however, the analysis assumed similar weather to other airports with such services due to their proximity⁶.

⁶ Due to higher average annual snowfall in Dover-Foxcroft and Dexter, weather data from other airports was not utilized for the analysis.

IFR conditions in Central Maine are in the 15-20 percent range, which is slightly less than SASP airports in the Coastal Region, but still very high. However, approach minimums at most airports keeps them open more than 90 percent of the time.

Table 5-22: Maine SASP – Central Region Airports - Weather Data, Conditions, & Closure Rates

Airport	Approach (P/NP/V)	AWOS	Avg. Annual Snow (in.)	% IFR	% Closed
Auburn-Lewiston Municipal	Precision	Y	66	15%	3%
Augusta State	Precision	Y	72	19%	5%
Bangor International	Precision	Y	66	17%	< 1%
Central Maine Regional ^{1/}	Non-Precision	Y	65	16%	5%
Charles A. Chase, Jr. Memorial	Visual	N	93	N/A	N/A
Dewitt Field, Old Town Municipal ^{2/}	Non-Precision	N	69	17%	8%
Dexter Regional	Non-Precision	N	83	N/A	N/A
Oxford County Regional ^{3/}	Non-Precision	N	80	15%	9%
Pittsfield Municipal ^{4/}	Non-Precision	N	65	16%	7%
Waterville Robert LaFleur	Precision	Y	64	16%	4%

Source: McFarland Johnson Analysis, 2020.

^{1/} Weather data from Waterville Robert LaFleur used for Central Maine Regional of Norridgewock.

^{2/} Weather data from Bangor International used for Dewitt Field, Old Town Municipal.

^{3/} Weather data from Auburn-Lewiston Municipal used for Oxford County Regional.

^{4/} Weather data from Waterville Robert LaFleur used for Pittsfield Municipal.

As described in [Chapter 4, Aviation Activity & Forecasts](#), future activity at SASP airports in the Central Region will likely continue to reflect characteristics of their current user base and function, with scale of activity being higher or by more demanding aircraft than in other SASP Regions, such that:

- **Basic & Unclassified** – Operations at Oxford County are predominantly single engine operators, and levels of activity by more complex Group II operations will be minimal aside from peak seasonal days where activity at all airports in the region or statewide likely experience the same spikes. Activity at Charles A. Chase, Jr. is also expected to remain closely tied to its current user base, such as “taildragger” aircraft like the Piper Cub or the Aeronca Champ that are well-equipped for turf operations.
- **Local** – With half of SASP airports in the Central Region being Local airports, the future of activity at Central Maine, Old Town, Dexter, Pittsfield, and Waterville is very important to the statewide system. Operations at Central Maine and Waterville are forecast to be the highest in terms of annual volume and most complex among the group, with operations by more complex aircraft occurring weekly.
- **Regional & Commercial** – GA operations at Auburn-Lewiston Municipal, Augusta State, and Bangor International are anticipated to comprise nearly 75 percent of all activity in the

Central Region, with Bangor claiming the highest volume of most complex operations by larger, more sophisticated, and higher performance aircraft.

Table 5-23 summarizes forecast highlights and growth outlook for SASP Airports in the Central Region.

Table 5-23: Maine SASP - Central Region Airports - Forecast Highlights & 20-Year Outlook

Airport	All Operations		Complex Operations	
	High Annual	Peak Day	Avg. Annual	Growth Rate
Auburn-Lewiston Municipal	29,315	100	2,905	< 1%
Augusta State	28,021	96	2,534	-18%
Bangor International	78,126	268	N/A	N/A
Central Maine Airport of Norridgewock	12,444	51	5	22%
Charles A. Chase, Jr. Memorial	N/A	0	N/A	N/A
Dewitt Field, Old Town Municipal	9,150	38	2	-15%
Dexter Regional	4,451	18	0	N/A
Oxford County Regional	1,406	5	7	-23%
Pittsfield Municipal	6,426	26	140	2%
Waterville Robert LaFleur	13,468	55	208	3%

Source: McFarland Johnson Analysis, 2020.

In terms of total annual operations volume, the least active SASP airports in the Central Region might be Charles A. Chase, Jr., and Oxford County Regional, and with so many other SASP airports as options, users of larger aircraft will not likely utilize Central Maine, Old Town, Dexter, or Oxford County with significant frequency. Table 5-24 summarizes system-wide planning issues, performance, gaps, and outstanding questions related to SASP airports in the Central Region.

Table 5-24: Maine SASP – Central Region Airports – Summary Report Card

System-wide Issues	Airports	
Aging Master Plans & Uncertain Critical Aircraft Needs	<ul style="list-style-type: none"> Central Maine Regional Dewitt Field, Old Town Municipal Oxford County Regional 	<ul style="list-style-type: none"> Auburn-Lewiston Municipal Waterville Robert LaFleur
Uncertain Crosswind Runway Usage	<ul style="list-style-type: none"> Central Maine Regional Dewitt Field, Old Town Municipal 	<ul style="list-style-type: none"> Auburn-Lewiston Municipal Waterville Robert LaFleur
Most Challenging Weather Conditions	N/A	
Highest Levels of Activity	<ul style="list-style-type: none"> Bangor International 	Augusta State

System-wide Issues	Airports	
	<ul style="list-style-type: none"> Auburn-Lewiston Municipal 	
Most Demanding Users	<ul style="list-style-type: none"> Bangor International Auburn-Lewiston Municipal 	Augusta State
Geographic Redundancies & Gaps	Description	
Redundancies in Market Area, Facilities, or Services	<ul style="list-style-type: none"> Dexter Regional and Pittsfield Municipal Pittsfield Municipal and Central Maine of Norridgewock Central Maine Regional and Waterville Robert LaFleur Waterville Robert LaFleur and Augusta State Oxford County Regional and Auburn-Lewiston Municipal 	
Gaps in Market Area, Facilities or Services	<ul style="list-style-type: none"> Geographic/Market Gaps not Evident 	

Source: McFarland Johnson Analysis, 2020.

5.3.5. Coastal Region

The Coastal Region is comprised of the following seven (7) SASP airports. As illustrated by **Figure 5-10**, these airports serve the coastal communities and islands from east of Portland near Freeport along U.S. Route 1 to areas just beyond. As indicated in Table 5-24, the Coastal Region includes two (2) SASP airports unclassified in the NPIAS, one Basic airport, two (2) Local airports, and two (2) Primary Commercial Service airports, Hancock County-Bar Harbor and Knox County Regional Airports.

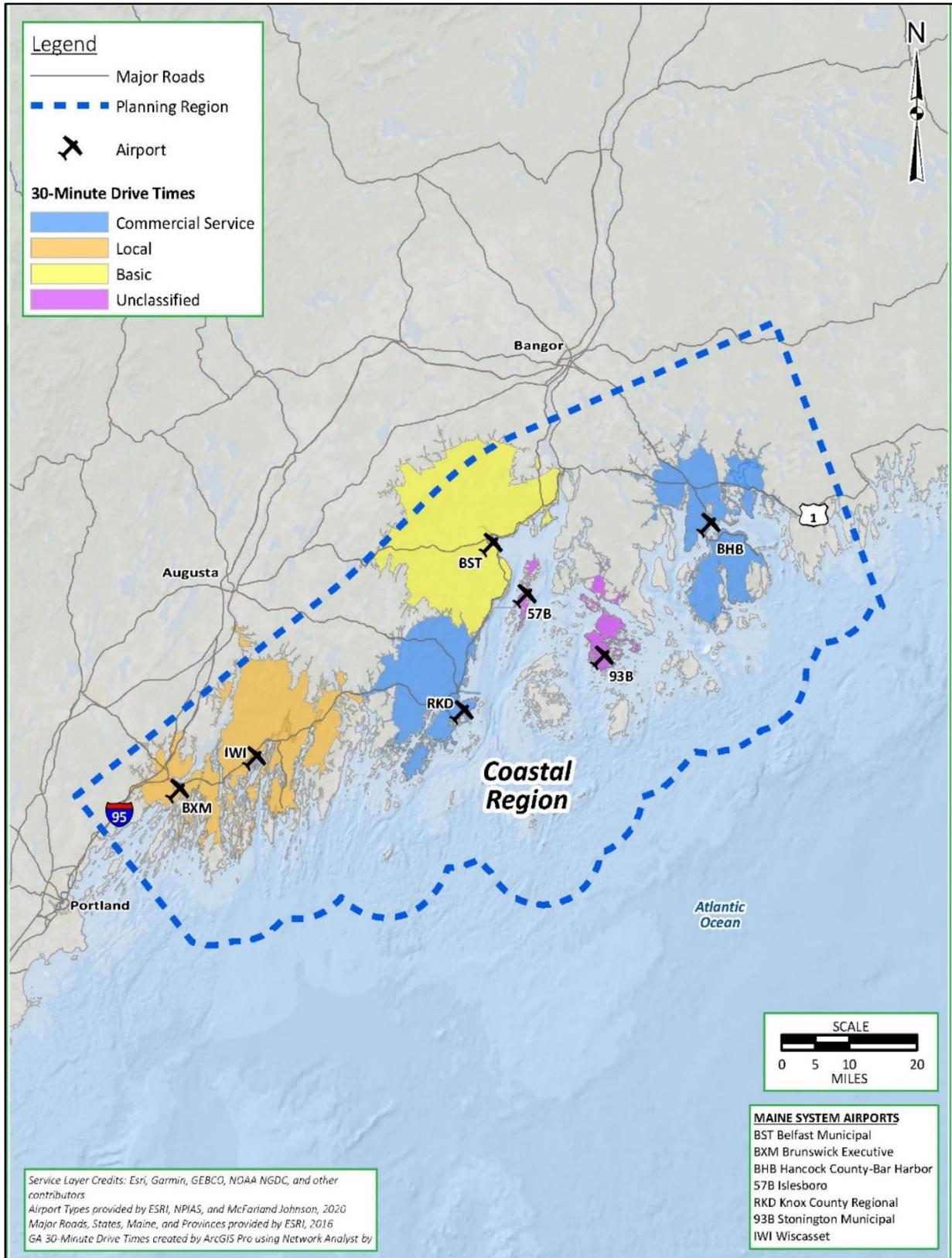
Table 5-25: Maine SASP – Coastal Region Airports

Airport	Role	Function
Belfast Municipal	Basic	Economic Activities
Brunswick Executive	Local	Economic Activities
Hancock County-Bar Harbor	Primary	Commercial Service
Islesboro	Unclassified	Critical Access
Knox County Regional	Primary	Commercial Service
Stonington Municipal	Unclassified	Critical Access
Wiscasset	Local	Destination

Source: McFarland Johnson Analysis, 2020.

The primary functions provided by these facilities as reported by airport managers reflect the nature of aviation activities in the region, such that Critical Access, Economic Activities, and Commercial Service functions are most prominent. The small, unclassified airports at Stonington and Islesboro clearly provide Critical Access to their islands. The user base and integration into local business community at Belfast Municipal and Brunswick Executive reflects an elevated level of Commercial, Industrial, and Economic activities, and Wiscasset’s reputation as the “Prettiest Village in Maine” makes the airport an important resource for visitors to Mid-Coast Maine.

Figure 5-10: Maine SASP – Coastal Region



Source: McFarland Johnson Analysis, 2020.

Table 5-26 summarizes information related to runways, the RDC or ARC, and status of airport master plans in the Coastal Region.

Table 5-26: Maine SASP - Coastal Region Airports - Runway Facilities & Design Standards

Airport	Master Plan Need ^{1/}	Primary Runway	Crosswind Runway	RDC / ARC
Belfast Municipal	Current	4,000 x 100	-	B-II
Brunswick Executive	Aging	8,000 x 200	-	C-III
Hancock County-Bar Harbor	Aging	5,200 x 100	3,363 x 75	C-II
Islesboro	Current	2,400 x 50	-	N/A
Knox County Regional	Outdated	5,412 x 100	4,000 x 100	C-II
Stonington Municipal	Current	2,099 x 60	-	N/A
Wiscasset	Current	3,397 x 75	-	B-II

Source: MaineDOT, 2020.

^{1/} Master Plan Need is based upon the date of the most recent Airport Layout Plan (ALP) signed by the FAA or knowledge of existing master plans in process of being updated. Airports noted either do not have a current ALP or are awaiting signature by the FAA.

As indicated, Knox County Regional has a Master Plan that is over 10 years old, and Brunswick Executive and Hancock County-Bar Harbor Airports' Master Plans were last updated between 5 and 10 years ago. Brunswick Executive is able to accommodate the largest business jet aircraft in Group III, such as the Global 5000, Gulfstream 650, and the largest 70-seat regional jets. Both Commercial Service airports are equipped to service regional jets configured for up to 50-seats such as the ERJ-145. The smallest airports in the Coastal Region are Islesboro and Stonington Municipal.

In terms of year-round, all-weather accessibility, SASP airports in the Coastal Region experience the highest frequency of IFR conditions but generally less snowfall than the Central and Northern Regions. **Table 5-27** summarizes approach capability, weather conditions, and percent of observations that represent IFR conditions and percent of observations where conditions do not meet minimums and are closed to operations.

Table 5-27: Maine SASP - Coastal Region Airports - Weather Data, Conditions, & Closure Rates

Airport	Approach (P/NP/V)	AWOS	Avg. Annual Snow (in.)	% IFR	% Closed
Belfast Municipal ^{1/}	Non-Precision	Y	63	18%	7%
Brunswick Executive ^{2/}	Precision	Y	58	18%	5%
Hancock County-Bar Harbor	Precision	Y	73	18%	5%
Islesboro ^{3/}	Visual	N	59	18%	18%
Knox County Regional	Precision	Y	61	18%	6%
Stonington Municipal ^{4/}	Visual	N	59	18%	18%
Wiscasset	Non-Precision	Y	66	18%	9%

Source: McFarland Johnson Analysis, 2020.

^{1/} Weather data from Knox County Regional used for Belfast Municipal.

- ^{2/} Weather data available for Wiscasset used for Brunswick Executive.
- ^{3/} Weather data from Knox County Regional used for Islesboro.
- ^{4/} Weather data from Knox County Regional was used for Stonington Municipal.

As shown, the Coastal region experiences some of the highest frequency of IFR conditions in the state. Due to the lack of instrument approaches on the island airports, this region reports 18 percent closure rates for Stonington and Islesboro Airports. As stated previously, lack of weather data due to incompatibility of data with standard NADINS system requirements or inoperable weather reporting systems at SASP airports where on-site AWOS systems are in place can make advance flight planning difficult.

As described in *Chapter 4., Summary of Aviation Activity & Forecast*, future activity at SASP airports in the Coastal Region will likely continue to be quite busy compared to other regions:

- **Basic & Unclassified:** Activity at Belfast Municipal in terms of annual volume may not be as significant as at other airports; however, there is growth in use by complex operators with larger Group II aircraft, which may average nearly once a week for the period. Operations at Stonington Municipal and Islesboro will be the lowest among all Coastal Region airports.
- **Local:** Operations at Local airports Wiscasset Municipal and Brunswick Executive are very different, with Wiscasset Municipal’s annual volume amounting to about 20 aircraft on peak days as compared to more than four times the volume at Brunswick Executive and nearly 30-times the number of operations by B-II and or turbine-powered aircraft.
- **Commercial:** GA operations at Hancock County-Bar Harbor and Knox County Regional can be expected to represent the highest volume of overall activity and most use by large, sophisticated jet aircraft.

Table 5-28 summarizes forecast highlights and growth outlook for SASP Airports in the Coastal Region.

Table 5-28: Maine SASP - Coastal Region Airports - Forecast Highlights & 20-Year Outlook

Airport	All Operations		Complex Operations	
	High Annual	Peak Day	Avg. Annual	Growth Rate
Belfast Municipal	3,431	14	48	13%
Brunswick Executive	22,489	92	619	11%
Hancock County-Bar Harbor	38,784	133	9,859	-4%
Islesboro	N/A	0	N/A	N/A
Knox County Regional	70,270	241	5,165	- < 1%
Stonington Municipal	N/A	0	N/A	N/A
Wiscasset	5,397	22	16	-11%

Source: McFarland Johnson Analysis, 2020.

In terms of total annual operations volume, Knox County Regional, Hancock County-Bar Harbor, and Brunswick Executive will be the most active SASP airports in the Coastal Region for the forecast

period. While the data does not reveal who the operators are that are utilizing these airports, it is notable that activity at Wiscasset by larger, Group-II aircraft is decreasing at the same rate that similar activity is increasing at Brunswick Executive, which was converted to civilian use (closed in 2011) but was built as a Naval air station with a much more robust airfield that offers more sophisticated infrastructure and services.

Table 5-29 summarizes system-wide planning issues, performance, gaps, and outstanding questions related to SASP airports in the Coastal Region.

Table 5-29: Maine SASP – Coastal Region Airports – Summary Report Card

System-wide Issues	Airports	
Aging Master Plans & Uncertain Critical Aircraft Needs	Brunswick Executive	
Uncertain Crosswind Runway Usage	Hancock County – Bar Harbor	Knox County Regional
Most Challenging Weather Conditions	All	
Highest Levels of Activity	Knox County Regional Hancock County- Bar Harbor	Brunswick Executive
Most Demanding Users	Knox County Regional Hancock County- Bar Harbor	Brunswick Executive
Geographic Redundancies & Gaps	Description	
Redundancies in Market Area, Facilities, or Services	<ul style="list-style-type: none"> Brunswick Executive and Wiscasset 	
Gaps in Market Area, Facilities or Services	<ul style="list-style-type: none"> Geographic/Market Gaps not Evident 	

Source: McFarland Johnson Analysis, 2020.

5.3.6. Washington County Region

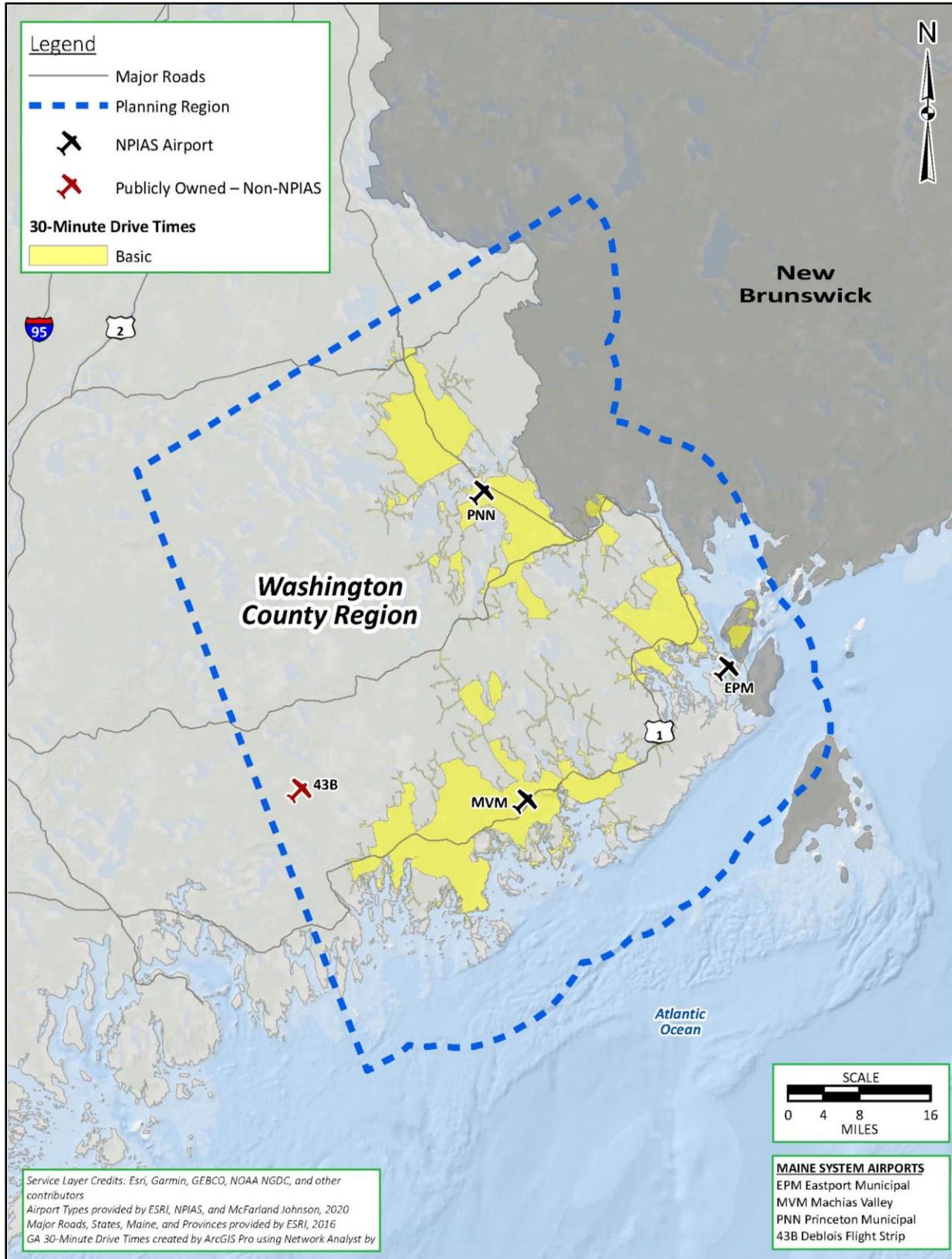
The Washington County Region is comprised of three (3) SASP airports and Deblois Flight Strip, a public-use facility in the region that is owned and operated by the State. As illustrated by **Figure 5-11**, these airports serve a remote area of southeast Washington County accessible by State Route 9 from Bangor and U.S. Route 1 from Ellsworth, about 90-100 miles away, respectively.

Table 5-30: Maine SASP – Washington County Region Airports

Airport	Role	Function
Deblois Flight Strip	Non-NPIAS	N/A
Eastport Municipal	Basic	All
Machias Valley	Basic	Critical Access
Princeton Municipal	Basic	Emergency Preparedness

Source: McFarland Johnson Analysis, 2020.

Figure 5-11: Maine SASP – Washington County Region



Source: McFarland Johnson Analysis, 2020.

The primary functions provided by these facilities as reported by airport managers reflect the low level of activities occurring at each facility and the perspective of each airport's sponsor as to the most important function. A focused evaluation of these airports and regional issues related to current and future usage and needs is included in [Appendix G., Washington County Regional Analysis](#). Generally speaking, these airports provide all functions to their host communities throughout the year.

Considering system-wide issues surrounding critical aircraft determinations described in [Section 5.2.1, Table 5-31](#) summarizes information related to runway facilities available, the RDC or ARC for each airport, which indicates the size of aircraft for whom the airfield is designed to accommodate as the critical aircraft, and the age of SASP airport master plans in the Washington County Region. There are no active crosswind runways at these SASP airports.

**Table 5-31: Maine SASP - Washington County Region Airports
Runway Facilities & Design Standards**

Airport	Master Plan Need ^{1/}	Primary Runway	Crosswind Runway	RDC / ARC
Deblois Flight Strip	N/A	4,500 x 75	-	B-II
Eastport Municipal	Outdated ^{2/}	4,002 x 75	-	B-I
Machias Valley	Current	2,880 x 60	-	A-I
Princeton Municipal	Aging	4,007 x 75	-	B-II

Source: MaineDOT, 2020.

^{1/} Master Plan Need is based upon the date of the most recent Airport Layout Plan (ALP) signed by the FAA or knowledge of existing master plans in process of being updated. Airports noted have either do not have a current ALP or are awaiting signature by the FAA.

^{2/} Eastport Municipal is in the early stages of updating their master plan.

As shown, Machias Valley is the only airport with a recent master plan signed by the FAA. Princeton Municipal has an updated ALP signed by sponsor and MaineDOT only.

In terms of year-round, all-weather accessibility, airports in the Washington County Region experience snowfall similar to SASP airports in the Coastal and Southern Regions aside from Princeton, which gets more snow due to its more northern location. While Eastport Municipal, Machias Valley, and Princeton Municipal each have AWOS equipment, data was not available to determine frequency of IFR conditions or closure rates. This may be another instance of data insufficiency or incompatibility with standard NADINS system requirements. [Table 5-32](#) summarizes approach capability and snowfall information.

**Table 5-32: Maine SASP - Washington County Region Airports
Weather Data, Conditions, & Closure Rates**

Airport	Approach (P/NP/V)	AWOS	Avg. Annual Snow (in.)	% IFR	% Closed
Deblois Flight Strip	Non-Precision	N	68	N/A	N/A
Eastport Municipal ^{1/}	Non-Precision	Y	58	N/A	N/A
Machias Valley ^{1/}	Non-Precision	Y	65	N/A	N/A

Airport	Approach (P/NP/V)	AWOS	Avg. Annual Snow (in.)	% IFR	% Closed
Princeton Municipal ^{1/}	Non-Precision	Y	89	N/A	N/A

Source: McFarland Johnson Analysis, 2020.

^{1/} Weather data not available.

Despite the lack of weather data, it is likely Eastport Municipal and Machias Valley exhibit weather patterns similar to SASP airports in the Coastal Region, which as described experience IFR conditions between 18-21 percent of the time. Approach minimums at Eastport Municipal and Princeton Municipal are better than those at Machias Valley, so it is reasonable to infer that closures occur more frequently at Machias Valley compared to Eastport Municipal and Princeton Municipal. Comparing minimums among Coastal airports with these in Washington County, it is reasonable to deduce that Princeton Municipal and Eastport Municipal may experience conditions that result in closure around 10 percent of the time during poor conditions, and Machias Valley may experience conditions that require closure around 15 percent of the time.

Future activity at airports in the Washington County Region will likely continue based upon current user base and functions, with low annual operations and spikes of activity during the summer months surpassing 10 operations on peak days. **Table 5-33** summarizes forecast highlights and growth outlook for SASP Airports in the Washington County Region.

Table 5-33: Maine SASP - Washington County - Forecast Highlights & 20-Year Outlook

Airport	All Operations		Complex Operations	
	High Annual	Peak Day	Avg. Annual	Growth Rate
Deblois Flight Strip ^{1/}	600	<2	N/A	N/A
Eastport Municipal	3,464	19	24	4%
Machias Valley	2,084	7	6	9%
Princeton Municipal	2,209	12	20	11%

Source: McFarland Johnson Analysis, 2020.

^{1/} Operations forecasted for Deblois based on methodology described in Chapter 4.

As indicated, the most activity might be anticipated at Eastport Municipal in terms of annual or peak day operations; however, Princeton Municipal and Eastport Municipal may experience similar levels of use by a number of larger, more sophisticated and demanding Group II aircraft.

Table 5-34 summarizes system-wide planning issues, performance, gaps, and outstanding questions related to SASP airports in the Washington County Region.

Table 5-34: Maine SASP – Washington County Region Airports – Summary Report Card

System-wide Issues	Airports	
Aging Master Plans & Uncertain Critical Aircraft Needs	Deblois Flight Strip Eastport Municipal ^{1/}	Princeton Municipal

Uncertain Crosswind Runway Usage	N/A	
Most Challenging Weather Conditions	Machias Valley	
Highest Levels of Activity	Eastport Municipal	
Most Demanding Users	Eastport Municipal	Princeton Municipal

Sources: McFarland Johnson Analysis, 2020.

Geographic Redundancies & Gaps	Description
Redundancies in Market Area, Facilities, or Services	Geographic/Market Redundancies not Evident
Gaps in Market Area, Facilities or Services	Clear Geographic Gaps between western and eastern communities of region.

Source: McFarland Johnson Analysis, 2020.

^{1/} Eastport Municipal is in the early stages of updating its master plan.

Additional analysis and findings included in [Appendix G., Washington County Regional Analysis](#).

5.4. SUMMARY OF SYSTEM-LEVEL PERFORMANCE, GAPS & STATEWIDE PLANNING ISSUES

The diversity in the general aviation activity in the State of Maine is as varied as the general aviation industry itself. Airports across the state support all types of aeronautical businesses, local small/corporate aviation activities, resources for private recreational flying, and critical access for remote communities for people, business, and emergency preparedness and response activities by state and federal agencies.

One of the most informative and instructive findings from research and analysis made possible by extensive stakeholder outreach [Chapter 2](#) is two-fold:

- 1.) General aviation airports and users in Maine represent a very diverse and nuanced group of operators with different and specialized needs. These user groups include:
 - Private/Personal Recreational Pilots,
 - Medevac Operators,
 - Small Business/Individuals/Corporate Operators,
 - Public Agency Operators,
 - Specialty Charter/Island/Seaplane Operators;
- 2.) The needs of these operators vary significantly based upon the intersection of complex circumstances that affect aviation year-round in Maine, such as:
 - The **Region** being Accessed;
 - The **Time** of the Operation (daytime/nighttime, weekday/weekend);

- **Weather** Conditions;
- **Requirements** of the Aircraft being Flown; and,
- **Needs** of the Operator and/or Passengers (recreation, business, medical emergency, natural resource protection/disaster);

3.) Any real or perceived redundancies in airport’s facilities or services (i.e., runways, fuel, approaches, weather reporting equipment) can quickly become gaps during acute conditions where the intersection of those circumstances creates obstacles for serving a pressing need.

For example, discussions with state agencies⁷ indicated that during the conduct of various missions, access to fuel can be an issue in terms of location and volume. While 21 airports in the Maine system have Jet A fuel, small airports often do not have enough to service needs during acute spikes in demand such as emergencies. To remedy this situation, Maine Forest Service maintains eight (8) fuel trucks stationed around the state for refueling purposes.

Similarly, Twitchell Airport (a privately-owned, public-use facility in Turner) is a critical facility for seaplane fueling due to its location. There is concern among seaplane operators that the closure of Twitchell Airport and other private facilities such as Lucky Landing on Pushaw Lake near Bangor would represent a significant loss to the system and introduce a gap in facilities and services to the segment of users in the state operating seaplanes.

Table 5-35 summarizes insights on gaps and redundancies geographic, market area coverage and facilities and service offerings at SASP airports by region.

Table 5-35: Gaps & Redundancies in Market Area Coverage, Facilities/Services, & Function

Region	Description
<p>Northern Region</p>	<ul style="list-style-type: none"> • Gaps do not represent significant issues due to low levels of population and economic activities in areas beyond 30-minute drive to system airport. • Redundancy between Caribou Municipal and Presque Isle International may be minimal or significant based upon scale of demand, specialized user groups and their needs, and intersection of acute conditions that affect demand.
<p>Western Mountains Region</p>	<ul style="list-style-type: none"> • Gaps in airport market/service areas are due to singular roadway access points and mountainous terrain and cannot be easily remedied. • Redundancies between airports not clear or evident based on remote locations situated in mountainous region. Any redundancy between Bethel Regional and Eastern Slope Regional expected to be minimal due to different user base.

⁷ Maine Forest Service (Division of Department of Agriculture, Conservation, and Forestry), Department of Inland Fisheries and Wildlife, Department of Marine Resources, as summarized in [Appendix A. Study Process Records](#).

Region	Description
<p>Southern Region</p>	<ul style="list-style-type: none"> • Geographic/market gaps are not evident • Redundancies between Biddeford Municipal and Sanford Seacoast Regional may not represent significant issues due to the high concentration of aviation activity. Nearly 40 based aircraft at Biddeford Municipal indicates airports’ facilities may complement each other providing much-needed capacity in terms of hangar storage and operating needs. User bases likely differ from private, recreational flying at Biddeford Municipal to more business-oriented operators at Sanford Seacoast Regional. • Redundancies between Sanford Seacoast and Portland International may also prove to be complementary rather than competitive due to aircraft storage capacity/availability, and operational capacity/traffic conditions at Portland International.
<p>Central Region</p>	<ul style="list-style-type: none"> • Geographic/market gaps appear to be minimal. • Geographic redundancies in market area, facilities, and services between airports from Dexter Regional and south toward Auburn-Lewiston Municipal are noticeable and may warrant further exploration in terms of crosswind runway needs. However, the level of operations and use by complex aircraft suggests that Pittsfield Municipal is in use by a higher number of larger aircraft than Dexter Regional, so overlap in facilities and services may not be so redundant for their core user base. Similarly, while Pittsfield Municipal and Central Maine Regional serve about the same volume of large aircraft, Central Maine Regional accommodates nearly double the annual operations as Pittsfield Municipal, suggesting a stronger user base of smaller aircraft. The same is true for Central Maine and Waterville Robert LaFleur, which service similar levels of annual operations, but Waterville Robert LaFleur attracts use by far more B-II and larger aircraft. This suggests that redundancies are in serving small aircraft only. Redundancies between Waterville Robert LaFleur and Augusta State may also occur; however, the scale of annual activity is more than double in volume and complex operations at Augusta State. Similarly, Auburn-Lewiston Municipal attracts a higher number of B-II operations than Augusta State, making any overlaps in service provided by Oxford County Regional limited to small aircraft. Any redundancies between Charles A. Chase, Jr. and Dexter Regional do not likely represent significant issues due to the differences in user base.

Region	Description
<p>Coastal Region</p>	<ul style="list-style-type: none"> • Gaps in airport market/service areas appear to be minimal • Redundancies in airport facilities and services may exist between Brunswick Executive and Wiscasset due to their close proximity. However, due to the longer runway and precision approach capability at Brunswick Executive, redundancies are not likely for growing segments of the general aviation fleet, such as complex B-II or larger operations.
<p>Washington County Region</p>	<ul style="list-style-type: none"> • Geographic/market gaps in Washington County are clear as a large area of the region is not within a 30-minute drive of a SASP airport. However, these gaps are not especially significant due to low levels of population and economic activity in those areas. • There is no evidence of redundancies in geographic, facilities, or service offerings among Washington County airports.

Source: McFarland Johnson Analysis, 2020.

5.5. SUMMARY

Based upon extensive outreach effort to airport managers other stakeholders, and research and analysis described and documented in previous Chapters, a number of planning issues have risen to the surface. Chapter 6., Findings, Priorities & Action Items provides a detailed descriptions of planning issues that will be carried forward through the rest of the SASP.

Findings, Priorities & Action Items

6.1. INTRODUCTION

This Chapter presents and summarizes findings, implications, and action items as determined by the Project Advisory Committee (PAC) and in consultation with staff from the MaineDOT Aviation Program and the Project Team.

By way of definition, the findings, implications, and action items as used herein are defined as:

- **Findings:** Primary facts and issues related to aviation and airports in Maine.
- **Implications:** Statement(s) about the meaning and importance of the Findings.
- **Action Items:** Statement(s) about what should be done to address the Findings.

Guidance from the PAC helped MaineDOT and the Project Team make determinations as follows:

- **Statewide Significance:** Some findings are the result of aviation industry and user trends, or broad external or economic factors affecting system airports that cannot be adequately addressed at the airport level. Some findings reflect challenges that are most appropriately resolved by the airport sponsor or community.

→ The SASP makes a determination as to what are system-wide issues and which are local, airport-specific issues.

- **MaineDOT Role:** Once a set of findings of statewide significance is identified, the next level of inquiry requires a consideration of whether MaineDOT is properly positioned – or should be – to take the lead role in addressing implications of the Finding.

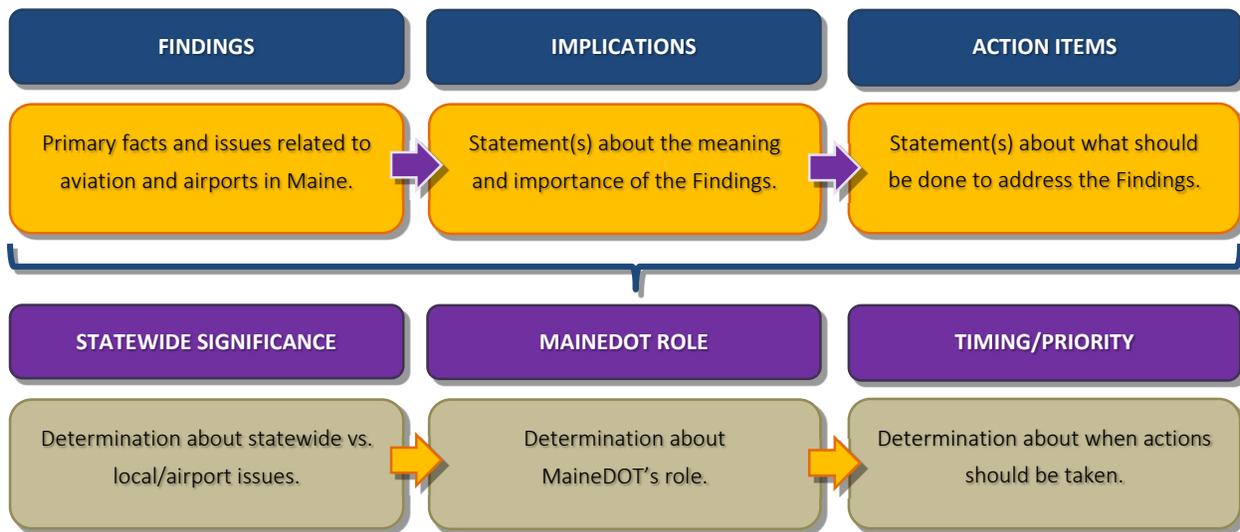
→ The SASP makes a determination as to whether MaineDOT, the FAA, airport sponsors, or other parties (i.e., state, local, or private) should be in a lead role, partner, role, or support role for addressing implications of Findings of statewide significance.

- **Timing/Priority:** Building from determinations of findings of statewide significance and identifications of roles, a final consideration is a determination of the timing or priority of prospective actions to address these issues and implications.

→ The SASP makes a determination as to whether actions should be priorities in the near term, mid-term, or long-term periods. These periods relate to generally accepted planning periods of 0-5 years, 5-10 years, and 10 years and beyond.

Figure 6-1 illustrates the levels of review conducted and considered for each SASP Finding.

Figure 6-1: Findings, Implications & Action Items – Review & Analysis Process



Source: McFarland Johnson, Inc. 2021

SASP determinations in these areas are presented by finding in the following sections:

- Facilities & Services Challenges
- Funding Challenges
- Activity Levels & Forecast Outlook
- Sponsor Challenges & Local Challenges
- Maintenance Issues & Needs
- Education & Promotion
- Special Use/Condition Nuances

6.2. FINDINGS, MAINEDOT ROLE, & PRIORITIES

The sections that follow detail the implications and action items associated with each finding, and the determinations regarding statewide significance, MaineDOT’s role, and the timing of actions that guide and inform SASP recommendations.

Detailed notes from the PAC meeting #3 that documents these determinations is included in [Appendix A, Study Process Records](#).

6.2.1. Facilities & Services Challenges

The **Facilities & Services Challenges** finding is characterized by the variety of needs placed on every SASP airport by a diverse user base. The scale of activity and acute demands placed on many SASP airports vary widely based upon aircraft types, operator mission, region, and weather. These demands require a wide range of minimum facilities and services that are often specialized and difficult to justify. Examples of this finding include:

- Statewide Pavement Condition Index (PCI) survey identified a significant expense for maintaining/rehabilitating current airfield pavements.
- Facility and service needs include aging weather reporting systems (AWOS), “last mile” ground transportation options, aircraft hangar storage, improved approach minimums, fuel availability, and adequate terminal facilities with passenger/crew amenities.
- Some SASP airports are expected to meet operating requirements for many user groups (private pilots, corporate/business operators, medevac operators, seaplane operators, charter operators) and aircraft (piston, twin-engine, floatplane, turbine, and jet aircraft).
- Current use and aging master plans at some airports may not meet the regular use threshold for current critical aircraft making improvements to pavements and other facilities difficult to justify.

A shortlist of **implications** of this finding are:

- Facilities and services that are imperative to provide a base level of access to a variety of users with different demands under challenging conditions may be exceedingly difficult to justify under more stringent FAA requirements.
- FAA justification or eligibility requirements may prove an obstacle to the long-term viability of the public airport system in Maine, effectively down-sizing and restricting the very type and scale of activity that can make SASP airports sustainable.

Statewide Significance, MaineDOT Role, Timing/Priority

The following summarizes determinations pertaining to statewide significance, MaineDOT role, and timing/priority for Facility & Services finding:

Facilities & Service Challenges	SASP Determinations		
	Low	Medium	High
Significance	←————— <input checked="" type="checkbox"/> —————→		
	<u>Lead</u>	<u>Partner</u>	<u>Support</u>
MaineDOT/State		<input checked="" type="checkbox"/>	
FAA		<input checked="" type="checkbox"/>	
Sponsor	<input checked="" type="checkbox"/>		
Other			
	<u>Near Term</u>	<u>Mid-Term</u>	<u>Long Term</u>
Timing/Priority	<input checked="" type="checkbox"/>		

Source: Project Advisory Committee Meetings, January 2021.

As shown, Facilities and Services are a high priority among SASP airports, and overall, the role of MaineDOT is as a partner to local SASP airport sponsors following actions. There are some areas where MaineDOT has a lead role in addressing, such as system-wide approaches to:

- improving coverage of AWOS systems either through ensuring broken systems are repaired or replaced and that these improvements provide regular reporting and data accessible to system users, and

- improving seaplane base facility design standards, transfers for operators and passengers, and access to fuel for seaplane operators.

6.2.2. Funding Challenges

The **Funding Challenges** finding is characterized by broad demand from SASP airport sponsors and the Maine Aeronautical Advisory Board, who are looking to MaineDOT for expanded funding and programming to meet increasing costs for maintenance and improvement to their facilities. State funding is also necessary to overcome eligibility limitations of the FAA AIP Program. Examples of this finding include:

- Sponsors struggle to cover operating expenses and costs associated with large and infrequent needs such as maintaining clear approaches after the initial clearing, replacement of fuel farms.
- The buying power of static AIP Entitlement funding declines while costs increase.
- AIP eligibility requirements for new or reconstruction of existing airfield pavements such as runway/taxiway widths and crosswind facilities are becoming more stringent as the FAA seeks documentation of regular use by critical aircraft.

A primary **implication** of this finding is that:

- Competition for scarce Sponsor/local funds, matched with limitations in State funding and more stringent FAA eligibility requirements threatens the long-term viability of some airports and statewide access for the public and key users that rely on the Maine system of public use airports. Some airports will be positioned for growth and others that support valuable functions will be without very basic needs.

Statewide Significance, MaineDOT Role, Timing/Priority

The following summarizes determinations pertaining to statewide significance, MaineDOT role, and timing/priority for Funding Challenges finding:

Funding Challenges	SASP Determinations		
	Low	Medium	High
Significance	←—————→ <input checked="" type="checkbox"/>		
	Lead	Partner	Support
MaineDOT/State	<input checked="" type="checkbox"/>		
FAA		<input checked="" type="checkbox"/>	
Sponsor		<input checked="" type="checkbox"/>	
Other			
	Near Term	Mid-Term	Long Term
Timing/Priority		<input checked="" type="checkbox"/>	

Source: Project Advisory Committee Meetings, January 2021.

As indicated, Funding Challenges are a high priority to sponsors of SASP airports, and MaineDOT has a lead role in addressing funding gaps to maintain and improve a viable system for the long-term. Key aspects of the funding challenges for SASP airports in Maine are:

- meeting maintenance and/or reconstruction needs for crosswinds, primary, and secondary pavements,
- developing merit-based criteria to aid in allocations of funding for AIP-eligible and non-eligible projects of import to the statewide system, and
- exploring and identifying sources of money to fund a discretionary program.

6.2.3. Activity Levels & Forecast Outlook

The **Activity Levels & Forecast Outlook** finding is characterized by an understanding that activity data at SASP airports continues to evolve similar to national trends. That is, airports are seeing the number of operations by small, single-engine piston aircraft remaining steady or declining and greater numbers of operations transitioning toward larger twin-engine and jet aircraft. While use by larger/demanding Group II aircraft has increased for some airports, declining activity by their traditional user base can threaten the long-term sustainability of airports and systemwide access. The mid- to long-term impacts of the global pandemic on the use of and outlook for Maine airports is uncertain. Examples of this finding include:

- Operational volumes have been declining since 2010 and impacts of the global pandemic will exasperate this trend in the near-term.
- Seasonal peaks and off-seasons produce inconsistent/unpredictable airport revenues.
- Declining based aircraft at some airports may threaten Entitlement and NPIAS eligibility.
- Changes in the number and type of active aircraft impacts demand and results in changes to airport facility requirements.
- Scale of use by larger/demanding Group II aircraft may not be sufficient at a number of airports to warrant maintenance of existing facility design or safety standards.
- Forecasts of long-term facility requirements will require strong documentation and justifications for critical aircraft for FAA approval.

A shortlist of **implications** of this finding are:

- Declining activity threatens the long-term viability of some airports and statewide access for the public and key users that rely on the Maine system of public use airports (medical evacuations, business/corporate users, public safety and agency operators, critical operators for the islands and recreational users).
- Wide ranges of activity at SASP airports makes it difficult to demonstrate the value provided to the public in terms of accessibility and the specific aeronautical functions that contribute to an active and dynamic user base statewide.

Statewide Significance, MaineDOT Role, Timing/Priority

The following summarizes determinations pertaining to statewide significance, MaineDOT role, and timing/priority for Activity Levels & Forecast Outlook finding:

Activity Levels & Forecast Outlook	SASP Determinations		
	Low	Medium	High
Significance	← <input checked="" type="checkbox"/> →		
	Lead	Partner	Support
MaineDOT/State			<input checked="" type="checkbox"/>
FAA			<input checked="" type="checkbox"/>
Sponsor	<input checked="" type="checkbox"/>		
Other			
	Near Term	Mid-Term	Long Term
Timing/Priority	<input checked="" type="checkbox"/>		

Source: Project Advisory Committee Meetings, January 2021.

Despite concerns about low levels of operational activity and the importance of activity levels for documenting facility needs at the airport level, operational volumes at SASP airports is an issue that MaineDOT can have little effect on improving. MaineDOT’s GARD counting system program is the appropriate role for MaineDOT, in a support role to help sponsors collect, monitor, and analyze operations data.

6.2.4. Sponsor & Local Challenges

The **Sponsor & Local Challenges** finding is characterized by the reality that some SASP airports are understaffed and under funded by their sponsors, some local economies are not robust enough to drive activity at local airports year-round, and some local business and agency partners are not equipped to capitalize on the Airport’s potential. Examples of this finding include:

- Each Airport’s trajectory/outlook is result of complex challenges and Sponsor ownership and management practices and acumen.
- Airport managers are expected to wear many “hats” with limited time for or access to formal training in some areas or specific expertise.
- Airport staffing challenges.
- Elected/appointed leaders may lack aviation knowledge and understanding of value.
- Community support is limited or challenging.
- Economic Development Districts are unaware of Aviation potential.

A primary **implication** of this finding is that:

- Opportunities for growth are missed and long-term sustainability of some Airports (physically and/or financially) will be increasingly challenged in the post-COVID environment.

Statewide Significance, MaineDOT Role, Timing/Priority

The following summarizes determinations pertaining to statewide significance, MaineDOT role, and timing/priority for Sponsor & Local Challenges finding:

Sponsor & Local Challenges	SASP Determinations		
	Low	Medium	High
Significance	←————→ <input checked="" type="checkbox"/>		
	Lead	Partner	Support
MaineDOT/State			<input checked="" type="checkbox"/>
FAA			<input checked="" type="checkbox"/>
Sponsor	<input checked="" type="checkbox"/>		
Other		<input checked="" type="checkbox"/> (ACRP)	
	Near Term	Mid-Term	Long Term
Timing/Priority	<input checked="" type="checkbox"/>		

Source: Project Advisory Committee Meetings, January 2021.

While sponsor and local issues at SASP airports are a continuous challenge, it’s most appropriate for MaineDOT fill a support role in helping SASP airports and sponsors manage these issues to ensure the long-term viability of the system. Similar to affecting activity levels at system airports, MaineDOT’s ability to effect change at the local level is limited; therefore, the appropriate role for MaineDOT is continued support such as the publishing of their airport management training guidebook, grant management, and funding state match for AIP-eligible projects that can leverage local support.

6.2.5. Maintenance Issues & Needs

The **Maintenance Issues & Needs** finding dovetails with other findings, such as: Funding Challenges, Sponsor & Local Challenges, and Facility & Service Challenges. Some Airport Sponsors are not able to maintain infrastructure due to funding needs, staffing/sponsor support, or other capital priorities. Deferred maintenance combines with harsh weather conditions, which over time grows into exponentially problematic maintenance issues that create unsafe conditions and reduce access for users. Examples of this finding include:

- Snow removal and deicing challenges
- Pavement repair challenges
- Obstructions and vegetation management challenges
- Airfield lighting maintenance challenges (cans/conduit for winter maintenance)
- Airfield VISAIIDs maintenance challenges (qualified contractors)

A primary **implication** of this finding is that:

- Local Sponsor’s challenge in maintaining the operational condition of these facilities has a direct impact to statewide mobility and reliable/predictable access for business and emergency services.

Statewide Significance, MaineDOT Role, Timing/Priority

The following summarizes determinations pertaining to statewide significance, MaineDOT role, and timing/priority for Maintenance Issues & Needs finding:

Maintenance Issues & Needs	SASP Determinations		
	Low	Medium	High
Significance	←————→ <input checked="" type="checkbox"/>		
	Lead	Partner	Support
MaineDOT/State		<input checked="" type="checkbox"/>	
FAA			<input checked="" type="checkbox"/>
Sponsor	<input checked="" type="checkbox"/>		
Other			
	Near Term	Mid-Term	Long Term
Timing/Priority		<input checked="" type="checkbox"/>	

Source: Project Advisory Committee Meetings, January 2021.

Maintenance issues and needs is of high importance system-wide, however, MaineDOT cannot be in a lead role in resolving ongoing maintenance for sponsors at SASP airports. In this regard, sponsors must own the lead role in resolving maintenance issues and needs rather than deferring maintenance until pavements require major rehabilitation or reconstruction due to advanced rates of deterioration.

6.2.6. Education & Promotion

The **Education & Promotion** finding is characterized by a broad lack of understanding and appreciation by the general public for general aviation airports’ impact and role as a job-provider in their communities. This finding is not especially unique to Maine; rather, an ongoing challenge for most communities that are home to general aviation airports. Commercial service airports often claim the most attention due to passenger travel. Examples of this finding include:

- Non-users often do not know about or understand what happens at local airports.
- Airports and airport sponsors have difficulty communicating this value.
- Need for aviation management professionals, pilots, mechanics continues to grow.
- Aviation education is very specialized and not considered broadly.
- Need for educational introduction in primary/secondary schools, flight schools, airframe/powerplant programs.

A primary **implication** of this finding is that:

- Declining understanding and support threaten the long-term success and sustainability of Maine airports.

Statewide Significance, MaineDOT Role, Timing/Priority

The following summarizes determinations pertaining to statewide significance, MaineDOT role, and timing/priority for Education & Promotion finding:

Education & Promotion	SASP Determinations		
	Low	Medium	High
Significance	←————→ <input checked="" type="checkbox"/>		
	Lead	Partner	Support
MaineDOT/State		<input checked="" type="checkbox"/>	
FAA			<input checked="" type="checkbox"/>
Sponsor	<input checked="" type="checkbox"/>		
Other			
	Near Term	Mid-Term	Long Term
Timing/Priority			<input checked="" type="checkbox"/>

Source: Project Advisory Committee Meetings, January 2021.

Education and promotion of the Maine system of public use airports is an important piece of sustaining a viable system of airports for the long term. A common tool in the aviation industry is to prepare studies that estimate the economic impact of airports and aviation to their communities and state economy. The results of these studies typically include materials that are distributed statewide and by sponsors to communicate the value and contributions of each airport throughout the state. An economic impact study is being conducted for this SASP and this is the proper role for MaineDOT and the FAA as partners and support for the ongoing education and promotion of aviation and airports in Maine.

6.2.7. Special Use/Condition Nuances

The **Special Use/Condition Nuances** finding is essentially the recognition that many airports in Maine serve remote areas from the Western Mountains to Downeast/Washington County, and Aroostook County through the Maine Highlands to the coast and islands region. Many airports also accommodate a range of special user groups such as charter providers to the coast and islands region, emergency medical operators, and seaplane operators taking passengers to many of Maines lakes and ponds. The large distances between SASP airports in remote areas or proximity among other SASP airports in more populated areas do not represent significant deficiencies or redundancies in the statewide system of public use airport facilities; rather, they present unique circumstances, some with opportunity and some with significant challenges. Examples of this finding include:

- The natural and socioeconomic characteristics vary by region of the state and affect the levels of demand for airport facilities and the requirements of aircraft operators and passengers/users.
- SASP airports in each region have specific requirements to meet their core user base but also require range of base level facilities and services to accommodate access by a variety of other less frequent use by providers of important value statewide.

A primary **implication** of this finding is:

- Local Sponsor’s challenge in maintaining the operational condition of these facilities has a direct impact upon statewide mobility for business and emergency services.

Statewide Significance, MaineDOT Role, Timing/Priority

The findings summarized here capture the statewide significance of Special Use/Condition Nuances as a finding in the SASP. There is no specific role or priority/timing for MaineDOT to address these circumstances; however, it is important that these unique circumstances at each public-use airport weigh in the decision of priority and support from MaineDOT, and that MaineDOT avoids a generic, blanket approach for groups of airports.

6.3. ACTION ITEMS BY PRIORITY

Based upon the findings, determinations of statewide significance and MaineDOT’s role, the following action items were developed by the PAC and MaineDOT Project Team by priority:

Address Now (no need for further study) – MaineDOT in Lead Role

FINDINGS OF STATE SIGNIFICANCE – MaineDOT as Lead – ADDRESS NOW
<ul style="list-style-type: none"> • Facilities & Services <ul style="list-style-type: none"> ○ AWOS – Seven (7) of 18 AWOS systems are out of service. <ul style="list-style-type: none"> ▪ Phase I Finding Sufficient, not to be advanced in Phase II. ▪ MaineDOT to pursue the replacement of AWOS systems with new AWOS III or another alternative (AWOS A-V, etc.) where appropriate. ○ Convene State agencies and seaplane stakeholders to address transfer challenges from Portland International Jetport and Bangor International, universal water landing facility designs, and southern Maine fuel access.
<ul style="list-style-type: none"> • Activity Levels & Forecast Outlook <ul style="list-style-type: none"> ○ Phase I Finding Sufficient, not to be advanced in Phase II <ul style="list-style-type: none"> ▪ MaineDOT’s GARD system program, data collection/analysis is appropriate role.
<ul style="list-style-type: none"> • Sponsor Challenges & Local Challenges <ul style="list-style-type: none"> ○ Phase I Finding Sufficient, not to be advanced in Phase II <ul style="list-style-type: none"> ▪ This is a local/Sponsor-driven need/responsibility. ▪ MaineDOT’s training guidebook, support, advocacy is the proper role.

At the time of this publication, MaineDOT has already implemented the upgraded GARD system with ADS-B capabilities at every SASP airport in the State which collects and reports airport activity. MaineDOT will monitor trends, runway utilization, and types of aircraft. MaineDOT has also reinvigorated the Airport Manager’s Training Manual. The AWOS-III program will require an implementation strategy identifying the readily available sites, costs, and necessary steps in order to fund and install the infrastructure. It is recommended that MaineDOT seek outside support for this holistic strategy in order to leverage additional labor force with oversight from the Aviation Program Staff. MaineDOT to prioritize seaplane facilities with other state agencies.

Address Now (SASP Analysis & Recommendations Required) MaineDOT in Lead Role

FINDINGS OF STATE SIGNIFICANCE – MaineDOT as Lead - ADVANCED TO PHASE II

- **Facilities & Services Challenges**
 - Pavements – PCI documents need for \$233M over 5-year period. Entitlement of \$30M over same period (\$6M annually) demonstrates funding gap of approximately \$203M. Overall, the “pavements” issue is generally one of overcoming funding gaps and maintenance of secondary pavements (taxiways, aprons) versus runways (primary pavements), which are mostly well maintained.
 - Phase II - advance prioritization of pavement projects based upon need:
 - Which crosswind facilities are a priority, and which are not?
 - Which taxiways merit larger than FAA eligible widths?
 - Assemble near (0-5 years), mid (5-10 years), and long-term (10-20 years) funding needs based on *systemwide* pavement improvement priorities.
- **Funding Challenges**
 - Phase II – advance the issue of MaineDOT being in the lead role (in partnership with FAA, Sponsor, and other sources) to address funding needs for pavements and maintenance for SASP airports as noted.
 - To be incorporated into merit-based criteria to measure Sponsor performance for MaineDOT match funding for crosswind, primary, and secondary pavements, and discretionary funding.
 - Explore “new pool” of money for MaineDOT discretionary funds and perhaps Sponsor-contributions for systemwide priorities.

FINDINGS OF STATE SIGNIFICANCE – MaineDOT as Lead - ADVANCED TO PHASE II**• Maintenance Issues & Needs**

- Phase II - determination of areas of system airports requiring the most attention for maintenance (facilities and equipment) such as: pavement, approach clearing/obstructions, fuel systems, AWOS equipment, snow removal equipment, airfield lighting, airfield visual aids.
 - Incorporate maintenance priorities that are local/Sponsor-driven need and responsibility into merit-based criteria for MaineDOT discretionary funding.
 - Explore bulk-purchase of equipment and/or consultant/contractor services for non-AIP/State funding projects.
 - Explore building procedures/practices to coordinate airport pavement maintenance projects with roads/highways projects by region.
 - Assemble near (0-5 years), mid (5-10 years), and long-term (10-20 years) funding needs based on systemwide pavement improvement priorities.

• Facilities & Services

- Design Standards/Specialty Airports – Phase II – advance incorporation of systemwide needs into merit-based criteria to measure Sponsor performance for MaineDOT discretionary funding.

• Regional Nuances

- Phase II – advance incorporation of systemwide needs into merit-based criteria to measure Sponsor performance for MaineDOT discretionary funding.

• Education & Promotion

- Phase II – advance education and promotion of the economic impact of SASP airports and the system via summary report, case studies of particular users and activities by region.

In a fiscally constrained environment, it is recommended that MaineDOT develop a state priority ranking system in order to target its limited funding effectively. This system should incorporate FAA's National Priority Ranking model to account for safety, but also weigh other factors identified as Statewide issues. Combined with strategic policies and standards, MaineDOT will be well positioned to justify the costs necessary to maintain the existing aviation facilities and encourage sponsors to meet criteria in order to leverage additional funding for their facilities. It is recommended that MaineDOT conduct an economic impact study. This study will result in informative documents that highlight individual airports' economic contributions to their surrounding communities. These documents can be used as tools to spread knowledge to the public on the positive impacts the aviation industry has on both local economies and the State economy as whole.

Address Now (no need for further study) MaineDOT in Partner Role with Sponsors in Lead Role

FINDINGS OF SPONSOR/LOCAL RESPONSIBILITY – MaineDOT as Partner – ADDRESS NOW

- **Facilities & Services**
 - Ground Transportation
 - Phase I Finding Sufficient, not to be advanced in Phase II
 - This is a local/Sponsor-driven need/responsibility.
 - MaineDOT to provide access to surplus fleet vehicles via existing auction process.
 - Hangars
 - Phase I Finding Sufficient, not to be advanced in Phase II
 - This is a local/Sponsor-driven need/responsibility.
 - Became more of a funding issue in terms of hangars needing to be financed by Sponsors in partnership with local/private/airport users.
 - MaineDOT can advocate now for low-interest loan program and/or TIF (tax increment financing) should be explored for Sponsors to self-finance hangar.
 - Approach Minimums
 - Phase I Finding Sufficient, not to be advanced in Phase II
 - This is a local/Sponsor-driven need/responsibility.
 - More of a maintenance issue in terms of keeping approaches clear of obstructions.
 - To be incorporated into issue of deferred maintenance and merit-based criteria to measure Sponsor performance for MaineDOT discretionary funding.
 - Fueling
 - Phase I Finding Sufficient, not to be advanced in Phase II
 - This is a local/Sponsor-driven need/responsibility.
 - Became more of a maintenance issue in terms of keeping equipment functioning safely, including regular inspection costs and costly repairs (i.e., card readers, etc.)
 - To be incorporated into issue of deferred maintenance and merit-based criteria to measure Sponsor performance for MaineDOT discretionary funding.
 - Terminal
 - Phase I Finding Sufficient, not to be advanced in Phase II
 - This is a local/Sponsor-driven need/responsibility.
 - There is and/or may be a need to ensure basic terminal facilities are available at airports near Canadian borders to accommodate Federal Inspection Service/Customs and Border Patrol activities.
- **Sponsor Challenges & Local Challenges**
 - Phase I Finding Sufficient, not to be advanced in Phase II
 - This is a local/Sponsor-driven need/responsibility.
 - MaineDOT's training guidebook, support, advocacy is the proper role.

It is recommended that MaineDOT formalize these important initiatives in merit-based criteria and standards for state priority ranking. Although MaineDOT is not a leader for these items listed above, the Sponsors can be encouraged to implement with defined merit-based criteria and support from MaineDOT.

MAINE STATE AVIATION SYSTEM PLAN



PHASE I – FINAL TECHNICAL REPORT

APPENDICES

prepared for:

MaineDOT
Bureau of Planning

prepared by:

 **McFarland Johnson**

Appendix A: Study Process Records

Project Advisory Committee (PAC) Meetings

Agenda - Project Advisory Committee (PAC) Meeting #1

Maine State Aviation System Plan (SASP) – Phase I

January 7, 2020 | MaineDOT Offices | 1:00-3:30PM

Agenda

- Opening Remarks – MaineDOT
- Introductions
- PAC Member Remarks - Discussion
- McFarland Johnson Presentation
 - MaineDOT Key Goals
 - Project Introduction, Approach, Schedule Overview
 - PAC Role & Orientation

 - Task 3 - System Management Evaluation
 - Key Findings & Implications
 - Discussion

 - Task 5 – Data Collection Underway Now
 - Airport Manager Survey
 - Regional Council/EDD Survey
 - Privately Owned/Public Use Airports
 - Discussion

Outreach

- MPO Quarterly Meeting (Augusta)
- Maine Aviation Forum (Owl's Head)
- MAAB (Augusta)
- State Agency Coordination/Input

PAC Meeting #2 – April - Anticipated Topics

- Technical Memo: Research Peer SASP Review & Context Setting
- Update on Survey Effort/Data Collection/Facility Inventory
- Update on Forecasts of Aviation Activity

Summary Notes - Project Advisory Committee (PAC) Meeting #1

Maine State Aviation System Plan (SASP) – Phase I

January 1, 2020 | MaineDOT Headquarters, 24 Child St, Augusta, ME | 1:00PM–3:00PM

The meeting was called to order at 1:00 PM EST by Matt O’Brien, McFarland Johnson Project Manager who briefly introduced the project team including Stacie Haskell, Aviation Planner and Project Manager for MaineDOT. He stressed the importance of this group convening to help achieve the defined goals of the System Plan. Scott LeCount, the project team’s lead planner was introduced and gave a brief presentation.

PAC members were invited to introduce themselves and share the biggest achievements they would like to see from the SASP:

PAC Member	Desired Achievements
Paul Bradbury , Portland International Jetport	Would like to see the return of interstate air travel opportunities. Stressed the importance of the system in the movement of goods and people.
Allison Navia , Airport Manager, Sanford Seacoast Regional Airport/Pilot	Above all, would like the Plan to be a usable document that airport management can use as a resource in justifying projects and developing their airport to its highest and best use.
Evan McDougal , Aviation Planner, Hoyle Tanner & Associates/Pilot	Brings an extensive aviation planning background to the PAC as a professional planner and pilot. Interested in seeing enhanced financial and staffing capacity at MaineDOT to support the aviation system.
Josh Dickson , Aviation Systems Coordinator, LifeFlight of Maine/Pilot	Rural economies are turning to airports for assistance as hospitals close and consolidate. Winter maintenance of runways is a key issue to bring in a twin-engine turboprop and knowing the runway conditions and how often they are reported is critical.
Pete Marucci , President, Maine ACE Camp/Owner & Operator of Mast Cove Seaplane Base/FBO Operator at Bethel/Pilot	Education opportunities are critical to fuel a pipeline for pilots or aviation maintenance. Maine airports have the capacity to add a large education facility, and additional education options should be explored.
Jeff Campbell , Airport Manager, Millinocket Municipal Airport	Increase opportunities for businesses to flourish. Increase opportunity for ground transportation to get tourists and pilots to their destinations
Steve Levesque , Executive Director, Midcoast Regional Redevelopment Association/Pilot	Redevelopment at NAS Brunswick. Maine is sitting on significant economic assets that are vastly underutilized. System should capitalize on underrealized infrastructure. Launching an A&P school

	and expand the education curriculum into the K-12 curriculum to drive aspirations and interests in aviation.
Kevin Waters , Owner and Chief Pilot, Penobscot Island Air	Maintains Isleboro and Stonington airports. Island business is the key business. More operations should be driven to help maintain 135 business and air taxi demand in the State.
Robert Mockler , Chief Pilot and Maintenance Technician, MMG Insurance	Flies 300 hours a year. From Maine.
Ann Walko , Flight Instructor & Pilot, Wiscasset Airport, Former Wiscasset FBO Operator	Help with small infrastructure and other non-AIP eligible projects.
Nate Moulton , Freight and Passenger Division Manager, MaineDOT	Would like to see the SASP help create best passenger product possible for Maine travelers.
Sean Collins , Eastern Region Manager, AOPA/Pilot	Grew up in Maine. Would like to see the return or feasibility of a statewide CIP program. Airports need to be able to better leverage small monies that are available to better serve the entire system.

The meeting was called to order at 1:00 PM EST by Matt O’Brien, McFarland Johnson Project Manager who briefly introduced the project team including Stacie Haskell, Aviation Planner and Project Manager for MaineDOT. He stressed the importance of this group convening to help achieve the defined goals of the System Plan. Scott LeCount, the project team’s lead planner was introduced and gave a brief presentation.

PAC members were invited to introduce themselves and share the biggest achievements they would like to see from the SASP:

Mary Ann Hayes , Multimodal Planning Division Manager and Aviation Director for MaineDOT further introduced the project team and additional staff working on the project: Stacie Haskell (MaineDOT), Tim LeSiege (MaineDOT), and Ralph Nicosia-Rusin (FAA). Mary Ann previewed to the PAC that the term “right sized” and “fiscally constrained analysis” would be terms used frequently and again stressed the MaineDOT key goals for the plan indicating that although everyone in the room was supportive of aviation, practical decisions must be made on how to fund and grow the system in a responsible and sustainable manner.

