

REGIONAL BUS SERVICE PROVISION STUDY

Key Findings from the Final Report of the FY 2018 UPWP Technical Assistance Project

Arianna Koudounas, AICP
Transportation Planner

TPB Technical Committee
January 4, 2019

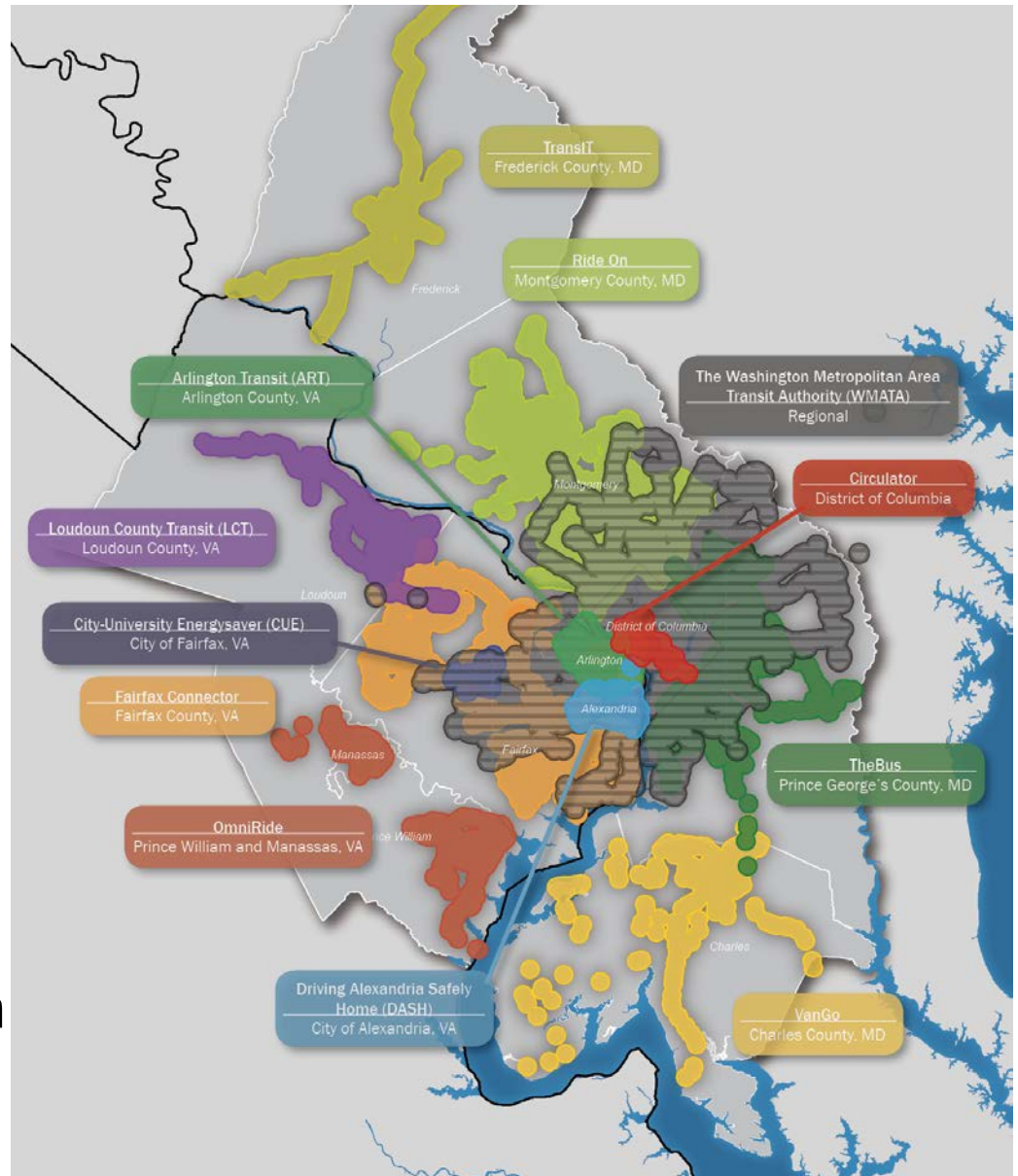
Agenda

- Purpose
- Overview
- Bus Service Cost Components
- Literature Review, Peer Review, Local Examples
- Enhanced Efficiency Recommendations & Implementation Timeframe
- Final Report & Bus Transformation Study



