



The City of



Airports

FAQs

Montgomery-Gibbs Executive and Brown Field Municipal Airports Master Plans

Aviation Demand Forecast Frequently Asked Questions (FAQs)

1. What is an Aviation Demand Forecast?

An aviation demand forecast is developed to identify the future demand for aviation services at individual airports and assesses the improvement needs in construction, operations, and future development necessary to meet those demands. Aviation demand forecasts are prepared as a supplement to the master planning process in pursuit of funds towards potential capital improvement projects through the FAA's Airport Improvement Program (AIP).

2. What sources of information do you use to prepare the forecast?

The forecast is developed using aircraft operations data generated from the airport itself, the FAA, and the county and/or city the airport resides in. A baseline of historical data is created for the airport from sources such as FAA's Air Traffic Data System (ATADS); the official source of historical National Airspace System (NAS) traffic operations and delays, and the Terminal Area Forecast (TAF), created by the FAA to forecast aviation activity at airports included in the National Plan of Integrated Airport Systems (NPIAS). Additional data was collected for the forecast such as demographics, and both national, regional, and/or local government sources were utilized.

3. What are the methods used to prepare the forecast?

There are three primary methods used to determine the forecast for airport activity; market share, socioeconomic regression modeling, and trend analysis. Market share forecasting looks at current aviation activity at an airport as a share of a regional, state, or national measure of aviation activity and projects the airport's future share of said activity. Socioeconomic regression modeling creates a relationship between the metric to be forecast and other variables that may influence demand or supply for air travel using statistical techniques. Trend analysis modeling extrapolates existing historical activity data using statistical techniques without comparison to other variables.

4. Why does the FAA have to approve the forecast?

For Montgomery-Gibbs Executive Airport and Brown Field Municipal Airport, the FAA's AIP can provide federal funding for up to 90 percent of eligible costs for proposed airport improvements. As part of the master planning process, forecasts are not only subject to FAA guidance and requirements, but must also be approved by the FAA to ensure that the data was developed using appropriate methods, was based on reliable assumptions, and is up to date.



5. How does the FAA forecast approval process work?

The FAA determines if the forecast is consistent with the TAF and ready for approval if the forecast for based aircraft, total enplanements, and total operations differ by less than 10 percent in the five-year forecast and less than 15 percent in the 10-year forecast. If there are inconsistencies between the proposed forecast and the TAF, revisions must be made to either the forecast, the TAF, or both and may require FAA Headquarters approval.

5. How often are forecasts updated?

Updates to the aviation demand forecast are done as part of the airport master plan or airport layout plan (ALP) update process. FAA guidance recommends that airport master plans be completed every five to ten years based on the development needs of the airport. However, updated forecasts can be submitted for FAA review in support of environmental analysis. The FAA typically updates the TAF on an annual basis to stay current with their budget and planning needs.

6. How will the forecast be used?

As a part of the Facility Requirements Working Paper, the forecast compares existing facilities to determine if they are sufficient to handle the level of forecast demand. Any areas with existing or future deficiencies will be identified and the best plan for improvement will be decided during the alternatives analysis process. The future activity levels will also be used to quantify potential environmental impacts due to the increased number of operations.

Commonly used Terms and Acronyms

Air Traffic Activity Data System (ATADS) – contains the official air traffic operations data available for public release. Updates on the 20th of each month with data from the month prior.

Based Aircraft – is an aircraft that is operational and air worthy that is typically based at an airport for a majority of the year.

Critical Aircraft – defined as the most demanding aircraft type, or grouping of aircraft with similar characteristics, that make regular use of the airport.

National Plan of Integrated Airport Systems (NPIAS) – identifies nearly 3,400 existing and proposed airports that are significant to national air transportation and thus eligible to receive Federal grants funding under the AIP.

Operation – an aircraft landing or take-off. Each is counted as one (1) operation.

Peak Period – where demand surpasses the average demand levels over the course of a specified period of time (e.g. hour or month).

Regression – an analysis where the dependent variable may be related to numerous other variables. For example, the demand for air travel at a particular GA airport may be posited to be a function of the surrounding community's socioeconomic factors.

Terminal Area Forecast (TAF) – the official FAA forecast of aviation activity for U.S. airports.

As noted, the City of San Diego welcomes community input at all stages of the Airport Master Plan process. Feedback can be provided to Wayne Reiter, Airports Program Manager for the City of San Diego, at (858) 573-1436 or at WReiter@sandiego.gov.