

Airport capacity profile estimates were created using a standard set of performance characteristics and do not take into account non-runway constraints, unless otherwise noted. The capacity estimates developed for this report are not intended to replace the results of any detailed analysis that would precede an environmental, investment, or policy decision.

The list of Future Improvements and their expected effects on capacity does not imply FAA commitment to, or approval of, any item on the list.

DEFINITION

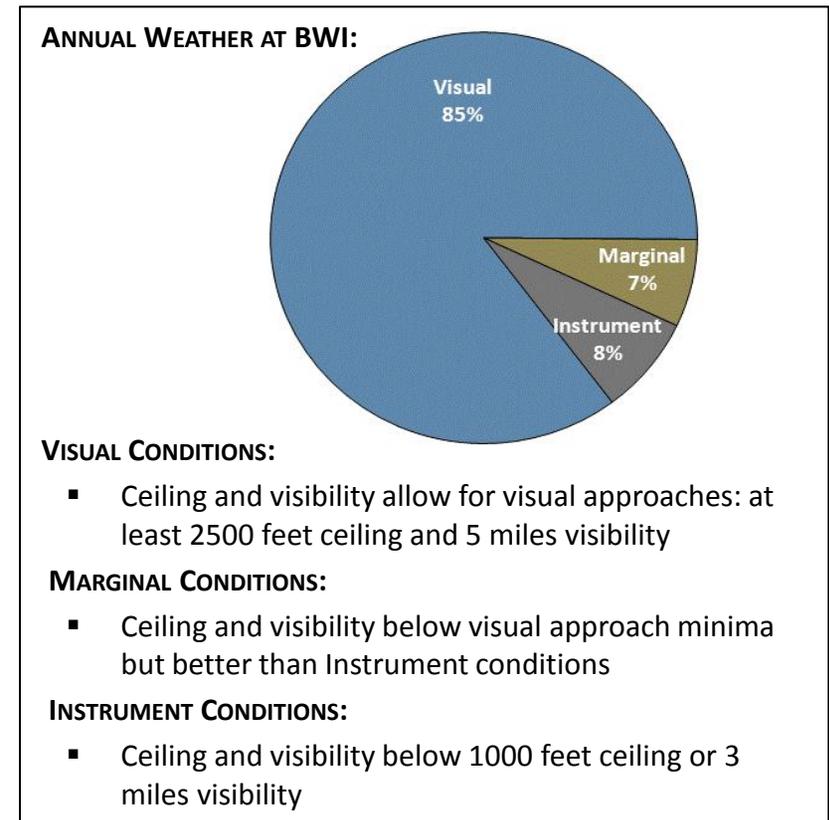
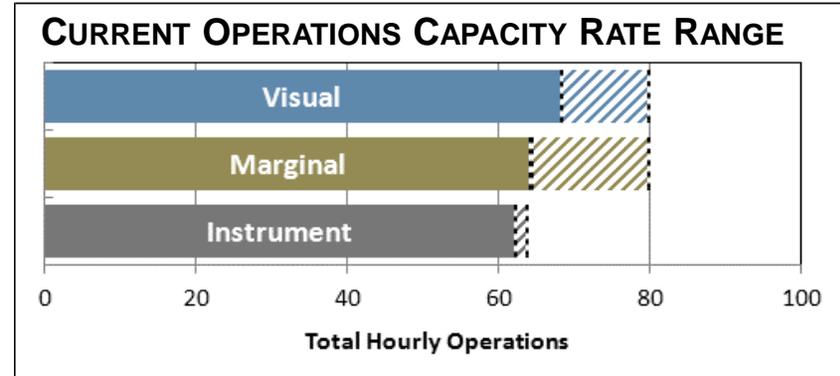
- The capacity profile shows the hourly throughput that an airport is able to sustain during periods of high demand, represented as the range between the model-estimated capacity and the ATC facility reported rate (called rate). Each weather condition has a unique capacity rate range.
- The following charts compare actual hourly traffic with the estimated capacity curves for BWI. Some hourly traffic points fall outside the estimated capacity curves. There are many reasons why this may occur without affecting operational safety. For example, more aircraft may have been able to use Runway 15L/33R than were assumed in the analysis. Also, actual weather may have been better for part of the hour than that recorded for the hour, allowing more efficient ATC procedures than were modeled.

FUTURE IMPROVEMENTS AT BWI

- *Improved Runway Delivery Accuracy:* The combined effects of several new capabilities, including ADS-B Out, CDTI, and TBM in the terminal area, will improve the ability of controllers by 2020 to deliver aircraft to the runway with the desired separation from the preceding aircraft. This will reduce the average spacing between arrivals and boost arrival capacity.
- Additional information on these improvements may be found in this report under "Future Operation Assumptions."

