

# Chapter 1

## Introduction

### INTRODUCTION

This report documents the results and recommendations of the short-range (five-year) Transit Development Plan (TDP) for the Central Maryland area including Anne Arundel County (except the City of Annapolis<sup>1</sup>), Howard County, and Northern Prince George's County including the City of Laurel. The Maryland Transit Administration (MTA) requires the Locally Operated Transit Systems (LOTS) in Maryland to conduct a TDP update every five years. The LOTS use their TDPs as a basis for preparing their Annual Transportation Plans (ATPs) that serve as their Annual Grant Application (AGP) for transit funding. The TDP planning process builds on or formulates the county's or region's goals and objectives for transit, reviews and assesses current transit services, identifies unmet transit needs, and develops an appropriate course of action to address the objectives in the short-range future, typically a five-year horizon. A completed TDP serves as a guide for the local transit system, providing a roadmap for implementing service and/or organizational changes, improvements, and/or potential expansion during the five-year period.

This particular TDP is a significant development in the planning process for transit in this region. Previously TDPs were developed separately for Howard County, Anne Arundel County, and for Connect-a-Ride (now RTA) services in Prince George's County. In addition, the staff of the RTA (and predecessor organizations) and the counties performed a great deal of short-range operational planning as the organizational changes in the region progressed. The previous TDPs for Howard and Anne Arundel Counties were separate plans, but they were done at the same time with the thought that they could be joined at the match lines to result in a regional plan. To an extent, the *Fort Meade BRAC Transit and Ridesharing Planning Study* of 2010 was the first regional transit plan to combine the local service plans. However this current *Central Maryland Transit Development Plan* will be the first fully regional transit plan to encompass this unique multi-jurisdictional region.

The fully regional nature of this TDP is reflected in the scoping process that led to the final Scope of Work. A scoping committee including representatives of the MTA, Howard County, Anne Arundel County Planning and Zoning, the Baltimore Metropolitan Planning Organization, the RTA, and the consultant met three times and provided comments on draft scope and budget documents. While there is a standard set of tasks included in a TDP and the MTA has a framework that must be followed, there is significant latitude within these guidelines. This scoping committee provided direction that was reflected in the final scope of services and eventually in this Central Maryland Transit Development Plan document.

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<sup>1</sup> A separate TDP is being conducted for the transit services operated by the City of Annapolis, but this study does include recommendations for the routes operated by Annapolis Transit with support from Anne Arundel County.

## Project Process

This study was guided through the participation of the public and agencies affected by public transit services primarily by a Technical Advisory Committee (TAC), which included representatives from the RTA, Anne Arundel County, Howard County, Prince George’s County, the City of Laurel, and the MTA. The role of TAC members included provision and validation of data, input on process, assistance in public outreach, review and comment on draft products and recommendations, and assistance in the final presentation and review process with key decision-makers. A broader Study Advisory Committee (SAC) was initially involved in the transition from the scoping process to the study and members of this group were informed during the study tasks. The TAC was a substantial subset of the SAC, which also included representatives of the Baltimore Metropolitan Commission (BMC) and the MTA. It should be noted that MTA staff provided data and contributed significantly to the development of service alternatives and recommendations, particularly for the Howard County routes.

## Review of Previous Studies and Data

An initial task involved review of recent studies and plans in the region to gain a better understanding of previous planning efforts, local trends, and directions that key participants will be taking. This review included:

- Recent and historic transportation studies for Anne Arundel, Howard and Prince George’s Counties and the City of Laurel, including the current regional Baltimore Region Coordinated Public Transit – Human Services Transportation Plan, Bus Rapid Transit (BRT) studies for Route 29 and Route 1, plans for the Downtown Columbia Transit Center, and the recent analysis of Anne Arundel County Department of Aging and Disabilities paratransit services.
- RTA passenger count data.
- Operating reports and performance data for systems under study, including MTA Form 2A reports.
- Land use or development plans for the area under study, including plans for downtown Columbia; the recently adopted Odenton Town Center Master Plan; and any other plans that have been adopted or are in force.
- Other regional plans or studies such as the Baltimore Regional Transit Needs Assessment, Baltimore Metropolitan Council (BMC) BWI Workforce Development Study, MTA Baltimore Link plan, and the Fort Meade Regional Growth Management Committee Comprehensive Regional Plan Addressing Growth Impacts.

- Previous and current funding for local transit systems.
- Progress on implementation of previous TDPs.

## Demographic Analysis and Land Use

In order to determine locations of major origins for transit ridership, a population profile was developed to identify areas of the region that are likely to have higher transit needs and the density that is required to support different types of transit services. The analysis used 2010 Census and American Community Survey updates. The analysis focused on the density of potentially transit dependent populations by Census block group. The transit dependent population included:

- Persons age 60 and older
- Persons with disabilities
- Zero car households
- Youth population
- Persons living below poverty level

In addition, overall population densities at the block group level were mapped to indicate whether or not the existing transit network was serving locations of sufficient density to support fixed-route service, or to identify areas of density lacking transit service.

In order to identify regional travel patterns, data was obtained from the BMC regional travel demand model. An analysis focusing on significant levels of home-based work trip productions/attractions resulted in tables and maps showing the key regional flows—for all modes. In addition, the study team collaborated with Sidewalk Labs (a subsidiary of Google) to attempt to use cell phone location data to identify regional travel patterns, which did not yield data usable for transit travel pattern analysis.

