

ITEM 10 – Information

February 17, 2021

Priority Airport Ground Access Projects

Background:

The board will be briefed on the priority projects included in Visualize 2045 that support airport ground access. These projects were recommended by the Aviation Technical Subcommittee as part of TPB's Continuous Airport Systems Planning Program and are important because of their potential to improve access to the region's three major commercial airports: BWI, DCA, and IAD.



MEMORANDUM

TO: National Capital Region Transportation Planning Board
FROM: Arianna Koudounas, TPB Transportation Planner
SUBJECT: Priority Airport Ground Access Projects
DATE: February 11, 2021

BACKGROUND

The Metropolitan Washington Council of Governments (COG), in cooperation with the Federal Aviation Administration (FAA), the Maryland Aviation Administration (MAA), the Virginia Department of Aviation (VDOA), the District of Columbia Office of Planning (DCOP), the District Department of Transportation (DDOT) and the Metropolitan Washington Airports Authority (MWAA), has conducted a metropolitan airport system planning process for more than forty years. The Continuous Airport System Planning (CASP) program provides a regional process that supports the planning, development and operation of airport and airport-serving facilities in a systematic framework for the Washington-Baltimore Region. As part of this process, TPB staff, in consultation with the Aviation Technical Subcommittee, prepares ground access planning studies, including ground access forecast updates, travel time studies, and an assessment of priority projects, programs, and policies that support airport ground access. This memo contains a list of the priority projects included in Visualize 2045 that support airport ground access. The full Regional Air System Plan document that this memo references can be found here: <https://www.mwcog.org/transportation/planning-areas/airports/casp-elements/regional-air-system-plan/>

PRIORITY ACCESS PROJECTS

The attachment to this memo identifies the projects contained in Visualize 2045 that the Aviation Technical Subcommittee identified to be important because of their potential to improve access to the region's three major commercial airports: Baltimore/Washington International Thurgood Marshall Airport (BWI), Washington Dulles International Airport (IAD), and Ronald Reagan Washington National Airport (DCA). Given how critically important the region's three major commercial airports are to the economic vitality of the Washington-Baltimore region, the Subcommittee recommends that these projects be given priority consideration for implementation. TPB staff will present an overview of these projects to the TPB at its February 17, 2021 meeting.

NEXT STEPS

To ensure regional aviation ground access needs and goals are addressed in the regional transportation planning process, the CASP planning cycle is synchronized with the regional Long-Range Transportation Plan (LRTP) update process. In general, the airport system planning process consists of a continuous cycle that begins with a regional air passenger survey, as shown in the

figure below. This survey is followed by forecasts of future air passenger travel and ground travel of these air passengers to and from the region's three commercial airports. These forecasts in turn lead to the development of a revised ground access plan for the region. The RASP Update is the synchronizing mechanism that links airport ground access needs to regional transportation planning. It is also the final and concluding step in the planning cycle. The next Washington-Baltimore Regional Air Passenger Survey will be the starting point of the next cycle. The precise timing of future RASP Updates will be based on need as well as aligning with each airport's strategic and master planning processes.

ATTACHMENT

Attachment 1

Visualize 2045 Project Recommendations

MDOT Interstate Roadway Projects

The following recommendations will help improve access from Virginia to Maryland.

- **Construct/Widen I-270 Toll Lanes**
 - From I-495 to I-270Y
 - From 4 + 2 HOV lanes to 4 + 2 HOV + 4 ETL
 - Completion date: 2025

- **Construct/Widen I-270 Toll Lanes**
 - From I-270Y to I-370
 - From 10 + 2 HOV lanes to 10 + 2 HOV + 4 ETL
 - Completion date: 2025

- **Construct/Widen I-495 Toll Lanes**
 - From Virginia State line / Potomac River (including American Legion Bridge) to I-270Y
 - From 8/10 lanes to 8/10 + 4 ETL
 - Completion date: 2025

- **Construct/Widen I-495 Toll Lanes**
 - From I-270Y to MD 355
 - From 6 lanes to 6 + 4 ETL
 - Completion date: 2025

- **Construct/Widen I-495 Toll Lanes**
 - From MD 355 to I-95
 - From 8 lanes to 8 + 4 ETL
 - Completion date: 2025

- **Construct/Widen I-495 Toll Lanes**
 - From I-95 to Baltimore Washington Parkway
 - From 8 lanes to 8 + 4 ETL
 - Completion date: 2025

- **Construct/Widen I-495 Toll Lanes**
 - From I-95 to Baltimore Washington Parkway
 - From 8 lanes to 8 + 4 ETL
 - Completion date: 2025

- **Construct/Widen I-495 Toll Lanes**
 - From Baltimore Washington Parkway to Glenarden Parkway
 - From 8 lanes to 8 + 4 ETL
 - Completion date: 2025

Anne Arundel County Primary Roadway Projects

The following recommendations will reduce congestion in Anne Arundel County surrounding BWI.

