Regional Transportation Agency of Central Maryland Transit Development Plan

Fiscal Years 2024 - 2028
Draft Final Report – October 2023

ANNE ARUNDEL COUNTY MARYLAND   HOWARD COUNTY MARYLAND   CITY OF LAUREL MARYLAND   Prince George's county   RTA   MDOT MARYLAND DEPARTMENT OF TRANSPORTATION MARYLAND TRANSIT ADMINISTRATION   KFH GROUP

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Chapter 1
Introduction and Goals for the Plan

Introduction

This Transit Development Plan (TDP) serves as a guide for public transportation improvements within Howard County and surrounding communities for a short-range (5-year) planning horizon. This is an update to the 2018 Central Maryland TDP and is intended to improve the efficiency and effectiveness of existing public transportation services provided by the Regional Transportation Agency of Central Maryland (RTA). The final TDP will document the history and current state of transit service, identify transportation needs and issues, develop organizational and service alternatives, and provide a comprehensive plan to guide improvements over the five-year planning cycle.

The Maryland Department of Transportation – Maryland Transit Administration (MDOT MTA) requires all Locally Operated Transit Systems (LOTS) in Maryland to conduct a TDP every five years. The LOTS, including Howard County, use their TDP as a basis for preparing the Annual Transportation Plan (ATP) which serves as the annual grant application for federal and state transit funding. To give a new service or service expansion the best chance of acquiring grant funding, the concept or project should be included in the TDP. The planning process for the TDP was guided by Howard County, RTA, Howard County's Multimodal Transportation Board, and MDOT MTA.

This TDP documents the entire planning process and provides conceptual five-year operating, capital, and financial plans. The TDP is organized in the following order:

> **Chapter 1: Introduction and Goals for the Plan**
> **Chapter 2: Review of Existing Services**
> **Chapter 3: Review of Needs**
> **Chapter 4: Community Input**
> **Chapter 5: Organizational and Service Alternatives**
> **Chapter 6: Transit Service Plan**

This first chapter highlights Howard County's existing public transportation goals and goals for the TDP. The goals were updated throughout the planning process as additional issues and opportunities came to light.

The latter portion of this chapter includes a review of existing planning reports and studies that specifically impact Howard County and the RTA. The purpose of including this review is to ensure this TDP is consistent with and builds upon other local and regional planning efforts.

Study Focus

The 2018 Central Maryland TDP was a regional effort with partners from Anne Arundel County, Howard County, Northern Prince George's County, and the City of Laurel. The 2018 TDP primarily focused on RTA service as it was the primary transit service provider in each locality at the time. Since the 2018 TDP, Anne Arundel County has launched Anne Arundel County Transit – taking over former RTA routes and expanding transit throughout the county. The RTA is Howard County's transit operator, and the RTA's service will be the primary focus of this TDP. The RTA was formed through the Central Maryland Transportation & Mobility Commission (CMTMC) which represents Howard County, Anne Arundel County, Northern Prince George's County, and the City of Laurel.