Purpose

- To better understand how and why agencies' costs, funding structures, and operational practices vary
- To identify ways to further enhance efficiency and improve coordination, collaboration, and partnering between agencies



Overview: Staff, Funding Partners, TAC

Client Staff

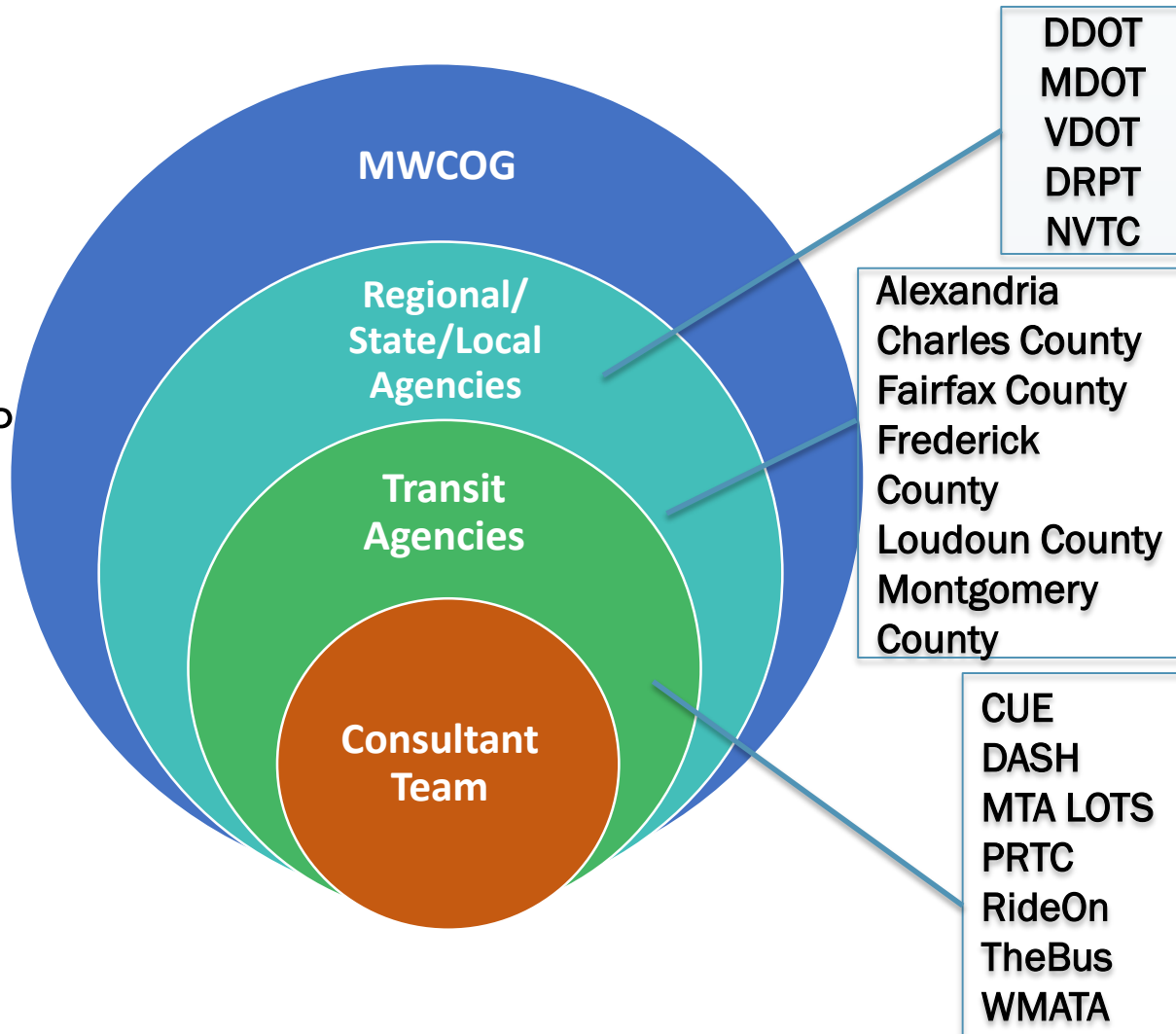
- COG-TPB

Consultant Staff

- AECOM
- Foursquare ITP

Funding Partners

- DRPT
- MDOT
- VDOT
- WMATA



Overview: Scope of Work

Cost Accounting of Bus Service

- Inventory of regional cost components
- Analysis of regional bus service provision cost factors

