



Saratoga Town Council Regular Meeting

May 2, 2023

Shively Field Airport – Engineer of Record Update

Introductions

Mike Beckhoff, PE – Engineering Project Manager | Armstrong Wyoming State Program Manager

Mike will serve Saratoga in three vital roles: Planning Project Manager, Engineering Project Manager, and Wyoming State Program Manager. Your primary point of contact to provide guidance and perspective on all aspects of your projects. He will hold a complete understanding of your airport from project conception to completion.

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Jesse Fabula, C.M. – Client Manager

Jesse will ensure you receive the services, communication, and support necessary to accomplish your aviation goals – particularly regarding airport management support, grant support, and administrative duties.

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We are a full-service firm which means we are here to assist you with all airport-related projects, specifically planning and engineering. Additionally, we have a deep staff of airport experts that can advise on a variety of airport operation-related topics. Call us any time. We are here to help.

Airport Overview

Shively Field (KSAA) is a public-use, general-aviation airport, here in Saratoga, Wyoming. The airport serves a variety of General Aviation (GA) traffic, small and medium jet traffic, charter operations, fractional ownership, and large private jet traffic. Shively Field is both a community asset and an economic driver for the town, county, and region. It is utilized by residents, visitors, and tourists alike.

- Town of Saratoga – Airport Sponsor – Ultimate Authority
- WYDOT Aeronautics Division – classifies KSAA as a Business Airport – second-tier
- Federal Aviation Administration (FAA) – classifies KSAA as Basic - fourth-tier



Grant Funding and the Annual CIP Process:

FAA grants come in several forms, including FAA Airport Improvement Program (AIP) grants, competitive FAA grants such as State Apportionment and Discretionary grants, and uncommon supplemental or stimulus-type grants.

- FAA Grants are for Capital Projects – meaning new construction or maintenance of existing infrastructure. Not for operational expenses or maintenance.
- Bipartisan Infrastructure Law – BIL grants – Competitive ATP grants
- FAA Grants are 90% FAA funding and 10% match
 - 6% is covered by WYDOT
 - 4% is covered by the Town of Saratoga

WYDOT – Aeronautics Division Grants. WYDOT offers several grant types:

- Operational reimbursement grants – NAVAIDS and AWOS maintenance
- 6% match on all FAA grants
- Statewide pavement maintenance – asphalt fog seal and crack fill
- State and Local only projects – 90% WYDOT, 10% local match

The annual airport capital improvement (ACIP or CIP) process consists of listing out all airport capital projects for the coming ten years, establishing project estimates, and designating funding sources.

- Yearly opportunity to evaluate development priorities
- Mechanism to notify FAA and WYDOT for funding needs
- Next project is the 2024 Airport Master Plan
 - Master plans are long-range planning documents, and the CIP will be heavily updated after the completion of the master plan.