- **Widen I-295**
 - From I-195 to MD 100
 - From 4 lanes to 6
 - Completion date: 2035

- **Widen MD 713**
 - From MD 175 to Stoney Run Drive
 - From 2 lanes to 4
 - Completion date: 2040

Howard County Primary Roadway Projects

The following recommendations will reduce congestion in Howard County surrounding BWI.

- **Widen I-95 peak period shoulder use**
 - From MD 32 to MD 100
 - From 4 lanes to 4 + 1
 - Completion date: 2035

- **Widen MD 100**
 - From I-95 to Anne Arundel/Howard County line, River Road
 - From 2 lanes to 4
 - Completion date: 2035

Transit Airport Ground Access Project

The following recommendation will help improve multimodal connectivity to BWI.

- **Implement Penn Line Service Improvements**
 - Completion date: 2029

VDOT Interstate Roadway Projects

The following recommendations will help reduce congestion along I-66.

- **Widen/Revise Operations of I-66**
 - From I-495 to US 50
 - From 3 general purpose in each direction + 1 HOV in peak direction during peak period to 3 general purpose + 1 Auxiliary + 2 HOT each direction
 - Completion date: 2021

- **Widen/Revise Operations of I-66**
 - From US 50 to US 29 Centreville
 - From 4 general purpose lanes in each direction off-peak, 3 general purpose + 1 HOV in peak direction during peak period to 3 general purpose lanes + 1 Auxiliary + 2 HOT lanes in each direction (2 Aux per direction between VA 286 & VA 28 only)
 - Completion date: 2021

- **Widen/Revise Operations of I-66**
 - From US 29 Centreville to University Boulevard Ramps (which is a new interchange for HOT-only)
 - From 4 general purpose lanes in each direction off-peak, 3 general purpose + 1 HOV in peak direction during peak period to 3 general purpose + 2 HOT in each direction
 - Completion date: 2021

- **Widen/Revise Operations of I-66**
 - From VA 234 Bypass to University Boulevard
 - From 4 general purpose in each direction off-peak, 3 general purpose + 1 HOV in peak direction during peak period to 3 general purpose+ 2 HOT in each direction (+1 Auxiliary each direction between US 29 and VA 234 Bypass only)
 - Completion date: 2021

- **Widen/Revise Operations of I-66**
 - From University Blvd Ramps (new interchange; HOT-only) to US 15 (1.2 miles west of)
 - From 4 general purpose in each direction off-peak, 3 general purpose + 1 HOV in peak direction during peak period to 3 general purpose + 2 HOT in each direction +1 Auxiliary each direction between US 29 and VA 234 Bypass only
 - Completion date: 2040

- **Widen/Revise Operations of I-66**
 - From I-495 to US 29 near Rosslyn
 - From HOT 2 in peak direction during peak period to HOT 3
 - Completion date: 2021

- **Revise Operations of I-66**
 - From I-495 to US 29 near Rosslyn
 - From HOT 3 in peak direction during peak period to HOT lanes 3 in both directions
 - Completion date: 2040

- **Construct/Widen I-66 Eastbound**
 - From VA 267 Dulles Toll Road to Washington Boulevard Off-Ramp
 - 3 lanes to 4 lanes
 - Completion date: 2020
- **Construct/Widen I-66 Eastbound**
 - From Washington Boulevard Off-Ramp to North Fairfax Drive
 - 2 lanes to 3 lanes
 - Completion date: 2020
- **Construct/Widen I-66 Westbound**
 - From Sycamore Street to Washington Blvd On-Ramp
 - 2 lanes to 3 lanes
 - Completion date: 2040

The following recommendations will help reduce congestion along the I-495 Capital Beltway.