Figure 1-1: Central Maryland Area – Study Focus Area
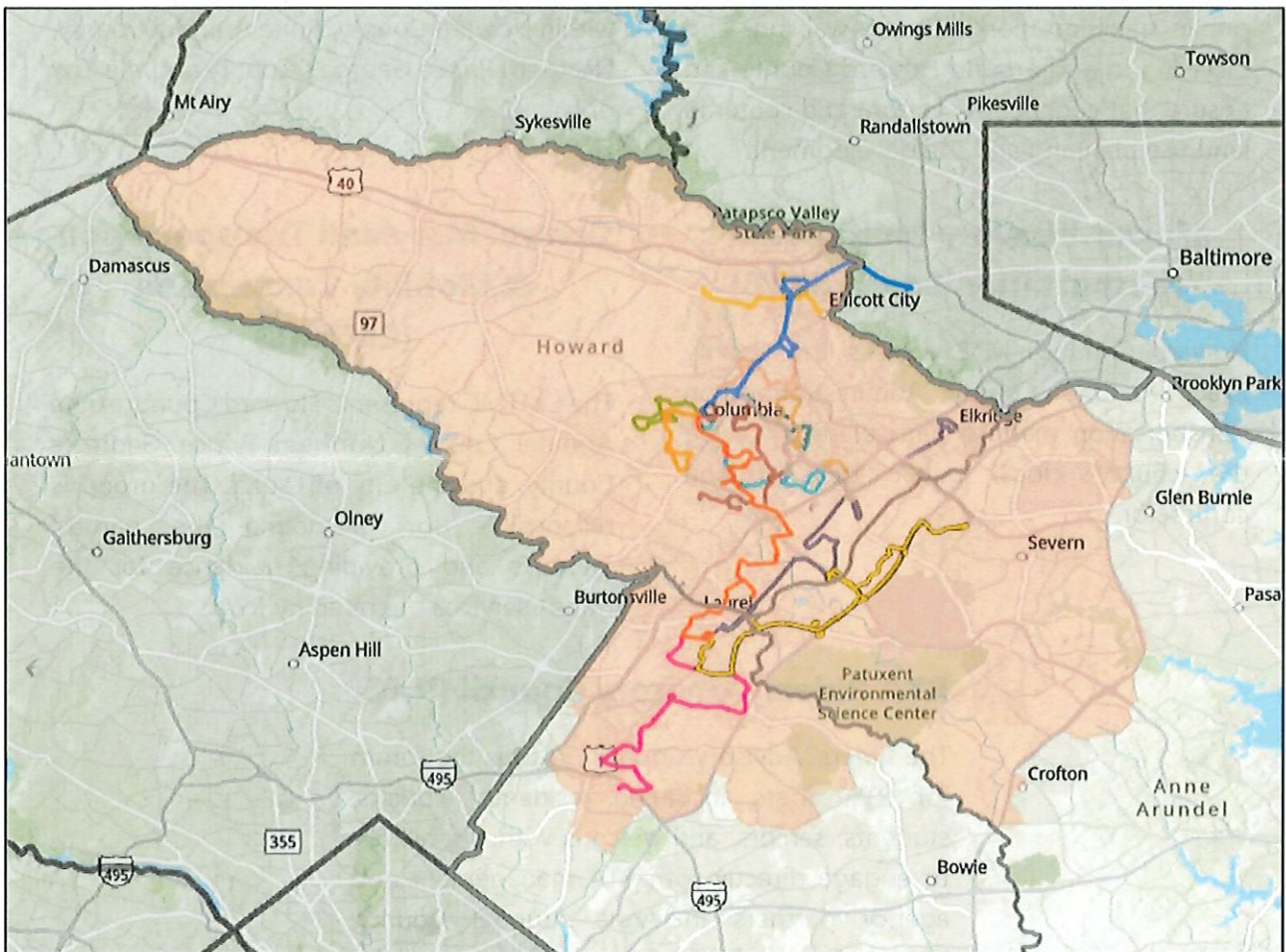
Guiding Organizations

The development of the TDP was guided by a technical advisory group that consisted of Howard County's Office of Transportation (OOT), the RTA, and MDOT MTA. Input on the TDP process and findings were provided through Howard County's Multimodal Transportation Board (MTB), the Central Maryland Transportation and Mobility Commission (CMTMC), and RTA's Rider Advisory Council (RAC).

Howard County Office of Transportation (OOT)

The Howard County OOT's primary focus is to increase the efficiency and effectiveness of public transportation services, walking, and bicycling in and around Howard County and ensure that connectivity is front and center in land use planning and site development.

Regional Transportation Agency of Central Maryland (RTA)

RTA is a public transportation service providing fixed route and paratransit services within Howard County, Anne Arundel County, Northern Prince George's County and the City of Laurel.

Howard County Multimodal Transportation Board (MTB)

Howard County's MTB advises the County Executive and County Administration on transportation matters, particularly involving the county's local public transportation contractor.

Central Maryland Transportation & Mobility Commission (CMTMC)

The CMTMC represents Howard County, Anne Arundel County, Northern Prince George's County, and the City of Laurel. The group is responsible for promoting the parties' interests and providing guidance for the transit services operated by RTA.

RTA Riders' Advisory Council (RAC)

The Riders' Advisory Council (RAC) is the forum for RTA riders, including residents, workers, students, seniors, and persons with disabilities, to engage directly with RTA management and agency partners in Anne Arundel County, Howard County, Prince George's County, and the City of Laurel. The RAC regularly advises the CMTMC.

Goals for the TDP

An initial step in the planning process is formulating the goals and objectives for the updated TDP. The following goals have been drafted based on meetings and discussions with Howard County and RTA staff. The goals will be used to guide the development of the TDP and will be updated throughout the planning process as additional needs are identified. The following goals are not presented in priority order.

Goal 1: Evaluate Alternatives from Previous TDP

- Focus on core services to see if recommended alternatives are still pertinent.

Goal 2: Set Realistic Performance Goals and Service Improvements

- The TDP must be realistic, based in financial reality bus also provide a vision for the future.
- Each TDP recommendation should be tied to Howard County's General Plan and functional transportation plans such as Walk Howard and Bike Howard.
- RTA has the capability to implement one to two new services or routes per year.
- Additional operating assistance will be needed for new services.
- Stable formula grants are unlikely to support significant service expansion in FY2024 and FY2025.
- Expanding service frequency during mid-day hours is not an option for the next five years.