STATE OF WYOMING Airport Allocated WACIP Report

Saratoga - Shively Field											
Year	Federal Funds					State Funds			Total Local	Total Project	Percent Split (F/S/L)
	Entitlement	Apportionment	Discretionary	Misc Federal	Total Federal	Transportation	General	Total State			
Project Title: Conduct Planning Study, Master Plan						Project Number: ASA019			Priority Number: 57		Shovel Ready Year: 2023
Requested:											
2023	\$198,244	\$0	\$0	\$176,667	\$374,911	\$13,216	\$0	\$13,216	\$8,811	\$396,938	94.45 / 3.33 / 2.22
2024	\$0	\$0	\$0	\$53,062	\$53,062	\$0	\$0	\$0	\$0	\$53,062	100.00 / 0.00 / 0.00
Allocated:											
2022	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.00 / 0.00 / 0.00
2023	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.00 / 0.00 / 0.00
2023	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.00 / 0.00 / 0.00
2024	\$198,244	\$0	\$0	\$0	\$198,244	\$13,216	\$0	\$13,216	\$8,811	\$220,271	90.00 / 6.00 / 4.00
2024	\$0	\$0	\$0	\$226,000	\$226,000	\$15,067	\$0	\$15,067	\$10,044	\$251,111	90.00 / 6.00 / 4.00
Project Title: Construct GA Terminal						Project Number: ASA005			Priority Number: 56		Shovel Ready Year:
Requested:											
2024	\$0	\$0	\$0	\$0	\$0	\$60,000	\$0	\$60,000	\$40,000	\$100,000	0.00 / 60.00 / 40.00
2025	\$450,000	\$0	\$0	\$0	\$450,000	\$300,000	\$0	\$300,000	\$200,000	\$950,000	47.37 / 31.58 / 21.05
Allocated:											
2027	\$450,000	\$0	\$0	\$0	\$450,000	\$30,000	\$0	\$30,000	\$20,000	\$500,000	90.00 / 6.00 / 4.00
2028	\$0	\$0	\$0	\$0	\$0	\$270,000	\$0	\$270,000	\$180,000	\$450,000	0.00 / 60.00 / 40.00
Project Title: Seal Coat and Mark Pavements						Project Number: ASA014A			Priority Number: 69		Shovel Ready Year: 2026
Requested:											
2026	\$0	\$0	\$0	\$0	\$0	\$294,300	\$0	\$294,300	\$32,700	\$327,000	0.00 / 90.00 / 10.00
Allocated:											
2026	\$0	\$0	\$0	\$0	\$0	\$297,000	\$0	\$297,000	\$33,000	\$330,000	0.00 / 90.00 / 10.00
Project Title: Acquire Land, RW 23 RPZ						Project Number: ASA001			Priority Number: 67		Shovel Ready Year:
Requested:											
2027	\$150,000	\$0	\$0	\$0	\$150,000	\$10,000	\$0	\$10,000	\$6,667	\$166,667	90.00 / 6.00 / 4.00
Allocated:											
2028	\$150,000	\$0	\$0	\$0	\$150,000	\$10,000	\$0	\$10,000	\$6,667	\$166,667	90.00 / 6.00 / 4.00

A Full Introduction to Airport Master Plans

Airport Master Plan – What is it?

For many airport representatives, interested stakeholders, and the public at large, navigating the world of FAA requirements in relation to airport planning and design can be daunting. In order to assist those that may need a quick refresher as to what an airport master plan is and why it is done, we have prepared the following:

What is an Airport Master Plan?

Quite simply, an Airport Master Plan is an FAA-approved planning study that provides a comprehensive look at the current and future infrastructure and needs of an airport and provides a rationale and specific blueprint for future growth and development for up to 20 years. Some of the specific goals of a master plan are:

- To provide a graphic representation of existing airport features, future airport development, and anticipated land use.
- To establish a realistic schedule for the implementation of the proposed development
- To identify a realistic financial plan to support the development
- To validate the plan technically and procedurally through investigation of concepts and alternatives on technical, economic, and environmental grounds.
- To prepare and present a plan to the public that adequately addresses all relevant issues and satisfies local, state, and federal regulations.
- To establish a framework for a continuous planning process

Why is it being conducted?

Along with providing all airport stakeholders and interested parties with a detailed document highlighting the current and future utility and needs of the airport, an airport master plan document is one of the official tools that the FAA, the State and local governments use to plan and budget for future development at an airport. Although master plans provide planning for up to 20 years in the future, the FAA recognizes that things change, and under normal circumstances, a master planning effort is conducted at every federally eligible airport, usually at least every 10 years. An up-to-date airport master plan, along with a current airport layout plan, is usually required by the FAA prior to an airport being eligible for any development utilizing Federal Funds.

How much does it cost and who pays for it?

The cost of an airport master plan varies widely depending on the airport. While some airports are relatively small, with slow to moderate growth rates, others are extremely large and complex, with rapidly evolving changes. Generally, the cost for an airport master plan usually ranges from at least a couple hundred thousand dollars for a smaller facility, to well over a million for larger airports. Because it is an FAA-required project, the FAA contributes 90% of the funding, with the remaining 10%

shouldered by the airport sponsor, sometimes with assistance from the State (in this case, WYDOT Aeronautics would cover 6% of the total cost and the Town of Saratoga 4%).