Stacie Haskell, Aviation Planner and Project Manager for the System Plan explained to the PAC that the System Plan will be split into two phases and that Phase II would look at the economic impact of the system with current 2020 information.

Scott LeCount from the project team outlined the goals, schedule, project phasing, and a review of some of the project’s early tasks. This included an overview of the MaineDOT Aviation System Management Evaluation which assessed the department’s role, funding, and function in relation to other states, prepared recommendations to optimize revenue, and documented other state’s successes in programming and funding. He stressed that the project team was here to listen and opened discussion to the group for their comment.

Steve Levesque commented that in addition to strategic investment prioritization and classifying airports by their FAA roles, airports should be looked at individually to see what specialized roles the airport may serve in their region. He noted many airports may provide unique services or values to a community and not be easily categorized by the FAA categories. For example, he noted that Brunswick airport may never serve as a passenger alternative to PWM, however it is an important educational and economic development hub for the region it serves. **Scott LeCount** concurred that there is no one size fits all methodology and that the project team did not want to create an entirely new scoring methodology to try and fit the airport system into certain boxes. He added that there would indeed be a geographic and spatial assessment for an airport's market area as one element of the classification. Qualitative items like local community needs, corporate flight missions, and other items would also be assessed.

Mary Ann Hayes shared that Governor Mills recently released a new economic development plan (Maine Economic Development Strategy 2020-2029) and that the plan may present the argument for workforce development strategies or sustainability initiatives that could help sustain the airport system. **Paul Bradbury** reacted to the sustainability of air transportation comment that air travel can be a very efficient means of transportation in certain instances and that the average mile per gallon average per passenger is over 50. He also shared that aerospace exports are a large industry in Maine with large companies like Pratt & Whitney substantially contributing to the economy. **Steve Levesque** added that electric aircraft and biofuels are sustainability initiatives to watch. To help implement the policy ideas that come from the SASP, he proposed that MABA could be reenergized to function as political vehicle. He added that having attended numerous aerospace trade shows, other states are robustly promoting themselves, and Maine is "hidden in plain sight". He added that Maine does not sell their airport system very well and should market their expertise and system in a fresh way. He also asked what Loring Airport's role in the system plan should be – they are currently private but should be mentioned in the system.

A brief break was taken at 2:31 PM.

The group resumed and focused attention to the key public outreach and data collection document for the SASP, a set of survey's created to answer critical questions about the system and its users. **Mary Ann Hayes** asked the group for constructive critique. She outlined that the strategy for the surveys was to do remote public outreach first so that key stakeholders could be identified, and key questions could be identified so that productive on-site meetings could be held in Phase II.

DISCUSSION OF THE AIRPORT MANAGER'S SURVEY

Allison Navia suggested that each airport's consultant on record with the State could be copied to help fill out the survey. Some discussion ensued on if this would be productive as some of the value of sending the surveys was the process itself. It was decided that although airports could reach out to their consultants if desired, it should be a team effort to answer the information to the best of each airport staff's abilities.

Jeff Campbell noted that when a Town Manager is the Airport Manager and designates the public works director as the airport manager, it becomes a convoluted management structure. The

project team responded that they would look into restructuring this question to get clear results from respondents.

Evan McDougal asked how the operating budget information would be utilized. Scott LeCount responded that they would help understand the sources of funds of each airport, find commonalities or efficiencies in the system, and provide another piece of data that would be useful for policy recommendations. Paul Bradbury added that budgets are public record. Steve Levesque seconded that the information would provide additional insight on what sources of funds are funding operations of each airport and that their best practices that can be learned.

Steve Levesque proposed revising the first question under “Facility-General” to ask, “what role do you see your airport providing for, or playing in the state” with “which type of activities occur at your airport”.

Paul Bradbury pointed out that joint-use airports (Bangor) have cost advantages and that a budget comparison with these facilities would not be apples to apples (i.e. DOD provides ARFF).

Allison Navia proposed the question “are your expenses trending up/down/stable” and “are your revenues trending up/down/stable”. Additionally, she proposed adding numbering to questions so that each question could be easily referenced for discussion and organization purposes. Evan McDougal followed that a notes box under every question for additional insights that respondents may want to share.

Josh Dickson asked that in addition to the question “is the airport attended”, could a question such as “is the condition of the runway actively reported” be added. He said this would be useful for LifeFlight’s purposes and an additional follow up question could be “how often do you update your NOTAMS for runway conditions.” Evan McDougal recommended adding the question “does your facility pretreat the runway in its deicing/snow removal procedures”. He also commented that the facilities management questions could be written in a more positive tone.

Paul Bradbury – Regarding transportation and moving people and goods – asked what questions in the survey framed these insights. Suggested questions could be “what is your passenger volume?” or “what is your cargo volume?” He shared that the primary airports have this information and PWM would be willing to share.

DISCUSSION OF THE RPC/EDD SURVEY

Evan McDougal asked the project team if it was useful to reach out to the regional planners in previous system plan studies. Scott LeCount said that he had not conducted an RPC survey for a system plan before, but was interested in seeing the response rate from a group of stakeholders that aren’t always involved in the airport planning process. Evan McDougal suggested removing the first question under “Activity-Regional Demand and Capacity”, which asked about excess airport capacity. Scott LeCount agreed to remove.

Steve Levesque added that this survey should perhaps be sent to the local community college or university system if workforce development was being stressed. He noted it is a topic that may not need a separate survey, but should be looked at.

DISCUSSION OF THE PRIVATELY OWNED/PUBLIC USE SURVEY

Kevin Waters suggested that the field “Identifier” should be changed to “FAA Identifier” or “ICAO identifier” as not every airport, especially private or public airports, have a three-letter identifier.

Sean Collins responded to the concerns that the response rate for this survey may be low that many of the owners of these private airports are AOPA members – the survey could be highlighted in AOPA publications to generate interest and response rate.

Pete Marucci stated he used to be charged \$50 for a seaplane base license which provided contact information to the State. He also noted he was surprised Lisa (MAAB) was not on the PAC as she is an enthusiastic aviation supporter for the State of Maine. He noted that her husband is on the Board of Directors for the seaplane base association (ME).

Ann Walko added that EAA chapters are another good stakeholder group to reach out to.

CLOSING ITEMS

Kevin Waters shared that operators are having challenges with the local FSDO. The project team responded that the FSDO may be another interested stakeholder group to engage with the PAC and system plan.

Paul Bradbury shared that reaching out for congregational support can be useful in getting action from federal agencies.

Josh Dickson shared that LifeFlight could potentially host the next PAC meeting in Bangor. MaineDOT staff also indicated the meeting could be held in Augusta again.

The project team indicated that the next PAC meeting would be sometime in April and would provide members with information on the finalized date, time and location, and agenda within the next few weeks. PAC members were thanked for their contributions.

The meeting ended at 3:32 PM.

Agenda - Project Advisory Committee (PAC) Meeting #2

Maine State Aviation System Plan (SASP) – Phase I

May 27, 2020 | MaineDOT Offices via ZOOM | 10:00AM–12:00 Noon

Join Zoom Meeting: <https://mainedot.zoom.us/j/421483545>

Meeting ID: 421 483 545

Dial by your location: +1 646 558 8656 US (New York)

Agenda

- Opening Remarks & Outreach Update – MaineDOT – (5 minutes)
- Survey Findings & Discussion - (60 minutes+)
 - Surveys Highlights and Themes
 - How Surveys Drive Plan Development
 - Airport Manager Survey Headlines
 - Emerging Themes
 - Summer Airport Visits & Interviews
 - Referral List of Stakeholders to Interview
 - What have we missed; who knows about that topic?
 - Other Aviation Topics & Issues
- Upcoming Tasks & Schedule – (10 minutes)
 - Technical Work:
 - Aviation Activity Forecast Approach
 - Airport System Roles & Capabilities
 - Gaps/Redundancies Analysis
 - Washington County Focus Evaluation
 - Other Outreach as Needed
- Next PAC Meeting: October - (10 minutes)
 - Update on Airport Visits & Interviews
 - Report on Findings
 - Discussion: What would the PAC like to see?
- Roundtable Discussion: COVID 19 Observations

Summary Notes - Project Advisory Committee (PAC) Meeting #2

Maine State Aviation System Plan (SASP) – Phase I

May 27, 2020 | MaineDOT Offices via ZOOM | 10:00AM–12:00 Noon

Attendees:

- PAC – Ann Walko, Alison Navia, Evan McDougal, Jeff Campbell, Paul Bradbury, Steve Levesque, Sean Collins, Rob Mockler (Not present: Josh Dickson, Kevin Waters, Pete Marucci)
- MaineDOT - Mary Ann Hayes, Stacie Haskell, Tim LeSiege, Nathan Moulton
- McFarland Johnson – Matt O’Brien, Scott LeCount, Brady Brewster, Rick Lucas, Erik Hartley
- FAA – Ralph Nicosia-Rusin, Sean Tiney

Mary Ann Hayes from MaineDOT opened the meeting and the MaineDOT/McFarland Johnson Project Team re-introduced themselves to everyone in attendance. PAC members followed by re-introducing themselves. Mary Ann continued introductory remarks by providing a general overview of activities with special mention of stakeholder outreach efforts.

Matt O’Brien opened the presentation by McFarland Johnson. A brief mention of agenda topics was covered with the desire of the meeting to focus on a discussion with PAC members regarding the themes that arose from airport surveys, and functions of system airports by NPIAS role. Scott LeCount described a project flow graphic from the presentation. The project flow illustrates how responses to airport manager surveys are indicating unique use characteristics of SASP airports. Some of these characteristics can be aggregated into common themes that are appearing across system airports. These use characteristics represent the unique value of the airports to their market area and system. They will be used through remaining work efforts for the plan, including forecasts, role definitions, and identifying gaps or redundancies in services.

Drive time maps were depicted for each FAA asset category. In addition to maps for each asset category, it was recommended that maps indicating functions should also be prepared. Sean Collins commented that for each classification should not necessarily indicated a prioritization level for a given airport.

Discussing Basic airports, the access they provide to rural areas was emphasized in what role these airports play for their communities. It was recommended that airport function vs. airport role should be defined and that each should relate to the goals. The project team indicated that a ranked methodology was not utilized to classify airports. Millinocket shared they favored the ideas of a scored ranking as it provides a quantitative comparison between airport functions. Others mentioned a scoring methodology may result in many rural airports scoring the same given the same level of services offered. It was suggested that airports with similar functions should be invested in uniformly. If airports were to be numerically ranked, this would result in winners and losers which could generate political backlash which should be prepared for.

Ralph Nicosia-Rusin added that airport functions indicate an airport’s capabilities and mission of the airport for its community. This leads to an understanding of what facility improvements may be needed. ASSET categories usually track with the pairing of function and missions. The state system analysis can be used to identify where there may be sufficient state or local need to expand an airport’s function (capability) beyond what is typical for its ASSET category. Conversely, there may be overlapping service areas which reveal where an airport needs less capability than if it was more isolated from other airports.

Allison Navia shared that functions could capture the following:

1. Destination and Special Functions
2. Emergency Preparedness
3. Commercial, Industrial, and Economic Activities
4. Aeronautical Functions and Services (captures GA and Commercial)
5. Community Access

Discussing Commercial Service airports, it was recommended that they could be differentiated by fleet mix. For example, Portland offers a range of service on different air frames, while EAS airports tend to offer turboprop service (with the exception of PQI which offers EAS service on jet aircraft with a major air carrier). For the maps indicated commercial service airports, Ralph Nicosia-Rusin added that a layer showing population density would be helpful. Allison Navia concurred stating that population density helps to show coverage, and would benefit the maps for all asset categories, not just commercial service. She added that this may help show that the system is not missing service in very rural areas due to low levels of population despite lack of airports nearby. Allison continued that MaineDOT needs relevant, up to date information on each airport to justify projects and funding airport can each utilize the info at a local level as well. Obtaining, organizing, and presenting all of that relevant information is valuable and the project team is on the right track. Regarding the list of functions, the FAA framework should be incorporated, but modified to fit to Maine. A detailed inventory should be provided; then goals and gaps should be shown. To assist in illustrating the critical role of airports for the tourism economy, Ralph Nicosia-Rusin shared that commercial service airports in Maine serve a higher proportion of non-residents than residents in the summer months. Paul Bradbury brought up the lack of interconnectivity between Maine airports from an air carrier perspective. He indicated that Maine is a large rural state and the SASP should take a position that nurtures smaller vs. legacy carriers that are better positioned for service to locations other than PWM and BGR, such as support for a USDOT Small Community Air Service Development Program (SCASDP) grant might be of benefit.

Regarding the State System Plans key message, PAC members stressed the entire system is important. A statement should be made to this effect and should be stood behind.

Mary Ann Hayes mentioned that the results of the EDD Survey shed light that many agencies were not tracking aviation or airport activities at all and could not complete the survey without assistance from airport managers. On a positive note, most agencies felt comfortable with airport management administering most airport development related decisions. Ralph Nicosia-Rusin

added that a lack of interest in aviation by the economic development agencies could be seen that air service is not a problem that comes up in promoting development in a region.

It was shared that MaineDOT needs an updated economic impact report. The following key stakeholders should be interviewed:

- MMG Insurance
- BIW
- Abbot Labs
- Colleges and Universities
- Other local businesses identified by airport managers during interviews.

As the meeting turned to other aviation topics and issues, Steve Levesque noted a desire that the SASP address how the state is providing for the future of aviation, such as UAS. Scott LeCount added that generally speaking the SASP should not take a position that is restrictive to communities and their airports that have found and/or wish to pursue an interests/opportunity for growth. Steve Levesque responded that the SASP should make policy statements that are more permissive in regard to these opportunities. PAC members stated the system plan should be supportive of all types of aviation. Maine’s geographical strengths should be highlighted as the closest US State to Europe, abundant natural resources, and available land. Spaceports could also be discussed. Ralph Nicosia-Rusin shared that a key issue for a state legislator may be whether there is any evidence that UAS technology will increase or decrease the need for facility improvements at airports. Beyond that, the system plan could provide some discussion points to provide context, but a deep analysis is beyond the current scope. Steve Levesque indicated he would work with MaineDOT to frame up the UAS discussion. Scott LeCount added that

The impact of COVID 19 was discussed briefly at the conclusion of the meeting. Paul Bradbury shared that traffic at PWM is down 88%.

Agenda - Project Advisory Committee (PAC) Meeting #3

Maine State Aviation System Plan (SASP) – Phase I

January 13, 2021 | MaineDOT Offices via ZOOM | 12:00 Noon–3:00 PM

Register in advance for this meeting:

https://mainedot.zoom.us/meeting/register/tJwlduihpzwqHdQJgH1V97Ull7WZ1a_gigXI

Agenda

- Opening Remarks– MaineDOT – (1 Minute)
- Agenda – MJ (1 Minute)
- Activities Update – MJ (10 Minutes)
 - Outreach (2 min)
 - Analysis & Forecast (4 min)
 - User and Regional Nuances (4 min)
- Project Goals and Process – MJ (4 Minutes)
 - Goals (3 min)
 - Process (1 Min)
- System-Level Findings – MJ & PAC Discussion (1.75 Hours)
 - Process (1 min)
 - Facilities & Services Challenges (25 min)
 - Funding Challenges (20 min)
 - Activity Levels and Forecast Outlook (5 min)
 - Sponsor and Local Challenges (10 min)
 - Maintenance Issues and Needs (15 min)
 - Education and Promotion (10 min)
 - Regional Nuances (10 min)
- Direction for Phase II – MJ and PAC Discussion (1 Hour)
 - Goals (1 min)
 - Phase II Approach 1 thru 4 (30 min)
 - Phase II Approach 5 thru 8 (30 min)
- Closeout – MaineDOT (2 Minutes)
 - Thank you (1 min)
 - Timeframe for Phase II (1 min)

Summary Notes - Project Advisory Committee (PAC) Meeting #3

Maine State Aviation System Plan (SASP) – Phase I

Part I - January 13, 2021 | MaineDOT Offices via ZOOM | 12:00 Noon – 3:30PM

Part II - January 19, 2021 | MaineDOT Offices via ZOOM | 11:00AM – 1:00PM

Attendees:

- PAC – Ann Walko, Allison Navia, Evan McDougal, Jeff Campbell, Paul Bradbury, Steve Levesque, Sean Collins, Rob Mockler, Josh Dickson, Ken Carle, Pete Marucci
- MaineDOT - Mary Ann Hayes, Stacie Haskell, Tim LeSieve
- McFarland Johnson – Matt O’Brien, Scott LeCount
- FAA – Ralph Nicosia-Rusin

Note: The following information was provided to PAC Members in advance of the meeting:

- *Agenda & Phase I Findings Summary (attached)*
- *Draft Chapters from Phase I Summary Report*

Mary Ann Hayes from MaineDOT opened the meeting with a few brief introductory remarks and handed the meeting over to Matt O’Brien from McFarland Johnson.

Matt O’Brien began a presentation with a brief introduction of the Agenda for today’s meeting, which briefly reviewed the Project Team’s activities to date such as: the extensive stakeholder outreach efforts; technical analysis and forecasting of future activity levels; and preparation of draft chapters for the Phase I Summary Report. M. O’Brien stated that the primary item on the Agenda for the meeting is to thoroughly discuss and confirm with the PAC system-level findings for the Phase I effort and the approach for Phase II.

M. O’Brien provided a review of the outreach efforts that reached 300+/- stakeholders including focused group meetings with state agencies, outdoor recreation users, Deblois flight strip, and Washington County airports. The effort created a contact list of over 100 users and phone calls to 70 users and site visits to each airport in the system for visual inspection of facilities and condition.

Scott LeCount provided an overview of the analysis and forecast efforts to date, summarizing a few of the top findings, which included:

- 17 airports (nearly 50% of system airports) have aging master plans (5-10 years old) or outdated (10+ years old)
- 20 airports (57% of system airports) with either aging AWOS II systems or insufficient data.
- Forecasting activity at SASP airports is uncertain. Some may recover post-pandemic and others may continue to decline. TFMSC counts at some SASP airports could indicate

recovery at airports experiencing growth in Group II aircraft operations; however, stringent application of “regular use” threshold could be an obstacle to recovery.

S. LeCount concluded introductory topics of the presentation by briefly revisiting project goals for Phase I, the process followed for Phase I, and where the project is now in that process.

M. O’Brien began the presentation of System-Level Findings by describing the process for today’s discussion was to answer the following questions:

- 1.) Is the finding significant to the statewide system and MaineDOT (or should it be)?
- 2.) What is MaineDOT’s role in addressing the issue?
- 3.) What should the timing or priority be for addressing the issue?

The Phase I Findings to be discussed are:

- Facilities & Services Challenges
- Funding Challenges
- Activity Levels & Forecast Outlook
- Sponsor Challenges & Local Challenges
- Maintenance Issues & Needs
- Education & Promotion
- Regional Nuances

The PAC discussion was led by M. O’Brien and S. LeCount and resulted in the following determinations by the PAC members:

- **Facilities & Services Finding:** Overall, the PAC agreed to the following regarding facilities and services at SASP airports. Details pertaining to components of system airports follow the table. Due to the considerable overlap in Phase I Findings, the PAC discussed the Facility and Services Issues at length (1.5 hours), dovetailing with other Findings as noted.

Item	Concurrence by PAC		
	Low	Medium	High
Significance	←————— <input checked="" type="checkbox"/> —————→		
	Lead	Partner	Support
MaineDOT/State		<input checked="" type="checkbox"/>	
FAA		<input checked="" type="checkbox"/>	
Sponsor	<input checked="" type="checkbox"/>		
Other			
	Near Term	Mid-Term	Long Term
Timing/Priority	<input checked="" type="checkbox"/>		

Notes from Discussion:

- M. O’Brien reviewed examples provided in the findings document (AWOS systems, ground transportation, hangar storage, approach minimums, fuel availability, terminal facilities) and asked the PAC to discuss significance, roles, and priority. He stated that SASP airports are expected or under demand to be almost “everything to everybody”, and asked if the MaineDOT/State should develop or have a say in establishing minimum design standards by type of airport? This could result in or help establish airports that “specialize” in serving certain functions or user groups (e.g., business/corporate jets activity).
- Pavements: M. O’Brien noted the large need for pavement improvement projects (approximately \$233 million over 5 years) as published in the DOT’s pavement management study and funding limits posed by existing FAA entitlement monies approximately \$6 million annually demonstrating need for discretionary funding.
 - Paul Bradbury weighed in that having airport pavements in good condition is the most critical infrastructure element to be maintained and is the most capital-intense. Tim LeSiege mentioned that MaineDOT has done well to keep SASP airport primary pavements (runways) in good condition. Taxiways and aprons are lower priority and deferred maintenance on those items due to needs of primary pavements is an issue.
 - Stacie Haskell stated that a previous maintenance project was made possible by combining entitlement funds from multiple airports for one large project. This option presents opportunities to direct money toward projects at certain airports that may be a higher priority due to condition or opportunity. However, the buying power of annual entitlement funds (approximately \$150,000 per airport) does not create many opportunities for this annually.
 - The conversation surrounding pavements moved toward maintenance and the following suggestions surfaced:
 - Jeff Campbell suggested investing in equipment that can be shared by multiple airports, perhaps by region, and conduct training to operate (i.e., snow removal equipment or crack-sealing machine, which is not FAA-eligible). Doing so could help overcome deferred maintenance on secondary pavements (taxiways/lanes and aprons).
 - T. LeSiege stated there may be opportunities to combine or time pavement maintenance projects at airports with highway work in the same area of the state to take create and take advantage of efficiencies.
 - Maintenance (crack seal) should be done by Sponsor, crack repair/rehabilitation with AIP funding with FAA/State priority.
 - Ralph Nicosia-Rusin suggested that maintenance issues for Sponsors is difficult and expensive and there is a “basket” of issues that generally includes pavement, approach clearing/obstructions, fuel systems, AWOS equipment among other items.
- ➔ *The PAC Members agreed to the following regarding airport pavements:
Significance: High; MaineDOT/State Role: Partner; Timing/Priority: Near Term.*
- AWOS: Joshua Dickson shared that seven (7) of the 18 existing AWOS systems are fully operational, but seven (7) others are out of service. Some of these were damaged in the last weather event and some have been broken for quite a while. The company that repairs

the sensors takes an excruciatingly long time to turn work around. Jackman's ceilometer, for example, has been 11 months in California waiting to be repaired. These things are past their expiration date and need to be replaced. J. Dickson continued:

- A summary of existing systems (18): 12 are at runways: 10 are at NPIAS airports, two (2) are island airstrips. One (1) at an island helispot (Monhegan, no room for a runway) and five (5) are at hospitals. There are IAP's associated with island and hospital AWOS.
- At a minimum, we need to replace the 10 at the airports and potentially those at island runways. The other AWOS all support FAA commissioned instrument approach procedures. As stated on the call today, we need to make this a priority.
- Evan McDougal suggested that not all Airports need AWOS 3. AWOS A-V or alternatives like "All Weather" should work for basic airports within 20-30 miles of an AWOS 3 at another field.
- T. LeSiege noted that the cost/benefit analysis for an AWOS 3 system at a general aviation airport is difficult to show benefit but Maine likely qualifies under most current FAA guidance.
- R. Nicosia-Rusin from the FAA mentioned that siting of AWOS systems is important, and sponsor or state plans for operating and maintaining the systems.
- ➔ *The PAC Members agreed to the following regarding AWOS systems:
Significance: High; MaineDOT/State Role: Lead; Timing/Priority: Near Term.*
- Ground Transportation: Ground transportation at SASP airports is a statewide issue, often referred to as bridging "the last mile" transportation gap for people to reach their local destination upon arrival at a SASP airport. The discussion noted:
 - Bethel Airport in cooperation with Maine Aeronautics Association (MAA) is providing bicycles. (After the meeting it was found that bicycles are also available at Brunswick Executive, Pittsfield Municipal, Chase Memorial-Dover-Foxcroft, Sugarloaf Regional, and Lincoln Regional (TBD).
 - T. LeSiege suggested one option might be to make access to state surplus fleet vehicles via current auction process.
 - E. McDougal proposed that Last Mile transportation should be sponsor responsibility.
 - ➔ *The PAC Members agreed to the following regarding ground transportation:
Significance: Low; MaineDOT/State Role: Support; Timing/Priority: Low.*
- Hangars: The conversation around hangars at SASP airports began with a question by Sean Collins regarding what percentage of existing hangars are being used and what types of hangars are needed? M. O'Brien responded that the airport manager survey and Phase I did not seek to answer the question of hangar use or need at that level of detail.
 - S. Collins added that AOPA would like to see a MaineDOT/State program to help airports become financially self-sufficient, a part of which might include a low interest loan program for Sponsors to self-finance hangar construction.
 - Steve Levesque suggested that perhaps MaineDOT could fund the loan program via an increase to existing or by issuing a new bond. The loan program could create a "pool" of available funding that Sponsors could apply for.

- Allison Navia stated that most hangar construction projects have a different “business plan” for how they are funded, by whom they are funded, with consideration to who the user is and where rent revenues accrue.
- A. Navia continued that at Sanford Seacoast Regional they have established certain property on and near the airport within a tax increment financing (TIF) districts to fund certain development. S. Levesque concurred with the opportunity presented by the use of TIF districts at SASP airports.
- E. McDougal stated that hangars should be funded privately unless they can be funded by Sponsors as a means to generate revenue to the Sponsor.
- ➔ *The PAC Members agreed to the following regarding hangars:
Significance: Medium; MaineDOT/State Role: Partner (Sponsor Lead); Timing/Priority: Mid-Term.*
- Approach Minimums: M. O’Brien moved to as the PAC about the issue of approach minimums at SASP airports.
 - T. LeSiege stated that the issue with approaches is often an obstruction issue, where Sponsors do not continue to clear approaches after the initial AIP-funded obstruction removal project. J. Dickson concurred
 - The sentiment from the PAC was that that approaches are really an airport-by-airport issue versus a statewide issue.
 - E. McDougal stated that approach minimums are the responsibility of the airport Sponsor and FAA.
 - ➔ *The PAC Members agreed to the following regarding approach minimums:
Significance: Low; MaineDOT/State Role: Support (Sponsor Lead); Timing/Priority: Long-Term.*
- Fueling: M. O’Brien continued the presentation by asking the PAC about the significance of fueling availability statewide. He mentioned that one example of fueling issue is the lack of fuel at SASP airports in the southern and central regions of the state for floatplane operators. Currently they rely on privately-owned seaplane bases at Lucky Landing (Pushaw Lake) and Twitchell Airport and Seaplane Base. The long-term operation of these privately-owned facilities is at times uncertain.
 - S. Collins noted that his suggestion for a low-cost loan program could apply to helping sponsors attend to deferred maintenance for fueling systems.
 - A. Navia noted that maintaining fuel systems is expensive and extremely difficult to build savings to maintain these via fuel flowage fees, offering examples such as replacing card readers that cost \$40,000 recently and semi-annual inspections that are around \$9,000.
 - E. McDougal added that the first installation of fuel systems at SASP airports should be funded by FAA via AIP, with maintenance and repairs the responsibility of the Sponsor. Also, fuel access for non-amphib seaplanes may be desirable but seems too tightly focused on an extremely limited and seasonal user and clientele.
 - ➔ *The PAC Members agreed to the following regarding fueling systems:
Significance: Medium; MaineDOT/State Role: Support; Timing/Priority: Long-Term.*
- Terminal: The conversation continued by addressing the terminal needs at SASP airports.

- T. LeSiege stated that the SASP airports without terminals are: Oxford County Regional, Stephen A. Bean Municipal, Newton Field, and Sugarloaf Regional.
- J. Dickson responded that an existing facility at Stephen A. Bean serves as a terminal because it is accessible via keypad and is satisfactory at this time for their needs (LifeFlight).
- T. LeSiege added that Greenville Municipal self-funded improvements to their terminal.
- S. Levesque noted that terminals are necessary at locations where Federal Inspection Service/Customs and Border Protection (FIS/CBP) are needed.
- Terminal construction should be sponsor unless AIP eligible for commercial service.
- ➔ The PAC Members agreed to the following regarding terminal facilities:
Significance: Low; MaineDOT/State Role: Support; Timing/Priority: Long Term.
- **Design Standards & “Specialty” Airports:** The presentation moved to consider the appropriateness of different design standards for SASP airports based on type of functions they serve, NPIAS role, and/or user base.
 - S. LeCount asked the PAC members if MaineDOT/State should make determinations about what functions each SASP airport serves, then also establish design standards or minimum requirements that SASP airports providing such particular functions should provide? Should the MaineDOT/State identify where such investments in SASP airports should occur based upon strategic opportunities and needs?
 - A. Navia suggested that merit-based criteria might be appropriate to determine which SASP airports “qualify” for discretionary state funding.
 - J. Campbell noted that at his airport (Millinocket Municipal) an extension of the primary runway to 5,500 feet would help secure jets currently using the airport.
 - E. McDougal provided the following comments via email after the meeting:
 - Maybe a focused group master planning effort targeting just those airports with crosswind runways to attempt to justify them or decide whether the Sponsor will need to maintain them in the future.
 - FAA's criteria will always get more challenging to meet. Hard decisions will need to be made by Sponsors with State input.
 - Financial constraints have to be based on some criteria and since FAA is funding the most it makes sense that their criteria is the rule we follow.
- ➔ *The PAC Members agreed to the following regarding design standards by function:
Significance: Low; MaineDOT/State Role: Support; Timing/Priority: Long Term.*
- **Funding Challenges:** Overall, the PAC agreed to the following regarding funding challenges.

Item	Concurrence by PAC		
	Low	Medium	High
Significance	←—————→ <input checked="" type="checkbox"/>		
	Lead	Partner	Support
MaineDOT/State	<input checked="" type="checkbox"/>		
FAA		<input checked="" type="checkbox"/>	

Item	Concurrence by PAC		
Sponsor		<input checked="" type="checkbox"/>	
Other			
	<u>Near Term</u>	<u>Mid-Term</u>	<u>Long Term</u>
Timing/Priority		<input checked="" type="checkbox"/>	

Notes from Discussion: Generally, the funding discussion focused on the “gap” in funding for projects that are not eligible for AIP funding. There was some discussion regarding the potential sources of funding such as tax increases or bond issues.

- R. Nicosia-Rusin offered that seeking a new funding source is at times a first reaction, or “easy” answer in comparison to making hard choices about how to more closely scrutinize the use of existing funding that is available. He added that the real challenge is understanding the real priorities and focusing on managing and maintaining existing infrastructure and facilities.
- J. Campbell stated that “yes”, a new pool or source of funding is necessary because managing and maintaining existing (as stated above) is extremely difficult.
- T. LeSiege suggested that any “new pool” of money or funding would still be limited and would result in competition among Sponsors for these funds. He suggested that some group or body be involved in “voting” or otherwise selecting which projects should receive money and offered groups like the Maine Aeronautical Advisory Board, the PAC, or the MaineDOT.
- E. McDougal provided the following comments via email after the meeting:
 - Initial Clearing Project needs to leave ground in bush-hog-able mowing condition. Permits as needed, stumps ground and Rocks removed or buried. More expensive initially but will Save the Sponsor immensely over time.
 - FAA/State/Sponsor will have to make hard decisions based on location, alternative landing sites or other access options. Not all airports can be funded equally.
 - Land and building leases need to be structured so that annual payments would pay for the lot every 15 years and a building every 30 years or less.
- **Activity Levels & Forecast Outlook:** Overall, the PAC agreed to the following regarding activity levels and the forecast of future activity at SASP airports.

Item	Concurrence by PAC		
	<u>Low</u>	<u>Medium</u>	<u>High</u>
Significance	← <input checked="" type="checkbox"/> →		
	<u>Lead</u>	<u>Partner</u>	<u>Support</u>
MaineDOT/State			<input checked="" type="checkbox"/>
FAA			<input checked="" type="checkbox"/>
Sponsor	<input checked="" type="checkbox"/>		

Item	Concurrence by PAC		
	<u>Near Term</u>	<u>Mid-Term</u>	<u>Long Term</u>
Other			
Timing/Priority	<input checked="" type="checkbox"/>		

Notes from Discussion: PAC members agreed that MaineDOT’s leadership with their program to provide/install G.A.R.D. systems at SASP airports is the appropriate role for the State.

- T. LeSiege stated that G.A.R.D. Systems are installed at all SASP airports, he receives daily and other regular airport-by-airport and statewide activity reports.
- Mary Ann Hayes stated that MaineDOT will collect and analyze G.A.R.D. data and sees her Division’s role as using such data to educate, promote, and encourage growth and use of the system.
- S. Collins added that general aviation activity is growing nationally, with flight training and light general aviation activity up 22 percent over 2019 levels and this year (2020) being the first increase in true new pilots entering the industry.
- E. McDougal provided the following comments via email after the meeting:
 - The pilot population, population that can afford flying for fun is aging quickly. And Airplanes compete with other hobbies available to retirees. And smaller light sport and other less expensive "hobby" aircraft are less suited for Maine seasonal flying. There is no doubt that A-1 type aircraft don't generate enough revenues to support all but the smallest field.

- **Sponsor & Local Challenges:** Overall, the PAC agreed to the following regarding challenges faced by SASP airport Sponsors and their communities.

Item	Concurrence by PAC		
	<u>Low</u>	<u>Medium</u>	<u>High</u>
Significance	←————— <input checked="" type="checkbox"/> —————→		
	<u>Lead</u>	<u>Partner</u>	<u>Support</u>
MaineDOT/State	<input checked="" type="checkbox"/>		
FAA			<input checked="" type="checkbox"/>
Sponsor	<input checked="" type="checkbox"/>		
Other		<input checked="" type="checkbox"/> (ACRP)	
Timing/Priority	<input checked="" type="checkbox"/>		

Notes from Discussion: T. LeSiege stated that MaineDOT has very-recently updated a training guidebook for Sponsors to utilize.

- P. Bradbury added again that a host of airport management and maintenance issues are the pressing obstacles that the smaller SASP airport Sponsors face.
- T. LeSiege stated that MaineDOT should continue supporting, advocating for, and sharing information to help Sponsors.
- M. O’Brien asked if MaineDOT/State should require training or implement a MaineDOT/State certification for managers or airports in the system?
- J. Dickson responded that there is no party better positioned than MaineDOT/State to implement training and require certification.
- M. O’Brien suggested that MaineDOT/State is already tasked to do quite a lot and perhaps training/certification could be the purview/responsibility of the Maine Aeronautical Advisory Board.
- S. Haskell added that NASAO offers a lot of guidance and training materials that can be utilized.
- E. McDougal provided the following comment via email after the meeting:
 - ACRP has a lot of guides for small airports. Don't reinvent the wheel. Use them.
- **Maintenance Issues & Needs:** Overall, the PAC agreed to the following regarding maintenance issues and needs of SASP airports.

Item	Concurrence by PAC		
	Low	Medium	High
Significance	←—————→ <input checked="" type="checkbox"/>		
	<u>Lead</u>	<u>Partner</u>	<u>Support</u>
MaineDOT/State		<input checked="" type="checkbox"/>	
FAA			<input checked="" type="checkbox"/>
Sponsor	<input checked="" type="checkbox"/>		
Other			
	<u>Near Term</u>	<u>Mid-Term</u>	<u>Long Term</u>
Timing/Priority		<input checked="" type="checkbox"/>	

Notes from Discussion: M. O’Brien opened the topic of maintenance issues and needs at SASP airports and the conversation touched on issues such as snow removal, deicing challenges, pavement repair, obstructions/vegetation management, airfield lighting, and airfield VISAIIDs.

- The PAC noted that significant attention was given to maintenance issues at the outset of the meeting.
- S. Levesque mentioned that there is just lots of infrastructure, facilities, and equipment to maintain and that SRE doesn’t “hold up” due to heavy use.
- J. Campbell reiterated that MaineDOT does well to help Sponsors in this area.
- Ann Walko added that the MaineDOT’s previous project to accomplish a “group buy” of equipment worked well and it was a good role for DOT to serve in.

- M. O’Brien and S. Haskell discussed that bulk/batch-buying of equipment and services for AIP eligible items is difficult and takes a lot of coordination. Doing so for State funded projects only is the better option.
- S. Levesque noted again that “pooling” of money in such instances could be very beneficial based on criteria that could include Sponsors putting in a local match to such a program that would be part of the criteria to qualify.
- E. McDougal provided the following comment via email after the meeting:
 - Sponsor's issue - most airports are too far apart to share equipment and personnel.
 - Crack seal should be local, crack repair could be a statewide priority system and contract.
 - Possible Statewide rotating contract? Where is the money going to come from?
 - Airport management needs to be local control; the on-call planning and engineering firm should be able to provide management consultation.
- **Education & Promotion:** Overall, the PAC agreed to the following regarding education and promotion of the statewide system.

Item	Concurrence by PAC		
	Low	Medium	High
Significance	←————— <input checked="" type="checkbox"/> —————→		
	Lead	Partner	Support
MaineDOT/State		<input checked="" type="checkbox"/>	
FAA			<input checked="" type="checkbox"/>
Sponsor	<input checked="" type="checkbox"/>		
Other			
	Near Term	Mid-Term	Long Term
Timing/Priority			<input checked="" type="checkbox"/>

Notes from Discussion:

- S. Levesque stated that the State has a very important role but could serve as partner to Sponsors.
- S. Levesque is interested in a statewide marketing initiative to help position the state and SASP airports outward to the world via conferences/tradeshows/exhibitions, but also inward to economic development agencies. He added that perhaps MaineDOT could help post or make known sites on SASP airports that are prime/ready for development.
- T. LeSiege added that he is aware that economic development is in some states a funded full-time position.

- S. LeCount suggested that maybe the solution is for Sponsors to supply MaineDOT with information regarding opportunities and for DOT to push that information out to other state departments charged with economic development role.
- E. McDougal provided the following comment via email after the meeting:
 - Hopefully this report will have shareable success stories from around the state that can be shared with communities and lawmakers to help loosen the ever-tightening available tax revenues.
- **Regional Nuances:** S. LeCount briefly summarized that the Maine system of airports is very unique – a reflection of each airport’s core user base and region. Therefore, the needs and demands placed on SASP airports vary widely. The intersection of acute conditions or circumstances surrounding airport use includes: airport location, seasonal vs. year-round use, weather conditions, aircraft requirements, and pilot and passenger requirements.

Notes from Discussion:

- PAC members agreed that there was no role or timing relevant to this finding that required a determination by the PAC.

The PAC meeting concluded at 3:30PM with Mary Ann Hayes and PAC members requesting another meeting to finish the conversation. All in attendance agreed a follow-up meeting was needed.

The PAC resumed Meeting #3 on January 19, 2021 at 1:00PM.

Matt O’Brien began the conversation by asking the PAC members if there were any follow-up thoughts that any member wanted to mention, or items/topics they forgot to mention last time that they wanted to bring to the group.

PAC members made no mention of thoughts or topics not addressed at the first meeting.

M. O’Brien asked Scott LeCount to present the Draft approach to Phase II to the PAC.

Phase II Approach

S. LeCount began the presentation of the Draft approach to Phase II of the MaineSASP by describing that the target for the conclusion of Phase I was to identify a list of system issues or findings that represent a compelling state interest and determine MaineDOT/State’s role in addressing those issues. This is the substance of the PAC meeting discussed on January 13 where the group discussed the findings, the significance to the State, roles of the MaineDOT, sponsors, and the FAA in attending to those issues. With the conclusion of last week’s call, the PAC has reached consensus on those items.

S. LeCount stated that the first task for Phase II is to build-out from the action items noted in the Findings Summary document and PAC input into a set of projects and/or initiatives that will represent a statewide capital improvement program (CIP). The statewide CIP will incorporate pavement needs as determined in the statewide pavement management study.

The approach for Phase II then is formulated to accomplish the following goals:

MaineSASP Phase II Goals	
<ul style="list-style-type: none"> Use <i>realistic, fiscally constrained life-cycle analyses</i> to foster the development of right-sized facilities affordable for sponsors and investment partners. <ul style="list-style-type: none"> ➔ “Right-sized” facilities does not necessarily equate to wholesale reductions in projects or funding for SASP airports. 	
<ul style="list-style-type: none"> Recommend <i>strategies to leverage public investments to generate private investments</i> and public policies that support a safe and efficient airport system. <ul style="list-style-type: none"> ➔ This is all about timing and phasing of investments to find and take advantage of local opportunities or find synergies with other state or regional activities 	
<ul style="list-style-type: none"> Develop <i>meaningful and practical metrics to track condition</i>, utilization and performance of the airport system. <ul style="list-style-type: none"> ➔ Metrics for measuring performance and utilization of the system means not just airport activity levels, but also sponsor management and maintenance performance and progress made toward meeting FAA and state standards such as local match for AIP-eligible projects. 	
<ul style="list-style-type: none"> Identify and <i>justify necessary and desirable system management functions</i>, including who should perform them and how they should be financed. <ul style="list-style-type: none"> ➔ This entails ensuring that MaineDOT Bureau of Planning, Aviation Program leadership and staff are properly positioned and outfitted to implement the statewide CIP and other policy directives of the MaineSASP. 	

S. LeCount then moved to summarize Draft Tasks of Phase II as follows:

Task	Detail
1. State Projects & Strategic Solutions (What we need to do)	This is where system-wide initiatives for each finding of State interest (where appropriate) are developed based upon importance, role, timeline/priority.
2. Capital Improvement Program & Costs (How much)	This is the combination of initiatives and projects from SASP airport ACIPs to create a statewide CIP.

<p>3. Economic Impact Analysis & Case Studies (Its value)</p>	<p>This is the preparation of an Economic Impact Study/analysis that quantifies the impact of SASP airports on jobs, income, taxes and economic output for the state. Case studies will be developed to highlight the impact by SASP region or other groupings of airports and select business type or operators.</p>
<p>4. Performance Metrics/Return on Investment (ROI)</p>	<p>This task is to develop life-cycle analysis to aid determination of projects that should be prioritized for state funding, and metrics to track condition, utilization, and performance of system, such as merit-based criteria for Sponsors.</p>
<p>5. Implementation Plan (Timing and Priority) (How/when)</p>	<p>An implementation plan, including the timing and phasing of projects from the statewide CIP over the near, mid-, and long-term periods.</p>
<p>6. Dynamic System Planning Solution (Tracking)</p>	<p>This task involves McFarland Johnson’s proprietary software solution that will be designed to help MaineDOT implementation of the statewide CIP, aid in program performance tracking, and streamline current activities such as grant management, SASP airport CIP management, and could incorporate other tracking metrics.</p>
<p>7. MaineDOT Aviation Programming & Operating Directives (Who)</p>	<p>Identify desirable system management functions that are justified by implementation plan requirements, including who should perform them and how they should be financed.</p>
<p>8. Recommended Aviation Policy Statements (Formal How-To’s?)</p>	<p>Forward-looking recommendations to guide policymaking for MaineDOT Aviation program and aid in building momentum and support across DOT departments and other state and partner agencies.</p>

S. LeCount summarized that Phase II tasks 7 and 8 are about ensuring that MaineDOT Bureau of Planning, Airports and Aviation leadership and staff are positioned well to implement the statewide CIP and any policy recommendations of the final plan.

S. LeCount opened up the meeting to PAC members to discuss the proposed Draft approach to Phase II. The following notes summarize the discussion, by topic.

Economic Impact

- M. O’Brien asked the PAC if Sponsors want economic impact information for their use at the local level or is just statewide results sufficient?
- P. Bradbury responded yes, statewide results are important but Sponsors will want help communicating the value of their airport and making the case to their boards/commissions for investing in their airports.

- S. Collins agreed, and suggested that larger airports such as Portland Jetport, Bangor International, Knox County Regional, Hancock County-Bar Harbor, Sanford Seacoast, and others should have stand-alone results reported.
- It was stated that groupings of smaller airports (i.e., by NPIAS role) or results by region or functional category could be of benefit for small airports.
- J. Campbell agrees to the grouping of smaller airports and results that point to “regional value”
- E. McDougal stated that each airport has a story worth telling and the economic impact study should highlight those stories.
- S. LeCount noted that there is information on these stories in the Airport Manager Surveys that will be in an appendix of the report that can be utilized for the economic impact effort.
- M.A. Hayes asked about highlighting impacts by – for example – tourism at Millinocket Municipal, or sporting camp/outdoor recreation at Princeton Municipal.
- J. Campbell added that his airport (Millinocket) is updating their master plan and will be surveying pilots and residents.
- P. Bradbury asked J. Dickson about how LifeFlight has made the successful case for projects that are not traditionally eligible at some SASP airports. J. Dickson responded that the cost of a human life is a powerful case, or the lost/opportunity cost of LifeFlight intervention in emergency response situations. He recounted a recent story where Princeton Municipal served as the location for an ambulance to rendezvous with LifeFlight’s fixed wing aircraft for people in an auto accident where the airport was essentially an on-demand remote hospital.
- S. Collins suggested that the Economic Impact Study should highlight LifeFlight of Maine.
- T. LeSiege added that airports that are improved to meet emergency response operations needs can then accommodate larger, business aircraft.
- P. Bradbury stated that the team can utilize Portland Jetport’s economic impact numbers and likely those from Bangor International.

Performance Metrics

- M.A. Hayes asked about the success of existing border crossings. Do we know or is there data about the volume of people served?
- S. LeCount asked if any existing FIS/CBP stations are user-fee based. T. LeSiege responded no, but that US CBP has considered or may begin charging certain users.
- P. Bradbury added that Portland Jetport is a port of entry and CBP is seeking user fees to recoup costs.
- M. O’Brien asked the PAC if the group is concerned or interested in where return on investment (ROI) accrues? Does the State need to appreciate ROI in real dollars or is it okay if benefits go to airports/sponsors and their communities?
- Several PAC members agreed that state should not need to appreciate ROI.
- M.O’Brien provided an example where the state participated in a hangar project at Eastern Slope Regional but the benefit of that project in terms of hangar rent, fuel sales, tax value does not accrue to the state.
- S. Collins stated that the State, Towns and Airport are all one, and should be considered as a benefit of the state regarding ROI.

- J. Campbell noted that the ROI for AIP-eligible projects is self-evident given state and local match to the FAA's 90 percent funding participation.
- M.A. Hayes asked about gap projects funded by non-AIP monies, adding that perhaps partners in certain industries have data (i.e. healthcare, outdoor recreation) or perhaps some original research may be necessary.

Implementation Plan

- M. O'Brien stated that based on conversations thus far it appears that Phase II should develop a state priority ranking system.
- M.A. Hayes agreed that a state priority ranking is needed for non-AIP projects.
- T. LeSiege stated that the primary reason AIP-eligible projects do not get done is because sponsors don't have a match or because they haven't been able to do things that the FAA ranks high/requires.
- S. Haskell stated that maybe a state priority ranking system could incorporate justification for the state to participate at a higher, or lower, level than existing five (5) percent match.
- S. Collins asked S. LeCount and M. O'Brien what other states do and S. LeCount stated that there is some research and results performed in Phase I, Task 3 report that covers this.
- J. Campbell asked about the possibility for state funding to help sponsors that simply cannot fund necessary items to meet grant assurances (i.e., obstruction removal, taxiway conditions), which ultimately could affect the system if such maintenance work is not completed.
- P. Bradbury agreed there are instances where sponsors cannot fund the five percent match but it is important to the system. This is a reason for state funding to fill the gap in AIP-eligible projects for the sponsor to make sure certain facilities don't become too degraded.
- S. Haskell mentioned an example where the state funded at a rate higher than five percent.
- T. LeSiege responded that perhaps if the state shoulders a higher percentage for a large project perhaps the sponsor may get a smaller participation on a smaller project.
- J. Campbell stated that these decisions should be made on a case-by-case basis, but sponsors should be able to demonstrate that they are committed to the airport.
- S. LeCount summarized and the PAC agreed that whatever the merit-based criteria are MaineDOT/State should retain some discretion in applying these standards.
- J. Dickson asked a question related to where money comes from for each project in the statewide CIP if they are not AIP-eligible.
- M.A. Hayes responded that the MaineSASP has to make a case for what is needed, and then the DOT might consider if it is bond funded, multi-modal funding, or other state sources.
- M.A. Hayes asked the group if there are items that can be implemented now versus waiting for the final publication of the SASP document and recommendations.
- J. Dickson answered yes, replace aging and failing AWOS equipment.
- M.A. Hayes asked the team to incorporate a description of the situation regarding failing AWOS systems into the Phase I report so that the MaineDOT can begin to implement a solution.

M. O'Brien summarized briefly, the PAC agreed to adjourn the meeting at approximately 1:00PM.

Maine Aeronautical Advisory Board Meetings

Maine Aeronautical Advisory Board

October 9, 2019
1:00 p.m. to 4:00 p.m.
Main Conference Room – MaineDOT Augusta (24 Capitol St.)

AGENDA

- 1:00** **Call to Order and Introductions** – Scott Wardwell
- 1:05** **Review and Accept June 12, 2019 Meeting Minutes**
- 1:10** **PCI Update** – Tim LeSiege
- 1:20** **Statewide System Plan Update** – McFarland Johnson
- 1:50** **Needed Creation of State Airport Capital Infrastructure Program** – Sean Collins
- 2:15** **5010 Update** – Tim LeSiege
- **Trends that need to be addressed**
- 2:25** **G.A.R.D. – Aviation Staff**
- 2:35** **FAA Update** – Ralph Nicosia-Rusin and Sean Tiney
- **FAA Changes in Personnel or Policy**
 - **Project Readiness Process**
 - **Upcoming Deadlines**
 - **Clear Approach Requirements for Federally Obligated Airports**
 - **“Ask the FAA”**
 - **Supplemental Grants**
 - **Rangeley** – Dubois & King
 - **Jackman** – Evan McDougal
- 3:15** **LifeFlight Update** – Josh Dickson
- **Runway Extensions**
 - **Hospital Bankruptcies**
- 3:30** **Other Business**
- **Next Meeting – Date, Location, Agenda**
 - **Airport Photos**
 - **Event updates and announcements**
- 3:45** **Public Comment**
- 4:00** **Adjourn**

Summary Notes – Maine Aviation Advisory Board – October Meeting

Maine State Aviation System Plan (SASP) – Phase I

October 9, 2019 | MaineDOT Headquarters | 1:00PM-3:00PM

ATTENDANCE:

MaineDOT (DOT):

Mary Ann Hayes, Multimodal Planning Division Manager
Stacie Haskell, Aviation Planning and Programming Manager
Tim LeSiege, Aviation Engineer

Federal Aviation (FAA) Administration

Ralph Nicosia-Rusin, Capacity Program Manager (ME Planner)
Sean Tiney, Civil Engineer (ME Engineer)

McFarland Johnson (MJ):

Matt O'Brien, Project Manager
Scott LeCount, Technical Lead, Planner
Brady Brewster, Airport Planner
Laura Canham, New England Airport Planning Manager
Rick Lucas, Senior Planner

Bureau of Planning (which the Multimodal Planning Division / Aeronautics Department is nested under) will be hiring a new director:

- Mary Ann will remain Multimodal Planning Division Manager and handle aviation affairs for the state. New position will allow her to focus more on organizational development and planning oversight rather than administration.

State System Plan Update

- The McFarland Johnson State System Plan Team (the Team) presented to the Advisory Board covering the scope of the project, intended goals, timeline, initial findings, and a preliminary funding sources analysis designed to generate discussion among the Board.
- Front loading the funding sources analysis was explained to have been conducted in this manner to get early leads on potential viable programs or sources of funds that the MJ team should investigate. The Blue-Ribbon Commission on Transportation Funding is meeting this fall, the DOT was hoping to share any meaningful results with that group, if allowed on the strict agenda.
- The MJ Team emphasized the desires of the State and FAA for this to not be a traditional state system plan, but closely align to the following goals:
 1. Understand current and future potential aviation system contributions to meeting societal needs to inform the following question: What compelling public value justifies what degree of state and federal investment toward what end.
 2. Use realistic, fiscally constrained life-cycle analyses to foster the development of right-sized facilities affordable for sponsors and investment partners.

3. Identify and justify necessary and desirable system management functions, including who should perform them and how they should be financed.
 4. Identify trends, gaps opportunities and prioritized recommendations for nurturing key system components, including aviation workforce development.
 5. Develop meaningful and practical metrics to track condition, utilization and performance of the airport system.
 6. Recommend strategies to leverage public investments to generate private investments and public policies that support a safe and efficient airport system.
- Emphasis on “right-sizing” was reiterated by Mary Ann meaning the Team will take a methodical approach to ensuring facility, program, and policy recommendations make fiscal sense and work for the State of Maine.
 - No public comment was received on the State System Plan Presentation. Participants were welcomed to contact the project email or any member of the project team to ask questions or provide commentary on the project.

Other Agenda Items

Proposal of State CIP Program – Sean Collins (AOPA)

- AOPA Eastern Region Representative, MAAB Board Member, and PAC Committee Member for the SSP Sean Collins stated that roughly \$1,000,000 is generated annually in Aviation registration fees.
- About 630,000 of this fund has historically been allocated lump sum to the Augusta State Airport, a State-owned airport in the capital city of Augusta.
- Stressed need for a CIP type discussion to redistribute the million-dollar budget more equitably among airports in the entire system.
- Begs the question of funding source alternatives and/or alternative management structures for Augusta State Airport.

5010 Update – Tim LeSiege (MaineDOT)

- GCR, the former technology contractor for the FAA’s 5010 forms and website is no longer providing services for the FAA.
- FAA is now responsible for access and maintenance to Airport Master Records and they can be located at airports-gis.faa.gov
- Format of the paper copy records will remain the same – just the user interface is changing.

Update on Part 77 and Obstruction Removal (MaineDOT and FAA)

- State recommends clearing all obstructions on 5010’s, however understands that clearing to full Part 77 is not always practical. Strongly urges sponsors to clear to these standards on-airport however.
- The FAA indicated that there are currently internal discussions on this topic, and that likely the design/operational (TERPS) surfaces will be the minimum threshold to clear to but should be discussed with the FAA on a case by case basis. Formal guidance will be distributed within the next few months.

GARD System Update – Mary Ann (MaineDOT)

- State to purchase ADSB Gard system for all general aviation airports in the State.

- Pilot program is being synthesized and will be provided to the interim director of Planning for funding approval. Mary Ann indicated the interim director is supportive of the program.
- Maintenance agreements still need to be worked out. State would like to purchase and own, however would like Sponsors to maintain. Language to be determined.
- With Phase II happening next year, Mary Ann is hopeful to have this program up and running to provide operations data for all airports to better validate data in this phase.

FAA Updates

- Sean Tiney (formerly Jacobs – 13 years) is now the new Engineer for Maine at FAA. He is also acting as the UAS SME for the ADO/Region.
- Ralph Nicosia-Rusin will remain the incumbent Maine FAA Planner
- Emphasized EB99 as the best guidance for clear approach requirements and obstruction removal.
- Other regions have instituted an “Obstacle Removal Action Plan” and New England will now be enforcing this
 - ORAP’s can be relatively simple in a spreadsheet format but must identify each obstacle in an alphanumeric format and state a disposition and timeline for removal of each object. Close in obstructions must be highest priority. Essentially the FAA must be convinced there is a plan in place for removing obstructions and not letting them linger on from year to year, plan to plan.
- There is a new contact for Class C airspace determinations (did not receive contact info as cards were handed out at the meeting). This is now coordinating with airports that have geofencing in place to help mitigate drone incursions into protected airspace.
- Any consultant proposing or designing a drone detection system or seeking further information should contact Sean Tiney.

LifeFlight Update -Josh Dickson (LifeFlight)

- 5 rural hospitals in Maine have filed bankruptcy and multiple mergers are in process, limiting access to healthcare in much of Rural Maine. The emphasis of a strong airport system to service these ever-increasingly underserved areas was stressed.
- Mary Ann Hayes indicated the MJ Team would be conducting a Washington County Update that would look at some of these issues including the following:
 - Capacity of Sponsors in the Region
 - Accessibility to Healthcare

Closing Discussion

- The PAC members for the SSP were introduced (present and non-present) and thanked for their service and assistance.
- Next meeting scheduled March 11th, 2019 at 1:00 p.m. – 4:00 p.m. in Augusta.
- One of the PAC members asked what their schedule would be. MJ responded that they would coordinate with MaineDOT and the PAC to provide a schedule.

Maine Aeronautical Advisory Board

March 11, 2020
1:00 p.m. to 4:00 p.m.
Main Conference Room – MaineDOT Augusta (24 Capitol St.)

Remote Access:

Information to be distributed later

AGENDA

- 1:00** **Call to Order and Introductions** – Scott Wardwell
- 1:05** **Review and Accept October 9, 2019 Meeting Minutes**
- 1:10** **Maine Flight Standards District Office** – David Swanson
- 2:30** **Intra-State Air Service** – Andrew Bonney, Cape Air
- 3:00** **Statewide System Plan Update** – McFarland Johnson
- 3:10** **G.A.R.D.** – Aviation Staff
- 3:15** **FAA Update** – Ralph Nicosia-Rusin
- **Earlier Grant Awards**
 - **Implications for Project Formulation Schedules**
 - **FAA Initiative to Review Runway Classifications and Criteria for Crosswinds**
- 3:30** **Other Business**
- **Next Meeting – Date, Location, Agenda (June 10th or June 24th?)**
 - **Nominations/Terms Expiring**
 - **Event updates and announcements**
- 3:50** **Public Comment**
- 4:00** **Adjourn**

Summary Notes – Maine Aeronautical Advisory Board – March Meeting

Maine State Aviation System Plan (SASP) – Phase I

March 11, 2020 | MaineDOT Headquarters via ZOOM | 1:00PM-4:00PM

Scott Wardwell called the meeting to order at 1:02 p.m. Board members and MaineDOT aviation staff introduced themselves, followed by all others in attendance.

Board Members Present:

Scott Wardwell, Presque Isle International Airport
Allison Navia, Sanford Seacoast Regional Airport
Kenneth Ortman, Belfast Municipal Airport
Rick Lanman, Auburn – Lewiston Municipal Airport
Evan McDougal, Hoyle, Tanner & Associates, Inc.
Lisa Reece, Maine Aeronautics Association
Josh Dickson, LifeFlight of Maine
Caleb Curtis, Curtis Air
Guy Rouelle, DuBois & King (by phone)

Board Members Absent:

Marty McMahon, Brunswick Executive Airport
Sean Collins, Aircraft Owners & Pilots Association
Ervin Deck, Stantec Consulting Services, Inc.

Other Attendees:

Jennifer Brickett, MaineDOT
Mary Ann Hayes, MaineDOT
Stacie Haskell, MaineDOT, clerk
Tim LeSiege, MaineDOT
Ralph Nicosia-Rusin, FAA
David Swanson, FAA, FSDO
Fred Cahn, FAA, FSDO
Andrew Bonney, Cape Air
Rick Tetrev, Wiscasset Municipal Airport
Matt O'Brian, McFarland Johnson
Ron DeFilippo, Eastport Municipal Airport
Kevin Waters, Penobscot Island Air
Pete Donaher, Biddeford Municipal Airport
Rick Laverriere, Biddeford Municipal Airport
Jacklyn Marks, Gale Associates
Jeremy Shaw, Knox County Regional Airport
Parker Montano, Pine Tree Helicopters
Barry Brown, Portland International Jetport

Shane McDougall, Aviest Engineering
Tony Caruso, Bangor International Airport (by phone)
Scott LeCount, McFarland Johnson (by phone)
Greg Jolda, University of Maine (by phone)
Kate Trapani, Stantec Consulting Services (by phone)

Review and Accept October 9, 2019 Meeting Minutes

Kenn motion to accept. Allison second. The minutes were accepted 6-0-2 (Lanman and Rouelle abstaining).

Maine Flight Standards District Office – David Swanson

Manager of field office in Portland, began in July. Spent first 6 months understanding where the office was with regards to staffing and certificate management. He has been out meeting operators. Some items that came up, increasing communication, collaboration, what is the perception of FSDO. Based upon that information is how he pulled together his presentation. Where are we coming from, we have a great interest in the business of aviation. If you are successful, we are successful. Everybody is connected.

See Portland Maine FSDO Presentation

Question: Can you do operator training via GoToMeeting or do they have to come in the office for web ops?

Answer: We like bringing them in because the inspector doing the training is more comfortable bringing them in but definitely can absolutely do via GoToMeeting. The recent Coronavirus could change this.

Question: What is your background and are you rated?

Answer: I am. Operations inspector in the Boston FSDO, Bachelor's Degree in Chemical Engineering, went in the Air Force flew active duty for 8 years and then in the Air National Guard for another 20 years, joined FAA 2008, came in through Boston FSDO, worked in QMS, NextGen, AEG, and now in Portland.

Question: How did you address backlog when you came in?

Answer: Had huge backlog of work when first came in, we did not have staff to support the operators. We have done some hiring, we now have 5 operations inspectors. 2 more in the cue. When you are short staffed you need to reach out to other offices for help. We did. Not a good long-term solution, so we offered up to all those in the office to work as much overtime as they want. The backlog has gone way down. The office used to be 100% paper. Converted it all to electronic. Backlog coming down, getting a better handle on priorities, still hiring and still offering overtime. The work never stops coming in.

Question: As an airport operator I have issue with people issuing NOTAM's and checking NOTAM's and following the NOTAM's. For example, the Runway is NOTAMED closed and someone lands. Some people don't know what the NOTAM means or they just ignore them. At untowered airports it seems to be a significant issue.

Is this a nationwide problem? Is there something being done to encourage the aviation community to check them?

Answer: Yes, this has even happened at JFK. John Wood would work on this. If this is something I need to take back to John I can and have him work on this. There was a period when this was occurring frequently and we had a lot of outreach on it.

Question: We have a unique problem, when turning lights on at Presque Isle, lights come on in Caribou. On three (3) separate occasions we have had air carriers that land at Caribou instead of Presque Isle, Runway numbers are the same and Unicom frequencies are the same. This has not been recent, before I started. I want Presque Isle Unicom frequency changed. I have been told that it is safer for them to be the same. Is this true? Can this be changed? Is there someone from your office that can come speak?

Answer: I thought this had been resolved, I will look into it. I will look up and see where we left this and get back to you. We can continue the conversation if you like.

Intra-State Air Service – Andrew Bonney, Cape Air

Andrew Bonney, the Senior Vice President of Planning at Cape Air, provided an overview of Cape Air and the commuter airline industry as a whole. He then discussed intra-state air service, noting that the sector has declined over the last 50 years due to increasing costs and competition from surface transportation (principally the automobile). Commuter air service, like that which would be appropriate for intra-Maine flights, generates significant public benefits for economic development and tourism, however on a per-seat-mile basis commuter air service is disproportionately expensive. So, sustainable intra-state air service must “solve an acute transportation problem” for a population or entity that has the financial wherewithal to pay for it, and there must be a lack of transportation substitutability.

Mr. Bonney also provided a speculative primer on the future of regional air transportation, with key points including:

- 50-seat regional jets will continue to be flown
- Cape Air’s new Tecnam Traveller 9-seat twin-engine aircraft will set the bar for commuter aircraft
- Electric aircraft will revolutionize short-haul air transportation with low costs, especially for intra-state service.

Statewide System Plan Update – McFarland Johnson

86% return on airport manager surveys. Only need 5 more.

Once surveys are back we will be meeting with the PAC again.

Bethel, Brunswick, Pittsfield all have bicycles and soon Dover-Foxcroft will.

See MaineSASP – Update for MAAB 3-11-2020 Presentation

G.A.R.D. – Aviation Staff & Ron Cote, Invisible Intelligence

Good to go for MaineDOT following MAAB recommendation of 2018 to offer reimbursement to all airports receiving federal/state AIP assistance and expect that they participate. Bad news is we lost a year of data collection. Good news is GARD program

is much improved over last year. All new equipment will be provided. Existing equipment purchased under the earlier agreement may be repurposed by the sponsor. Ron Cote gave a presentation of the new features of GARD, which were well received.

FAA Update – Ralph Nicosia-Rusin

Earlier Grant Awards

Grant process may be moved to sometime in early April. If 5010 shows you don't have 20:1 we need to address that

Implications for Project Formulation Schedules

FAA Initiative to Review Runway Classifications and Criteria for Crosswinds

See Presentations:

Preparing for FY2021 Grants

Crosswind Runways Applying AC 150/5000-17

MAAB Minutes (Draft) March 11, 2020 Page 4 of 4

Other Business

Next Meeting – Date, Location, Agenda

The next meeting, the annual MANDATORY in-person attendance meeting, will be June 10, 2020 here at MaineDOT Headquarters in the Main Conference Room from 1:00 p.m. to 4:00 p.m.

Maine Aeronautical Advisory Board

June 10, 2020
1:00 p.m. to 4:00 p.m.
Zoom Meeting

AGENDA

- 1:00 Call to Order and Introductions** – Scott Wardwell
- 1:05 Review and Accept Meeting Minutes of March 11 and May 20, 2020**
- 1:10 Statewide System Plan Update** – McFarland Johnson
- 1:25 Charting Privately Owned/Private Use Airstrips** – Sean Collins, AOPA
- 1:35 FAA Update** – Ralph Nicosia-Rusin and Sean Tiney
- 2:05 G.A.R.D. Update** – Aviation Staff
- 2:10 Customs and Border Patrol – Potential Impacts to Maine Airports** – Aviation Staff
- 2:20 State Aviation Program Budget Briefing** – Josh Dickson, LifeFlight and Aviation Staff
- 2:30 Objectives for the Coming Year**
- Snow removal training – Guy Rouelle
 - Best practice manual – Kenn Ortmann
 - Other...
- 3:10 Other Business**
- Next Meeting – Date, Location, Agenda (Sept. 23rd or 30th? Oct. 7th, 14th or 28th?)
 - Board Nominations (2-year term effective July 1)
 - Election of Officers (1-year term effective July 1)
 - Event updates and announcements
- 3:40 Public Comment**
- 4:00 Adjourn**

Summary Notes – Maine Aeronautical Advisory Board – June Meeting

Maine State Aviation System Plan (SASP) – Phase I

June 10, 2020 | MaineDOT Headquarters via ZOOM | 1:00PM-4:00PM

Following Zoom housekeeping information from MaineDOT staff, Scott Wardwell called the meeting to order at 1:03 p.m.