Goal 3: Ensure Regional Coordination

- Ensure regular and consistent communication with neighboring jurisdictions and the MTA.
- Identify routes that can improve connections to regional transportation centers.
- Ensure consistency between the TDP and the ongoing BMC Regional Transit Plan.
- Given the recent implementation of RTA service to Catonsville, invite Baltimore County to participate as a partner jurisdiction with a Memorandum of Understanding.

Goal 4: Increase Ridership

- Transit ridership has almost rebounded following Covid-19 related declines.
- With full service restored in early FY2024, ridership is expected is further rebound.
- Expand upon partnerships with Howard County Public School System and Howard Community College to increase ridership among students.
- Considering increasing frequencies to improve service and increase ridership.
- RTA's ridership goal is to reach one million rides per year.

Goal 5: Explore Transition towards Electric Buses

- There is great interest in a transition from gas/diesel buses to alternative fuels, specifically electric.
- RTA currently has three BYD electric buses with charging stations.
- Howard County would like expert guidance on planning for electric vehicles.

Goal 6: Study and Implement Bus Rapid Transit

- Priority is to connect Columbia with Montgomery County FLASH BRT service running on US 29.
- Howard County has partnered with Montgomery County on a capital funding request.
- Howard County is looking at FLASH "light" bus stops which would allow level boarding.
- BRT expansion to Broken Land Parkway has also been identified as an area of interest.

Goal 7: Enhance Public Transit Circulation/Access in Columbia

- Examine options to improve transit access in Columbia.
- Work with local advocacy groups in Columbia and update the transit circulator access study.

Goal 8: Enhance Transit Options along Route 1 Corridor

- Increase fixed route service along the US 1 corridor.
- Implement on-demand micromobility services on US 1.

Goal 9: Study a Direct Connection between Elkridge and Columbia

- Continue efforts to improve connectivity to Elkridge, supported by bus service.
- Route 501 provides limited service along US 1 south of Elkridge (between MD 175 and MD 100), new service options need to be identified.

Review of Previous and Current Plans and Studies

The following section reviews recent plans and current initiatives addressing public transportation in Howard County. The reviewed plans include those specific to transportation, as well as those covering broader issues and planning efforts. Current and ongoing planning efforts will be updated throughout the TDP process. The summarized plans are presented in the following order:
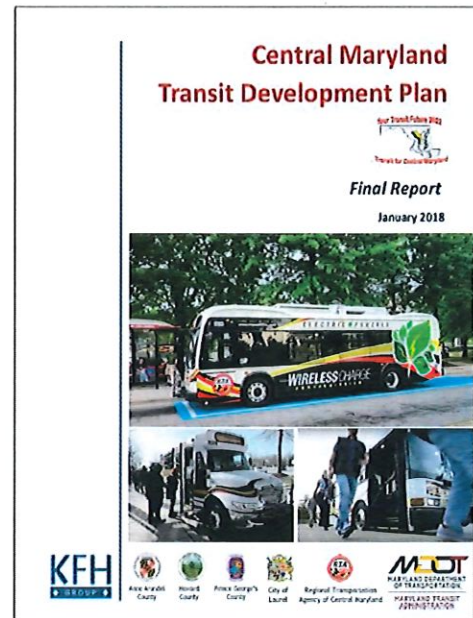
- 2018 Central Maryland Transit Development Plan
- Baltimore Regional Transit Needs Assessment
- MD 32 Enhanced Bus Feasibility Study
- Connecting Our Future: A Regional Transit Plan for Central Maryland
- Zero Emissions Bus Transition Plan
- BWI to Columbia Study (BMC)
- BMC Bus Stop Assessment
- HoCo by Design

2018 Central Maryland Transit Development Plan

The Central Maryland TDP, completed in 2018 and the precursor to this TDP, was a regional effort with partners from Anne Arundel County, Howard County, Northern Prince George's County, City of Laurel, RTA, and MDOT – MTA. Since completion of the previous TDP, Anne Arundel County has launched their own county-run public transportation service **for some areas previously served by the RTA** and no longer contracts with the RTA for services. The TDP consisted of the demographics and land use of the study area, public and stakeholder input, a review of existing services, service alternatives, a transit plan, and future transit development.

Howard County Strategies from the 2018 Central Maryland TDP:

- Basic performance and service improvements
  - Replace older, unreliable buses that are outdated and expensive to maintain
  - Streamline fare structure
  - Improved bus stops and bus shelters
- System reconfiguration and service expansions within 18 months (after public hearings)
  - Routes that better align with riders' needs
  - More shorter routes versus fewer longer routes within same service area
  - More direct routes and shorter travel times
  - More weekend and evening service, shorter headways

BMC Bus Stop Assessment

Completed in June 2022, the Bus Stop Assessment provided the Baltimore Metropolitan Council (BMC) with an inventory of the location, condition, and ADA accessibility of more than 1,500 bus stops maintained by six Locally Operated Transit Systems (LOTS) within the BMC's area of interest. Among the LOTS surveyed was RTA and the 453 bus stops it operates within Howard County. The study identified the extent of ADA compliance and amenity deficiencies at the surveyed locations and drafted cost estimates for proposed improvements to bus stops.

