



Baraboo-Wisconsin Dells Regional Airport

Airport Master Plan



Draft

AIRPORT MASTER PLAN

For

**Baraboo-Wisconsin Dells Regional Airport (DLL)
Baraboo, WI**

Prepared by



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Introduction

Baraboo-Wisconsin Dells Regional Airport (DLL) serves the City of Wisconsin Dells, the Village of Lake Delton, and Sauk County, Wisconsin region as a general aviation (GA) airport. The airport is part of a larger state- and nationwide system of airports that comprise the National Airspace System, connecting people and goods to larger economic markets. DLL is currently owned and managed by the Village of Lake Delton, while the daily operations of the airport are managed by a private fixed-base operator (FBO) that also provides aviation services and amenities to based and transient aircraft operators. Historically, the City of Baraboo was a co-owner (sponsor) of the airport but chose to withdraw from the partnership as of January 2023. The airport has a 5,010-foot-long asphalt runway with instrument approach procedures, a 2,746-foot-long turf crosswind runway, and robust landside facilities.

DLL is a vital transportation facility but also a key economic engine as it contributes to the local and state economy. According to a 2016 economic impact study completed by the Wisconsin Department of Transportation-Bureau of Aeronautics, the airport generates approximately \$4.4 million in payroll and \$14.7 million in sales and revenue annually. The Village of Lake Delton recognizes the value the airport brings to the community, and the airport master plan is evidence of this. With a sound and realistic development plan in place, DLL can maintain and grow in its role as an important link to the regional, state, and national air transportation systems.

ABOUT THE STUDY

WHAT IS A MASTER PLAN?

The Federal Aviation Administration (FAA) recommends that airports update their long-term planning documents every seven to 10 years, or as necessary to address local changes at the airport. This will be the first master plan for the airport in over two decades. The Village of Lake Delton, the Sponsor of the airport, received a grant from the Wisconsin Department of Transportation (WisDOT)-Bureau of Aeronautics (BOA)¹ to update the airport's master plan.

¹ WisDOT participates in the State Block Grant Program, administering Federal Grants from the Airport Improvement Program (AIP) for the FAA.

The airport’s Sponsor (Lake Delton) is responsible for daily maintenance as well as funding capital improvements at the airport. This includes obtaining Airport Improvement Program (AIP) and BOA development grants. In addition, Lake Delton must oversee facility enhancements and infrastructure development conducted by private entities at the airport. **The airport master plan is intended to provide a vision for how DLL should be developed, specific guidance for future development, and justification for proposed development projects** for which the airport may receive grant funding from the BOA/FAA.

An airport master plan follows a systematic approach outlined by the FAA to identify airport needs in advance of the actual need for improvements. This is done to ensure that the Sponsor can coordinate environmental reviews, project approvals, design, financing, and construction to minimize the negative effects of maintaining and operating inadequate or insufficient facilities. An important outcome of the master plan process is a recommended development plan, which reserves sufficient areas for future facility needs. Such planning will protect development areas and ensure they will be readily available when required to meet future needs. The intended outcome of this study is a detailed on-airport land use concept which outlines specific uses for all areas of airport property, including strategies for revenue enhancement.

The preparation of this master plan is evidence that the Village of Lake Delton recognizes the importance of the airport and the associated challenges in providing for its unique operation and improvement needs. The cost of maintaining an airport is an investment which can yield impressive benefits to the local and even greater regional community. With a sound and realistic master plan, the airport can maintain its role as an important link to the regional, state, national, and global air transportation system. Moreover, the plan will aid in supporting decisions for directing limited and valuable resources for future airport development. Ultimately, the continued investment in the airport will allow the Village of Lake Delton, and the region as a whole, to reap the economic benefits generated by previously completed investments and projects.

Figure iA summarizes what a master plan is and what it is not.

