



AIR CARGO ELEMENT UPDATE

Comprehensive Regional Air System Plan

Olga Perez
Planning Program Specialist
Continuous Airport System Planning (CASP) Program

Freight Subcommittee
November 14, 2024



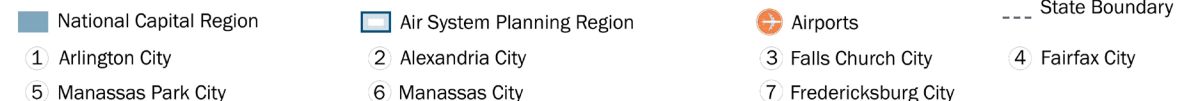
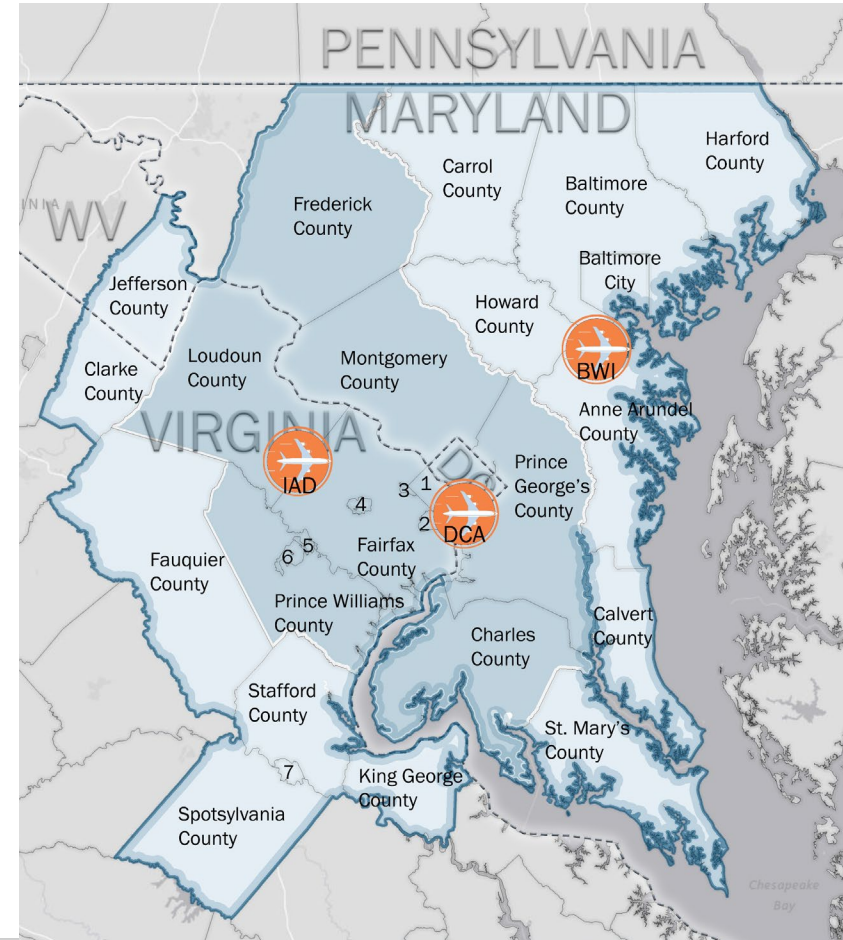
Continuous Airport System Planning (CASP) Program - Overview

- Regional process carried out by COG/TPB to support planning, development, and operation of airport and airport-serving facilities in a systematic framework for the Washington-Baltimore region for more than 40 years.
- The TPB's Aviation Technical Subcommittee develops, implements and monitors CASP Program activities, and is responsible for the integration of airport system planning with the regional transportation planning process. Members include:
 - Federal Aviation Administration (FAA)
 - Maryland Aviation Administration (MAA)
 - Virginia Department of Aviation (DOAV)
 - District of Columbia Office of Planning (DCOP)
 - District Department of Transportation (DDOT)
 - Metropolitan Washington Airports Authority (MWAA)
 - Staff from the Baltimore Metropolitan Council (BMC)