The key findings relevant to the Howard County TDP include:

- Less than a third of RTA bus stops have landing pads which fully conform to ADA standards and a third of bus stops have no landing pad at all.

- Only half of the bus stops have adequate lighting and fewer than a quarter have shelters or seating.

- Amenity and accessibility improvements for Howard County bus stops would cost an estimated $5,857,900 (not including implementation costs), with $3,804,000 of that going towards ADA accessibility improvements.

HoCo By Design

Through HoCo By Design (HBD), Howard County's General Plan for the next 20 years, the county establishes its guiding principles as equity for all people and communities, predictability of future land use and common vision, sustainability in both future growth and natural resource conservation, and achievability grounded in stakeholder input and resource limitations. HBD presents the county's vision for transportation in *Chapter 4: County in Motion.* Through extensive public engagement it was identified that while automobiles are and likely will continue to be the primary method of transportation for most members of the community, there is a growing recognition of the necessity to expand transit and multimodal networks to promote equity, improve roadway safety, and take advantage of Howard County's position as a link between Washington DC and Baltimore. In the context of broader regional connectivity, the plan emphasizes the need for county transit to connect

- Encourage opportunities for Transit-Oriented Development (TOD)
- Provide real-time arrival information and safety statistics
- Evaluate and expand transit support programs (e.g., guaranteed ride home, ride matching, etc.)
- Establish and fund a two-year effort to review local bus stops
- Study BRT and Bus on Shoulder (BOS)
- Evaluate bus priority strategies

MD 32 Enhanced Bus Feasibility Study

With a grant from the Baltimore Regional Transportation Board's Unified Planning Work Program, the Anne Arundel County Office of Transportation was tasked with leading a study to determine the feasibility of bus rapid transit or enhanced bus service in the MD 32 corridor between Annapolis and Clarksville. Enhanced bus services include express bus, commuter bus, and bus rapid transit. A key takeaway regarding existing transit services in the area is that the most transit service operates between BWI Airport and BWI MARC Station and between Columbia Mall and East Columbia/Gateway. The major trip generators and targeted growth areas include Parole Town Center, Odenton Town Center, BWI Airport/Business District, Arundel Mills, Fort Meade, National Business Park, US 1 Corridor, Columbia Gateway, and Downtown Columbia. The study laid out four alternative segments, which included Columbia to US 1, US 1 to Odenton, Odenton to MD 3, and MD 3 to Annapolis/Parole. The study also discusses the benefits, drawbacks, and estimated travel times for each segment.

Connecting Our Future: A Regional Transit Plan for Central Maryland

MDOT MTA created the Central Maryland Regional Transit Plan, which presents goals, objectives, and initiatives to enhance transit service, support the economy, and reduce impacts to the environment for the region by 2045. The main six objectives in the plan includes providing faster, more reliable service, improving the customer experience, growing the ridership, being more equitable, increasing access to jobs and opportunities, and preparing for the future. The plan utilized input from the public through pop-ups, presentations, regional open houses, commission meetings, inter-agency meetings, and online surveys. The overall themes from the public were to increase efficiency and reliability of transit services, improve access to jobs and schools, address personal safety and security concerns, maintain transit vehicles, stations, and stops, make it easier to transfer between different modes and systems, focus on current riders and people who are dependent on transit, reduce emissions, and explore additional funding sources.
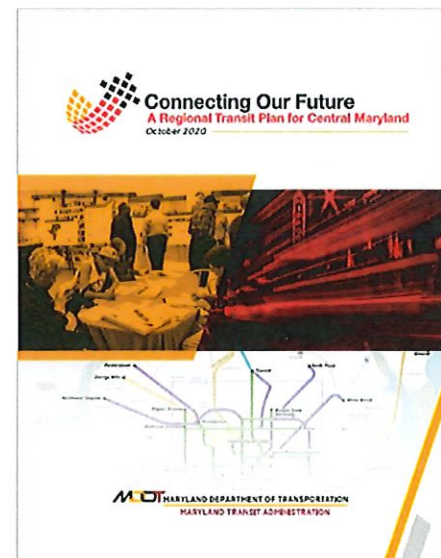
Some of the deliverables for customers include:

- Improving on-time performance
- Increasing service on the most congested bus routes
- Rail and bus fleet replacement, including the advancement of a zero-emissions bus program
- One fare platform for all transit providers in the region
- Full ADA accessibility of all bus stops and rail stations

Zero Emissions Bus Transition Plan

The Anne Arundel County Zero Emissions Bus Transition Plan (ZEB), completed In March 2022, will serve to inform the Howard County TDP to ensure regional coordination. The ZEB plan provides strategic goals to transition the transit fleet to Zero Emission Hybrid buses to achieve emissions reductions over the next decade and to increase the resiliency of the community to the effects of climate change. This plan was recognized by the Federal Transit Administration (FTA) and is included on their website as part of their environmental programs.

