

AVIATION FORECASTS AND AIRPORT DEVELOPMENT

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DEFINITIONS

- ADO-FAA Airports District Office (field office)
- AIP-Airport Improvement Program-Federal Grants
- Approach Category-aircraft grouping based on approach speed. Categories A, B, C, D, E
- APO-110-FAA Statistics and Forecast Branch
- APP-400-FAA National Planning & Environmental Division
- BCA-Benefit Cost Assessment
- Critical Aircraft-most demanding aircraft using airport on regular basis (500 annual itinerant operations, scheduled service)



DEFINITIONS

- EA-Environmental Assessment
- EIS-Environmental Impact Statement
- Enplanements-revenue passenger boardings
- Nav aids-ground based equipment that assists pilots in arrivals and departures
 - ILS-Instrument Landing Systems
- PFC- local airport ticket assessment
- VLJ-very light jets-aircraft that weighs <10,000 # MGTW, generally six seats or less



AIRPORT SPONSOR FORECASTS

- Airport sponsors generate aviation forecasts (local forecasts) for use in defining scope and timing of airport development



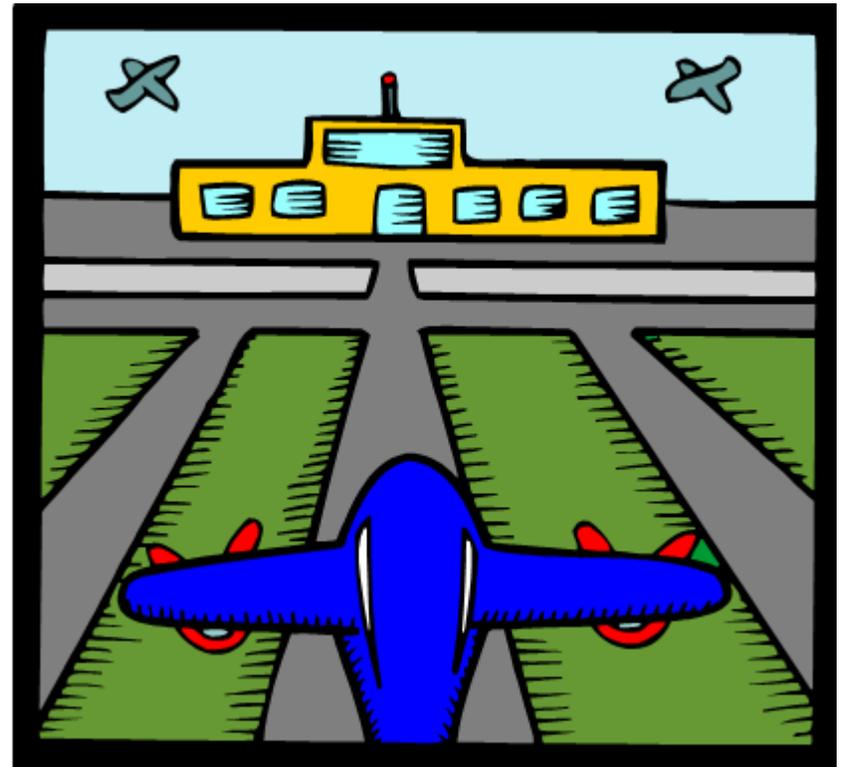
AIRPORT SPONSOR FORECASTS

- These forecasts usually contain:
 - Historic data
 - Activity levels
 - Enplanements
 - Critical aircraft



USE OF SPECIFIC AIRPORT SPONSOR FORECASTS

- Terminal building design (including security): peak hour passengers
- Access facility design: passenger trips
- Airfield capacity: total activity
- Airfield dimensions: critical aircraft



AVIATION METROPOLITAN AND STATE SYSTEM PLAN FORECASTS

- Prepared by state DOT or MPO
- Broad forecasts of activity, fleet mix and surface vehicle trips
- Used to determine roles of airports including:
 - Business jet airports
 - LPV priorities



FAA AIRPORTS OFFICE USE OF AIRPORT SPONSOR FORECASTS

- FAA is concerned with sponsor forecasts when used in FAA decision documents
 - Noise, air quality, airfield modeling, access analyses in an EA or EIS
 - Airfield modeling, delay and capacity analyses in BCA
 - Airfield and terminal improvements to be funded by AIP or PFC



FAA FORECAST ISSUES

- Accurate baseline data
- Based on realistic assumptions
- Uses appropriate methodologies
- Specifies analysis and information used
- Impact of annual TAF updates on EIS



BASELINE DATA

- Historic operations, enplanements
- Accurate baseline data is available for towered airports, air carrier enplanements and operations with flight plan (ETMS)
- TAF often “flatlines” forecasts in cases of uncertain baseline data
- Baseline data can be improved through aircraft counting programs-State DOT and MPO can do



PLANNING JUSTIFICATION FOR CRITICAL AIRCRAFT

- Prefer airline/user support letters or contracts for new service, based aircraft or change in facility use (i.e. new flight school)
- Letters should specify the following and be signed by authorized official:
 - Current constraints (payload/stage)
 - Projected number of operations by aircraft
 - Stage length of projected operations
 - Date service is expected to start
 - Airfield and landside facilities needed



TAF UPDATES AND EIS PLANNING DATA: COMMERCIAL OPERATIONS

- Sponsor forecast should be approved as close to EIS/EA Notice of Intent as possible using current numbers and analysis
- Even at this, long term nature of environmental process can result in variance with TAF
- Examine issue in 2007-forecast averaging



FAA REVIEW OF AIRPORT SPONSOR FORECASTS

- Forecast approval always rests with ADO/regional office
- Forecasts that require HQ review:
 - Those not consistent with the TAF
 - Forecasts for complex projects with potential for environmental controversy, even if the forecast is consistent with the TAF



WHAT FAA LOOKS FOR IN REVIEW OF AIRPORT SPONSOR FORECAST

- Forecast based on latest available data
- Realistic assumptions
- Appropriate forecast methodologies
- Report has information and analysis used
- Forecasts provide justification for planning and development recommendations
- Forecasts are consistent with TAF



CONSISTENCY OF SPONSOR FORECAST AND TAF

Forecasts consistent if they differ less than 10% in 5 years and 15% in 10 years

- Total operations
- Total enplanements
- Based aircraft



Skylink Train Station exterior November 2004



MATERIAL NEEDED FOR FAA REVIEW OF AIRPORT SPONSOR FORECAST

- Side-by-side comparison: see templates in “Forecasting Aviation Activity by Airport.”
- Enplanement, activity and based aircraft data (historic baseline and trends)
- Assumptions (i.e. load factors, average seats, operations per based aircraft)
- Forecast methodologies (i.e. regression)



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