

CAPACITY Annual Service Volume



Federal Aviation
Administration

FY 2008 Performance Target

"Increase the Annual Service Volume (ASV) of the 35 Operational Evolution Partnership (OEP) airports by at least 1%.

Flight Plan Objective and Performance Target

Objective 1: Increase capacity to meet projected demand and reduce congestion.

Performance Target: Commission nine runway/taxiway projects, increasing the annual service volume of the 35 OEP airports by at least 1 percent annually, measured as a five-year moving average, through FY 2012.

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Target	1.00% 2 runways	1.00% 0 runways	1.00% 4 runways	1.00% 2 runway projects ¹	1.00% 1 taxiway project
Actual	1.07% 2 runways	1.01% 0 runways	1.67% 4 runways	1.57% 2 runway projects	

¹This target was revised from 1 runway in FY 2007.

Definition of Measure

Unit of Measure: Number of additional annual aircraft operations that can be accommodated. Total of runway projects commissioned during the current fiscal year.

Computation: This measure is a 5-year moving average. The 1998 ASV is the base year. ASV is calculated using the Runway Delay Simulation Model (RDSIM). Delay curves are developed for each of the 35 OEP airports for the existing airport layout and with new runways where proposed. A consistent calculation technique to estimate capacity was used for all airports, based on demand schedules and fleet mixes, supplemented with flight counts and standard air traffic control procedures for each airport. For those airports where new runways are to be commissioned, the ASV can be estimated any time in the year that the runway will be opened.

Formula: N/A

Scope of Measure: This measure estimates the benefit, in terms of additional aircraft operations, from runway construction projects. A runway construction project includes new runways, runway extensions, and airfield reconfigurations. Aircraft operations include air carrier, commuter, air taxi, general aviation, and military aircraft. Only the 35 OEP airports are included in this measure.

Why the FAA Chooses this Measure

The ASV measure is intended to estimate and track the increase in airport capacity at airports. This measure is calculated as a five year moving average. It is calculated in this way to smooth out peaks and valleys associated with yearly variability in new runway openings. The 1998 ASV is the base year. There were no new runways opened in FY 1999, and one new runway in each of the fiscal years 2000, 2001, and 2002, which added 0.78% to the overall capacity total of those years. The FAA did not begin reporting on the increase until FY 2004. The moving average from FY 1998 through FY 2002 was an increase of 0.28%. In 2003, three new runways opened adding 2.51% more capacity resulting in a five year moving average of 0.67%. Two additional runways opened in FY 2004, adding an additional 1.91% to the Nation's total and resulting in a five year moving average of 1.07%. Four runways opened in FY 2006, adding 3.27% more capacity and resulting in a 5-year moving average of 1.67%. In FY 2007, one new runway opened and one relocated runway opened resulting in a 5-year moving average of 1.57%.

Source of the Data

Demand schedules and fleet mixes are developed from recent Official Airline Guide (OAG) information. Flight counts are obtained from airport traffic control tower logs. In addition, standard air traffic control procedures are used for each airport.

Statistical Issues

This measure is derived from model estimates that are subject to errors in model specification.

Completeness

The Capacity Analysis Group (AJP-27) continues to provide technical support to develop a consistent method of calculating the individual airport ASV through the Operations Planning Service at the FAA Technical Center, Atlantic City, NJ.

Reliability

Recalculations of the original ASV studies have not been necessary. Once developed, the delay curves remain accurate unless a major change in fleet mix or operational characteristics occurs at an airport.