- **Widen I-495 Capital Beltway SB Auxiliary Lane**
 - From VA 193 On-Ramp to VA 267 Off-Ramp
 - From 4+2 lanes to 5+2 lanes
 - Completion date: 2030
- **Construct I-495 Express Lanes On-Ramp**
 - From Dulles Connector Road Westbound to I-495 Express Lanes Northbound
 - From 0 lanes to 1 lane
 - Completion date: 2025
- **Construct I-495 Capital Beltway HOT Lanes**
 - From American Legion Bridge to George Washington Parkway (south of)
 - From 8 to 8+4 lanes
 - Completion date: 2025
- **Construct I-495 Capital Beltway HOT Lanes**
 - From George Washington Parkway (south of) to Old Dominion Drive (south of)
 - From 8 to 8+4 lanes
 - Completion date: 2025
- **Construct I-495 Capital Beltway Interchange (Phase IV)**
 - Provide Southbound HOT lanes to Eastbound HOV & Eastbound Dulles Toll Road to Northbound HOT movement at VA 267 Dulles Toll Road
 - Completion date: 2030
- **Widen I-495 Capital Beltway Interchange Ramp (Phase III Dulles Toll Road)**
 - Widen Eastbound Dulles Toll Road ramp to 2 Northbound lanes
 - From 1 to 2 lanes
 - Completion date: 2030

The following recommendation will help reduce congestion along the Dulles Airport Access Road.

- **Widen Dulles Airport Access Road**
 - From Dulles Airport to VA 123
 - From 4 to 6 lanes
 - Completion date: 2030

VDOT Primary Roadway Projects

The following recommendations will help reduce congestion along VA 28.

- **Widen VA 28 from I-66 to Westfields Boulevard**
 - From I-66 to Westfields Boulevard, as part of VA 28 PPTA Phase II
 - From 6 lanes to 8+ 2 aux lanes
 - Completion date: 2021
- **Widen VA 28 from Westfields Boulevard to US 50**
 - From Westfields Boulevard to US 50, as part of VA 28 PPTA Phase II
 - From 6 lanes to 8 lanes
 - Completion date: 2025
- **Widen VA 28 from US 50 to Sterling Boulevard**
 - From US 50 to Sterling Boulevard, as part of VA 28 PPTA Phase II
 - From 6 lanes to 8 lanes
 - Completion date: 2025
- **Widen VA 28 from Sterling Boulevard to VA 7**
 - From Sterling Boulevard to VA 7, as part of VA 28 PPTA Phase II
 - From 6 lanes to 8 lanes
 - Completion date: 2025

PRIORITY AIRPORT GROUND ACCESS PROJECTS

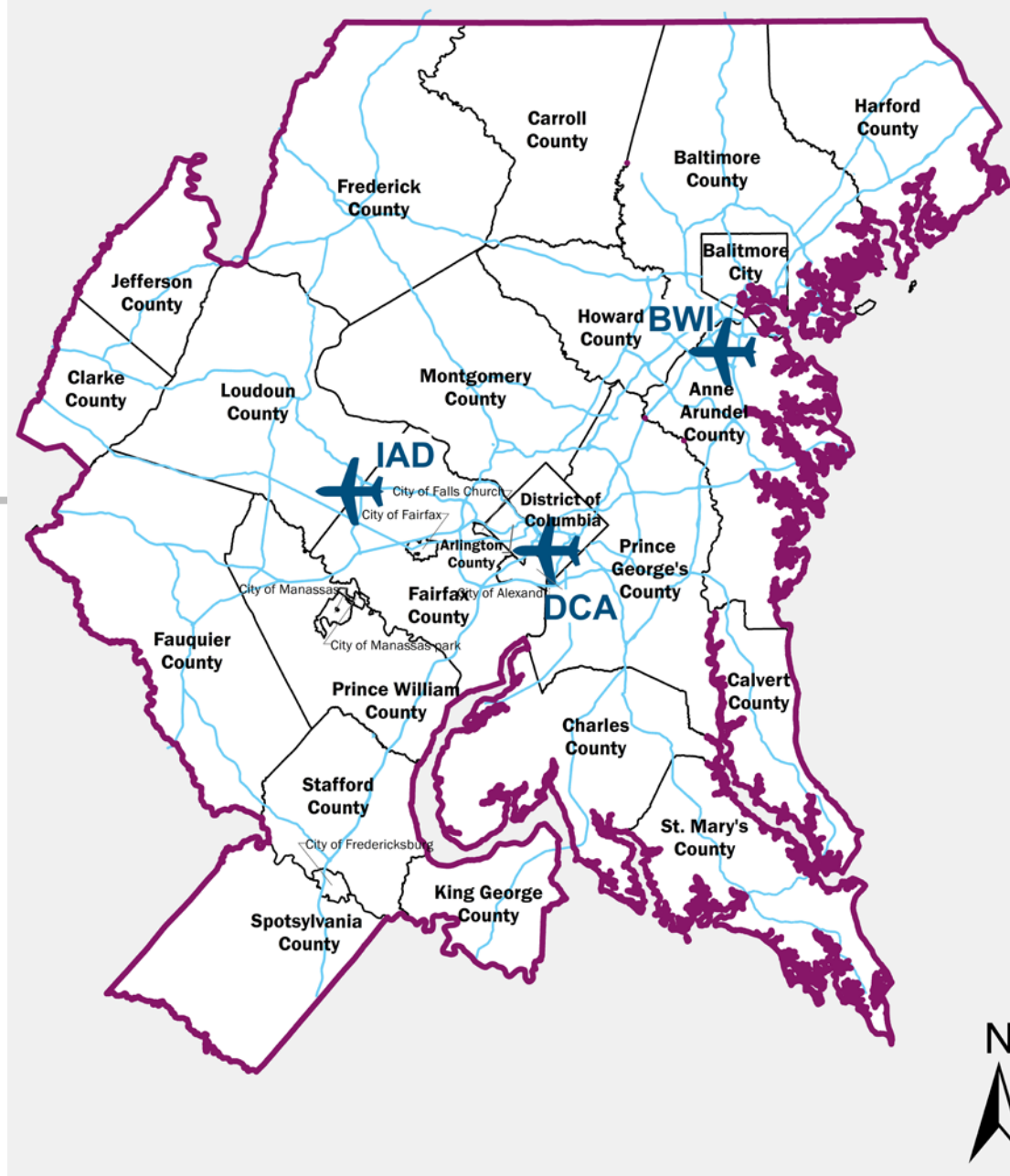
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Transportation Planner