Anne Arundel County has committed to purchasing only zero-emission buses and hybrid-electric buses (HEBs) from 2023 onward. In 2023, Anne Arundel County will begin purchasing Battery Electric Buses (BEBs) to achieve the duty cycles of longer routes and blocks with larger energy demands than the current battery electric buses that are available in the current market. Anne Arundel County is committed to achieving a blended fleet by 2033 with the combination of BEBs and HEBs. The plan also lays out the necessary facilities and infrastructure modifications required, including charging stations.

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to the MARC network and to the Montgomery County Flash Bus Rapid Transit and the Purple Line once they are completed. Additionally, the plan lists 38 proposed transportation improvement projects identified in the previous General Plan and still under consideration. Some of these include:

- Constructing a Downtown Columbia Transit Center to improve service
- Supporting transit-oriented development around the Laurel Park and Dorsey MARC stations
- Widening US 29 to accommodate bus rapid transit connection to Montgomery County
- Constructing a regional trail from Elkridge to Ellicott City as part of a Patapsco Regional Greenway
- Developing the Hickory Ridge Bicycle Corridor to connect surrounding communities to Howard Community College and Downtown Columbia

Chapter 2
Review of Existing Services

Introduction

This chapter provides a comprehensive review of the existing public transportation services in Howard County, western Anne Arundel County, northern Prince George's County, and the City of Laurel. The Regional Transit Agency of Central Maryland (RTA) is the primary focus of this review. However, other public and private transportation providers also serve Howard County and provide connections to destinations in adjacent counties and the greater metropolitan regions of Baltimore and Washington, D.C.

This document serves as a guide to identify any service gaps and areas for improvement in the performance and organizational efficiency of existing transit services. The combined results of the existing service analysis, transit needs analysis, and the community input process will serve as the basis for developing service and organizational recommendations.

This chapter is divided into the following sections:

- **Geography** – General overview of the RTA service area including Howard County, and its unique characteristics.

- **Overview of Existing Transit Services** – Review of regional public transportation providers with a focus on Regional Transportation Agency of Central Maryland (RTA).

- **Funding Sources and Fare Policy** – Operating and capital budget overview with a description of passenger fares.

- **Service Performance Evaluation** – Performance of RTA compared to the Maryland Department of Transportation – Maryland Transit Administration's (MDOT MTA) service standards, route profiles, ridership, and on-time performance.

- **Other Area Transportation Providers** – Identification of other transportation services that operate within or close to Howard County and the RTA service area.

Geography

The study area for this TDP is a reflection of the RTA service area and includes Howard County, western Anne Arundel County, and northern Prince George's County (including the City of Laurel). Located mid-way between Baltimore and Washington, D.C., this study area (displayed in **Figure 2-1**) is a major transportation link in the northeastern corridor. The study area straddles two metropolitan areas. Howard and Anne Arundel Counties are members of the Baltimore Metropolitan Council (BMC) which serves as the Baltimore region's federally designated Metropolitan Planning Organization (MPO). Whereas Prince George's County is a member of the Metropolitan Washington Council of Governments (COG) which serves as the Washington region's MPO. With the proximity of these two metro areas, they have been combined into the Washington-Baltimore-Arlington (DC-MD-VA-WV-PA) Combined Statistical Area.

Overview of Existing Transit Services

The RTA provides fixed route service, ADA complementary paratransit, and demand response service for seniors and persons with disabilities in Howard County. The RTA also provides some fixed route service in Anne Arundel and Prince George's County, which is addressed in this plan as it is an integral part of RTA service offerings.

RTA is the primary focus of this TDP; however, the central Maryland region is served by other public transit providers. Agencies with connecting service to RTA include Anne Arundel County Transit (AACT), Prince George's County's TheBus, the Maryland Transit Administration (MTA), and the Washington Metropolitan Area Transit Authority (WMATA). In addition, the MTA provides regional services through MARC commuter rail and the MTA commuter bus program. Each of these providers and their connecting services are profiled later in this chapter.