Roll Call and Establishment of Quorum:

Stacie called the roll and declared a quorum with all members present.

Board Members Present:

Scott Wardwell, Presque Isle International Airport
Kenneth Ortmann, Belfast Municipal Airport
Rick Lanman, Auburn – Lewiston Municipal Airport
Evan McDougal, MCD Consulting, LLC
Lisa Reece, Maine Aeronautics Association
Josh Dickson, LifeFlight of Maine
Caleb Curtis, Curtis Air
Guy Rouelle, DuBois & King
Marty McMahon, U.S. Navy
Sean Collins, Aircraft Owners & Pilots Association
Allison Navia, Sanford Seacoast Regional Airport

Board Members Absent:

None

Other Attendees:

Mary Ann Hayes, MaineDOT
Stacie Haskell, MaineDOT, clerk
Tim LeSiege, MaineDOT
Nate Moulton, MaineDOT
Jen Brickett, MaineDOT
Tom Reinauer, MaineDOT
Ralph Nicosia-Rusin, FAA
Sean Tiney, FAA
Matt O'Brian, McFarland Johnson
Paul Bradbury, Portland International Jetport
David Cullinan, Eastern Slope Regional Airport
David Chamberlain, Jacobs Engineering
Brittany Davies, National Business Aviation Association
Kat Garrett, HNTB
Jeremy Shaw, Knox County Regional Airport

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Tom Winsor, Oxford County Regional Airport
Jacklyn Marks, Gale Associates
Heath Marsden, Jacobs Engineering
Pete Donaher, Biddeford Municipal Airport
Richard Dymont, Airport Planning & Management, LLC
Ronald DeFilippo, Eastport
Matthew Derosier, Northern Aroostook Regional Airport
Jean Mongillo, Hoyle, Tanner & Associates, Inc.
Randy Marshall, Robert LaFleur Airport

Review and Accept Meeting Minutes of March 11 and May 20, 2020

Kenn moved to accept as presented. Marty seconded. The minutes were accepted 11-0.

Statewide System Plan Update – McFarland Johnson

Completed surveys in February and we have been pulling the information out and want to share some of the things we have done so far. One of first things we have done is go to Public Advisory Committee (PAC) and discussed how to take the surveys from the paper and incorporate into the system plan. We decided to use the FAA asset report, table figure 1. What this does is compare each airport and the function it provides to the state. The most important value of each airport based on service it provides. When we visit these airports, we want to know how these airports provide this service and ask them to provide examples of how this is happening. We will be contacting airports over phone soon and we will start pulling together a preliminary informational profile of each airport. From that we will be able to say, here is our understanding of your airport, are there other functions that we don't have listed? If this list is not inclusive of your functions provided by your airport, let us know if there is a niche market that you service in your area. If the airport can provide detailed examples, the anecdotal data will help support the value when you get down to the nitty gritty detail.

Just because you report that you have this function, how important is this function to your airport? Do you provide the majority of the time or is it just a minor service? How do stakeholders feel about your functions? Do you need more functions? Do they not use your functions? This information will provide an understanding of how each airport is serving the State of Maine. Our ultimate goal is to take that survey and develop a profile of the airport and then start calling them up and getting examples of how they fit into this function chart. We can't stress enough that it is important that we get key stakeholders, people who know the nitty gritty details of the airport, to provide anecdotal details of how the airport is serving that community. We are trying to find out is who uses these airports and which functions are important to them.

Of the themes that we received from the surveys, we took a comparison between airport managers and airport stakeholders. We saw that they were looking at the same system but had much different views. Snow removal is the #1 challenge of airport managers

when it comes to maintenance at their facility. Managers provided examples to demonstrate that they need more funding for labor or equipment. In the area of facility development, an overwhelming 25% of managers stated that hangars were the #1 need of airports. We will get a better understanding of hangar requirements when we do the interviews and site visits at the airports. What do you mean when you say you need more hangars? It sounds simple and straightforward but when we compare what the stakeholders were saying they don't mention the need for more hangars, so why do managers say they need more hangars – we want to know more. The last one was interesting, we asked the airport managers, "how is the service of MaineDOT"? Overwhelming they reported that it is sufficient, 30 out of 36 say MaineDOT services are great. But then there was 6 people that said "no, I could use more services". Of those 6 people, the most frequent comment was that they could use more grant funding. Even though that is a small percentage, it jives with the maintenance challenges of all airports, and it also coincides with what we are hearing from the stakeholders. We asked the stakeholders "what are the pros and cons of the system". Almost all said that airports' greatest strength is access to the state. There is an enormous number of airports, you can fly almost anywhere, it has great natural beauty, and it is great for float planes. There were one or two mentions for a need for hangars from stakeholders, but pretty much all were saying that they need a basic level of service when they get to the airport. That includes Wi-Fi, restrooms, a pilot planning area, and weather reporting.

They mention that each airport has a different level of service, but they just need to know that when they get to a facility, they at least have a basic level of service. Stakeholders mentioned funding. Funding for pavement maintenance, terminals and basic levels of services at some facilities. Stakeholders say we need expanded education outreach for pilots, mechanics, and other aviation workforce. The last one was collaboration between business and government. An example that came up multiple times was that the local municipalities, town councils, or the city councils don't really know much about the airport. They feel there is a need to educate community leaders on the airport so that they are making the right decisions that can help the airport collaborate with local businesses and be an asset for that community.

We also reached out to the regional economic development groups. We asked them throughout the several different regions in Maine, "what are the assets that you see in your region"? The regions don't overlap, so their assets don't overlap. As you go south, they start naming some of the bigger airports. When we ask what the facilities are lacking and what the airports need, you start seeing public transit connectivity. That jives with the discussion of the "last mile", that was the basic level of service that the stakeholders were mentioning. When we get there, we still have to try to get to where we are going. Maybe it is a taxi, maybe its uber, there is definitely a connectivity link that needs to be investigated. They also mentioned improved landside and modernizing the airside facilities.

We heard several comments about improving pavements. We all know that airport managers are dealing with constant asphalt repair. There were some specific examples of local airports investments from local businesses, including business parks and strategic investment plans. They talked about the last mile again, with multimodal connectivity, the cost of fuel, and the lack of air service to the State.

We are still working out the details of the upcoming schedule. Our goal is to start the phone call interviews by end of June. We will iron out the details of these facilities and really figure out what makes the airport function and what its service is to the community. We will be asking the airports to provide contact information for stakeholders, who we call “key informants”. These are people who know firsthand about the functions and/or services that are being conducted at this airport and how it is helping the local communities. Come July we will be starting “key informant” interviews.

After the interviews we will reassess and determine which airports we need to visit. We may not need to meet any airport in person. We may decide that Zoom is good enough, although there is something to be said for driving through the airport and the local community. Visiting the airports gives a better understanding of the types of businesses and infrastructure that they have built there, especially in Phase 2 when we start talking about economic impacts it could be useful. By August we will either be doing more phone or onsite interviews. In September, we will start analysis of data from interviews. We will start preparing for our PAC meeting which will likely occur the last week of October or the first week of November. We are still working that out, but will know more as that comes.

As October rolls in, we will have a lot of the documents produced. By the next Maine Aeronautical Advisory Board meeting in October we should be able to start showing some of the information and maps, and we can share some of the results of what our interviews and site visits divulged. November, after the PAC meeting, we are going to start scoping Phase 2 and realizing we have all this information, we identified the challenges, the gaps, the overlaps, and what do we do about it. That is really what Phase 2 of this report is going to be. Trying to solve the problem now that we know what the system is made of.

Charting Privately Owned/Private Use Airstrips – Sean Collins, AOPA

I just wanted to make everyone aware, the FAA is going through an effort where they are reviewing about 3,000 privately owned airports across the country. In Maine I think we had about 37. After the meeting I will send everyone the list. When you have your airport charted, there is an inherent obligation to keep the FAA informed as to whether your airport is active or not. They sent out letters on January 1st to all airport owners who are not necessarily managers, and they had until the end of June to contact FAA to let them know if airport is still active. At the end of June there will be a second wave of letters going out to whoever is listed as the airport manager, which in some cases may also be

the airport owner and, in some cases, maybe someone different. This is an attempt to confirm if the airport is still active. Typically AOPA does not actively engage on privately owned airport issues, but in this case we certainly feel there is a value to the flying public as emergency landing sites. These are all charted sites, and if they do not provide a response relatively soon to the FAA, then they will be removed from the charts. My purpose on this is to just make everyone aware of that. If you happen to know the owner or manager of any of these airports, I just ask that you reach out to them to let them know that they need to notify the FAA. We have directions on our website on how to go about notifying the FAA.

Question: If they are not charted or do not have a 5010, an airport does not get recognized in an OE/AAA study. Do you know anything about that?

Answer: You would go to the AGIS site and update your information there. If you don't have access to that you can contact Tracy McInnis at the FAA office.

Question: Are these all airports that are charted now or could be potentially charted?

Answer: These are all currently charted, privately owned airports. Sometimes they go abandoned and nobody updates that information and it is really more of a safety concern than anything else, someone trying to land at an airport that is now overgrown with trees. It is just verifying that they are still active.

Question: So we are not looking at ones that are not charted and may want to be or should be?

Answer: No, this is currently existing.

FAA Update – Ralph Nicosia-Rusin and Sean Tiney

Sean – just a couple of quick reminders for people. We are into FY2020 grants pretty heavily, so we are pretty focused on that right now. A reminder as we head into 2021, you should be looking at consultant selection and making sure you are current and whether or not you need to go through the process. If so, you should be starting that as soon as possible. We are going through CIP's right now, should be working on scoping your FY2021 projects as soon as you get through your CIP meeting. We want to get these scoped early this year. This year's goal was for early grants, but things really changed on us with CARES. But we are still pushing to get them out, maybe 2021 will be the year for early grants. We are not late, but not as early as we had hoped. So, let's get started early on your 2021 projects.

Ralph – one of the concerns that comes up is, because of COVID-19, some communities are experiencing a reduction in revenue and that coming up with local share is difficult. So one of the things we will be asking is for, especially with the project readiness form, is for you to identify the date when you will be going and getting the approval for your local share so we can have confidence that you will be able to go ahead especially if you are

requesting the use of discretionary funds. We understand during these times that the airport may not be a priority for the community, and we will work with you to come up with a plan B if we need to. Second issue, especially if you are doing revenue projects, we are getting a lot of questions from headquarters on obstructions and pavement and marking conditions that are listed on your 5010. We understand that this is out of your control, it is based on information from your last airport inspection and that the Part 77 Surfaces are not totally consistent with the required clearing surfaces that our airport design guide provides. This is just a heads up that we need to have that information at our fingertips as we try to forward that information into the grant application process to avoid those last-minute hiccups. We are just trying to work with you to help make the system as predictable in the decision-making process as possible for you. Lastly, internally at FAA, we are going through a categorization of the runway systems and crosswind runways. I have talked about this before, but again if you have a crosswind runway that is an issue, there is a process that we can go through a headquarters review. I can help make an initial determination to see if I think there is sufficient merit that will carry it.

One of the things we have at the FAA is a tool that looks at the ADSB data that is helping us a lot to understand how much runways are being used even at our smaller GA airports. Throughout Maine we are getting a sufficient number of ADSB tracks that help us understand the pattern of use of the airports, we can see where crosswinds really are being used a lot and by what type of aircraft. So, I think there is a lot of good reasons for pilots to keep that ADSB switch on if they have it in their cockpit, especially for search and rescue. But, we are also getting a good benefit out of it for being able to justify the facilities that are being actively used.

Question: One of last meetings you mentioned airports should be cautious because who knows what funding is going to do in the future. I was wondering if you had any grasp of the big picture with the Aviation Trust Fund and the obvious reduce flow of revenue and taxes and how that might impact whether there has been any look at that from the FAA's perspective.

Answer: Unfortunately, all I have right now is the big picture that not much money is going in to the fund compared to historic levels and that presents a problem down the road. What reaction is Congress going to take to that in terms of finding a solution, or whether or not we will continue to have supplemental appropriations out of the general fund, or how much airport development is seen as a critical component while the economy is recovering from the COVID-19, are all issues that we are going to read about in the newspaper.

Question: Once you do a master plan regardless you have to go back out and do consultant selection. True or False.

Answer: True. That is the interpretation that the consultant community has asked us to follow.

Question: So, the consultant that does the master plan doesn't do the work? Is that the point of it?

Answer: No, you just have to go back and say now that I understand the projects that I am going to be pursuing as a basis of this master plan I have to advertise those projects. You could be selecting the same consultant. If the project was already part of the consultant selection before that you can still go ahead, it is just saying that any projects that are newly identified as part of the master plan would require a new consultant selection process.

Question: I also read that we are required to include projects specifically in the Request For Qualifications (RFQ). Is this correct?

Answer: Yes the solicitation needs to list the specific projects. If a project is not included in the solicitation, there are some exceptions that you would need to work on with Sean. You would need to do a new selection just for that project or a new multi-year selection. But you are supposed to identify the projects. You do have the option to select multiple consultants.

Question: I like to have to 2 consultants so if a particular project gets too expensive or too much work for 1 consultant I have a second consultant. Do I have to list out all my projects in the contract for both consultants?

Answer: Yes, in your selection you need to identify who is doing what projects.

Question: Specifically? I can't just give both consultants the same list?

Answer: Correct, you cannot assign all the projects to everybody and then pick and choose after, you need to make that determination at the time of selection.

Ralph: On quick follow up on a question Tim raised about the chartered private airports. The basis for Part 77 evaluation airspace review I think is limited to paved runways that are greater than 3,200 feet. So even some of our NPIAS runways aren't necessarily going to receive OE evaluations. They are sometimes considered, but it is kind of a discretionary or more advisory process when it is not a paved runway over 3,200 feet.

Josh: That is interesting, we have heard some guidance that might be coming down about heliport design that has an instrument approach procedure associated with it having applicability to obstruction clearance in the future.

Ralph: Airspace is not my specialty; Tracy McInnis is the person to contact if you ever have a question about whether or not one of your heliports is properly protected I would contact her.

The meeting adjourned at 3:38 p.m.

Maine Aeronautical Advisory Board

October , 2020
1:00 p.m. to 4:00 p.m.
Zoom Meeting

AGENDA

- 1:00 Call to Order and Introductions** – Scott Wardwell
- 1:05 Review and Accept Meeting Minutes of June 10, 2020**
- 1:10 Snow Removal Training** – Guy Rouelle
- 1:25 Statewide System Plan Update** – McFarland Johnson
- 1:45 MaineDOT Technical Assistance Provision**
- **Best Practice Manual Update** – Kenn Ortmann
 - **Airport Manager Manual Update** – Tim LeSiegé
 - **Field Assistance** – Randy Marshall
- 2:00 FAA Update** – Ralph Nicosia-Rusin and Sean Tiney
- 2:20 Airport Sustainability Initiatives**
- **Sanford** – Allison Navia
 - **Knox County** – Jeremy Shaw
 - **Eastport** – Ron DeFilippo
 - Others/Discussion
- 2:50 Aviation Fuel Tax Report** – Mary Ann Hayes
- 3:20 G.A.R.D. Rollout Plan** – Invisible Intelligence, LLC
- 3:30 Other Business**
- Next Meeting – Date, Location, Agenda (March?)
 - Event updates and announcements
- 3:45 Public Comment**
- 4:00 Adjourn**

Washington County Focus Group Meetings

Summary Notes – State Agency Focus Group

Maine State Aviation System Plan (SASP) – Phase I

March 3, 2020 | MaineDOT Headquarters | 1:00PM-3:00PM

MaineDOT Bureau of Planning invited other State agencies/departments, and the following representatives attended a Focus Group meeting to discuss how their agency/department’s use airport facilities and aviation in the State Aviation System to support their mission: what works, what doesn’t work, issues, and current or future needs.

<u>Agency Invited</u>	<u>Attended</u>
• Maine Forest Service	John Crowley, Chief Ranger Pilot
• Maine State Police	N/A
• Department of Marine Resources	Steve Ingram, Pilot Marine Patrol
• Department of Emergency Medical Service	Sam Hurley, Director
• Department of Economic & Community Dev., Office of Outdoor Recreation	Carolann Ouellette, Director
• Department of Health & Human Services	N/A
• Maine Wing Civil Air Patrol	Lt. Col. Greg Curtis
• U.S. Customs & Border Projection	N/A
• Maine Army National Guard	N/A
• Maine Air National Guard Pratt	Air NG – Col. Ian Gillis & Col. Dave Pratt
• Department of Inland Fisheries & Wildlife Pilot	Jeff Beach, Chief Warden Service

The meeting was called to order at 9:35 AM EST by Mary Ann Hayes, MaineDOT Director of Aviation, who welcomed attendees and introduced the project team (Stacie Haskell and Tim LeSiege, MaineDOT; Ralph Nicosia-Rusin, FAA; Matt O’Brien, McFarland Johnson. Scott LeCount from McFarland Johnson attended via telephone. The following notes are a combination of those recorded by MaineDOT, FAA, and McFarland Johnson project team.

Mary Ann Hayes provided an overview of the purpose for the State Aviation System Plan, which is to serve primarily as a 10-year guide to support MaineDOT capital improvement programming - to document, justify, and prioritize investments. Mary Ann went on summarize the Key Goals for the System Plan, which are to essentially respond to public need and provide value with a “right-sized” airport/aviation system that is efficient, strategic about investments because facilities are expensive to maintain, and leverages private sector investment and builds partnerships for the long term. Goals are listed below:

MaineDOT Key Goals for State Aviation System Plan
1. Understand current and future potential aviation system contributions to meeting expressed societal needs sufficiently to inform the following question: What compelling public value justifies what degree of state and federal investment toward what end?
2. Use realistic, fiscally constrained life-cycle analyses to foster the development of right-sized facilities affordable for sponsors and investment partners.
3. Identify and justify necessary and desirable system management functions, including who should perform them and how they should be financed.
4. Identify trends, gaps, opportunities and prioritized recommendations for nurturing key system components, including aviation workforce development.
5. Develop meaningful and practical metrics to track condition, utilization and performance of the airport system.
6. Recommend strategies to leverage public investments to generate private investments and public policies that support a safe and efficient airport system.

Focus Group participants each provided an overview of their use and interactions with aviation and airports in Maine.

Sam Hurley, Director, Department of Emergency Medical Services

The Department isn't a user, but a regulatory agency for users who transport patients in emergencies and non-emergencies. The Department regulates users such as medical agencies, educators, providers and transport services. Their role is to ensure the safety of patients and providers via compliance standards of procedures, practices, and equipment. They do not regulate aircraft (FAA's responsibility) – but seek to ensure resources being utilized in the state are safe.

Mr. Hurley believes there will likely be a trend upward for air transport because other services don't exist anymore, and Maine surface roadway networks and geography requires long/bumpy trips that are not good for some patients or emergency scenarios. Transports for rural health are an issue. Along with this, LifeFlight (as a primary provider) will become more stressed due to the increase and a workforce shortage.

There was discussion of supplementary services provided by Penobscot Island Air and efforts underway to develop certification for these to be official medical emergency flights. (Ralph Nicosia-Rusin from the FAA noted that the FAA has received a concept for a new runway in North Haven brought forward by PIA and the Town of North Haven which is pending and relates to this action.)

Carolann Ouellette, Director, Maine Office of Outdoor Recreation

The Office of Outdoor Recreation is a new agency - a division of the Office of Tourism at the Department of Economic and Community Development – whose aim is to leverage Maine's assets

and outdoor recreation heritage to grow the outdoor recreation economy. Outdoor recreation is part of the state’s talent recruitment strategy. Ms. Ouellette believes that air travel will increase in Maine as a means to transport people into and out of the “woods” – it helps with recreational access to key destinations in places like Greenville, Rangeley, Millinocket and others.

Additional users and impacts for outfitters, guides, and seaplane pilots and operators. A key issue in air travel to remote areas is the “last mile” connection from airports to the final destinations, parking facilities. Ms. Ouellette echoed the Governor’s call for growing the state’s workforce by 75,000 people over the next 10 years, and suggested opportunities for scheduled international charter flights to bring people to Maine.

A follow-up conversation should seek any data that could be used to reflect the trend in this activity- number of licensed guides, remote lodges, trends in fishing, hunting and other licenses.

Steve Ingram, Pilot, Department of Marine Resources

The Department of Marine Resources’ is a small agency whose primary use of the aviation system (since the 1940’s) is for marine patrol, law enforcement (based out of Augusta), and extensive search and rescue operations (commercial fisherman). Augusta Airport is an extremely valuable airport, although they rely on the crosswind runway and keeping that runway clear has posed a problem in the past. Mr. Ingram suggested the Department uses Waterville Robert Lafleur Airport (which is less busy than Augusta) and could use Stonington Municipal Airport more frequently; however, obstructions are an issue. Stonington is a NPIAS airport and therefore AIP-eligible; however, the sponsor does not utilize federal funding and therefore enforcement of standards is difficult.

A follow-up question regarding crosswind runways: Is there any information about the crosswind component rating of amphibious aircraft that supports using a lower evaluation than 10.5 knots?

Department aircraft are ADS-B equipped and fly primarily VFR/daytime missions. Mr. Ingram is an amphibian pilot. He mentioned an issue with fuel farms only being available between 8:00AM and 4:00PM and AV cards that don’t work at a few facilities (e.g. Eastport Municipal).

A follow-up question regarding the fueling issue: Is the solution administrative versus facilities and are the airports or the agencies best positioned to resolve it?

Mr. Ingram also mentioned that the Maine Warden Service also relies heavily on airports, and he is happy to see the University of Maine Flight Instruction program, and his desire for no airports to be closed because they are vital.

Follow-up considerations regarding search and rescues: While there has probably been an increase in outdoor recreational activity in remote areas, GPS and cellular communications has mitigated the number of related search and rescue missions. Demographics have given rise to missions relating to Alzheimer victims and other non-recreation related missions. No noticeable trend in total number of missions. (Follow up might be if there has been a shift in the geographic patterns of their missions)

John Crowley, Chief Ranger Pilot, Maine Forest Service

The Department of Agriculture, Conservation, and Forestry, Maine Forest Service maintains 10 aircraft (7 helicopters, 2 fixed-wing, ?) that are ADS-B equipped, employs their own aircraft mechanics, and maintains 8 fuel trucks stationed around the state for refueling purposes (jet A fuel). The Forest Service's primary purpose is for natural resource management, fire protection, performance of search and rescue missions, and medical evacuations. Mr. Crowley indicated that they fly VFR conditions and their operation relies heavily on crosswind runways. The Forest Service also offers a short-haul program, which flies medics from Bangor to places where they need to use the hoist for insertion/extraction missions.

The purpose Forest Service maintains their own fuel trucks stationed throughout the state is to meet timely demand during events. It is difficult to fill 2,500-gallons from one airport – it would deplete their resources and still may not be enough during a multi-day fire-fighting need. Rangeley (Stephen A. Bean Municipal Airport) having fuel is a huge benefit because they are in that area so much.

Follow-up regarding fuel farms: Ralph Nicosia-Rusin stated that if there are system issues related to fuel availability – the frequency of statewide gaps – it is very important for the FAA to know because they consider fuel farms to be revenue-generation facilities and don't score that high as FAA priority. Making the FAA aware can help justify and move such projects up in priority ranking.

Additionally, it is difficult to fly float planes in the middle of Maine because there are not a lot of options for fuel or if you need to land in an emergency. References made to Lincoln and Pittsfield seaplane bases, which are only used in emergencies because they are extremely difficult to get into and maneuver. Tim LeSiege noted that there are not many publicly owned seaplane bases. Mr. Crowley believes that float plane activity would increase if there was better access. Especially for recreation.

Lt. Col. Greg Curtis, Maine Wing Civil Air Patrol

Mr. Curtis is a pilot and instructor with the Civil Air Patrol, which has five aircraft and called upon by the Air Force for emergency operations services such as search and rescue for State Police, Forest Service and providing photography services (e.g. photographed state after Hurricane Sandy). Mr. Curtis advocated for crosswind runways as critical for small aircraft, stating that the FAA is jeopardizing the safety of GA pilots by closing crosswind runways. An example is the need for training (Auburn-Lewiston in particular) during December through March, and for support to Maine and Federal EMA for flooding at ice jams - keep all runways that exist in the state.

Mr. Curtis noted that Deblois Airport needs windsock, segmented circle, an apron because there is no place to park aircraft. He suggested a minimum ramp area to accommodate 10 aircraft parking positions for emergency events where activity will spike. Mr. Curtis also brought to the group's attention that the University of Maine at Augusta Aviation Program is moving to Brunswick and may be earning a Part 141 certificate to train veterans.

Ralph Nicosia-Rusin asked about data to support crosswind justifications and noted that in some locations extra width on primary runways can help during crosswind conditions. Tim LeSiege noted that a possible solution might be to share the cost of crosswind runways across multiple state agencies if they benefit the state but are not FAA-funded.

Col. Ian Gillis & Col. Dave Pratt, Maine Air National Guard

Mr. Gillis and Mr. Pratt from the Air National Guard began by stating that the crown jewel of the state system for them is Bangor International Airport. They noted that they can go to Brunswick Executive and Portland International if needed for training, but those are the only other options due to runway length requirements. There has been short-term use of Presque Isle International in the past. They are aware that Marine Corps uses Brunswick Executive.

In terms of infrastructure needs for the Air National Guard, there is limited or no room for engine runs at Bangor – which results in noise issues. They would love to explore a partnership to be able to fund. Potential need for a “hot” cargo pad (for loading/unloading ammunition explosives, or other hazardous materials). Military is the fuel provider.

Mr. Curtis noted that has not been low-level route (?), survey lately (?), coming soon (?). No noted conflicts with civilian and military airspace activities.

Jeff Beach, Chief Warden Service Pilot, Department of Inland Fisheries & Wildlife

Mr. Beach stated the Department of Inland Fisheries and Wildlife employs 3 full-time pilots and maintains 4 aircraft (three Cessna 385 and one Cessna 172). The Department stocks fish twice annually, and uses straight floats (rather than amphibious to increase payload) during the summer months. Mr. Beach advocated for seaplane bases and crosswind runways, stating that their pilots perform at least 400 searches annually do not get to pick which days they need to fly. Mr. Beach stated they operate out of seaplane bases and fueling in the North (Eagle Lake), Central (Greenville) they own, and also in the South (Skowhegan) they do not own. Twitchell Airport (privately owned, public use airport) is a critical facility to pilots for fueling, which is currently considering selling or closing – which would have a huge impact. For example, Mr. Beach stated that if Twitchell’s seaplane base closed he would have to switch to wheels all year or at least after fish stocking. There was a lot of discussion about the lack of seaplane fueling south of Twitchell.

Follow-up question: It would be good to find out which airport or other facility they use for switching to wheels and are they dependent on a single location remaining in operation.

Tim LeSiege noted that possible partnerships between public and private airports and/or seaplane bases could provide for solutions such as finding locations on state-owned land to store privately-owned fuel.

Concluding Remarks

As the Focus Group discussion came to a close, the following comments were made and noted:

Mary Ann Hayes suggested that attendees give thought to other agencies/individuals that did not attend the Focus Group meeting who might be interviewed to get their input for the System Plan.

Internet access at airports is critical. There needs to be work done to get internet at all airports.

The need for fuel in southern Maine was emphasized in the meeting.

Stacie Haskell asked how reliant operators were on AWOS systems, such as LifeFlight?

Tim LeSiege stated that opportunity may be there for stepping-up to AWOS-3 due to FAA reauthorization eligibility

Follow-up consideration regarding AWOS: Ralph Nicosia-Rusin questioned if AWOS-III's with their reporting connections to the NWS provide any mitigation to the loss of crosswind runways by easier access to current local wind conditions at alternate airports and forecasts of wind shifts?

Consider follow-up with a focus group meeting regarding Outdoor Recreation with the Maine Guides Assn and perhaps Sportsmans' Alliance of Maine.

The meeting concluded at approximately 12:00 Noon.

Summary Notes – Outdoor Recreation Focus Group

Maine State Aviation System Plan (SASP) – Phase I

October 1, 2020 | MaineDOT Offices via ZOOM | 8:00AM–10:00AM

Attendees:

- Carol Anne Oullette – Director of Office of Outdoor Recreation
- Igor Schorske – Bradley Camps, Floatplane operator
- Bryan Wentzell – Maine Mountain Collaborative
- Dana Bullen – President of Sunday River Resorts (Sugarloaf/Sunday River)
- Matthew Polstein – New England Outdoor Center
- MaineDOT - Mary Ann Hayes, Stacie Haskell, Tim LeSiege
- McFarland Johnson – Matt O’Brien, Scott LeCount
- FAA – Ralph Nicosia-Rusin

Mary Ann Hayes from MaineDOT opened the meeting and the MaineDOT/McFarland Johnson Project Team introduced themselves to everyone in attendance. Mary Ann provided a general overview of the System Plan and the purpose of this focus group to guide the project team as outdoor recreation is a key element of Maine’s economy and may have an impact on the state airport system.

Introductions commenced with each focus group member describing the relevance of aviation to their business or organization and its goals.

Matthew A. Polstein, of Millinocket, is a Maine native and the owner and founder of New England Outdoor Center. As a registered Maine guide, he is considered a pioneer of Maine whitewater rafting and is a passionate supporter of natural and economic sustainability. He served on the Governor’s Nature-based Tourism Initiative Task Force, the Governor’s Task Force on Natural Resource-based Industries, America Outdoors, and Millinocket Town Council. He currently is developing Katahdin Resorts, where guests will be able to meet and see the work of local artisans, bakers, potters, weavers, farmers, and others. He is vice-chair of MaineCF’s Penobscot County Committee.

Igor Sikorsky, a float plane operator representing Bradley Camps shared that he routinely flies from Portland, Bangor, Millinocket, and Presque Isle International and utilizes his float plane without wheels to deliver people to camps and fishing that would otherwise be inaccessible. Mr. Sikorsky emphasized that Bradley Camps is in a remote location and relies on aviation and is estimated to drive more than \$2MM into the local economy. One of the major issues he faces as a floatplane operator is the lack of public access pick up points for float planes. Oftentimes, his passengers must wade into the water to access the plane due to the lack of a transition facility. Obtaining fuel from facilities was also another challenge faced by Mr. Sikorsky. Portland has limited

access to fueling facilities and often it can only be delivered by a tanker truck. To address some of these challenges, he suggested having more dock access, a remote fueling point with float access, and bulk fuel deliveries with providers that service float planes. Specifically, in Portland, the southeast end of Highland Lake could be a good point for a transition facility.

Bryan Wentzell from Maine Mountain Collaborative stated he was a private pilot that primarily flies into Greenville and services over 100 miles of wilderness. Most of his flying is for conservation purposes, providing staff access, and shuttling reporters, donors, and camera access to remote parts of the state. He stated that his aviation group has also supported Maine Forestry Services with their mission. He mentioned that Air Hawk is a service that connects pilots to conservation agencies which sometimes feeds passengers to his group. A group called the Bald Eagle Club is responsible for significant personal recreation use at Bethel, Rangeley, Charles A. Chase Memorial, Millinocket, and Old Town Airports. To support access, Mr. Wentzell mentioned that Red Pine, a camp site is currently closed and certain airports like Rangeley and Jackman would be good for “Fly-In Campsites” where pilots pitch a tent next to their aircraft. He believes this type of niche activity could create a social media buzz for Maine. Challenges faced at Greenville include the need for a courtesy car to help with the logistics of “the last mile”. At Carrabassett, the airport is co-located with a cross country ski head and the Appalachian Trail which is a valuable asset that could be better marketed to outdoor recreation seekers.

Dana Bullen, the President of Sunday River and Sugarloaf ski and golf resorts spoke that airports often provide corporate team access. These events are infrequent and do not bring many passengers to the resorts but are helpful for out of town ski teams to access the mountains. Most teams use Auburn-Lewiston, Augusta, and occasionally Bethel for access. Mr. Bullen also mentioned that there has been an impetus of people moving to Maine to live and work due to the COVID-19 pandemic. Many of the homes around the ski resorts are sold out and there is an increase in the diversity of people and resources coming to the ski communities. Regarding airports, oftentimes homeowners and guests will fly in with a charter from Southern Maine or fly their own personal aircraft to airports near the ski resorts.

Regarding floatplanes, discussion ensued regarding various access points. In Bangor, Pushaw Lake is used as an access point upwards of a dozen times a week. The location used to have a dock and fuel, but now the only services offered are at Old Town which is not convenient for clients. Pushaw Lake also used to have a facility to store the aircraft at in the winter and mechanics were nearby in the area for any maintenance issues. When asked why the facilities have diminished, Mr. Sikorsky responded there was a succession issue with the business owners and there is currently not an owner. In Portland, Highland Lake provides access by using a canoe to ferry passengers to the floatplane. There is challenges with this ferrying system and a useable dock is needed in the foreseeable future. Mr. Sikorsky recommended this priority could be brought to the attention of Maine Inland Fisheries and Wildlife for consideration. At Millinocket, there has been an increase in floatplane activity, but no traffic counting has been conducted. A recommendation from the group was that the Airport be named Katahdin Airport to better advertise the airport and it’s access to the Katahdin Woods Region as this is a nationally known amenity.

Ralph Nicosia-Rusin from the FAA asked if the high-end lodging segment of the economy was increasing and if aviation was deemed to be critical to those services and facilities. Mr. Bullen responded that while there are some frequent charters and operations during the height of ski season, the ultimate impact was unknown. The project team determined that the economic analysis would be a better forum to measure this impact and provide an adequate response.

To help better spatially understand the outdoor recreation areas of the state, the project team asked focus group participants to define the State into “regions”. The following responses were provided:

- Millinocket/Lincoln are essentially the same region
- Katahdin sees Bangor as Greater Bangor Area
- Penobscot County and River are a contiguous area
- Bangor is considered the nexus of the Acadia and Katahdin regions.
- Portland is considered the southern mountains and Bangor is the hub for the North Maine Woods.

The project team asked if certain regions or areas have more difficult access challenges than others. Participants responded that Twitchell’s Airport and Seaplane Base is a hub for private pilots, float planes, and rentals and is essential for access to the region. It was indicated that many people will drive to Twitchell’s and then rent a plane to venture into points north. At Pittsfield Airport, it was indicated that the facility is very important in the floatplane community but that the waterway and ramps need improvement. Currently, the canal can barely taxi a Cessna 206, and it’s even worse in low-water conditions. Vegetation growth can also be an obstacle for the ramp. At Millinocket, Mr. Sikorsky mentioned that there is no redundancy in service provided at the facility and that Red River, Libby’s, Bradford Camps, and Rainbow Lake Lodge are all serviced by MLT. Workforce shortages and lack of trained mechanics are the biggest issues facing the facility.

Carol Anne Oullette from the Office of Outdoor Recreation asked if hangar space was adequate to service the needs of outdoor recreation activities. Responses varied; however, Fryeburg was identified as a facility in needs of addition hangars. Additionally, Millinocket hangar space was noted to be at-capacity and is looking into investment for additional hangars. Millinocket tends to have closures due to winter conditions. A need for additional transient hangar space at Millinocket was also identified. Airports that have terminal facilities were identified as valuable to the outdoor recreation communities. Some facilities such as Bethel have hosted fly in meetings in the conference rooms at the terminal that help promote aviation and the airport.

Regarding flight safety, the group mentioned that the AWOS weather reporting system is critical to aviation in Maine.

In closing, the group discussed overall trends in traffic for different activities. Sunday River and Sugarloaf have extensive expansion plans and are likely to trend upward for growth at airports in the area with even scheduled flights being a possibility within the next decade.

Participants were thanked for their input. The meeting concluded at 10:00AM.

WASHINGTON COUNTY AIR MEDICAL TRANSPORT FOCUS GROUP
Maine State Aviation System Plan

November 3, 2020
 12:30-2:00 PM via Zoom

Attendees:

Betsy Fitzgerald, Manager, Washington County
 Bill Cody, Calais Regional Hospital
 Craig Barrett, Pleasant Point Health Center
 Fran Jensen, Office of MaineCare Services,
 Jeff Brown, Systems Safety Group
 Joshua Dickson, LifeFlight of Maine
 Elizabeth Neptune, Pleasant Point Health
 Center
 Lois Libby, Machias Ambulance Service
 Nicole Breton, Office of Rural Health, DHHS
 Sharla Moretti, Down East Community Hospital
 Tom Judge, LifeFlight of Maine

Project Team (Listeners):

Mary Ann Hayes, MaineDOT
 Stacie Haskell, MaineDOT
 Tim LeSiege, MaineDOT
 Ralph Nicosia-Rusin, FAA
 Joe Lacerda, MaineDOT – Maintenance WC
 Fred Michaud, MaineDOT – Planner on WC
 Jen Peters, Sunrise County Economic Council
 Matthew O'Brien, McFarland Johnson
 Scott LeCount, McFarland Johnson

Invited

Bill Kinter, Town of Deblois
 Christina Bridges, Down East Community
 Hospital
 Cindy Gay, Deblois Fire Department
 Elise Fleming, Healthy Acadia
 Kenny Clark, Calais Fire Department
 Mike Loughlin, Beddington Fire Department
 Bill MacDonald, Washington County COG
 Nate Moulton, MaineDOT

MEETING NOTES***Describe what you see happening in the world:***

Joshua Dickson LifeFlight

Joshua Dickson – Sole emergency medivac for the state of Maine. Three helicopters, One fixed wing. Bangor is closest base, 22 minutes by Air. One hour, 45-minute Drive to Downeast Community Hospital (DCH), plus return trip. Weather complicated – AWOS is aging, needs to be replaced – weather patterns different between BGR, BHB, and Washington County. LifeFlight would like to see the MVM facility upgraded to accommodate fixed wing

Data – Downeast Community Hospital – One to two patients per week, majority go to Bangor. Of the 241 transported 182 went to Bangor. Hospitals are under a lot of financial stress and

challenges to provide community services such as obstetrics and prenatal care services, operating rooms, etc. Staff is changing in hospitals and losing specialists

Carly – With Sharla – Agrees with Joshua - patching EMS services have happened but very difficult DCH is adding services, so these issues are now growing

Joshua – LifeFlight uses PNN and EPM, do not encounter the same problems as they do with MVM/DCH

Machias – weather is especially bad and weather reporting is weak. Cannot utilize unless “Goldilocks” conditions: Cold is OK, but not cold where there is ice. Weather cannot be bad. Need minimal fuel, but still need enough to get to airport alternates.

Ground - Two hours by ground with no radio contact on Route 9. Frost Heaves reduce speeds to 15 miles per hour.

Story: Landed at Deblois, Cherryfield ambulance had to pick them up and drive them to Machias. This resulted in Cherryfield losing their ambulance services. Machias is adding services, but they are so remote it makes it difficult.

Bill Cody - Calais Regional Hospital

Calais is the second hospital. There are two airports that can feed Calais (Princeton or Eastport) It would be better to have one in downtown Calais. Helipad instrument approach has been approved for Calais. Rt 9 is not a friendly road. Lifeflight is not excluding them from the discussion, but Machias has experienced much more difficulty. Mr. Cody expressed concern about the condition of the helipad with the obstructions surrounding the pad (buildings, trees, etc.) requires a vertical departure. Can make it work because of sea level operating conditions.

Ralph – neonatal experience vibrations on transport?

Joshua - No, it is not the vibration, but it’s the frost heaves, large jolts.

Ralph – New procedures, will these solve the problems in Machias?

Joshua – New procedures will help push the IFR season wider by a month on each end.

Ralph – Are there scenarios where you need the runway but cannot use the airport?

Anytime the Helicopter cannot be used. Bangor is the only alternate for the helicopter, and if Bangor’s weather is bad, they cannot operate. What this means is that legal requirements for helicopter flight plan alternates makes Machias unusable because they can only carry two hours of fuel, fly at 140 knots. The fix wing can use Portland, or even Albany, NY if they need to.

Ralph – What minimums do you need?

LPV minimum would be great. 1.5-mile 800 foot would make a difference.

Lois Libby – Runway Reconstruction just shortened the runway, now it cannot be used. Why?

MaineDOT explained that the airport did not meet the safety area standards. Only shortened by 60 feet. Lois – They only transfer to the fixed wing.

Craig - trying to work with SoM to get more med staff to be able to help (??) need recording for him --- transport issues – want to help the system – would send people to Calais hospital – have paramedics on shift 24/7 – want to work with Maine EMS - stroke patients etc.

Joshua - Strokes and Cardiac. Older folks. Complicated respiratory challenges. Need cath-labs at MaineMed, Central Maine, Eastern Maine Medical Center. Lifeflight do fly to Maine Med for most of these situations.

Could there be a critical trained team based in Machias?

Joshua - Lifeflight has tried this in the past and there is not often enough to justify the costs.

Tom Judge – Experience rate of staff for management of patients, low reimbursement cost \$1.7M in losses. Reimbursement – Medicare 2002 negotiation schedule does not cover the cost. PQI has a ground crew and they are losing \$600k per year. Very big rural EMS cost problem across the county.

Mary Ann - Are Angel Flights used?

Joshua - They are non-emergency. FAA feels this is important in understanding the role of the airports.

Sharla – DHC has providers that fly in – they fly themselves – asked to get a list of providers doing so.

Ralph – organ/transplant flights?

Bill C – knows some providers fly to BGR and rent a car --- Angel flights usually cancer patients and dialysis

Mary Ann - Medical personnel, supplies, etc. flown in?

Tom - Downeast community personnel are flown in by self-flying. Not too many people fly to Calais, most fly to Bangor and drive. Calais experiences cancer a lot. Route 9 is not a viable alternative due to its condition. Going to Boston would be very helpful. Lifeflight is planning to support stockpiles for medications with the State Police. Cooperative Group the Air Gard, Forest Service, etc. for search and rescue.

Nicole - island emergencies?

Joshua D – not many, have arrangements for landing zones on private property as needed.

Regarding summer community members. Washington County islands are a lot less inhabited vs. Penobscot bay.

Crossing the border used to be straightforward, very difficult to fly back into the US.

Jeff - Remote piloted aircraft?

MaineDOT – Drones are currently being tested. Drones are short range.

Fran – Dialysis?

Betsy – some folks drive three days a week to Ellsworth – reality. (performed in Ellsworth). Take a lot of people to Bangor. Drive three days per week to Ellsworth where it is performed. The Tribal communities travel to Eastport to get to

Matthew – scheduled service?

Mary Ann – would scheduled service help cancer/dialysis?

Tom – a precision approach (PA) would be helpful

Tim L. – explained EPM desire for Cape Air – posed the question, is this the best location? Would a precision approach format be better?

Life flight needs

Winter runway maintenance. Portable deicing facilities, lighting approach, instrument approach procedures. Need AWOS replacement plan that report into the NADIN.

Scheduled Service

Need more like a Penobscot Island Air to connect to the larger airlines. Is Eastport the correct place for scheduled air service?

Closing Remarks

People of Washington County blend into the existence of the hard rocks landscape.

MaineDOT needs to hear more from the Medical Community – They need to “raise hell.” MaineDOT will hear them and improve the roads. Lifeflight says that it is not just the roads. Route 9 does not have resources along the way. Rt 1 is a good road and there are hospitals along the way. Route 192 is worse than what they see in Texas!

Mary Ann thanked everyone for their input and promised to send the notes out for any corrections. Input will contribute to MaineDOT planning considerations.

WASHINGTON COUNTY AVIATION ECONOMIC DEVELOPMENT FOCUS GROUP**Maine State Aviation System Plan**

November 5, 2020

1:30-3:00 PM via Zoom

Attendees:

Andrew Lively, Cooke Aquaculture
Betsy Fitzgerald, Manager, Washington County
Bill Kinter, Town of Deblois
Brad Richard, Princeton Municipal Airport
Charles Rudelitch, Sunrise County Economic Council
Cindy Gay, Town of Deblois
Chris Gardner, Port Authority & County Commission
Darrin Coffin, Passamaquoddy Tribe
David Bell, Cherryfield Foods
Kris and Scott Weeks, Leen's Lodge
Larry Barker, Machias Savings Bank
Michael Radeka, Machias Valley Airport
Ron DeFilippo, Eastport Municipal Airport
Scott Beal, Woodland Pulp/St. Croix Tissue

Project Team (Listeners):

Mary Ann Hayes, MaineDOT
Stacie Haskell, MaineDOT
Tim LeSieg, MaineDOT
Ralph Nicosia-Rusin, FAA
Joe Lacerda, MaineDOT
Fred Michaud, MaineDOT
Bill MacDonald, Washington County COG
Matt O'Brien, McFarland Johnson (DOT consultant)
Steve Bourque, McFarland Johnson
Scott LeCount, McFarland Johnson
Carolann Ouellette, DECD
Nate Moulton, MaineDOT

MEETING NOTES

1. Welcome and Session Introduction (Mary Ann Hayes, MaineDOT)
2. Project Team Member Introductions
3. Member Introductions
4. Summary of last week's meeting with LifeFlight
 - a. B200 flights into Machias are restricted due to their runway length. Not just Machias, weather is bad throughout the county. There is poor weather reporting as well throughout the county.
 - b. Matt O'Brien (project manager) drove throughout the county and saw the potential value for locations to expand - interested to hear where the group needs and wants are

5. Discussion questions

- a. How is aviation currently used to support economic activity and how important is it to your business or others of which you are aware?
 - i. Weeks Lodge - Clients fly in and some fly into Princeton, or some charter aircraft into Princeton. 80% or more fly in to use the lodge. Most fly to Bangor and hire Katahdin Air to fly the folks to the docks. Some fly their own planes, some charter plans to fly there. Commercial air service to PNN would be amazing. Would like to keep airport available.
 - ii. Machias Savings - have not used the airport as much - Sometimes the weather is not good so they cannot come back. Runway length is a challenge - Use a King Air and often cannot take more than a couple people with luggage. Bigger airport in Machias with better capability would open Washington County a lot. LifeFlight is absolutely critical. Fuel is challenging. Occasionally have to travel to Princeton and spend as much time driving to Princeton as they do flying to their destination. One example is Lorne Michaels purchased land. Hard to quantify what the impact to the economy would be. What vendors would use a longer runway – vendors from Boston and from Caribou to Portland. Semi-annual meeting, they fly in to have meetings on smaller aircraft. For the most part the facilities at Machias are adequate.
 - iii. Cook Agriculture – do not use Machias. Have King Airs and a Falcon jet – Runway is too short. Processing facility in Machias port planning on an expansion – challenge is suppliers have to fly into Bangor and drive down. Doing a lot of work with their Virginia facility and Machias facility. They use Eastport more frequently -6-12 times per year but wildlife and people on the runway are an issue. Eastport does have CBP at the airport which is extremely helpful, and they use Eastport because of that facility. GPS approaches are adequate. Runway length at Machias and fencing at Eastport are the issues.
 - iv. Tim – Trees at Machias have been cut.
 - v. Chris – CBP at Eastport could be expanded, and the CBP is a big part of that. Bar Harbor is well known for their cruise ships and they have to borrow CBP out of BGR to make clearing customs work. High hurdle to get FIS at an airport. CBP is increasingly difficult due to crew change requirements and would be easier out of Eastport rather than BGR. If they could get a direct connection to get people top the port would help – They have the deepest water port (in the US?). Adding fuel to Eastport changed things dramatically to increase usage.
 - vi. Ralph – International cargo carriers? Do they use scheduled service or charter jet? Options for wildlife are to fence the entire airport or remove the existing dilapidated fence.

- vii. Fred – see fence system in New Brunswick- allows animals to escape
- b. Scheduled Service
 - i. Ron – Would like to mention that tourism is the number one resource. Large population that spends the summer in Washington County. Only one road into Eastport so aviation is a viable option. Cape Air is a partner airline with larger carriers and an important link for Washington County. Big opportunity for people who want to use scheduled service.
 - ii. Discussion about where scheduled service might be best – Eastport or Machias or Princeton? Discussion about scheduled service on certain days of the week.
- c. Discussion about rental cars
 - i. Jen inquired about a real estate boom in Wash. County. Last mile is a problem.
 - ii. Kris – most of their guests hire guides so they wouldn't need car rentals.
 - iii. Ron – What better way to open up the economy but to open a rental car company at the airport? Having a rental car company would be a win-win. If we develop the airport, we need to develop all parts of the airport. EPM will do this, as they recognize this, they also have free parking and room. Want to serve the customers. Population of Eastport triples in the summer. (no COVID-19 in Eastport). The area is a safe haven. Will develop all aspects of the airport, the complete package. They want to do this. Want to put in solar farm to help generate airport revenue.
 - iv. Ralph inquired about floatplane requirements for the camps in Maine.
 - v. Kris – more people use float planes into their facility. They fly right to their dock.
- d. Discussion about charter operations.
 - i. Mary Ann – if Charter were advertised more, would it be taken advantage of? Michael – For Machias, we have rental cars, but do not have the runway length. MDA for Machias is 800 feet, which is not adequate. Two runway shortenings over the years so the airport is going backward. Need runway length to get better approaches at Machias.
 - ii. Chris G. – There is so much into making these ideas work. Singular focus on one part of the system can be shortsighted.
 - iii. Tim – AWOS systems need to be ungraded. Just able now to upgrade to new system and working on through the system plan as to upgrading those. A key is marketing charter service for local businesses to let their customers know that charter is an option to get them here.
 - iv. Fred- Chicken and egg situation – There are people that fly into these airports. Has anyone ever taken the time to survey users and ask them what services they might be willing to use? May find out that air service is

not a big need for the County. People come in and out. Has anyone tried to survey the new folks for their needs? The Jimmy Fallons, Loren Michaels, and other big names use - Metroquest is an incredibly powerful tool available to the county for long range planning in the region.

- v. Tim – What needs are not being met from an aviation perspective? What can aviation help with? Longer runways, AWOS, other business needs. What can DOT do to help businesses to thrive?
 - vi. Mike R – Commercial at EPM wouldn't help MVM folks at all. Equidistant to BHB, so they would drive to BHB. Bill Varney charter – Katahdin air out of MLT. MVM does have rental cars in town, but not enough runway. Does have some wildlife. Need better minimums. Runway has been shortened a few times. Have spent money on a study for the best location for a new runway. In process of getting land if they can. Need the length to get new runway, need better weather reporting. Need a number of facilities upgraded. Private pilots can land whenever do not have insurance requirements like Netjets pilots. Airport is key to the MVM area! LifeFlight is a key part to this.
 - vii. MAH - Need marketing tool and business plan.
 - viii. Larry – great start – opportunity is now. Business plan – a lot of it is speculation.
 - ix. Ralph – What does the larger picture look like? What is the strategy in the region? Is ground transportation an issue with the port?
 - x. Jen – economic summit coming up for Sunrise County – good responses from social media posts as well – keep them in mind to help do a survey.
 - xi. Brian Swartz – News person – dropped by to understand the process of the three airports in the county. Heard quite a bit of excellent input today.
6. Wrap-up and Next Steps. There were no immediate obvious next steps to take. All agreed to keep thinking about how aviation fits into economic development opportunities. Mary Ann promised to share the notes from the discussion and incorporate the input into the Aviation System Plan discussion.

WASHINGTON COUNTY AVIATION REGIONAL COORDINATION SESSION

Maine State Aviation System Plan

November 9, 2020

3:30-5:00 PM via Zoom

Attendees:

Betsy Fitzgerald, Manager, Washington County
 Bill Kitchen, Director, Machias Airport
 Brad Richard, Manager, Princeton Municipal Airport
 Charles Rudelitch, Sunrise County Economic Council
 Cindy Gay, Town of Deblois
 Michael Radeka, Machias Valley Airport
 Steve Trieber, Manager, Eastport Municipal Airport
 Thomas Hoskins II, Eastport Municipal Airport- City Manager

Project Team:

Mary Ann Hayes, MaineDOT
 Stacie Haskell, MaineDOT
 Tim LeSiege, MaineDOT
 Ralph Nicosia-Rusin, FAA
 Fred Michaud, MaineDOT
 Bill MacDonald, Washington County COG
 Matt O'Brien, McFarland Johnson (DOT consultant)
 Scott LeCount, McFarland Johnson
 Nate Moulton, MaineDOT

MEETING NOTES

1. Welcome and Session Introduction (Mary Ann)
 Could we improve the cost effectiveness of the airports?
2. Project Team Introductions
3. Attendee Introductions
4. Summary of Findings of Airport Analyses (Matt)
 Very Brief discussion of the findings to date.
5. **Summary of Economic Development Discussion held Thursday (Matt)**
 Very Brief discussion of the findings to date.
6. **Discussion Questions:**
 - a. **Are the airport findings accurate? Anything to add?**
 Eastport has been moving in the direction of improving the car rentals. Looking to build on. Have past the \$20M of funding and projects for the initiatives.
 Clarification: Last week Cooke Agriculture mentioned that there were wildlife hazards, but Eastport has been watching the facility and have not had deer for nearly five years. Currently have a depredation permit for geese and working toward deer.
 Eastport has looked into the costs of charter, nearly \$3800 to get here from there...(Hyannis).

Princeton: Has a lot of stuff going for them. New Terminal Building, New runway, fuel farm and new credit card machine. Usage of the lodging Resorts industry has been significant by the charter companies.

Machias: The need is the runway length. 6-7 years ago, there was discussion to close the runway. There has been a 180 in management which shows that were going in the right direction. Volunteer group working for the “whole area, not just Machias.” Fuel coming soon.

MaineDOT: Eastport obtained 100% grant, otherwise there would be a substantive local match. Since these are regional facilities, is there an interest in sharing the financial burden?

County Manager – Several years the County had to turn down the financial requests to the Airports. If the County funds one, it needs to fund all. Since the County does not have surplus in the budget, there is very little to help with.

b. Operations: Any value in improving communication about sharing the burden?

Princeton and Eastport attempt to share loads of fuel, but this does not always align.

Eastport – the airports are about 1hour apart, but the collaboration does not work due to the distances.

c. Any ideas that would help with operations?

Princeton: Calais and Baileyville help support financially. Completely voluntary. Finding the additional funding to find the match for AIP is a huge burden. Was able to use out of the box thinking to contribute fill to the airport to cover their match. Princeton does not charge for parking, landing fees, etc. Not likely to amount to much. Thought that the County Gov’t may be able to supply cash to each airport.

MaineDOT: Since the pilots live in other states that do not support your airport, maybe this is a County-wide issue. LifeFlight supports the Machias Hospital, but those patrons come from elsewhere within the County.

MaineDOT: Narrates an example of a Statewide crack seal project that covered 6 airports. This reduced the grant admin by 5 grants, about \$20k each, therefore saving \$100k of entitlement. If there were an authority, this would reduce the grant work by 66%. This may also allow the “Authority” to have \$450k of entitlement

Politics – Too many airports, with interest to cut the financial burden. Everyone is trying to find “thrifit.” May result in closing the airport. Who is going to use them, rate of growth, broad band, kids staying in Washington County? People are likely to get Turf-oriented when discussions begin regarding consolidation facilities.

FAA: 13 pilots in the neighboring Towns. Does not justify a regional tax burden. MJ noted that there are 30 registered, but not based in the three airports.

Currently 5010 states less than 10 based aircraft at each facility. What challenge do you have in obtaining 10 or more based aircraft at the airports?

- Pure economics. Not cheap to buy/operate a plane. Princeton now has 3 aircraft.
- Based Aircraft is restricted by hangars being built – Eastport. Permitting restrictions. Currently have four (4) potential users.
- Machias needs fuel. Then need Hangars. Found four (4) people who are interested.

Plan to put forward the regional authority as an option to help fix the financial burden.

If there were not a Regional Authority, maybe the Towns could be encouraged to support the local Sponsor. Princeton is working with local municipalities and working towards collaboration with the Passamaquoddy Tribe. But having trouble finding rental cars. The Calais car dealership will not make the financial commitment to supply a car.

Wheels Up – Overnight at BHB because there are no hangar facilities. Eastport would rather overnight at EPM. Princeton also found the Charters leave the region because they will not leave their aircraft overnight.

Extremely Seasonal – May -September.

Baileyville Mill – reported that that mill did not use the facility for internal travel as much as it used to under prior ownership, but Princeton feels that consultants and contractors use this to service the mill more.

d. Marketing:

Package charter companies in a way to service from PWM/BGR. Market that “we’re right around the corner.”

Eastport – Maine Travel and Tourism, AAA, AARP, Reality and Trade Shows that promote remote regions. Cost efficient, to promote the coast and Maine. Lots of opportunity.

Steve – State parks, Lubec Quoddy Point. Machias has nice beaches that are attractants. Cycling organizations that are looking to visit and spend money in these regions. Fly in with bicycles to do annual events 50-100k people. Example – Bike Maine 2016 – Eastport served 400 plates of salmon.

Biking is huge in Downeast. Lubec (largely private donor) is investing \$11M in bicycling. Calais is applying for a Bicycle scenic byway.

FAA: it requires creative narrative justification from FAA NE in order to keep the airports into the NIPIAS in obtaining the \$150k entitlement.

7. Wrap Up

Mary Ann thanked everyone for their time and input. As there were no obvious opportunities to pursue, everyone agreed to just keep communications open should something arise. She promised to

share the meeting notes for corrections. The results will be incorporated into the Aviation System Plan documentation.

Project Team Management Meetings

Agenda – Bi-Weekly PM Meeting #1

Maine State Aviation Systems Plan – Phase I

December 3, 2019 | Conference Call

Dial-In Info: +1 (646) 975.3975

Participant Code: 110-361-588-34

Current/Upcoming Activities

- Airport Manager Survey – Draft/in-process
- Short-term Project Schedule (winter 2019/2020 months)
 - Project Team Work Sessions/Project Review Meetings/Bi-Weekly PM Calls
 - Align Work Sessions & Review Meetings with Bi-Weekly Calls
 - Purpose?
 - January?
 - PAC #1 – mid/late January?
 - Role Orientation
 - Task 3 Report Findings
 - Project Process/Components
 - Outreach/ Agency Coordination
 - Regional Council/EDD Survey
 - MPO Quarterly Meeting (Augusta)
 - Maine Aviation Forum (Owl’s Head)
 - MAAB (Augusta)
- Decision regarding ADS-B data – City Pairs/O&D Phase 2

Next Steps

- Task 3 Report – Revised Final delivered by 12/6/19
- Airport Manager Survey – MaineDOT Launch Process & Date
- Other

MEETING NOTES

DATE: December 3, 2019
12:00 PM

MEETING: Project Meeting #1
Conference Call

PROJECT: Maine Statewide Aviation System Plan
MaineDOT
AIP No. 3-23-0000-001-2019
MJ No. 18519.00

ATTENDANCE:

MaineDOT: Mary Ann Hayes;
 FAA: Ralph Nicosia-Rusin
 McFarland Johnson: Matthew O'Brien; Scott LeCount; Rick Lucas

Conference Call

Dial-In Info: (646) 975-3975
 Participant Code: 110-361-588-34

I – Current/Upcoming Activities:

- ➔ Airport Manager Survey – Draft/in-process
 - Pre-populate information for the surveyor. Don't have them take time to provide information that we can develop on our own. Use this to double-check the information on the 5010.
 - Management Staff – What is the goal of obtaining this information?
 - Do the airports have the necessary resources to operate the airport?
 - MaineDOT thinks this information is valuable.
 - MaineDOT wants more information about how many people does it take to operate the airport.
 - Survey to reduce the burden on airport manager
 - Reserve payroll and economic impacts for another survey Phase II
 - Hold specific details for the PAC or other group test-running the survey.
 - Try to obtain FTE for airports to answer, “How many people does it take to manage these facilities?”
 - Will it lead to an ability to share part-time management?
 - What challenges do the Airport have with staffing?
 - Address under resource needs. Met or under met?
 - Facility Development
 - Top three major projects. Typically, airports have both airport CIP and AIP CIP.
 - Ask to submit their Airport CIP.
 - Ask for state of Mind: “What keeps you up at night?”
 - FAA recommended removing the As shown on CIP check box.
 - Also Remove the redundant “Unfunded Airside and Landside Needs.”
 - Change Major projects to simply just “Top” to avoid leading the airport manager into a speaking to only large projects.

- What challenges do you have maintaining the airport.
- Wildlife strikes, problems, reporting?
- Challenges with Vehicles on airfield?
- Interest in participating the GARD upgrade?
- Airport Safety Risk Program or Committee.
 - Are they actively reviewing facility challenges with safety?
- Facility/Local Funding Match
 - Source of match?
 - Is obtaining a local match for your airport a challenge?
 - How much does it cost, Annual Operating budget?
- Consider adding checklist for respondent to provide attachments.
- Set a time-budget for respondent to complete a survey?
 - Keep to a reasonable task to complete.
 - What is the response rate?
 - MJ knocks on doors and track them down to obtain 100%
 - Ask questions that inspires them and we should expect good response rates.
- Activity
 - Names
 - To help plan out the site visits.
 - Time of Year
 - Provides a picture of the facility.
 - Checklist shouldn't take long to do.
 - Combine air taxi/charter
 - Peak and off-peak
 - FAA recommends Average week & Peak week
 - Correction. Not actual numbers, but a check mark.
 - Which type of niche activity that they service?
 - What is the competitive advantage of our facility?
- Coordination
 - How often does the Airport rely on MaineDOT Staff?
 - What kinds of assistance does MaineDOT do for your airport?
 - Or how does MaineDOT help facilitate the airport?
- Short-term Project Schedule (winter 2019/2020 months)
 - Survey should be open from Mid-January to Mid-February at the latest.
- Project Team Work Sessions/Project Review Meetings/Bi-Weekly PM Calls
 - Align Work Sessions & Review Meetings with Bi-Weekly Calls
 - Purpose?
 - January?
 - To be answered at Friday meeting with Stacie.
- PAC #1
 - Early January?
 - MaineDOT needs to do preparation and set up prior to the January timeframe.

- Week of January 6th. Excluding 8th and 9th.
- Role Orientation
- Task 3 Report Findings
- Project Process/Components
 - Use the PAC to identify missing thoughts.
- Do not use the PAC for decision making.
- Nothing to be reported by MaineDOT on the Blue-Ribbon Commission.
 - MaineDOT still wants to share with PAC.
- ➔ Outreach/ Agency Coordination
 - Regional Council/EDD Survey
 - MPO Quarterly Meeting (Augusta)
 - Maine Aviation Forum (Owl's Head)
 - MAAB (Augusta)
 - Anticipate the March 11. Meeting to be confirmed by MaineDOT.
 - Other State Agencies (Augusta)
 - MJ to request a date from MaineDOT.
- ➔ Decision regarding ADS-B data – City Pairs/O&D Phase 2
 - Ralph had to leave the at 1pm.
 - MJ to provide email to group documenting purchase of data and scoping what it will be used for in Phase 2.

II – Next Steps:

- ➔ Task 3 Report – Revised Final delivered by 12/6/19
- ➔ Airport Manager Survey – MaineDOT Launch Process & Date
 - Don't start on Regional Council survey.
 - Small bullets outline okay, but don't spend a lot of time on it.
- ➔ Other
 - MJ to provide a list of requested data.
 - What we need and in what order.
 - MJ send out an invite for 9am Friday 12/6/19 to wrap-up and debrief Stacie Haskell.

End 1:54 pm

PM MEETING #1 - CONTINUED

DATE: December 6, 2019
9:00 AM

MEETING: Project Meeting #1
Conference Call

PROJECT: Maine Statewide Aviation System Plan
MaineDOT
AIP No. 3-23-0000-001-2019
MJ No. 18519.00

ATTENDANCE:

MaineDOT: Mary Ann Hayes; Stacie Haskell; Tim LeSiege
McFarland Johnson: Matthew O'Brien; Scott LeCount; Brady Brewster

The Project Team reconvened to discuss the following:

- Incorporation of privately-owned airports in SASP
 - Data collection? What are we looking for?
 - Identify based aircraft, operations, FBO/maintenance/flight instruction businesses
 - How do they use the system?
 - Bring topic to PAC for discussion
 - If data needs and/or effort required exceeds Scope or FAA-eligibility, MaineDOT will determine how to supplement project funding to allow it.
- EDD Survey
 - MJ to review/suggest revisions to questions provided by Mary Ann.
 - Bring survey to PAC for discussion?
- Airport Manager Survey
 - Tim to complete survey for one airport to test data available at MaineDOT and length of survey time to complete survey by Friday 12/13/19
 - Tim to provide various MaineDOT datasets pertaining to system airports to MJ for use in reducing Survey questions by Friday 12/13/19
 - Stacie to provide her comments
- Other State Agency/Department Coordination
 - MaineDOT to coordinate with and/or convene group
 - First the Project Team should determine what information should be sought from them:
 - State agency staff travel via Augusta
 - Due diligence to coordinate within our own organization
 - What are their needs?
 - Determined that Project Team should consider and discuss again later.
 - Determine the specific questions to ask.
 - Perhaps ask the PAC
- ADS-B/GARD
 - Purchase ADS-B data at later date - anticipated that more data will be available and will be more useful under Phase II. MJ to document/share decision via E-mail to FAA.
 - How does the MaineDOT implement the GARD System
- Dynamic System Plan Tool
 - Shows charts and trends

- Add new bid data to update cost/need?
- Design requirements to be determined at a later date.
- Data Needs
 - Scott to share current list of items MJ needs
 - Update list as items come up
 - MJ set up a SharePoint url location for use to transfer large files

End 10:09

Agenda – Bi-Weekly PM Meeting #2

Maine State Aviation Systems Plan – Phase I

December 17, 2019 | 2:00PM | Conference Call

Dial-In Info: +1 (646) 975.3975

Participant Code: 110-361-588-34

Current Activities

- Surveys
 - Format/Distribution Method
 - Airport Manager Survey – Revisions in-process
 - Regional Council/EDD Survey – Drafted
 - Private/Public Airport Survey - Drafted
- PAC #1 – January 7, 1-3:30PM
 - Agenda & Info Packet
 - Role Orientation – Sounding Board/Guidance
 - SASP Summary of Proposed Approach - Project Process/Components
 - Task 3 Report – Discussion of Findings
 - Draft Surveys – Discussion of Data Available/Needed

Next

- Task 2.1 System Plan Peer Review & Context Setting
 - FAA/Other Plans Research & Memo
- Task 5 Data Collection
 - Assembly & Summation

Upcoming Outreach

- MPO Quarterly Meeting (Augusta) – Date – January? (MJ remote)
- Maine Aviation Forum (Owl’s Head) – Date - February? (up to 2 MJ present)
- MAAB (Augusta) – Date - February/March? (1 MJ present/1 MJ remote)
- Agency Coordination - Spring

Housekeeping

- Short-term Project Schedule (winter 2019/2020 months) – updated
- Task 1.8 Project Review Meetings (up to 4)
- Task 2.2 Work Sessions with MaineDOT (up to 6)

Agenda – Bi-Weekly PM Meeting #4

Maine State Aviation Systems Plan – Phase I

January 14, 2020 | 2:00PM | Conference Call

Dial-In Info: +1 (646) 975.3975

Participant Code: 110-361-588-34

Current Activities

- PAC #1 – Debrief/Takeaways – (Summary notes coming)

- Surveys
 - Airport Manager Survey, Regional Council/EDD Survey – OK
 - Revisions being finalized, next: create PDF forms/pre-populate/DOT distribute
 - Private/Public Airport Survey – on-hold

- Maine Aviation Forum (Owl’s Head) – February 15 (up to 2 MJ present)
 - Attending from MaineDOT/MJ?