Transportation Planning Board
February 17, 2021



Washington-Baltimore Air Systems Region at a Glance

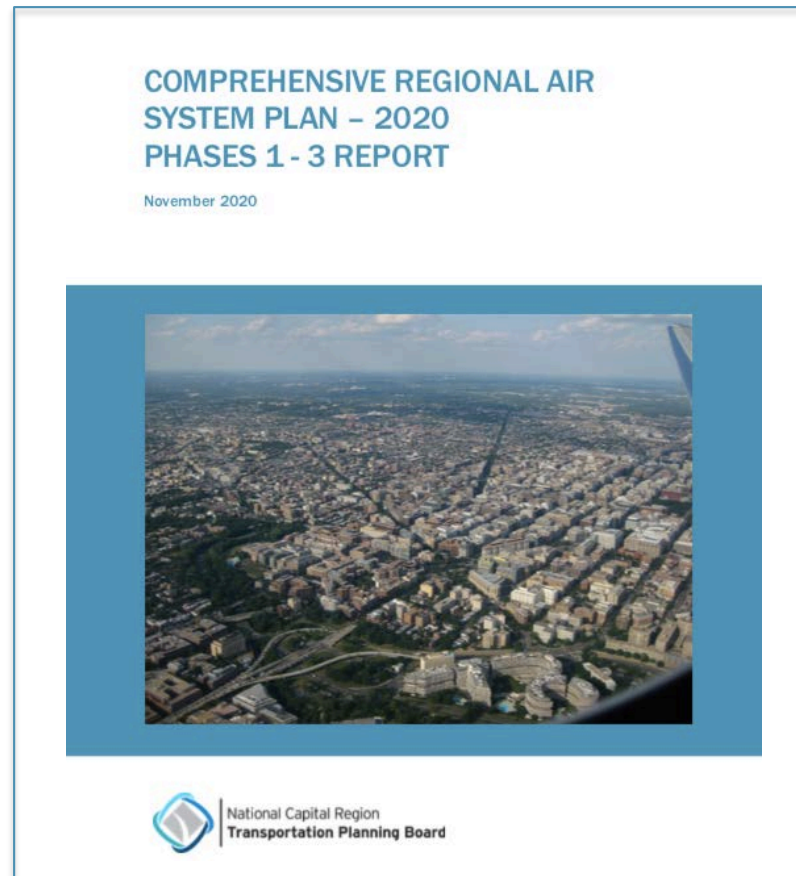
The Washington-Baltimore Air System Planning Region (ASPR) stretches from Harford County, MD to the north, to Spotsylvania County, VA to the south and from the Chesapeake Bay in the east to the foothills of the Appalachian Mountains to the west. It includes both the Washington and Baltimore regions.