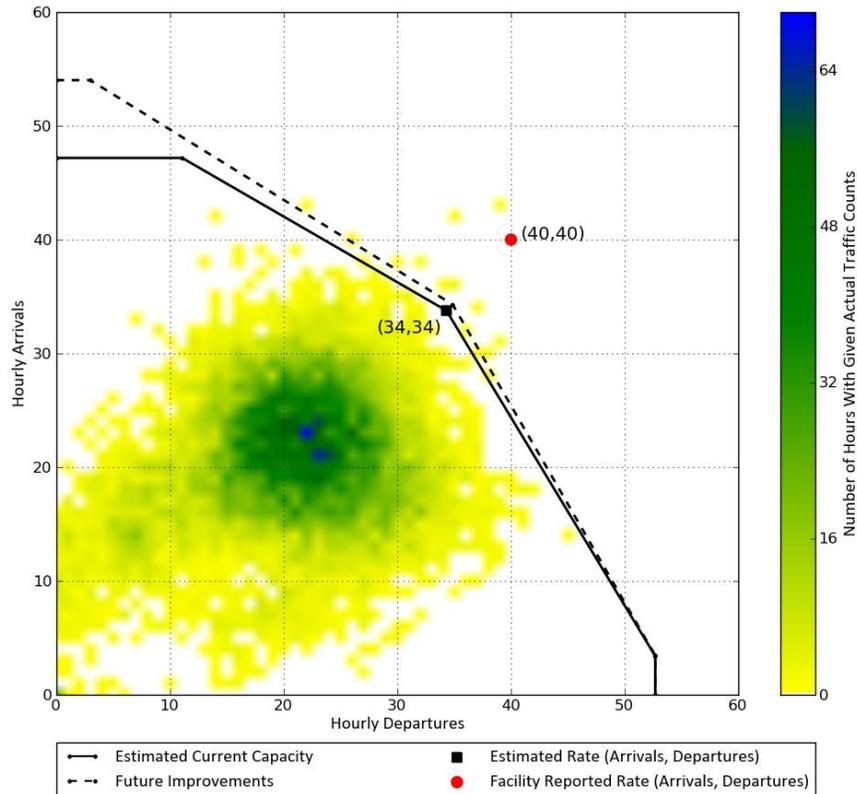
DATA SOURCES

- Actual hourly BWI operations, weather and configuration data were obtained from the FAA ASPM database, and represent operational hours from 7am to 11pm local time for all of Fiscal Years 2009 and 2010. Actual configuration usage is determined by multiple operational factors, including weather conditions.
- Facility reported rates were provided by ATC personnel at BWI.
- Model-estimated rates are derived from operational information provided by ATC.



BWI Scenario	Arrival Runways	Departure Runways	Procedures	Hourly Rate	
				ATC Facility Reported	Model-Estimated
CURRENT OPERATIONS	33L, 33R	28, 33R	Visual Approaches, Visual Separation	80	68
FUTURE IMPROVEMENTS Improved Runway Delivery Accuracy	33L, 33R	28, 33R		N/A	69

VISUAL WEATHER CONDITIONS



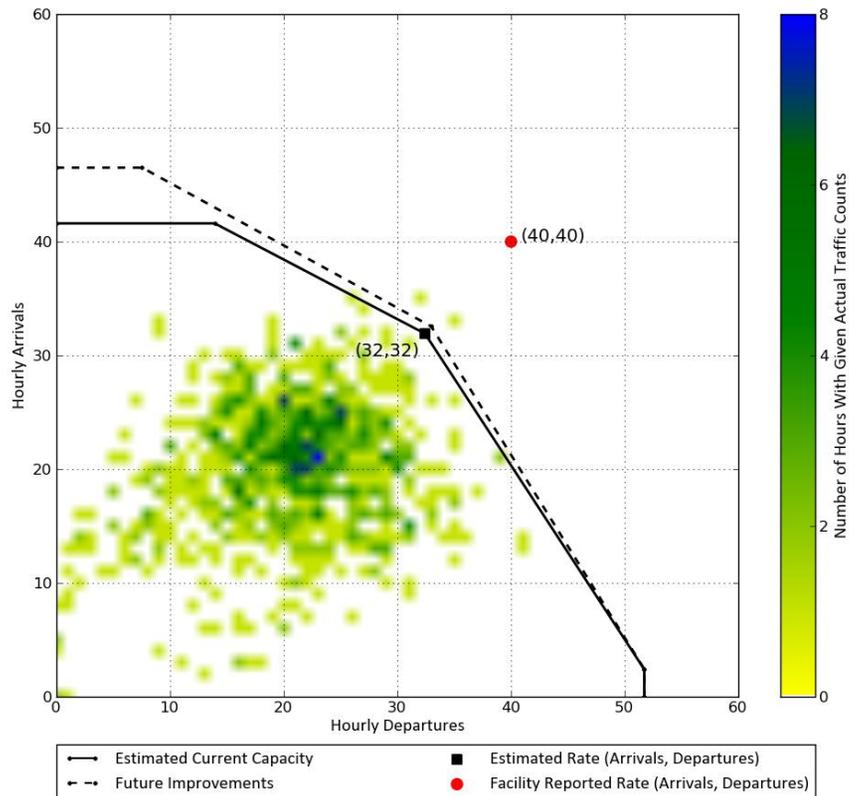
- The capacity rate range in Visual conditions is currently 68-80 operations per hour.
- BWI has two primary directional traffic flows. The airport operates in variations of this configuration approximately 66% of the time in Visual weather conditions (totaling 56% annually).
- Operations on Runway 33R are typically limited to small propeller and general aviation aircraft due to length and noise restrictions.