Specialized transportation services, including demand response services for seniors and persons with disabilities, are provided by the RTA. Other specialized transportation providers focus on the needs of specific population groups. Finally, there are private taxi firms and ride-hailing or transportation network companies (TNCs) such as Uber and Lyft. While only one taxi operator is licensed by Howard County, service providers to and from BWI Airport will provide connections to Howard County.

Regional Transportation Agency of Central Maryland

RTA serves the citizens of Howard, western Anne Arundel and northern Prince George's counties, and the City of Laurel with fixed route and demand response service (see **Figure 2-1**). The RTA service area is focused on Howard County and the City of Laurel, but also offers connections to areas of Anne Arundel and Prince George's counties. RTA provides a local transit connection from these largely suburban counties to the surrounding major metropolitan areas of Baltimore, MD and Washington, D.C.

Overview of RTA Service

Service is operated seven days a week. All routes operate on weekdays, with service spanning between 5:30 a.m. and 11:55 p.m. Peak hour headways are 60 minutes except for Route 502 (45 min. headways). Off-peak headways vary between 30 and 150 minutes. On Saturdays, twelve of the fourteen routes operate, with service spanning from 7 a.m. to 10 p.m. On Sundays, ten of the fourteen routes operate with service spanning from 9 a.m. to 8 p.m. Weekend headways are 60 minutes except for Route 502 (90 min. headways). **Table 2-1** presents the service characteristics, which include service area, origin-destination, days of service, the span of service, and headways. Detailed route-level characteristics are described in the Route Profiles Section.

Table 2-1: Fixed Route Service Characteristics

Route	County Service Area	Service Characteristics			
		Day	Span	Peak Headways	Off-Peak Headways
301 South Laurel	Prince George's	Weekdays	7:00am – 7:00pm	60 min.	60 min.
302 Town Centre Laurel – Greenbelt Metro Station	Prince George's	Weekdays	6:00am – 7:00pm	60 min.	60 min.
		Saturday	9:00am – 6:00pm		
		Sunday	10:00am – 6:00pm		
401 Mall in Columbia – Howard County Hospital & Clary's Forest	Howard	Weekdays	6:00pm – 11:00pm	30 min.	60 min.
		Saturday	8:00am – 10:00pm	30 min.	
		Sunday	9:00am – 8:00pm	60 min.	
402 Mall in Columbia – Columbia Crossing – Dobbin Center	Howard	Weekdays	7:30am – 5:30pm	60 min.	60 min.
		Saturday	8:30am – 5:30pm		
		Sunday	9:30am – 5:30pm		
403 Mall in Columbia – Executive Park Drive	Howard	Weekdays	6:00am – 10:00pm	60 min.	60 min.
		Saturday	8:00am – 8:00pm		
		Sunday	10:00am – 5:00pm		

Route	County Service Area	Service Characteristics			
		Day	Span	Peak Headways	Off-Peak Headways
404 Mall in Columbia – Hickory Ridge	Howard	Weekdays	6:00am – 9:00pm	60 min.	60 min.
		Saturday	8:00am – 7:00pm		
		Sunday	9:00am – 5:00pm		
405 Ellicott City	Howard	Weekdays	5:30am – 6:00pm	60 min.	60 min.
		Saturday	7:30am – 6:00pm		
406 Mall in Columbia – Columbia Gateway	Howard	Weekdays	7:30am – 5:30pm	60 min.	60 min.
407 Mall in Columbia – Kings Contrivance	Howard	Weekdays	6:00am – 11:00pm	60 min.	60 min.
		Saturday	8:00am – 10:00pm		
		Sunday	9:00am – 8:00pm		
408 Mall in Columbia – Sherwood Crossing	Howard	Weekdays	6:00am – 11:00pm	60 min.	60 min.
		Saturday	8:00am – 10:00pm		
		Sunday	9:00am – 8:00pm		
409 Town Centre Laurel – Elkridge Corners	Howard, Prince George's	Weekdays	6:00am – 7:00pm	60 min.	60 min.
		Saturday	8:00pm – 6:00pm		
501 Mall in Columbia – Arundel Mills Mall	Howard, Anne Arundel	Weekdays	6:00am – 10:00pm	60 min.	60 min.
		Saturday	8:00am – 10:00pm		
		Sunday	9:00am – 6:00pm		
502 Town Centre Laurel – Arundel Mills Mall	Anne Arundel, Howard, Prince George's	Weekdays	6:00am – 10:00pm	45 min.	60 min.
		Saturday	9:00am – 9:00pm	90 min.	90 min.
		Sunday	10:00am – 7:00pm	90 min.	90 min.
503 Town Centre Laurel – Mall in Columbia	Howard, Anne Arundel, Prince George's	Weekdays	6:00am – 8:00pm	60 min.	60 min.
		Saturday	9:00am – 7:00pm		
505 Mall in Columbia – Catonsville via Ellicott City	Baltimore, Howard	Weekdays	6:00am – 9:30pm	60 min.	60 min.
		Saturday	8:00am – 9:30pm		
		Sunday	9:00am – 5:30pm		
RTA Mobility's General Paratransit Service (GPT)	Howard	Weekdays	9:00am – 5:00pm	N/A	N/A
RTA Mobility's ADA Paratransit Service	Howard, Anne Arundel, Prince George's	Available during the same days and times as RTA fixed route service		N/A	N/A