About CASP Program

- Continuous Airport System Planning (CASP) program
- Funded by FAA, MWAA, and MAA
- Supports planning, development, and operation of airport facilities and associated transportation facilities
- A continuous cycle:
 - Biennial regional air passenger survey
 - Air passenger origin/destination forecast update
 - Air passenger ground access forecast update
 - Ground access plan update
- Developed, implemented, and monitored by Aviation Technical Subcommittee (ATS), including MAA and MWAA

Background Reading



The RASP Report can be found online in the link below. A memo highlighting the priority airport ground access projects has been included in the mailout.

<https://www.mwcog.org/transportation/planning-areas/airports/casp-elements/regional-air-system-plan/>



RECOMMENDATIONS

Federal Planning Factors

- Increase accessibility and mobility of people and freight
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight
- Enhance travel and tourism

TPB Policy Framework

BMC Policy Framework

Long-Range Transportation Plan (LRTP) Projects to Prioritize



TPB Policy Framework

Aspirational Initiatives

The express travel network would provide several benefits for airport ground access connectivity, including reducing congestion and incentivizing travelers to either carpool or travel by transit vehicle. Expanding Metrorail capacity would increase logistical ease and comfort for those traveling by Metrorail to and from airports.

Regional Transportation Priorities Plan (RTPP) Goals

- Provide a comprehensive range of transportation options.
- Support inter-regional and international travel and commerce.



Visualize 2045 Priority Projects

- **Overall**
 - Highway: **33** & Transit: **1**
- **MDOT Interstate Roadway Projects**
 - To improve access from Virginia to Maryland
 - I-270: **2** & I-495: **6**
- **Anne Arundel County Primary Roadway Projects**
 - To reduce congestion in Anne Arundel County surrounding BWI
 - I-295: **1** & MD 713: **1**
- **Howard County Primary Roadway Projects**
 - To reduce congestion in Howard County surrounding BWI
 - I-95: **1** & MD 100: **1**



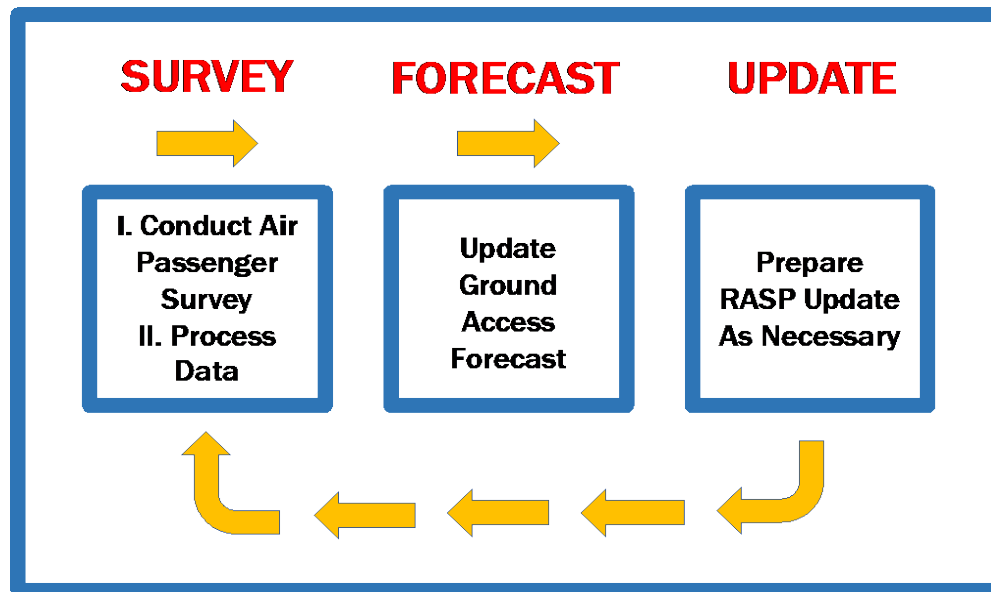
Visualize 2045 Priority Projects

- **Transit Airport Ground Access Project**
 - To improve multimodal connectivity to BWI
 - MARC Penn Line: **1**
- **VDOT Interstate Roadway Projects**
 - To reduce congestion along I-66
 - I-66: **10**
 - To reduce congestion along the I-495 Capital Beltway
 - I-495: **6**
 - To reduce congestion along the Dulles Airport Access Road
 - Dulles Airport Access Road: **1**
 - To reduce congestion along VA 28
 - VA 28: **4**



NEXT STEPS

- CASP planning cycle will continue to be synchronized with the regional LRTP update process. The precise timing of future RASP Updates will be based on need, available funding, as well as aligning with each airport's strategic and master planning processes.



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