Underway

- Task 2.1 System Plan Peer Review & Context Setting
 - FAA/Other Plans Research & Memo

- Task 5 Data Collection
 - Inventory Chapter Development

Next

- Report/Chapter Development
- Survey Results/Interviews/Site Visits (May-August)

Upcoming Outreach

- MPO Quarterly Meeting (Augusta) – Date TBD - (MJ remote)
- Maine Aviation Forum (Owl’s Head) – February 15 (up to 2 MJ present)
- MAAB (Augusta) – March 11 (1 MJ present/1 MJ remote)
- Agency Coordination – Date TBD (Spring)

Agenda – Bi-Weekly PM Meeting #5

Maine State Aviation Systems Plan – Phase I

January 28, 2020 | 2:00PM | Conference Call

Dial-In Info: +1 (646) 975.3975

Participant Code: 110-361-588-34

Current Activities

- Forecast Methodology – R. Lucas
- Task 3 Report – System Management Evaluation – Final Revisions
- Surveys
 - Airport Manager Survey – 35 PDFs being pre-populated
 - Regional Council/EDD Survey – ready to go
 - Boilerplate instruction language - coming
 - DOT Distribution Date – 2/7/20; Return/Due Date – 2/21/20
- Maine Aviation Forum (Owl's Head) – February 15 (up to 2 MJ present)
 - Attending from MaineDOT/MJ (B. Brewster & S. LeCount)
 - Preparations/Table/Booth (DOT); Sign-in Form & Questions (MJ)

Underway

- Task 2.1 System Plan Peer Review & Context Setting
 - FAA/Other Plans Research & Memo
- First Look - Phase I Executive Summary Report Outline
 - Introduction – Goals, Approach, Process, Outreach, System Management Evaluation (reference Appendix)
 - Summary of Existing System
 - Aviation Activity Summary & Forecasts
 - Airport System Roles & Capabilities
- Formulating Dynamic Framework

Upcoming Outreach, Etc.

- MAAB (Augusta) – Afternoon of March 11 (1 MJ present/1 MJ remote)
- Agency Coordination – Tentative>Morning of March 11
- Survey Results/Interviews/Site Visits (May-August)
- MPO Quarterly Meeting (Augusta) – Date TBD - (MJ remote)

Agenda – Bi-Weekly PM Meeting #6

Maine State Aviation Systems Plan – Phase I

February 11, 2020 | 2:00PM | Conference Call

Dial-In Info: +1 (646) 975.3975

Participant Code: 110-361-588-34

Current Activities

- Survey Administration & Support
 - Received: Princeton, Bethel, Jackman, Lincoln, Dewitt/Old Town, Knox County
 - Biddeford – address status of data and insights at interview
- Maine Aviation Forum (Owl's Head)
 - Attending from MaineDOT/MJ (B. Brewster)
 - Preparations:
 - Table/Booth (DOT);
 - Sign-in Form & Questions (1-page survey, MJ)
 - Plan/Roles for MaineDOT/MJ
 - Simple Survey – 1 page?
- Agency Coordination – Morning of March 11
 - Update on Attendees?
 - Agenda Thoughts/Preparation - next

Ongoing

- Task 3 Report – System Mgmt. Evaluation – Final Corrections from MaineDOT – Status?
- Task 2.1 System Plan Peer Review & Context Setting
- Getting Off Ground
 - Task 6 - Forecast
 - Task 7 – Roles & Capabilities
- Formulating Dynamic Framework

Upcoming Outreach, Etc.

- MAAB (Augusta) – Afternoon of March 11 (1 MJ present/1 MJ remote)
- Survey Results/Interviews/Site Visits (May-August)
- MPO Quarterly Meeting (Augusta) – Date TBD - (MJ remote)

Looking Ahead

- Phase 2 Timing?

Agenda – Bi-Weekly PM Meeting #7

Maine State Aviation Systems Plan – Phase I

February 26, 2020 | 10:30AM | Conference Call

Dial-In Info: +1 (646) 975.3975

Participant Code: 110-361-588-34

Current Activities

- Survey Responses/Progress
 - Received (16):
 - Auburn-Lewiston, Bangor, Belfast, Bethel, Biddeford, Frenchville, Jackman, Knox Co., Lincoln, Millinocket, Old Town, Portland, Presque Isle, Princeton, Sanford, Wiscasset
 - Operating Budgets Received: Sanford, Presque Isle, No. Aroostook
 - Bangor – MJ Follow Up
 - Biddeford – MaineDOT Follow Up
 - EDD Survey – Bugs and Solutions
 - Submit button opens for some, but not others
 - How many responses should we anticipate?
 - List of who the survey was sent to
 - Received (5):
 - Houlton Chamber, Kennebec Valley COG, Portland COG, Mid Maine Chamber, Greenville Town Mgr. (via M.A. Hayes)
- Maine Aviation Forum (Owl's Head)
 - Debrief
- Agency Coordination – Morning of March 11
 - Agencies
 - Forest Service, State Police, Marine Research, Emergency Mgmt., DHHS, CAP, MeCBP, Army/AirNG
 - Agenda Thoughts/Preparation
- MAAB Presentation – Afternoon of March 11 (1 MJ present/1 MJ remote)
 - Preliminary Survey Results
 - PAC Meeting #1 - Themes
 - Owls Head

Ongoing

- Task 3 Report – System Mgmt. Evaluation – Final Corrections from MaineDOT
 - Status of consolidated comments
 - Refer to survey results by state abbreviation (CA. NH) vs. number (#5, #17).

- Task 2.1 System Plan Peer Review & Context Setting
- Getting Off Ground
 - Task 6 – Forecast
 - Task 7 – Roles & Capabilities
 - Phase I – Summary Report
 - Formulating Dynamic Framework

Upcoming Outreach, Etc.

- Survey Results/Interviews/Site Visits (May-August)

Looking Ahead

- Phase 2 Timing:
 - August – Conduct Scoping Meeting
 - September – Develop Contract
 - October – Submit FAA Grant Application FFY21

Meeting Notes – Bi-Weekly PM Meeting #7

Maine State Aviation Systems Plan – Phase I

February 26, 2020 | 10:30AM-11:51 | Conference Call

Dial-In Info: +1 (646) 975.3975

Participant Code: 110-361-588-34

Attendance

Mary Ann Hayes – MaineDOT

Stacie Haskell – MaineDOT

Tim LeSiege – MaineDOT

Ralph Nicosia-Rusin – FAA

Matthew O’Brien – MJ

Scott LeCount – MJ

Current Activities

- Survey Responses/Progress
 - Received (16):
 - Auburn-Lewiston, Bangor, Belfast, Bethel, Biddeford, Frenchville, Jackman, Knox Co., Lincoln, Millinocket, Old Town, Portland, Presque Isle, Princeton, Sanford, Wiscasset
 - Operating Budgets Received: Sanford, Presque Isle, No. Aroostook
 - Bangor – MJ Follow Up
 - Biddeford – MaineDOT Follow Up. **Stacie Confirmed.**
 - **Stacie to reach out to the Airports by next Monday.**
 - **MJ to provide a list to Stacie. Draft a sample email.**
 - EDD Survey – Bugs and Solutions
 - Submit button opens for some, but not others
 - How many responses should we anticipate?
 - List of who the survey was sent to
 - **MaineDOT to follow up EDD.**
 - **MaineDOT anticipates 15 responses.**
 - **MaineDOT to provide list to MJ**
- Maine Aviation Forum (Owl’s Head)
 - Debrief
 - Brady is moving to Miami:
 - MaineDOT would like a consistent person coordinating all the voices.
 - Scott LeCount - primary report author/coord.; knit themes together.
 - Brady heard stories first hand and made relationships at Owls Head; Important to convey back to MJ team.

- Dover-Foxcroft Story
 - Part of NPIAS, but not using AIP funds.
 - Almost a solar farm.
 - Flight school.
 - This story is important to be captured by the SASP as a model for how things might be transferrable.
- All-around good vibes – Organizers/attendees happy to have MaineDOT there.
- FAA – Ralph asked if there was any significant new learning gained from attending, or if there were issues with facilities discussed.
 - Not in this context. Sharing was who to contact. Will follow up with digital survey.
 - Heard interesting stories regarding operator insurance issues, entrepreneurial ideas/challenges, hopes for aero biz expansions.
- Tim LeSiege
 - Not there representing MaineDOT.
 - Heard that Part 135 operation has challenges growing company.
 - Other companies looking to expand.
 - Heard from Life Flight.
 - David Swanson, Lead FSDO, attended
- Agency Coordination – Morning of March 11
 - Agencies
 - Forest Service, State Police, Marine Research, Emergency Mgmt., DHHS, CAP, MeCBP, Army/AirNG
 - Agenda Thoughts/Preparation
 - **MaineDOT will prompt the group.**
 - **Allow the group to discuss amongst themselves.**
 - **Plan B: Send structured questions to allow them to prepare.**
 - **Tim’s invite provides this head’s up on topic**
 - **MaineDOT will provide introduction to group with MJ leading/directing discussion as required.**
 - **MJ & MaineDOT will take notes.**
- MAAB Presentation – Afternoon of March 11 (1 MJ present/1 MJ remote)
 - Preliminary Survey Results
 - PAC Meeting #1 - Themes
 - Owls Head
 - Include SASP Phase I & II schedule update.
 - MaineDOT to discuss GARD upgrades to aid the system plan.

Ongoing

- Task 3 Report – System Mgmt. Evaluation – Final Corrections from MaineDOT
 - Status of consolidated comments – **due to workload input from MaineDOT will be 3 Weeks+**

- Refer to survey results by state abbreviation (CA, NH) vs. number (#5, #17).
- Task 2.1 System Plan Peer Review & Context Setting
- Getting Off Ground
 - Task 6 – Forecast
 - Task 7 – Roles & Capabilities
 - Phase I – Summary Report
 - Formulating Dynamic Framework
- **MaineDOT wants to review direction of SASP at critical points for approval**
 - **Methodology and Assumptions**
 - **Before substantial work is undertaken to confirm/assure agreement.**
 - **MJ in agreement**

Upcoming Outreach, Etc.

- Survey Results/Interviews/Site Visits (May-August)
 - MaineDOT approve this approach.

Looking Ahead

- Phase 2 Timing:
 - August – Conduct Scoping Meeting
 - September – Develop Contract
 - October – Submit FAA Grant Application FFY21
 - **MaineDOT is looking for enough time to be thoughtful.**
 - **Slow down the pace and push the deadlines**
 - **Use meetings and people’s time well.**
 - **September is very busy with MaineDOT.**
 - **If site visits are complete by August, the Team needs the time to digest**
 - **MJ agrees. Work sessions will be very beneficial prior to scoping.**
 - **MJ to develop a draft schedule for review.**
 - **Use April 1, 2021 as new Deadline**

ASSET Category

- FAA shared a spreadsheet ahead of the meeting. Ralph suggested that year-to-year fluctuations in FAA metrics that affect Asset categories, it might be appropriate/useful/preferable for MaineDOT to utilize descriptors for Maine Airport FAA Asset Categories to reflect state and airport nuances and maintain consistency over time. MaineDOT suggested that “Role” descriptions will provide that detail to the System Plan.

GARD System

- MaineDOT submitting a GARD program participation update letter to airports. Airports’ willingness to participate may affect State funding for projects.
- FAA offered assistance in describing the benefits of the data being collected.
- FAA would like to include and evaluation of ADS-B data in Maine with local samples to extrapolate for non-equipped aircraft.

Washington County Evaluation

- When will this be undertaken? Recommend aligning with Airport visits to Downeast airports.
- Update and include in the schedule.

Phase 1 Report

FAA wants Phase 1 report to review:

- Winter Maintenance, condition reporting and consideration of distance to hospitals as a metric for assessing emergency access

Scott Wardwell Story

- Late-night patient transport patterns such that may not be an emergency but driven by insurance requirements/costs and how after-hours call-outs burden/impact airports and staff with limited resources.
- Recoupment of these airport costs for non-emergency patient transport is therefore a topic/issue

Agenda – Bi-Weekly PM Meeting #8

Maine State Aviation Systems Plan – Phase I

March 10, 2020 | 2:00PM | Conference Call

Dial-In Info: +1 (646) 975.3975

Participant Code: 110-361-588-34

Current Activities

- Survey Responses Progress 69% of surveys, 63% of budgets

Airport Manager Surveys Remaining

Airport	Manager Survey	Budget
Augusta State		
Biddeford Municipal	✓*	
Brunswick Executive		
Charles A Chase Jr Memorial		
Dewitt Field, Old Town Municipal	✓	
Dexter Regional		✓
Eastern Slopes Regional		
Eastport Municipal		
Hancock County-Bar Harbor		
Lincoln Regional	✓	
Machias Valley		
Newton Field	✓	
Oxford County Regional		✓
Stonington Municipal	✓	
Sugarloaf Regional		

- EDD Survey Responses

EDD Survey Responses
Southern Midcoast Maine Chamber of Commerce
Washington County Council of Governments
Greater Houlton Chamber of Commerce
Kennebec Valley Council of Governments
Greater Portland Council of Governments
Midcoast Economic Development
Northern Maine Development Corporation
Androscoggin Valley Council of Governments
Town of Greenville
Easter Maine Development Corporation

- Agency Coordination – Morning of March 11
 - Call-in Information?
 - Update on Agencies Participating?
 - Forest Service, State Police, Marine Research, Emergency Mgmt., DHHS, CAP, MeCBP, Army/AirNG
 - Agenda Thoughts/Preparation
- MAAB Presentation – Afternoon of March 11 (1 MJ present/1 MJ remote)
 - Surveys, Communication & Outreach Efforts
 - PAC Meeting #1 – Discussion Topics/Themes
 - Project Schedule Extension

Ongoing

- Task 3 Report – System Mgmt. Evaluation – Final Corrections from MaineDOT
 - Current Final Draft Version Provided via E-mail to MaineDOT 3/10/20
- Task 2.1 System Plan Peer Review & Context Setting
 - Underway - Task 6 – Forecast, Task 7 – Roles & Capabilities, Phase I – Summary Report, Formulating Dynamic Framework

Upcoming Outreach, Etc. – no change

- Survey Results/Interviews/Site Visits (May-August)

Looking Ahead – no change

- Phase 2 Timing:
 - August – Conduct Scoping Meeting
 - September – Develop Contract
 - October – Submit FAA Grant Application FFY21

Agenda – Bi-Weekly PM Meeting #9

Maine State Aviation Systems Plan – Phase I

March 24, 2020 | 2:00PM | Conference Call

Dial-In Info: +1 (646) 975.3975

Participant Code: 110-361-588-34

Current Activities

- Survey Responses Progress 83% of surveys, 74% of budgets – as of 3/11
Airport Manager Surveys Remaining

Airport	Manager Survey	Budget
Biddeford Municipal	✓*	
Charles A Chase Jr Memorial		
Dewitt Field, Old Town Municipal	✓	
Eastern Slopes Regional		
Eastport Municipal		
Hancock County-Bar Harbor		
Lincoln Regional	✓	
Machias Valley		

- EDD Survey Responses

EDD Survey Responses
Southern Midcoast Maine Chamber of Commerce
Washington County Council of Governments
Greater Houlton Chamber of Commerce
Kennebec Valley Council of Governments
Greater Portland Council of Governments
Midcoast Economic Development
Northern Maine Development Corporation
Androscoggin Valley Council of Governments
Town of Greenville
Easter Maine Development Corporation

- Agency Coordination – Morning of March 11
 - o Call-in Information?
 - o Update on Agencies Participating?
 - Forest Service, State Police, Marine Research, Emergency Mgmt., DHHS, CAP, MeCBP, Army/AirNG
 - o Agenda Thoughts/Preparation

- MAAB Presentation – Afternoon of March 11 (1 MJ present/1 MJ remote)
 - Surveys, Communication & Outreach Efforts
 - PAC Meeting #1 – Discussion Topics/Themes
 - Project Schedule Extension

Ongoing

- Task 3 Report – System Mgmt. Evaluation – Final Corrections from MaineDOT
 - Current Final Draft Version Provided via E-mail to MaineDOT 3/10/20
- Task 2.1 System Plan Peer Review & Context Setting
 - Underway - Task 6 – Forecast, Task 7 – Roles & Capabilities, Phase I – Summary Report, Formulating Dynamic Framework

Upcoming Outreach, Etc. – no change

- Survey Results/Interviews/Site Visits (May-August)

Looking Ahead – no change

- Phase 2 Timing:
 - August – Conduct Scoping Meeting
 - September – Develop Contract
 - October – Submit FAA Grant Application FFY21

Agenda – Bi-Weekly PM Meeting #10

Maine State Aviation Systems Plan – Phase I

April 7, 2020 | 2:00PM | Conference Call

Dial-In Info: +1 (646) 975.3975

Participant Code: 110-361-588-34

Current Activities

- Survey Analyses Underway – starting with Airport Manager Surveys

Airport Manager Surveys Remaining	Manager Survey	Budget
Lincoln Regional	✓	
Machias Valley		✓

- Agency Coordination – Takeaways by Agency, see combined notes

Present	Not Present
Maine Forest Service	Maine State Police
Dept. Marine Resources	Dept. Health & Human Services
Dept. Emergency Medical Services	
Civil Air Patrol	
Maine Customs & Border Protection	
Maine Army/Air National Guard	
Dept. Inland Fisheries & Wildlife	

- COVID-19 Considerations
 - Phase 1 – Preliminary Observations - Summary Documentation for the plan?
 - Anecdotal only -> Too early for data
 - Request: Team keep/maintain rolling bullet list? (MaineDOT & MJ)
 - NASAO Convention (September, Greenville, SC) – expect sessions/panels
 - Phase 2 Economic Impact – Survey Question(s) to be included

System Airports

- Only NPIAS? Or: Include Deblois Flight Strip? Augusta APB?
- What about other Publicly Owned/Public Use/Non-NPIAS?
 - Not in scope list: Lubec Municipal, Presque Isle SPB,
 - In scope list: Portage Lake Muni SPB, VanBuren SPB
- Minimum treatment of Loring AFB? North Haven?
- Eligibility clarification(s)

Ongoing

- Phase 1 Summary Report – Chapter Outlines/Framework for Buy-in – coming 4/16-17/20

- Including basic figures/drive-times
- Formulating Beta Dynamic Framework – screen caps?
- Task 2.1 System Plan Peer Review & Context Setting – coming 4/16-17/20
- Task 3 Report – System Mgmt. Evaluation – Final Corrections from MaineDOT (3/10/20)

Upcoming Outreach, Etc. – no change

- PAC Meeting May 27th
 - Survey Results/Interviews Prep/Site Visits
- Interview/Site Visit Staffing Plan & Scheduling (June-August)

Looking Ahead – no change

- Phase 2 Timing:
 - January/February – Conduct Scoping Meeting
 - March – Develop Contract
 - April – Submit FAA Grant Application FFY21
- Washington County Evaluation - Anticipated August 2020

Other Survey Responses (as of 4/7/20)

EDD Survey Responses

- Southern Midcoast Maine Chamber of Commerce
- Washington County Council of Governments
- Greater Houlton Chamber of Commerce
- Kennebec Valley Council of Governments
- Greater Portland Council of Governments
- Midcoast Economic Development* completed by Knox County
- Northern Maine Development Corporation
- Androscoggin Valley Council of Governments
- Town of Greenville
- Eastern Maine Development Corporation
- Southern Maine Planning & Development
- Aroostook Band of Micmacs
- Mid-Maine Chamber of Commerce

General Stakeholder Survey Responses

Allan Fuller	Duke Tomlin	James Schoenmann	Paul Lariviere
Andrew Rowe	Eric Hendrickson	Jean Hardy	Perry Virgin
Barry Valentine	Ervin Deck	John Watson	Phil Cyr
Bob Thuet	Glen Davis	Joseph Blinick	Ralph Shipton
Bill Shelley	Ian Gillis	Joshua Dickson	Shane McDougall
Caleb Curtis	Ian Riley	Karl Pepin	Tom Goetz
Charlie Cianchette	Igor Sikorsky	Lisa Reece	Owl’s Head (4)
Clark Cantwell	James Gallagher	Malcom Brydon	101 st MX Group - MeANG
David Cullinan	James Rike	Mike Muchmore	

Meeting Notes – Bi-Weekly PM Meeting #10

Maine State Aviation Systems Plan – Phase I

April 7, 2020 | 2:00PM | Conference Call

Mary Ann Hayes
 Stacie Haskell
 Tim LeSieve
 Matthew O’Brien
 Scott LeCount
 Rick Lucas
 Ralph Nicosia-Rusin

Dial-In Info: +1 (646) 975.3975
Participant Code: 110-361-588-34

Current Activities

- Survey Analyses Underway – starting with Airport Manager Surveys

Airport Manager Surveys Remaining	Manager Survey	Budget
Lincoln Regional	✓	
Machias Valley		✓

MJ to provide a compiled PDF of the surveys and upload to an online link for the design team to access, if desired.

Machias has completed a copy, but didn’t save it. Stacie wants 100%! MJ to move forward and follow up with interview.

MJ to pull survey status off the agenda, until processing is complete.

- Agency Coordination – Takeaways by Agency, see combined notes

Present	Not Present
Maine Forest Service	Maine State Police
Dept. Marine Resources	Dept. Health & Human Services
Dept. Emergency Medical Services	
Civil Air Patrol	
Maine Customs & Border Protection	
Maine Army/Air National Guard	
Dept. Inland Fisheries & Wildlife	

MaineDOT to review the notes. They were “Well done.” (thank you for the compliment!) Follow up with the seaplane and the states economy, that would be helpful – FAA

A couple key groups/association that may be appropriate to follow up with to discuss the importance of the GA airports and their business. FAA is not interested in the opinion of the GA contribution of the economic benefit. FAA would like to find data for trending (registrations, etc.)

Forecasting to not look at short-term 2020 Covid-19 impacts. Talk more about the change in trends to the GA and scheduled air service system.

Seaplane bases fly from their base to a public airport to pick visitors up and provide access to hunting camps.

MJ has found that not a lot of published data is available for seaplane. MJ will need assistance from MaineDOT to acquire sea plane registrations. Mechanics may be able to measure the trends of sea planes. Seaplane fly in in September.

Steve, the head of the seaplane association.org, MJ and MaineDOT to coordinate questions, vet them for the phone interview.

- COVID-19 Considerations
 - Phase 1 – Preliminary Observations - Summary Documentation for the plan?
 - Anecdotal only -> Too early for data
 - Request: Team keep/maintain rolling bullet list? (MaineDOT & MJ)
 - NASAO Convention (September, Greenville, SC) – expect sessions/panels
 - Phase 2 Economic Impact – Survey Question(s) to be included

COVID-19 is too early to tell what impacts on aviation will be a result of this global crisis. To prepare for phase II, use our bullet list of observations of how to address within the economic impacts. MaineDOT liked the idea of rolling list. May seem minor, but an executive order requiring posts are ports of entry. Resiliency if an airport was closed? Emergency planning and back up plans. Want to come out of this plan with a list of FBO contact list. Maybe share at the PAC meeting in May 2020. FAA asked not to lose sight for AIP investment in facilities, and what analysis to have a better understanding of that, no funding for non-NPIAS Airports.

System Airports

- Only NPIAS? Or: Include Deblois Flight Strip? Augusta APB?

Not eligible but make a statement that the airport is of state's concerns. Mary Ann feels that they should be excluded as non-NPIAS. Stacie feels that Deblois feels that this needs to be included. MA feels that it should be addressed in the Washington County Analysis. Include Deblois in the seaplane base discussion. FAA suggest that MaineDOT conduct the work and supply to MJ to avoid costs to the study.

- What about other Publicly Owned/Public Use/Non-NPIAS?

- Not in scope list: Lubec Municipal, Presque Isle SPB,
- In scope list: Portage Lake Muni SPB, VanBuren SPB
- Minimum treatment of Loring AFB? North Haven?

FAA supports the North Haven, if the MaineDOT supports this. FAA to conduct a site analysis. What would be necessary for Loring to be considered?

Must meet NPIAS Criteria

Maybe an interest to the state. Maybe close Presque Isle? Find other needs for Loring.

FAA has already spent money on Loring, and came to the conclusion to keep out of

NPIAS.

MaineDOT would like to fund for they own interests. What level of treatment is necessary to keep Loring as a member of the System Plan.

MJ did an Arkansas system plan and looked at if there were an airport that may change from non-system.

There is talk about a space port in Maine. Brunswick and Loring are the two locations. In order to do that, they would need to be recognized as a spaceport and in the System Plan.

FAA – Spaceports are not Airports and do not get within the NPIAS.

MJ will state that Loring was studied, and it did not meet criteria. If this changes, MaineDOT will support it.

Forecast – Don't analysis spaceport. If spaceports take off, here are the two airports that should be targeted. FAA does not want to deviate to spaceport when the current system needs keep in good shape and financially sustainable. COVID is not in scope, nor is spaceports. Keep focused on airports.

- Eligibility clarification(s)

Ongoing

- Phase 1 Summary Report – Chapter Outlines/Framework for Buy-in – coming 4/16-17/20
 - Including basic figures/drive-times
- Formulating Beta Dynamic Framework – screen caps?
- Task 2.1 System Plan Peer Review & Context Setting – coming 4/16-17/20
- Task 3 Report – System Mgmt. Evaluation – Final Corrections from MaineDOT (3/10/20)
 - **May 1, 2020 – Mary Ann will provide comments.**
- MJ will outline and talk about the different influencers in a qualitative effort.
- Validating cross wind requirements – using percentage gap to determine 500 aircraft that need it. Need to mention wind data.
- FAA would like to know statewide design aircraft at airports.
- Washington County Analyses
 - FAA needs more detail.
 - MJ and MaineDOT to expand upon the scope of that effort.
 - Should the sponsorship be considered due to challenges of funding.
 - Obtain common vision with region on what this study will achieve.
 - FAA and MaineDOT to conduct work outside of Grant work to build a relationship.
 - Determine criteria, stake holders.

Upcoming Outreach, Etc. – no change

- PAC Meeting May 27th
 - Survey Results/Interviews Prep/Site Visits
- Interview/Site Visit Staffing Plan & Scheduling (June-August)

Looking Ahead – no change

- Phase 2 Timing:
 - Finalize Plan in December 2020
 - Start scoping December/January
 - February/March – Develop Contract
 - April 1st, 2021 – Submit FAA Grant Application FFY21

MJ to develop two plans – COVID influences in the summer, or not.

- Washington County Evaluation - Anticipated August 2020

Other Survey Responses (as of 4/7/20)

EDD Survey Responses

Southern Midcoast Maine Chamber of Commerce

Washington County Council of Governments

Greater Houlton Chamber of Commerce

Kennebec Valley Council of Governments

Greater Portland Council of Governments

Midcoast Economic Development* completed by Knox County

Northern Maine Development Corporation

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Town of Greenville

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Southern Maine Planning & Development

Aroostook Band of Micmacs

Mid-Maine Chamber of Commerce

General Stakeholder Survey Responses

Allan Fuller	Duke Tomlin	James Schoenmann	Paul Lariviere
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Caleb Curtis	Ian Riley	Karl Pepin	Tom Goetz
Charlie Cianchette	Igor Sikorsky	Lisa Reece	Owl’s Head (4)
Clark Cantwell	James Gallagher	Malcom Brydon	101 st MX Group - MeANG
David Cullinan	James Rike	Mike Muchmore	

Agenda – Bi-Weekly PM Meeting #11

Maine State Aviation Systems Plan – Phase I

April 23, 2020 | 11:00AM | Conference Call

Dial-In Info: +1 (646) 975.3975

Participant Code: 110-361-588-34

Current Activities/Hot Topics

- Confirm “System Airports” or “SASP Airports”
 - Only NPIAS? Or: Include Deblois Flight Strip? Augusta APB?
 - Confirm other Publicly Owned/Public Use/Non-NPIAS – Not “SASP Airports”
 - Not in scope list: Lubec Municipal, Presque Isle SPB
 - In scope list: Portage Lake Muni SPB, Van Buren SPB
 - SASP should Clarify State Funding Eligibility – Title 6
- Phase 1 Summary Report – Chapter Outlines/Framework for Review
 - TOC/Outline & Chapter 3 submitted 4/20; Stakeholder Outreach – coming 4/24
 - Next: Forecast Outline/Framework – ETA 4/30
- Task 2.1 System Plan Peer Review & Context Setting – coming 4/24

Ongoing

- COVID-19 Update(s) - Technical Memo Provided 4/17 – Update? Observations?
- Task 3 Report – System Mgmt. Evaluation – Final Corrections from MaineDOT
 - Current Final Draft Version Provided via E-mail to MaineDOT 3/10/20
 - M.A. Hayes Comments Anticipated May 1, 2020

Upcoming Outreach, Etc. – no change

- PAC #2 May 27, 2020 – 10am ZOOM Meeting
 - Survey Results/Interviews/Site Visits
- Interview/Site Visit Staffing Plan & Scheduling

Looking Ahead – no change

- Phase 2 Timing:
 - November/December – Finalizing Phase I Summary Report
 - January/February – Conduct Scoping Meeting
 - March – Develop Contract
 - April 1, 2020 – Submit FAA Grant Application FFY21
- Washington County Evaluation - Anticipated August 2020
 - Scope to be discussed between MJ & MaineDOT

Agenda – Bi-Weekly PM Meeting #11

Maine State Aviation Systems Plan – Phase I

April 23, 2020 | 11:00AM | Conference Call

Attended: Mary Ann Hayes, Stacie Haskell, Ralph Nicosia-Rusin, Matthew O’Brien, Scott LeCount Brady Brewster, Erik Hartley

Dial-In Info: +1 (646) 975.3975

Participant Code: 110-361-588-34

Current Activities/Hot Topics

Scott introduced Erik Hartley from MJ, who is involved/working on the project.

- Confirm “System Airports” or “SASP Airports”

Scott explained why this question is important, how the list from the 5010 was different than in the scope. This list could evoke eligibility status for state funding. Also, need to ensure accuracy/consistency in the GIS mapping/analysis.

- Only NPIAS? Or: Include Deblois Flight Strip? Augusta APB?

Mary Ann has had conversations internally with MaineDOT. MaineDOT is happy to do state-funded add-ons that make sense. FAA’s funds are designated to support NIPIAS. MaineDOT would support services (fuel, repairs) that support the users of the NIPIAS system. Wants to recognize these facilities, but necessarily want to place them on an eligibility list.

Ralph stated that FAA supports an analytical approach that considers the “small ‘s’ system” holistically with “capital ‘S’ system” being primarily NPIAS airports. Example: Loring wants to sit outside of the defined System, but FAA would recommend specifically what the interest would be for the state of Maine especially since PQI is more centrally located to public, and all the investment in PQI. Don’t establish two systems of airports per se, and no otherwise expressly stated eligibility connotation with “capital ‘S’ system”.

- Confirm other Publicly Owned/Public Use/Non-NPIAS – Not “SASP Airports”
 - Not in scope list: Lubec Municipal, Presque Isle SPB
 - In scope list: Portage Lake Muni SPB, Van Buren SPB
- SASP should Clarify State Funding Eligibility – Title 6

Possibly use “supporting non-system airport”. What defines the supporting airport? Stake holder survey asked a specific question about which private airports or services are relied upon by NPIAS airports? Such as use of Twitchell as essential to the system. Ralph suggested

that we simply take what comes from the survey/investigation work as to which privately owned airports and services/users there that may reveal a compelling state/public interest.

Ralph also suggested 4 real categories of airports:

- Current NPIAS Airports and prospective NPIAS candidates
- state owned/managed airports where there is a clear responsibility
- private or other public non-NPIAS airports where a high public interest is apparent
- Other landing areas of the state. (what trends to expect due to their continuing operation).

MaineDOT – how to determine who is on the list. Interviews may provide more insight. Tim to provide Seaplane base feedback. MJ to mine the survey question.

Ralph cautioned naming specific privately owned or non-NPIAS facilities. It may lead to questions on why some are included, but not others. Define the services that are essential, how to replace these facilities if they close? Ralph added if the state agency has an aviation need, this plan can include it, but it's on the agency to fund the facility.

MaineDOT - instead of starting with all 200 and refining, start with only the facilities that have been identified by the surveys.

- Phase 1 Summary Report – Chapter Outlines/Framework for Review
 - TOC/Outline & Chapter 3 submitted 4/20; Stakeholder Outreach – coming 4/24

Stacie liked the incorporation of the questions.

Mary Ann thought this section may be long. Can it be shortened by using an appendix?

Regarding the Table of Contents, under stakeholder groups, add state agencies. Tribes are not a separate group. Section 6.0 – summary of existing deficiencies or redundancies.

Scott requested that MaineDOT submit a record that you have reviewed it, via an email.

MaineDOT requested MJ provide draft documents to FAA for their input as well.

- Next: Forecast Outline/Framework – ETA 4/30
- Task 2.1 System Plan Peer Review & Context Setting – coming 4/24

MaineDOT - Maximize on 6.2 – big data collection exercise could end with a big – so what. This could point toward tasks for phase two. Team agrees that the task is not to regurgitate stakeholders comments to say that we heard them, but address the problems at hand.

Hangar development – 8year block of entitlement funds. What are other ways an airport can get revenue hangar. SRE – how to fund? AIP has trouble addressing.

Ralph added a question as to whether the analysis can answer whether an airport needs a parallel taxiway? If not, why invest in direct access to runway, if they back-taxi regardless?

Ralph clarified that the question of the system plan should answer is twofold: Phase 1 -Why worry about airports? Phase 2 - If we are worried, what do we do?

Ongoing

- COVID-19 Update(s) - Technical Memo Provided 4/17 – Update? Observations?

MaineDOT does not see the value for putting effort in this topic. The extent of the SASP effort is to recognize the topic, but no need to go beyond this. FAA doesn't feel that any of us can predict the COVID outcome. Expected a running list of bullets, not a well-documented report.

Maybe raises a discussion of Risk management? What is a redundancy during disruption, such as COVID. Maybe next phase will be a better time to review COVID trends: fuel prices, training increase? Corporate may increase to avoid contagion? Emergency preparedness?

- Task 3 Report – System Mgmt. Evaluation – Final Corrections from MaineDOT
 - Current Final Draft Version Provided via E-mail to MaineDOT 3/10/20
 - M.A. Hayes Comments Anticipated May 1, 2020

Upcoming Outreach, Etc. – no change

- PAC #2 May 27, 2020 – 10am ZOOM Meeting
 - Survey Results/Interviews/Site Visits

Draft Survey results

Provide Agenda – 1 week ahead.

No need to shift the date.

Be prepared to talk with while at the airport?

- Interview/Site Visit Staffing Plan & Scheduling

COVID may delay this project. Phone interviews should be on schedule in June. State restriction should not apply

PAC meeting to after MJ is able to synthesize the data and come the group with thoughtful analysis.

Looking Ahead – no change

- Phase 2 Timing:
 - November/December – Finalizing Phase I Summary Report
 - January/February – Conduct Scoping Meeting
 - March – Develop Contract
 - April 1, 2020 – Submit FAA Grant Application FFY21
- Washington County Evaluation - Anticipated August 2020
 - Scope to be discussed between MJ & MaineDOT

Agenda – Bi-Weekly PM Meeting #12

Maine State Aviation Systems Plan – Phase I

May 5, 2020 | 2:00PM | Conference Call

Dial-In Info: +1 (646) 975.3975

Participant Code: 110-361-588-34

Current Activities

- PAC Meeting #2 - Agenda
 - Survey Findings – Power Point
 - Missing information?
 - What does the PAC know as an airport’s purpose/value?
 - Interview Questions June
 - Who to talk to?
 - Questions targeting missing information
 - Site Visits – July/Aug
 - Maps/Coverages – Sample, October PAC
 - Shortfalls
 - Submit to MaineDOT for Review May 13;
 - Comments May 15th
 - Submit to PAC 5/20/20
- Survey Analysis
 - Airport Manager Survey Analysis – Nearly Complete
 - EDD Survey Analysis - Next
 - General Stakeholder Survey Analysis – Next
- Phase I Analysis Approach Overview (graphic on next page)

Ongoing

- Phase 1 Summary Report – Chapter Outlines/Framework for Review
 - TOC/Outline & Chapter 3. Summary of Existing System - submitted 4/20
 - Chapter 2. Stakeholder Outreach – submitted 4/24
 - Chapter 4. Summary of Aviation Activity & Forecast – submitted 5/1
 - ➔ Comments from MaineDOT/FAA – due date? – Forecast call?
- Task 2.1 System Plan Peer Review & Context Setting – submitted 4/24
- Task 3 Report – System Mgmt. Evaluation – Final Corrections from MaineDOT
 - ➔ Current Final Draft Version Provided via E-mail to MaineDOT 3/10/20
 - ➔ M.A. Hayes Comments Anticipated May 1, 2020. Due Date Extended.

Upcoming Outreach, Etc. – no change

- PAC #2 May 27, 2020 – 10am ZOOM Meeting
- Interview/Site Visit Staffing Plan & Scheduling

Looking Ahead – no change

- Phase 2 Timing:
 - November/December – Finalizing Phase I Summary Report
 - January/February – Conduct Scoping Meeting
 - March – Develop Contract
 - April 1, 2020 – Submit FAA Grant Application FFY21
- Washington County Evaluation - Anticipated August 2020
 - Scope to be discussed between MJ & MaineDOT

Meeting Notes – Bi-Weekly PM Meeting #12

Maine State Aviation Systems Plan – Phase I

May 5, 2020 | 2:00PM | Conference Call

Dial-In Info: +1 (646) 975-3975

Participant Code: 110-361-588-34

Mary Ann Hayes
Stacie Haskell
Tim LeSiege
Ralph Nicosia-Rusin
Matthew O'Brien
Scott LeCount
Rick Lucas
Brady Brewster

Current Activities

- **Scott's Opening:**
 - MJ has made good progress. Way ahead on outline/draft chapters of Phase I Summary Report.
 - Looking for feedback on draft outlines/content framework provided.
 - MJ received comments today from Tim (Ch. 3 & 4), and from Ralph (Ch. 4)
 - Forecast – Needs separate working session call. Don't use TAF.
 - Description of Plan Development Process Diagram.
- **PAC Meeting #2 - Agenda**
 - Survey Findings – Power Point
 - Missing information?
 - What does the PAC know as an airport's purpose/value?
 - Interview Questions June
 - Who to talk to?
 - Questions targeting missing information
 - Site Visits – July/Aug
 - Maps/Coverages – Sample, October PAC
 - Shortfalls
 - Submit to MaineDOT for Review May 13
 - Comments May 15th
 - Submit to PAC 5/20/20

Mary Ann feels the approach presented for PAC Mtg. #2 approach is fine.

FAA feels that big issues to prepare for:

- COVID-19 – Presents an unknown and we need to recognize that but also there are conditions and issues that will persist in the future that we can address despite COVID Impacts. Forecast is an example - quickly ID and move on.

- COVID impacts could include GA with an expanded role since people avoid scheduled service. Use of air charter might also be increasing.
- Ralph asked Tim from MaineDOT to pull data from January-April for 2019 to compare to 2020 data to ID a COVID impact.
- Crosswind Runways – how to handle justification
- Forecast of the qualitative demand drivers, vs. numbers
 - Demand – Traffic
 - Demand – Reason Maine has the airport
 - Demand – Safety?
 - Demand – Cargo, business access?
 - Demand – not volumes, but types of operations. Leads to roles and capabilities. Leads to redundancies, gaps and short falls.
 - Critical Functions – Medical, Access
- Demand example: If a runway is only available the months/yr for runway length. What would be the demand if it was kept open from May to October.
 - FAA- Leave Market Economics terms out of the plan. Unless Interstate 95 closes, air cargo cannot compete with trucking.

What to provide the PAC as prep. Material.

- Summary of surveys
- Slide, or two for each asset category of airports (Basic, local, regional, National)
 - Headline for these airports, facilitate discussion with PAC on airport attributes, help refine/identify themes, meaning/value – find information and insights we don't have.
 - This work will identify attributes for forecast, which leads into role identification and system analysis
- Provide list of stake holders identified in survey responses for interviews
- Stacie is good with this approach.
- Survey Analysis
 - Airport Manager Survey Analysis – Nearly Complete
- Brady and Scott have been reviewing the surveys and summarizing in a spreadsheet.
- Leading to questions and themes based on the airport's story.
- Using the survey to mine the story to approach the PAC.
- Some airport surveys are less complete
 - Less information to share
 - New airport managers with historical knowledge
 - EDD Survey Analysis - Next
 - General Stakeholder Survey Analysis – Next

- Phase I Analysis Approach Overview (graphic on next page)

Phase 1 ends with the identification of gaps/redundancies. Phase II focusing on identifying a compelling state interest, then what to do about it and how.

Mary Ann likes the graphic.

Scott stated that the SASP does not want to take limiting position on what's possible at airports.

FAA agreed - airports are owned by local sponsors, and the system plan will not ultimately limit what they do with their facilities, but will likely limit funding.

Rick added commentary about the Forecast approach, regarding the System Plan's intent to not make critical aircraft determinations.

FAA is providing guidance on Forecast method to reduce Project Team's level of effort for airport, identify roles for airports, focus of gap analysis.

Tim added interest to see a graphic (GIS Map) for the assess categories, RDCs (A-1, B-11, etc.)

Scott agreed that his interest is on target, will be explored further in preparation for October PAC.

FAA cautions not to limit airports due to RDCs, it is really a performance measure of the airport.

Ongoing

- Phase 1 Summary Report – Chapter Outlines/Framework for Review
 - TOC/Outline & Chapter 3. Summary of Existing System - submitted 4/20
 - Chapter 2. Stakeholder Outreach – submitted 4/24
 - Chapter 4. Summary of Aviation Activity & Forecast – submitted 5/1
 - ➔ Comments from MaineDOT/FAA – due date? – Forecast call?

Meet May 12, 2020, 2pm. MJ to set up Phone Call to discuss Forecast.

MaineDOT emphasized interest in Dynamic, not static data. Value of report is not in the number of pages - just focus on analysis. One idea is to reduce number tables, include in appendix if necessary. Needs to be accurate, and have the facts, but executive summaries will be read most.

- Task 2.1 System Plan Peer Review & Context Setting – submitted 4/24
- Task 3 Report – System Mgmt. Evaluation – Final Corrections from MaineDOT
 - ➔ Current Final Draft Version Provided via E-mail to MaineDOT 3/10/20
 - ➔ M.A. Hayes Comments Anticipated May 1, 2020. Due Date Extended.

Tim commented that should be reviewed to ensure proper terminology. RDC vs. ADG.

Upcoming Outreach, Etc. – no change

- PAC #2 May 27, 2020 – 10am ZOOM Meeting
- Interview/Site Visit Staffing Plan & Scheduling

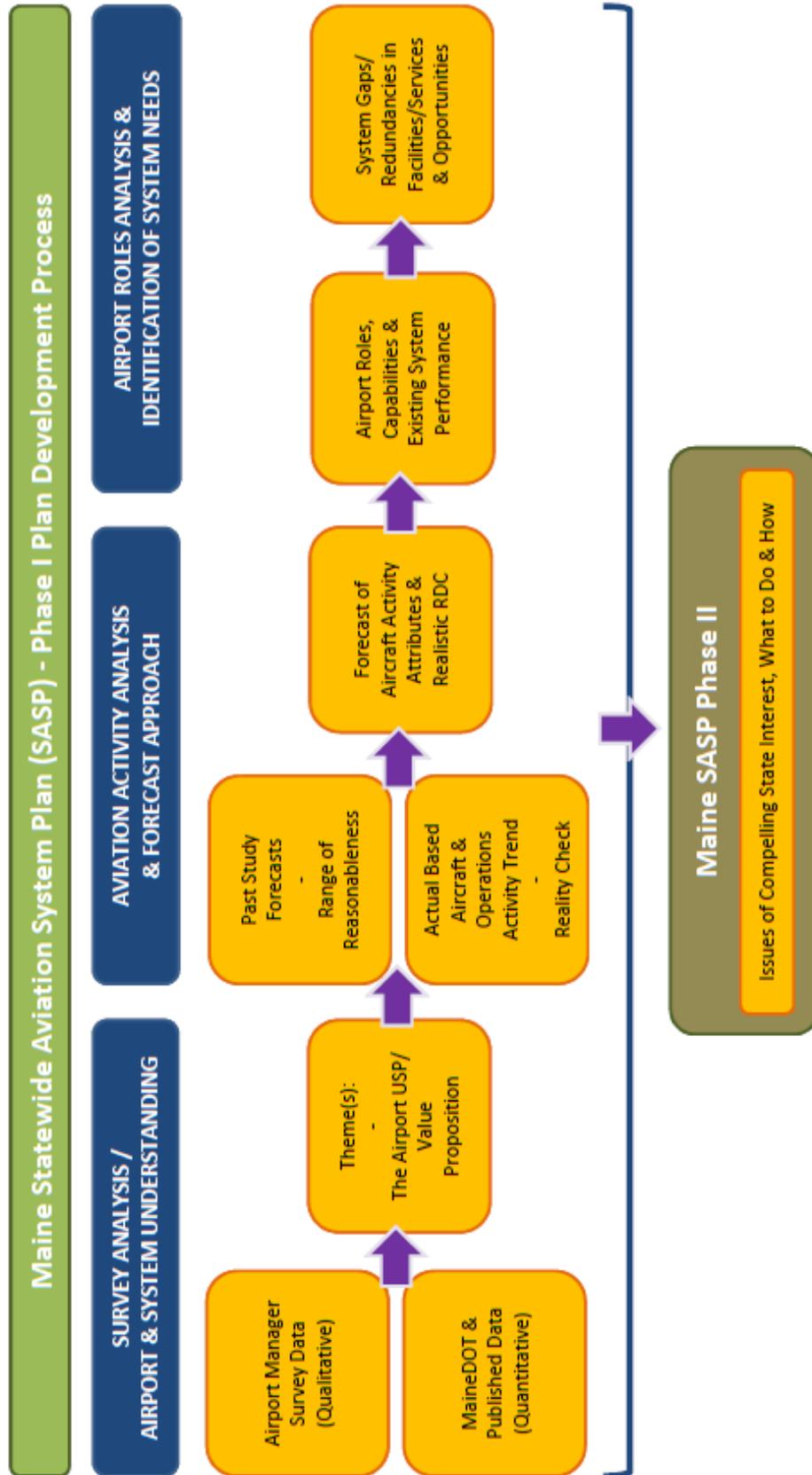
Prepare for a Plan B – Virtual Interview and Site Visit. Wait a few more weeks before making decision. Plan B likely an in depth phone interview, may be all that is necessary.

Looking Ahead – no change

- Phase 2 Timing:
 - November/December – Finalizing Phase I Summary Report
 - January/February – Conduct Scoping Meeting
 - March – Develop Contract
 - April 1, 2020 – Submit FAA Grant Application FFY21
- Washington County Evaluation - Anticipated August 2020
 - Scope to be discussed between MJ & MaineDOT

AFS data analytics. FAA has access to data that can look at which runway is being used.

Coincidence of flights with wind patterns. Goes back 6 years.



Agenda – Bi-Weekly PM Meeting #13

Maine State Aviation Systems Plan – Phase I

May 19, 2020 | 2:00PM | Conference Call

Dial-In Info: +1 (646) 975.3975

Participant Code: 110-361-588-34

Current Activities

- PAC #2 May 27, 2020 – 10am ZOOM Meeting
 - Agenda & PowerPoint Revisions
 - Info Packet for PAC - Submit to PAC 5/20/20?

Ongoing – no change

- Phase 1 Summary Report – Chapter Outlines/Framework for Review
 - TOC/Outline & Chapter 3. Summary of Existing System - submitted 4/20
 - Chapter 2. Stakeholder Outreach – submitted 4/24
 - Chapter 4. Summary of Aviation Activity & Forecast – submitted 5/1
 - ➔ Comments from MaineDOT/FAA – due date?
- Task 2.1 System Plan Peer Review & Context Setting – submitted 4/24
- Task 3 Report – System Mgmt. Evaluation – Final Corrections from MaineDOT
 - ➔ Current Final Draft Version Provided via E-mail to MaineDOT 3/10/20
 - ➔ M.A. Hayes Comments Anticipated May 1, 2020. Due Date Extended.

Upcoming Outreach, Etc. – no change

- PAC #2 May 27, 2020 – 10am ZOOM Meeting
- Interview/Site Visit Staffing Plan & Scheduling

Looking Ahead – no change

- Phase 2 Timing:
 - November/December – Finalizing Phase I Summary Report
 - January/February – Conduct Scoping Meeting
 - March – Develop Contract
 - April 1, 2020 – Submit FAA Grant Application FFY21
- Washington County Evaluation - Anticipated August 2020
 - Scope to be discussed between MJ & MaineDOT

Agenda – Bi-Weekly PM Meeting #14

Maine State Aviation Systems Plan – Phase I

June 2, 2020 | 2:00PM | Conference Call

Dial-In Info: +1 (646) 975.3975

Participant Code: 110-361-588-34

Current Activities

- PAC #2 May 27, 2020 – Debrief
- Support for MAAB Meeting June 10
 - Theme discussion
 - Development of Slide regarding survey themes
- Private Airports
- Project Website?

Ongoing – no change

- Phase 1 Summary Report – Chapter Outlines/Framework for Review
 - TOC/Outline – submitted 4/20
 - Confirm Feedback from MaineDOT – no changes required?
 - Chapter 3. Summary of Existing System - submitted 4/20
 - Confirm Feedback from MaineDOT – keep documentation brief, do not re-publish data, locate necessary tables of data in appendix.
 - Chapter 2. Stakeholder Outreach – submitted 4/24
 - Confirm Feedback from MaineDOT – no changes required?
 - Chapter 4. Summary of Aviation Activity & Forecast – submitted 5/1
 - ➔ Comments from MaineDOT/FAA?
- Task 2.1 System Plan Peer Review & Context Setting – submitted 4/24
 - Confirm Feedback from MaineDOT – no changes required?
- Task 3 Report – System Mgmt. Evaluation – Final Corrections from MaineDOT
 - ➔ Current Final Draft Version Provided via E-mail to MaineDOT 3/10/20
 - ➔ M.A. Hayes Comments Anticipated May 1, 2020. Due Date Extended.

Upcoming Outreach, Etc.

- Airport Manager Interviews/Site Visit Staffing Plan & Scheduling
 - Question Development – Focus on Functions

Looking Ahead – no change

- Phase 2 Timing:
 - November/December – Finalizing Phase I Summary Report
 - January/February – Conduct Scoping Meeting
 - March – Develop Contract
 - April 1, 2020 – Submit FAA Grant Application FFY21

- Washington County Evaluation - Anticipated August 2020
 - Scope to be discussed between MJ & MaineDOT July 2020

Meeting Notes – Bi-Weekly PM Meeting #14

Maine State Aviation Systems Plan – Phase I

June 2, 2020 | 2:00PM | Conference Call

Dial-In Info: +1 (646) 975.3975

Participant Code: 110-361-588-34

Current Activities

- PAC #2 May 27, 2020 – Debrief

Provide point ranking to the Functions level, regardless of the PAC's flat response.
Be more "crisp" with questions to the PAC.

- Support for MAAB Meeting June 10
 - Theme discussion

FAA inquired as to whether survey themes can be categorized into NPIAS Asset groups.
Focus of analysis is to be on Functions performed by airports rather than comparison of Asset classifications.

- Development of Slide regarding survey themes

Up to a couple slides for the meaning of these surveys.

Report that functions are the direction.

Quality of site visits vs. video.

Key informant to date tomorrow – Slides Monday. Memo to be screened. Questions we're going to ask.

EDD – varies by the region.

Can MJ Breakdown the surveys by who said what?

Regardless of surveys, please refer to Bangor as BGR (not BIA)

Facility Development needs – with percentages.

Boil down the themes to top choices.

Provide the comprehensive list to MAAB to obtain "Key informants"

Phase II – Funding, Hangars. How to respond to these demands?

Go beyond the cookie cutter approaching. Provide analysis, develop prototype cases, case studies to provide Life Cycle costs vs. 90% funding to install for hangar and fuel farms.

FAA would like to see the physical constraints of the airport.

Crosswind funding challenge.

Economic Impact - Not just IMPLAN, But demonstration of value.

How to determine justification.

Interviews/Site Visits

Use interview to verify and clarify what the airport meant by the survey.

Survey clarification: Who need hangars. What is the market rate willing to pay? Why base your aircraft at a particular airfield?

Need key informants.

Key opportunities? Business niche? This links to/aligns with the Project Goal #6

Find facts – to validate that your need statement is true. Why, how often, what for?

Site visits are important for the “setting” of the airport. Local economy.

Helpful if the desktop analysis done prior to visit. Make the “profile” for the airport

Primary role, secondary role, how are we doing describing your airport? “Who cares that you are here or might use the airport more if you had more facilities/services?” We need to verify and document as much as possible.

- Private Airports

Tim needs to complete follow up questions.

Took the trouble to ask, to be inclusive.

FAA – can you look at the 5010 to solve the same problem – What happens if they close?

MJ – Show on a map, identify redundancy in functions.

Anticipate before end of June.

- Project Website?

Interim reports

PAC Meetings

General Stake Holder Interview

MJ to provide a model?

MaineDOT to post on their website

Ongoing – no change

- Phase 1 Summary Report – Chapter Outlines/Framework for Review
 - TOC/Outline – submitted 4/20
 - *Confirm Feedback from MaineDOT – no changes required?*
 - Chapter 3. Summary of Existing System - submitted 4/20
 - *Confirm Feedback from MaineDOT – keep documentation brief, do not re-publish data, locate necessary tables of data in appendix.*
 - Chapter 2. Stakeholder Outreach – submitted 4/24
 - *Confirm Feedback from MaineDOT – no changes required?*
 - Chapter 4. Summary of Aviation Activity & Forecast – submitted 5/1
 - ➔ *Comments from MaineDOT/FAA?*
- Task 2.1 System Plan Peer Review & Context Setting – submitted 4/24
 - *Confirm Feedback from MaineDOT – no changes required?*
- Task 3 Report – System Mgmt. Evaluation – Final Corrections from MaineDOT
 - ➔ *Current Final Draft Version Provided via E-mail to MaineDOT 3/10/20*
 - ➔ *M.A. Hayes Comments Anticipated May 1, 2020. Due Date Extended.*

MJ Needs formal feedback, consolidated notes & comments to ensure items are addressed.

Upcoming Outreach, Etc.

- Airport Manager Interviews/Site Visit Staffing Plan & Scheduling
 - Question Development – Focus on Functions

Detailed work plan with Maine DOT by third week of June.

Agreed future Project Meetings will be held over Zoom and scheduled for 90 minutes. Stacie will send invites.

Looking Ahead – no change

- Phase 2 Timing:
 - November/December – Finalizing Phase I Summary Report
 - January/February – Conduct Scoping Meeting
 - March – Develop Contract
 - April 1, 2020 – Submit FAA Grant Application FFY21
- Washington County Evaluation - Anticipated August 2020
 - Scope to be discussed between MJ & MaineDOT July 2020

Due Princeton, MVM and Eastport analysis prior to Scoping this Washington County Evaluation, as early in summer as possible.

Need to absorb the individual analysis before discussion the Regional. Maybe September if time too crunched. Economic (seafood), emergency (lifeflight), separate or redundant function, ground support? Ownership and management of the airports?

Agenda – Bi-Weekly PM Meeting #15

Maine State Aviation Systems Plan – Phase I

June 16, 2020 | 2:00PM | ZOOM Call *(details in MS Outlook Invite)*

Join Zoom Call:

<https://mainedot.zoom.us/j/91925059299?pwd=Ylh1ZGlvSTJncUtYQy9CcUJzbGtCZz09>

Current Activities

- MAAB Mtg – June 10, 2020 – Debrief
 - Importance of final comments for Task 3 Report
- Project Website?
 - MaineDOT Update on needs.
- Chapter 2. Stakeholder Outreach – Comment Review
- Chapter 3. Summary of Existing System – Comment Review

Critical to Meeting Project Deadlines

- Phase 1 Summary Report – Chapter Outlines/Framework for Review
 - TOC/Outline – submitted 4/20
 - *Confirm Feedback from MaineDOT – no changes required?*
 - Chapter 4. Summary of Aviation Activity & Forecast – submitted 5/1
 - ➔ *Forecast Conference Call (5/12) Summary Notes* - submitted 6/10
 - ➔ *Comments from MaineDOT/FAA?*
- Task 2.1 System Plan Peer Review & Context Setting – submitted 4/24
 - *Confirm Feedback from MaineDOT – no changes required?*
- Task 3 Report – System Mgmt. Evaluation – Final Corrections from MaineDOT
 - ➔ *Current Final Draft Version Provided via E-mail to MaineDOT 3/10/20*
 - ➔ *M.A. Hayes Comments Anticipated May 1, 2020. Due Date Extended.*

Upcoming Outreach, Etc.

- Airport Manager Interviews/Site Visit Staffing Plan & Scheduling
 - Question Development – Focus on Functions
 - Work Plan in progress Submit June 26, 2020
- Interviews (June 22nd July 31st (4th of July Holiday))
 - MJ Update on Preliminary Approach/Draft Questions/Profiles
- Site Visits (August 17th through September 3rd)
 - Discussion of ‘Are they necessary?’
 - Verification of scale of anecdotal evidence
 - Condition Assessment
 - Vehicle Access/Signage
 - Building condition/Modernization – visual
 - Hangars, Terminal, SRE
 - Security
 - Basic Level of service/FBO

- Float infrastructure
- Equipment
- Approaches
- Pavement/lighting
- Personnel
- Credibility of Recommendations
- Airport's not requiring Visitations
 - IZG, BXM, Belfast, Waterville
 - BGR, PWM,
 - SFM, LEW, AUG
 - Pittsfield? Jackman? Carrabassett? Oxford?

Looking Ahead – no change

- Phase 2 Timing:
 - MAAB October 7th
 - PAC Meeting November 4th
 - November/December – Finalizing Phase I Summary Report
 - December /January – Conduct Scoping Meeting
 - February/March – Develop Contract
 - April 1, 2020 – Submit FAA Grant Application FFY21
- Washington County Evaluation - Anticipated August 2020
 - Scope to be discussed between MJ & MaineDOT July 2020
 - Eastport/MVM/Princeton Interview and Site Visit Conducted first

Meeting Notes – Bi-Weekly PM Meeting #15

Maine State Aviation Systems Plan – Phase I

June 16, 2020 | 2:00PM | ZOOM Call *(details in MS Outlook Invite)*

Join Zoom Call:

<https://mainedot.zoom.us/j/91925059299?pwd=Ylh1ZGlvSTJncUtYQy9CcUJzbGtCZz09>

Ralph
Mary Ann
Tim LeSiege
Stacie Haskell
Matthew T. O'Brien
Scott LeCount

Current Activities

- MAAB Mtg – June 10, 2020 – Debrief
 - Importance of final comments for Task 3 Report

August Credit – MainedOT to provide comments to incorporate into the Report.

Confirming fuel values.

MainedOT to provide back up to FAA based upon query.

- Project Website?
 - MainedOT Update on needs.

Hold this topic for a later date.

- Chapter 2. Stakeholder Outreach – Comment Review

MJ didn't have any clarifications to discuss.

How did the surveys provide insight to Scott, an outsider of the system?

Is the system different than what is seen in other system plans? Scale of activity to understand the value of the number and type of operations.

- Chapter 3. Summary of Existing System – Comment Review

System plan summary – don't summarize the airports, summarize the system. Group the airports Assets/Functions. Airport summaries in the appendix. MainedOT feels that this chapter acts more like an inventory. Couple with Forecast for trends, performance and recommendations chapters to create a complete system plan.

Define the groups of airports, identify where the airports are, how they are used, and limitations. Identify markers to track.

Stacie loves the individual airport descriptions. All agreed to keep in the appendix.

Get the ready directly to the "so what" of the chapter.

Maps for the fuel coverage goes here? MJ was thinking system roles – chapter 6. Group agreed to Fast forward to Roles/Functions. Combine with Chapter 3. This meets the goal of non-traditional system plan format.

Critical to Meeting Project Deadlines

- Phase 1 Summary Report – Chapter Outlines/Framework for Review
 - TOC/Outline – submitted 4/20
 - *Confirm Feedback from MaineDOT – no changes required?*
 - Chapter 4. Summary of Aviation Activity & Forecast – submitted 5/1
 - ➔ *Forecast Conference Call (5/12) Summary Notes* - submitted 6/10
 - ➔ *Comments from MaineDOT/FAA?*
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 - ➔ *M.A. Hayes Comments Anticipated May 1, 2020. Due Date Extended.*

Upcoming Outreach, Etc.

- Airport Manager Interviews/Site Visit Staffing Plan & Scheduling
 - Question Development – Focus on Functions
 - Work Plan in progress Submit June 26, 2020
- Interviews (June 22nd July 31st (4th of July Holiday))
 - MJ Update on Preliminary Approach/Draft Questions/Profiles
- Site Visits (August 17th through September 3rd)
 - Discussion of ‘Are they necessary?’
 - Verification of scale of anecdotal evidence
 - Condition Assessment (**align with Survey Themes**)
 - Vehicle Access/Signage
 - Building condition/Modernization – visual
 - Hangars, Terminal, SRE
 - Security
 - Basic Level of service/FBO
 - Float infrastructure
 - Equipment
 - Approaches
 - Pavement/lighting
 - Personnel
 - How well maintained?
 - Credibility of Recommendations

Oxford – Visit for the FBO.

Carrabassett – new airport manager? Flight training.

SFM interview FBO.

Keep looking for opportunities

Tell us what is special and point us in the right direction.

- Airport’s not requiring Visitations

- IZG, BXM, Belfast, Waterville
- BGR, PWM,
- LEW, AUG
- ~~Pittsfield? Jackman?~~ 15min visit if in the area.

Looking Ahead – no change

- Phase 2 Timing:
 - MAAB October 7th
 - PAC Meeting November 4th
 - November/December – Finalizing Phase I Summary Report
 - December /January – Conduct Scoping Meeting
 - February/March – Develop Contract
 - April 1, 2020 – Submit FAA Grant Application FFY21
- Washington County Evaluation - Anticipated August 2020 kick off
 - Scope to be discussed between MJ & MaineDOT September 2020
 - Eastport/MVM/Princeton Interview and Site Visit Conducted first
 - **September 2020 – Address the Region analysis.**

Agenda – Bi-Weekly PM Meeting #16

Maine State Aviation Systems Plan – Phase I

August 11, 2020 | 2:00PM | ZOOM Call *(details in MS Outlook Invite)*

Join Zoom Call:

<https://mainedot.zoom.us/j/91925059299?pwd=Ylh1ZGlvSTJncUtYQy9CcUJzbGtCZz09>

Current Activities

- Site Visits – Update from MTO, Man on the Scene
 - Verification of scale of anecdotal evidence
 - Condition Assessment
 - Vehicle Access/Signage, Building condition/Modernization – visual
 - Hangars, Terminal, SRE
 - Security, Basic Level of service/FBO, Personnel
 - Float infrastructure, Equipment, Approaches, Pavement/lighting
 - Credibility of Recommendations
 - Visits Remaining?
- Airport Manager Interviews Remaining?
- Phase 1 Summary Report in Process
- Previous Deliverables “Tidy Up” (Task 2.1 Technical Memo, Task 3 Report – revisions)

Critical to Meeting Project Deadlines

- GARD Data – T. LeSiege is getting/updating
- Key Informant Interviews – streamlined list, after Airport Manager interviews complete
- Washington County Evaluation - Anticipated September 2020
 - Eastport/MVM/Princeton Interview and Site Visit Conducted first
 - Scope to be discussed between MJ & MaineDOT August 2020

Other Open Items

- Privately Owned Airports?
- Outreach – Native American Tribes, Maine Guides/Sportsmen?

Looking Ahead – no change

- Phase 2 Timing:
 - MAAB October 7th
 - PAC Meeting November 4th
 - November/December – Finalizing Phase I Summary Report
 - December /January – Conduct Scoping Meeting
 - February/March – Develop Contract
 - April 1, 2020 – Submit FAA Grant Application FFY21

Meeting Notes – Bi-Weekly PM Meeting #16

Maine State Aviation Systems Plan – Phase I

August 11, 2020 | 2:00PM | ZOOM Call *(details in MS Outlook Invite)*

Join Zoom Call:

<https://mainedot.zoom.us/j/91925059299?pwd=Ylh1ZGlvSTJncUtYQy9CcUJzbGtCZz09>

Current Activities

- Site Visits – Update from MTO, Man on the Scene
 - Verification of scale of anecdotal evidence
 - Condition Assessment
 - Vehicle Access/Signage, Building condition/Modernization – visual
 - Hangars, Terminal, SRE
 - Security, Basic Level of service/FBO, Personnel
 - Float infrastructure, Equipment, Approaches, Pavement/lighting
 - Credibility of Recommendations
 - Visits Remaining?