As transit can have a major role in providing access to jobs for those who are unemployed or underemployed, the density and location of employment was mapped, and combined with information on the percentage of households in poverty. This information was mapped to help identify the adequacy of current transit coverage and the need for new transit links.

Finally, land use information was obtained from the counties to identify new or recent major developments to confirm that existing or planned transit services provide adequate access.

The results of these analyses are presented in Chapter 2.

## Public and Stakeholder Outreach

A substantial effort was made to collect public and stakeholder input as part of the process of developing this plan. In the public and stakeholder input subtask, the consultants worked with the counties, the city and RTA to obtain public input regarding the issues and concerns to be addressed in the study by identifying and interviewing stakeholders. The stakeholders, typically public agency representatives, were identified jointly with county staff, and were interviewed by telephone, email, and in meetings.

A single project website was developed and linked to the RTA website and to each jurisdiction's website, providing an overview of the study process. It included a link to an open-ended community survey that could be completed online. The RTA and the counties publicized the project and survey. The project website included high-level summaries of draft products and links to technical memoranda, and also included contacts available for any public input or questions. Presentations and other materials from the public meetings were also made available on the website.

The consulting team worked with the RTA and the jurisdictions to conduct public meetings. An initial round of public meetings presented the purpose of the study and was designed to solicit input regarding needs. The consultant developed the materials and content, and conducted a meeting in each jurisdiction—Howard County used the materials to conduct an additional two meetings. A second round of public meetings was held to present service alternatives.

Finally, user surveys were developed to solicit the input of riders. For fixed-route services, a printed survey was developed, distributed and collected on buses with significant assistance from the RTA staff and operators. The survey was also available to users electronically through the website. A second survey was designed primarily for users of demand-response services, and it was mailed to current users. All surveys were made available in English, Spanish, and Korean.

Results of the outreach process are presented in Chapter 3 of this report.

## Existing Public Transit System

Chapter 4 of the study included an assessment of existing RTA fixed-routes, RTA demand-response services, and Anne Arundel Department of Aging and Disabilities (DOAD)<sup>2</sup> demand-response services. This task involved collection and calculation of basic route and service level performance data to allow an assessment of current routes and services and evaluate performance against the MTA's established performance standards. For RTA services, initially MTA Form 2a performance data was used, but subsequent analyses

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<sup>2</sup> Responsibility for these Anne Arundel County demand-response services was shifted to the new Ann Arundel County of Office of Transportation during the course of the study.

conducted by the counties and the RTA to update cost-allocation to RTA partners resulted in data that better reflected the current service and ridership, so this information was included in the analysis. The result provided a route-level analysis of key performance indicators.

In addition, data was collected from the RTA's Nextbus system to develop estimates of activity by stop for each route. Because this equipment is only working on a portion of the fleet, and the fact that many buses move from route to route during the course of a day, a considerable effort was needed to reassemble this information to provide a good approximation of the on-off information. The performance and ridership data was combined with the user survey data to present a route profile for each route.

Separate analyses of RTA and Anne Arundel County demand-response services were included, focusing on basic service productivity and costs. The RTA fare structure was also reviewed.

Information on other transit providers in the TDP service area, including routes, schedules, fares and connectivity with local services, was collected and presented. This included MTA local routes, MTA commuter bus services, MTA light rail, MARC commuter rail services, and WMATA Metrobus routes. These also included new services developed by MTA as part of the Baltimore Link restructuring of Baltimore's bus transit network. Information on other providers, including human service agencies, is also presented in Chapter 4. City of Annapolis routes and services connecting the City and County were included in this inventory.

## **Transit Service Alternatives**

The first three tasks of the TDP lay the foundation for development of the recommended plan. In Chapter 5, the needs identified in the previous task are used as a basis for detailed alternatives.

For each service option a route map is provided showing the existing service and potential changes in routing. Text is used to describe changes in frequency or span, or to describe the proposed frequency or span for new expansion services. Summary tables include planning estimates of operating costs. Similarly, for vehicle capital a proposed alternative is presented to address the vehicle replacement needs for the RTA, and to address fare collection.

These alternatives were presented at a series of meetings in the RTA service area in summer and fall of 2017, and the comments and input received were used to revise the alternatives for inclusion in the TDP.

## **Recommended Plan**

Chapter 6 presents the recommended plan, based on the previous analyses and the input received on the alternatives described in Chapter 5. The plan includes conceptual routes and schedules structure for planned modifications to existing services, and for proposed

expansion services. The plan is presented as a phased plan over the five years, though the specific year of implementation may change depending on the resources available and local opportunities. Budget information is provided for the plan, with greater detail for the initial year and more generalized cost estimates for the out years.

A capital plan is included, reflecting vehicle replacement needs and the planned expansion of services. It addresses capital requirements for a new fare collection system for the RTA and Central Maryland.

## **Vision—Beyond the TDP**

Chapter 7, the final chapter, presents information on additional transit initiatives that are likely to emerge in the final years of this plan. These include the development of bus rapid transit options in Howard County, implementation of a new intermodal bus terminal in Columbia, (potentially) a high-frequency east-west transit corridor connecting key activity centers in Howard County, and development of a high-frequency shuttle between Arundel Mills and Baltimore Washington International airport (BWI).