

Review and Approval of Aviation Forecasts June 2008

Note, when the term "forecast" is used in the guidance below, it means the airport sponsor's or locally generated forecast. The TAF is the FAA's Terminal Area Forecast and is not referred to as the "forecast" in this guidance.

Other Forecast Guidance

The following should be reviewed for guidance on preparing and reviewing aviation forecasts.

- AC 150/5070-7, "The Airport System Planning Process," para. 506
- AC 150/5070-6B, "Airport Master Plans," Chapter 7
- FAA Order 5090.3, "Field Formulation of the NPIAS,"
- FAA Order 5100.38C, "AIP Handbook," Chapter 4
- APO Report "Forecasting Aviation Activity by Airport"
- ACRP Synthesis 2 Report "Airport Aviation Activity Forecasting"

Forecast Review and Approval

Airport District Offices (ADO) or Regional Airports Divisions (RO) are responsible for forecast approvals. When reviewing a sponsor's forecast, FAA must ensure that the forecast is based on reasonable planning assumptions, uses current data, and is developed using appropriate forecast methods. Additional discussion on assumptions, data and methodologies can be found in the APO report "Forecasting Aviation Activity by Airport." After a thorough review of the forecast, FAA then determines if the forecast is consistent with the TAF.

For all classes of airports, forecasts for total enplanements, based aircraft, and total operations are considered consistent with the TAF if they meet the following criterion:

- Forecasts differ by less than 10 percent in the 5-year forecast period, and 15 percent in the 10-year forecast period

If the forecast is not consistent with the TAF, differences must be resolved if the forecast is to be used in FAA decision-making. This may involve revisions to the airport sponsor's submitted forecasts, adjustments to the TAF, or both. FAA decision-making includes key environmental issues (e.g. purpose and need, air quality, noise, land use), noise compatibility planning (14 CFR Part 150),

approval of development on an airport layout plan, and initial financial decisions including issuance of LOI's and calculation of BCA's.

Headquarters Review of Forecast

Forecasts that require FAA headquarters (APP-400, APO-110) review are:

- Those inconsistent with the TAF, except as noted in the "exception" section below, or
- Forecasts for projects that are expected to require an EIS and/or BCA, even if such forecasts are consistent with the TAF.

At the discretion of an ADO or Regional Airports Division, forecasts involving significant changes in aircraft mix (i.e. introduction of new technology aircraft like Very Light Jets) that would not otherwise require FAA headquarters review can be submitted for headquarters review. The airport sponsor should justify any forecast of significant changes in aircraft mix. Guidance on aircraft justification can be found in Paragraph 505 of FAA Order 5100.38C, and the fifth bullet of page 2 of the APO document "Planning Information Needed for FAA Headquarters Review of Benefit Cost Analysis."

Forecasts submitted for headquarters review should contain the following information:

- Historic and forecast levels of enplanements, aircraft operations, based aircraft (as appropriate),
- completed Appendix B and C Templates from APO document "Forecasting Aviation Activity by Airport,"
- forecast assumptions, and
- methodology (regression analysis, trend analysis, share analysis).

The ADO or RO must complete the attached form "Request for FAA Headquarters Review of Airport Forecasts" for forecasts to be sent to headquarters. Transmit the completed form and the forecast report to APP-400. The form is intended to reduce common errors made in the preparation of forecasts. It should reduce, but may not eliminate, headquarters comments.

APP-400 will review the forecast and coordinate with APO-110 if required. APP-400 may determine that coordination with APO-110 is not required, such as when the forecast differences slightly exceed the criterion. Also, APP-400 and APO-110 may request additional information from the airport sponsor or FAA field office to explain or support the forecast. APP-400 and APO-110 take up to 45 days (total) to complete reviews, unless additional information is needed.

Exception to Headquarters Review

FAA headquarters review is not required for forecasts at non-towered general aviation and reliever airports where:

- five and ten year forecasts do not exceed 200 based aircraft or 200,000 total annual operations, and
- the related development is not expected to require an EIS and/or BCA.

FAA field offices should ensure that these forecasts are thorough, supported by reasonable planning assumptions and current data, and developed using appropriate methodologies. These forecasts should be provided to APP-400 and APO-110 for use in the annual update of the TAF. APO-110, when updating the TAF, may require additional information, especially if the forecast exceeds normal expectations without adequate justification.

Use of TAF as Forecast

FAA does not encourage sole use of the TAF as the airport sponsor's forecast without sponsor recognition and understanding of its development. It is standard practice to use the TAF for comparison purposes. If the TAF is used as the airport sponsor's forecast, the airport sponsor should:

- Make a conscious decision to use the TAF,
- understand how the TAF was developed for their airport(s), including assumptions, methods and calculations used, and
- document the decision to use the TAF, and the rationale, in the master plan or other planning document.

Aircraft Operations Counting Program

APO-110 uses data from Airport Master Record (5010) reports to develop baseline levels of aircraft operations at non-towered airports. APO-110 has less confidence in operations data from 5010 reports, as opposed to counting of operations by a staffed control tower or an activity counter. Lacking better baseline data, the TAF often assumes a zero growth rate when forecasting future operations at non-towered airports.

Aircraft counting programs should be considered to obtain more accurate information on existing operations. Such counting is AIP eligible under airport master planning and aviation system planning. The purchase of activity counters is not generally AIP eligible (see paragraph 424, FAA Order 5100.38C).

However, if the counter is not a permanent installation, consult with APP-520 for AIP eligibility.

Review Airport Cooperative Research Program (ACRP) Synthesis 4 report, "Counting Aircraft Operations at Non-towered Airports" for additional information on aircraft operations counting programs. Synthesis 4 report can be found at http://trb.org/news/blurb_detail.asp?id=8002. The report refers to the Delaware Valley Regional Planning Commission (DVRPC) counting methodology as one acceptable method. A copy of the DVRPC methodology was previously sent by APP-400 to each Regional Airports Division.

National Trends

VLJ, Unmanned Aerial Vehicles (UAV) and other new technology are difficult to forecast due to uncertainties in application, market served and potential for sustained and predictable growth. Field offices should consult the latest FAA Aerospace Forecast document or APP-400 on handling these or other uncertain forecasts. The FAA Aerospace Forecast document can be found at http://www.faa.gov/data_statistics/aviation/aerospace_forecasts/.

Forecasts and Environmental Documents

FAA Environmental Orders 5050.4B and 1050.1E require the use of the latest available planning information at the time the NEPA (EA, EIS) process starts. Just prior to that process, ADO and Regional Airports Divisions should ensure that the forecast to be used in the NEPA process is consistent with the latest published TAF. TAF and forecast inconsistencies should be resolved prior to the start of an EA or EIS. When a forecast is developed as part of the NEPA document, the forecast should be undertaken early in the process and significant differences with the TAF resolved at that time.

After the start of an EA or EIS, the sponsor and FAA planners should be alert to national, regional or site specific aviation trends that could affect the project purpose and need developed for the EA or EIS. Indicators of aviation trends include the annual Terminal Area Forecast for the airport, the FAA National Aerospace Forecast, regional-specific economic trends, regional airport system factors, and site-specific restraints to growth. The annual TAF should be compared to the sponsor's FAA-approved project forecast. Identify any variations that exceed consistency criteria identified. Advise the environmental team of these variations.