M. O'Brien provided overview update of Airport site-visits conducted during the weeks of July 27th and August 10th, including: Bethel, Caribou, Dexter, Dover-Foxcroft, Greenville, Houlton, Lincoln, Machias, Millinocket, Newton, Pittsfield, Presque Isle, Old Town, Oxford. Remaining site visits as of 8/18/20:

Particular notes from visits included: float activity at Pittsfield, Forest Service at Old Town, several small jet aircraft on ramp at Machias, FBO at Oxford is steadily hiring for and growing it's maintenance business, Caribou proximity to Presque Isle suggests duplicity of service/facilities, not much activity at Millinocket or Newton, float activity at Lincoln, high level of activity during visit to Greenville, potential use of Bethel by Gould Academy.

- Airport Manager Interviews Remaining?

S. LeCount mentioned that only a handful of follow-up airport manager phone interviews remain to be conducted. Remaining interviews as of 8/18/20: Stephen A. Bean (Rangeley), Brunswick Executive, and Portland FBO.

- Phase 1 Summary Report in Process
- Previous Deliverables "Tidy Up" (Task 2.1 Technical Memo, Task 3 Report – revisions)

S. LeCount updated the group that the MJ Team is progressing the assembly of data and narratives to complete Phase 1 Summary Report, and finalizing previous deliverables noted here now that MJ has received MaineDOT comments/suggested revisions.

S. LeCount noted to the group that the combination of insights gained from airport site visits by M. O'Brien, interviews by E. Hartley, MaineDOT, & L. Canham, and survey/inventory data will provide much info and insights to capture profile or "story" for each SASP airport. Reminded the group that the Phase I Report will chart a logical path from information collected to issues

identified that can be “rolled-up” into a aggregate of projects or types of projects by airport roles and functions such that statewide need(s) can be established.

Critical to Meeting Project Deadlines

- GARD Data – T. LeSiege is getting/updating
- Key Informant Interviews – streamlined list, after Airport Manager interviews complete
- Washington County Evaluation - Anticipated September 2020
 - Eastport/MVM/Princeton Interview and Site Visit Conducted first
 - Scope to be discussed between MJ & MaineDOT August 2020

S. LeCount touched on each item listed above, such that a list of key informants will be assembled once interviews are complete and circulated to MaineDOT for concurrence prior to MJ conducting Key Informant Interviews.

Additionally, those on the call discussed briefly the need to the conduct of the Washington County Evaluation required by the Scope and agreed to use the next PM call (8/25/20) to discuss the scope of the evaluation to be conducted. MJ agreed to provide preliminary thoughts to the Project Team prior to the 8/25 meeting.

Other Open Items

- Privately Owned Airports?
- Outreach – Native American Tribes, Maine Guides/Sportsmen?

S. LeCount noted outstanding items above. M. Hayes and T. LeSiege updated the Project Team on the status of MaineDOT’s private airport survey (8 returns as of 8/11/20), and stated they will wrap this up soon. M. Hayes addressed the two groups noted for outreach in previous meetings/discussions as follows:

- Native American Tribes: will be invited to meeting conducted for Washington County Evaluation.
- Maine Guides/Sportsmen: connection to this group remains TBD.

FAA clarified that the SASP’s level of attention to Private Airports should be minimal, and include a brief, one paragraph statement about the transfer of private airport on North Haven private airports

Looking Ahead – no change

- Phase 2 Timing:
 - MAAB October 7th
 - PAC Meeting November 4th
 - November/December – Finalizing Phase I Summary Report
 - December /January – Conduct Scoping Meeting
 - February/March – Develop Contract
 - April 1, 2020 – Submit FAA Grant Application FFY21

The meeting concluded with brief mention of items noted above and that the project remains on track.

Agenda – Bi-Weekly PM Meeting #17

Maine State Aviation Systems Plan – Phase I

August 25, 2020 | 2:00PM | ZOOM Call *(details in MS Outlook Invite)*

Join Zoom Call:

<https://mainedot.zoom.us/j/91925059299?pwd=Ylh1ZGlvSTJncUtYQy9CcUJzbGtCZz09>

Current Activities

- Site Visits – remaining: Wiscasset
- Airport Manager Interviews - remaining: Rangeley, Brunswick, Portland FBO

- **Washington County Evaluation – Methodology Discussion**
 - Review previous studies - Where should we look? Anything specific of note?
 - Evaluate airports - Complete. M. O'Brien visits/findings
 - Interview Washington County officials about needs – to be done
 - Interview key industry representatives about needs – to be done
 - Forecasted needs – in progress, linked to function

Proposed Methodology of Analysis - Discussion

1. MJ - Assemble needs findings by airport from surveys, interviews, visits,
2. MJ - Conduct Key Informant interviews
3. MJ - Send to Washington County COG, discuss at interview
4. DOT - Distribute summary document to Stakeholders
5. DOT - Stakeholder meeting/discussion – October?
6. MJ – Assemble updated needs and gaps documentation for Phase I Report

Open Items/Critical to Meeting Project Deadlines

- Key Informant Interviews – MJ to begin
- GARD Data – T. LeSiege is getting/updating
- Privately Owned Airports Survey Data – T. LeSiege
- Dynamic System Planning Interface – update call 8/26/20 @ 9AM

Looking Ahead – no change

- Phase 1 Summary Report in Process
- Previous Deliverables “Tidy Up” (Task 2.1 Technical Memo, Task 3 Report – revision)
- Phase 2 Timing:
 - MAAB October 7th
 - PAC Meeting November 4th
 - November/December – Finalizing Phase I Summary Report
 - December /January – Conduct Scoping Meeting
 - February/March – Develop Contract
 - April 1, 2020 – Submit FAA Grant Application FFY21

Meeting Notes – Bi-Weekly PM Meeting #17

Maine State Aviation Systems Plan – Phase I

August 25, 2020 | 2:00PM | ZOOM Call *(details in MS Outlook Invite)*

Join Zoom Call:

<https://mainedot.zoom.us/j/91925059299?pwd=Ylh1ZGlvSTJncUtYQy9CcUJzbGtCZz09>

Current Activities

- Site Visits – remaining: Wiscasset

M. O'Brien from MJ stated that he expects the site visit to take place in September 2020.

- Airport Manager Interviews - remaining: Rangeley, Brunswick, Portland FBO

M. O'Brien stated that the remaining interviews are as noted, and requested MaineDOT's assistance in coordinating final effort. UPDATE: the interview with Brunswick was conducted on 8/27/20. Additionally, MJ did conduct an interview with Northeastern – FBO at PWM.

- Washington County Evaluation – Methodology Discussion

S. LeCount from MJ stated that the following bullet points were the tasks described in the Scope of Work for this task:

- Review previous studies - Where should we look? Anything specific of note?

MaineDOT suggested review of previous studies. FAA recommended that MJ should not spend much time on old studies because conditions have changed, and those studies were focused on different topic and conducted nearly 15 years ago. These studies are not applicable.

R. Nicosia-Rusin from the FAA offered his thoughts on what the evaluation might cover by posing some questions (provided via email after the conference call), including:

1. What are the revenues and cost streams for these airports?
2. What is the size of the tax base that funds deficits?
3. Are there any issues with funding large capital needs?
4. Compare the market catchment areas of the three airports (equi-distant travel time)

S. LeCount noted that MJ has developed service area mapping for all SASP airports.

5. Does an analysis of above identify any problems that would be solved by revising the organization of the airports either institutionally or physically?
6. What roles are identified as under-served? How much aeronautical activity would occur if there were no facility constraint?
7. What non-AIP resources could be used to improve this county's system?

The Project Team discussed the original intent of the evaluation conceived during the scoping of the project. S. LeCount added that this issue has been studied for a long time and the SASP might consider updating the state's position/perspective on aviation/airport facility needs in the region.

S. LeCount discussed Scope tasks and the proposed methodology, summarizing the following:

- Evaluate airports - Complete. M. O'Brien visits/findings
- Interview Washington County officials about needs – to be done

- Interview key industry representatives about needs – to be done
 - Forecasted needs – in progress, linked to function
- Proposed Methodology of Analysis - Discussion
7. MJ - Assemble needs findings by airport from surveys, interviews, visits,
 8. MJ - Conduct Key Informant interviews
 9. MJ - Send to Washington County COG, discuss at interview
 10. DOT - Distribute summary document to Stakeholders
 11. DOT - Stakeholder meeting/discussion – October?

MaineDOT to coordinate Stakeholder meeting

12. MJ – Assemble updated needs and gaps documentation for Phase I Report

The Project Team brainstormed about how to perform the analysis for Washington County.

- Identify redundancies and duplications and efficiencies to be gained by shared management of facilities (all located within one county but owned/managed locally)
- Basic data to facilitate this study:
 - updated information (i.e. change in Life Flight fleet affects use/accessibility)
 - Identify physical constraints, Weather, runway length
- Determine, “What is state interest/position re/ development in Washington County.”
 - Develop Pros/Cons, Provide Alternatives
 - Single airport to support region vs. Support each airport individually
 - Authority consolidating management of three airports
 - Develop recommended alternative, for preferred priority of funding

S. LeCount added that perhaps the Phase I effort should summarize how to address: air service, management, governance, MX/repair, ownership, financial performance, & capital funding.

McFarland Johnson will review these requests against the scope to determine if enough hours were allocated in the contract.

Open Items/Critical to Meeting Project Deadlines

- Key Informant Interviews – MJ to begin
- GARD Data - **MaineDOT provided via email during the meeting.**
- Privately Owned Airports Survey Data - **MaineDOT provided via email during the meeting**
- Dynamic System Planning Interface – update call 8/26/20 @ 9AM

Looking Ahead – no change

- Phase 1 Summary Report in Process
- Previous Deliverables “Tidy Up” (Task 2.1 Technical Memo, Task 3 Report – revision)
- Phase 2 Timing:
 - MAAB October 7th
 - PAC Meeting November 4th
 - November/December – Finalizing Phase I Summary Report
 - December /January – Conduct Scoping Meeting
 - February/March – Develop Contract
 - April 1, 2020 – Submit FAA Grant Application FFY21

Agenda – Bi-Weekly PM Meeting #18

Maine State Aviation Systems Plan – Phase I

September 8, 2020 | 2:00PM | ZOOM Call *(details in MS Outlook Invite)*

Join Zoom Call:

<https://mainedot.zoom.us/j/91925059299?pwd=Ylh1ZGlvSTJncUtYQy9CcUJzbGtCZz09>

Current Activities

- **Washington County Evaluation – Progress**
 - 13. MJ - Review previous studies – complete
 - 14. MJ - Assemble draft document - complete
 - 15. MJ - Conduct Key Informant interviews
 - 16. MJ – Provide document to Washington County COG, discuss at interview
 - 17. DOT - Distribute summary document to Stakeholders, discuss at meeting
 - 18. DOT - Stakeholder meeting/discussion – October?
 - 19. MJ – Assemble updated needs and gaps documentation for Phase I Report

Open Items/Critical to Meeting Project Deadlines

- Key Informant Interviews – DOT approval
- Site Visits – remaining: Wiscasset
- Airport Manager Interviews - remaining: Rangeley, Brunswick, Portland FBO
- GARD Data – complete
- Privately Owned Airports Survey Data – TBD
- Dynamic System Planning Interface – complete

Looking Ahead – no change

- Phase 1 Summary Report in Process
- Previous Deliverables “Tidy Up” (Task 2.1 Technical Memo, Task 3 Report – revision)
- Phase 2 Timing:
 - MAAB October 7th
 - PAC Meeting November 4th
 - November/December – Finalizing Phase I Summary Report
 - December /January – Conduct Scoping Meeting
 - February/March – Develop Contract
 - April 1, 2020 – Submit FAA Grant Application FFY21

Meeting Notes – Bi-Weekly PM Meeting #18

Maine State Aviation Systems Plan – Phase I

September 8, 2020 | 2:00PM | ZOOM Call *(details in MS Outlook Invite)*

Stacie Haskell

Tim LeSeige

Mary Ann Heyes

Ralph Nicosia-Rusin

Scott LeCount

Matthew O’Brien

Eric Hartley

Join Zoom Call:

<https://mainedot.zoom.us/j/91925059299?pwd=Ylh1ZGlvSTJncUtYQy9CcUJzbGtCZz09>

Current Activities

Scott shared his screen and walked the Team through the Washington County Analysis.

Discussed the previous system plan recommendation and setup. A previous performance metric was to provide a Level 1 Airport within 30mins of a designated service center. This recommendation was linked to the demand for services at these airports. Tim didn’t feel the previous plan’s level system is relevant any long. Mary Ann felt that it was a good refresher of background.

Tim took interest in the county assessed value and thought it would be useful state-wide.

Scott suggested that this analysis withhold recommendations to ensure they align with the remaining system recommendations.

Mary Ann feels that knowing opportunity and trends by hearing from the users. Question, is there some opportunity of combining resources to make more efficient.

FAA is questioning whether or not Aviation is a key component in Washington County. Also questioning if a consolidation of facilities within an authority may be stressed by the lack of unified challenges. Also may result in financial challenges if Princeton funds support the expansion of Machias/Eastport.

Scott tasked MaineDOT with mulling over what the State’s response to action in Washington County could be. Does a state have a role? Does the County want a role? What about Pilot groups?

- **Washington County Evaluation – Progress**
 - 20. MJ - Review previous studies – complete
 - 21. MJ - Assemble draft document - complete
 - 22. MJ - Conduct Key Informant interviews
 - 23. MJ – Provide document to Washington County COG, discuss at interview
 - 24. DOT - Distribute summary document to Stakeholders, discuss at meeting
 - 25. DOT - Stakeholder meeting/discussion – October?
 - 26. MJ – Assemble updated needs and gaps documentation for Phase I Report

Open Items/Critical to Meeting Project Deadlines

- Key Informant Interviews – DOT approval
- Site Visits – remaining: Wiscasset
- Airport Manager Interviews - remaining: Rangeley, Brunswick, Portland FBO
- GARD Data – complete

FAA is in the process to transition from the TAF to other sources of operations.

- Privately Owned Airports Survey Data – TBD

Poor response from the Private airports, except Twitchells.

MaineDOT may support a site study at North Haven.

Layout an approach to how to address other airports.

What would be the impact if these airports closed? Does the system have capacity to absorb them? Conduct a system analysis of absorbing, is there a public interest in supporting a private field.

- Dynamic System Planning Interface – complete

Looking Ahead – no change

- Phase 1 Summary Report in Process
- Previous Deliverables “Tidy Up” (Task 2.1 Technical Memo, Task 3 Report – revision)
- Phase 2 Timing:
 - MAAB October 7th
 - PAC Meeting November 4th

Need to know the outcomes of the Phase I to confirm conclusions on this Phase.

Developing the performance metrics, recommendations of the right-size airports, and strategic approach is phase II.

Crosswind Runways, do they serve a need to the state?

Timing and scale of solution to issues.

- November/December – Finalizing Phase I Summary Report
- December /January – Conduct Scoping Meeting
- February/March – Develop Contract
- April 1, 2020 – Submit FAA Grant Application FFY21

Agenda – Bi-Weekly PM Meeting #19

Maine State Aviation Systems Plan – Phase I

September 29, 2020 | 2:00PM | ZOOM Call *(details in MS Outlook Invite)*

Join Zoom Call:

<https://mainedot.zoom.us/j/91925059299?pwd=Ylh1ZGlvSTJncUtYQy9CcUJzbGtCZz09>

Current Activities

- **Key Informants**
 - DOT approval today
 - Washington County first

- **Washington County Evaluation**
 - 27. MJ - Draft to DOT Next Week
 - 28. DOT – Comments to MJ 10/13/20
 - 29. MJ – Revisions by 10/20/20
 - 30. DOT – Provide document to Washington County Stakeholders - 10/20/20
 - 31. DOT - Stakeholder meeting/discussion – 10/26-10/30/20
 - 32. MJ – Assemble updated needs and gaps documentation for Phase I Report

- **MAAB October 7th**
 - High Level presentation of issues, gaps
 - Do you agree?
 - What does success look like?

- **PAC November 5th**
 - Presentation of draft forecast, issues & gaps findings
 - Strategic initiative opportunities

Project Delivery Schedule

- October 8th – MJ Submit Draft Phase 1 Summary Report to DOT
- October 22nd – DOT provide final comments to MJ
- October 29th – MJ revisions to DOT; DOT submit complete Draft to PAC
- November 5th – Final PAC Meeting, MJ present Phase 1

Phase 2 Timing

- November/December – Finalizing Phase I Summary Report
- December/January – Conduct Scoping Meeting
- February/March – Develop Contract
- April 1, 2020 – Submit FAA Grant Application FFY21

Agenda – Bi-Weekly PM Meeting #20

Maine State Aviation Systems Plan – Phase I

October 6, 2020 | 2:00PM | ZOOM Call *(details in MS Outlook Invite)*

Join Zoom Call:

<https://mainedot.zoom.us/j/91925059299?pwd=Ylh1ZGlvSTJncUtYQy9CcUJzbGtCZz09>

Current Activities

- **MAAB October 7th**
 - High Level presentation of issues, gaps
 - Do you agree?

- **Washington County Evaluation**
 - 33. MJ - Draft to DOT This Week
 - 34. DOT – Comments to MJ 10/13/20
 - 35. MJ – Revisions by 10/20/20
 - 36. DOT – Provide document to Washington County Stakeholders - 10/20/20
 - 37. DOT - Stakeholder meeting/discussion – 10/26-10/30/20
 - 38. MJ – Assemble updated needs and gaps documentation for Phase I Report

- **PAC November 5th**
 - Presentation of draft forecast, issues & gaps findings
 - Strategic initiative opportunities

Project Delivery Schedule

- October 8th – MJ Submit Draft Phase 1 Summary Report to DOT
- October 22nd – DOT provide final comments to MJ
- October 29th – MJ revisions to DOT; DOT submit complete Draft to PAC
- November 5th – Final PAC Meeting, MJ present Phase 1

Phase 2 Timing

- November/December – Finalizing Phase I Summary Report
- December/January – Conduct Scoping Meeting
- February/March – Develop Contract
- April 1, 2020 – Submit FAA Grant Application FFY21

Meeting Notes – Bi-Weekly PM Meeting #20

Maine State Aviation Systems Plan – Phase I

October 6, 2020 | 2:00PM | ZOOM Call *(details in MS Outlook Invite)*

Join Zoom Call:

<https://mainedot.zoom.us/j/91925059299?pwd=Ylh1ZGlvSTJncUtYQy9CcUJzbGtCZz09>

Stacie Haskell
Tim LeSiege (tardy)
Mary Ann Hayes
Raph Nicosia-Rusin
Scott LeCount
Matthew OBrien

Current Activities

- MAAB October 7th
 - High Level presentation of issues, gaps
 - Do you agree?

Tim – Focus on the Gaps in the functions – LifeFlight: Where are their gaps?, What airports can they not get into?

FAA – AWOS is also an aging challenge statewide.

Remove the No. 6 from the goals to avoid confusion

Present the needs/opportunities:

Remote places, people with disposable income moving due to COVID and working remotely.

Greenville, Rangeley, Sunday River, Sugarloaf (Eastport?)

Focus on trends and opportunities for economic development.

Be more specific with snow removal, airport managers manual.

Note differences@ regions. Gaps → give example instead of a teaser. Note the intermodal ground connections along the I-95 and southern Maine regions.

Phase 2 – Conversations

Economic Impact: MaineDOT wants to design the economic impact study to be more tailored than just running the generic IMPLAN model.

Need Quantifiable data

Limiting to growth in area

Not Economic impact, but strategic investment plan, much like Fryeburg. Vett Case Studies.

FAA – tell stories of airports. Policy directions. Need evidence.

- **Washington County Evaluation**

39. *MJ - Draft to DOT This Week*

40. DOT – Comments to MJ 10/13/20

41. MJ – Revisions by ~~10/20/20~~ **MaineDOT has Monday as Holiday. Update Schedule.**

42. DOT – Provide document to Washington County Stakeholders - 10/20/20

43. DOT - Stakeholder meeting/discussion – 10/26-10/30/20

44. MJ – Assemble updated needs and gaps documentation for Phase I Report

Try to identify what needs attention in Phase 2

We learned XYZ from Phase 1 → We need to do XYZ in phase 2

- **PAC November 5th**

- Presentation of draft forecast, issues & gaps findings

- Strategic initiative opportunities

Project Delivery Schedule

MaineDOT asked MJ to update schedule to allow for incorporation of Key Informants, digestion of analysis, comments from MaineDOT, and Phase 2 preparation for PAC meeting.

- October 8th – MJ Submit Draft Phase 1 Summary Report to DOT

- October 22nd – DOT provide final comments to MJ

- October 29th – MJ revisions to DOT; DOT submit complete Draft to PAC

- November 5th – Final PAC Meeting, MJ present Phase 1

Phase 2 Timing

- November/December – Finalizing Phase I Summary Report

- December/January – Conduct Scoping Meeting

- February/March – Develop Contract

- April 1, 2020 – Submit FAA Grant Application FFY21

Agenda – Bi-Weekly PM Meeting #21

Maine State Aviation Systems Plan – Phase I

October 20, 2020 | 2:00PM | ZOOM Call *(details in MS Outlook Invite)*

Join Zoom Call:

<https://mainedot.zoom.us/j/91925059299?pwd=Ylh1ZGlvSTJncUtYQy9CcUJzbGtCZz09>

Current Activities

- **MAAB October 7th - Recap**
 - No additional feedback – approval of Phase I direction

- **Washington County Evaluation**
 - 45. DOT – Comments to MJ 10/19/20 afternoon
 - 46. MJ – Revisions by 10/23/20
 - 47. DOT – Provide document to Washington County Stakeholders – October 26th
 - 48. DOT - Stakeholder meeting/discussion – Nov 9th at Latest
 - 49. MJ – Assemble updated needs and gaps documentation for Phase I Report
 - 50. DOT – Separate Med Transport Meeting – Must be before November 9th

- **PAC November (Based upon WC Meetings)**
 - Presentation of draft forecast, issues & gaps findings
 - Strategic initiative opportunities
 - Describe objectives and approach for Phase II

- **System Plan Dynamic Database Update**
 - MJ has been meeting with Stacie to finesse the intricacies of the system.
 - Preparing scope for Phase II – December 2020

Project Delivery Schedule

- October 23rd – MJ Submit Draft Phase 1 Summary Report to DOT
- November 6th – DOT provide final comments to MJ
- November 9th – WC Stakeholders' Meeting
- November 13th (Friday) – MJ revisions to DOT; DOT submit complete Draft to PAC
- November 26th – Thanksgiving
- December 2nd – Final PAC Meeting, MJ present Phase 1
- December – Finalizing Phase I Summary Report
- December/January – Conduct Scoping Meeting
- February/March – Develop Contract
- April 1, 2020 – Submit FAA Grant Application FFY21

Meeting Notes – Bi-Weekly PM Meeting #21

Maine State Aviation Systems Plan – Phase I

October 20, 2020 | 2:00PM | ZOOM Call *(details in MS Outlook Invite)*

Join Zoom Call:

<https://mainedot.zoom.us/j/91925059299?pwd=Ylh1ZGlvSTJncUtYQy9CcUJzbGtCZz09>

Stacie Haskell
Tim LeSiegé
Mary Ann
No Ralph, No Scott

Current Activities

- MAAB October 7th - Recap
 - No additional feedback – approval of Phase I direction

No additional feedback to discuss. Good meeting overall. MA thought it was good.

Phase II - Its up the system plan to provide a Return for Investment which will argue for more money.

Phase II - Need to identify fiscal sustainability for airports

New Themes: Airport Management – Human Factor?

MTO provided a theme from Users, Twitchell's, Allison as an example.

Stacie has identified challenges from Town managers who is not

MLT is a great example of fulltime supervisor vs. Public Works.

Consultants may be allowed to “run” the airport.

Consultants don't allow communication with MaineDOT

Eastport – Change in management, change in trajectory.

Sanford – Elliot private field – little brook. Limington/holland.

Not interested in Pease. Building t-hangars,

Town Support – Economic Development

Biddeford may revitalize. New Town Support.

Manual – How to makes the airport successful.

Consultant they choose is not performing.

Performance Metrics? Rewards for competition, sustainability, models for success.

MaineDOT has asked to include this theme in the report. Give examples as trends.

Performance Metrics:

Goals should be wrapped into the community benefit.

Highway was assess/risk management based.

Previous Aviation – gave up on 2006 by 2009

Tim/Stacie provided a “obtain FAA money” rating. Problem was that people didn’t understand aviation.

*When things are generalized that you lose the “gem.” Need to stay specific in the narrative.

- **Washington County Evaluation**

- 51. DOT – Comments to MJ 10/19/20 afternoon

- 52. MJ – Revisions by 10/23/20

- 53. DOT – Provide document to Washington County Stakeholders – October 26th

- 54. DOT - Stakeholder meeting/discussion – Nov 9th at Latest

- 55. MJ – Assemble updated needs and gaps documentation for Phase I Report

- 56. DOT – Separate Med Transport Meeting – Must be before November 9th

*Must be able to prove it, or don’t say it.

* crisp it into what we found about their airports. What are the needs/gaps/redundancies.

Interest in a regional authority.

Right-sizing, management and facility.

Share the Authority documents with MaineDOT for Mary Ann to review over the winter.

- **PAC November (Based upon WC Meetings)**

- Presentation of draft forecast, issues & gaps findings

- Strategic initiative opportunities

- Describe objectives and approach for Phase II

Economic Impact analysis. How might this be used.

- **System Plan Dynamic Database Update**

- MJ has been meeting with Stacie to finesse the intricacies of the system.

- Preparing scope for Phase II – December 2020

Requests for Aviation – Airport Directory. Airport Manager and Sponsor.

Final deliverable – Live demo – FAA interface for review.

Project Delivery Schedule

- October 23rd – MJ Submit Draft Phase 1 Summary Report to DOT

- November 6th – DOT provide final comments to MJ

- November 9th – WC Stakeholders’ Meeting

- November 13th (Friday) – MJ revisions to DOT; DOT submit complete Draft to PAC

- November 26th – Thanksgiving

- December 2nd – Final PAC Meeting, MJ present Phase 1

Schedule for the Week of December 7th. Not 9th AM. Aim for Morning. Tuesday 8th – FAA not able. Not 10th, not 11th (7am/pm); (9th AM/PM) 3-hour meeting.

- December – Finalizing Phase I Summary Report
- December/January – Conduct Scoping Meeting
- February/March – Develop Contract
- April 1, 2020 – Submit FAA Grant Application FFY21

Regional NASAO Meeting

Issue with Drones? Will there be some treatment with Drones? Should the State DOT manage drone activity? Raising the choices of MaineDOT in terms of managing Drones in the state of Maine. Or how Airports should be addressing or monitoring drones. Nationally it’s an emerging issue. MaineDOT has its own Drone division. Does MaineDOT even want to do anything with drones? Drone registry is an FAA function. Tim feels that this topic is too much of an Urban issue for Maine. No one identified drones are an issue throughout the investigation.

Agenda – Bi-Weekly PM Meeting #22

Maine State Aviation Systems Plan – Phase I

October 27, 2020 | 2:00PM | ZOOM Call *(details in MS Outlook Invite)*

Join Zoom Call:

<https://mainedot.zoom.us/j/91925059299?pwd=Ylh1ZGlvSTJncUtYQy9CcUJzbGtCZz09>

Current Activities

- **PAC meeting**
 - Confirm team available times week of Dec 7.
 - Anything more than Dec 7 AM & PM and Dec 9 PM?
 - Confirm how early Ralph can start in AM?

- **Debrief Air Medical Focus Group Meeting**
 - what did we learn?
 - Any follow up needed?

- **Prep for Nov 5 meeting – Regional Economic Development**
 - Any specific questions to add?

- **Prep for Nov 9 meeting - Med**
- Think we should start with highlights for each of the 4 airports – can sent ahead or not as long as brief
- Discussion questions – Ralph has sent some already:
 - What challenges have you experienced in maintaining and operating your airport?
 - Do you anticipate any problems with funding the local share of major capital improvements?
 - Do you think there are any activities that would benefit from greater collaboration among the Washington County Airports?
 - Marketing
 - Directing particular users to best match
 - Sharing of personnel or equipment
 - Broadening financial responsibility / position for possible TIF proceed eligibility?

Project Delivery Schedule

- October 23rd – MJ Submit Draft Phase 1 Summary Report to DOT
- November 6th – DOT provide final comments to MJ
- November 9th – WC Stakeholders' Meeting
- November 13th (Friday) – MJ revisions to DOT; DOT submit complete Draft to PAC

- November 26th – Thanksgiving
- December 2nd – Final PAC Meeting, MJ present Phase 1
- December – Finalizing Phase I Summary Report
- December/January – Conduct Scoping Meeting
- February/March – Develop Contract
- April 1, 2020 – Submit FAA Grant Application FFY21

Agenda – Bi-Weekly PM Meeting #23

Maine State Aviation Systems Plan – Phase I

November 3, 2020 | 2:00PM | ZOOM Call *(details in MS Outlook Invite)*

Join Zoom Call:

<https://mainedot.zoom.us/j/91925059299?pwd=Ylh1ZGlvSTJncUtYQy9CcUJzbGtCZz09>

Current Activities

- **PAC meeting**
 - Confirm team available times week of Dec 7.
 - Anything more than Dec 7 AM & PM and Dec 9 PM?
 - Confirm how early Ralph can start in AM?

- **Debrief Air Medical Focus Group Meeting**
 - what did we learn?
 - Any follow up needed?

- **Prep for Nov 5 meeting – Regional Economic Development**
 - Any specific questions to add?

- **Prep for Nov 9 meeting - Med**
- Think we should start with highlights for each of the 4 airports – can sent ahead or not as long as brief
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 - What challenges have you experienced in maintaining and operating your airport?
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 - Do you think there are any activities that would benefit from greater collaboration among the Washington County Airports?
 - Marketing
 - Directing particular users to best match
 - Sharing of personnel or equipment
 - Broadening financial responsibility / position for possible TIF proceed eligibility?

Project Delivery Schedule

- October 23rd – MJ Submit Draft Phase 1 Summary Report to DOT
- November 6th – DOT provide final comments to MJ
- November 9th – WC Stakeholders' Meeting
- November 13th (Friday) – MJ revisions to DOT; DOT submit complete Draft to PAC

- November 26th – Thanksgiving
- December 2nd – Final PAC Meeting, MJ present Phase 1
- December – Finalizing Phase I Summary Report
- December/January – Conduct Scoping Meeting
- February/March – Develop Contract
- April 1, 2020 – Submit FAA Grant Application FFY21

Meeting Notes – Bi-Weekly PM Meeting #23

Maine State Aviation Systems Plan – Phase I

November 3, 2020 | 2:00PM | ZOOM Call *(details in MS Outlook Invite)*

Join Zoom Call:

<https://mainedot.zoom.us/j/91925059299?pwd=Ylh1ZGlvSTJncUtYQy9CcUJzbGtCZz09>

Current Activities

- **Debrief Air Medical Focus Group Meeting**
 - what did we learn?
 - Any follow up needed?
- 1. **MaineDOT to submit to MJ to develop the first draft.**
- 2. **Question at the end – Any other aircraft that could be utilized at Machias. Maybe even the local share would be able to fund the new aircraft. Tim explained that equipment and logistics of patients and staff in the aircraft. Penobscot Island Air was a crude bandaid and not an engineered solution.**
- 3. **Look at the range of alternatives to find the solution, then figure out who's responsible for it.**
 - Found out the decision factors for LifeFlight to choose the King Air.
 - Suggest funding for the purchase of smaller aircraft.
- 4. **Stroke and Cardiac numbers were also identified which supports the need.**
- 5. **What would it take to trigger funding from FAA?**
 - FAA may consider to progressing the environmental to prepare the project for a stimulus bill.
- **PAC meeting**
 - Confirm team available times week of Dec 7.
 - Anything more than Dec 7 AM & PM and Dec 9 PM?
 - Confirm how early Ralph can start in AM?

MJ previously submitted our times.

- **Prep for Nov 5 meeting – Regional Economic Development**
 - Any specific questions to add?

None to discuss at this time.

Earmark case studies for Phase II.

- **Prep for Nov 9 meeting – Airports and County Coordination Call**
 - Think we should start with highlights for each of the 4 airports – can sent ahead or not as long as brief
 - Discussion questions – Ralph has sent some already:
 - What challenges have you experienced in maintaining and operating your airport?

Report on what we have heard to date.

Ask if the airports have issues.

- Do you anticipate any problems with funding the local share of major capital improvements?
- Do you think there are any activities that would benefit from greater collaboration among the Washington County Airports?
 - Marketing
 - Directing particular users to best match
 - Sharing of personnel or equipment
 - Broadening financial responsibility / position for possible TIF proceed eligibility?

Identify Models of Regional Management.

How can MaineDOT support Economic Development.

Cooperative Operating Agreement

Careful not to go into the meeting with solutions. Attend as a listener. Read the room in terms of cooperation.

MaineDOT to lead the conversation.

MJ to summarize our findings to the functions that these airports provide.

- **Runway Analysis**
 - Ralph's email in response to the ALP's RDC provided.
 - Ralph sees this as a Gap Analysis and Right Sizing.
 - Cross wind analysis.
 - MJ agrees with this as a system plan, albeit phase II. But should also include the Sponsor's since this is a Master Plan
 - Ralph feels that this is the eligibility determination solely done by FAA.
 - Ralph to provide analysis to identify critical aircraft and link this to the ALP RDC to see if there is a gap.

Project Delivery Schedule

- November 6th – DOT provide final comments to MJ
- November 9th – WC Stakeholders' Meeting
- November 13th (Friday) – MJ revisions to DOT; DOT submit complete Draft to PAC
- November 26th – Thanksgiving
- FAA/MaineDOT Meeting – Plan for PAC
- December 7-11th – Final PAC Meeting, MJ present Phase 1
- December – Finalizing Phase I Summary Report
- January – Conduct Scoping Meeting
- February/March – Develop Contract
- April 1, 2020 – Submit FAA Grant Application FFY21

Stacie asked to include DBE expenditure tracking for the Grant Management Dynamic Plan.

3:57pm

Agenda – Bi-Weekly PM Meeting #25

Maine State Aviation Systems Plan – Phase I

November 30, 2020 | 2:00PM | ZOOM Call *(details in MS Outlook Invite)*

Join Zoom Call:

<https://mainedot.zoom.us/j/91925059299?pwd=Ylh1ZGlvSTJncUtYQy9CcUJzbGtCZz09>

Current Activities

- PAC meeting
 - Discuss what to submit prior to the PAC meeting
 - Discussion of what is presented/Goals
 - Confirm problem/Here are the issues
 - Does this rise to a State-wide issue?
 - What role should the state take in resolving
 - Small, Medium, Large involvement
 - PAC Meeting - Confirm Team available times until January 22, 2021

- Items Added to Phase I
 - Scope items that MaineDOT has elected
 - Schedule of these items delivered
 - What is available budget

Project Delivery Schedule

(Assuming MaineDOT allows adjusting from April 1 to May 1)

Latest Date for Final PAC Meeting.....	January 22, 2021
Team Review of PAC Meeting.....	January 26, 2021
Scoping Meeting for Phase 2	February 5, 2021
Draft Scope Submitted.....	February 26, 2021
Scope Review Comments.....	March 5, 2021
Revised Scope Submitted	March 12, 2021
IFE (Blank) Fee Template	March 19, 2021
Finalizing Phase I Summary Report.....	March 22, 2021
Draft Fee Proposal Submitted.....	March 26, 2021
Record of Negotiations	April 2, 2021
MaineDOT Internal Coordination	Unknown
Grant Application	May 1, 2021

Meeting Notes – Bi-Weekly PM Meeting #25

Maine State Aviation Systems Plan – Phase I

November 30, 2020 | 2:00PM | ZOOM Call *(details in MS Outlook Invite)*

Join Zoom Call:

<https://mainedot.zoom.us/j/91925059299?pwd=Ylh1ZGlvSTJncUtYQy9CcUJzbGtCZz09>

Current Activities

- PAC meeting
 - Discuss what to submit prior to the PAC meeting

Some desire to provide annotated info in addition to PPT to PAC members prior to PAC meeting. T. LeSiege suggested posting even draft chapters for members to review. MJ unsure if they will be in presentable shape in advance of meeting but will consider.

- Discussion of what is presented/Goals

S. LeCount shared screen to review draft meeting agenda/topics.

Discussion highlighted need to ask PAC members questions such as:

- Aside from traditional economic impact modeling output, what other suggestions might they have for moving from Phase I qualitative value into quantitative value in Phase II
- What performance metrics should the Plan develop? For example:
 - What is the impact of certain aviation activities (i.e., medevac, seaplane operators serving recreational tourism market)
 - Is there a quantifiable ROI for replacing aging AWOS II systems with AWOS III?
 - Other state/quasi agencies benefit outside of aviation
 - Tim shared that Multi-agency benefit of improved weather reporting
- - Confirm problem/Here are the issues
 - Does this rise to a State-wide issue?
 - What role should the state take in resolving
 - Small, Medium, Large involvement
- PAC Meeting - Confirm Team available times until January 22, 2021

M.A. Hayes to send out doodle poll to PAC members to ascertain availability on January 13th, 14th, 20th, and 21st.

MJ suggested holding weekly meetings when possible through end of Phase I work

- ~~Items Added to Phase I~~
 - ~~Scope items that MaineDOT has elected~~
 - ~~Schedule of these items delivered~~
 - ~~What is available budget~~

Project Delivery Schedule

M. O’Brien presented/discussed following schedule. No substantial objections were noted.

(Assuming MaineDOT allows adjusting from April 1 to May 1)

Latest Date for Final PAC Meeting.....	January 22, 2021
Team Review of PAC Meeting.....	January 26, 2021
Scoping Meeting for Phase 2	February 5, 2021
Draft Scope Submitted.....	February 26, 2021
Scope Review Comments.....	March 5, 2021
Revised Scope Submitted	March 12, 2021
IFE (Blank) Fee Template	March 19, 2021
Finalizing Phase I Summary Report.....	March 22, 2021
Draft Fee Proposal Submitted.....	March 26, 2021
Record of Negotiations	April 2, 2021
MaineDOT Internal Coordination	Unknown
Grant Application	May 1, 2021

Agenda – Bi-Weekly PM Meeting #26

Maine State Aviation Systems Plan – Phase I

December 10, 2020 | 12:00PM | ZOOM Call *(details in MS Outlook Invite)*

Join Zoom Call:

<https://mainedot.zoom.us/j/91925059299?pwd=Ylh1ZGlvSTJncUtYQy9CcUJzbGtCZz09>

Current Activities

- PAC meeting
 - PAC Meeting - Confirmed January 13, 2021
 - Progressing Outline into Power Point Presentations
 - Revisions to Outline from last week
 - Sneak-Peek at Power Point.

Project Delivery Schedule

(Assuming MainedOT allows adjusting from April 1 to May 1)

Latest Date for Final PAC Meeting.....	January 13, 2021
Team Review of PAC Meeting.....	January 19, 2021
Scoping Meeting for Phase 2	January 26, 2021
Draft Scope Submitted.....	February 26, 2021
Scope Review Comments.....	March 5, 2021
Revised Scope Submitted	March 12, 2021
IFE (Blank) Fee Template	March 19, 2021
Finalizing Phase I Summary Report.....	March 22, 2021
Draft Fee Proposal Submitted.....	March 26, 2021
Record of Negotiations	April 2, 2021
MainedOT Internal Coordination	Unknown
Grant Application	May 1, 2021

Meeting Notes – Bi-Weekly PM Meeting #26

Maine State Aviation Systems Plan – Phase I

December 10, 2020 | 12:00PM | ZOOM Call *(details in MS Outlook Invite)*

Join Zoom Call:

<https://mainedot.zoom.us/j/91925059299?pwd=Ylh1ZGlvSTJncUtYQy9CcUJzbGtCZz09>

Current Activities

- PAC meeting
 - PAC Meeting - Confirmed January 13, 2021

Confirmed.

January 6th – Chapters provided to MaineDOT to share with PAC. Use a Link to share.

Schedule Restraints during the holidays. FAA out Monday/Friday to the end of the year.

- Progressing Outline into Power Point Presentations
 - Revisions to Outline from last week
 - Sneak-Peek at Power Point.

Findings

“Complex Operations” – Ralph would prefer this be considered B-II or larger that requires more facility needs, but not enough to trigger the funding. Tim feels that complex refers to the challenge of the flight. MJ to revise the term.

FAA – this low level of Complex operation has been going on for years, are we facing critical issues. Move away from generic language and be specific with defining the problem statement that it is created from this data.

Scott – if we drill into identifying if the specific examples for the challenges of each airport, there may be pushback in acceptance. We can pose the question for Master Plans efforts to define.

MA – AWOS feels like this is a significant finding and there should be a list of actionable items.

Where might the state be specifically coordinate high-level maintenance items.

- AWOS, PAPI, GARD systems, etc.

Here is what we found. Vetting by the PAC. Here is what it means.

Findings, Implications, deliberation of ideas, determine what more do we need to find out to make a decision. Include ideas that have come to date.

PAC will be bottom-up view. Scott will present Top down. This meeting will be a dialog between both perspectives. What do we think on timing? Is this a state issue, or local issue?

What about sustainability? It may not be a MaineDOT issue, but important statewide.

While Phase 2 goes on, MaineDOT can begin addressing the non-AIP issues. Some things don't need to wait until phase 2.

Master Plan – How to conduct planning more efficient? State systematic review or each airport. Identify what is still valid, what needs to be updated.

Actional Items – Today

AWOS – next year state apportionment, Last Mile – MainedOT fleet services, send auction cars to airports. Because they are so important. Don’t study anymore, start addressing.

Gaps

MA would like the regional to be a briefing. How different are the slides when we get into the individual regions?

FAA – add three bullets to “define” the variety that occurs in terms of functions at each region
Friendly reminder to simplify the amount of text in the files. Avoid saying the same thing.

Complex operations – What does it lead to, what does it mean?

FAA – 90min for CS airport. 30min for every system airport for GA activity. Can we better show the overlap?

Opportunities

Barriers to remove? What is the economic ROI on the investment to remove this barrier?

Suggesting a grant program without justification of ROI

High impact, strategic. Need stories to sell this grant program.

IS MJ capable to developing a tool to calculate return on investment? Maybe like hangars? What do we do to position a project to be evaluated? Build the business case. This is where MA wants to take the economic impact study. What is the business case for these opportunities? Do hunting/fishing camps build a business case to support Princeton?

Project Delivery Schedule

(Assuming MainedOT allows adjusting from April 1 to May 1)

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Grant Application	May 1, 2021

End 2pm

Agenda – Bi-Weekly PM Meeting #27

Maine State Aviation Systems Plan – Phase I

December 16, 2020 | 12:30PM | ZOOM Call *(details in MS Outlook Invite)*

Join Zoom Call:

<https://mainedot.zoom.us/j/91925059299?pwd=Ylh1ZGlvSTJncUtYQy9CcUJzbGtCZz09>

Current Activities

- PAC meeting
 - PAC Meeting - Confirmed January 13, 2021
 - Progressing Identification of “Issues”
 - Confirming MJ direction meet’s MaineDOT’s directive/expectation

Project Delivery Schedule

(Assuming MaineDOT allows adjusting from April 1 to May 1)

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Meeting Notes – Bi-Weekly PM Meeting #27

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Current Activities

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 - Progressing Identification of “Issues”
 - Confirming MJ direction meet’s MaineDOT’s directive/expectation

Findings

MJ Review of Findings of Gaps, Trends, Opportunities in the “Unrolled-Gaps” bullet list. FAA felt that this was a good capture of the issue off the system identified throughout the process.

MA suggested MaineDOT Building Material, equipment support, and MaineDOT Resources should be listed as an opportunity.

MA suggested that the term “efficiently scaling” be used under maintenance opportunities. Do we know enough now, or should there be further study?

Statewide initiatives → State economic develop initiatives attract talent statewide.

Phase II Survey → who are these people who are moving into Maine due to COVID, and does the Airport play a role in where they relocated to, and why?

Filter out the less important initiatives. Shorten list. Start moving towards prioritizing. Sort by FAA funded projects.

The findings needs to be better defined. Example: The float plane access in Southern Maine. This is a connecting the link between tourism to the Great Outdoors of Maine at their access points through PWM and BGR. Currently the link is broken in Southern Maine at Highland Lake because there is just so little options to land, and there is no infrastructure at Highland. Bangor is being threatened as Lucky Landing for sale and may close.

Action Items

FAA suggested that the action items should create a physical picture in your mind. This will be a hard thought, not generic.

No FAA funding investigating the State of Maine Tax program.

Gap Funding Analysis likely will result in a recommendation of a new Gap Funding Program.

Ultimately there is very little to do in Maine. The infrastructure is in better shape than the other

modes of transportation. The forecasts are showing decline. The objective is to keep running, maintaining the existing.

Level of Investment

In order for anything to be considered, there must be a justified return on investment.

Timeframe

To be discussed with the PAC.

Project Delivery Schedule

(Assuming MaineDOT allows adjusting from April 1 to May 1)

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Grant Application	May 1, 2021

Agenda – Bi-Weekly PM Meeting #28

Maine State Aviation Systems Plan – Phase I

December 21, 2020 | 1:30PM | ZOOM Call *(details in MS Outlook Invite)*

Join Zoom Call:

<https://mainedot.zoom.us/j/91925059299?pwd=Ylh1ZGlvSTJncUtYQy9CcUJzbGtCZz09>

Current Activities

- PAC meeting
 - PAC Meeting - Confirmed January 13, 2021
 - Progressing Identification of “Issues”
 - Filter out the less important initiatives. Shorten list.
 - Start moving towards prioritizing.
 - Sort by FAA funded projects.
 - The findings need to be better defined.
 - MaineDOT objectives/initiatives?
- Forecast Revisions
 - MJ preparing to submit to FAA for review of the addressed comments

Project Delivery Schedule

(Assuming MaineDOT allows adjusting from April 1 to May 1)

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Meeting Notes – Bi-Weekly PM Meeting #28

Maine State Aviation Systems Plan – Phase I

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<https://mainedot.zoom.us/j/91925059299?pwd=Ylh1ZGlvSTJncUtYQy9CcUJzbGtCZz09>

Current Activities

- **PAC meeting**
 - PAC Meeting - Confirmed January 13, 2021
 - Progressing Identification of “Issues”
 - Filter out the less important initiatives. Shorten list.
 - Start moving towards prioritizing.
 - Sort by FAA funded projects.
 - The findings need to be better defined.
 - MaineDOT objectives/initiatives?
- **Forecast Revisions**
 - MJ preparing to submit to FAA for review of the addressed comments

Take a hard look at the topics, if its FAA not a FAA eligible items. Findings in Phase 1 should include all tasks, but cannot commit future funds to these items.

Filter by priority – Order by number. Statewide significance? Y/N.

Topics – Less expensive to solve without federal money?

Better support the funding issue: AIP purchase power, AIP eligibility constraints.

Lubec Municipal Airport.

List to be available.

Leadership → rephrase this to avoid backlash. Highlight the expertise and how it has developed as an economic Engineer.

MaineDOT Aviation limited staff.

Can we show the impacts of what happens if people no longer fly.

MA to provide workforce development initiatives.

Focus on development place-making (downtowns) that attracts people to the region.

AWOS a big, exciting finding. High profile.

Last Mile, important to address. Itineraries to market the regions. Here’s how you travel.

Current format okay for PAC. Sort the Action Items into timeframe. Progress now, or further analysis.

Economic Analysis → not to focus on construction output.

Case study methodology. What do you capture for data, how?

State Agency → how important is the state functions? Economic impacts, how much do they spend.

Putting a \$\$ figure on the specific functions at every airport.

What can you do besides Implan? Come to Phase II with a specific plan of attack.

Last System Plan provided an economic impact on the local municipality, MaineDOT is requested this information when we City Council asks to close. Must be explainable for how the numbers are derived. Understandable/Defensible.

How to build the ROI for Phase II.

Show MaineDOT an example product, and how to use it.

Does Randle have numbers for emergency services?

MaineDOT Values

Emergency and Public Safety – lots of angles (med-Evac.)

Economic Efficiency

Driving an economic engine

Partnering, Levering other resources

This should be placed on the PAC meeting Phase II scoping.

Action Items → what will phase II do for us in a year?

Project Delivery Schedule

Summarize the other chapters. Show the regional analysis, no physical gaps.

Need to develop Washington County Conclusion. Not anticipated to be much. So what?

Powerpoint presentation. MA available to help with PPT review.

(Assuming MaineDOT allows adjusting from April 1 to May 1)

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Grant Application	May 1, 2021

Agenda – Bi-Weekly PM Meeting #29

Maine State Aviation Systems Plan – Phase I

December 29, 2020 | 2:00PM | ZOOM Call *(details in MS Outlook Invite)*

Join Zoom Call:

<https://mainedot.zoom.us/j/91925059299?pwd=Ylh1ZGlvSTJncUtYQy9CcUJzbGtCZz09>

Current Activities

- PAC meeting
 - PAC Meeting - Confirmed January 13, 2021
 - Brief Power Point Outline Walk Through

Project Delivery Schedule

(Assuming MaineDOT allows adjusting from April 1 to May 1)

Latest Date for Final PAC Meeting	January 13, 2021
Team Review of PAC Meeting.....	January 19, 2021
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Grant Application	May 1, 2021

Meeting Notes – Bi-Weekly PM Meeting #29

Maine State Aviation Systems Plan – Phase I

December 29, 2020 | 2:00PM | ZOOM Call *(details in MS Outlook Invite)*

Join Zoom Call:

<https://mainedot.zoom.us/j/91925059299?pwd=Ylh1ZGlvSTJncUtYQy9CcUJzbGtCZz09>

Attendees:

- Mary Ann Hayes
- Stacie Haskell
- Tim LeSiege
- Scott LeCount
- Matthew O’Brien

Current Activities

- PAC meeting
 - PAC Meeting - Confirmed January 13, 2021
 - Brief Power Point Outline Walk Through

MA – Correct the Airport-Specific to “Systemic” system-wide conversation
What else do we need to know in order to act, can we do it now? What is urgent?

MaineDOT Role → objective is not to let these findings die if MaineDOT is not the lead. If not MaineDOT, then Who is going to lead these items? Instead of yes/no, give options (sponsor?)

Start-up/on-going...revisit this within “Timing.”

MJ to progress the Power Point, and develop the content associated with the “Phase II Approach.” MTO stated that this is challenging due to the unlimited possibilities as to where the conversations leads, but MJ will provide an approach to start the conversation knowing that it will likely expire, or will not be applicable as the PAC discussion progresses.

MJ to develop One-Drive Link and share with Stacie along with a title of the chapters, # of pages and description for her to forward to the PAC. Due Thursday January 7th by noon. (MA said 3pm would be acceptable for her.)

Project Delivery Schedule

(Assuming MaineDOT allows adjusting from April 1 to May 1)

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Revised Scope Submitted March 12, 2021
IFE (Blank) Fee Template March 19, 2021
Finalizing Phase I Summary Report..... March 22, 2021
Draft Fee Proposal Submitted..... March 26, 2021
Record of Negotiations April 2, 2021
MaineDOT Internal Coordination Unknown
Grant Application May 1, 2021

Meeting Notes – Bi-Weekly PM Meeting #30

Maine State Aviation Systems Plan – Phase I

January 5, 2020 | 2:00PM | ZOOM Call *(details in MS Outlook Invite)*

Join Zoom Call:

<https://mainedot.zoom.us/j/91925059299?pwd=Ylh1ZGlvSTJncUtYQy9CcUJzbGtCZz09>

Attendees:

Mary Ann Hayes

Tim LeSiege

Ralph Nacosia-Rusin

Scott LeCount

Matthew O'Brien

Current Activities

- **PAC meeting**
 - PAC Meeting - Confirmed January 13, 2021
 - Final DRAFT Power Point Discussion

MTO was delayed by a previous meeting. Arrived 15 mins after start.

FAA – the tasks need to be boiled down to identify the key items that describe what we learned from the system.

MA – they were too boiled down before. This figure shows a balance of information overload through specifics, and over simplified through generalization.

Group decided to keep the tasks descriptions the same.

FAA – there should be a compelling argument for the need of Phase III System Plan (MJ Phase II task). Team agreed that the objective of the PAC meeting will provide the insight to what Ralph is looking for: Compelling argument, and key items.

Edits – MA suggested that the timeframe should not focus on now/mid/long; but “ready now”/needs more investigation.

Pull out action items now. Non-AIP ready for actions. Pushaw Lake, Highland Lake.

Tim to provide comments by 9am tomorrow.

Project Delivery Schedule

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Grant Application	May 1, 2021

Meeting Notes – Bi-Weekly PM Meeting #31

Maine State Aviation Systems Plan – Phase I

January 27, 2020 | 1:00PM | ZOOM Call *(details in MS Outlook Invite)*

Join Zoom Call:

<https://mainedot.zoom.us/j/91925059299?pwd=Ylh1ZGlvSTJncUtYQy9CcUJzbGtCZz09>

Attendees:

Stacie Haskell

Mary Ann Hayes

Tim LeSiege

Scott LeCount

Matthew O'Brien

Current Activities

- PAC meeting
 - MaineDOT perception of meeting
 - Review PAC determinations

The seven pages of findings may be a better result in Chapter 6 – findings/conclusions and recommendations along with Action Items.

Define things in terms of urgent/long term, what is the next step?

System Performance Metrics

Encourage the Sponsor to address the last-mile during a master plan process.

Application should not go through the MAAB.

How well is MainedOT performing at maintaining their facility?

Look at ASCE Report Card for performance standards.

Should align with how to score applications.

Merit Based grant. Safety and economic stimulation airport sustainability. Partnering.

Document that “other” should be involved in funding.

MainedOT to host the wealth of knowledge.

Maintenance – Piggyback off MainedOT efforts in the region.

Economic Impact – needs to be a per airport basis. Rolled up in a series of different ways:

Regional, asset class, etc.

Scoping meeting – Set for February

Dynamic database is needed in order to present and access the system data as a deliverable of the system plan phase II.

Economic – what is the value of the border crossing? What is the value to the state? May involve surveying users to become more informed with their data. Outdoor sporting economic value. Value of medical transport – human life. Case studies.

Urban flight, now here all year. How important are these airports to these people? Find these people, and survey them.

Doing a Plan for AWOS-III deployment, will likely need to be a separate planning/implementation study.

Completion of Phase I for FAA review.

Project Delivery Schedule

(Assuming MaineDOT allows adjusting from April 1 to May 1)

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Appendix B: Study Survey & Interview Instruments

Airport Manager Survey



“FACE” of Maine Aviation | Airport Manager Survey

Maine State Aviation System Plan

MaineDOT, Bureau of Planning, Aviation Program requests your participation in updating the Maine State Aviation System Plan (SASP) by completing this survey. This information will be relied upon as a basis for the SASP update process, which is now underway. Please return this survey by February 21, 2020, attaching any relevant information you would like considered.

- **Facility** – tell us about your airport’s airside, landside, & terminal area facilities.
- **Activity** – tell us about your tenant’s activities, itinerant visitors & aircraft, operations.
- **Community** – tell us about your relationship with neighbors & broader community.
- **Economy** – tell us about your airport’s financial performance & private investment.

Thank you! Your contributions to the Maine State Aviation System and this System Plan are sincerely appreciated!

If you have questions about this survey or the Maine State Aviation System Plan, please contact Stacie Haskell, stacie.haskell@maine.gov, (207) 624-3243 or Brady Brewster at McFarland Johnson, Inc., bbrewster@mjinc.com; (978) 692-0522.

3-letter FAA ID:		Airport Name:	
-------------------------	--	----------------------	--

Survey Completed by (Name):	
Organization:	Telephone/Mobile Phone:
Title/Position:	Email:

FACILITY – GENERAL INFORMATION	
1.) General Data	
1a: Airport Ownership (Name):	
1b: Are you a FT airport manager? Are you only PT? Are you municipal staff that fulfills other roles leaving you to do airport manager work only part time? Are you an unpaid volunteer? Are you FBO staff? (check all that apply)	<input type="checkbox"/> FT <input type="checkbox"/> FT Seasonal <input type="checkbox"/> PT <input type="checkbox"/> PT Seasonal <input type="checkbox"/> Unpaid Volunteer <input type="checkbox"/> Municipal Dept. Staff <input type="checkbox"/> FBO Staff <input type="checkbox"/> Other: _____
1c: Airport Hours Attended:	<input type="checkbox"/> Full Time (24 hours) <input type="checkbox"/> Part-Time - Indicate Months: _____ Days: _____ Hours: _____ <input type="checkbox"/> Unattended
1d: Airport Employees:	# FT Employees: _____ # PT Employees: _____ OR # Annual FTE: _____
1e: Airport Manager Name:	
1f: Airport Manager Email / Tel:	Email: _____ Tel: _____
1g: Airport Mailing Address	

"FACE" of Maine Aviation | Airport Manager Survey



1h: Airport Website URL	
FACILITY – GENERAL	
2.) What role does your airport provide for operators in and travelers to/from Maine?	
Explain:	
3.) Why should itinerant pilots come to your airport?	
Explain:	
4.) Do you compete with any airports to attract or retain based aircraft tenants and/or itinerant users?	
Explain:	
4a: What do other airports offer that you wish you offered? What do you offer that other airports don't? Explain:	
5.) What top 3 issues are the most challenging in maintaining your airport?	
5a:	
5b:	
5c:	
Additional Notes: <i>(please indicate the question no. of your response)</i>	

FACILITY – DEVELOPMENT	
6.) What are your top 3 facility needs? (construction projects or other improvements)	
6a:	
6b:	
6c:	

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FACILITY – AIRCRAFT HANGAR STORAGE & PARKING				
7.) Aircraft Hangars				
Hangar Types	Total Number	% Occupied (estimate)	Total Square Footage	Largest Aircraft Accommodated
7a: T-Hangars				
7b: Private Box/Conventional				
7c: Community (Shared)				
7d: Transient Hangars				
TOTALS:		N/A		N/A
7e: Waiting List for Existing Hangars	<input type="checkbox"/> Yes <input type="checkbox"/> No	# of A/C on list:	A/C Type*:	
7f: Waiting List to Build Hangar	<input type="checkbox"/> Yes <input type="checkbox"/> No	# of A/C on list:	A/C Type*:	
8.) Airport Aprons				
Is the aircraft parking apron sufficient for your needs?			<input type="checkbox"/> Yes <input type="checkbox"/> No	
Additional Notes: <i>(please indicate question no. of your response)</i>				

FACILITY - TERMINAL BUILDING & AREA	
9.) Does the airport have a general aviation terminal building? (areas for public use attached to hangars)	
9a: Is there a GA Terminal Building? <input type="checkbox"/> Yes <input type="checkbox"/> No	Owner (if different than Sponsor)
9b: If YES, is it standalone or attached or otherwise part of a hangar?	<input type="checkbox"/> Standalone <input type="checkbox"/> Attached to Hangar <input type="checkbox"/> Public Area in Private Hangar <input type="checkbox"/> Public Area in FBO Hangar/Facility
9c: Facility Age:	Year Constructed: _____ Year Rehabbed: _____ Year Expanded: _____
9d: Facility Appearance/Condition:	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor
9e: Is your GA terminal sufficient for your needs?	<input type="checkbox"/> Yes <input type="checkbox"/> No
9f: Facility Tenants:	1. _____ 3. _____ 2. _____ 4. _____
10.) Terminal Area Amenities – Does the airport have:	
10a: Public Access Restrooms <input type="checkbox"/> Yes <input type="checkbox"/> No	10e: Courtesy Vehicle/Crew Car <input type="checkbox"/> Yes <input type="checkbox"/> No
10b: Public Access Courtesy Telephone <input type="checkbox"/> Yes <input type="checkbox"/> No	10f: Public Access WiFi <input type="checkbox"/> Yes <input type="checkbox"/> No
10c: Food/Beverage/Vending Machines <input type="checkbox"/> Yes <input type="checkbox"/> No	10g: Flight Planning Room <input type="checkbox"/> Yes <input type="checkbox"/> No
10d: Pilot Lounge <input type="checkbox"/> Yes <input type="checkbox"/> No	10h: <input type="checkbox"/> Taxi <input type="checkbox"/> Uber/Lyft <input type="checkbox"/> Bus Stop <input type="checkbox"/> Transit Stop

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FACILITY - TERMINAL BUILDING & AREA	
11.) Automobile Parking & Ground Transportation	
11a: How much auto parking is available? (inclusive of all tenant and passenger lots)	Main Lot # Spaces: _____ Second Lot # Spaces: _____ Tenants # Spaces: _____ Total # Spaces: _____
11b: Does the airport have enough auto parking for all operational functions?	<input type="checkbox"/> Yes <input type="checkbox"/> No
11c: If not enough parking, please describe where and how much new parking is needed:	
Additional Notes: <i>(please indicate question no. of your response)</i>	

FACILITY – OTHER SUPPORT FACILITIES & SERVICES	
12.) Does the airport have the following facilities/services:	
12a: Does the airport have an Airfield Maintenance building?	<input type="checkbox"/> Yes <input type="checkbox"/> No # of Bays: _____
12b: Does the airport have Snow Removal Equipment (SRE)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
12c: Does the airport have a SRE building?	<input type="checkbox"/> Yes <input type="checkbox"/> No # of Bays: _____
12d: Does the airport have an Operations building?	<input type="checkbox"/> Yes Square Footage: _____ <input type="checkbox"/> No
12e: Does the airport have other aviation-related buildings?	<input type="checkbox"/> Yes <input type="checkbox"/> No Building 1 Use: _____ Square Footage: _____ Building 2 Use: _____ Square Footage: _____
12f: Does the airport offer deicing?	<input type="checkbox"/> Chemical <input type="checkbox"/> Radiant/Hangar <input type="checkbox"/> None
12g: Is the condition of the runway reported? If YES, how so:	<input type="checkbox"/> Not Reported <input type="checkbox"/> ASOS/AWOS <input type="checkbox"/> NOTAM <input type="checkbox"/> Other _____

FACILITY – MANAGEMENT	
13.) Do you consider your airport management policies, primary guiding documents, agreements, or rates and charges to be out of date or otherwise not favorable to the airport?	
13a: Primary guiding documents (rules and regulations, minimum standards).	<input type="checkbox"/> Yes <input type="checkbox"/> No
If YES, please explain:	
13b: Tenant leases or operating agreements and terms.	<input type="checkbox"/> Yes <input type="checkbox"/> No
If YES, please explain:	

"FACE" of Maine Aviation | Airport Manager Survey



13c: Rates and charges, land appraisals, valuations, fair market value.	<input type="checkbox"/> Yes <input type="checkbox"/> No
If YES, please explain:	
14.) Security & Safety	
14a: Is there a law enforcement agency on-site? <input type="checkbox"/> Yes <input type="checkbox"/> No	If YES, name of agency: _____
14b: Describe your airport's safety program:	
14c: Over the last 3-5 years have you had any wildlife strikes? If YES, please describe.	<input type="checkbox"/> Yes <input type="checkbox"/> No
14d: Do you have a reporting system or procedures for wildlife strikes? If YES, please describe.	<input type="checkbox"/> Yes <input type="checkbox"/> No
14e: Do you have any problems with pedestrians? If YES, please describe.	<input type="checkbox"/> Yes <input type="checkbox"/> No
15.) MaineDOT Programs, Services, Functions, and Expertise	
15a: How often do you interact with MaineDOT Aviation staff? <input type="checkbox"/> Infrequently <input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Annually	
15b: What services, expertise, or help do you currently utilize from MaineDOT?	
15c: Are the programs, services, and expertise provided by MaineDOT Aviation sufficient? <input type="checkbox"/> Yes <input type="checkbox"/> No	
If NO, what programs or services are desired? <input type="checkbox"/> Capital Funding Program <input type="checkbox"/> CIP Development <input type="checkbox"/> Safety Inspections <input type="checkbox"/> Safety Enforcement <input type="checkbox"/> Grants/Funding <input type="checkbox"/> General Sponsor Support <input type="checkbox"/> Education/Training Programming <input type="checkbox"/> UAV Management/Education <input type="checkbox"/> Aviation Services Directory <input type="checkbox"/> Workforce Development <input type="checkbox"/> Industry Leadership <input type="checkbox"/> Other:	If NO, what expertise is desired? <input type="checkbox"/> Engineering <input type="checkbox"/> Planning <input type="checkbox"/> Grants Administration <input type="checkbox"/> Economic Development <input type="checkbox"/> Contracting Support <input type="checkbox"/> Analyst/Technician <input type="checkbox"/> Maintenance <input type="checkbox"/> Design/Drawings (CAD) <input type="checkbox"/> Inspections <input type="checkbox"/> Financial <input type="checkbox"/> Accounting/Procurement <input type="checkbox"/> Other:

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Additional Notes: *(please indicate question no. of your response)*

ACTIVITY – BASED AIRCRAFT & OPERATIONS

16.) Do you or some other local agency or department collect State excise tax on aircraft based at your airport?

- Yes 16a: If YES, can you approximate your annual collections from all aircraft? \$ _____
 No 16b: If YES, where does this money go and how is this money spent? _____

17.) Is your airport a "summer home" to aircraft that are officially based elsewhere? Yes No

If YES, how many aircraft are stored at your airport during peak seasonal flying periods? # Aircraft _____
 Explain:

18.) Airport Operations (Enter airport manager's estimate if 5010 data is considered inaccurate)

Year	Air Carrier	Air Taxi	GA (Local)	GA (Itinerant)	Military	Total
2019 (5010 data)						
2019 (airport data)						

Additional Notes: *(please indicate question no. of your response)*

ACTIVITY – TENANTS & TRANSIENTS

19.) Who are the top 5 most active based business tenants?