Washington-Baltimore Air System Planning Region

- Includes District of Columbia and cities and counties in Maryland, Virginia and West Virginia
- North to South: PA / MD border to beyond Fredericksburg, VA
- East to West: Chesapeake Bay to Appalachian Mountains



Washington-Baltimore Air System Planning Region

Served by three large commercial airports



Comprehensive Regional Air System Plan (RASP) – Completed 2021

Phase 1 - Summarizes previous and recent air systems planning efforts, resulting in a determination of the state of the practice in regional air system planning.

Phase 2 - Reviews existing conditions (supply) and anticipated needs (demand) in the regional airport system.

Phase 3 - Synthesizes air system-wide planning considerations, conducts needs assessment, reviews ground access element update, and shares airports ground access-related recommendations.

All three phases developed in conjunction with FAA, MWAA, and MAA.

The 2021 RASP is accessible here: <https://www.mwcog.org/transportation/planning-areas/airports/casp-elements/regional-air-system-plan/>

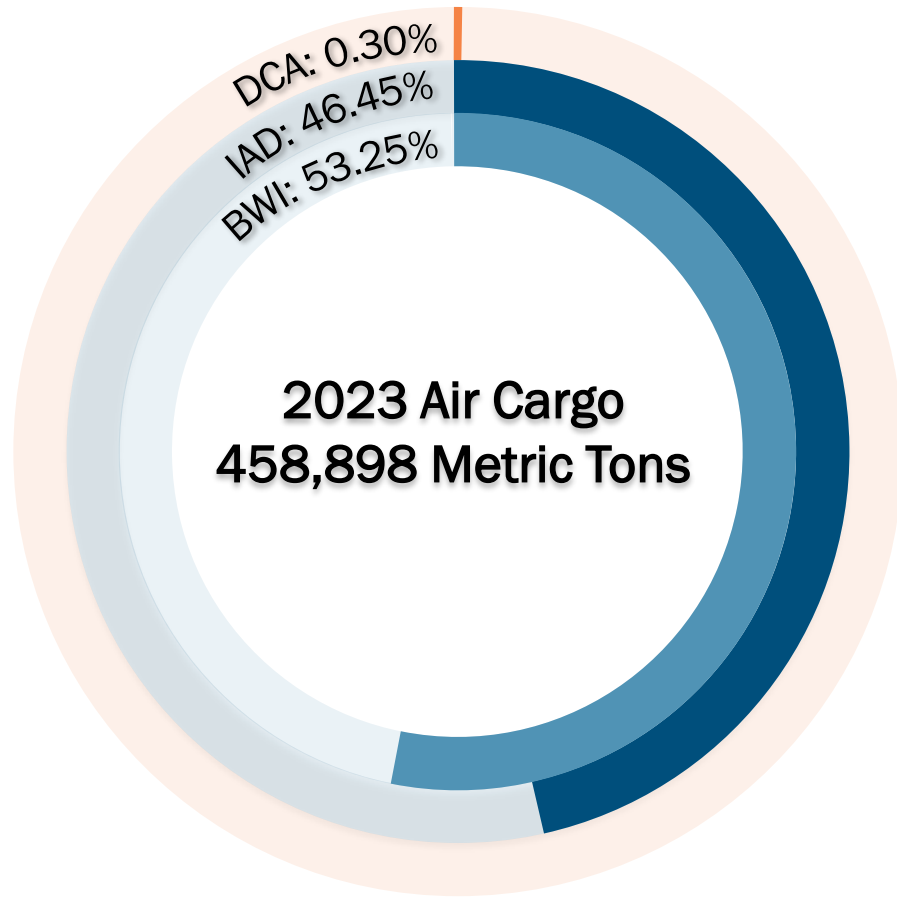


WASHINGTON BALTIMORE REGIONAL AIR CARGO STUDY 2015

- The air cargo component was **last examined in 2015**
- The study in 2015 focused on evaluating the **suitability** of current air cargo facilities to accommodate future air cargo demand.
- Past Air Cargo Element studies were conducted periodically, with previous assessments completed in **2008** and **1997**.
- Analysis focused on the air cargo demand at Baltimore Washington International Thurgood Marshall Airport (**BWI**) in Maryland and Washington Dulles International Airport (**IAD**) in Virginia.