Identification of Regional Options for Efficiency

- Analysis of cost factors and potential strategies
- Recommendations framework
- Scenario development and evaluation
- Conclusions

Final Report

- Delivered June 2018
- Presented to RPTS on June 26, 2018



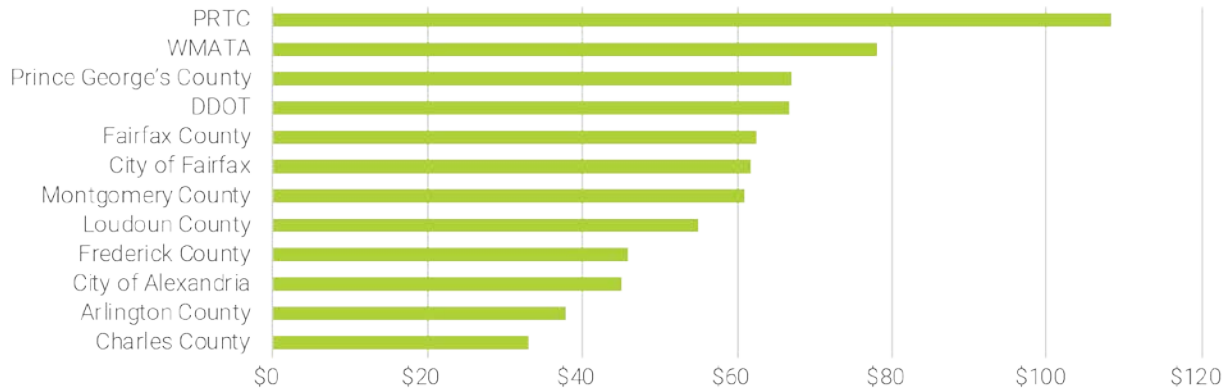
Bus Service Cost Components



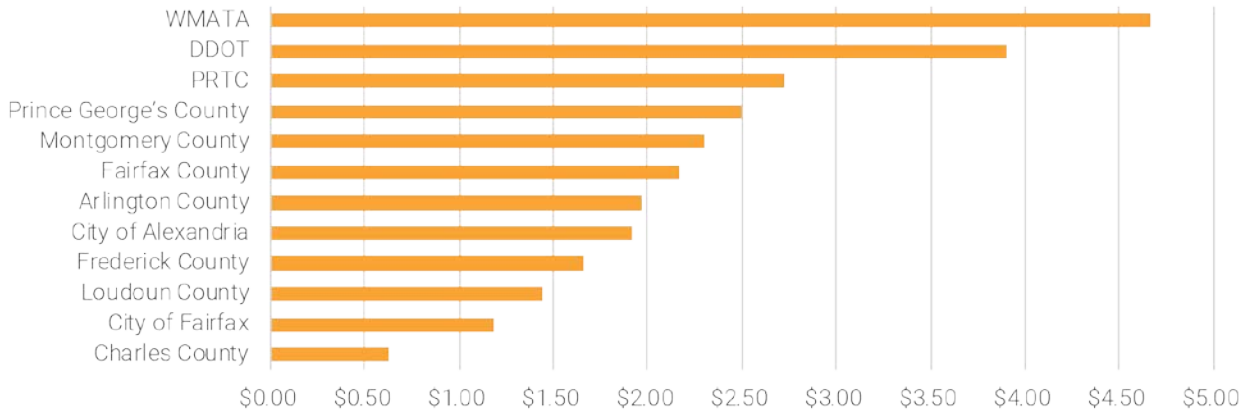
- * Considered in context of near-term impacts and for small service changes
- ** Considered in context of near- & long-term impacts and for small & large service changes