Name	Type of Business	Aircraft Type	Departures/Week
18a:			
18b:			
18c:			
18d:			
18e:			

"FACE" of Maine Aviation | Airport Manager Survey



Additional Notes: *(please indicate question no. of your response)*

20.) What is the airport's busiest month for based tenants?
21.) What percentage of annual volume does that month represent?

Busiest Month:	% of Annual Operations Volume:
-----------------------	---------------------------------------

22.) Who are the top 5 most active transient operators visiting local businesses?

Name	Type of Business	Aircraft Type	Arrivals/Week
22a:			
22b:			
22c:			
22d:			
22e:			

23.) What is the airport's busiest month for itinerant users?
24.) What percentage of annual volume does that month represent?

Busiest Month:	% of Annual Operations Volume:
-----------------------	---------------------------------------

Additional Notes: *(please indicate question no. of your response)*

COMMUNITY - COMPATIBLE LAND USE & SUPPORT

25: Does your municipality or surrounding municipalities under your approach have airport land use/zoning regulations that require off-airport development to be compatible with the airport? Yes No Unknown

If YES, what controls? Land Use Plan Zoning Ordinance/Resolution Noise Abatement Procedures

26: Is the airport supported by the surrounding community? Yes No

Please provide details pertaining to the surrounding community's support or non-support of the airport:

27: Does the airport have the support of local and/or regional planning commissions? Yes No Unknown

Please provide details about local or regional planning commissions' support or non-support of the airport:

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28.) Does the airport control land in Runway Protection Zones?			
RW _____	Fee simple _____%	Easement _____%	Uncontrolled _____%
RW _____	Fee simple _____%	Easement _____%	Uncontrolled _____%
RW _____	Fee simple _____%	Easement _____%	Uncontrolled _____%
RW _____	Fee simple _____%	Easement _____%	Uncontrolled _____%
Are there any public roads currently traversing any of the airport’s RPZs? Please explain:			
Additional Notes: <i>(please indicate question no. of your response)</i>			

COMMUNITY - AVIATION OUTREACH	
29: Does the airport actively coordinate with FAA and MaineDOT on regulatory and compliance issues (e.g., RSAs, obstructions, through-the-fence, non-standard leases, etc.)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
30: Is your airport a member of your local Chamber of Commerce?	<input type="checkbox"/> Yes <input type="checkbox"/> No
31: Does your airport actively coordinate with your local economic development agency?	<input type="checkbox"/> Yes <input type="checkbox"/> No
32: Does your airport have an active community outreach program? (including residential, governmental, pilot, and business communities). If YES, please describe the programs (e.g. airport open house, fly-ins, membership in civic organizations, chamber of commerce, etc.):	<input type="checkbox"/> Yes <input type="checkbox"/> No
33: Check each of the following outreach mechanisms that your airport utilizes: <input type="checkbox"/> E-mail Outreach <input type="checkbox"/> Newsletters <input type="checkbox"/> Community Events <input type="checkbox"/> Other _____	
34: If no formal outreach program is in place, do you maintain an open dialogue with neighbors, businesses, elected/appointed officials?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Additional Notes: <i>(please indicate question no. of your response)</i>	

COMMUNITY - PROPERTY & ENVIRONS	
35: Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport? If YES, please provide name(s).	<input type="checkbox"/> Yes <input type="checkbox"/> No Name(s): _____

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36: Does the airport have a business/industrial park on the property?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Vacancy <input type="checkbox"/> Airfield Access
37: Is there a business/industrial park adjacent or in proximity (< 1 mile)? If YES, are you aware of any vacancy?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Vacancy
38: Does the airport currently have through-the-fence (TTF) operations? If YES, is there a current access agreement in place for each?	<input type="checkbox"/> Yes <input type="checkbox"/> No # Commercial ____ # Residential ____ # Access Agreements in Place ____
Additional Notes: <i>(please indicate question no. of your response)</i>	

ECONOMY – FUEL SALES, OPERATIONS & PROJECT FUNDING, PRIVATE INVESTMENT

39.) If you sell fuel, what were the estimated fuel sales and volume on the airport in 2019? (indicate contract sales)	
AvGas Sales – Gross Revenue: _____ AvGas Volume Sold: _____	Jet A Sales – Gross Revenue: _____ Jet A Volume Sold: _____
39a: What % of annual Jet fuel volume sold is at a discount or contract rate?	% of Volume @ Contract Rate: _____
39b: When are fueling services offered?	<input type="checkbox"/> 24 Hours <input type="checkbox"/> Part-Time <input type="checkbox"/> After Hours <input type="checkbox"/> Unattended/On-Call
40.) Operations Funding	
40a. What is your airport’s average annual operating budget/expenditures (non-capital)? \$ _____	
40b. How are your airport’s annual expenses trending?	<input type="checkbox"/> Upward <input type="checkbox"/> Downward <input type="checkbox"/> Stable
40c. How are your airport’s annual revenues trending?	<input type="checkbox"/> Upward <input type="checkbox"/> Downward <input type="checkbox"/> Stable
40d. Is the airport budget supplemented by other agencies (e.g. sponsor/owner /town) for its basic operating and maintenance costs? <input type="checkbox"/> Yes <input type="checkbox"/> No	If YES, what is the source of those funds? <input type="checkbox"/> General Fund <input type="checkbox"/> Other: _____ <input type="checkbox"/> Special Fund Describe: _____ <input type="checkbox"/> Transportation/Roads Fund
41.) Project Funding	
41a: Over the last 3-5 years, have you been able to get local match for Federal/State-funded projects?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If YES, please estimate: Average Annual Local Match \$ _____ Total 5 Year Match \$ _____	
If NO, is obtaining local match difficult due to: <input type="checkbox"/> Limited Fiscal Resources <input type="checkbox"/> Community Opposition <input type="checkbox"/> Lack of Political Support <input type="checkbox"/> Unfunded Year(s): ____ <input type="checkbox"/> Other (explain): _____	

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41b: What is the source of funding for projects not funded by Federal/State grants?	
41c: What sources of non-aviation revenue does the airport have?	
42.) Private Funding & Investment	
What types of projects have private interests invested in over the last 5 years?	<input type="checkbox"/> Hangar <input type="checkbox"/> Terminal <input type="checkbox"/> FBO <input type="checkbox"/> Maintenance <input type="checkbox"/> Flight School
Describe these investments:	
Additional Notes: <i>(please indicate question no. of your response)</i>	

FOLLOW UP	
43: Would you like to be provided with the aggregated results of this survey?	<input type="checkbox"/> Yes <input type="checkbox"/> No
44: Would you like to be contacted to discuss any issues further?	<input type="checkbox"/> Yes <input type="checkbox"/> No
45: Are you aware of any key interested stakeholders in the aviation system users (i.e. individual users, businesses or public/private organizations) in your region that may wish to be interviewed over the coming year? Please provide contact information (Name, Organization, Email, Phone, Interest/Knowledge to Contribute):	
1.	
2.	
3.	
4.	

INFORMATION REQUESTED
Beyond the FAA/MaineDOT CIP for FAA-eligible projects, what other non-FAA eligible projects does your airport have planned? Please send information pertaining to these projects to stacie.haskell@maine.gov .
Do you have any notes regarding your ACIP?
Please provide your annual operating budget to stacie.haskell@maine.gov

General Aviation Stakeholder Survey



SUBMIT

Aviation System Stakeholder Survey Maine State Aviation System Plan

MaineDOT requests your participation in updating the Maine State Aviation System Plan (SASP) by completing this survey. If you have questions about this survey or the Maine State Aviation System Plan, please contact Stacie Haskell, stacie.haskell@maine.gov, (207) 624-3243 or Brady Brewster at McFarland Johnson, Inc., bbrewster@mjinc.com; (978) 692-0522. Note your interest below if you would like to be more formally interviewed.

Survey Completed by (Name):	
Home Airport:	Telephone/Mobile Phone:
Title/Position:	Email:
1) What do you see as the strengths of the Maine Aviation System or airports that can be built upon or emulated at other airports? (Please be as specific as possible.)	
2) What do you feel are the biggest weaknesses in Maine's Aviation System?	
3) Where do you see opportunities to strengthen Maine's Aviation System?	
4) The State currently programs aviation fuel tax revenues (about \$1m/year) and Transportation Bond Funds (averaging \$2M/year) to provide 50% of the local match for FAA grants-fund-eligible projects. Please share any innovative funding ideas you may have to augment these resources and how additional funds might best be directed, if at all.	
5) Are you aware of any key interested stakeholders in the aviation system (i.e. individual users, businesses, or public/private organizations) that may wish to be interviewed over the coming year? Please provide contact information (Name, Organization, Email, Phone, Interest/Knowledge to Contribute). Include your own information if you would like to be formally interviewed.	
6) Please add any other input you have for us:	

Thank you! Your contributions to the Maine State Aviation System Plan are sincerely appreciated!

Regional Planning and Economic Development Survey



“FACE” of Maine Aviation | Regional Planning & Economic Development Survey

Maine State Aviation System Plan

MaineDOT, Bureau of Planning, Aviation Program is developing an updated State Aviation System Plan for 2021-2030 and would like your organization’s input. This information will be relied upon as a basis for the SASP update process, which is now underway. Please return this survey by February 21, 2019, attaching any relevant information you would like considered.

- Facilities – tell us airport facilities and infrastructure in your region.
- Activities – tell us about activities at airports in your region.
- Community – tell us about community and development interactions with your airports.
- Economy – tell us about the economic and business impact airports have in your region.

Thank you! Your contributions to the Maine State Aviation System and this System Plan are sincerely appreciated!

If you have questions about this survey or the Maine State Aviation System Plan, please contact Brady Brewster of McFarland Johnson, Inc. bbrewster@mjinc.com (978) 320-4832.

SURVEY COMPLETED BY (NAME):	
Organization:	Telephone:
Title/Position:	Email:

Airports eligible for federal funding under the FAA Airport Improvement Program must be identified on the National Plan of Integrated Airport Systems (NPIAS). NPIAS Airports in Maine include the following:

FACILITY – NPIAS AIRPORTS IN MAINE				
Interest	Airport Name	Municipality	County	
<input type="checkbox"/>	Auburn-Lewiston Municipal	Auburn	Androscoggin	
<input type="checkbox"/>	Augusta State	Augusta	Kennebec	
<input type="checkbox"/>	Bangor International	Bangor	Penobscot	
<input type="checkbox"/>	Hancock County-Bar Harbor	Trenton	Hancock	
<input type="checkbox"/>	Belfast Municipal	Belfast	Waldo	
<input type="checkbox"/>	Bethel Regional	Bethel	Oxford	
<input type="checkbox"/>	Biddeford Municipal	Biddeford	York	
<input type="checkbox"/>	Brunswick Executive	Brunswick	Cumberland	
<input type="checkbox"/>	Caribou Municipal	Caribou	Aroostook	
<input type="checkbox"/>	Sugarloaf Regional	Carrabassett Valley	Franklin	
<input type="checkbox"/>	Dexter Regional	Dexter	Penobscot	
<input type="checkbox"/>	Charles A. Chase Jr. Memorial	Dover-Foxcroft	Piscataquis	
<input type="checkbox"/>	Eastport Municipal	Eastport	Washington	
<input type="checkbox"/>	Northern Aroostook Regional	Frenchville	Aroostook	
<input type="checkbox"/>	Eastern Slope Regional	Fryeburg	Oxford	
<input type="checkbox"/>	Greenville Municipal	Greenville	Piscataquis	
<input type="checkbox"/>	Houlton International	Houlton	Aroostook	
<input type="checkbox"/>	Islesboro	Islesboro	Waldo	
<input type="checkbox"/>	Newton Field	Jackman	Somerset	
<input type="checkbox"/>	Lincoln Regional	Lincoln	Penobscot	
<input type="checkbox"/>	Machias Valley	Machias	Washington	
<input type="checkbox"/>	Millinocket Municipal	Millinocket	Penobscot	
<input type="checkbox"/>	Central Maine Airport of Norridgewock	Norridgewock	Somerset	
<input type="checkbox"/>	Dewitt Field, Old Town Municipal	Old Town	Penobscot	
<input type="checkbox"/>	Oxford County Regional	Oxford	Oxford	
<input type="checkbox"/>	Pittsfield Municipal	Pittsfield	Somerset	
<input type="checkbox"/>	Portland International	Portland	Cumberland	
<input type="checkbox"/>	Presque Isle International	Presque Isle	Aroostook	
<input type="checkbox"/>	Princeton Municipal	Princeton	Washington	
<input type="checkbox"/>	Stephen A. Bean Municipal	Rangeley	Franklin	
<input type="checkbox"/>	Knox County Regional	Owls Head	Knox	
<input type="checkbox"/>	Sanford Seacoast Regional	Sanford	York	
<input type="checkbox"/>	Stonington Municipal	Stonington	Hancock	
<input type="checkbox"/>	Waterville Robert LaFleur	Waterville	Kennebec	
<input type="checkbox"/>	Wiscasset	Wiscasset	Lincoln	

FACILITY – GENERAL INFORMATION
1: Check which airports shown on table above are within your organization’s geographic area of interest.

<p>2: In what ways do these airports in the aviation system provide benefits to your region? (check all that apply for the region)</p>	<input type="checkbox"/> Commerce/Economic <input type="checkbox"/> Life Safety <input type="checkbox"/> Emergency Preparedness <input type="checkbox"/> Transportation <input type="checkbox"/> Community Events <input type="checkbox"/> Other (explain below)
<p>3: Please identify any particular aviation assets that set your region apart and explain why.</p>	
<p>4: What facilities do you feel airports or the aviation system in your region are lacking? Please list specific facilities by airport or region.</p>	
<p>5: Does your organization have any priority targeted investments related to the aviation system? Please describe (include any reference in CEDS, plans, or other regional strategies).</p>	
<p>Additional Notes: <i>(please indicate the question no. of your response)</i></p>	

ACTIVITY – REGIONAL DEMAND AND CAPACITY	
<p>6: Do you have any indication that use of the facilities in your region is likely to increase or decrease from 2021-2030? Please describe by individual airport.</p>	
<p>7: Do other modes of transportation fulfill needs not being met by the airport facilities in your region? If so, please describe.</p>	
<p>Additional Notes: <i>(please indicate the question no. of your response)</i></p>	

COMMUNITY – COMPATIBLE LAND USE & OUTREACH

<p>8: Are you aware of any land use or zoning conflicts around any of the facilities in your region? Please list the airport and any conflict(s).</p>	
<p>9: Is there anything specific that your organization would like to see addressed in the State Aviation System Plan update?</p>	
<p>Additional Notes: <i>(please indicate the question no. of your response)</i></p>	

COMMUNITY - PROPERTY & ENVIRONS

<p>10: Do any airports in your region have a business/industrial park <u>on the airport property</u>? Please indicate which airport. Check the box if the business/industrial park at the airport has airfield access (i.e. a taxiway connecting buildings to the runway). Determine the approximate percentage of vacancy in the development, if any.</p>	<table border="1"> <thead> <tr> <th data-bbox="951 888 1182 940"><u>Airport Name</u></th> <th data-bbox="1182 888 1377 940"><u>Airfield Access?</u></th> <th data-bbox="1377 888 1528 940"><u>Business/Industrial Park Vacancy</u></th> </tr> </thead> <tbody> <tr> <td data-bbox="951 940 1182 993">1. _____</td> <td data-bbox="1182 940 1377 993"><input type="checkbox"/></td> <td data-bbox="1377 940 1528 993">% Vacant _____</td> </tr> <tr> <td data-bbox="951 993 1182 1045">2. _____</td> <td data-bbox="1182 993 1377 1045"><input type="checkbox"/></td> <td data-bbox="1377 993 1528 1045">% Vacant _____</td> </tr> <tr> <td data-bbox="951 1045 1182 1098">3. _____</td> <td data-bbox="1182 1045 1377 1098"><input type="checkbox"/></td> <td data-bbox="1377 1045 1528 1098">% Vacant _____</td> </tr> <tr> <td data-bbox="951 1098 1182 1150">4. _____</td> <td data-bbox="1182 1098 1377 1150"><input type="checkbox"/></td> <td data-bbox="1377 1098 1528 1150">% Vacant _____</td> </tr> <tr> <td data-bbox="951 1150 1182 1203">5. _____</td> <td data-bbox="1182 1150 1377 1203"><input type="checkbox"/></td> <td data-bbox="1377 1150 1528 1203">% Vacant _____</td> </tr> <tr> <td data-bbox="951 1203 1182 1255">6. _____</td> <td data-bbox="1182 1203 1377 1255"><input type="checkbox"/></td> <td data-bbox="1377 1203 1528 1255">% Vacant _____</td> </tr> </tbody> </table>	<u>Airport Name</u>	<u>Airfield Access?</u>	<u>Business/Industrial Park Vacancy</u>	1. _____	<input type="checkbox"/>	% Vacant _____	2. _____	<input type="checkbox"/>	% Vacant _____	3. _____	<input type="checkbox"/>	% Vacant _____	4. _____	<input type="checkbox"/>	% Vacant _____	5. _____	<input type="checkbox"/>	% Vacant _____	6. _____	<input type="checkbox"/>	% Vacant _____
<u>Airport Name</u>	<u>Airfield Access?</u>	<u>Business/Industrial Park Vacancy</u>																				
1. _____	<input type="checkbox"/>	% Vacant _____																				
2. _____	<input type="checkbox"/>	% Vacant _____																				
3. _____	<input type="checkbox"/>	% Vacant _____																				
4. _____	<input type="checkbox"/>	% Vacant _____																				
5. _____	<input type="checkbox"/>	% Vacant _____																				
6. _____	<input type="checkbox"/>	% Vacant _____																				
<p>11: Please list business/industrial parks <u>adjacent to or within one mile</u> of each airport in your region. Attach any further descriptive information regarding the value of the airport to businesses in the park.</p>																						
<p>12: Approximately how many employees work in aviation related businesses in your region? Please indicate large employers if known.</p>																						
<p>Additional Notes: <i>(please indicate the question no. of your response)</i></p>																						

ECONOMY – ECONOMIC BENEFITS AND COMMERCE	
13: What economic, technological, or other factors might impact the use of the aviation system in your region within the next decade?	
14: Please share any evidence of the quantitative value the aviation system provides to your region (i.e. results of prior studies, economic impact reports, jobs created, emergency preparedness support, etc.).	
15: Please describe any programs or technical assistance your organization provides to airports or airport related businesses to stimulate economic development (i.e. grants, loans, small business assistance, etc.)?	
16: Please describe any other forms of support your organization makes available to your region’s aviation facilities and businesses.	
Additional Notes: <i>(please indicate the question no. of your response)</i>	

FOLLOW UP	
17: Would you like to be provided with the aggregated results of this survey?	<input type="checkbox"/> Yes <input type="checkbox"/> No
18: Would you like to be contacted to discuss any issues further?	<input type="checkbox"/> Yes <input type="checkbox"/> No
19: Are you aware of any key interested stakeholders in the aviation system users (i.e. individual users, businesses or public/private organizations) in your region that may wish to be interviewed over the coming year? Please provide contact information (Name, Organization, Email, Phone, Interest/Knowledge to Contribute):	
1.	
2.	
3.	
4.	

Privately Owned Public Use Survey



“FACE” of Maine | Privately Owned / Public Use Airport Survey

Maine State Aviation System Plan

MaineDOT requests your participation in updating the 10-year Maine State Aviation System Plan (SASP) by completing this survey. We want to understand your facility's role in supporting the aviation community and gather your input on what is needed in the public system. If any questions are irrelevant, just skip them. We would be happy to interview you to understand issues you identify further.

- **F**acility – tell us about your airport’s facilities.
- **A**ctivity – tell us about your airport’s activities, aircraft, and operations.
- **C**ommunity – tell us about your relationship with neighbors & broader community.
- **E**conomy – tell us about your airport’s economic impact & private investment.

Thank you! Your contributions to the Maine State Aviation System and this System Plan are sincerely appreciated!

If you have questions about this survey or the Maine State Airport System Plan, please contact Tim LeSiege of MaineDOT at Tim.LeSiege@maine.gov or (207)215-7459.

3-letter FAA ID:		Airport Name:	
-------------------------	--	----------------------	--

Survey Completed by (Name):	
Organization:	Telephone/Mobile Phone:
Title/Position:	Email:

FACILITY – GENERAL INFORMATION	
General Data	
Airport Owner (Name)	
Airport Management Status (check all that apply)	<input type="checkbox"/> Full Time <input type="checkbox"/> Full Time (Seasonal) <input type="checkbox"/> Part-Time <input type="checkbox"/> Part-Time (Seasonal) <input type="checkbox"/> Volunteer <input type="checkbox"/> FBO Staff <input type="checkbox"/> Other:
Airport Manager Name	
Airport Manager Email	
Airport Manager Telephone	
Airport Mailing Address	
Airport Hours Attended	<input type="checkbox"/> Full Time (24 hrs) <input type="checkbox"/> Part-Time - Indicate Months: Days:0 Hours:
Airport Role (check all that apply)	<input type="checkbox"/> Seasonal (warm weather) <input type="checkbox"/> Turf Runway <input type="checkbox"/> Seasonal (cold weather) <input type="checkbox"/> Hard Surface Runway <input type="checkbox"/> Seaplane Base <input type="checkbox"/> Agricultural Use

FACILITY – RELATIONSHIPS AND FUTURE PLANS

Do you have any current or planned developments at your facility?
If so, please detail the projects:

What factors may limit or restrict the future growth or development of your airport? (Specifically identify them):

Physical Factors/Limitations: Yes No (Explain)

Limited Space

Environmental Factors: Yes No (Explain)

Community Relations: Yes No (Explain)

Financial Shortfalls: Yes No (Explain)

Do you have plans to close your airport in the near, mid-, or long term period or do you anticipate your airport closing? If yes, please explain why.

- Near Term (5 Years)
 Mid-Term (5-10 Years)
 Long Term (10-20 Years)

FACILITY – AIRCRAFT HANGAR STORAGE & PARKING

AIRCRAFT HANGARS (Please Comment on Seasonality in Notes Sections)

Hangar Types	Total Number	% Occupied (estimate)	Total Square Footage	Largest Aircraft Accommodated
T-Hangars				
Private Box/Conventional				
Community (Shared)				
Transient Hangars				
TOTALS:		N/A		N/A

FACILITY – RELATIONSHIPS

Do aviation users in your region depend upon any unique services provided at your facility?
If yes, describe:

Yes No

List services important to your operation and/or users offered by nearby airports (name the service and airport):

“FACE” of Maine | Airport Manger Survey



ACTIVITY

How many aircraft are based at the Airport? Please describe the aircraft types and approximately how many operations are conducted each month?

Busiest Month:

Annual Operations:

COMMUNITY - COMPATIBLE LAND USE & SUPPORT

Is the Airport supported by surrounding community?

Yes No

Please provide details pertaining to the surrounding community’s support or non-support of the Airport:

COMMUNITY - PROPERTY & ENVIRONS

Does the airport have any aeronautical or non-aeronautical businesses or services on the property?

Yes No Vacancy
 Airfield Access

Please describe what the service or function of businesses at the airport, if any (i.e. fuel service, maintenance, flying lessons).

Fuel services
 Community/Conference room
 Maintenance Business
 Aeronautical Business. If so, please describe: _____
 Non-aeronautical Business. If so, please describe: _____
 Other: _____

ECONOMY – ECONOMIC BENEFITS

Please comment on the economic, life safety, and/or other regional benefits derived from your airport?

What economic or other external factors might impact the use of your airport over the next decade?

Is your airport vital to the economy and if so, can you point to a quantitative or qualitative value provided?

FOLLOW UP

Would you like to be contacted with the aggregated results of this survey and/or discuss any issues further? Please provide contact information if different from above.

Yes No

Name: _____

Organization: _____

Email: _____

Phone: _____

Appendix C: SASP Airport Profile Summaries

Auburn Lewiston Municipal Airport (LEW)

Auburn-Lewiston Airport (LEW) is owned and operated by both Cities of Auburn and Lewiston. Located in the City of Auburn, the airport provides reliable jet access to the Androscoggin Valley of Western Maine. The facility provides FBO service, flight training, along with a dispatch location for LifeFlight of Maine. Strategically located adjacent to a railroad and off the Interstate 95 exit 75, the facility is very conducive to multimodal integration. Located in a Foreign Trade Zone, the airport supports a local industrial/business park, along with a gravel quarry. The facility has archeological-significant sites, along with state-listed species of concern. LEW is included in the NPIAS and as such, is eligible for federal funding through the AIP. A summary of facilities and services is provided below:

Auburn-Lewiston Municipal Airport Facility Summary

Auburn-Lewiston	
Location	Auburn
FAA Asset Role	Regional
Primary Runway Length/Width	5,001' x 100'
Crosswind	2,750' x 75'
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	ILS/LOC, RNAV/GPS Runway 04 RNAV/GPS Runway 22 VOR/DME – A
Terminal/Administration Building	Yes
Fuel	100LL & Jet A
Weather Reporting	AWOS – 3PT
5010 Based Aircraft	50
Hangars	T-hangars, Conventional/Box, Transient & Community
ALS (Approach Lighting System)	MALSR Runway 04
Visual Approach Aids	4-Box PAPI Runway 04 4-Box PAPI, REIL Runway 22
Lighting	HIRL Runway 4-22 MIRL Runway 17-35

Source: *Airport Master Record, 2020; Airport Survey, 2020.*

Facility Condition

Information published in the *Airport Pavement Management System (2019)* and Pavement Condition Indexes (PCI) data from the recent MaineDOT statewide study was considered and a visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Good*
Taxiway Pavements	Good
Apron/Ramp Pavements	Satisfactory
Terminal	Good
Hangars	Good

Source: MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.

*Runways repaved since 2018 PCI study

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- We offer a complete range of traveling services including rental cars, hotel discounts, competitive fuel, no ramp fee, on-field maintenance, on-field catering, aircraft deicing. We are able to service from single-seat experimental home-builds to Canadair RJ700's and do every day.

5.) What top 3 issues are the most challenging in maintaining your airport?

- The last mile to the cities.
- Finding people willing to invest their working time at the airport.
- Depending on a Capital funding scheme that dates from AIR-21 (2001).

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Constructing hangars and other long-term revenue producing structures.
- Appropriate-level overnight accommodations closer than 20 minutes.

19.) Who are the top 5 most active based business tenants?

- Sky Ward Aviation – Maintenance Provider – Small Aircraft – Departures/Week N/A
- LifeFlight of Maine – Air Ambulance – Rotary/Fixed Wing – Departures/Week N/A
- Wiggins Airways – Cargo – B-Sized Aircraft – 30-40 Departures/Week

22.) Who are the top 5 most active transient operators visiting local businesses?

- Net Jets – Air Charter – Jet Aircraft – 20-25 Departures/Week
- Wheels Up – Air Charter – Turbo Prop Aircraft – 18-25 Departures/Week
- Exec Jet – Air Charter – Jet Aircraft – 18-20 Departures/Week

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- Hidden Valley Ski, Wallingford Orchard, Lewiston Basilica

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	1*
Critical Community Access	1*
Other Aviation Specific Functions	1*
Commercial, Industrial, & Economic Activities	1*
Destination & Special Events	1*
Other:	

Source: Airport Manager Interviews, 2020.

*Airport indicated all were equally important.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
Air New England	Air Service
Skyward Aviation	Maintenance

Source: Airport Manager Interviews, 2020.

Augusta State Airport (AUG)

Augusta State Airport (AUG) is owned by the State of Maine and operated by the City of Augusta. Located in the City of Augusta, along Interstate 95, the airport provides reliable jet access to central Maine. Daily airline service is offered to Boston by Cape Air under the US DOT Essential Air Service program. AUG is included in the NPIAS and as such, is eligible for federal funding through the AIP. A summary of facilities and services is provided below:

AUG Airport Facility Summary

Augusta State Airport	
Location	Augusta
FAA Asset Role	Regional
Primary Runway Length/Width	5,001' x 100'
Crosswind	2,613' x 75'
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	ILS/LOC, RNAV/GPS Runway 17 RNAV/GPS, VOR Runway 35 RNAV/GPS Runway 08 VOR/DME - A
Terminal/Administration Building	Yes
Fuel	100LL & Jet A
Weather Reporting	ASOS
5010 Based Aircraft	47
Hangars	T-hangars & Conventional/Box
ALS (Approach Lighting System)	MALSR Runway 17
Visual Approach Aids	4-Box PAPI, REIL Runway 35 4-Box PAPI Runway 17
Lighting	HIRL Runway 17-35 MIRL Runway 08-26

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

Information published in the *Airport Pavement Management System (2019)* and Pavement Condition Indexes (PCI) data from the recent MaineDOT statewide study was considered and a visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Good
Taxiway Pavements	Satisfactory

Facility	Condition
Apron/Ramp Pavements	Poor
Terminal	Good
Hangars	Good

Source: MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager of SASP Airports were surveyed to collect current insights and information pertaining to each SASP Airport. Answers to the following questions for AUG are as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- Scheduled air service 7 days a week & Private charter

5.) What top 3 issues are the most challenging in maintaining your airport?

- Qualified part-time employees
- Aging infrastructure

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Hangars
- Apron – Commercial and GA
- Crack sealing project

19.) Who are the top 5 most active based business tenants?

- No answer provided

22.) Who are the top 5 most active transient operators visiting local businesses?

- No answer provided

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- No answer provided

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	2
Critical Community Access	5
Other Aviation Specific Functions	1
Commercial, Industrial, & Economic Activities	3
Destination & Special Events	4
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
Maine Instrument Flight	Charter Services

Source: Airport Manager Interviews, 2020.

Bangor International Airport (BGR)

Bangor International Airport (BGR) is the second largest commercial service airport located 3.2 miles west of downtown Bangor, Maine. The Airport has the single largest runway of SASP airports in Maine. Runway 15-33 is a 11,440-foot by 200-foot grooved asphalt runway. Bangor International is home to the aviation staff and equipment of the Maine National Guard, including the Air National Guard that operates KC-135’s and the Army National Guard, which operates Black Hawks (UH-60’s), two Lakota’s (UH-72’s) and a KingAir. Per the Airport’s 5010 record, there are 31 based general aviation aircraft at BGR, not including 28 military aircraft. BGR is included in the NPIAS and as such BGR, is eligible for federal funding through the AIP. A summary of facilities and services is provided below:

BGR Airport Facility Summary

Bangor International Airport	
Location	Bangor
FAA Asset Role	Primary, Non-Hub
Primary Runway Length/Width	11,440’ x 200’
Crosswind	N/A
ATCT (Air Traffic Control Tower)	Yes
IAP (Instrument Approach Procedure)	ILS (CAT II-III), RNAV/GPS, VOR/DME Runway 15 ILS (CAT I-II), RNAV/GPS, VOR/DME Runway 33
Terminal/Administration Building	Yes
Fuel	100LL & Jet A
Weather Reporting	ASOS
5010 Based Aircraft	31 ^{1/}
Hangars	T-hangars, Conventional/Box, Community & Transient
ALS (Approach Lighting System)	ALSF2 Runway 15 MALSR Runway 33
Visual Approach Aids	4-Box PAPI Runway 15 4-Box PAPI Runway 33
Lighting	MIRL Runway 15-33

Source: Airport Master Record, 2020; Airport Survey, 2020.

^{1/} Military aircraft are also based at the Airport.

Facility Condition

A visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Good
Taxiway Pavements	Good

Facility	Condition
Apron/Ramp Pavements	Good
Terminal	Good
Hangars	Good

Source: McFarland Johnson, Inc., 2020.

Note: BGR was not included in the MaineDOT Pavement Condition Index Data; Part 139 airports conduct frequent checks and repairs. AIP grants were awarded for taxiway rehabilitation. Runway slated for 2023 mill and overlay.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager of SASP Airports were surveyed to collect current insights and information pertaining to each SASP Airport. Answers to the following questions for BGR are as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- FAA Part 139 commercial service airport with flights and connections to various destinations, technical stop specialists, Federal Inspection Services

5.) What top 3 issues are the most challenging in maintaining your airport?

- Infrastructure funding for repairs and rehabilitation
- High energy costs
- Federal regulations

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Modernization
- Expansion - meeting demands
- Reducing energy consumption

19.) Who are the top 5 most active based business tenants?

- FedEx. Cargo. C-208. 5 Departures/Week
- Wiggins/UPS. Cargo. B-99. 10 Departures/Week
- Varney Agency. Insurance. C-208. 3 Departures/Week
- LifeFlight of Maine. Air Ambulance. King Air/Augusta. Variable Departures/Week
- MeANG. Military. KC-135. Variable Departures/Week

22.) Who are the top 5 most active transient operators visiting local businesses?

- N/A

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- Waterfront Concerts, Hollywood Slots, Cross Insurance Center

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	1
Critical Community Access	5
Other Aviation Specific Functions	2
Commercial, Industrial, & Economic Activities	3
Destination & Special Events	4
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
Chris Kilgour, Owner	C&L Aero (MRO)
Chuck Feaga, Owner/President	Sebec Aviation Services

Source: Airport Manager Interviews, 2020.

Belfast Municipal Airport (BST)

Belfast Municipal Airport (BST) is located within a small coastal city between Rockland and Bar Harbor. The Airport provides a quiet home to a multitude of box hangars and a small FBO who current rely on other airports for fueling (although some tenants have provided their own fuel truck). The single 4,000' runway with non-precision approach accommodates small jet aircraft supporting major employers such as banks, insurance, and the working waterfront. A summary of facilities and services is provided below:

BST Facility Summary
Belfast Municipal Airport

Belfast Municipal Airport	
Location	Belfast
FAA Asset Role	Basic
Primary Runway Length/Width	4,000' x 100'
Crosswind	N/A
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	RNAV/GPS Runway 15; RNAV/GPS Runway 33
Terminal/Administration Building	Yes
Fuel	None
Weather Reporting	AWOS - AV
5010 Based Aircraft	12
Hangars	T-Hangars, Conventional/Box, & Community
ALS (Approach Lighting System)	None
Visual Approach Aids	REIL Runway 15 REIL Runway 33
Lighting	MIRL Runway 15-33

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

Information published in the *Airport Pavement Management System (2019)* and Pavement Condition Indexes (PCI) data from the recent MaineDOT statewide study was considered and a visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Satisfactory
Taxiway Pavements	Satisfactory*
Apron/Ramp Pavements	Satisfactory*
Terminal	Satisfactory
Hangars	Good

Source: MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.

*2018 AIP Grant to construct new partial parallel taxiway, bypass taxiway, and mill and overlay apron pavement.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- A 4,000' runway accommodating small GA aircraft up to small executive Jet aircraft
- A short distance to downtown Belfast which is a thriving coastal community with emphasis on tourism in the summer months
- Fuel services presently not available however current projections are to have Av Gas and Jet A available by spring 2021 at the latest

5.) What top 3 issues are the most challenging in maintaining your airport?

- No Fuel
- Runway Care
- Hangar Construction

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Fuel Services
- Hangar Availability
- Runway Care (Crack sealing, paving repair, striping)

19.) Who are the top 5 most active based business tenants?

- Seaview Aviation. Flight Instruction/Scenic Flights. C-172 aircraft. 10 departures/week
- DG aviation. Maintenance Service. No AC listed. No departures/week shown

22.) Who are the top 5 most active transient operators visiting local businesses?

- Athena Health. Health Care. Pilatus PC-12. 4 departures/week

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- Belfast Harbor walk, Front Street Shipyard, United Farmers Market, Passy Rail Trail, Belfast Historical Society & Museum, Belfast Curling Club, a variety of festivals

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private

investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	5
Critical Community Access	4
Other Aviation Specific Functions	2
Commercial, Industrial, & Economic Activities	1
Destination & Special Events	3
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
DG Aviation	Flight Instruction
Jim Watts	A&P

Source: Airport Manager Interviews, 2020.

Bethel Regional Airport (OB1)

Bethel Regional Airport (OB1) is an unattended facility in the western mountains, 20 minutes from the New Hampshire border. The Town of Bethel employs one (1) full-time and two (2) part-time employees with assignments to oversee certain activities at the Airport. An important landing site for emergency medical operations and recreational destinations such as resorts, ponds/lakes, mounting/hiking systems, and vacation homes. Self-serve facility with no fees, free parking, plug-in service, battery tenders, and modern terminal. A summary of facilities and services is provided below.

OB1 Facility Summary
Bethel Regional Summary

Location	Bethel
FAA Asset Category	Local
Primary Runway Length/Width	3,818' x 75'
Crosswind	N/A
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	RNAV/GPS Runway 32
Terminal/Administration Building	Yes
Fuel	100LL
Weather Reporting	AWOS-AV
5010 Based Aircraft	17
Hangars	Conventional/Box
ALS (Approach Lighting System)	None
Visual Approach Aids	REIL Runway 32
Lighting	MIRL Runway 14-32

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

Information published in the *Airport Pavement Management System (2019)* and Pavement Condition Indexes (PCI) data from the recent MaineDOT statewide study was considered and a visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Satisfactory
Taxiway Pavements	Satisfactory
Apron/Ramp Pavements	Satisfactory
Terminal	Good
Hangars	Good

Source: MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- Our airport is an important part of Western Maine’s infrastructure to provide air transportation to pilots and their passengers visiting various resorts, ponds and lakes, mountain/hiking systems and vacation homes. Our airport also serves as an important designated emergency landing site for LifeFlight of Maine.

5.) What top 3 issues are the most challenging in maintaining your airport?

- Crack sealing/repairing is a constant challenge
- Tree/shrub growth control in low/wet areas of the field and along the fence line
- Fuel self-serve/pump system is old often problematic

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Town-owned short-term and long-term hangar rental

19.) Who are the top 5 most active based business tenants?

- Pete Marucci. Aircraft Mechanic. Small fixed wing. N/A departures/week

22.) Who are the top 5 most active transient operators visiting local businesses?

- No Answer Provided

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- Sunday River Resort

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	3

Function	Rank
Critical Community Access	4
Other Aviation Specific Functions	5
Commercial, Industrial, & Economic Activities	2
Destination & Special Events	1
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
Pete Marucci	A&P
SkyDive New England	Skydiving

Source: Airport Manager Interviews, 2020.

Biddeford Municipal Airport (B19)

Biddeford Municipal Airport (B19) is a single runway open year-round with 1 FT/1PT employee in a convenient, coastal location. Desire to be known as great value due to fuel, parking, and location; however, limited services, hangar facilities, no Jet A fuel, and shorter runway. A summary of facilities and services is provided below.

B19 Facility Summary

Biddeford Municipal Airport	
Location	Biddeford
FAA Asset Role	Local
Primary Runway Length/Width	3,000' x 75'
Crosswind	N/A
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	RNAV/GPS, VOR Runway 06
Terminal/Administration Building	Yes
Fuel	100LL
Weather Reporting	None
5010 Based Aircraft	37
Hangars/Storage	Conventional/Box & Community
Approach Aids	4-Box VASI, REIL Runway 06
Lighting	MIRL Runway 06-24

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

Information published in the *Airport Pavement Management System (2019)* and Pavement Condition Indexes (PCI) data from the recent MaineDOT statewide study was considered and a visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Good*
Taxiway Pavements	Good*
Apron/Ramp Pavements	Poor
Terminal	Satisfactory
Hangars	Good

Source: MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.

*Runway and taxiway pavements reconstructed in 2020

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- Convenient location near coast communities and beaches in Southern Maine.

5.) What top 3 issues are the most challenging in maintaining your airport?

- TBD

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Runway & apron resurfacing (Runway expected to be completed this year)
- Additional hangar space - moratorium was placed on construction due to drainage issues and hope to have lifted with runway construction
- Develop alternate revenue sources (solar?)

19.) Who are the top 5 most active based business tenants?

- No answer provided

22.) Who are the top 5 most active transient operators visiting local businesses?

- No answer provided

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- No answer provided

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	1*
Critical Community Access	1*
Other Aviation Specific Functions	1*
Commercial, Industrial, & Economic Activities	1*

Function	Rank
Destination & Special Events	1*
Other:	

Source: Airport Manager Interviews, 2020.

* Airport indicated all were equal

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
FBO	Airport FBO
Local Business	Seaplane Operator

Source: Airport Manager Interviews, 2020.

Brunswick Executive Airport (BXM)

Brunswick Executive Airport (BXM) transitioned from a former naval facility. The Airport is open daily year-round in the Casco Bay area. Facility is owned by Midcoast Regional Redevelopment Authority and operated under contract with Flight Level Aviation as the FBO. BXM offers a terminal with full-service facilities, amenities and FBO that can accommodate operators of any size. U.S. Customs and Border Protection services are identified as benefits of the Airport, and 12 aircraft are on the waitlist for future hangars. The airport offers very large hangar facilities and an aging parallel runway which is currently not in use. A summary of facilities and services is provided below.

BXM Facility Summary

Brunswick Executive Airport	
Location	Brunswick
FAA Asset Role	Local
Primary Runway Length/Width	8,000' x 200'
Parallel	8,000' x 200' closed
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	ILS/LOC, RNAV/GPS Runway 01R RNAV/GPS Runway 19L
Terminal/Administration Building	Yes
Fuel	100LL & Jet A
Weather Reporting	AWOS - AV
5010 Based Aircraft	43
Hangars	T-hangars, Transient & Community
ALS (Approach Lighting System)	MALSR Runway 1R
Visual Approach Aids	4-Box PAPI, REIL Runway 19L REIL Runway 1R
Lighting	HIRL Runway 1R-19L

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

Information published in the *Airport Pavement Management System (2019)* and Pavement Condition Indexes (PCI) data from the recent MaineDOT statewide study was considered and a visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Satisfactory
Taxiway Pavements	Satisfactory
Apron/Ramp Pavements	Satisfactory

Facility	Condition
Terminal	Good
Hangars	Good

Source: MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- Access to the Mid-Coast Region for small to very large private aircraft. Facilities that can accommodate operators of any size

5.) What top 3 issues are the most challenging in maintaining your airport?

- Maintaining SRE equipment. Equipment is 15-20 years old before replacement
- Snow removal process takes time with only one employee
- Maintaining good asphalt surface

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Snow removal
- Maintaining old Navy infrastructure
- Funding with FAA limitations on funding. Difficulty in procuring a new AWOS system

19.) Who are the top 5 most active based business tenants?

- American Class Flight School - 25 departures/week

22.) Who are the top 5 most active transient operators visiting local businesses?

- Government AC - 2 departures/week
- NetJets Charters - 2-3 departures/week
- Other private operators - 8-10 departures/week

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- Shopping in Freeport, ME, and the Boothbay Harbor Region

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport.

These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	4
Critical Community Access	3
Other Aviation Specific Functions	2
Commercial, Industrial, & Economic Activities	1
Destination & Special Events	5
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
Flight School	American Classic
FBO	Flight Level Aviation

Source: Airport Manager Interviews, 2020.

Caribou Municipal Airport (CAR)

Caribou Municipal Airport (CAR) is an unattended northern airport with crosswind runway and runway lighting, GPS approach, on-airport weather reporting (ASOS), and self-serve 100LL fueling just north of Presque Isle. Serves as Airport of Entry with on-call Customs and Border Protection/Federal Inspection Services. The Airport has a GA terminal available during daylight hours and by appointment after hours. A summary of facilities and services is provided below:

CAR Facility Summary
Caribou Municipal Airport

Caribou Municipal Airport	
Location	Caribou
FAA Asset Role	4-Basic
Primary Runway Length/Width	4,003' x 100'
Crosswind	3,016' x 75'
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	RNAV/GPS Runway 1 RNAV/GPS Runway 19
Terminal/Administration Building	Yes
Fuel	100LL
Weather Reporting	ASOS
5010 Based Aircraft	10
Hangars	T-Hangars & Community
ALS (Approach Lighting System)	None
Visual Approach Aids	None
Lighting	MIRL Runway 1-19; MIRL Runway 11-29

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

Information published in the *Airport Pavement Management System (2019)* and Pavement Condition Indexes (PCI) data from the recent MaineDOT statewide study was considered and a visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Good
Taxiway Pavements	Good
Apron/Ramp Pavements	Fair
Terminal	Good
Hangars	Good

Source: MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- General Aviation, 100LL fuel, primarily tourism waypoint and commuter location for doctors at local hospital

5.) What top 3 issues are the most challenging in maintaining your airport?

- No FBO present
- Cost of maintaining the airfield relative to traffic
- Lack of revenue sources to cover costs of maintaining the airport

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Mechanics hangar
- Upgraded fuel island and dispenser system
- Additional private hangar spaces

19.) Who are the top 5 most active based business tenants?

- Gospel Mission Aviation - Philanthropic Service - 1 departure/week
- BMB Construction - Engineering Services - 1 departure/week
- Mid Atlantic Logistics Inc. - Logistics Service - 3 departures/week

22.) Who are the top 5 most active transient operators visiting local businesses?

- No answer provided

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- Fall Foliage and the North Woods Region

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	3
Critical Community Access	2
Other Aviation Specific Functions	4
Commercial, Industrial, & Economic Activities	2
Destination & Special Events	2
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
National Oceanic and Atmospheric Administration (NOAA)	National Weather Service fly weather balloons

Source: Airport Manager Interviews, 2020.

Central Maine Regional Airport of Norridgewock (OWK)

Central Maine Regional Airport of Norridgewock (OWK) is located in the Kennebec & Moose River Valley Region. The Airport is owned and operated by the Town with 3 PT employees, including the Airport Manager. The Airport competes on fuel price, notes that on-site aircraft maintenance would be beneficial, and funding is the largest issue for the Airport. A summary of facilities and services is provided below:

OWK Facility Summary

Central Maine Regional Airport of Norridgewock	
Location	Norridgewock
FAA Asset Role	Local
Primary Runway Length/Width	4,000' x 100'
Crosswind	3,998' x 80'
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	RNAV/GPS, VOR/DME Runway 3; RNAV/GPS Runway 15
Terminal/Administration Building	Yes
Fuel	100LL & MoGas
Weather Reporting	AWOS - AV
5010 Based Aircraft	28
Hangars	T-hangars, Conventional/Box, & Community
ALS (Approach Lighting System)	None
Visual Approach Aids	2-Box PAPI, REIL Runway 15 REIL Runway 33
Lighting	MIRL Runway 15-33

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

Information published in the Airport Pavement Management System (2019) and Pavement Condition Indexes (PCI) data from the recent MaineDOT statewide study was considered and a visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Satisfactory
Taxiway Pavements	Good
Apron/Ramp Pavements	Satisfactory
Terminal	Good
Hangars	Good

Source: MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- No answer provided

5.) What top 3 issues are the most challenging in maintaining your airport?

- Funding

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Additional hangars
- Taxilane improvements

19.) Who are the top 5 most active based business tenants?

- Morgan Aviation – Flight School – Small aircraft

22.) Who are the top 5 most active transient operators visiting local businesses?

- No answer provided

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- Summer Camps, Belgrade Lakes

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	5
Critical Community Access	4
Other Aviation Specific Functions	2
Commercial, Industrial, & Economic Activities	1
Destination & Special Events	3
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
None Provided	

Source: Airport Manager Interviews, 2020.

Charles A. Chase, Jr. Memorial Airport (44B)

Charles A. Chase, Jr. Memorial Airport (44B), sometimes referred to as Dover-Foxcroft, is an unclassified, unattended airport. Story of successful grassroots advocacy and community support that led to the continued operation when threatened by a solar array development. Also, runway extended by 1,000' funded 100% by private interests. Turf runway with no reported based aircraft and very limited facilities. A summary of facilities and services is provided below:

44B Facility Summary

Charles A. Chase, Jr. Memorial Airport	
Location	Dover-Foxcroft
FAA Asset Role	Unclassified
Primary Runway Length/Width	2,926' x 75' - Turf
Crosswind	N/A
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	None
Terminal/Administration Building	No
Fuel	None
Weather Reporting	No
5010 Based Aircraft	0
Hangars	T-Hangars
ALS (Approach Lighting System)	None
Visual Approach Aids	None
Lighting	None

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

A visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements (Turf)	Satisfactory*
Taxiway Pavements (Turf)	N/A*
Apron/Ramp Pavements (Turf)	Satisfactory*
Terminal	Poor
Hangars	Poor

Source: MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.

Note: 44B was not included in the MaineDOT Pavement Condition Index Data.

*Observed as smooth ground, low cut vegetation with some notable stones penetrating.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- The airport provides a recreational destination for travelers. It's a 3,000' grass strip runway so it's an asset to those who prefer this surface for training purposes. We also do not plow the runway in the winter allowing for use by ski planes.

5.) What top 3 issues are the most challenging in maintaining your airport?

- Funding
- Difficulties in terms of future expansion
- FAA regulations in terms of grant eligibility

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Pilot building improvements
- Fencing and signage
- Additional hangar space

19.) Who are the top 5 most active based business tenants?

- No answer provided

22.) Who are the top 5 most active transient operators visiting local businesses?

- No answer provided

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- Peaks Kenney State Park and Borestone Mountain

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	1
Critical Community Access	4
Other Aviation Specific Functions	2
Commercial, Industrial, & Economic Activities	3
Destination & Special Events	5
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
PQ Controls	Manufacturing

Source: Airport Manager Interviews, 2020.

Dewitt Field, Old Town Municipal Airport (OLD)

Dewitt Field, Old Town Municipal Airport (OLD) is located just north of Bangor. Home to several T-hangars and box hangars, along with the Maine Forest Service operation, the facility provides float plane access and a quiet alternative to Bangor. Operated by the City of Old Town with 1FT/2PT employees and offers 100LL & Jet A fuel, aircraft storage, terminal with amenities and access to the University of Maine – Orono Campus. Tenants offer aircraft maintenance and aerial mapping. There is a waiting list of 4-8 aircraft for future hangars (wetlands constrain new development). Top users are University Flying Club, Air Guard Flying Club, and Maine Army National Guard. A summary of facilities and services is provided below:

OLD Facility Summary

Dewitt Field, Old Town Municipal Airport	
Location	Old Town
FAA Asset Role	Local
Primary Runway Length/Width	4,001' x 75'
Crosswind	2,802' x 75' 8,400' x 100' -Water
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	RNAV/GPS Runway 12 RNAV/GPS, VOR/DME Runway 22 RNAV/GPS Runway 30
Terminal/Administration Building	Yes
Fuel	100LL & Jet A
Weather Reporting	No
5010 Based Aircraft	38
Hangars	T-hangars & Conventional/Box
ALS (Approach Lighting System)	None
Visual Approach Aids	4-Box PAPI Runway 22 4-Box PAPI Runway 30 REIL Runway 04
Lighting	MIRL Runway 04-22 MIRL Runway 12-30

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

Information published in the *Airport Pavement Management System (2019)* and Pavement Condition Indexes (PCI) data from the recent MaineDOT statewide study was considered and a visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Good
Taxiway Pavements	Poor
Apron/Ramp Pavements	Good
Terminal	Good
Hangars	Good

Source: MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- We provide 100LL aviation fuel, Jet A fuel, Tie-Down space either daily or monthly. We have nested T-hangars for rent. We have a terminal with clean bathrooms and a lounge area. Also, there are vending machines and easy access to the local University.

5.) What top 3 issues are the most challenging in maintaining your airport?

- Vegetation
- Not enough hangars or tie-down spaces available
- Permitting regulations for development on airport property

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Hangars
- Apron space
- Parallel taxiways

19.) Who are the top 5 most active based business tenants?

- Horizon Aircraft Service - Aircraft Maintenance
- Geomni/Verisk - Aerial Mapping Company

22.) Who are the top 5 most active transient operators visiting local businesses?

- University of Maine Flying Club
- Air Guard Flying Club
- Maine Army National Guard

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- Question not answered

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	1
Critical Community Access	3
Other Aviation Specific Functions	5
Commercial, Industrial, & Economic Activities	2
Destination & Special Events	3
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
Brewer Flying Club	Flying Club
Rick Easton, Faculty Advisor at University of Maine Flying Club	Flight Instruction

Source: Airport Manager Interviews, 2020.

Dexter Regional Airport (1B0)

Dexter Regional Airport (1B0) is owned and operated by the Town of Dexter with 4 PT employees in the Maine Highlands Region. Airport provides a safe landing area for medivac and small business aircraft for 100LL and MO Gas fueling. Pilots rely on other airports for weather reporting, Jet A, and FBO services. 1B0 competes with other airports on fuel and based aircraft for hangars, and would like to offer FBO services, night operations, and NAVAIDs for Instrument Flight Rules conditions. A summary of facilities and services is provided below:

1B0 Facility Summary

Dexter Regional Airport	
Location	Dexter
FAA Asset Role	Local
Primary Runway Length/Width	3,008' x 75'
Crosswind	1,249' x 120' -Turf
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	RNAV/GPS Runway 16; RNAV/GPS Runway 34
Terminal/Administration Building	Yes
Fuel	100LL & MoGas
Weather Reporting	None
5010 Based Aircraft	18
Hangars	Conventional/Box & Community
ALS (Approach Lighting System)	None
Visual Approach Aids	None
Lighting	MIRL Runway 16-34; None Runway 7-25

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

Information published in the *Airport Pavement Management System (2019)* and Pavement Condition Indexes (PCI) data from the recent MaineDOT statewide study was considered and a visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Good
Taxiway Pavements	Good
Apron/Ramp Pavements	Good
Terminal	Satisfactory
Hangars	Good

Source: MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- Dexter airport provides a safe landing area for operators traveling to, or traveling through, the central and western regions of the State of Maine. We provide medivac and business aircraft access to the region and we provide fuel services to both based and itinerant aircraft.

5.) What top 3 issues are the most challenging in maintaining your airport?

- Generating revenue
- Attracting businesses
- Keeping clear approaches

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Safe airspace
- Larger terminal building
- Additional apron space

19.) Who are the top 5 most active based business tenants?

- Dexter Healthcare Services - 1 departure/week
- Scott Brake - Realtor - 1 departure/week

22.) Who are the top 5 most active transient operators visiting local businesses?

- No answer provided

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- Lake Wasookeag

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	1
Critical Community Access	2
Other Aviation Specific Functions	4
Commercial, Industrial, & Economic Activities	3
Destination & Special Events	5
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
Dexter Healthcare Services	Aero medical, flying in specialists, etc.
Scott Baker	Realty

Source: Airport Manager Interviews, 2020.

Eastern Slope Regional Airport (IZG)

Eastern Slope Regional Airport (IZG), sometimes referred to as Fryeburg, is located in the western mountains area, also serving Mount Washington Valley Region and Conway area of New Hampshire. Owned by the Town of Fryeburg and operated under lease by the Eastern Slope Airport Authority (ESAA) with 1FT/2PT employees. Primarily serving the regions ski, recreational, and shopping destinations. New transient hangar under construction in 2020. Competes with airports on fuel price, FBO services and flight training. A summary of facilities and services is provided below:

IZG Facility Summary

Eastern Slope Regional Airport	
Location	Fryeburg
FAA Asset Role	Local
Primary Runway Length/Width	4,200' x 75'
Crosswind	N/A
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	RNAV/GPS Runway 32
Terminal/Administration Building	Yes
Fuel	100LL & Jet A
Weather Reporting	ASOS
5010 Based Aircraft	33
Hangars	T-hangars, Conventional/Box, & Community
ALS (Approach Lighting System)	None
Visual Approach Aids	2-Box VASI, REIL Runway 32
Lighting	MIRL Runway 14-32

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

Information published in the *Airport Pavement Management System (2019)* and Pavement Condition Indexes (PCI) data from the recent MaineDOT statewide study was considered and a visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Satisfactory
Taxiway Pavements	Fair
Apron/Ramp Pavements	Satisfactory
Terminal	Satisfactory
Hangars	Satisfactory

Source: MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- The airport is a regional airport for Western Maine and the Mount Washington Valley (MWV) New Hampshire. Many travelers are destined for year-round recreation and shopping in Western Maine and the MWV. Corporate traffic is generally related to local ski areas or “big box” retail in North Conway. The airport provides a courtesy car for short term use and arranges for rental cars for longer term use.

5.) What top 3 issues are the most challenging in maintaining your airport?

- Maintenance and energy costs for terminal and t-hangars
- Snow Removal (winter) and Grass/Brush Removal (summer)
- Maintaining consistent funding

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Transient Hangar
- New/Renovated terminal building
- Runway Lengthening to 5,001 feet

19.) Who are the top 5 most active based business tenants?

- No answer provided

22.) Who are the top 5 most active transient operators visiting local businesses?

- No answer provided

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- 5 Major Ski Areas (NH and ME) including Mt. Cranmore, Wildcat, Attitash, King Pine, Black Mtn., in addition to Storyland Theme Park, New England Ski Museum, Mount Washington Observatory, White Mountain National Forest (eastern gateway)

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	1*
Critical Community Access	1*
Other Aviation Specific Functions	1*
Commercial, Industrial, & Economic Activities	1*
Destination & Special Events	1*
Other:	

Source: Airport Manager Interviews, 2020.

*Airport indicated all are important

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
Skydive New England	Skydiving
Dragon Fly Aerials	Aerial Imagery

Source: Airport Manager Interviews, 2020.

Eastport Municipal Airport (EPM)

Eastport Municipal Airport (EPM) is an unattended airport located in the City of Eastport in Washington County and lays claim to be the eastern-most city in the U.S. The Airport offers a 4,002' runway, runway lighting, visual guidance, non-precision approach and self-serve 100LL and Jet A fueling. EPM Serves as an Airport of Entry with on-call U.S. Customs and Border Protection/Federal Inspection Services. Facilities include several hangars and GA terminal with flight planning and wi-fi. A summary of facilities and services is provided below:

EPM Airport Facility Summary

Eastport Municipal	
Location	Eastport
FAA Asset Role	Basic
Primary Runway Length/Width (Feet)	4,002' x 75'
Crosswind	No
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	RNAV (GPS)
Terminal/Administration Building	Yes
Fuel	100LL & Jet A
Weather Reporting	AWOS-AV
5010 Based Aircraft	10
Hangars	Conventional/box
ALS (Approach Lighting System)	No
Visual Approach Aids	REIL Runway 15-33
Lighting	MIRL Runway 15-33
Other Services	Fuel, transient storage, snow removal, maintenance

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

Information published in the *Airport Pavement Management System (2019)* and Pavement Condition Indexes (PCI) data from the recent MaineDOT statewide study was considered and a visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Poor*
Taxiway Pavements	Fair
Apron/Ramp Pavements	Satisfactory
Terminal	Satisfactory**
Hangars	Satisfactory

Source: *MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.*

*2020 FAA AIP Grant offer for reconstruction of runway

**Improvements underway in 2020

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- Port of entry with Customs for international flights. Direct access to the Down East coast for Tourism, deep water seaport with overseas shipping and international travel to Canada. Runway is sufficiently long enough to handle fractional ownership Jet traffic.

5.) What top 3 issues are the most challenging in maintaining your airport?

- Approach obstacle/clearance
- Complying with Maine DEP Regulations
- Restrictions in the current AIP book regarding needed funding items

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Complying with DEP regulations
- Runway rehab including all lighting
- Improving AWOS to be fully integrated with the National Weather System with all functions FAA approved

19.) Who are the top 5 most active based business tenants?

- None reported

22.) Who are the top 5 most active transient operators visiting local businesses?

- Net Jets – Air Charter – Jet Aircraft – 3 Arrivals/Week

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- Whale Watching, Fishing, Boating

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	1*
Critical Community Access	1*
Other Aviation Specific Functions	1*
Commercial, Industrial, & Economic Activities	1*
Destination & Special Events	1*
Other:	1*

Source: Airport Manager Interviews, 2020.

*Airport indicated that all were equally important

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
Steve Trieber, Airport Manager/Business Owner	A&P, Flight Instruction, Scenic Flights

Source: Airport Manager Interviews, 2020.

Greenville Municipal Airport (3B1)

Greenville Municipal Airport (3B1) has 1 PT employee and is located in the Town of Greenville at the base of Moosehead Lake, the largest lake in the State of Maine. Owned and operated by the Town, the Airport offers 100LL, Jet A, and MoGas fueling, aircraft storage, and access to recreational destinations. A summary of facilities and services is provided below:

3B1 Airport Facility Summary

Greenville Municipal Airport	
Location	Greenville
FAA Asset Role	Basic
Primary Runway Length/Width	4,000' x 75'
Crosswind	3,001' x 75'
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	RNAV/GPS Runway 14
Terminal/Administration Building	Yes
Fuel	100LL, Jet A, & MoGas
Weather Reporting	AWOS - A
5010 Based Aircraft	13
Hangars	Conventional/Box
ALS (Approach Lighting System)	None
Visual Approach Aids	4-Box PAPI, REIL Runway 14 4-Box PAPI Runway 32
Lighting	MIRL Runway 14-32

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

Information published in the *Airport Pavement Management System (2019)* and Pavement Condition Indexes (PCI) data from the recent MaineDOT statewide study was considered and a visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Satisfactory
Taxiway Pavements	Fair
Apron/Ramp Pavements	Satisfactory
Terminal	Good
Hangars	Satisfactory

Source: MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- Fueling, Storage, and Tie-downs

5.) What top 3 issues are the most challenging in maintaining your airport?

- Weather / Wind & Snow
- Lightening [sic]

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Security Gates
- T-Hangars
- Courtesy Vehicles

19.) Who are the top 5 most active based business tenants?

- None

22.) Who are the top 5 most active transient operators visiting local businesses?

- N/A

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- Mooshead Lake

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	3
Critical Community Access	4
Other Aviation Specific Functions	5

Commercial, Industrial, & Economic Activities	2
Destination & Special Events	1

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
Jacks Air Service – Josh	-
JBI Helicopter – Kurt West	<ul style="list-style-type: none"> Multiple airports – Fort Kent to Oxford – all of them. Power line inspection and construction – in and out for fuel and staging for construction – contractor for USCBP – up to Bangor then North to Millinocket to Rangeley. Flying seven days a week – In Maine frequently. Sometimes in remote areas not using airports much. They do their own maintenance – Some airports don't have jet-A so sometimes have to ferry fuel. State has nothing we run into as a flag, unlike Massachusetts. Maine is very accommodating and business friendly.

Source: Airport Manager Interviews, 2020.

Hancock County-Bar Harbor Airport (BHB)

Hancock County-Bar Harbor Airport (BHB) is located in the Town of Trenton and is Maine’s fifth busiest commercial service airport that connects popular attractions such as Acadia National Park, Bar Harbor, Mount Desert Island, and numerous summer communities to the national airspace system. Daily airline service is offered to Boston by Cape Air under the US DOT Essential Air Service program and seasonally by Silver Airways with additional service to Boston in the summer months (Memorial Day through Labor Day) when traffic swells with visitors and residents enjoying the scenic region. A summary of facilities and services is provided below:

BHB Facility Summary

Hancock County-Bar Harbor Airport	
Location	Trenton
FAA Asset Role	Local
Primary Runway Length/Width	5,200' x 100'
Crosswind	3,363' x 75'
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	ILS/LOC, RNAV/GPS Runway 22 RNAV/GPS Runway 04
Terminal/Administration Building	Yes
Fuel	100LL & Jet A
Weather Reporting	AWOS - 3PT
5010 Based Aircraft	28
Hangars	T-hangars, Conventional/Box, & Transient
ALS (Approach Lighting System)	MALSF Runway 22
Visual Approach Aids	4-Box VASI Runway 22 4-Box VASI, REIL Runway 04
Lighting	HIRL Runway 04-22

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

A visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Good*
Taxiway Pavements	Fair*
Apron/Ramp Pavements	Fair*
Terminal	Good
Hangars	Good

Source: McFarland Johnson, Inc., 2020.

Note: Hancock County-Bar Harbor Airport was not included in the MaineDOT PCI data. Observations of medium severity cracking with uniform medium severity weathering on aprons and taxiways. Portions of apron pavement were observed to have alligator cracking. Runway pavement was observed to be in good condition.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- FBO for GA and scenic tours year-round. Daily airline service to Boston Logan International Airport.

5.) What top 3 issues are the most challenging in maintaining your airport?

- Runway deicing

6.) What are your top 3 facility needs? (construction projects or other improvements)

- SRE heated storage garage
- Obstruction clearing for approaches.
- Rehabilitate parking lots and renovate Terminal Building

19.) Who are the top 5 most active based business tenants?

- Columbia Air Services - FBO
- Acadia Air Tours - Scenic Air Tours.

22.) Who are the top 5 most active transient operators visiting local businesses?

- NetJets - Jet - arrivals vary seasonally
- Plane Sense - Turbo Prop - arrivals vary seasonally
- Flex Jet - Jet - arrivals vary seasonally
- Wheels Up - Turbo Prop - arrivals vary seasonally
- XO Jet - Jet - arrivals vary seasonally

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- Acadia National Park

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private

investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	4
Critical Community Access	2
Other Aviation Specific Functions	1
Commercial, Industrial, & Economic Activities	3
Destination & Special Events	5
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
Silver Air	Essential Air Service
Acadia Air Tours	Scenic Flights

Source: Airport Manager Interviews, 2020.

Houlton International Airport (HUL)

Houlton International Airport (HUL) is located in the Town of Houlton, along I-95 at the US/Canadian border in Aroostook County. Owned and operated by Town staff, the Public Works Director serves as Airport Director, with 1PT employee. The Airport has a 5,000’ runway and a crosswind runway. The Airport offers Customs and Border Patrol (CBP)/Federal Inspection Services (FIS), 100LL and Jet A fuel, terminal building with modest amenities, and on-site aircraft maintenance services. HUL relies on other airports to “split” full loads of fuel. A summary of facilities and services is provided below:

HUL Facility Summary

Houlton International Airport	
Location	Houlton
FAA Asset Role	Local
Primary Runway Length/Width	5,015’ x 100’
Crosswind	2,700’ x 60’
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	RNAV/GPS Runway 5 RNAV/GPS - A
Terminal/Administration Building	Yes
Fuel	100LL & Jet A
Weather Reporting	ASOS
5010 Based Aircraft	21
Hangars	Community
ALS (Approach Lighting System)	None
Visual Approach Aids	4-Box PAPI, REIL Runway 5 REIL Runway 23
Lighting	MIRL Runway 5-23

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

Information published in the *Airport Pavement Management System (2019)* and Pavement Condition Indexes (PCI) data from the recent MaineDOT statewide study was considered and a visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Good
Taxiway Pavements	Satisfactory
Apron/Ramp Pavements	Satisfactory
Terminal	Satisfactory

Facility	Condition
Hangars	Good

Source: MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- Houlton International provides a 5,000 foot very well-maintained runway, for GA pilots to visit Houlton and surrounding areas. Also provides a 2,700'-foot crosswind runway. Houlton International is located right next to the Canadian border for very easy access to Canada. Customs officials will meet the plane and occupants right at the airport. HUL also offers Jet A fuel with additive along with 100LL fuel at great prices. LifeFlight of Maine also conducts transports frequently from the airport.

