VISUALIZE 2050

Visualize 2050
Planning and
Programming Process

Surface Connection to Air Planning

Part 23 of 27

National Capital Region
Transportation Planning Board

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OVERVIEW OF AIRPORT SYSTEM PLANNING

The multimodal transportation system of the National Capital Region is served by three large commercial airports: Baltimore/Washington Thurgood Marshall International Airport (BWI) in Maryland, Ronald Reagan Washington National Airport (DCA), and Washington Dulles International Airport (IAD) in Virginia. These airports offer air travel choices to the region's residents and visitors, serve as components of the region's freight distribution system, and provide significant employment opportunities in the transportation and transportation-serving employment sectors in the National Capital Region. Collectively, BWI, DCA, and IAD had nearly 40 million enplanements (boardings) in 2023, revealing significant demand for airport ground access for both passengers and airport services. These airport ground access needs are key considerations addressed through the TPB's Continuous Airport System Planning (CASP) Program.

Continuous Airport System Planning (CASP) Program

The TPB initiated the CASP program more than 45 years ago when the first grant application was approved by the Federal Aviation Administration (FAA) in 1978. The goal of the CASP program is to provide a process that supports the planning, development, and operation of airport facilities and the transportation facilities that serve the airports in a systematic framework for the Washington-Baltimore region.

The airport system planning process consists of a continuous cycle that begins with a Washington-Baltimore Regional Air Passenger Survey. This survey is followed by forecasts of future air passenger travel and the ground travel of these air passengers to and from the region's three commercial airports. These forecasts and analyses of planned airport ground access facilities in the region are used to develop the Regional Airport System Plan (RASP).

FIGURE 23.1: THE NATIONAL CAPITAL REGION'S THREE MAJOR AIRPORTS
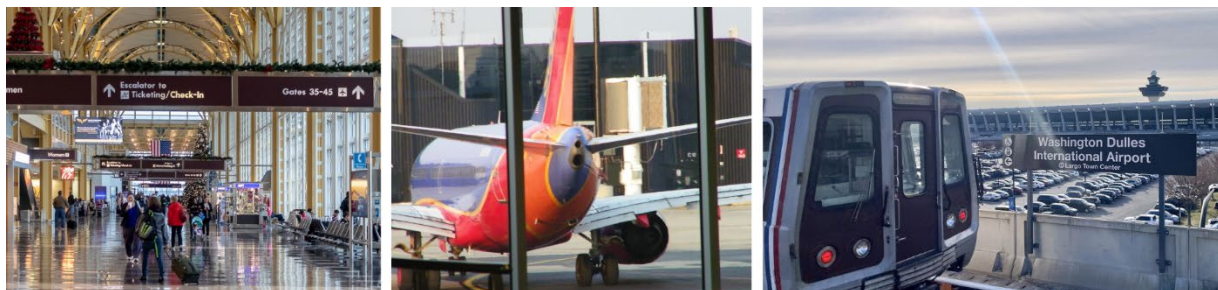
National Hall DCA (Doug Letterman/Fickr); BWI (Corey Seeman/Flickr); Dulles (airbus777/Flickr)

Regional Air Passenger Survey and Ground Access Forecasts

Simultaneous, regional surveys of departing air passengers at all three commercial airports (BWI, DCA, and IAD) have been performed in 1973/74, 1981/82, 1987, 1992, 1998, 2000, 2002 and every two years since 2005, except in 2021 due to the COVID-19 pandemic. The most recent survey was conducted in late 2023. These surveys provide data that are essential for airport system planning and master planning processes.

The Regional Air Passenger Survey is designed as an at-gate lobby interview survey where travelers are asked to provide information about the purpose of their air travel, how they traveled to the airport (drove, rode transit, etc.), and other information to support the airport system planning and airport ground access planning processes. The survey is jointly funded by the Maryland Aviation Administration, which owns and operates BWI, and the Metropolitan Washington Airports Authority, which owns and operates both DCA and IAD. The survey results are analyzed in detail and are documented in two reports: (1) General Findings, and (2) Geographic Findings. These reports are

funded by the Federal Aviation Administration (FAA) through grants from its Airport Improvement Program.

Using data from the regional air passenger survey and other sources, TPB staff developed a methodology to forecast future ground access trips to each of the three airports from individual geographic areas called Aviation Analysis Zones (AAZs), which are larger zones aggregated from Transportation Analysis Zones (TAZs) used by TPB and the Baltimore Metropolitan Council/Baltimore Regional Transportation Board in their regional travel demand forecasting process. These forecasts consider ground access travel trends observed from the survey, projections of population, households, and employment prepared for the planning area, and terminal area forecasts of future airport passenger volumes.