Bus Service Cost Components (1)

COST OF VEHICLE OPERATIONS (USD per Revenue Hour)



COST OF VEHICLE MAINTENANCE (USD per Revenue Mile)

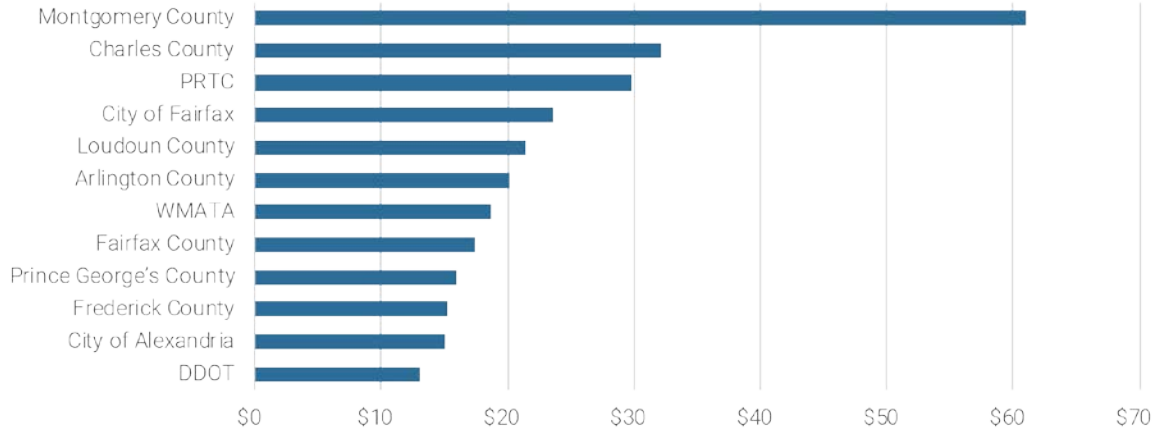


*Considered in context of near-term impacts and for small service changes

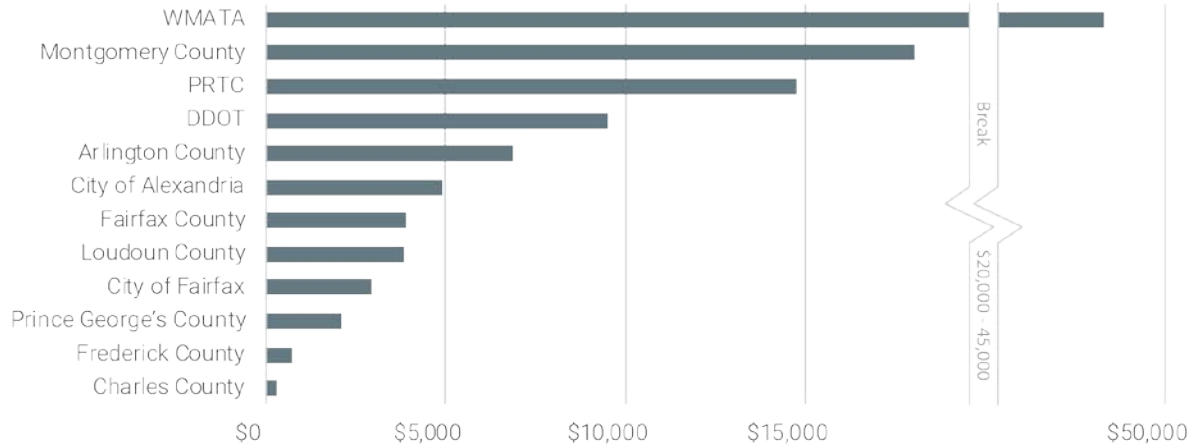


Bus Service Cost Components (2)