5.) What top 3 issues are the most challenging in maintaining your airport?

- Keeping up with snow removal equipment, Equipment is 15-20 years old before replacement.
- With the airport located in northern Maine, the snow removal process takes time. Only one employee located at the airport.
- Maintaining good asphalt surface.

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Additional hangar space
- New instrument approaches
- Renovation of Terminal and replacement of fuel tanks

19.) Who are the top 5 most active based business tenants?

- No answer provided

22.) Who are the top 5 most active transient operators visiting local businesses?

- No answer provided

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- Historic Downtown Houlton

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	1
Critical Community Access	3
Other Aviation Specific Functions	4
Commercial, Industrial, & Economic Activities	5
Destination & Special Events	2
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
Robert Contie	Personal Flying
Gerald Johnson	Stores Aircraft (from Canada)

Source: Airport Manager Interviews, 2020.

Islesboro Airport (57B)

Islesboro Airport (57B) is an unclassified, unattended island airport. The facility is utilized/served by Penobscot Island Air but does not experience significant regular activity. The facility has a short 2,400' paved runway, with no lighting, an aircraft parking apron, and two box hangars. No fueling services are offered and only a visual approach is available. A summary of facilities and services is provided below:

57B Facility Summary

Islesboro Airport	
Location	Islesboro
FAA Asset Role	Unclassified
Primary Runway Length/Width	2,400' x 50'
Crosswind	N/A
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	None
Terminal/Administration Building	No
Fuel	None
Weather Reporting	None
5010 Based Aircraft	0
Hangars	Conventional/Box
ALS (Approach Lighting System)	None
Visual Approach Aids	None
Lighting	None

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

A visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Satisfactory*
Taxiway Pavements	Satisfactory*
Apron/Ramp Pavements	Good*
Terminal	N/A
Hangars	Good

Source: MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.

Note: *Islesboro Airport was not included in the MaineDOT PCI data. Observations of low-severity cracking with uniform high-severity weathering. No PCI value was quantified. Aprons were new.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- A 2,400-foot asphalt runway with a windsock

5.) What top 3 issues are the most challenging in maintaining your airport?

- Maintaining clear approaches

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Tree clearing
- Resurfacing the runway in the future

19.) Who are the top 5 most active based business tenants?

- No answer provided

22.) Who are the top 5 most active transient operators visiting local businesses?

- No answer provided

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- No answer provided

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	1
Critical Community Access	2
Other Aviation Specific Functions	3
Commercial, Industrial, & Economic Activities	4
Destination & Special Events	5

Function	Rank
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
Stan Makara	Delta Captain. Active Airport Advisory Board Member/Harbormaster for Islesboro Ferry
Penobscot Island Air	Air Service

Source: Airport Manager Interviews, 2020.

Knox County Regional Airport (RKD)

Knox County Regional Airport (RKD), sometimes referred to as Rockland, is Maine’s third busiest commercial service airport located in Owl’s Head serving the nearby City of Rockland and broader Midcoast region. The Airport is exceptionally busy in the summer months to serve the summer island communities within Penobscot Bay. Daily scheduled service is provided by Cape Air to Boston under the US DOT Essential Air Service program. RKD also serves as a critical connection to the island communities of midcoast Maine, namely Matinicus Isle, North Haven, and Vinalhaven. Scheduled service to the islands is provided by Penobscot Island Air which also offers charter and seaplane flights throughout the region, in addition to servicing freight and mail contracts to serve residents of the midcoast islands. A summary of facilities and services is provided below.

RKD Facility Summary

Knox County Airport	
Location	Owls Head
FAA Asset Role	P-4 N
Primary Runway Length/Width	5,412’ x 100’
Crosswind	4,000’ x 100’
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	ILS/LOC, RNAV/GPS Runway 13 RNAV/GPS, NDB Runway 03 RNAV/GPS, NDB Runway 31
Terminal/Administration Building	Yes
Fuel	100LL & Jet A
Weather Reporting	AWOS – 3PT
5010 Based Aircraft	67
Hangars	T-hangars, Conventional/Box, Community, & Transient
ALS (Approach Lighting System)	MALSR Runway 13
Visual Approach Aids	4-Box PAPI, REIL Runway 03 4-Box PAPI Runway 13 4-PAPI, REIL Runway 31
Lighting	HIRL Runway 13-31 MIRL Runway 03-21

Source: Airport Master Record, 2020; Airport Survey, 2020

Facility Condition

A visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Good*

Facility	Condition
Taxiway Pavements	Good*
Apron/Ramp Pavements	Poor**
Terminal	Good
Hangars	Good

Source: McFarland Johnson, Inc., 2020.

Note: *Knox County Regional Airport was not included in the MaineDOT PCI data.

**Observations of apron pavements included high-severity cracking with uniform high-severity weathering. No PCI value was quantified.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- RKD is the gateway to Midcoast Maine and the islands that adorn the coast. It is a lifeline for medical emergencies through the use of Penobscot Island Air for residents of the island communities. Centrally located in Maine, aviators are essentially halfway to anywhere else in Maine. There are planned upgrades to the flying club to become the hub of GA aviation and exploration in the State of Maine.

5.) What top 3 issues are the most challenging in maintaining your airport?

- Wildlife Deterrence
- Vegetation Management
- Proximity to the Ocean - Mixed precipitation for winter weather events

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Additional hangar space
- Pavement maintenance
- Airfield markings

19.) Who are the top 5 most active based business tenants?

- MBS Aviation - Jet Charter Service - 2 departures/week
- Wiggins - Freight Operator - 8 departures/week
- Cape Air - EAS Operator - 21 departures/week
- Penobscot Island Air - Part 135 Operator - 200 departures/week
- Downeast Air - FBO - 140 departures/week

22.) Who are the top 5 most active transient operators visiting local businesses?

- NetJets - 140 arrivals/week

- FlexJet - 30 arrivals/week
- Alpha Flying - 30 arrivals/week (turboprop)
- Retrix - 30 arrivals/week (turboprop)
- XOJET - 30 arrivals/week

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- Transportation Museum, Terminal amenities, Samoset Resort

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	4
Critical Community Access	5
Other Aviation Specific Functions	3
Commercial, Industrial, & Economic Activities	2
Destination & Special Events	1
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
Cape Air	Commercial Service
Penobscot Island Air	Commercial Service

Source: Airport Manager Interviews, 2020.

Lincoln Regional Airport (LRG)

Lincoln Regional Airport (LRG) is an unattended facility located along the Penobscot River in the Town of Lincoln, just minutes east of I-95 and 40 minutes south of Millinocket. LRG offers a seaplane base close to recreational areas for boating, fishing, and hunting. It is home to several box hangars and PK Floats which is a growing manufacturer of seaplane floats. The Airport Manger survey indicates demand for hangar storage and there is a terminal with limited services. A summary of facilities and services is provided below:

LRG Facility Summary

Lincoln Regional Airport	
Location	Lincoln
FAA Asset Role	Local
Primary Runway Length/Width	2,804' x 75'
Second Runway	2,304' x 75' -Water
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	RNAV/GPS Runway 17 RNAV/GPS Runway 35
Terminal/Administration Building	Yes
Fuel	100LL
Weather Reporting	None
5010 Based Aircraft	24
Hangars	T-hangar, Conventional/Box, & Community
ALS (Approach Lighting System)	None
Visual Approach Aids	None
Lighting	MIRL Runway 17-35

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

Information published in the *Airport Pavement Management System (2019)* and Pavement Condition Indexes (PCI) data from the recent MaineDOT statewide study was considered and a visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Fair*
Taxiway Pavements	Poor
Apron/Ramp Pavements	Fair
Terminal	Satisfactory
Hangars	Fair

Source: *MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.*

*2020 FAA AIP Grant offer for reconstruction of runway

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- Runway with a seaplane base
- Close to recreational areas (boating, fishing, hunting, etc.)

5.) What top 3 issues are the most challenging in maintaining your airport?

- Snow Removal
- Public access and parking
- Security

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Parallel taxiway to avoid back taxiing
- Security fencing
- Public (non-aviation) access to restrooms

19.) Who are the top 5 most active based business tenants?

- Not answered

22.) Who are the top 5 most active transient operators visiting local businesses?

- Not answered

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- No

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	3
Critical Community Access	5
Other Aviation Specific Functions	2
Commercial, Industrial, & Economic Activities	1
Destination & Special Events	4
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
PK Floats	<ul style="list-style-type: none"> • Aircraft float manufacturer around since 1954. Sell worldwide floats and airplanes – Germany, Canada, Sweden, Norway, China South America and Alaska. 10 employees, custom built handmade aircraft floats. • Aircraft fly in to be fitted or floats go out by truck. Big advantage for them is the floatplane base at the end of the runway on the river. Tremendous asset. • Weather. Bad approach. Bad minimums from the south landing to the north. • We are approached about expanding manufacturing. They own the land 5.5-acre plot with room to grow. Would fit right into the airport operations. Would like to see a paved road to their business. • Town ran three phase electric which is a valuable add-on. Town has been very supportive. Airport needs a longer runway. It serves their purposes very well most aircraft are STOL • Critical. Would not be here without airport. Formerly owned by a Chinese company, and would have removed the business

Source: Airport Manager Interviews, 2020.

Machias Valley Airport (MVM)

Machias Valley Airport (MVM) is an unattended facility owned and operated by the Town of Machias, along US Route 1 in the Town of Machias in Washington County. The facility provides air service to the region. MVM is included in the NPIAS and as such, is eligible for federal funding through the AIP. A summary of facilities and services is provided below:

MVM Facility Summary

Machias Valley	
Location	Machias
FAA Asset Role	Basic
Primary Runway Length/Width (Feet)	2,880' x 60'
Crosswind	No
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	RNAV (GPS)
Terminal/Administration Building	Yes
Fuel	No
Weather Reporting	AWOS-AV
5010 Based Aircraft	3
Paved Aircraft Parking	Yes
Hangars	Tie-down
ALS (Approach Lighting System)	No
Visual Approach Aids	REIL Runway 36
Lighting	MIRL Runway 18-36
Other Services	Flight Instruction

Source: Airport Master Record, 2020; Airport Survey, 2020

Facility Condition

Information published in the *Airport Pavement Management System (2019)* and Pavement Condition Indexes (PCI) data from the recent MaineDOT statewide study was considered and a visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Good
Taxiway Pavements	Good
Apron/Ramp Pavements	Satisfactory
Terminal	Good
Hangars	N/A

Source: MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

Our airport provides a vital transportation link for medical transports, business travel, real estate sales, and personal access to the area. It is used by Maine forestry, Civil Air Patrol, and the blueberry industry.

5.) What top 3 issues are the most challenging in maintaining your airport?

- Snow removal
- Keeping a windsock from shredding in the coastal winds

6.) What are your top 3 facility needs? (construction projects or other improvements)

- A runway long enough to truly service the needs of this community
- A fuel farm for pilots
- Hangar space

19.) Who are the top 5 most active based business tenants?

- David Rier
- Mike Hennessey
- Machias Savings Bank

22.) Who are the top 5 most active transient operators visiting local businesses?

- None reported

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- Cutler Bold Coast Trails
- Roque Bluffs State Park

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	2
Critical Community Access	1
Other Aviation Specific Functions	4
Commercial, Industrial, & Economic Activities	3
Destination & Special Events	5
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
Larry Barker	President - Machias Savings Bank
Charles J. Rudelitch	Sunrise County Economic Council

Source: Airport Manager Interviews, 2020.

Millinocket Municipal Airport (MLT)

Millinocket Municipal Airport (MLT) is located west of I-95 in the Town of Millinocket. The Airport is municipally operated by a full-time airport supervisor and two (2) part-time employees, providing services to business and recreational activities, with no competition to other airports and demand for hangars. Active tenants and itinerant users include recreational aviation businesses (sightseeing, skydiving, rafting), and restorations. A summary of facilities and services is provided below.

MLT Facility Summary

Millinocket Municipal Airport	
Location	Millinocket
FAA Asset Role	Local
Primary Runway Length/Width (Feet)	4,713' x 99'
Crosswind	4,000' x 100'
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	No
Terminal/Administration Building	Yes
Fuel	100LL
Weather Reporting	ASOS
5010 Based Aircraft	16
Hangars	Conventional/box, transient & community
ALS (Approach Lighting System)	NO
Visual Approach Aids	REIL Runway 29 VASI Runway 29
Lighting	HIRL Runway 29
Other Services	No additional services provided

Source: *Airport Master Record, 2020; Airport Survey, 2020.*

Facility Condition

Information published in the *Airport Pavement Management System (2019)* and Pavement Condition Indexes (PCI) data from the recent MaineDOT statewide study was considered and a visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Fair
Taxiway Pavements	Fair
Apron/Ramp Pavements	Fair
Terminal	Satisfactory

Facility	Condition
Hangars	Satisfactory

Source: MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- Access to business and recreational activities

5.) What top 3 issues are the most challenging in maintaining your airport?

- Snow/Ice removal from runway, taxiway, and parking apron
- Grass and grounds maintenance
- Tree and vegetation management (obstructions)

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Rehabilitation of both runways
- Taxiway extension
- Hangar construction

19.) Who are the top 5 most active based business tenants?

- West Brand Aviation - Single Engine - 6 departures/week
- Jump and Raft Adventures - Single Engine - Skydiving/varies seasonally
- Noyes Enterprises - Aircraft Restoration - Single Engine - 1 departure/week

22.) Who are the top 5 most active transient operators visiting local businesses?

- Rafting, Skydiving, Fishing, Hunting, Appalachian Trail Visitors, and State Parks all induce transient operations at the airport

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- Baxter State Park and the Maine Woods and Waters National Monument

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport.

These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	4
Critical Community Access	1 – feel strongly that they link to the outside world
Other Aviation Specific Functions	2 – needs fuel truck to better provide
Commercial, Industrial, & Economic Activities	5 – economic activity is VERY HIGH
Destination & Special Events	3
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
Steve Noyes	Noyes Enterprises
Owen Ross	Jump & Raft Adventures

Source: Airport Manager Interviews, 2020.

Newton Field Airport (59B)

Newton Field Airport (59B), sometimes referred to as Jackman, is an unattended airport in Northern Kennebec & Moose River Valley. The Airport has 2,898’ runway (which is scheduled to be lengthened and widened), lighting, GPS approach, on-airport weather reporting (AWOS), and self-serve 100LL fueling. A summary of facilities and services is provided below.

59B Facility Summary

Newton Field Airport	
Location	Jackman
FAA Asset Role	Basic
Primary Runway Length/Width	2,898’ x 60’
Crosswind	N/A
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	RNAV/GPS Runway 13; RNAV/GPS – Y Runway 31
Terminal/Administration Building	Yes
Fuel	100LL
Weather Reporting	AWOS – 3PT
5010 Based Aircraft	12
Hangars	T-hangars, Conventional/Box, & Community
ALS (Approach Lighting System)	None
Visual Approach Aids	REIL Runway 31
Lighting	MIRL Runway 13-31

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

Information published in the *Airport Pavement Management System (2019)* and Pavement Condition Indexes (PCI) data from the recent MaineDOT statewide study was considered and a visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Satisfactory
Taxiway Pavements	Fair
Apron/Ramp Pavements	Satisfactory
Terminal	Poor
Hangars	Good

Source: MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- Newton Field Airport provides a 2,898-foot-long runway for pilots to use at their discretion

5.) What top 3 issues are the most challenging in maintaining your airport?

- Frequent snow removal due to the geography of the area
- Deicing with use of a loader/scrapper
- General maintenance issues with lights, windsock, and DigiWx

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Runway extension
- Apron rehabilitation
- Grading/drainage work around hangars

19.) Who are the top 5 most active based business tenants?

- James Schoenmann - Flight Lessons/Scenic Flights - 5 departures/week
- Jean Paul Carrier - Corporation - 3 departures/week
- John Willard - Recreational - 5 departures/week
- U.S. Border Patrol - Federal Helicopter - 1 departure/week

22.) Who are the top 5 most active transient operators visiting local businesses?

- John Couri - Foundation - Less than one flight/week
- LifeFlight - Medical Services - Less than one flight/week

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- Moosehead Lake and other nearby recreational areas

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	1
Critical Community Access	3
Other Aviation Specific Functions	5
Commercial, Industrial, & Economic Activities	2
Destination & Special Events	4
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
Jackman Air, LLC	Flight Instruction, scenic flights, and float plane rides
John Coiro	Unity College Sky Lodge

Source: Airport Manager Interviews, 2020.

Northern Aroostook Regional Airport (FVE)

Northern Aroostook Regional Airport (FVE), sometimes referred to as Frenchville, is the northern-most airport in the State of Maine system. Operating year-round, the Airport offers a 4,600' paved runway, GA terminal, hangar facilities, lighting, GPS approach, on-airport weather reporting (ASOS), full-service 100LL and Jet A fueling, and a large apron. A summary of facilities and services is provided below.

FVE Facility Summary

Northern Aroostook Regional Airport	
Location	Frenchville
FAA Asset Role	Basic
Primary Runway Length/Width	4,600' x 75'
Crosswind	N/A
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	RNAV/GPS Runway 14 RNAV/GPS Runway 32
Terminal/Administration Building	Yes
Fuel	100LL & Jet A
Weather Reporting	ASOS
5010 Based Aircraft	10
Hangars	T-hangars, Conventional/Box, & Community
ALS (Approach Lighting System)	None
Visual Approach Aids	4-PAPI, REIL Runway 32 REIL Runway 14
Lighting	MIRL Runway 14-32

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

Information published in the *Airport Pavement Management System (2019)* and Pavement Condition Indexes (PCI) data from the recent MaineDOT statewide study was considered and a visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Satisfactory
Taxiway Pavements	Good
Apron/Ramp Pavements	Fair
Terminal	Satisfactory
Hangars	Fair

Source: MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

Both Avgas and Jet A fuel types are offered, in addition to aircraft hangars, a pilot lounge with Wi-Fi, and other terminal amenities. If traveling from Canada, Customs and Immigration inspections can be done at the airport. A local car dealership will provide a rental vehicle as needed.

5.) What top 3 issues are the most challenging in maintaining your airport?

- Snow removal
- Terminal Maintenance due to age
- Vegetation Management

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Terminal Renovations (interior and exterior)
- Snow Removal Equipment upgrade
- Vegetation Management Equipment Needed

19.) Who are the top 5 most active based business tenants?

- JV Aviation - Demolition Firm - 1 departure/week
- Varney's Insurance Agency - Insurance Company - 1 departure/week
- Irving - Forest Management - 1 departure/week

22.) Who are the top 5 most active transient operators visiting local businesses?

- Angel Flight - 1 arrival/week
- Various lodging, snowmobile rental, and hunting guide services drive itinerant traffic

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- Canada, foliage, snowmobiling, hunting, fishing, camping, Acadian festival, Muskey derby,

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport.

These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	5
Critical Community Access	4
Other Aviation Specific Functions	3
Commercial, Industrial, & Economic Activities	4
Destination & Special Events	4
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
Voisine Cedar Mill	Paper Mill
Varney's Insurance	Insurance - business travel

Source: Airport Manager Interviews, 2020.

Oxford County Regional Airport (81B)

Oxford County Regional Airport (81B) is an unattended airport owned and operated by the County and located in the Town of Oxford near a region of Maine known for countless lakes. Mosher Aviation FBO offers full services including maintenance, painting, storage, and inspections. 81B offers a paved 2,997’ runway and 100LL fuel. A summary of facilities and services is provided below.

81B Facility Summary

Oxford County Regional Airport	
Location	Oxford
FAA Asset Role	Basic
Primary Runway Length/Width	2,997’ x 75’
Crosswind	N/A
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	RNAV/GPS Runway 15; RNAV/GPS Runway 33
Terminal/Administration Building	Yes
Fuel	100LL
Weather Reporting	None
5010 Based Aircraft	11
Hangars	Conventional/Box & Community
ALS (Approach Landing System)	None
Visual Approach Aids	None
Lighting	MIRL Runway 15-33

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

Information published in the *Airport Pavement Management System (2019)* and Pavement Condition Indexes (PCI) data from the recent MaineDOT statewide study was considered and a visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Good
Taxiway Pavements	Good
Apron/Ramp Pavements	Poor
Terminal	Satisfactory*
Hangars	Good

Source: MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.

*No terminal building. Typical terminal facilities provided by the FBO.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- Our Tenant, Mosher Aviation, offers full-service aircraft maintenance, including painting, storage, and all required FAA inspections

5.) What top 3 issues are the most challenging in maintaining your airport?

- The surrounding wetlands limit development options unless we can purchase additional land
- The taxiways and aprons need resurfacing and finding the money to do it is challenging
- Security systems to monitor the areas around the hangars

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Need to rebuild or temporarily repair the aprons and taxiways
- Need to finish repairing the damage to plumbing and heating left from previous tenant.
- We need to improve security and lighting of the hangar and aircraft storage areas

19.) Who are the top 5 most active *based* business tenants?

- Bancroft Construction. General Contractor. Twin & Single. 5+ Departures/Week

22.) Who are the top 5 most active transient operators *visiting* local businesses?

- No answer provided

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- Oxford Casino, Sunday River, Mt. Abraham

Aeronautical Function Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	5

Function	Rank
Critical Community Access	1
Other Aviation Specific Functions	2
Commercial, Industrial, & Economic Activities	3
Destination & Special Events	4
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
Ben Mosher	Mosher Aviation
Bancroft Contracting	General Contracting in the local area

Source: Airport Manager Interviews, 2020.

Pittsfield Municipal Airport (2B7)

Pittsfield Municipal Airport (2B7) is centrally located in the Town of Pittsfield between Bangor and Augusta, offering maintenance, terminal building, as well as 100LL & Jet A fuel. There is a demand for new hangars, would also like rental car options. Active based tenants include flight school, summer skydiving, two small business/corporate operators and a major employer in the construction industry, Cianbro. The Airport is more active during summer months, when some operators will base their aircraft at the Airport seasonally. A summary of facilities and services is provided below:

2B7 Airport Facility Summary

Pittsfield Municipal Airport	
Location	Pittsfield
FAA Asset Role	Local
Primary Runway Length/Width	4,003' x 100'
Crosswind	N/A
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	RNAV/GPS Runway 18; RNAV/GPS, NDB Runway 36
Terminal/Administration Building	Yes
Fuel	100LL & Jet A
Weather Reporting	None
5010 Based Aircraft	50
Hangars	T-Hangars & Conventional/Box
ALS (Approach Lighting System)	None
Visual Approach Aids	REIL Runway 18 4-Box PAPI, REIL Runway 36
Lighting	MIRL Runway 18-36

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

Information published in the *Airport Pavement Management System (2019)* and Pavement Condition Indexes (PCI) data from the recent MaineDOT statewide study was considered and a visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Satisfactory
Taxiway Pavements	Satisfactory
Apron/Ramp Pavements	Good
Terminal	Satisfactory*
Hangars	Satisfactory

Source: *MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.*

*No terminal building. Typical terminal facilities provided by the FBO.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- Aircraft Maintenance
- FBO Building
- Fuel Sales
- Aircraft Storage
- Courtesy Car

5.) What top 3 issues are the most challenging in maintaining your airport?

- Hot Top Maintenance (Repair and Crack Sealing, Markings with all the plowing)
- Obstruction Maintenance (Keeping it all cut down)
- Snow Removal and NOTAM Filing

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Hangar Development
- Pavement Markings
- Large Scale Crack Sealing

19.) Who are the top 5 most active based business tenants?

- Sky Ward Aviation – Maintenance Provider – Small Aircraft - Departures/Week N/A
- Life Flight of Maine – Air Ambulance – Rotary/Fixed Wing – Departures/Week N/A
- Wiggins Airways – Cargo – B-Sized Aircraft – 30-40 Departures/Week

22.) Who are the top 5 most active transient operators visiting local businesses?

- Curtis Air. FBO. Light Aircraft. 6 Departures/Week
- Cianbro. Construction. King Air. 4 Departures/Week
- CM Almy. Church Goods. Baron. 1 Departure/Week
- Central Maine Aviation. Flight School. Piper. 25 Departures/Week
- Vacation Land Skydiving. Jumpers. Cessna. 30 Departures/Week (Summer)

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- No

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	4
Critical Community Access	5
Other Aviation Specific Functions	3
Commercial, Industrial, & Economic Activities	1
Destination & Special Events	2
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
Caleb Curtis - Curtis Air	FBO
Cianbro Construction Company	Self-piloted business

Source: Airport Manager Interviews, 2020.

Portland International Jetport (PWM)

Portland International Jetport (PWM) is Maine’s flagship commercial service airport serving the State’s largest city, Portland, and the surrounding metropolitan area of nearly 540,000 residents. PWM offers year-round flights to 15 cities on American Airlines, Cape Air, Delta, Elite Airways, Frontier Airlines, Southwest, and United. 11 additional destinations are offered seasonally when American, Delta, Frontier, JetBlue, Southwest, Sun County Airlines, and United offer additional flight frequencies and destinations for summer travelers. With a diverse mix of air carriers and destinations that range from as far west as Denver, CO (seasonally) and Dallas/Fort Worth (seasonally), in addition to extensive Eastern and Mid-Atlantic region coverage, PWM provides numerous benefits of air carrier choice and destination diversity to the State of Maine. The airport boasts a modern and environmentally sustainable terminal building, completed in 2011 which features the state’s largest geothermal heating and cooling system. A summary of facilities and services is provided below.

PWM Facility Summary

Portland International Jetport	
Location	Portland/South Portland
FAA Asset Role	Primary, Small Hub
Primary Runway Length/Width	7,200’ x 150’
Crosswind	6,100’ x 100’
ATCT (Air Traffic Control Tower)	Yes
IAP (Instrument Approach Procedure)	ILS (CAT II-III), RNAV/GPS Runway 11 ILS (CAT I-II), RNAV/GPS Runway 29 RNAV/GPS Runway 18 RNAV/GPS Runway 36
Terminal/Administration Building	Yes
Fuel	100LL & Jet A
Weather Reporting	ASOS
5010 Based Aircraft	41
Hangars	T-Hangar & Conventional/Box
ALS (Approach Lighting System)	ALSF-II Runway 11 MALSR Runway 29
Visual Approach Aids	4-Box PAPI Runway 11 4-Box PAPI Runway 29 4-Box PAPI, REIL Runway 18 4-Box PAPI, REIL Runway 36
Lighting	HIRL Runway 11-29 MIRL Runway 18-36

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

A visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Satisfactory*
Taxiway Pavements	Satisfactory*
Apron/Ramp Pavements	Good*
Terminal	Good
Hangars	Good

Source: McFarland Johnson, Inc., 2020.

Note: *Portland International Jetport was not included in the MaineDOT PCI data. Apron pavements were observed to be in good condition. Observations of low and medium severity cracking and medium weathering on runway and taxiway pavements. No PCI value was quantified.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

The Portland International Jetport is a small hub airport which provides a robust connection to the national and international air transportation system. The Jetport provides up to 112 daily arriving and departing flights to 22 non-stop destinations and handles 2.179 million total passengers annually.

5.) What top 3 issues are the most challenging in maintaining your airport?

- Infrastructure funding: the PFC has not been increased in 20 years which has limited the purchasing power of the PFC over time
- Regional low unemployment rates (2.2% in Portland) are causing shortages in staffing across several business lines
- Like many Northeast airports PWM is land constrained which limits some business and infrastructure opportunities/efficiencies. Finding people willing to invest their working time at the airport

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Add passenger boarding bridges for gates 11, 12, & 14. The refurbishment/replacement of existing boarding bridges
- Development of Federal Inspection Services facility to provide non-stop international service from PWM
- Additional inbound baggage and parking capacity

19.) Who are the top 5 most active based business tenants?

- PWM's focus is on scheduled passenger service, so we do not track the operations of our based general aviation users. This information would be available from our FBOs if required

22.) Who are the top 5 most active transient operators visiting local businesses?

- As noted previously PWM is focused on scheduled air service as its primary business. August is our busiest scheduled traffic month and accounts for 10.2% of our annual scheduled flights

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- Arts/Culture/dining in the City of Portland, Portland Headlight, Portland Museum of Art, etc.

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	2
Critical Community Access	1
Other Aviation Specific Functions	3
Commercial, Industrial, & Economic Activities	1
Destination & Special Events	1
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
Northeast Air	FBO- was interviewed for survey

Source: Airport Manager Interviews, 2020.

Presque Isle International Airport (PQI)

Presque Isle International Airport (PQI) is located in the City of Presque Isle and is the state’s fourth busiest airport by passenger enplanements and serves a vast area of northern Maine and northwestern New Brunswick province in Canada. Daily scheduled commercial service is provided by CommutAir operating as United Express with service to Newark Liberty International operated under the US DOT Essential Air Program. During the COVID-19 pandemic, this flight and service was temporarily routed to Washington Dulles International Airport, with service to Newark Liberty International to resume as passenger market recovers. A large industrial park, the Skyway Industrial Park is located adjacent to the airport and houses numerous aeronautical and non-aeronautical businesses, in addition to building opportunities for commercial developers. The remote location of Presque Isle makes PQI a critical facility to facilitate medical evacuation flights, provide emergency services, and facilitate goods and commerce. A summary of facilities and services is provided below.

PQI Facility Summary

Presque Isle International Airport	
Location	Presque Isle
FAA Asset Role	Primary, Non-Hub
Primary Runway Length/Width (Feet)	7,441’ x 150’
Crosswind	6,000’ x 100’
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	ILS/LOC, RNAV/GPS Runway 01 RNAV/GPS, VOR Runway 19 RNAV/GPS Runway 28
Terminal/Administration Building	Yes
Fuel	100LL & Jet A
Weather Reporting	AWOS – 3PT
5010 Based Aircraft	41
Hangars	T-hangars, Conventional/Box, & Community
ALS (Approach Lighting System)	MALSR Runway 01
Visual Approach Aids	4-Box PAPI, REIL Runway 19 4-Box PAPI Runway 28
Lighting	HIRL Runway 01-19 MIRL Runway 10-28

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

A visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Satisfactory*
Taxiway Pavements	Satisfactory*
Apron/Ramp Pavements	Good*
Terminal	Good
Hangars	Good

Source: McFarland Johnson, Inc., 2020.

Note: *Presque Isle International Airport was not included in the MaineDOT PCI data.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- PQI provides airline jet service with a catchment area extending from Houlton north to the Canadian Border as well as Northwestern New Brunswick and Eastern Quebec. The service flies non-stop to Newark Liberty International Airport (EWR) 12 times per week. Newark is United's largest hub on the East Coast with 151 non-stop routes and 416 flights/day. For our catchment area, New York is the second largest destination. As reported by the Maine Office of Tourism, the Mid-Atlantic states have provided the largest growth in visitors to Aroostook County of any region in the Country. In 2019, the airport boarded more passengers than any year in the last seven years. In July 2019, the airport boarded the most passengers in 12 years. PQI is one of only three essential air service markets awarded directly to United Airlines. The vast majority of EAS markets are award to smaller regional carriers. With United, passengers are awarded frequent flier miles on United and other members of the Star Alliance. The Star Alliance is the largest airline group in the world.
- PQI is the only all-weather airport in the northern third of the State of Maine with an instrument landing system (ILS), runway deicing capability and round the clock winter maintenance. This allows FedEx, UPS, and USPS air mail to operate out of the Airport. This service makes next day deliveries possible not only to but from businesses and individuals in Aroostook County.
- In an emergency PQI is the go-to airport for medical air evac and natural disaster recovery.
- Internationally PQI is the closest commercial airport with customs 24-7 to Europe. The runways are long enough to accommodate all corporate jet aircraft, narrow body jets and some wide bodies.

- The FBO is an AvFuel Branded dealer. AvFuel has been voted the most popular brand by readers of Professional Pilot several years running.

5.) What top 3 issues are the most challenging in maintaining your airport?

- Snow removal
- Finding qualified personnel

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Passenger terminal replacement
- SRE building expansion
- Runway 1-19 extension to accommodate regional jets during periods that runway is contaminated

19.) Who are the top 5 most active based business tenants?

- United Airlines - ER145 - 12 departures/week
- FedEx - Wiggins Airways. Freight. Cessna Caravan. 16 departures/week
- UPS - Wiggins Airways. Freight. Beech 99. 11 departures/week
- Main Mutual Express. Insurance. Cessna Citation 2. 5 Departures/week

22.) Who are the top 5 most active transient operators visiting local businesses?

- Net Jets. Fractional Ownership. Jet. 5 Arrivals/Week
- LifeFlight. Medical. King Air/Helicopter. 4 arrivals/week
- Wal Mart. Retailer. Jet
- Maine Instrument Flight. Charter. Twin

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- Aroostook State Park, Nordic Heritage Biathlon Center

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	4
Critical Community Access	1
Other Aviation Specific Functions	2

Function	Rank
Commercial, Industrial, & Economic Activities	3
Destination & Special Events	5
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
Aroostook Trusses	Construction
Modern Roofing and Siding	Construction - Otis Nelson

Source: Airport Manager Interviews, 2020.

Princeton Municipal Airport (PNN)

Princeton Municipal Airport (PNN) is an unattended facility owned by the Princeton Regional Airport Authority and located in the Town of Princeton in central Washington County. The facility provides a terminal building, flight instruction, 100LL fuel, and on-call U.S. Customs and Border Protection/Federal Inspection Services. PNN is included in the NPIAS and as such, is eligible for federal funding through the AIP. A summary of facilities and services is provided below.

PNN Facility Summary

Princeton Municipal	
Location	Princeton
FAA Asset Role	Basic
Primary Runway Length/Width	4,005' x 75'
Crosswind	Closed
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	RNAV (GPS)
Terminal/Administration Building	Yes
Fuel	100LL
Weather Reporting	AWOS-AV
5010 Based Aircraft	1
Paved Aircraft Parking	Yes
Hangars	Conventional/box & transient
ALS (Approach Lighting System)	No
Visual Approach Aids	4-PAPI Runway 15
Lighting	MIRL Runway 15-33
Services	Fuel, Customs (on request) transient, flight instruction

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

Information published in the *Airport Pavement Management System (2019)* and Pavement Condition Indexes (PCI) data from the recent MaineDOT statewide study was considered and a visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Good
Taxiway Pavements	Good
Apron/Ramp Pavements	Satisfactory
Terminal	Good
Hangars	Poor

Source: MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- PNN has a 4,007-foot runway next to the Canadian border. Customs is available upon request

5.) What top 3 issues are the most challenging in maintaining your airport?

- The airport authority is volunteer based. Getting trustworthy people to help with things is often a challenge
- The Airport always has to make do with what it has, it would be great to be able pay for people to mow, plow, etc.
- More money from the cooperating towns or other sources to help pay for operating costs

6.) What are your top 3 facility needs? (construction projects or other improvements)

- FBO hangar
- Jet A tank
- Tractor for mowing

19.) Who are the top 5 most active based business tenants?

- None reported

22.) Who are the top 5 most active transient operators visiting local businesses?

- Mark Bankroft – Construction – 2 Arrivals/Week

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- West Grand Lake, Grand Lake Stream

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	5
Critical Community Access	4
Other Aviation Specific Functions	2
Commercial, Industrial, & Economic Activities	3
Destination & Special Events	3
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
Chevy Dealer	Chevy Dealership owners
Bancroft Contracting	General Contracting in the local area

Source: Airport Manager Interviews, 2020.

Sanford Seacoast Regional Airport (SFM)

Sanford Seacoast Regional Airport (SFM) is located in the Southcoast Region, owned and operated by the City of Sanford. Situated in the City of Sanford, equidistant between Portsmouth International Airport at Pease (PSM) in NH and PWM, the Airport is staffed by three (3) full time and two (2) part-time employees, SFM is classified as a reliever airport to PWM boasting a 6,389’ primary and 4,999’ crosswind runway system with a full parallel taxiway and ILS approach capability, modern approach lighting, free parking, flight instruction, maintenance, restaurant, fueling and aircraft parking/storage. Sanford offers full-service executive FBO services, including on-site into-plane catering, community events, MoGas, testing center, multiple hangar options. Top based users are Southern Maine Aviation (FBO) and Pine Tree Helicopters, with high use by itinerant jet charter operators for business and tourism. A summary of facilities and services is provided below.

SFM Facility Summary

Sanford Seacoast Regional Airport	
Location	Sanford
FAA Asset Role	Regional
Primary Runway Length/Width	6,389’ x 100’
Crosswind	4,999’ x 100’
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	ILS/LOC, RNAV/GPS Runway 07 RNAV/GPS, VOR Runway 25 RNAV/GPS Runway 32
Terminal/Administration Building	Yes
Fuel	100LL, Jet A, & MoGas
Weather Reporting	AWOS – 3PT
5010 Based Aircraft	82
Hangars	T-hangars, Conventional/Box, & Transient
ALS (Approach Lighting System)	ODALS Runway 25
Visual Approach Aids	4-Box PAPI, REIL Runway 07 4-Box PAPI Runway 25 4-Box PAPI Runway 14 4-Box PAPI Runway 32
Lighting	HIRL Runway 07-25 MIRL Runway 14-32

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

Information published in the [Airport Pavement Management System \(2019\)](#) and Pavement Condition Indexes (PCI) data from the recent MaineDOT statewide study was considered and a

visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Good
Taxiway Pavements	Satisfactory
Apron/Ramp Pavements	Fair
Terminal	Good*
Hangars	Good

Source: *MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.*

*No terminal building. Typical terminal facilities provided by the FBO.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- Reliever Airport, public use, open 24-7, full ILS approach, two large runways, free landside parking, aviation services including flights schools, maintenance, restaurant, fueling, parking and storage

5.) What top 3 issues are the most challenging in maintaining your airport?

- Lack of adequate AIP funding
- Lack of applicability for AIP funding due to eligibility

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Additional hangar construction
- Rehabilitation of Taxiway Charlie and apron
- Infrastructure and utility improvements for existing and future development

19.) Who are the top 5 most active based business tenants?

- Southern Maine Aviation. Full service FBO. Fixed wing (6). Unknown departures/week
- Pine Tree Helicopters. Specialized Aviation Service Operations (SASO). Rotorcraft (3). Unknown departures/week
- Pilots Cove Café. Eat-in
- Pilots Cove Café. In-to-Plane Catering for Jets

22.) Who are the top 5 most active transient operators visiting local businesses?

- Chartered Flights. Business. Jet Unknown arrivals/week
- Chartered Flights. Tourism. Jet. Unknown arrivals/week

- Itinerant GA. Eat at Restaurant. Single & Twin. Unknown arrivals/week

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- Southern Maine Beaches

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	3
Critical Community Access	5
Other Aviation Specific Functions	1
Commercial, Industrial, & Economic Activities	2
Destination & Special Events	4
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
Mark Damuth	Southern Maine Aviation, General Manager Full Service FBO
Parker Montano	Pine Tree Helicopter, Owner & Chief Instructor

Source: Airport Manager Interviews, 2020.

Stephen A. Bean Municipal Airport (8B0)

Stephen A. Bean Municipal Airport (8B0), sometimes referred to as Rangeley, is an unattended airport owned and operated by the Town of Rangeley with 1 PT employee. Given the Airport's location, it is a good site/location for access to recreational activities. The Airport offers a 4,300' runway and 100LL & Jet A fueling. A summary of facilities and services is provided below.

8B0 Facility Summary

Stephen A. Bean Municipal Airport	
Location	Rangeley
FAA Asset Role	Basic
Primary Runway Length/Width (Feet)	4,300' x 75'
Crosswind	N/A
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	RNAV/GPS - D
Terminal/Administration Building	Yes
Fuel	100LL & Jet A
Weather Reporting	AWOS – 3PT
5010 Based Aircraft	50
Hangars	T-hangars, conventional/box, transient & community
ALS (Approach Lighting System)	None
Visual Approach Aids	REIL Runway 14; 4-PAPI, REIL Runway 32
Lighting	MIRL Runway 14-32

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

Information published in the *Airport Pavement Management System (2019)* and Pavement Condition Indexes (PCI) data from the recent MaineDOT statewide study was considered and a visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Good*
Taxiway Pavements	Satisfactory
Apron/Ramp Pavements	Fair
Terminal	N/A**
Hangars	Good

Source: MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.

*2018 AIP Grant.

**No terminal building. Typical terminal facilities provided by the FBO with access code.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

- 2.) **What services does your airport provide for operators in and travelers to/from Maine?**
 - A hub in the mountains of western Maine and provides access to the tourism in this area
 - The Airport also has fuel for pilots in need

- 5.) **What top 3 issues are the most challenging in maintaining your airport?**
 - Snow removal
 - Politics
 - Not having someone full-time

- 6.) **What are your top 3 facility needs? (construction projects or other improvements)**
 - Parallel Taxiway
 - Hangar Space
 - Updated equipment

- 19.) **Who are the top 5 most active based business tenants?**
 - No answer provided

- 22.) **Who are the top 5 most active transient operators visiting local businesses?**
 - No answer provided

- 35.) **Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?**
 - Rangeley Lakes Region

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	1

Function	Rank
Critical Community Access	2
Other Aviation Specific Functions	5
Commercial, Industrial, & Economic Activities	4
Destination & Special Events	3
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
None Provided	

Source: Airport Manager Interviews, 2020.

Stonington Municipal Airport (93B)

Stonington Municipal Airport (93B) is an unclassified, unattended airport located in the Town of Stonington on the island of Deer Isle. Likely important landing site due to location. Not a lot of activity beyond Penobscot Island Air’s activity. A summary of facilities and services is provided below.

93B Facility Summary

Stonington Municipal Airport	
Location	Stonington
FAA Asset Role	Unclassified
Primary Runway Length/Width	2,099’ x 60’
Crosswind	N/A
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	None
Terminal/Administration Building	Yes
Fuel	None
Weather Reporting	None
5010 Based Aircraft	2
Hangars	Conventional/Box
ALS (Approach Lighting System)	None
Visual Approach Aids	None
Lighting	None

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

A visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Satisfactory*
Taxiway Pavements	Poor*
Apron/Ramp Pavements	Satisfactory*
Terminal	Poor
Hangars	Poor

Source: McFarland Johnson, Inc., 2020.

Note: *Stonington Municipal Airport was not included in the MaineDOT PCI data. Observations of high severity raveling and medium severity cracking on taxiway pavements. Observations of medium severity cracking and uniform medium severity weathering on apron and runway pavements. No PCI value was quantified.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- Penobscot Island Air flies in and transports our marine mechanics and technicians to service area vessel engines needs such as ferries, lobster boats and repairs and services heavy equipment engine needs/repairs for forestry equipment also, seasonal pilots fly in for recreation, others because they have summer homes or their friends do, LifeFlight uses it also.

5.) What top 3 issues are the most challenging in maintaining your airport?

- Pavement management and costs.
- Not much of a budget, we have been operating largely on lease fees, donations from the public and pilots who either are based at our airport or fly in frequently.
- Hangar maintenance problems.

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Pavement & crack sealing budget money

19.) Who are the top 5 most active based business tenants?

- Penobscot Island Air. Passengers/ Freight. "Small planes". 3-5 departures per week

22.) Who are the top 5 most active transient operators visiting local businesses?

- I don't know who they are, they just fly in. Sometimes they sign the book, go do their thing and leave

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- Acadia National Park, Penobscot Bay area, Nervous Nellies, Aragosta Restaurant, Acadia Provisions, Stonington Opera House

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	2
Critical Community Access	1
Other Aviation Specific Functions	3
Commercial, Industrial, & Economic Activities	5
Destination & Special Events	4

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
Penobscot Island Air	Air Service

Source: Airport Manager Interviews, 2020.

Sugarloaf Regional Airport (B21)

Sugarloaf Regional Airport (B21), located in the Town of Carrabassett Valley and sometimes referred to as Carrabassett, is a single runway threaded between the Carrabassett River and ME Route 27 with a large mountain on each side. B21 is a quiet facility, home to several hangars and provides access to Flagstaff Lake and Sugarloaf Ski Resort. A summary of facilities and services is provided below:

B21 Airport Facility Summary

Sugarloaf Regional Airport	
Location	Carrabassett Valley
FAA Asset Role	Basic
Primary Runway Length/Width	2,800' x75'
Crosswind	No
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	RNAV/GPS - A
Terminal/Administration Building	No
Fuel	100LL & MoGas
Weather Reporting	AWOS - AV
5010 Based Aircraft	12
Hangars	Conventional/Box & Community
ALS (Approach Lighting System)	None
Visual Approach Aids	None
Lighting	None

Source: *Airport Master Record, 2020; Airport Survey, 2020.*

Facility Condition

Information published in the *Airport Pavement Management System (2019)* and Pavement Condition Indexes (PCI) data from the recent MaineDOT statewide study was considered and a visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Satisfactory
Taxiway Pavements	Satisfactory
Apron/Ramp Pavements	Good
Terminal	N/A
Hangars	Good

Source: *MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.*

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- Easy access to many recreational activities year-round

5.) What top 3 issues are the most challenging in maintaining your airport?

- Snow removal
- Runway surface maintenance (crack sealing)

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Additional hangar space for more based aircraft
- Pilot/passenger lounge with restroom facility
- Hangar for itinerant aircraft to rent

19.) Who are the top 5 most active based business tenants?

- Sugarloaf Aviation. Flight Training. Super Cub. 10 departures/week
- Bigelow Aviation. Flight Training. 172. 8 Departures/week
- Restoration Aircraft. Aircraft Mechanical Repair. No aircraft or departures/week provided

22.) Who are the top 5 most active transient operators visiting local businesses?

- No answer provided

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- Sugarloaf Ski Resort

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the Airport.

Function	Rank
Emergency Preparedness & Response	4
Critical Community Access	3
Other Aviation Specific Functions	1
Commercial, Industrial, & Economic Activities	2
Destination & Special Events	5
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
Tom Walls	Aeronautical Business Owner
Lloyd Cuttler	Local Pilot and Town Selectman

Source: Airport Manager Interviews, 2020.

Waterville Robert LaFleur Airport (WVL)

Waterville Robert LaFleur Airport (WVL) is located in the City of Waterville and operated by 2FT/4PT municipal staff. Convenient to I-95, competes with AUG, would like corporate hangar, maintenance, additional T-hangars. GA terminal attached to hangar does not meet needs, modest amenities. Active tenants include cargo and flight school; itinerant users are Net Jets, Plane Sense, Wheels Up. A summary of facilities and services is provided below.

WVL Facility Summary

Waterville Robert LaFleur Airport	
Location	Waterville
FAA Asset Role	Local
Primary Runway Length/Width	5,500' x 100'
Crosswind	2,301' x 60'
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	ILS/LOC/DME, RNAV/GPS Runway 05 RNAV/GPS Runway 23
Terminal/Administration Building	Yes
Fuel	100LL & Jet A
Weather Reporting	AWOS-3PT
5010 Based Aircraft	16
Hangars	Conventional/Box & Community
ALS (Approach Lighting System)	MALSF Runway 05
Visual Approach Aids	4-PAPI, REIL Runway 23; 4-VASI Runway 05
Lighting	HIRL Runway 05-23

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

Information published in the Airport Pavement Management System (2019) and Pavement Condition Indexes (PCI) data from the recent MaineDOT statewide study was considered and a visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Good
Taxiway Pavements	Poor
Apron/Ramp Pavements	Fair
Terminal	Good
Hangars	Good

Source: MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- Geographically, we are centrally located in the state and have ease of access to I-95. We provide a quality facility that can easily accommodate and quick-turn aircraft without congestion of large airports

5.) What top 3 issues are the most challenging in maintaining your airport?

- Vegetation Management
- Snow removal
- Electrical

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Taxiway A reconstruction
- Terminal building with corporate hangar
- T-hangars

19.) Who are the top 5 most active based business tenants?

- Airline Academy. Flight School. Several Aircraft. Multiple departures/week
- Wiggins Airways. UPS Cargo Carrier. Beech 99. 5 departures/week

22.) Who are the top 5 most active transient operators visiting local businesses?

- Net Jets. No business type, aircraft type or arrivals/week listed
- Plane sense. No business type, aircraft type or arrivals/week listed
- Wheels up. No business type, aircraft type or arrivals/week listed
- EJM. No business type, aircraft type or arrivals/week listed
- Tradewind. No business type, aircraft type or arrivals/week listed Jets – Air Charter – Jet Aircraft – 20-25 Departures/Week
- Wheels Up – Air Charter – Turbo Prop Aircraft – 18-25 Departures/Week
- Exec Jet – Air Charter – Jet Aircraft – 18-20 Departures/Week

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- Multiple

Aeronautical Functions Provided & Economic Profile

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private

investment. To meet these goals, the SASP relies on responses to Airport Manager Survey questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	3
Critical Community Access	2
Other Aviation Specific Functions	4
Commercial, Industrial, & Economic Activities	1
Destination & Special Events	5
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
Garvan D. Donegan	FTZ 186
Airlink Flight School	Flight School

Source: Airport Manager Interviews, 2020.

Wiscasset Airport (IWI)

Wiscasset Airport (IWI) is located in the Town of Wiscasset, offering a terminal building available 24/7 with amenities and competitively priced self-serve 100LL & Jet A fuel. The Airport would like additional hangar space. Itinerant users of IWI are Plane Sense and Helicopter Service. The Airport has lease-option agreements for solar development. A summary of facilities and services is provided below:

IWI Facility Summary

Wiscasset Airport	
Location	Wiscasset
FAA Asset Role	Local
Primary Runway Length/Width	3,397' x 75'
Crosswind	N/A
ATCT (Air Traffic Control Tower)	No
IAP (Instrument Approach Procedure)	RNAV/GPS Runway 07 RNAV/GPS Runway 25
Terminal/Administration Building	Yes
Fuel	100LL & Jet A
Weather Reporting	ASOS
5010 Based Aircraft	31
Hangars	T-hangars, Conventional/Box, Transient & Community
ALS (Approach Lighting System)	None
Visual Approach Aids	4-Box PAPI Runway 07 4-Box PAPI, REIL Runway 25
Lighting	MIRL Runway 07-25

Source: Airport Master Record, 2020; Airport Survey, 2020.

Facility Condition

Information published in the *Airport Pavement Management System (2019)* and Pavement Condition Indexes (PCI) data from the recent MaineDOT statewide study was considered and a visual inspection of the Airport was conducted during a site visit performed in August 2020. The following summarizes the general condition of primary facilities at the Airport.

Facility	Condition
Runway Pavements	Satisfactory
Taxiway Pavements	Good
Apron/Ramp Pavements	Fair
Terminal	Good
Hangars	Good

Source: MaineDOT Pavement Condition Index Data; McFarland Johnson, Inc., 2020.

Airport Manager Survey Highlights

As part of the SASP data collection effort, each Airport Manager was surveyed to collect current insights and information pertaining to their Airport. Answers to select questions provide an overview of services offered, issues, needs, activity, and local attractions, and are presented as follows:

2.) What services does your airport provide for operators in and travelers to/from Maine?

- Pilot's Lounge and Waiting Area
Clean, comfortable Terminal Building open 24-7
- V, Free Wi-Fi, and computer for Flight Planning
- Plane-side rental car and personal vehicle access
- Short/long-term hangar and tie-down space -Courtesy car

5.) What top 3 issues are the most challenging in maintaining your airport?

- Runway pavement is at the end of its useful life. (Capital Improvement Program for replacement of the runway is for 2021.)
- Apron is in fair to poor condition but does not pose a safety hazard. (CIP reconstruction 2025)
- Maintaining older buildings

6.) What are your top 3 facility needs? (construction projects or other improvements)

- Replace the Runway
- Repair the Apron
- Replace and add new fencing

19.) Who are the top 5 most active based business tenants?

- None

22.) Who are the top 5 most active transient operators visiting local businesses?

- Plane Sense. Fractional Aircraft Ownership. PC-12 and PC-24. 3 arrivals per week, May - September
- Point of View Helicopter Service. Photography, Surveys, Mapping. Schweizer 300C. 1 Arrival per week

35.) Are there any major/popular tourist or leisure attractions within a 30-minute drive of the airport?

- Boothbay, Reid State Park, Popham Beach, Maine Maritime Museum and Red's Eats

Three primary goals of the SASP are to: identify public value that justifies investment; nurture growth in key areas of opportunity and trends; and leverage public spending to generate private investment. To meet these goals, the SASP relies on responses to Airport Manager Survey

questions to identify activities that demonstrates the primary functions of each SASP Airport. These activities are placed into five (5) categories of aeronautical functions that serve the public interest, as provided by the FAA in the NPIAS.

The Airport Manager indicated the following functions in order of scale or activity at the airport.

Function	Rank
Emergency Preparedness & Response	2
Critical Community Access	5
Other Aviation Specific Functions	4
Commercial, Industrial, & Economic Activities	3
Destination & Special Events	1
Other:	

Source: Airport Manager Interviews, 2020.

The Airport Manager Survey and follow-up telephone interviews with the Airport Manager indicated the following indicators of economic activity currently occurring at the Airport:

Key Informant Business Name or Type	Notes/Description
Peregrine Turbine	Aeronautical Technologies Company

Source: Airport Manager Interviews, 2020.

Appendix D: Peer State Airport System Plan Reviews

Technical Memorandum

TO: *Maine State Airport System Plan (SASP) Project Team; Maine Department of Transportation (MaineDOT) Bureau of Planning*

FROM: *McFarland Johnson, Inc.*

DATE: *April 24, 2020*

SUBJECT: *Maine SASP – Task 2.1 Technical Memo – SASP Peer Review & Context Setting*

PURPOSE

To advise and inform MaineDOT’s approach to the development of the SASP, a literature review was conducted of relevant Federal Aviation Administration (FAA) guidance and a selection of recently completed aviation system plans. This review is intended to identify insightful outcomes or approaches used by other state systems. The following documents were reviewed to provide context and guidance to the SASP.

SASP Document	Project Sponsor / Consultant Team	Year
Virginia Air Transportation System Plan Update (VATSP) ¹	Virginia Department of Aviation (DOAV) <i>Self-Performed with Consultant Support Marr Arnold Planning Michael Baker</i>	2016
New York State Airport System Plan (NYSASP) ²	New York State Department of Transportation, Aviation Bureau <i>Louis Berger Group DY Consultants CHA</i>	2018
Oregon Aviation Plan v6.0 (OAP) ³	Oregon Department of Aviation <i>Jviation Century West Angelo Planning Group Marr Arnold Planning</i>	2018

Source: see footnotes.

¹ <https://doav.virginia.gov/resources/forms-and-reports/studies-guides-and-reports/virginia-air-transportation-system-plan-update-2016/>

² <https://www.dot.ny.gov/divisions/operating/opdm/aviation/sasp>

³ <https://www.oregon.gov/aviation/plans-and-programs/Pages/oap.aspx>

SUMMARY FINDINGS

A review of plans completed within the last five years was conducted. The plans were performed by eight different planning and engineering firms, which was helpful in assessing various approaches to conducting the work, analysis and organization of technical issues, and report deliverable composition. Review of each plan indicated that each utilized a consistent process that generally follows **Figure D-1**:



Source: McFarland Johnson Analysis, 2020.

The system plans reviewed used the typical system planning approach as outlined in FAA Advisory Circular (AC) 150/5010, however there were several intriguing observations:

1. Overall, each plan identified a sub-category of airport roles in addition to the FAA asset classification categories.
2. Virginia is a growing population and focused on overall access to facilities within the system. Their approach proposed more facilities within a travel time of 30 minutes. The overall goal is to further invest in the system by building new airports and strengthening private airports to provide robust access to aviation by the entire state.
3. New York is well populated and has a strong aviation growth rate. Their approach was to focus on economics, emergency, and environmental aspects in addition to preparing a formal inventory to identify facility conditions and needs.

Virginia Air Transportation System Plan Update | Virginia Department of Aviation, 2016

The Commonwealth of Virginia is a mature aviation system anchored by two large-hub commercial service airports near the Washington D.C. metropolitan area and six other commercial service airports, in addition to 57 general aviation (GA) airports throughout the state. Strong growth at the Commonwealth's commercial service airports in addition to growing based aircraft counts reported at the majority of airports in the system indicate that Virginia aviation growth significantly outpaces national growth and is expected to continue in the future.

VATSP Objectives

Forecast Approach

Cultivate an advanced aviation system that is safe, secure, and provides for economic development.

Promote aviation awareness and education to Virginians.

Provide the safest and most efficient flight services for the Commonwealth leadership and state agencies.



1.6% Average Annual Growth of Based Aircraft

Traditional Approach Measuring Based Aircraft and Operations

Forecast Sources: FAA Aerospace Forecast FY2012-FY2032, Consultant Analysis (ICF SH&E), VA Department of Aviation Survey Results

Airport Roles

Prior to the 2012 release of the FAA’s, *General Aviation Airports: A National Asset*, states often assessed a number of criteria to define the role of airports in their respective system. In the 2016 VATSP, the planning team attempted to blend additional characteristics to the more limited criteria used by the FAA for asset classification. FAA asset characteristics include the following:

- Airport setting/location
- Activity type and volume
- Special user groups for basic airports.

Additional criteria assessed in the VATSP included:

- Applicable FAA design standards
- Airport functional and economic roles
- Types of activity supported (business, tourism, agriculture, sport aviation, emergency operations, and flight instruction)
- Facilities and services in place

Using the FAA asset categories along with these additional criteria, the VATSP created a series of unique asset categories and assigned airports based on the number of criteria each airport met.

Facility Requirements

To determine system wide needs, the VATSP developed a set of Facility, Service, and Equipment (FS&E) objectives for each airport role in the system. FS&E objectives included the following:

- | | |
|---|---|
| <ul style="list-style-type: none"> • Airport Reference Code (ARC) • Airfield Capacity • Primary Runway Length • Primary Runway Width • Runway Strength | <ul style="list-style-type: none"> • Approach Types and Minimums • Weather • Communications • Visual Aids |
|---|---|

Performance Metrics

To review system performance, the results of the facility requirement objectives were assessed against a set of performance measures to measure compliance or deficiencies in the objectives for the system. The performance metrics and assessment mechanisms can be seen in **Table D-1**.

Table D-1: Facility Requirement Objectives

Performance Metric	Assessment Mechanism
Access to ANY Airport System	Accessibility to any commercial service airport within a 45-minute drive time and/or any general aviation airport within a 30-minute drive time.
Access to Airports with Commercial Service	Accessibility to any airport with scheduled commercial airline service within a 45- minute drive time.
Access to Airports with a Runway Length of 5,500’ or Greater	Accessibility to any airport with a runway length of 5,500’ or greater within a 30-minute drive time.
Access to Airports with a Precision Instrument Approach	Accessibility to any airport with a precision runway approach supported by vertical guidance within 30-minute drive time.
Access to Airports with On-Site Weather Reporting Equipment	Accessibility to any airport with on-site weather reporting equipment within a 30-minute drive time.
Access to Airports that Serve Business Aircraft Needs	Accessibility to any airport that meets the characteristics of a “business airport” defined as an airport with a runway that contains a runway of 5,500’ or greater, a precision approach with vertical guidance, and on-site weather reporting equipment.

Source: VATSP, 2016.

Industry Trends and Recommendations

The VATSP addressed issues unique to the Commonwealth that could enhance access or service to the aviation system. Some of these solutions included the following:

- **Build New Airports:** Increase accessibility of airports to all Virginians
- **On Site Weather Reporting:** Goal to have 100% of airports equipped with functioning weather reporting equipment.
- **Support Private Airports:** Given that rates and charges may be more competitive at private airports, and may serve residents and businesses more conveniently, the Commonwealth identified a capital improvement plan (CIP) for private airports to be supported by state funding
- **Establish Maintenance Fund:** Using an appropriated 2.3M budget, the Commonwealth

would establish \$100,000 grants annually for maintenance.

- **Reclassify Airport Roles:** As Needed: Reclassify airport roles based on FAA asset categories and unique characteristics of the Virginia system to prioritize funding.

New York State Airport System Plan | NY DOT Aviation Bureau, 2018

New York State contains a diverse aviation system serving the nation’s most populated areas near the New York City metropolitan area, and also providing a large network of other commercial and GA airports for the more rural Upstate regions. The 2018 New York State Airport System Plan (NYSASP) focused on stakeholder feedback to help shape the objectives and recommendations of the system, aligning them also with other New York State planning documents and relevant FAA recommendations.

NYSASP Objectives

Identify the airport system that is essential to meet future commercial service and GA growth.

Ensure that each airport is appropriately evaluated for inclusion in the FAA NPIAS category-role system and that available information accurately represents the full assessment of its aviation roles.

Present an overview of the infrastructure cost essential to sustain and improve the system.

Identify the GA airports that are essential to a vibrant regional transportation system.

Develop strategies that ensure an economically sustainable system.

Forecast Approach



4.3% Average Annual Growth of Based Aircraft

Traditional Approach Measuring Based Aircraft and Operations

Forecast Insights: Strong population and economic growth attributed to commercial enplanement growth. A sales tax exemption on small aircraft is attributed to GA growth.

Airport Roles

The 2018 NYSASP took an expanded approach to classifying airport roles, using the FAA asset categories, and adding additional characteristics to understand each facility’s state-level role and function within the system.

This resulted in five categories with a principal factor used to define each role:

- **National / Commercial Service**
 - Principal Factors: FAR Part 139 certificated airport that hosts scheduled commercial air service for national, international, or regional markets.

- **Regional / Corporate Business**
 - Principal Factors: FAR Part 139 certificated airport that does not host scheduled air service; or an airport with a paved primary runway, instrument landing system and active control tower.
- **Local / Community Business:**
 - Principal Factors: Airports with a paved runway, 100LL aviation fuel, and either Jet-A aviation fuel, a major repair service on site, or at least 20 based aircraft with at least 20 daily flight operations.
- **Local / General Aviation**
 - Principal Factors: Airports with FAA Part 135 or 136 operations, or 100LL aviation fuel, or a major repair service on site, or provides seasonal local significance, or has at least 10 based aircraft with at least 14 daily flight operations.
- **Basic / General Aviation**
 - Principal Factors: Airports that have less than 10 based aircraft or less than 14 daily flight operations and do not have 100LL aviation fuel or major repair services on site (e.g. airframe, powerplant).

Facility Requirements

To determine system wide needs, the NYSASP developed facility objectives for each airport role in the system. The core facility requirement objectives for New York State included the following:

- General Airside Infrastructure
- NAVAIDS
- FAA Design Standards
- Economic Strength
- Environmental
- Security
- Facility Services Offered
- Capacity

These are further defined and applied to airports in the performance metrics analysis.

Performance Metrics

NYSASP performance metrics were developed to determine how individual facilities in the system are currently performing. By identifying these relevant system objective elements (detailed in Table D-2) and establishing detailed benchmarks to further assess, adequacies and deficiencies can be determined for the broader New York state airport system.

Table D-2: Performance Metrics

System Objectives	Performance Benchmark Elements
General Airside Infrastructure	<ul style="list-style-type: none"> • Airport Reference Code (ARC) • Primary Runway Length • Primary Runway Width • Runway Pavement Condition • Taxiway Pavement Condition

System Objectives	Performance Benchmark Elements
NAVAIDS	<ul style="list-style-type: none"> • Localizer Performance w/ Vertical Guidance (LPV) • Localizer Performance (LP) • Runway Approaches • VHF Omnidirectional Range (VOR) • Weather Reporting Equipment • Visual Glide Slope Indicator (VGSI) • Precision Instrument Lighting System
Economic	<ul style="list-style-type: none"> • Airport Annual Revenue • New Business Operating in the Past 5 Years • Cease of Business in the Past 5 Years • Airport Capital Improvement Plan (ACIP)
Environmental	<ul style="list-style-type: none"> • Emergency Response Plan • Storm Water Pollution Plan • Vegetation Management Plan • Comprehensive Solid Waste Plan • Local/State Comprehensive Plan • Wildlife Management Plan • Recycling Plan
Security	<ul style="list-style-type: none"> • Security Plan • Security Fencing
Facility Services	<ul style="list-style-type: none"> • Air Traffic Control Tower • Fixed Base Operator (FBO) • Fuel • Aircraft Maintenance • Terminal/Administration Building • Snow Removal Equipment (SRE) • Aircraft Rescue and Fire Fighting (ARFF)
Storage Capacity	<ul style="list-style-type: none"> • Based Aircraft Hangar Storage • Conventional Aircraft Hangar Storage • Hangar Waiting List

Industry Trends and Recommendations

The NYSASP identified several aviation issues and trends of national, state, regional, and local concern to assess their local airport system against. These issues include the following:

- **Federal Budget Impacts on Air Traffic Control Towers:** Recommend creating a contingency plan or investigating remotely controlled airport traffic control towers (ATCTs) if federal funding is reduced for ATCTs.
- **Capital Funding Needs:** To assist airports that are not eligible for FAA Funds, or where FAA funds are not enough to meet capital program needs, a \$200 million, 5-year Aviation Capital Grant Program is recommended to be established.

- **Wildlife Hazards:** Recommend continued outreach with stakeholders to avoid, minimize, or mitigate habitat that can cause wildlife hazards to aircraft.
- **Airport Revenue - Fuel Sales Tax:** NY only taxes fuel estimated to be burned in the state, referred to as the burn-rate adjustment to reduce to burden of aviation fuel tax on consumers. Recommend creation of dedicated aviation account to avoid diversion of funds compliance issues.
- **Land Use Compatibility:** Limit hazards to air navigation by promoting and recommending municipalities to adopt airspace zoning based on the FAA model ordinance.
- **Local Property Taxes on Smaller Airports:** Lobby for a tax exemption for airport property and improvements which are not income producing.
- **Contract Weather Observation Stations:** Create contingency plan for Contract Weather Observer (CWO) reductions in staff.
- **Emerging Technologies:** satellite-based instrument approach procedures; remotely controlled air traffic control towers; and, unmanned aerial systems (UAS). Establish test sites.
- **Solar Energy Panels at Airports:** Explore responsible placement of solar panels at airports and promote use of the solar glare hazard analysis tool to conduct glint-glare studies.

