

Gallatin Field 2008 Master Plan Update Executive Summary

Introduction

The Gallatin Airport Authority started the 2008 Master Plan Update process in June of 2006 when they approved Morrison-Maierle, Inc. to provide an update to the 1993 Master Plan. The Master Plan Update was funded with Passenger Facility Charges. The recommendations contained in the Master Plan Update represent the views, policies, and development plan of Gallatin Airport Authority and do not necessarily represent the views of the Federal Aviation Administration (FAA). The FAA reviews all elements of a master plan to ensure that sound planning techniques have been applied. Acceptance of a master plan by the FAA does not constitute a commitment on the part of the United States to participate in any development depicted in the plan, nor does it indicate that the proposed development is environmentally acceptable in accordance with appropriate public law.

The 2008 Master Plan Update follows the requirements of FAAAdvisory Circular "Airport Master Plans" 150/5070-6B and is presented in six chapters, covering the planning period from 2008 to 2025. The primary objective of the Master Plan Update is to provide the Gallatin Airport Authority with a long term development plan which provides an efficient air transportation facility that meets the needs of the community. A new Airport Layout Plan was produced to display the development plan and is provided in the Appendix.

Inventory

Gallatin Field Airport is located in Gallatin County in the southwest part of the State of Montana. Gallatin County is the most populated and fastest growing county in scenic southwest Montana. The County Seat is Bozeman, which, at large, encompasses over 50,000 people. Gallatin Field Airport is one of fifteen commercial service airports in Montana and one of two airports in Gallatin County. The Airport serves not only the local citizens of southwest Montana but also many tourists who visit southwest Montana for the multitude of outdoor activities.

The Civil Aeronautics Administration financed construction of Gallatin Field in 1941 in order to provide a training school for pilots just prior to World War II. In 1941, the Airport had four runways. The 1940s heralded the beginning of the Airport's major construction era and included 5,200 feet of paved Runway 12-30, 5,100 feet of paved Runway 16-34, turf Runways 3-21 (4,700 feet) and 7-25 (4,700 feet), and Taxiways A and B. The apron and lighting on Runways 16-34, 12-30, and Taxiways A and B were also completed during the 1940s. A 35-foot by 75-foot quonset hut was built in 1947 as a temporary "depot" for Northwest Airlines, which began regular commercial service in June of that year. The Airport administration building was constructed in 1950 and served as the passenger terminal until 1977 when the existing terminal was constructed.

Gallatin Field now has three runways, the commercial service Runway 12-30, the crosswind Runway 3-21, and a turf Runway 11-29. The taxiways and taxilanes provide aircraft access to the Airport's four parking aprons, two fixed based operators, and over 70 private aircraft hangars.

Support facilities on the Airport include Aircraft Rescue and Fire Fighting (ARFF), airport maintenance and administration, and fuel storage. The commercial passenger facilities include the terminal building and parking facilities for passengers and employees. The existing terminal contains 74,000 square feet of space on two floors. Increased passenger numbers and security requirements have reduced the operating efficiency of the existing terminal. Since the 1993 Master Plan Update, passenger enplanements have increased 92% to 335,276 in 2007. Expansion of the terminal facilities is a top priority and one of the focuses of this Master Plan Update.



Forecasts

Forecasts of aviation, landside, and terminal activities are the foundation for decisions in airport planning. Projections help determine the need for new or expanded facilities. There are many variables that affect these forecasts. Major forces on aviation activity include both aviation related and outside factors at the local, regional, and national levels.

Forecasts of aviation activity are projected through the year 2025 in five year increments. As forecasts are estimates, it cannot be assured that the actual achievements will match the forecasts. Because of that, it is important that facilities be planned so construction can be phased when actual activity levels require the facilities.

Aviation forecasts included in the 2008 Master Plan Update cover the following areas:

- Commercial Service
 - o Annual Enplaned Passengers,
 - o Annual Operations,
 - o Fleet Mix.
- Annual Instrument Approaches
- Fuel Usage

- General Aviation
- Based Aircraft,
- o Local and Itinerant Operations.
- Air Taxi
- Air Cargo
- Military

Aviation activity was forecast using two methods: population based and trend analysis. The population-based forecasts were based on the Gallatin County Growth Plan. This plan projects 2% average annual growth through 2030. Population growth in recent years has been averaging 3%, therefore, the population based forecast was considered to be the low end forecast for the planning period. The trend analysis forecast looked at past levels of growth in aviation activity at Gallatin Field and shows that local aviation growth is affected by more than population. From 1995 to 2007, passenger enplanements have increased 80%, or 6% annually on average. 6% annual growth was forecast and is considered to be the high level of aviation activity.

The high and low forecasts were then compared with the FAA's Terminal Area Forecast. The FAA forecasts enplanements to grow at 3.5% on average annually for the planning period. By comparing the three forecasts, the Master Plan Update recommends that activity be forecast at an average annual rate of 5%. This rate would result in a doubling of the 2005 aviation activity at Gallatin Field by 2025. The recommended forecasts were reviewed and approved by the FAA.

Facility Requirements and Developments

Airside facility requirements included in the update looked at the essential facilities for the operation of aircraft. These essential facilities include runways, taxiways, navigational aids, and support facilities. Development alternatives have been displayed on the updated Airport Layout Plan (ALP) included in the Master Plan Update. Costs associated with the construction of the developments recommended are also included.