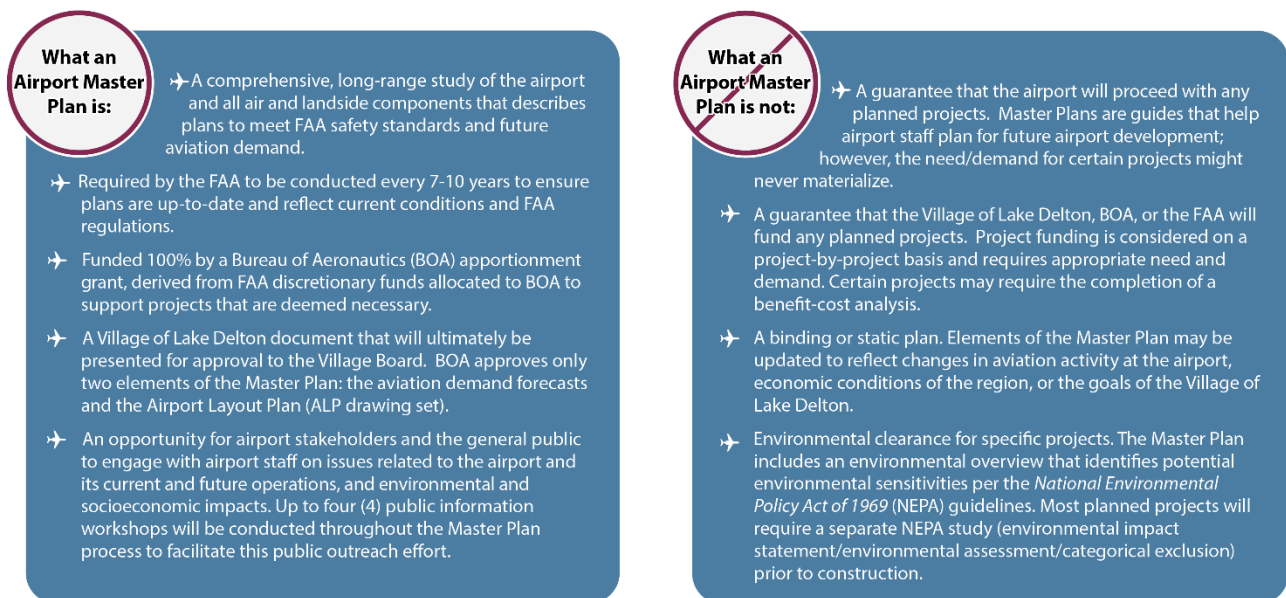


Figure iA: Master Plan Definitions

WHO IS PREPARING THE MASTER PLAN?

Through a qualifications-based selection process, the Sponsor has contracted with the airport planning firm Coffman Associates, Inc. to prepare the master plan. Coffman Associates is an airport consulting firm that specializes in master planning and environmental studies. Coffman Associates will lead the planning team, with support from Martinez Geospatial and Strand Associates. Martinez Geospatial is a survey and imagery company who will provide geographical mapping and Geographic Information System (GIS) survey data for use in the master plan process. Strand Associates is an engineering firm who will assist with field survey data and project cost estimating throughout the project.

The airport master plan will be prepared in accordance with FAA requirements, including Advisory Circular (AC) 150/5300-13B, *Airport Design* (as amended), and AC 150/5070-6B, *Airport Master Plans* (as amended). The plan will be closely coordinated between DLL, the Village of Lake Delton, BOA, and other local and regional agencies, as appropriate, while considering other relevant planning studies.

STUDY GOALS AND OBJECTIVES

The primary goal of this master plan is to develop and maintain a financially feasible, long-term development program, which will satisfy aviation demand of the region; be compatible with community development, other transportation modes, and the environment; and enhance employment and revenue for the local area. Accomplishing this goal requires an evaluation of the existing airport to decide what actions should be taken to maintain a safe, adequate, and reliable facility. **Figure iB** summarizes the objectives of this airport master plan.