COST OF GENERAL ADMINISTRATION (USD per Revenue Hour)



COST OF NON-VEHICLE MAINTENANCE (USD per VOMS)



*Considered in context of near-term impacts and for small service changes



Bus Service Cost Components

- Operating characteristics, contractual provisions, and governance structures can significantly impact these O&M unit costs
- Among the most important explanations of the differences are:
 - **Deadheading:** the amount of time and distance that vehicles operate outside of regular revenue service
 - **Labor Contracts:** including operator wages, union work rules, and service profile
 - **Fringe Benefits:** all non-salary benefits, including pensions

*Considered in context of near-term impacts and for small service changes



Lit Review, Peer Review, Local Examples

- **Customer-Oriented Strategies**
 - Schedule Coordination
 - Shared Passenger Facilities
 - Regional Fare Structure
 - Regional Fare Media
 - Information/Date Coordination
- **Agency-Oriented Strategies**
 - Joint Procurement
 - Joint Staff Training
 - Shared Infrastructure
 - Shared Technology
 - Merge Duplicative Routes
 - Joint Maintenance, Parking, and Storage Facilities

Image Credit: WMATA Metrobus New Flyer Xcelsior XDE40s & XN40s (MWTransitPhotos/Flickr)



Local Examples: Customer-Oriented

Schedule Coordination

- Transit providers in the region regularly coordinate schedules for a wide variety of reasons, facilitating transfers between agencies and modes

Shared Passenger Facilities

- Transit hubs and centers, like the Pentagon Transit Center, provide passengers with comfortable spaces to make transfers, information services, and other passenger amenities

Regional Fare Structure

- Bus providers in the region have established a 2-hour transfer credit, which encourages trips that cross jurisdictions

Regional Fare Media

- The SmartTrip card, which was released in 1999 as a fair payment system for MetroRail, has been adopted by all local bus agencies

Information/Date Coordination

- Multiple agencies work together to share information through Commuter Stores and WMATA's Trip Planner



Local Examples: Agency-Oriented

Joint Procurement

- ART utilizes a Fairfax County tire contract; MWCOCG has a cooperative fuel purchasing contract

Joint Staff Training

- WMATA and Maryland MVA license CDL drivers in Maryland through a training program

Shared Infrastructure

- Metroway in Arlington/Alexandria is the first of what could be many shared facilities in the region

Shared Technology

- TIGER Transit Service Priority Project: buses run the same routes/across jurisdictions with TSP treatments using the same technology

Merge Duplicative Routes

- Regional transit providers frequently merge duplicative service

Joint Maintenance, Parking, Storage Facilities

- WMATA has a 75-year lease with Fairfax County for co-occupying the West Ox bus facility; includes operating and renewal cost sharing



Enhanced Efficiency Recommendations & Implementation Timeframe (1)

- Transfers or Mergers of Service (3+ years)
- Shared Maintenance, Storage, and Parking Facilities (3+ years)
- Shared Infrastructure on High Investment Corridor (3+ years)
- Joint Procurement
 - Regional Procurement Contract for Buses (5+ years)
 - Regional Procurement Contract for Other Purchases (3+ years)
 - Procurement Agreement for Buses Between Two or More Jurisdictions (1-2 years)
 - Procurement Agreement for Other Purchases between Two + Jurisdictions (1-2 years)
- Shared Customer Service Functions
 - Regional Coordination and Promotion of Transit Information Resources (2-5 years)
 - Establish Consistent Service Disruptions Communications Channel (1-2 years)
 - Joint Regional Call and Communication Center (5+ years)
 - Shared Customer Service Studies (1-2 years)



