



AVIATION ANALYSIS MODELS

Suite of economic analytical tools for air navigation and airport operation systems.

An airspace system design is incomplete without an understanding of its economic impact. JTA has developed the Aviation Statistical Analysis Model as a sophisticated suite of analytical tools specifically tailored to aviation. This toolset is used by customers for investment analysis, air traffic analysis, trade-off studies, what-if scenarios, cost-benefit determination, and forecasting.

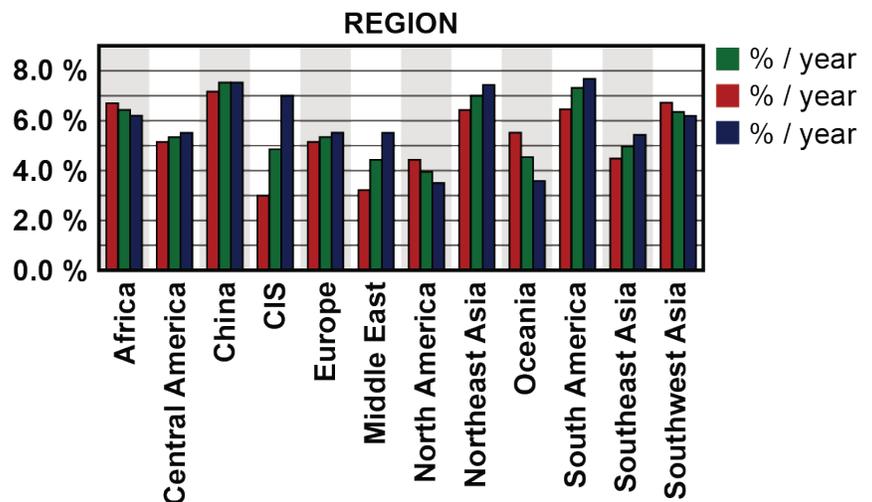
Demand/Capacity Model: The Demand/Capacity Model determines the current scheduled traffic through a selected airspace, as well as other traffic that would benefit by gaining access to that airspace. The Performance Analysis System (PAS) is a major tool that supports this capability.

When used in conjunction with the JTA Master Mapper, detailed airspace analysis based on demand and capacity can be conducted.

Staffing Analysis Model: The Air Traffic Control (ATC) Staffing Model projects the air traffic staffing required to support the anticipated demand using the planned sectorization scheme. The Technical Staffing Model is used to plan the number of maintenance and operations personnel and their base locations based on an airspace system design concept.

Revenue and Cost Model: The Revenue and Cost Model projects operating revenues and costs attributed to the levels of Air Navigation Services provided.

Integrated Noise Model: The Integrated Noise Model is used for evaluating the impact of aircraft noise in and around airports. This tool assesses the effect that changes in runway configuration, air traffic volume, aircraft equipment, and air traffic control procedures have on perceived noise levels. JTA combines the output of the noise model with the Master Mapper to plot noise contours in the area surrounding airports.



JTA has developed a set of analytical tools to form the basis for comprehensive economic analysis of aviation systems, such as this projection of annual growth rate for regional air traffic.