MASTER PLAN OBJECTIVES	
<ul style="list-style-type: none"> • Develop strategic visions and mission statements to guide airport development/growth • Research factors likely to impact air transportation demand segments in the Baraboo-Wisconsin Dells region over the next 20 years • Determine the airport's current and future critical design aircraft • Analyze the airport's existing airfield system to determine if any deficiencies exist and correct areas of non-standard geometry • Evaluate highest and best uses of airport property for aeronautical development, including hangar expansion and maintenance facilities 	<ul style="list-style-type: none"> • Consider options for non-aeronautical development that could produce additional revenue streams for the airport • Develop a phased, demand-based 20-year Capital Improvement Plan • Produce an updated Airport Layout Plan drawing set, detailing future airside and landside development • Review future use and zoning of airport property, instrument approach areas, and nearby developments to ensure flight safety and land use compatibility is maintained

Figure iB: Objectives of the Master Plan

BASELINE ASSUMPTIONS

A long-range planning study requires several baseline assumptions that will be used throughout this analysis. The baseline assumptions for this study are as follows:

- DLL will continue to accommodate general aviation tenants, as well as itinerant and local aircraft operations by air taxi, general aviation, and military operators.
- The aviation industry will develop through the planning period as projected by the FAA. Specifics of projected changes in national aviation industries are described in Chapter 2, “Aviation Demand Forecasts.”
- The socioeconomic characteristics of the region will generally follow as forecast (Chapter 2).
- A federal and state airport improvement program will be in place through the planning period to assist in funding future capital development needs.
- A national/global economic and aviation industry recovery from the COVID-19 pandemic will occur over the course of the next several months and years.

MASTER PLAN ELEMENTS AND PROCESS

An airport master plan has eight elements that are intended to assist in the evaluation of future facility needs and provide the supporting rationale for their implementation. **Figure iC** provides a graphical depiction of the process involved with this study.

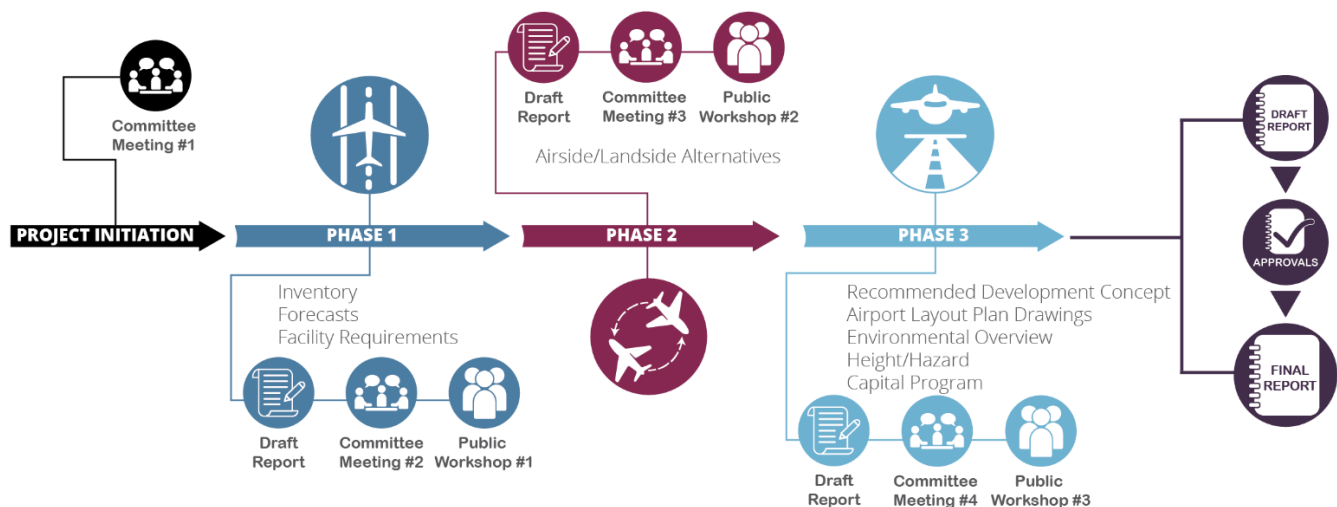


Figure iC: Master Plan Study Process

Element 1 – Initiation includes the development of the scope of services, schedule, and study website. Study materials will be assembled in a workbook format. General background information will be established that includes outlining the goals and objectives to be accomplished during the master plan.

