


PLAN IMPLEMENTATION

The Brenham Municipal Airport Master Plan has been undertaken to evaluate the airport’s capabilities and role and to plan for the timely development of new or expanded facilities that may be required to meet future demand. The ultimate goal of the Master Plan is to be a proactive document providing systematic guidelines for the airport’s overall maintenance, development, and operation.

Brenham Municipal Airport serves as a vital economic asset for the City of Brenham and surrounding region. As such, it should be carefully and thoughtfully planned and subsequently developed in a manner which matches the development goals of the community. The continued development of Brenham Municipal Airport demonstrates the City’s commitment to growth and prosperity, while also

remaining sensitive to the needs of the residential areas and businesses it serves. The Master Plan provides the tools that the City of Brenham will need to meet the challenges of the future. By providing a safe and efficient facility, Brenham Municipal Airport will remain a valuable component of the surrounding region.

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 AIRPORT CONSULTANTS

Brenham Municipal Airport is owned and operated by the City of Brenham, Texas, which is situated halfway between Austin and Houston in east-central Texas. The airport is located approximately five miles northeast of the city and encompasses approximately 281 acres. Brenham Municipal Airport is currently served by a single runway with a field elevation of 318 feet above mean sea level (MSL). Runway 16-34, oriented north/south, measures 6,003 feet long by 75 feet wide and is served by full-length parallel Taxiway A. The airport is classified in the Federal Aviation Administration's (FAA) National Plan of Integrated Airport Systems (NPIAS) as a regional general aviation (GA) airport. These airports support regional economies with interstate and some long-distance flying. Regional airports have high levels of activity, including jets and multi-engine propeller aircraft.



BACKGROUND

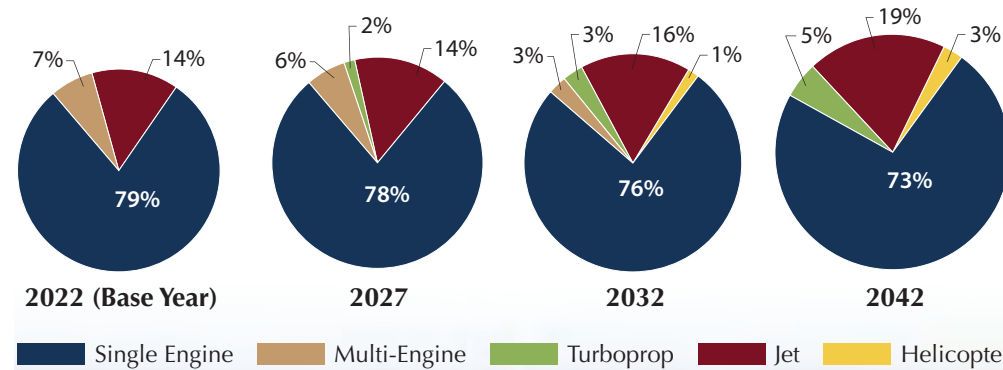
The City of Brenham initiated an airport master plan with the objective of determining future requirements for the airport. The master plan, initiated in April 2022, was sponsored by the Texas Department of Transportation (TxDOT) – Aviation Division. The airport consulting firm Coffman Associates was selected to conduct this planning effort. Completed in Spring 2024, the Brenham Municipal Airport Master Plan is a long-term planning document outlining future airport development based upon aviation demand forecasts prepared during the study process. Recognizing that the airport is of interest to many constituencies, a group of community leaders, aviation interest groups, and government officials were identified to act in an advisory role during the development of the master plan. This planning advisory committee (PAC) met four times during the course of the study, reviewed draft reports, and provided comments throughout to help ensure that a realistic, viable plan was developed. Public information workshops were also conducted throughout the study process to provide information and solicit input from interested citizens.

DEMAND-BASED PLAN

Airport planning begins with an analysis of future demand expected to occur at the facility. For Brenham Municipal Airport, this involved generating forecasts to identify potential aviation demand for based aircraft and annual aircraft operations over the next 20 years. Recognizing the realities of year-to-year fluctuations in activity, the focus was on potential demand levels rather than future dates in time. These “demand planning horizons” were established as levels of activity that will trigger the consideration of implementing the next step in the development program (see following table). By developing the airport to meet aviation demand levels, it will serve the actual needs of users, while maintaining a safe and efficient environment. For Brenham Municipal Airport, the number of based aircraft and annual aircraft operations are forecast to increase during the planning period when considering a diverse economy and continued development of airport facilities. Given that activity and growth may not occur as predicted, flexibility will be very important to future development. The master plan provides airport stakeholders with a general guide that, if followed, can maintain the airport's long-term viability, and allow the airport to continue to provide corporate and general aviation services to the region.