What will the airport sponsor get as part of a master plan?

After the completion of an airport master plan, an airport sponsor will usually receive a bound study containing all the required elements of a master planning study, along with other specific elements, which may have been agreed to prior to the start of the master plan. Along with the bound study, many master plans include an electronic element in the form of a website, which will enable the general public to view the elements of the master plan. An executive summary of the study and its results is also usually provided as well. The FAA strictly controls most aspects of what can and cannot be included as part of an airport master plan. The document that guides the master planning process is the *FAA Advisory Circular 150/5070-6B*. This AC clearly states what elements are to be included in a master plan. Elements of a master plan study normally consist of the some or all of the following:

- 1) **Pre-planning** – The pre-planning process usually includes an Initial Needs Determination, Request for Proposal and Consultant Selection, Development of Study Design, Negotiation of Consultant Contract, and Application for Study Funding.
- 2) **Public Involvement** – Once the project starts, a public involvement program is begun to identify and document the key issues for various stakeholders and solicit input.
- 3) **Environmental Considerations** – A clear understanding of the environmental requirements needed to move forward with proposed projects in the recommendations.
- 4) **Existing Conditions** – An inventory of all pertinent airport data.
- 5) **Aviation Forecasts** – Forecasts of aeronautical demand for short-, medium-, and long-term time frames.
- 6) **Facility Requirements** – Assess the ability of the existing airport infrastructure, both airside and landside, to support the forecast demand. Identify the demand levels that will trigger the need for facility additions or improvements, and estimate the extent of new facilities that may be required to meet that demand.
- 7) **Alternatives Development and Evaluation** – Identify options to meet projected facility requirements and alternative configurations. Assess the expected performance of each alternative against a wide range of evaluation criteria, including its operational, environmental, and financial impacts. A recommended development alternative will emerge from this process and will be further refined in subsequent tasks. This will also aid in developing the purpose and need for subsequent environmental documents.
- 8) **Airport Layout Plans** – One of the key products of a master plan is a set of drawings that provides a graphic representation of the long-term development plan for an airport. The primary drawing in this set is the “Airport Layout Plan”. Other drawings are usually included as well, depending on the size and complexity of the individual airport.

- 9) **Facilities Implementation Plan** – Provides a summary description of the recommended improvements and associated costs. The schedule of improvements depends, in large part, on the levels of demand that trigger the need for expansion of existing facilities.
- 10) **Financial Feasibility Analysis** – Identifies a financial plan for the airport, describes how the sponsor will finance the projects recommended in the master plan, and demonstrate the financial feasibility of the program.

ARMSTRONG

THE AIRPORT MASTER PLAN PROCESS



DELIVERABLES



WORK PROCESSES



MEETINGS



GRANT
OFFER
AND
TASK
ORDER

SCOPING AND GRANT COORDINATION

ESTABLISH TECHNICAL
ADVISORY COMMITTEE (TAC)

ESTABLISH PUBLIC OUTREACH
PROGRAM



TAC MEETING #1
KICKOFF MEETING

INVENTORY

FORECASTS

WORKING PAPERS (WP)



WP
#1

FACILITY REQUIREMENTS



WP
#2

DEVELOPMENT ALTERNATIVES



WP
#3



TAC MEETING #2
PUBLIC MEETING
OPEN HOUSE

SELECT PREFERRED ALTERNATIVE(S)

KEY MILESTONE

FINANCIAL PLAN AND ACIP



WP #4
AND
DRAFT ALP

AIRPORT LAYOUT PLANS (ALP)



DRAFT
REPORT
AND
DRAWINGS

FAA AIRSPACE REVIEW



TAC MEETING #3
DRAFT REVIEW

FINAL DOCUMENTS



FINAL
REPORT
AND
DRAWINGS

PROJECT CLOSEOUT