SOURCE: CENTRAL MARYLAND RTA ROUTE MAPS & SCHEDULES, 2023

Figure 2-1: RTA Service Area and Route Network

Legend:

- ⬭ Key Transfer Stop
- ○ RTA Bus Stop
- ● MARC Train Stop
- ╋ MARC Train Tracks
- ☆ Park and Ride Lot
- 301: Town Centre - Laurel - South Laurel
- 302: Town Centre Laurel - Greenbelt Metro Station
- 401: Mall in Columbia - Howard County Hospital
- 402: Mall In Columbia - Columbia Crossing - Dobbin Center
- 403: Mall in Columbia - Executive Park Drive
- 404: Mall in Columbia - Hickory Ridge
- 405: Mall in Columbia - Ellicott City
- 406: Mall in Columbia - Columbia Gateway
- 407: Mall in Columbia - Kings Contrivance
- 408: Mall in Columbia - Sherwood Crossing
- 409: Town Centre Laurel - Elkridge Corners
- 501: Mall in Columbia - Arundel Mills Mall
- 502: Town Centre Laurel - Arundel Mills Mall
- 503: Town Centre Laurel - Mall in Columbia
- 505: Mall In Columbia - Catonsville

Management and Organizational Structure

RTA's management has developed over the past twenty years as different organizational structures evolved in response to the need for a mechanism to support both local and regional services in the region. Over the past two decades, the operation of these services shifted from a private non-profit organization to a management company under contract to provide regional services, to the current model which supports a limited set of joint regional routes. While a regional operations facility was planned and built, the goal of a regional transit authority has not been realized and separate county-based systems have resulted.

Shortly after the 2018 Central Maryland TDP, RTA Routes in Anne Arundel County were replaced by fixed route services from Anne Arundel County's Office of Transportation (AAOOT), and RTA services in Prince George's County were reduced. The result is that the RTA is much more of a Howard County focused system.

Howard County, through its Office of Transportation, contracts with Transit Management of Central Maryland (TMCM), which is a wholly-owned subsidiary of First Transit (now Transdev) to operate fixed route and paratransit/demand response services in Howard County, and routes linking the county adjacent jurisdictions. TMCM provides most of the administration and management of the transit services, with the county staff role focused on grants administration, contract oversight, and compliance. Howard County is the grant subrecipient for state and federal transit funding for Howard County, and the legal responsibility for public transit rests with the County.

There are continuing elements of the previous efforts to create a regional transit system. Regional coordination is provided under a Memorandum of Understanding (MOU) of the Central Maryland Transportation and Mobility Consortium (CMTMC) which has been signed by Anne Arundel County, Howard County, Prince George's County, and the City of Laurel. The MOU defines each entity as an equal partner in a cooperative effort to maintain an efficient and effective coordinated bus system in central Maryland. With the addition of Route 505 into Catonsville, the CMTMC may consider extending an invitation to Baltimore County to participate as a member jurisdiction.

As described in the MOU, Howard County, on behalf of the four jurisdictions, has contracted with a third-party private firm (TMCM) to manage and operate transit services in the region. Howard County is the contract manager. The MOU creates a commission with representatives of the four jurisdictions to provide policy direction concerning transit services. Each jurisdiction appoints two commissioners, none of which may be employed by the contractor. There is a Rider's Advisory Council whose chair is a non-voting member of the commission. There are commission bylaws that set forth the mission of the commission and its activities. while representing the interests of the parties. A major focus of the CMTMC is the allocation of RTA service hours among the participating jurisdictions to be used in allocating the costs of fixed route and paratransit services provided by the RTA in each jurisdiction.