For more information on the Regional Airport Passenger Survey and the Ground Access Forecasts, please visit this link: https://www.mwcog.org/transportation/planning-areas/airports/casp-elements/air-passengers/

Comprehensive Regional Air System Plan (RASP)

In 2020, transportation planning staff at COG, in coordination with the Federal Aviation Administration (FAA), the Metropolitan Washington Airports Authority (MWAA), and the Maryland Aviation Administration (MAA), completed the multiyear, three-phase Comprehensive Washington-Baltimore Regional Air System Plan (RASP). The 2020 RASP report is the first comprehensive RASP conducted since the Continuous Airport System Planning (CASP) program's inaugural study, "The Future of Washington's Airports" in 1975. Phase 1 illustrates the state of the practice in regional air system planning. Phase 2 identifies existing conditions (supply) and anticipated needs (demand) in the Washington-Baltimore regional airport system. Phase 3 synthesizes air system-wide planning considerations, conducts a needs assessment for each airport, reviews the ground access element update and provides a series of airport ground access-related recommendations based on the most recent long-range transportation plan at that time, Visualize 2045 and Maximize2045 for the COG-TPB and BMC regions, respectively.

Prior to the 2020 Comprehensive RASP, components of the RASP were updated periodically and released as individual "elements" of the RASP. These included the Ground Access Element Update and the Air Cargo Element Update.

For more information on the Regional Airport System Plan, please visit this link: https://www.mwcog.org/transportation/planning-areas/airports/casp-elements/regional-air-system-plan/

TPB'S ROLE AND KEY STAFF

As the MPO for the National Capital Region, the TPB is required to prepare a metropolitan transportation plan (MTP), among other requirements. There are specific planning elements and considerations required to be addressed by MTPs; however, it is noteworthy that airport system planning is not a required activity for the TPB as an MPO and the Regional Airport System Plan (RASP) that is developed by the CASP Program is not a required element of the MTP. Nevertheless, the RASP and key findings from ground access planning studies and analyses undertaken by the CASP Program do inform the MTP and provide important planning context and understanding for airport ground access needs that can be considered by transportation planning agencies throughout the region. Thus, airport system planning activities are incorporated into the overall metropolitan transportation planning process undertaken by the TPB.

TPB Staff	Title	Role
Kanti Srikanth	Executive Director	Director for the Transportation Planning Board (TPB)
Kenneth Joh	Principal Survey Statistical Analyst	Program Lead
Olga Perez	Planning Program Specialist	Program Specialist
Suraj Vujjini	Transportation Data Analyst	Analyst/Contributor

The CASP program is developed, implemented, and monitored with the assistance of the Aviation Technical Subcommittee of the TPB's Technical Committee. The subcommittee develops, implements, and monitors CASP program activities and oversees integration of airport system planning with the regional transportation planning process. The region's three major commercial airports are represented on the TPB by the Maryland Aviation Administration (MAA) and the Metropolitan Washington Airports Authority (MWAA).

ROLE OF KEY PLANNING AGENCIES

Agencies involved in the CASP Process are represented on the Aviation Technical Subcommittee. Members and include the Federal Aviation Administration (FAA), the Maryland Aviation Administration (MAA), Virginia Department of Aviation (DOAV), District of Columbia Office of Planning (DCOP), District of Columbia Department of Transportation (DDOT), the Metropolitan Washington Airports Authority (MWAA), and staff from the Baltimore Metropolitan Council/Baltimore Regional Transportation Board (BMC/BRTB). Collectively, as part of the Aviation Technical Subcommittee, these partner agencies provide guidance and oversight over the CASP Program, helping to set future CASP work program priorities and activities for staff to carry out.

Funding for the CASP Program is provided through annual federal formula grants administered by the FAA as part of its Airport Improvement Program. The biennial Washington-Baltimore Regional Air Passenger Survey is jointly funded by the MAA and the MWAA, which own and operate the three large commercial airports.

PUBLIC ENGAGEMENT

All activities are coordinated and reviewed by the Aviation Technical Subcommittee, which, as a Subcommittee of TPB's Technical Committee, conducts its business in bimonthly meetings that are accessible to the public. In addition, aspects of the CASP program are presented to the public at TPB meetings, at which time members of the public have the opportunity to comment, and also through presentations to the TPB's public-facing advisory committees, such as the Community Advisory Committee. TPB staff shared the results of the 2023 Regional Air Passenger Survey with the TPB in September 2024 which are the most recent to reflect in Visualize 2050.