Terminal Area Forecast

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Federal Aviation Administration

What is the TAF

- Database Containing Annual Historic and Unconstrained Demand and Activity Forecast by Airport
- Includes All NPIAS Airports (About 3,400)
  - **FAA and Contract Towers**
  - **Non-FAA Towered Airports**
  - **Non-towered Airports**
- Updated on an Annual Basis
- The Official FAA Forecast

TAF: A Year-Long Process

- **Jan thru Mar: Update data**
- **Mar thru Apr: Initial short-term forecast**
- **Apr thru June: Develop non-OEP airport draft forecast**
- **July thru Aug: Regional review of draft TAF**
- **June thru Sep: Update OEP airport forecasts**
- **Oct thru Dec: Review regional comments & finalize forecast**

TAF is the official FAA forecast used for:

- Staffing and budgeting
  - **Basic input for controller staffing levels**
  - **Staffing levels and capital needs determine the budget needs**
- Airport and capacity planning
  - **Master Plan and EIS forecasts compared against TAF**
  - **Federal Contract Towers Benefit/Cost analyses use TAF**
- NAS plan development
  - **Capital investment analysis uses TAF**
  - **NexGen analysis and development uses TAF**

TAF Inputs

- Historical Aviation Data
  - **Enplaned passengers**
  - **Airport and instrument operations**
  - **Based aircraft**
- Operational Factors
  - **Load factors**
  - **Average aircraft seat size**
  - **Operations per based aircraft**
- Socio-economic factors
  - **Economic variables (local, national)**
    - **Income**
    - **Employment**
- Cost of Flying

TAF Outputs

- Enplanements
  - **Air Carrier (domestic, international)**
  - **Commuter/Regional**
- Operations
  - **Air carrier**
  - **Commuter/Air Taxi**
  - **General Aviation**
  - **Military**
- Instrument Operations
- Based Aircraft

Basic Commercial Forecast Method

- Forecast pax demand
  - **Short term based on published schedules**
  - **Medium and long term based on econometric models**
- Develop & apply pax/departure using:
  - **Load factors**
  - **Average aircraft seat size**
- Forecast commercial operations
  - **Air carrier (pax/cargo)**
  - **Commuter/Air Taxi**

Hub Characteristics Vary

- Origin and destination: TPA, BOS, SAN
- Connecting: ATL, ORD, CLT
- International gateway: JFK, MIA, LAX
- Low-cost carrier : BWI, FLL, MDW
- Resort: LAS, MCO, HNL
- Slot controlled: LGA, DCA

Medium and Small Hub Forecast Methodology

- Establish baseline using latest
  - **Passenger counts**
  - **Operation counts**
  - **OAG future schedules**
- Variety of methods used
  - **O&D model for second-tier hubs**
  - **Trend analysis**
  - **Use FAA-approved master plan forecasts**
  - **Regional FAA input**

Non-Commercial Forecasts

- General Aviation
  - **With verifiable data**
    - **Use trend analysis and**
    - **FAA field direction**
    - **Approved Master Plan Forecasts**
  - **Without verifiable data**
    - **Straight-line (no growth) forecast, and**
    - **FAA field direction/other local input**
- Military
  - **Straight-line (no growth) forecasts**
  - **Activity level changed when known**

Review of Local Forecasts

- **Initial review by ADO and/or Region**
- **Their evaluation considers if:**
  - Forecast is supported by realistic assumptions
  - Appropriate methods were used depending on complexity of airport
  - Back-up data and analysis are sufficient
  - Planning and development recommendations are justification
  - Forecast is consistent with the TAF

Current Guidance

- **APP-1 Memo of December 23, 2004**
- **Forecast approval rests with ADO/Regional Office**
- **Further by APP-400 review required if:**
  - Forecast is inconsistent with the TAF if it:
    - Differs by more than 10% in 5-year forecast period
    - Differs by more than 15% in 10-year forecast period
  - Complex projects at large air carrier airport having potential for environmental controversy or BCA concerns – even if consistent with TAF

Current Guidance (continued)

- **Must resolve differences between local forecasts and TAF before planning continues**
- **Airport forecast review required for:**
  - Commercial service airports and
  - General aviation and reliever airports with more than 100K annual operations or 100 based aircraft
- **No review needed for GA airports with less than 100K operation or 100 based aircraft**

Forecast Package Submission

- **Appendix B and C templates in "Forecasting Aviation Activity by Airport"**
- **Enplanements, operations, and based aircraft data (recent historic baseline and trends)**
- **Forecast assumptions (load factors, average seats per aircraft, operations per based aircraft)**
- **Methods (regression analysis, trend analysis, etc.)**
- **Comparison with TAF (levels and growth rates)**