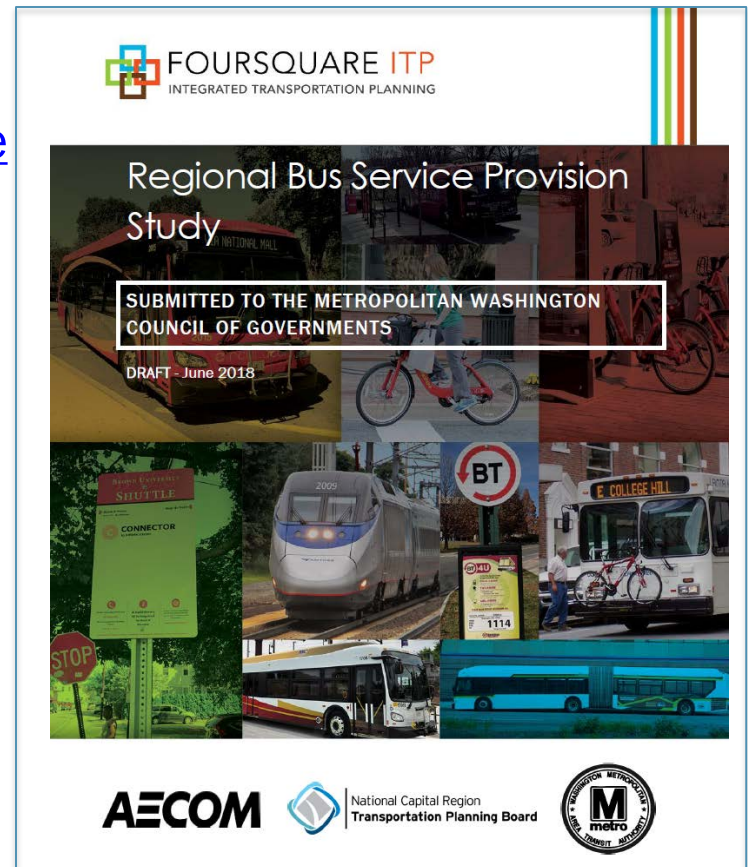
Enhanced Efficiency Recommendations & Implementation Timeframe (2)

- Shared Administrative Functions
 - One Agency Performs Bus Acceptance for Other Agencies (1-2 years)
 - Regional Collaboration on Asset Disposal/Management (1-2 years)
 - Merging of Bus Service Provider Governance, Staff, Operations (5+ years)
 - Information Sharing regarding Successful Practices in Administration (1-2 years)
- Joint Training
 - Joint CDL Training (1-2 years)
 - Joint Clever Device Training (1-2 years)
 - Maintenance Trainings (1-2 years)
 - Safety and Security Training (1-2 years)
 - Regional Technical Training Program (5+ years)
- Shared Technology
 - Standardized Processes for the Collection and Dissemination of GTFS, APC, and AVI
 - Transit Signal Priority Systems
 - Flex Services



Final Report & Bus Transformation Study

- Final Report now online
 - <https://www.mwcog.org/documents/2018/12/27/regional-bus-service-provision-study/>
- Bus Transformation Study
 - Update at February 2019 TPB Tech
 - Envisions the future of the region's bus system
 - Opportunity to integrate the findings from the Regional Bus Service Provision study
 - Same consulting team as Regional Bus Service Provision study
 - AECOM
 - Foursquare ITP



Arianna Koudounas, AICP

Transportation Planner

Department of Transportation Planning

202.962.3312

akoudounas@mwkog.org

Tim Canan, AICP

Planning Data and Research Program Director

Department of Transportation Planning

202.962.3280

tcanan@mwkog.org

Eric Randall

Principal Transportation Engineer

Department of Transportation Planning

202.962.3254

erandall@mwkog.org

mwkog.org/tpb

Metropolitan Washington Council of Governments

777 North Capitol Street NE, Suite 300

Washington, DC 20002



National Capital Region
Transportation Planning Board