Oregon Aviation Plan V6.0 | Oregon Department of Aviation, 2018

Oregon has a unique airport system hosting large commercial service facilities to small rural airstrips and seaplane bases. Oregon places a high value on its airport system and views airports as vital to economic development and as an asset for providing safe and efficient access to communities, businesses, recreational areas, and abundant natural resources. This version of the Oregon Aviation Plan (OAP) was meant to address booming economies in some areas of the state like near the Greater Portland Metropolitan Area, and to address slowing economies in more rural areas of the state. The plan also addresses new technologies in aviation, like unmanned aerial vehicles (UAV's) and decreasing demand for commercial air service in smaller markets.

OAP Objectives

- Mobility and Access** - provide a balanced, efficient, and cost-effective, integrated multimodal transportation system.
- Improve Management of the System** - optimize existing transportation infrastructure with improved operations and management.
- Economic Vitality** - promote expansion and diversification of Oregon's economy through effective movement of goods and people in an environmentally sound manner.
- Sustainability** - a system that distributed benefits and burdens fairly and is maintained and operated to be sensitive to the natural and built environment.
- Safety and Security** - plan, build, and operate a safe and secure system.
- Funding** - Create a funding structure that will support a viable transportation system to achieve state and local goals today and in the future.

Forecast Approach



1.6% Average Annual Growth of Based Aircraft

Robust Forecast Approach Measuring Based Aircraft and Operations, Destinations Served, and Domestic Service Analysis.

Forecast Sources: FAA Aerospace Forecast FY2012-FY2032, JVIATION

Airport Roles

The OAP defined airport functional roles using a blend of performance criteria, and the FAA's ARC coding system. The intent was to reflect demand for aviation within the associated city or region served by each airport. Five airport functional roles and defining characteristics were developed:

- **Category I: Commercial Service**
 - Defined by airports that support some level of scheduled commercial service in addition to a full range of general aviation aircraft activities.
- **Category II: Urban General Aviation**
 - Defined by airports that support all general aviation aircraft and can accommodate corporate aviation activity, including business jets and helicopters.
- **Category III: Regional General Aviation**
 - Defined by an airport that supports most twin and single-engine aircraft and may occasionally accommodate business jets.
- **Category IV: Local General Aviation Airport**
 - Defined by an airport that supports primarily single-engine general aviation aircraft but is also capable of accommodating smaller twin-engine general aviation aircraft. These airports support local air transportation needs and special use activities.
- **Category V: Remote Access/Emergency Services Airport**
 - Defined by airports that primarily support single-engine general aviation aircraft, special-use aviation activities, access remote areas, or provide critical emergency service access.

Facility Requirements

To meet the OAP's goal of safe and secure airports that meet FAA design criteria, a robust list of airside and landside facilities were identified to determine the ability of Oregon airports to support system needs. This comprehensive list of facility requirement elements is below:

- ARC
- NPIAS Role
- Number of Based Aircraft
- Runway Orientation
- Runway Length
- Runway Width
- Runway Pavement Type
- Runway Pavement Strength
- Rotating Beacon
- Lighted Wind Indicator
- Weather Reporting
- Aircraft Storage
- Apron Parking/Storage
- Fueling Facilities
- Pilots Lounges
- Restrooms
- Ground Transportation
- Terminal Building
- Auto Parking Capacity
- Security Fencing
- Cargo Capabilities
- Deicing Facilities
- Runway Pavement PCI
- Taxiways
- Approach Type
- Visual Approach Aids
- Instrument Approach Aids
- Runway Lighting
- Taxiway Lighting

Performance Metrics

OAP performance metrics were developed to evaluate the state airport system to determine its current performance. This evaluation was supported using a series of performance criteria and benchmarks that are generally reflective of the characteristics that define an airport system. The primary lens in which this analysis was conducted was through air and ground accessibility. Benchmarks associated with each performance measure are further described in **Table D-3**.

Table D-3: Performance Metrics

System Objectives	Performance Benchmark Elements
Air Accessibility	<ul style="list-style-type: none"> • 30-minute accessibility to an airport with an approach supported by vertical guidance • 30-minute accessibility to an airport with a published approach • 30-minute accessibility to an airport with weather reporting.
Community/ Ground Accessibility	<ul style="list-style-type: none"> • 120-minute accessibility to an airport with scheduled airline service. • 120-minute accessibility to an out of state airport with scheduled service • 120-minute accessibility to out of state commercial service airports on borders AND Category I airports. • 30-minute accessibility to any system airport. • 30-minute accessibility to out of state general aviation airports on borders • 30-minute accessibility to a commercial service airport. • 30-minute accessibility to an urban general aviation airport. • 30-minute accessibility to a regional general aviation airport. • 30-minute accessibility to a local general aviation airport. • 30-minute accessibility to a remote access/emergency services general aviation airport. • 30-minute accessibility to a state-owned airport. • 30-minute accessibility to airports supporting economic development and business utilization of general aviation.

Industry Trends and Recommendations

Industry specific trends impacting aviation were not specifically identified, however the resulting analysis from the study provided recommendations, many of which are specific to the local Oregon System. These recommendations include the following:

- **Reclassify Airport Roles:** Changes should be considered if there have been significant outside influences on an airport or improvements to infrastructure that have changed their role.
- **Land Use Compatibility:** Recommend continued coordination with the State Aviation Department and local jurisdictions to find synergies in program overlap. It is also

recommended to engage local planners and recommend code language updates as necessary to protect airspace zoning.

- **Wind Coverage Analysis:** Detailed wind studies are recommended for airports that do not meet wind coverage objectives.
- **Explore New Airports:** Explore areas of geographic coverage gaps to determine if the area is adequately served by the airport system.
- **NPIAS realignment:** The OAP recommends considering options for non NPIAS airports to be included in the NPIAS.
- **Resiliency Planning:** Recommend further resiliency planning at individual airports within high risk coastal flooding areas or within the Cascadia subduction zone that may at high risk of being impacted or destroyed during a zone eruption.

Appendix E: System Management Evaluation

MAINE STATE AVIATION SYSTEM PLAN



System Management Evaluation

December 2019

EXECUTIVE SUMMARY



prepared for:

MaineDOT

Bureau of Planning
Multimodal Planning Division

prepared by:

 **McFarland Johnson**

1. Executive Summary

As MaineDOT embarks on the development of an update to the State Aviation System Plan (SASP), a priority was placed on evaluating the State's existing functions pertaining to aviation, and the programs and services offered to the statewide system of airports. To do so, the MaineDOT and McFarland Johnson Project Team undertook the following tasks:

- Review of Peer State Programs,
- Strategies for Revenue Enhancement, and
- Evaluation of Other Funding Sources.

This *System Management Evaluation* is the culmination of work efforts on those tasks, which captures and presents the most salient research and findings from the review of peer state aviation programs, provides insights on staffing levels and functions, and program operating and funding. The purpose of this System Management Evaluation is to provide information and insights for the development of the State Aviation System Plan, especially to drive and focus what may come as preferred or recommended options for implementing change.

Additionally, MaineDOT is hopeful that the information presented in this System Management Evaluation can raise awareness of Maine aviation and airport funding needs, by showing how Maine's approach to managing, serving, and funding the statewide system of airports compares with other states management of aviation and airports.

The following sections summarize the most compelling findings from work performed by the Project Team.

1.1. HOW DOES MAINE'S AVIATION PROGRAM STACK UP?

The Project Team administered a survey to members of the National Association of State Aviation Officials (NASAO), which reached an impressive 36% percent participation (18 states). *Chapter 2., Review of Peer State Programs* provides details pertaining to survey responses by other state aviation professionals.

The breadth and depth of activities undertaken by other states to manage aviation functions and provide programs, services, and funding to their airports are as varied as the states they serve. A snapshot of the findings and comparisons with MaineDOT aviation includes:

- ➔ Maine ranks 15th among survey respondents in terms of population, square miles, and airports in the NPIAS, and 17th in based aircraft at NPIAS airports. As a proxy for statewide aviation activity, the ranking of based aircraft could be of concern because the number and type of based aircraft are often considered a strong indicator of economic viability for airports. At the state level, low levels of based aircraft mean a smaller base upon which to rely for tax and/or other user fee revenue from those aircraft owners and their operations. In the best of circumstances, generally low levels of based aircraft can be offset by the basing of medium and large twin-engine and jet aircraft that are active for business

purposes. Such activity points toward broader economic impact of aviation such as connecting people and business for interstate commerce, in-state job retention and creation, and taxable personal incomes and business incomes. Unfortunately, as described in greater detail in Section 1.2 below and *Chapter 3, Strategies for Revenue Enhancement*, most aircraft based at NPIAS airports in Maine are older, smaller single-engine piston aircraft likely used more for recreational than business.

- ➔ Maine trails most other states in staffing and functions performed. Among respondents, the average number of state aviation full-time staff is around 18 in engineering, planning, project and grant management, inspection, technical, and finance, among other roles.

Average Aviation Staff Level by Role

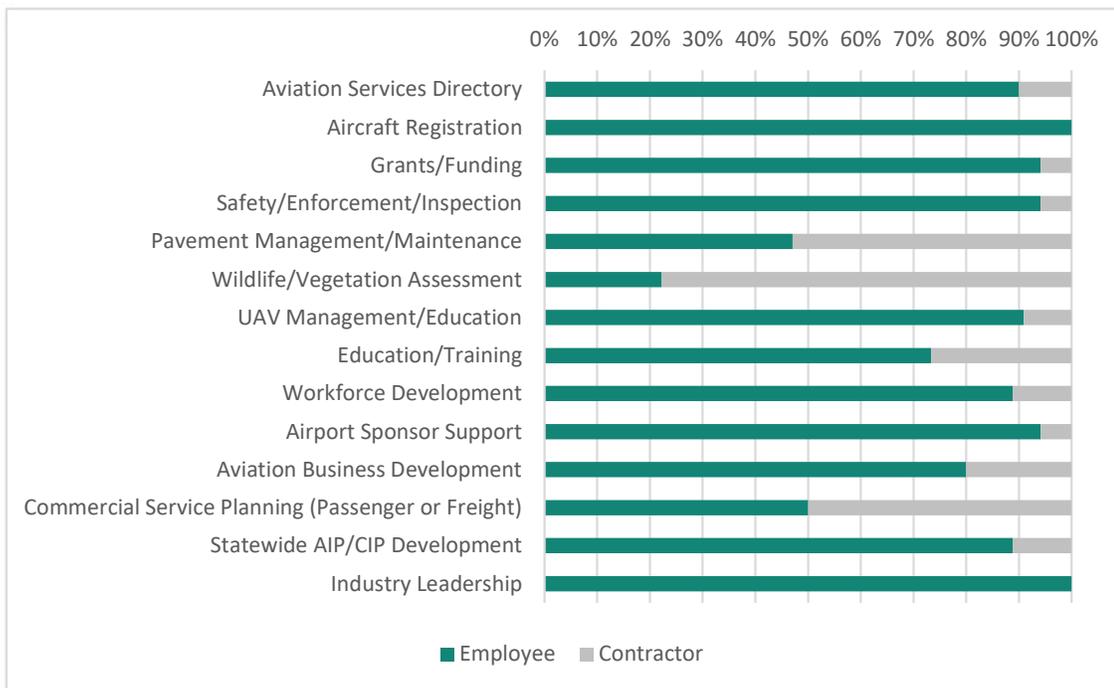
Role	# Staff	Role	# Staff
Directors/Administrators	2	Pilots	2
Engineers	3	Analyst/Technicians/Airport Support	2
Planners	2	Safety/Inspectors	2
Project Managers	2	Clerical/Administrative	1
Grants Managers	1	Financial Managers	1

Source: McFarland Johnson Analysis.

With a current staff of just 2.3 full time staff performing all MaineDOT aviation functions, staffing is clearly a constraint to expansion of other programs offered by peer states.

- ➔ Maine also lags peer states in programs and services offered to airports.

State Aviation Program Functions Performed



Source: McFarland Johnson Analysis.

Additionally, while outsourcing certain functions to contractors is a solution for many peer states, the average level of contracts for non-capital functions is \$270,000 annually. This includes two outlier states, one that outsources entire aviation program staff at a cost of \$2.3M annually, and another that contracts for \$1M annually for NAVAID maintenance expertise.

➔ MaineDOT’s operating budget and grant funding for airport capital projects is funded from fewer sources and at lower levels than most other states. MaineDOT’s primary source of revenue for operating expenses is the tax collected on aviation fuels (about \$950,000 annually), most of which is utilized to operate the state-owned Augusta State Airport and cover direct and indirect operating expenses. This leaves very little net income to pay for airport capital projects or other investments in the aviation system. Therefore, the state match of FAA-approved, AIP-eligible projects are covered by bonds issued by the state and approved by Maine voters. Special aviation system needs are reviewed competitively with other multimodal needs (e.g. ferries, transit, trails and rail) eligible for support from taxes collected on rental vehicles.



Comparing Maine aviation’s operating budget and capital funding to survey respondents is difficult due to the wide range of tax bases and airports served; therefore, comparisons were made per capita for operating budget and per NPIAS airport. The following compares Maine to respondent DOT aviation programs in terms of operating budget, AIP match funds, and non-AIP state funding:

Operating Budget & Funding Comparison Per Capita

State DOT	Operating Budget	AIP Match per NPIAS Airport	Non-AIP Funds per NPIAS Airport
Maine	\$0.72	\$57,142	\$15,657
Survey Respondents	\$1.20	\$100,683	\$103,664

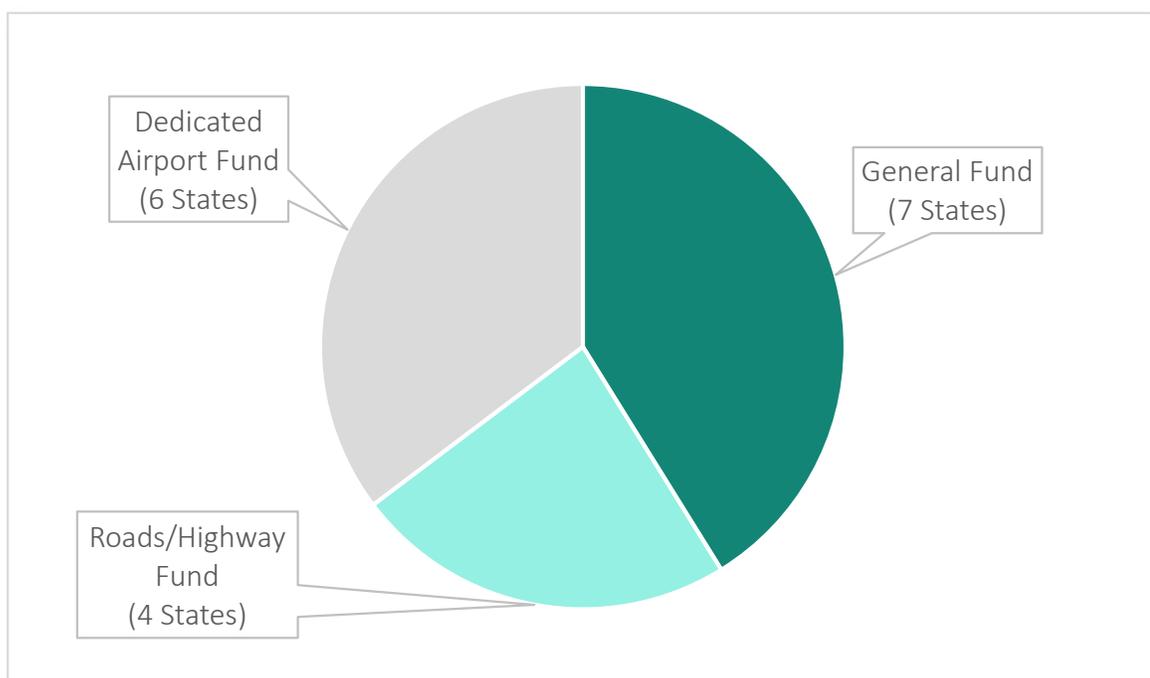
Source: McFarland Johnson Analysis.

As shown, Maine’s operating budget per capita is about 60 percent of peer states, 57 percent of peer state AIP match funds per NPIAS airport, and 15 percent of peer state funding level for non-AIP projects per NPIAS airport. While a wide range of geographic, social, and economic circumstance and nuance also separate Maine from its peers, the

disparity in funding warrants further consideration, at least insofar as the SASP may propose future investments that MaineDOT may wish to consider.

In terms of where peer state funding comes from, six respondent states indicated that a dedicated aviation fund supplies the primary source of funding for operating and grant funding. Most dedicated aviation funds are sourced from user fees such as aviation fuel taxes, sales/use or aircraft property taxes, and annual aircraft registration fees. Seven respondents to the survey indicated that their airport/aviation division, functions, and/or programs are funded with appropriations from the general fund, while four respondents stated that aviation funding is supported by funds primarily named for roads, highways, or for multimodal uses.

State Aviation Program Primary Funding Sources



Source: McFarland Johnson Analysis.

1.2. WHAT OPPORTUNITIES FOR REVENUE IS MAINE OVERLOOKING?

Considering the disparity of funding sources and levels between MaineDOT funding and peer state programs noted here and in *Chapter 2, Review of Peer State Programs*, it is worthwhile exploring ways for the state to generate more revenue for aviation staffing, programming, and capital grants.

Chapter 3, Revenue Enhancement Strategies presents research and analysis on this subject, and highlights include:

- ➔ The excise tax rate on Jet fuel in Maine is the second lowest of all other New England States at just \$0.034 per gallon, with some nuances pertaining to how the fuel is being used (New Hampshire) or as a formula that adjusts tax rates quarterly (Vermont). Rhode Island

charges no tax for Aviation Gas or Jet Fuel. Maine’s tax rate on AvGas is relatively high at \$0.30 per gallon because it is taxed at the same rate as general motor vehicle fuel and is subject to respective tax increases in that classification of fuel.

New England States Aviation Fuel Tax Rates

New England States	Aviation Gas Tax Rate	Jet Fuel Tax Rate
Maine	\$0.300	\$0.034
New Hampshire	\$0.040	\$0.035
Massachusetts	\$0.319	\$0.104
Vermont	\$0.320	6 percent avg. per gallon ^{1/}
Connecticut	\$0.250	\$0.25
Rhode Island	No Tax Levied	No Tax Levied
New England Average	\$0.246	\$0.11

Source: McFarland Johnson Analysis

^{1/} Vermont levies a 6 percent Motor Fuel Transportation Infrastructure Assessment in lieu of excise tax on Jet Fuel. This rate is set quarterly and based on the average price of Jet A fuel available in the State. An average price of \$5.02 was used for this analysis.

If annual fuel sales volumes remain around existing levels, an increase to the excise tax on Jet fuel even by just \$0.01 per gallon can have significant impacts on revenues to MaineDOT programs and services. The state may have more flexibility to increase this tax while remaining competitive among New England States.

Potential Impact of Increase Jet Fuel Excise Tax

Option	Tax Rate	Projected Revenue	Increase in Revenue (%)	Increase in Revenue (\$)
Half Cent Increase	\$0.039	\$1,106,650	15%	\$141,900
Full Cent Increase	\$0.044	\$1,248,500	30%	\$283,700
2½ Cent Increase	\$0.059	\$1,674,150	74%	\$709,400

Source: McFarland Johnson Analysis

➔ Another option to improve revenue from fuel sales might include termination of the aeronautical gasoline excise tax refund authorized by state statute. The number of pilots seeking the aeronautical gasoline refund varies from year to year,



however Maine Revenue Service estimates that the amount of foregone revenue to the Multimodal Fund via this avenue could be as high as \$24,000 annually. Maine currently

imposes an annual excise tax¹ on aircraft that is paid to the municipality where the aircraft is based (home airport); however, there is some uncertainty as to whether local jurisdictions enforce and collect this tax because many small, older planes based in Maine may not produce an annual fee of more than a few hundred dollars. Perhaps a portion of the excise tax should come to the state for managing the aviation system. At scale and in aggregate, however, all these aircraft and the larger, newer jet aircraft may represent untapped revenue potential that can have a real impact for the state. Estimates described in *Chapter 3* point to potential revenue levels over \$240,000 under the existing Maine tax formula, and perhaps reaching well into the \$300,000-range if the fee schedule is adjusted.

➔ The state and MaineDOT should be creative in assembling a variety of funding sources to build to scale for maximum impact for MaineDOT and the statewide system of airports. Findings presented in *Chapter 2* demonstrate that it is common and effective to piece together various sources of funding. A positive benefit of building funding from various sources is that variability of funding performance over time may be more easily balanced than is currently due to significant reliance on revenue from aviation fuel taxes. Other options for creating revenue explored in *Chapter 3* include:



- Annual appropriation from State Rental Car Tax revenues for activity and receipts generated by Maine Airports;
- Annual appropriation from unassigned General Fund balances;
- Modifications to State tax policy to reduce or remove certain aviation-related tax exemptions; and
- Participation in State’s specialty license plate program.

➔ The potential revenues from numerous options presented in *Chapter 3* represent substantial increases to MaineDOT for aviation staffing, programs, services, and capital grants for state airports as follows:

Estimated Potential Annual Funding Impact

Funding Option	Revenue Estimate
Jet Fuel Excise Tax - \$0.01 Increase	\$283,700

¹ Aircraft operated in this State that is owned or controlled by a resident of this State is subject to an excise tax computed as follows 9 mills on each dollar of the maker's average equipped price for the first or current year of model; 7 mills for the 2nd year; 5 mills for the 3rd year; 4 mills for the 4th year; and 3 mills for the 5th and succeeding years.

Eliminating AvGas Fuel Tax Rebates – 100%	\$24,000
Gaining Aircraft Excise Tax – 100%	\$240,000
Appropriation from General Fund – 1% of 2018 Unassigned Balance	\$1,697,000
Specialty License Plate Revenue – 4,500 plates	\$45,800
Total Estimated Annual Potential Funding Impact	\$2.3M

Source: McFarland Johnson Analysis.

This does not include any estimate from gaining revenue from state rental car taxes for receipts generated by airports, or any gains realized from changes to tax policy on aviation-related exemptions.

1.3. THE STATE AVIATION SYSTEM PLAN: A PATH TO THE FUTURE

Considering the comparisons of MaineDOT aviation to peer state programs highlighted here – especially the trailing position the DOT currently maintains – much of what comes from the updated SASP rests substantially upon the state’s willingness to provide expanded funding for MaineDOT aviation. As described, there is significant disparity between how MaineDOT manages, serves, and funds state airports compared to its peers, and it stands to reason that the state would benefit significantly from increased staffing, improved breadth of expertise and capabilities, programs and services for airports in the state, and funding for capital projects.

In light of the identified gaps, it appears that existing funding and staff activities represent the structural limit of programs and services that can be offered by the existing MaineDOT aviation program. As such, fulfilling recommendations of the SASP may be difficult to implement without a commensurate increase of funding resources enough to advance material change for airports and communities in need of support and improved airport facilities and aviation services.



Such an initiative should rely on a sound business case, and the completed SASP (projected to conclude Phase II in Fall 2021) will provide a number of key components to building that case, which are:

- A determination of Maine systemwide airport needs in the context of meeting defined public objectives;
- An estimate of the capital, operating and maintenance costs associated with those needs;
- Recommendations for the State’s role and staffing, functions, and funding needed to meet those needs;
- Recommendations for funding the long-term operating needs of MaineDOT aviation and the statewide system of airports;
- Practical metrics and technology tools for evaluating performance over time; and,

- Strategies that might best position the state to attract private investment.

These components align with the goals of the MaineDOT SASP, which are:

Key Goals	
	Understand current and future potential aviation system contributions to meeting expressed societal needs sufficiently to inform the following question: <i>What compelling public value justifies what degree of state and federal investment toward what end?</i>
	Use <i>realistic, fiscally constrained life-cycle analyses</i> to foster the development of right-sized facilities affordable for sponsors and investment partners.
	Identify and <i>justify necessary and desirable system management functions</i> , including who should perform them and how they should be financed.
	Identify <i>trends, gaps, opportunities and prioritized recommendations</i> for nurturing key system components, including aviation workforce development.
	Develop <i>meaningful and practical metrics to track condition</i> , utilization and performance of the airport system.
	Recommend <i>strategies to leverage public investments to generate private investments</i> and public policies that support a safe and efficient airport system.

Source: MaineDOT.

Appendix F: Washington County Evaluation

Technical Memorandum

TO: *Maine SASP Project Team; MaineDOT Bureau of Planning*

FROM: *McFarland Johnson, Inc.*

DATE: *July 12, 2021*

SUBJECT: *FINAL – Task 7.4 Washington County Regional Analysis*

PURPOSE

Since the mid-1990’s, as described in the previous State Aviation System Plan (2006 Plan), community leaders in the Central Washington County and Cutler/Machias Valley area have recognized the need for improved airport infrastructure. The questions of deficiency in the Down East Region gained momentum with the conclusion of the 2006 Plan, which recommended an airport to replace Machias Valley because the existing facility was too constrained to meet system performance goals for the airport. In the years that followed, prospective locations were studied but ultimately stalled due to a combination of factors, including a price tag of roughly \$25 million

Today, questions and uncertainty about current and future need of the public for airports and aviation in Down East Region remain. This section of the Maine SASP provides a fresh look at the issue.

FINDINGS FROM 2006 MAINE AVIATION SYSTEM PLAN

To understand the deficiency documented in Washington County by the 2006 Plan, it is crucially important to describe the methodology that produced the idea. A robust study, the 2006 Plan assigned each general aviation airport in the system at that time into one of four categories based upon the role each airport played in meeting the State’s aviation needs. Each category, referred to a “level”, was attributed with a desired set of airside and landside facilities and service characteristics that served as objectives for airports within each category to meet. Each Level was characterized by the following facilities:

Level	Design Group	Runway (LxW)	Taxiway	Approach	FBO	Fuel
I	B or C	5,000+ x 100	Full	Precision	Full	Jet A
II	B	3,500 - 4,999 x 75	Partial	Non-Precision	Limited	100LL
III	B and A	2,500 - 3,499 x 60	Turnaround	Visual	N/A	N/A
IV	A	< 2,500	None	Visual	N/A	N/A

Source: 2006 Plan.

These Levels and their respective facility and service objectives provided a framework of metrics to determine the performance of the existing system and provide a list of improvements goals for existing and future system. The 2006 Plan categorized Washington County airports¹ as follows:

- Deblois Flight Strip – Level IV
- Eastport Municipal – Level III
- Machias Valley – Level IV
- Princeton Municipal – Level IV

Additionally, the 2006 Plan incorporated performance benchmarks to serve as tests of the statewide system’s adequacy. One such performance benchmark was the location of a Level I Airport within a 30-minute drive of each of the 29 Primary Service Centers as identified then by State Planning Office. At the time of the 2006 Plan, Calais, Machias, and Milbridge in Washington County were three primary service centers not within a 30-minute drive to a Level I Airport, among others. **Figure 1** is from the 2006 Plan that illustrates the lack of geographic proximity of these Primary Service Centers to a Level I Airport.

Figure 2 is an exhibit from the 2006 Plan that illustrates the proposed elevation of some airports’ existing Levels to address these geographic gaps. Among airports identified for an upgrade to their role is Machias Valley, which is identified to move from a Level IV Airport to a Level I Airport.

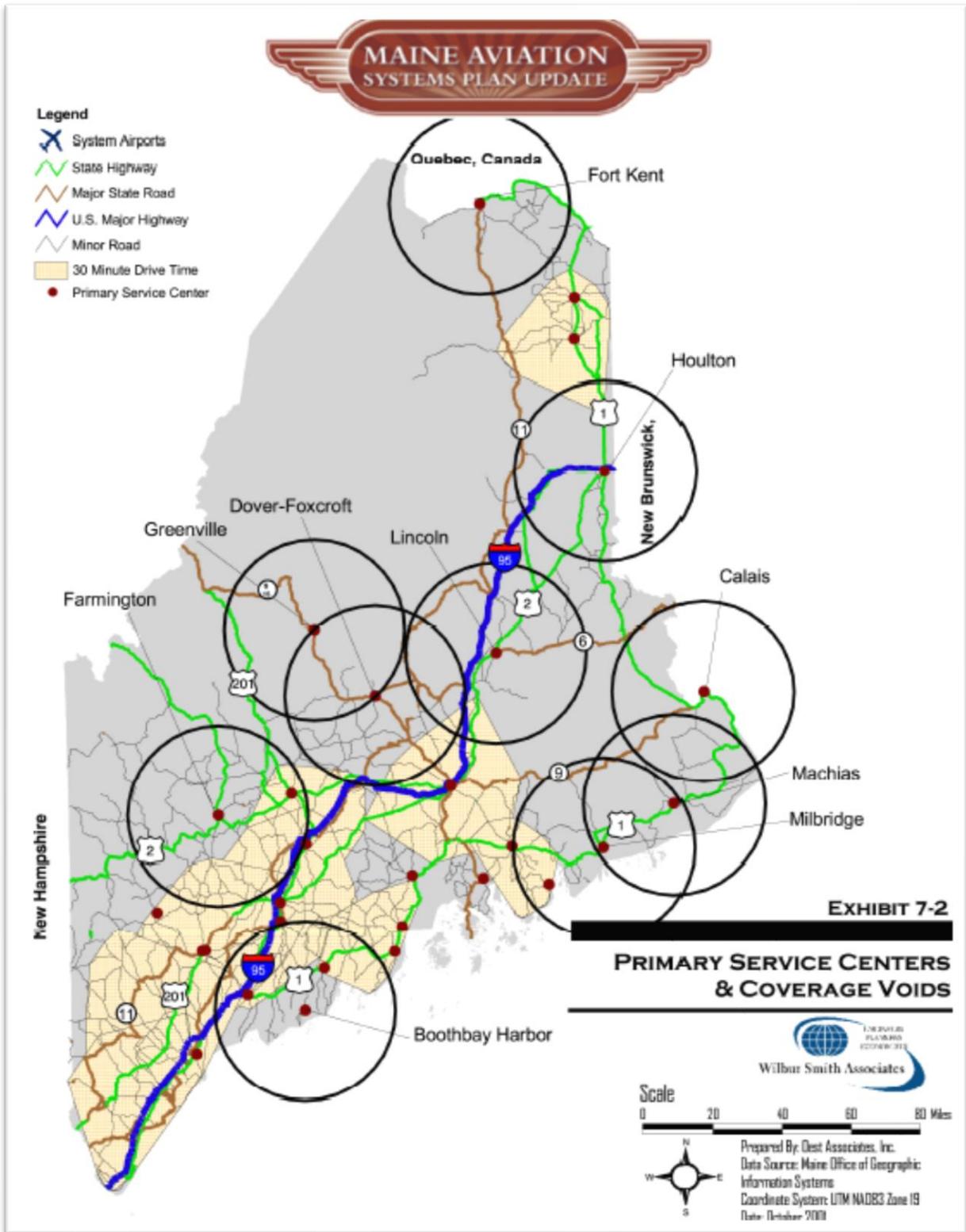
Prior to the completion of 2006 Plan, additional studies were undertaken (e.g. The Cutler Comprehensive Airport Study and Machias Valley Airport Site Assessment Study, Environmental Assessment, Master Plan for the replacement airport), that built momentum and interest in building the new airport in Washington County.

Importantly, while the methodology used in the 2006 Plan is somewhat reasonable, the recommendation for a replacement airport was an answer to a very specific question predicated on the primacy of one system-level performance benchmark. This performance benchmark – 30-minute geographic proximity to primary service centers – did not incorporate consideration that a sufficient volume of demand by current and prospective users of aircraft requiring Level I airport facilities might be present. Additionally, even if sufficient demand may exist during peak periods from spring through autumn months, drop-offs in activity during the winter or even the facility conditions during winter months could jeopardize justification for a Level I facility as described in the 2006 Plan by traditional metrics such as 500 annual operations to be considered critical design aircraft for such an airport, which is relied upon by the Federal Aviation Administration (FAA).

Finally, Figure 2 illustrates that the 2006 Plan recommended five other airports be upgraded to Level I facilities – two of which (Central Maine and Millinocket) were Level III airports. The recommended change in Level and associated facilities and services requirements to meet those objectives did not incorporate justification for aircraft and operator demand

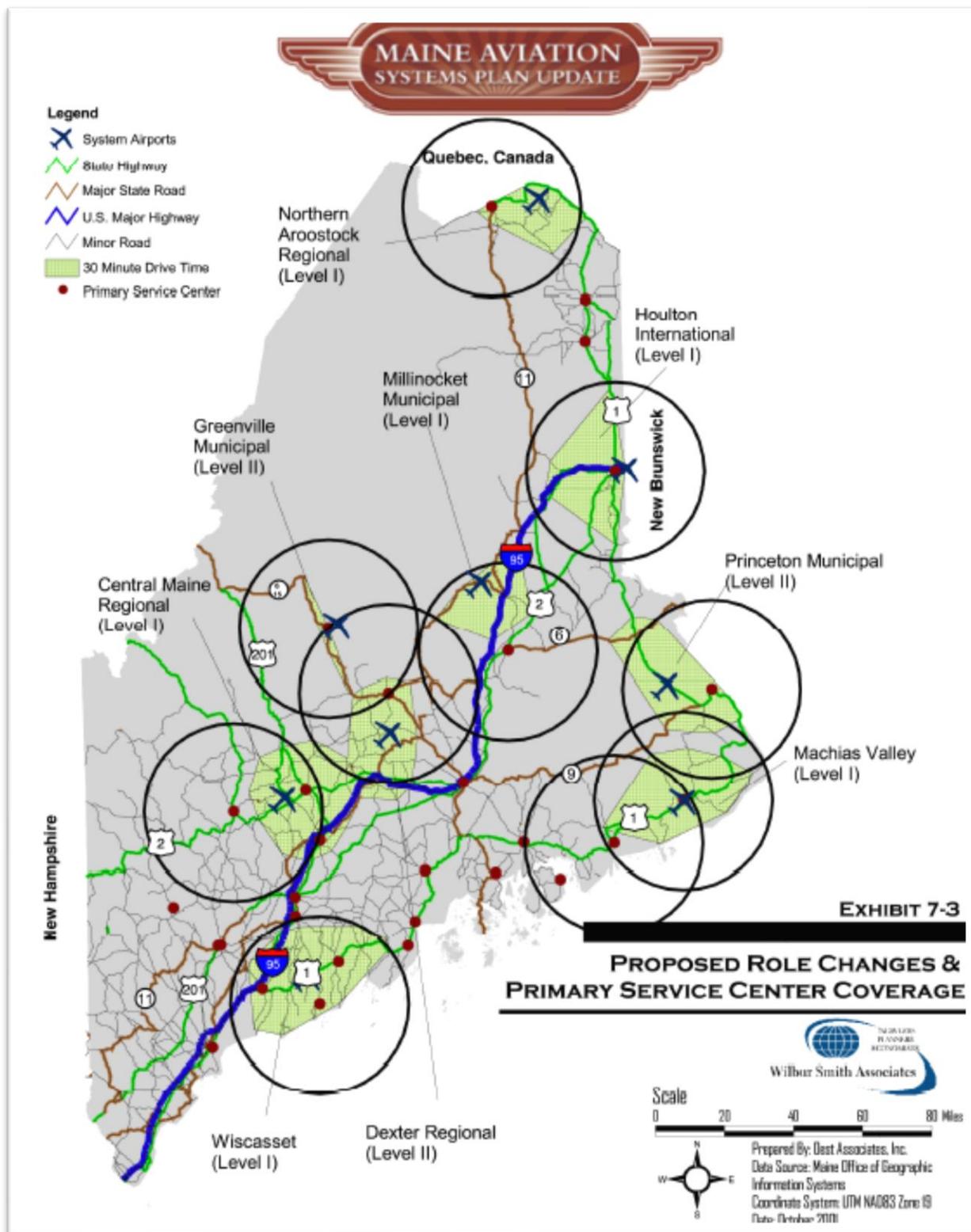
¹ The 2006 Plan included Lubec Municipal Airport, which is no longer in the NPIAS.

Figure 1: 2006 Plan – Primary Service Center Coverage Voids



Source: 2006 Plan

Figure 2: 2006 Plan – Proposed Airport Role Changes



Source: 2006 Plan.

Conversations with MaineDOT indicate that such recommendations brought about funding of projects that were not as strongly justified by demand as otherwise would have been desired or documented in a Master Plan.

This review of the 2006 Plan and these recommendations provides context for understanding the recommendation for a new airport in Down East Maine and makes clear the need to re-cast existing and future needs for airports in Washington County from a new perspective.

Two of the six goals described in Chapter 1., Introduction, of this Maine SASP update guide this fresh look at Washington County airports:

- Identification of a compelling public value that justifies investment by state and federal sources; and,
- Use of realistic, fiscally constrained analysis to foster development of rightsizing of facilities.

In this way, the Maine SASP update is infused with a bias toward practical, implementable recommendations versus the pursuit of large, long-term capital projects that may be unattainable in the current state and Federal funding environment. The challenge of operating and maintaining aviation facilities and services is also in focus, as is considering the return on public investment that will stimulate private investment and economic activity.

A FRESH LOOK: WASHINGTON COUNTY & DOWN EAST MAINE'S AIRPORTS

This section of the SASP takes a fresh look at existing SASP airports in Washington County (Eastport Municipal, Machias Valley, and Princeton Municipal), and folds in consideration of Deblois Flight Strip, a State-owned facility. Deblois Flight Strip is not included in the NPIAS and therefore does not make a significant contribution to the National Airspace System or a defined role by the FAA's report, *General Aviation Airports: A National Asset*, 2012. (ASSET). However, as a public-use facility in the region that is owned and operated by the State, the airport is included in this analysis as an option for improving access in the region.

The approach utilized is described and presented in the following sections:

- Problem Statement
- Summary of Existing Facilities, Roles & Functions
- Airport Manager Outreach Findings: Surveys, Interviews & Site Visits
- Stakeholder Outreach Findings: Washington County Officials & Key Local Representatives
- A Compelling Public Value & Need
- Gaps & Opportunity
- Recommendations
- State & Maine DOT Role

Problem Statement

Access to Washington County is challenging, due to the topography and distance between the next-closest and larger Cities of Bangor and Ellsworth to the easternmost locations of Princeton and Eastport. The drive from Bangor to Princeton along State Route 9 is over 90 miles and 1½

hours, and the distance from Ellsworth to Eastport is 100 miles and more than two (2) hours' drive. These roadways – ME9 and U.S. 1 – are a lifeline connecting communities of people and business to services available in Maine and the world. So too are Washington County public use airports.

The problem under consideration is not just that the area is remote and at times difficult to access, or that poor weather exacerbates such issues. Washington County airports already play a key role in supplementing long drives, overcoming time and distance to connect important local businesses and residents under normal circumstances and in acute situations (i.e., natural or medical emergencies). These are known issues.

The problem to be assessed is who or what private or public interests are best positioned to elevate the role airports fill to improve access and have an impact, because existing public-use airports are an option for improving access and connectivity for these communities.

Summary of Existing Facilities

Table 1 summarizes each airport's role, the date of most recent Airport Layout Plan (ALP), and top three (3) functions as reported by the Airport Managers during interviews in Summer 2020.

Table 1: Washington County Airport Roles & Functions

Airport	NPIAS/ ASSET Role	Top 3 Functions	Master Plan ^{2/}
Deblois Flight Strip	N/A	Remote/Critical Community Access Aviation Specific Activities Commercial/Industrial/Economic Activities	N/A
Eastport Municipal ^{1/}	GA / Basic	Remote/Critical Community Access Aviation Specific Activities Commercial/Industrial/Economic Activities	2007
Machias Valley	GA / Basic	Remote/Critical Community Access Emergency Preparedness & Response Commercial/Industrial/Economic Activities	2015
Princeton Municipal	GA / Basic	Emergency Preparedness & Response Remote/Critical Community Access Commercial/Industrial/Economic Activities	2003 ^{3/}

Sources: FAA National Plan of Integrated Airport Systems (NPIAS), 2019-2023, October 2018.

Airport Manager Interviews, 2020.

Maine Department of Transportation, Bureau of Planning, 2020.

^{1/} Airport Manager ranked all functions as number one. Ranking shown provided by McFarland Johnson for the purpose of this analysis.

^{2/} Master Plan Date refers to date of FAA signature approval.

^{3/} Princeton's most recent ALP (June 2015) has not been signed by the FAA.

As indicated, Deblois Flight Strip does not have a current ALP and there are no immediate plans on record for expansion by the State. Improvements to the facility are limited to ongoing pavement maintenance and regular inspections and brooming to ensure a safe, usable runway.

The functions shown for each Airport are general descriptions of those described by the FAA in the ASSET. Additional details of the activities within each function are shown in **Figure 3**.

Figure 3: Types of Aeronautical Functions Serving Public Interest

<p>Emergency Preparedness and Response</p>	<ul style="list-style-type: none"> ▪ Aeromedical Flights ▪ Law Enforcement/National Security/Border Security ▪ Emergency Response ▪ Aerial Fire Fighting Support ▪ Emergency Diversionary Airport ▪ Disaster Relief and Search and Rescue ▪ Critical Federal Functions 	
<p>Critical Community Access</p>	<ul style="list-style-type: none"> ▪ Remote Population/Island Access ▪ Air Taxi/Charter Services ▪ Essential Scheduled Air Service Cargo 	
<p>Other Aviation Specific Functions</p>	<ul style="list-style-type: none"> ▪ Self-Piloted Business Flights ▪ Corporate ▪ Flight Instruction ▪ Personal Flying ▪ Charter Passenger Services ▪ Aircraft/Avionics Manufacturing/Maintenance ▪ Aircraft Storage ▪ Aerospace Engineering/Research 	
<p>Commercial, Industrial, and Economic Activities</p>	<ul style="list-style-type: none"> ▪ Agricultural Support ▪ Aerial Surveying and Observation ▪ Low-Orbit Space Launch and Landing ▪ Oil and Mineral Exploration/Survey ▪ Utility/Pipeline Control and Inspection ▪ Business Executive Flight Service ▪ Manufacturing and Distribution ▪ Express Delivery Service ▪ Air Cargo 	
<p>Destination and Special Events</p>	<ul style="list-style-type: none"> ▪ Tourism and Access to Special Events ▪ Intermodal Connections (rail/ship) ▪ Special Aeronautical (skydiving/airshows) 	

Source: *General Aviation Airports: A National Asset, 2012*.

The ability to conduct these types of operations at each Washington County airport is important and sometimes vital to each pilot, business, and other private or public agency and their mission, and the value of these functions to the public interest is self-evident.

Table 2 summarize key facilities at each airport which affect the types of aircraft and conditions under which access to the Down East Region is facilitated by these airports.

Table 2: Washington County Airport Facilities

Airport	Runway	Runway Design Code Existing/Future	Approach Type / Best Minimum	On-Site Weather
Deblois Flight Strip	4,500 x 75	B-II	RNAV 820 @ 1 mi.	No
Eastport Muni	4,002 x 75	B-I / B-I	RNAV 378 @ 1 mi.	AWOS-AV
Machias Valley	2,880 x 60	A-I / A-I	RNAV 940 @ 1 mi.	AWOS-AV
Princeton Muni	4,007 x 75	B-I / B-II	RNAV 640 @ 1 mi.	AWOS-AV

Source: Airport Master Plans.

As shown in Table 2, Deblois Flight Strip has the longest runway in the region and meets B-II design standards. Machias Valley has the shortest runway and most restrictive minimums. Deblois is the only airport without on-site weather reporting equipment. All airports have GPS approaches. Eastport Municipal has the lowest minimums at one mile.

The Runway Design Code (RDC) of the Washington County airports represents the type of aircraft by size and approach speeds that are best suited. **Table 3** lists the types of aircraft that each airport is designed to accommodate when conditions meet approach minimums or better.

Table 3: Representative Critical Aircraft by Airport

Aircraft Approach Category & Design Group			Representative Aircraft Models	
B		A-I		
B-II	B-I			
Deblois Flight Strip	Eastport Municipal & Princeton Municipal	Machias Valley	Cessna 150 & 172	
			Beechcraft Bonanza	
			Mooney M20	
			Piper Cherokee, Seneca, Malibu	
			Cirrus SR-20/22	
			Cessna 182/402/421	
	Deblois Flight Strip	Deblois Flight Strip	Deblois Flight Strip	Beechcraft Baron
				Embraer Phenom 100/300
				Learjet 28/29
				King Air Super King Air 300
				Cessna Citation 550/650/Mustang/XLS
				Beechcraft C99 Airliner
				Dassault Falcon 20/50

Source: McFarland Johnson, Inc.

As shown, Machias Valley has the shortest runway and is designed for small, single-engine piston aircraft. Eastport and Princeton are designed for the safe operation by B-I aircraft such light twin-engines (Cessna 402 and Beechcraft Baron), light jets like the Embraer Phenom. Deblois Flight Strip's longer runway is designed for use by large twins (King Air 300, C99) and mid-size jet aircraft like the Falcon 50 or Citation XLS.

Importantly, these aircraft are a representative list of those for which the airports are designed to accommodate. This list should not be construed to include an exhaustive list of all aircraft that can utilize these airports on any given day under good weather conditions. Aircraft owners, operators, and their chief pilot and/or dispatchers conducting flight planning activities are those who decide ultimately which airports can meet their needs based on their weight for the flight and aircraft operating requirements. For example, Machias Valley is used by B-I and B-II aircraft at times under good conditions – the Airport Manager and Project Team has observed jet and multi-engine aircraft operating there. However, poor weather or flying conditions make Machias Valley not usable consistently or year-round.

Airport Manager Outreach Findings: Surveys, Interviews & Site Visits

As described in *Chapter 3., Summary of Existing System*, surveys completed by and interviews with Airport Managers provided insights into the existing operating characteristics of each SASP airport in Washington County, as follows:

- **Deblois Flight Strip (43B):** Located along State Route 193 between Beddington and Cherryfield, in the middle of a large rural, undeveloped area of the county known for agricultural use for blueberry barrens and a large peat farm. Owned by the State of Maine, Deblois Flight Strip was constructed in 1942 for military training purposes until it was turned over to the State. The airport is unattended, offers no support facilities such as an aircraft parking apron, terminal, or services such as fuel.

Deblois Flight Strip	
Challenging Issues to Maintain	<ul style="list-style-type: none"> • Minimal use • Regular funding for maintenance and repair stopped (previous administrator)
Facility Needs	<ul style="list-style-type: none"> • Runway in need of significant reconstruction and repair
Transient Operators	<ul style="list-style-type: none"> • Occasional use by executives of one (1) blueberry business • Occasional training by U. of Maine (Augusta) aviation program • Previous use by State Departments of Inland Fisheries & Wildlife, Agriculture, Conservation & Forestry
Attractions	<ul style="list-style-type: none"> • None

Source: Maine Department of Transportation, Bureau of Planning, 2020.

As listed, activities at Deblois include occasional operations by a variety of public and private interests such as LifeFlight, Air National Guard and other private pilot training (touch-and-go’s). Occasional use of the facility by executives of local agricultural business, and past use includes, a Civil Air Patrol youth educational event, private meetups for power paragliding users, and even drag-racing. There is one privately-owned hangar on the airport whose ground lease has expired and is now month-to-month.

Discussions were held with Wyman's and Cherryfield Foods regarding their level of interest in the airfield. Neither have sufficient use interest to take on maintenance costs. The Town of Deblois municipal officers expressed willingness to discuss the Town taking on

ownership of the facility but likewise have no resources with which to maintain it. Legal research must be done by MaineDOT regarding the conditions by which it acquired the airfield to confirm the options for legal transfer and discontinuation of aviation use. No compelling public aviation use need was identified to justify continued maintenance. However the airstrip must be kept safe for aviation use as long as it remains open, necessitating pavement sweeping and asphalt maintenance.

- Eastport Municipal (EPM):** Located in the easternmost city in the United States, EPM serves as a port of entry with on-call U.S. Customs and Border Protection/Federal Inspection Services for international flights. Facilities include several hangars and GA terminal with flight planning and wi-fi. Downtown Eastport has charm attractive for tourism, and a naturally deepwater seaport with overseas shipping and international travel to Canada. The runway is long enough to accommodate use by some jet aircraft. Additional information provided includes:

Eastport Municipal	
Challenging Issues to Maintain	<ul style="list-style-type: none"> Approach obstacle/clearance Complying with Maine DEP Stormwater Regulations^{1/} Restrictions in the current AIP book regarding needed funding items
Facility Needs	<ul style="list-style-type: none"> Runway rehab including all lighting (slated for 2020) Improving AWOS to be fully integrated with the National Weather System with all functions FAA approved.
Transient Operators	<ul style="list-style-type: none"> Net Jets Air Charter – Jet Aircraft – 3 Arrivals/Week
Attractions	<ul style="list-style-type: none"> Whale Watching, Fishing, Boating, Festivals

Source: Airport Manager Surveys, 2020.

^{1/} Addressed in 2020 using local funds and AIP grant, respectively.

Activities at EPM include operations by U.S. Fish and Wildlife, search and rescue by the Civil Air Patrol/U.S. Coast Guard (also utilize fueling), and aero-medical operations by LifeFlight. Other operators include Net Jets/Wheels Up charter flights to Canada, and local executive travel. Additionally, the Airport Manager at EPM provides flight instruction and there is also maintenance offered on-airport. The Eastport Airport Association also holds fly-ins and fundraising events. Non-aeronautical use of five-acre parcel for storage by the Port Authority.

- Machias Valley (MVM):** Situated along U.S. Route 1 about one (1) mile west of Machias town center and the University of Maine, MVM provides a vital transportation link for medical transports, business travel, real estate sales, and personal access to the area. Used by Maine Forest Service, Civil Air Patrol, and the blueberry industry. Additional information provided includes:

Machias Valley	
Challenging Issues to Maintain	<ul style="list-style-type: none"> • Snow removal • Keeping a windsock from shredding in the coastal winds • Historical concerns of public regarding groundwater contamination
Facility Needs	<ul style="list-style-type: none"> • Longer runway • Fuel services • Hangar space
Transient Operators	<ul style="list-style-type: none"> • Auto Parts Business • Maine-Based Banking Institutions • Insurance Agency
Attractions	<ul style="list-style-type: none"> • Cutler Bold Coast Trails • Roque Bluffs State Park

Source: Airport Manager Surveys, 2020.

Activities at MVM include Maine Forestry Service, a small/independent charter operator, and an architect from the Biddeford area. Additionally, there are regular (weekly) operations by traveling nurses and doctors to provide scheduled healthcare/surgical procedures due to lack of nurses and doctors in the region. There is also glider activity and interest/use by affluent individuals due to attractive coastal real estate. The Airport Manager recounted spikes in activity where 17 aircraft (including jet aircraft) can be observed parked on the apron. Jet traffic was validated during Project Team visit where several jet aircraft were parked at MVM.

- **Princeton Municipal (PNN):** The northernmost airport in the Down East region, PNN is an unattended facility owned by the Princeton Regional Airport Authority and located in the Town of Princeton, which is along U.S. Route 1 north from the Town of Calais in eastern Washington County. The facility provides a terminal building, flight instruction, 100LL fuel, and on-call U.S. Customs and Border Protection/Federal Inspection Services. Additional information provided by the Airport Manager includes:

Princeton Municipal	
Challenging Issues to Maintain	<ul style="list-style-type: none"> • Qualified/trustworthy workforce for volunteer airport authority • Cannot afford to pay for mowing, plowing • Limited funding from towns/other sources for operating expenses
Facility Needs	<ul style="list-style-type: none"> • FBO hangar • Jet A tank • Tractor for mowing
Transient Operators	<ul style="list-style-type: none"> • Construction Business – 2 Arrivals/Week • Charter flights service for local camps and mill executives
Attractions	<ul style="list-style-type: none"> • West Grand Lake • Grand Lake Stream

Source: Airport Manager Surveys, 2020.

Activities at PNN are driven by recreation (five nearby sporting lodges) and Woodland Pulp, and St. Croix Tissue, which are located about 10 miles south of the airport in Baileyville. Sales and technical staff utilize the airport several times annually to visit mill and go to Canada. PNN is also the closest runway to Calais Regional Hospital, serving as the landing site for LifeFlight on a regular basis. Additionally, the airport is within two (2) miles of the Passamaquoddy Indian Township Reservation Tribal Building, which supports and utilizes the airport to bring investors to the area to finalize plans for a water bottling plant. The Airport Authority is comprised of residents from Princeton, Calais, Baileyville, and the Tribe has shown interest in joining. A construction contractor that supports Woodland Pulp facilities utilizes the Airport and keeps a vehicle there, and the airport also sees activity from Maine Forest Service, the Department of Inland Fisheries and Wildlife, Maine Air National Guard helicopters, and Angel Flights for local medical treatment services.

A Compelling Public Value & Need

Based on the types of aeronautical functions serving the public interest Washington County airports provided by Airport managers on surveys and during interviews, it is clear that these airports provide a critically valuable resource to their communities and the State. In contrast to the regions that stretch from the Southern Maine Coast through the Portland area and the Midcoast up to Bangor, these airports represent the *only* alternative to long drives west along U.S. Route 1 from east of Machias to Ellsworth or State Route 9 from Calais to Bangor. In the more densely populated areas of the state, where surface roads and Interstate 95 threads together communities, people, and business, there are also more airports to serve higher volumes of activity and more sophisticated users and aircraft. It is in these areas where use by commercial/economic interests or larger aeronautical operators and business may at times garner more attention in terms of volume or complexity. However, maintaining a remote facility on a shoestring budget with extremely scarce resources might be the more impressive feat. It might also illustrate a set of circumstances that endangers the future of the Maine state aviation system.

Table 4 summarizes operating characteristics of these airports.

Table 4: Washington County Airports Operating Characteristics

Airport	Annual Budget	Average Annual AIP Match	Employees	Schedule
Deblois Flight Strip ^{1/}	\$ 10,000	N/A	(1) Part Time	Unattended
Eastport Muni	\$ 62,640	N/A	(1) Full Time / Unpaid Volunteer	Year Round / Part Time
Machias Valley	\$ 10,200	\$ 7,500	(1) Municipal Staff	Unattended
Princeton Muni	\$ 15,000	\$ 24,000	Volunteer	Unattended

Source: Airport Manager Surveys, 2020.

^{1/} The annual budget is the estimated maximum annual spent for brooming, crack-sealing, or asphalt repair work as provided by MaineDOT Region 4.

As shown in Table 4, the operating budgets of all four Washington County airports amounts to less than \$100,000 annually – an average of less than \$25,000 per airport, with Deblois, Machias Valley and Princeton Municipal budgets at less than half that average. The lack of funding resources

means three of the four facilities are unattended and are operated part time by sponsor employees or unpaid volunteers. In contrast, the average annual budget for all general aviation airports in the SASP is approximately \$205,500², and the average annual local match for FAA’s Airport Improvement Program (AIP) projects is roughly \$50,000, as reported by airport managers. This places Washington County airports at 14 percent of the average operating budget of all general aviation airports in the SASP.

AIP grants at Washington County airports are limited to just three eligible airports³, each of which have participated over the last 5 years. AIP grants totaled roughly \$15.14 million for the following projects. Projects shown for Eastport Municipal represents 2020 grant awards.

Table 5: Washington County Airports AIP Projects – 2015-2020

Airport	Project
Eastport Municipal	Reconstruct Runway
	Lighting Improvements
	Stormwater Drainage Improvements
Machias Valley	Reconstruct Runway
	Construct Terminal Building, Reconstruct Access Road
	Install Airport Beacons
Princeton Municipal	Construct Terminal Building
	Install Perimeter Fencing
	Reconstruct Runway - 15/33
	Remove Obstructions

Source: Federal Aviation Administration, Airport Improvement Program Grant Histories

Despite such limited local funding these communities require airports that can accommodate very disparate groups of users under a range of different conditions. Functions offered by these facilities and users can at times pivot quickly between providing critical landing sites in poor conditions to mitigating natural resource disasters, to hosting 24-hour emergency search and rescue operations and serving as a polished, well-equipped link for passengers and pilots using the airport for business and economic activity. This challenge is more acute for remote airports over those located in more populated areas of the state. Other SASP airports in larger communities with more robust road and highway infrastructure benefit from greater and faster access, more and regular Sponsor funding, a stronger tax base, diversity of business activity, and access to public and private capital – all of which produces a readiness that remote areas cannot replicate.

² Maine State Aviation System Plan, Appendix F., System Management Evaluation.

³ Deblois Flight Strip is not included in the NPIAS and is therefore not eligible to participate in the FAA Airport Improvement Program.

Table 6 compares the tax valuation for 2020 for Washington County SASP airport Sponsor communities, the County as a whole (including unorganized territory) and shows compound annual growth rates (CAGR) for the 5-year and 10-year periods.

**Table 6: State Valuation Trends Summary (000's)
Washington County & Down East Airport Communities**

Area	2010	2015	2020	CAGR (10 year)	CAGR (5 Year)
Deblois	\$46,300	\$42,950	\$36,500	-2.35%	-3.20%
Eastport	\$131,750	\$135,000	\$140,600	0.65%	0.82%
Machias	\$140,950	\$132,350	\$140,950	0.00%	1.27%
Princeton	\$56,150	\$59,900	\$60,400	0.73%	0.17%
Washington County ^{1/}	\$3,217,500	\$3,106,200	\$3,292,650	0.23%	1.17%

Source: Maine Department of Revenue, 2020.

^{1/} Not including unorganized territory.

As shown, the trend for these communities is basically flat over the last 10 years, with Deblois showing a continued decline in absolute taxable value while Eastport and Machias are showing modest improvements over the last five years. Taxable valuation in Princeton is still positive, but growth has declined about 75 percent of the previous 10-year rate. Among the four Down East towns, Deblois has the lowest valuation at barely 25 percent of Eastport and Machias. Together, airport sponsor towns represent barely 12 percent of municipal valuations in the County, and 10 percent when including the valuation of unorganized territory.

The town with the highest valuation in Washington County is Baileyville, with \$329.5 million in assessed value for 2020, with the next-closest in Millbridge, Lubec, and Stueben, which owe higher property valuations to large businesses such as Woodland Pulp and St. Croix Tissue in Baileyville, while valuations in Millbridge, in Lubec, and Stueben are driven by coastal real estate.

At the County level, Washington is second-to-last in valuation to Piscataquis County. **Table 7** compares valuations and trends at the County level for the Top 5 counties and Washington County.

The top 5 counties comprise 67 percent of the State’s property values, with Cumberland and York driving statewide growth over the last 5 years.

**Table 7: State Valuation Trends Summary (000’s)
Comparison of Top 5 Counties**

County ^{1/}	2010	2015	2020	CAGR (5 year)
Cumberland	\$41,772,500	\$39,379,600	\$50,417,650	5.07%
York	\$31,457,900	\$29,117,100	\$35,851,250	4.25%
Hancock	\$13,812,550	\$12,570,400	\$13,600,150	1.59%
Kennebec	\$10,253,150	\$9,955,450	\$11,244,950	2.47%
Penobscot	\$10,423,000	\$10,215,600	\$11,199,100	1.86%
Washington	\$3,217,500	\$3,106,200	\$3,292,650	1.17%
State	\$166,579,700	\$155,991,300	\$181,616,800	3.09%

Source: Maine Department of Revenue, 2020.

^{1/} Not including unorganized territory.

As a measure of economic health, the low property tax valuation for the County indicates that very economic activity occurs in the County, and is reflected in low levels of airport activity. The lack of accurate operational counts⁴ makes it difficult to evaluate activity levels or ascertain trends that might indicate growth or decline. *Chapter 4., Summary of Aviation Activity & Forecast* presents data and analysis that provides insights into current and future use of these airports. **Table 8** summarizes information from Chapter 4, including growth in activity of B-II or larger aircraft.

Table 8: Washington County Airports – Activity Forecast & Historical Operational Trend

Airport	Operations Forecast		Operational Trend 10-Year Average, B-II or Higher	
	Annual	Avg. Day	Total Annual	Growth Rate
Deblois Flight Strip ^{1/}	600	<2	10	7%
Eastport Municipal	2,887	8	24	4%
Machias Valley	1,736	5	6	9%
Princeton Municipal	1,841	5	20	11%

Source: McFarland Johnson Analysis, 2020.

As shown, Deblois Flight Strip is forecast to experience the lowest levels of activity annually, and Eastport Municipal the highest; however, average daily operations for every airport is less than 10. Common practice for estimating peaking characteristics applies a factor of two to estimate average day during peak seasonal periods, and the busiest hour during peak seasonal events might be estimated at 25 percent of the peak seasonal day. This means that Deblois Flight Strip’s peak

⁴ MaineDOT has a program that funds the installation of equipment that estimates operations by monitoring radio transmissions. As facilities without Air Traffic Control Towers, Washington County airports would benefit from use of these systems. Machias Valley and Eastport Municipal have the equipment installed but data collected or reported is infrequent and incomplete.

hour is one (1) operation, and Eastport Municipal might see five (5) operations during a peak event period.

Also shown in Table 8 is an indication of the total annual operations by B-II or larger aircraft based on data available from the FAA's Traffic Flow Management System Counts (TFMSC). Each airport in the region has experienced use by these larger, more sophisticated aircraft over the last 10 years; however, due to the low volume this use is infrequent and does not represent significant demand. A notable constraint to use by B-II or larger aircraft is the existing runway length.

The number and type of based aircraft at these airports also provides some insight into the use and activity at SASP airports in Washington County. As of September 2020, FAA records indicate that there are 30 aircraft registered in the County, all of which are under 12,500 pounds characterized by aircraft like the Cessna 150 or 172 model variants, Piper Cherokees, and Mooney M20. Most are registered to individuals; two are co-owned and four listed as ownership by corporations. **Table 9** indicates that only 14 aircraft are based at these airports today, which is a decrease of eight based aircraft among the same airports at the time of the 2006 Plan.

Table 9: Washington County SASP Airports - Based Aircraft Trends

Airport	Based Aircraft (Existing)	Type	Based Aircraft (Change since 2006 Plan)
Deblois Flight Strip	0	N/A	(1)
Eastport Municipal	9	Single Engine	4
Machias Valley	4	Single Engine	(4)
Princeton Municipal	1	Single Engine	(7)

Source: www.basedaircraft.com, August 2020.

Considering minimal sponsor-funding for operating expenses, Deblois Air Strip's inability to access AIP funding due to ineligibility, the static level of each community's local tax base, and the lack of based aircraft and activity volumes, it is apparent that Washington County airports face myriad obstacles to maintaining existing facilities or making improvements over the long term. These obstacles are intensified by the thresholds required by the FAA for inclusion in the NPIAS (i.e., 10 based aircraft), and use by critical aircraft (500 annual operations) that drive airfield facility standards and requirements at time when national and regional fleets evolves to larger, and more sophisticated aircraft.

Therefore, it is exactly *because* activity at these airports cannot translate into significant numbers of based aircraft and high volumes of traffic that the State's role may never be more apparent or justifiable. The loss of any of these airports would have a measurable and negative impact to existing users, the life safety of people and communities they serve, preservation of natural resources and public lands, local businesses, as well as the regional and state economy.

Achieving participation by all non-towered and general aviation airports and consistent collection of aircraft operations data over time can significantly improve the ability to monitor use and activity trends at SASP airports.

Gaps & Opportunity

The Washington County/Down East region represents a large geographic region with limited roadway access that presents obstacles for fast, convenient connections between people, business, and the work of many in the state. Maine weather conditions exacerbate the challenges of accessing these remote communities, and for people and business in those communities to connect to resources in Coastal and Central Maine. The State's system of public use airports is capable of closing this gap; however, funding and other resource obstacles make it difficult for individual local communities and airport sponsors to sufficiently attend to these issues alone. This represents a gap that the state may consider taking an interest in solving.

Looking long term, the Maine statewide aviation system may be degraded or lose the functional utility of these airports in Washington County by not maintaining or improving them. Faced with the reality of limited local funding resources to maintain and improve them, remote, rural, and poor areas with weak economies and limited resources – public and private - cannot produce a scale of economic output that can build momentum to attract, create, and infuse the capital necessary to maintain these facilities into the future. Over time the funding gap between other airports and Washington County airports will widen. The capability gap between the aircraft other airports can accommodate and Washington County airports as fleets change may also widen. Finally, the services gap between what other airports offer to changing demand or industry nuance will also change.

Despite very real challenges, opportunities exist that may be ripe for catalyzing growth in the region, and Washington County airports may play a central role in realizing these opportunities.

SUMMARY FINDINGS & CONCLUSION

As described in *Chapter 2, Stakeholder Outreach*, the Project Team conducted interviews and convened focus groups to discuss the unique needs and use of aviation by people, communities, and businesses in the Downeast or Washington County Region.

Despite the previous Maine system plan (2006 Plan) finding that that Washington County has a deficiency in aviation access, and that no long-term or concrete resolution was made in the interim period from that plan to this update (15 years), existing airport sponsors (Towns of Machias and Princeton, City of Eastport) do not have individually have sufficient capacity, funding, or broad support to take on the type of regional initiative necessary to address these needs beyond maintenance and improvements currently being considered for their own airport. County Government, the Washington County Council of Governments and Sunrise County Economic Council are now better informed regarding regional aviation assets and better prepared to make useful referrals to business and public safety interests. They will keep aviation in mind for any county-wide marketing efforts.

The Air Medical Focus Group confirmed the inability for LifeFlight's fixed wing aircraft to land in Machias, endangering patients needing rapid transport to specialized hospital facilities in and out of Maine. A solution being discussed with local support is building a crosswind runway long enough to accommodate the King Air 200. The Town and medical community could not fund this on their own. The FAA has already indicated that it cannot provide funding or support for a longer

runway in Machias based on its current regulations regarding runway length determinations. This suggests other public or private resources will be needed to address this outstanding need.

Summary notes from each focus group meeting are included in [Appendix A., Study Process Records](#) on page A-48