Cargo Volume by Airport

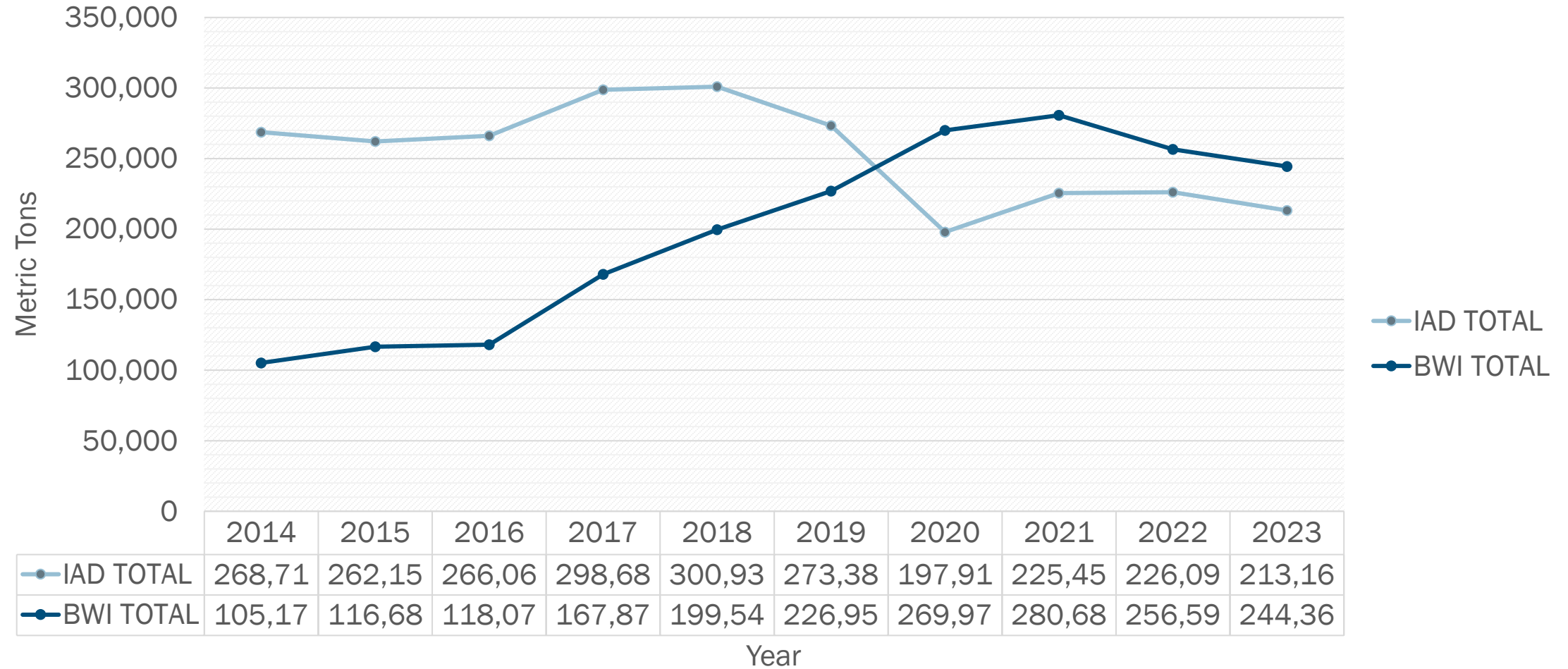


Air Cargo Element update includes only **IAD** and **BWI** airports due to **DCA's** substantially smaller share and limited capacity for expansion.