MARGINAL

BALTIMORE/WASHINGTON INTERNATIONAL THURGOOD MARSHALL

BWI Scenario	Arrival Runways	Departure Runways	Procedures	Hourly Rate	
				ATC Facility Reported	Model-Estimated
CURRENT OPERATIONS	10, 15L	15L, 15R	Dependent Instrument Approaches, Visual Separation	80	64
FUTURE IMPROVEMENTS Improved Runway Delivery Accuracy	10, 15L	15L, 15R		N/A	66

MARGINAL WEATHER CONDITIONS



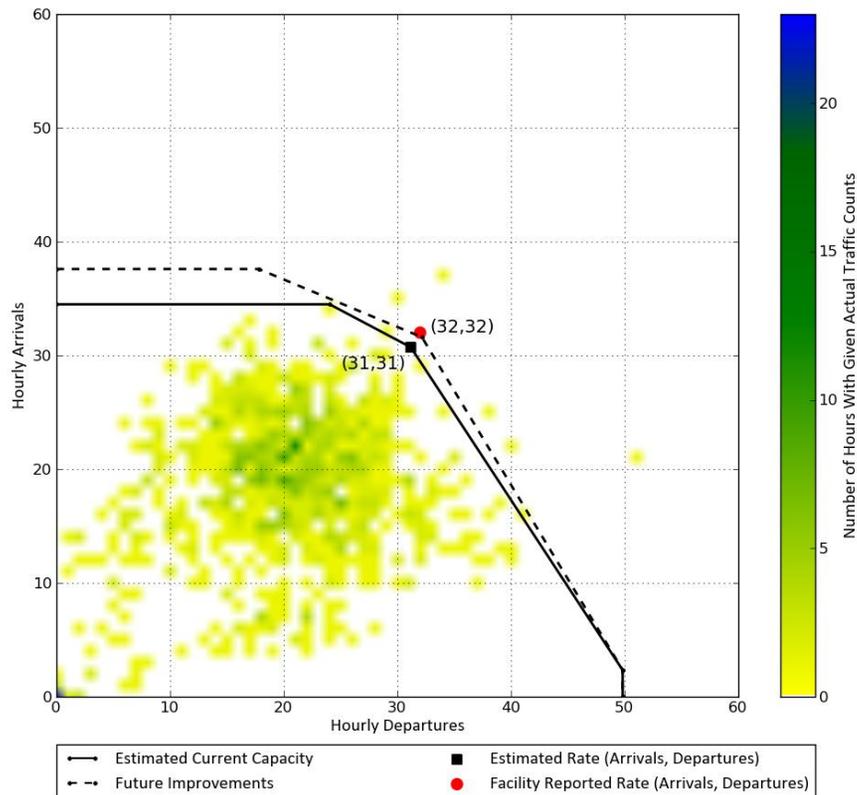
- The capacity rate range in Marginal conditions is currently 64-80 operations per hour.
- BWI has two primary directional traffic flows. The airport operates in variations of this configuration approximately 50% of the time in Marginal weather conditions (totaling 3% annually).
- Operations on Runway 15L are typically limited to small propeller and general aviation aircraft due to length and noise restrictions.

INSTRUMENT

BALTIMORE/WASHINGTON INTERNATIONAL THURGOOD MARSHALL

BWI Scenario	Arrival Runways	Departure Runways	Procedures	Hourly Rate	
				ATC Facility Reported	Model-Estimated
CURRENT OPERATIONS	10, 15L	15L, 15R	Dependent Instrument Approaches, Radar Separation	64	62
FUTURE IMPROVEMENTS Improved Runway Delivery Accuracy	10, 15L	15L, 15R		N/A	64

INSTRUMENT WEATHER CONDITIONS



- The capacity rate range in Instrument conditions is currently 62-64 operations per hour.
- BWI has two primary directional traffic flows. The airport operates in variations of this configuration approximately 64% of the time in Instrument weather conditions (totaling 5% annually).
- Operations on Runway 15L are typically limited to small propeller and general aviation aircraft due to length and noise restrictions.