Element 2 – Inventory is focused on collecting and assembling relevant data pertaining to the airport and the area it serves. Information is collected on existing facilities and operations. Local economic and demographic data is collected to define the local growth trends, and environmental information is gathered to identify potential environmental sensitivities that might impact future improvements. Planning studies that may have relevance to the master plan are also collected.

Element 3 – Aviation Demand Forecasts examine the potential aviation demand at DLL. The analysis uses local socioeconomic information, as well as national air transportation trends, to quantify the levels of aviation activity that can be reasonably expected to occur over a 20-year period. An existing and ultimate critical design aircraft are also established, based on AC 150/5000-17, *Critical Aircraft and Regular Use Determination*, to determine future planning design standards. The results of this effort are used to determine the types and sizes of facilities which will be required to meet the projected aviation demand at the airport through the planning period. The forecasts will be submitted to BOA for review and approval.

Element 4 – Facility Requirements determine the available capacities of various facilities at the airport, whether they conform to FAA design standards, and what facility updates or new facilities will be needed to comply with both the projected aviation demand and applicable FAA requirements.

Element 5 – Airport Development Alternatives consider a variety of solutions to accommodate projected airside and landside facility needs through the planning period. An analysis is completed to identify the strengths and weaknesses of each proposed development alternative, with the intention of determining a single direction for development.

Element 6 – Airport Plans/Land Use Compatibility involves coordination with airport staff and the Planning Advisory Committee (PAC) and will result in the selection of a recommended development concept. Airport layout plans will be developed to depict the recommended development concept. The drawings will meet FAA's Standard Operating Procedure (SOP), *Standard Procedure for FAA Review and Approval of Airport Layout Plans (ALPs)*, effective October 1, 2013. The updated ALP set will be included as an appendix to this master plan. The airport's noise exposure and land use compatibility will also be evaluated. An environmental overview will identify any potential environmental concerns that must be addressed prior to the implementation of the recommended development plan.

Element 7 – Financial Management and Development Plan analyzes the costs that may be associated with the development plan, with in-depth financial analysis to estimate the capital funds required from federal and state grant-in-aid programs. A 20-year capital program and development schedule that prioritizes projects will be established.

Element 8 – Final Reports and Approvals will include production of the draft final report and ALP set in print and digital form. These materials will be presented to the Sponsor, WisDOT, and the FAA for review and approval. Once approved, a final report will be prepared and made available in print and digital formats.

COORDINATION AND OUTREACH

This study is of interest to many within the local communities and region. This includes local citizens and businesses, community organizations, city officials, airport users and tenants, and aviation organizations. As a component of the regional, state, and national aviation systems, DLL is of importance to both state and federal agencies responsible for overseeing the air transportation system.

Draft working paper materials will be prepared at various milestones in the planning process. The working paper process allows for timely input and review during each step within the master plan to ensure that all issues are fully addressed as the recommended program develops.

To assist in the development of the airport master plan, a Planning Advisory Committee (PAC) has been established to act in an advisory role. PAC members will meet up to four times at designated points during the process to review study materials and provide comments to help ensure that a realistic, viable plan is developed.

In addition to the PAC meetings, two open-house public information workshops are also planned as part of the study coordination and outreach efforts. Workshops are designed to allow all interested persons to become informed and provide input concerning the master plan process. Notices of meeting times and locations will be advertised through local media outlets.

All draft working papers, reports, meeting notices, and materials will be made available to the public on a study-specific website (dll.airportstudy.net).