Sources: Statistics - BWI Airport, Dulles Air traffic statistics – IAD Airport, and COG National Capital Region Freight Plan, 2023 Update



Cargo Volume by Airport



Sources: Statistics - BWI Airport, Dulles Air traffic statistics – IAD Airport, and COG National Capital Region Freight Plan, 2023 Update



WASHINGTON-BALTIMORE REGIONAL AIR CARGO STUDY – 2015

February 2017



Source: 2015 Washington-Baltimore Regional Air Cargo Study - cover (COG)

Project Purpose

- Analyze the capacity for delivering high-value, just-in-time air cargo services.
- Identify ground accessibility challenges that hinder the efficient transfer of air cargo shipments from airports to their final destinations.
- Provide recommendations based on the analysis to enhance ground access for the distribution of air cargo shipments.
- Serve as a comprehensive guide for strategic planning across the Washington-Baltimore region.



Data Sources

- Census Bureau
- U.S. Department of Labor, Bureau of Labor Statistics
- U.S. Bureau of Economic Analysis
- District of Columbia Department of Employment Services
Office of Labor Market Research and Information
- Maryland Department of Labor, Licensing and
Regulation, Office of Workforce Information and
Performance
- FHWA, (Federal Highway Administration)
- Airports Council International - North America

Stakeholders

MWAA

MAA

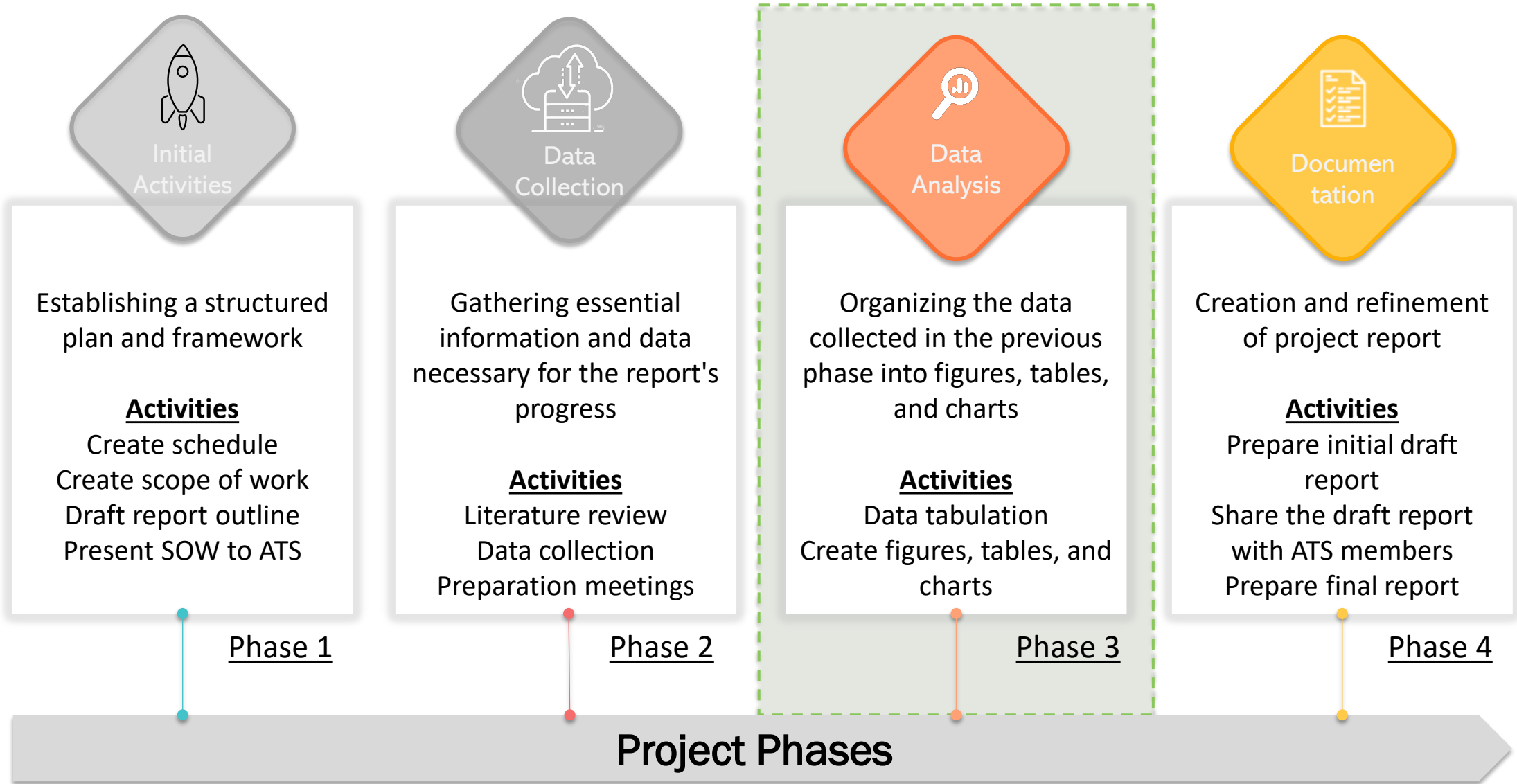
FAA

State and Local Transportation
Planning Agencies

COG/TPB Freight
Subcommittee

Source: Defense Visual Information Distribution Service





Tentative Report Outline

- **Introduction**

- Regional Air System Planning, Washington-Baltimore Air System Planning Region
- Air Cargo characteristics and regional air cargo market