	Base Year (2022)	Short Term (1-5 years)	Intermediate Term (6-10 years)	Long Term (11-20 years)
ANNUAL OPERATIONS				
Itinerant				
Air Carrier	0	0	0	0
Other Air Taxi	194	235	301	453
General Aviation	6,900	7,700	8,200	9,100
Military	50	50	50	50
Total Itinerant Operations	7,144	8,000	8,600	9,600
Local				
General Aviation	20,700	23,400	24,800	27,600
Military	0	0	0	0
Total Local Operations	20,700	23,400	24,800	27,600
Total Annual Operations	27,844	31,400	33,400	37,200
BASED AIRCRAFT				
Single Engine	46	49	51	57
Multi-Engine	4	4	2	0
Turboprop	0	1	2	4
Jet	8	9	11	15
Helicopter	0	0	1	2
Total Based Aircraft	58	63	67	78

Based Aircraft Fleet Mix



RECOMMENDED DEVELOPMENT PLAN

The recommended development concept is based on a two-phase approach which includes improvements to airside (runways, taxiways, navigational aids, etc.) and landside (hangars, aprons, terminal area, etc.) facilities. The two-phased implementation of the recommended development concept includes a “future” plan and an “ultimate” plan. The future plan roughly corresponds to a period of time between now and 20 years, while the ultimate plan has been established as a point in time that could exceed 20 years, unless aviation demand dictates the need for development associated with the ultimate plan sooner. The following summarizes the airside and landside recommendations that will serve the airport well beyond the long-term planning horizon.

Major Airside Development Includes:

- Meeting existing/future Runway Design Code (RDC) B-II-4000 standards on Runway 16-34 until such a time that demand dictates a shift to ultimate RDC C-II-4000 standards.
- Acquiring property interests off each runway end and west of Runway 16-34 to control safety areas now and in the future.
- Relocation of the automated weather observing system (AWOS) to maximize landside development on the east side.
- Installation of medium intensity taxiway lighting (MITL).
- If/when a transition to C-II-4000 is justified and a runway reconstruction is necessary, relocate Runway 16-34 to the west by 60 feet to provide a 300-foot separation between it and Taxiway A, in accordance with C-II-4000 design standards.
- Extend Runway 16-34 to the north by 500 feet, bringing the total runway length to 6,503, and widen the runway to 100 feet to meet C-II-4000 standards.

Major Landside Development Includes:

- Analyze the potential for additional infrastructure associated with aircraft storage hangars and aircraft apron space to meet future needs, including new west side development.
- Potential expansion or relocation of terminal building
- Construct support facilities needed for aviation activities.
- Identify areas of airport property that are suitable for non-aviation development.

A capital improvement program (CIP) for the orderly development of the airport has been prepared to outline long-term investment costs. The CIP has been developed to individualize each of the first five years, and the remaining projects are grouped into intermediate (years 6-10) and long-term (years 11-20 and beyond) planning horizons. By utilizing planning horizons instead of specific years for intermediate and long-term development, the City of Brenham will have greater flexibility to adjust capital needs as demand dictates. The total CIP proposes approximately \$76.4 million in airport development needs. Of this total, approximately \$61.9 million could be eligible for federal and state funding assistance, while the local funding estimate for the proposed CIP is approximately \$14.5 million. The CIP is intended to serve as a road map of airport improvements to help guide the City of Brenham, TxDOT – Aviation Division, and the FAA.

Capital Improvement Program Summary

	Total Project Cost Estimates	Federal/State Funding Share	Local Funding Share
Short Term Total	\$8,296,180	\$7,391,723	\$864,457
Intermediate Term Total	\$9,615,535	\$7,874,738	\$1,740,798
Long Term Total	\$58,474,700	\$46,604,430	\$11,870,270
CIP TOTAL	\$76,386,415	\$61,870,890	\$14,475,525