Significant airside facility developments that were not on the previous ALP include the following:

- Construction of high speed exit taxiways for Runway 12-30,
- Construction of a full length dual parallel taxiway.
- Construction of by-pass taxiways near the thresholds of Runway 12-30.
- Construction of an all-weather runway parallel to Runway 12-30.



Terminal facility requirements are also presented in the Master Plan Update. These facilities were analyzed based on the forecast passenger demand levels. Morrison-Maierle retained the aviation planning firm of Reynolds, Smith, and Hills, Inc. (RS&H) to assist in the terminal area planning. The space requirements for the terminal facilities were projected utilizing the forecast number of annual passengers and annual aircraft operations.

Six terminal schemes including access roads and parking areas were developed based on the space requirements developed. Each scheme was evaluated to determine how well it met the terminal facility requirements and the goals and objectives developed by the Gallatin Airport Authority. Analysis of the six schemes resulted in two refined schemes being created, a three sided "T" concept and a linear expansion west. The refined schemes were further developed into initial floor plans and preliminary cost estimates for comparison. The outcome of these comparisons resulted in the linear expansion west being the preferred option for development.

Financial Plan

Evaluation of the airport development needs based on forecast activity and operational efficiency were used in the formation of a recommended capital improvement plan. The plan outlines the costs associated with each development item and provides a timeline when the items will likely be undertaken. One of the most important elements of the master planning process is the application of basic economic, financial, and management rationale to each development item so that feasibility of implementation can be achieved.

The financial plan examines the economic feasibility of developing the proposed improvements. Possible funding sources of the developments includes airport revenues, federal and state grant programs, Passenger Facility Charges (PFC), Car Rental Facility Charges (CFC), and bond financing. The plan expects the cost of the capital improvement and maintenance projects at Gallatin Field to total over \$147 million during the 20-year planning period. The plan recognizes that the terminal expansion is one of the most pressing and costly developments currently facing Gallatin Field Airport. The financial plan demonstrates that, if the terminal expansion can be appropriately phased, the recommended development projects could be completed by using PFC, CFC, local, and Airport Improvement Program (AIP) funds without issuing revenue bonds. However, it may be desirable to complete additional phases at one time to minimize passenger disruption and reduce overall time in construction. This may result in the need to issue revenue bonds or obtain other financing.

Land Use Compatibility

To assist in land use compatibility, the FAA, state aviation agencies, and local airport sponsors have expended significant funds in support of airport planning and land use compatibility planning. Compatible land use guides have been prepared for airport managers, local land use planners, developers, and elected and appointed public officials. The purpose is to provide information on FAA programs and sources of support and to promote an understanding of land use compatibility planning issues around airports that could result in improved compatibility in airport environments.

Ensuring compatible land use around the Airport is very important to future airport operations. In the past, this has been done primarily through land acquisition. The Gallatin Airport Authority currently owns 1,984.5 acres of land in fee title. They also control 1,038.3 acres of land through clear zone easements, development rights, and leases. In total, the Gallatin Airport Authority controls 3,022.8 acres of land surrounding the airport. Recommendations for airport land use planning are presented. The Master Plan Update also takes into account existing land planning efforts completed by the local governmental agencies to date and makes recommendations for off airport land use planning as well. Environmental factors were considered in land use planning to help the Gallatin Airport Authority thoroughly evaluate the airport development alternatives and to provide information that will help expedite subsequent environmental processing.



Public Involvement

Throughout the master planning process public involvement was solicited. This was done through a variety of methods. Public meetings were held for the pilots, airlines, on airport businesses, and the general public to comment on and provide input to the development alternatives. Additionally, the draft chapters of the Master Plan were posted on Gallatin Field Airport's web site as they were completed for the public to review. The Master Plan was also reviewed by John Styba and Dave Stelling of the FAA Helena Airport District Office. The following is a summary of many of the meetings held by the consultant and airport staff throughout the master planning process:

- News letters to General Aviation pilots;
- Meet with Tower Chief;
- Meet with airlines:
- Meet with TSA;
- Meet with FBOs and commercial operators;
- · Meet with cargo operators;
- · Meet with ground transportation, rental car and parking concessionaires;
- Meet with terminal concessionaires;
- Airside public meeting;
- · Landside public meeting;
- · Terminal requirements public meeting;
- · Final Master Plan public meeting;
- · Review Land Use Planning chapter to Belgrade and Gallatin County Planning Boards.

Conclusion

The 2008 Master Plan Update for Gallatin Field provides a guide for future development. Numerous factors will influence future aviation activity at the airport. While the forecast activity levels may not be achieved by the estimated date, the recommended development schedule can be shifted up or back to meet the needs of the airport and its users. As planning is not a static event but a dynamic process, the Airport Authority is encouraged to revisit the recommendations included in the document periodically.

Morrison-Maierle, Inc. and RS&H, Inc. sincerely thank the Gallatin Airport Authority Board members for giving us the opportunity to complete the update. Thank you to the board members and the airport staff for their assistance and input throughout the planning process.

Gallatin Airport Authority Board

- · Richard Roehm, Chair
- · Greg Metzger
- John McKenna, Jr.
- Kevin Kelleher
- Steve Williamson

The Principal Authors

- Morrison-Maierle, Inc.
 - o Scott T. Bell, P.E.
 - o Mark Maierle, P.E.
- RS&H
 - o Michael Spitzer

Gallatin Field Airport Authority

- Ted Mathis, Airport Director
- · Brian Sprenger, Assistant Director



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