- Washington-Baltimore Region Industrial and Demographic Profile (population, labor force and unemployment, at-place employment, and income)

- **Air cargo demand analysis**

- Residential and commercial demand
- Job, commodities, and the growth the air cargo industry both nationally and within the Washington-Baltimore region

- **Regional airport cargo facilities**

- For BWI and IAD

- **Ecommerce analysis**

- For BWI and IAD

- **Accessibility analysis**

- For BWI and IAD

- **Recommendation**




Data Progress

 Current (and Historic) Air Cargo in the Region


 Commodities Type

Air Cargo Growth in the Region




- NAM Ranking 2022/2020/2017

Industrial and Demographic Profile



- Population
- Unemployment
- At Place Employment
- Income

Air Cargo Demand Analysis



- Population Forecast
- Household Forecast
- Employment Forecast
- Air Cargo Forecast

Ecommerce Data



- Percentage of ecommerce in the Air Cargo



Data Completed
Tabulated
Analysis in progress



In Progress



Next Steps to Complete the Air Cargo Element

Phase 3

- **Organize and Tabulate Data:** Begin by systematically organizing and tabulating the collected data to ensure it aligns with the report's requirements.
- **Create Visuals:** Develop clear and effective visuals that represent key findings related to population dynamics, air cargo volumes, and airport facilities.
- **Data Analysis:** Conduct a thorough analysis to highlight changes over time, ensuring that the insights drawn from the data are easily understandable and impactful.
- **Foundation for Recommendations:** Use the analyzed data to build a strong foundation for the recommendations that will be presented in the report's conclusion.

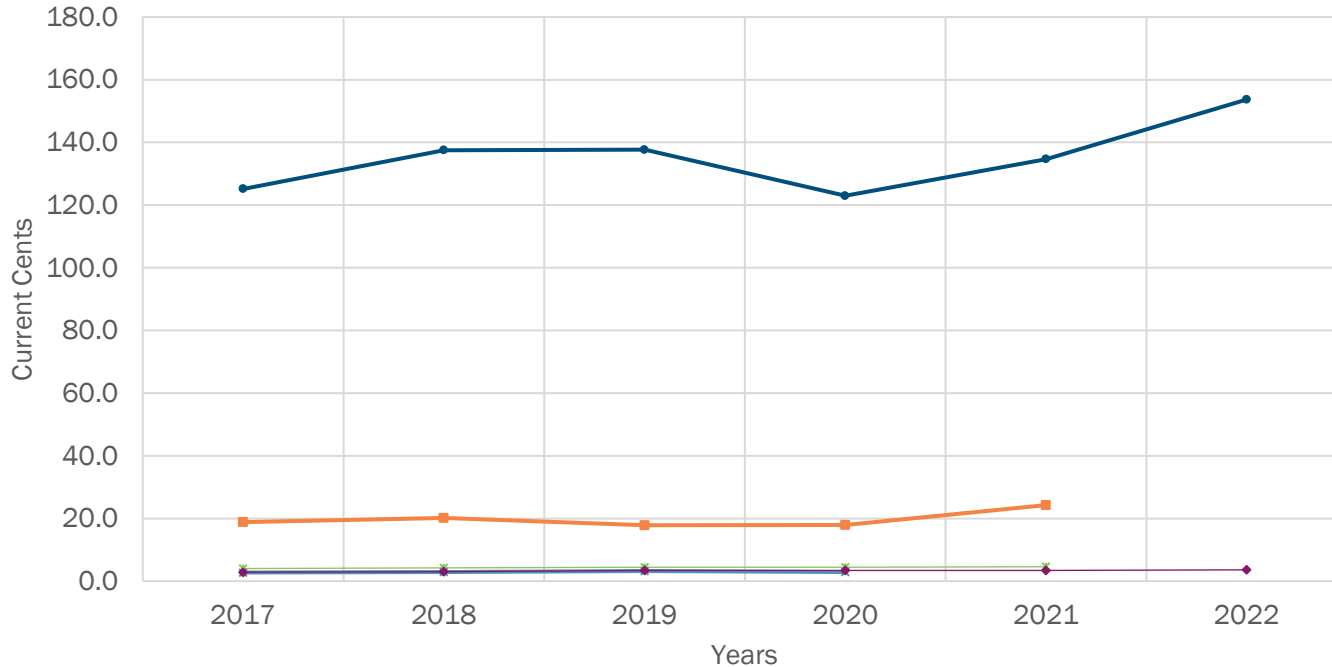
PHASE 4

- Compile Project Information
- Draft Comprehensive Report
- Facilitate Stakeholder Review



Economic Impact – Air Cargo

Average Freight Revenue per Ton-mile
Actual Value (Current Cents)



Air cargo has a **significant economic impact** due to the transportation of high-value commodities. While its share of total weight compared to other modes is small, **its share in value is important.**

— Air carrier, domestic — Truck — Class I rail — Water transportation, domestic — Oil pipeline

Notes: Data are unavailable for some modes in certain years.

Sources: U.S. Department of Transportation, Bureau of Transportation Statistics, National Transportation Statistics, table 3-21 available at <https://www.bts.gov/product/national-transportation-statistics> as of September 2024.



Freight Plan Update / Air Cargo Element Update

- The Freight Plan examines freight movement across all modes of transportation in the National Capital Region, while Air Cargo focuses specifically on goods transported by air.
- The Freight Plan covers the National Capital Region, whereas the Air Cargo study includes a broader Air System Planning Region, encompassing 15 additional jurisdictions (1 in WV, 6 in VA, and 8 in MD).
- Due to its comprehensive approach to intermodal freight, the Air Cargo Study can serve as a valuable resource to complement the Freight Plan.
- Depending on publication dates, data from one report may be used in the other. When newer data is available, it will be used, while ensuring that any shared historical data remains consistent between both reports.



Olga Perez

Planning Program Specialist

(202) 962-3265

opelaez@mwkog.org

Timothy Canan

Program Director, Planning Data and Research

(202) 962-3280

tcanan@mwkog.org

mwkog.org/tpb

Metropolitan Washington Council of Governments

777 North Capitol Street NE, Suite 300

Washington, DC 20002