Figure 2-2: RTA Organizational Structure
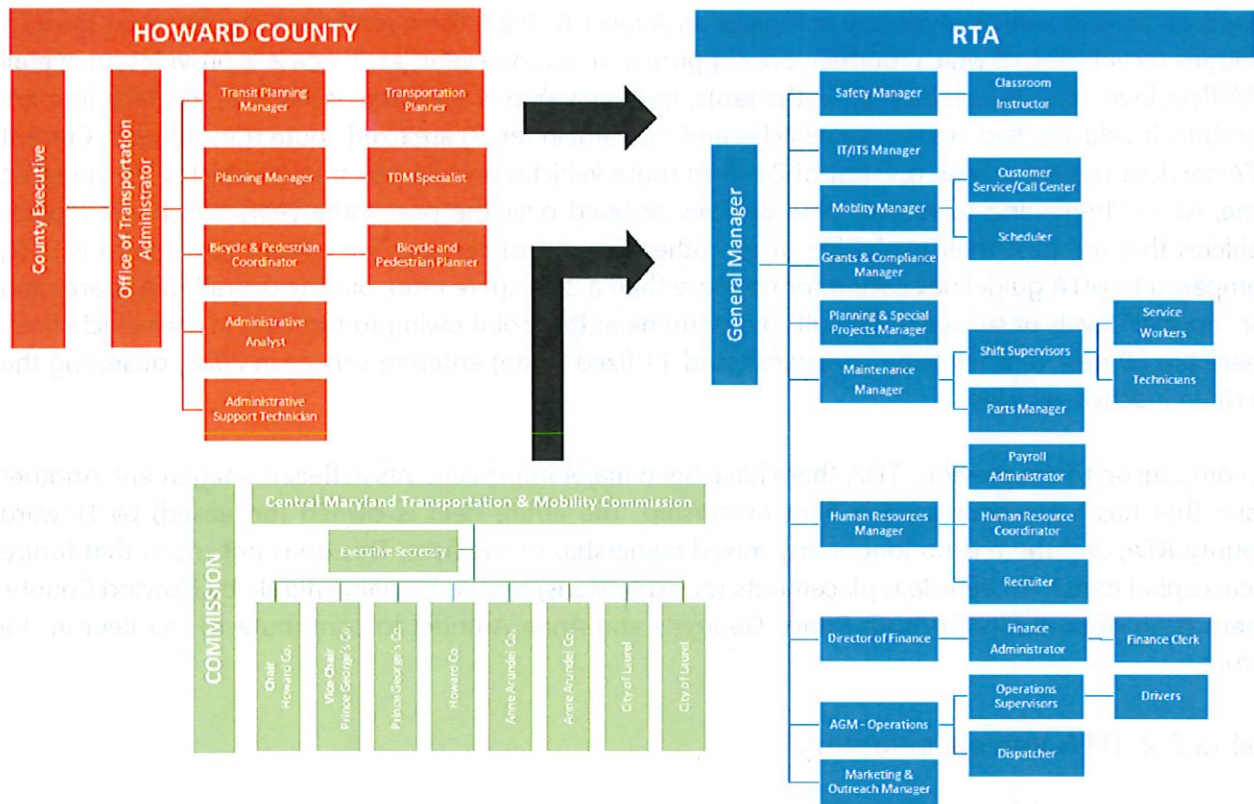
SOURCE: RTA, JANUARY 2023

For FY2023 the MOU requires each of the partners to allocate funding for their share of the hours of service, based on the actual service provided and adjusted to reflect expected transit funding from the MTA and expected federal relief funding under the American Rescue Plan (ARP) and the Coronavirus Response and Relief Supplemental Appropriations Act of 2021 (CRRSAA). Although the MOU provides the option for the participants to lease individually owned transit assets to TMCM, there are no longer any transit assets used by TMCM that are not owned by Howard County.

In addition to the CMTMC, actual transit service coordination takes place through periodic meetings of the transit program staff representing each of the jurisdictions. On a day-to-day basis, contact between the transit program staff of the parties is another aspect of the administration of the RTA beyond the more formal and less frequent contact provided through the commission.

The key aspect of the transit organizational structure in Howard County is that the County is the funding subrecipient through which funding is provided and that the management and operation of the services are provided by a contractor (TMCM). Routes that provide connections between Howard County and its adjacent jurisdictions are operated under an MOU among the jurisdictions that allocate the cost of the regional routes among them.

Fleet Structure

Based on an RTA vehicle inventory compiled on August 8, 2023, the overall fleet managed by the RTA includes 89 vehicles, of which fourteen are support/non-revenue vehicles. **Table 2-2** provides an overall RTA fleet inventory. As can be seen in the table, thirteen vehicles are listed as inactive, of which four are paratransit vehicles, two are service vehicles and the remainder (7) are fixed-route transit buses. Current RTA services require a peak pull out of 24 fixed route vehicles and 21 paratransit vehicles. At the same time, RTA is beginning to receive new vehicles ordered over the past three years which will replace vehicles that are past their useful life or are otherwise out of service. The current spare ratio is 37%, compared to MTA guidelines calling for no more than a 20% spare ratio, but the overall RTA spare ratio for "normal" levels of service is difficult to determine at this point owing to turnover in the vehicle fleet. There are 20 new vehicles (nine paratransit and 11 fixed route) entering service in 2023, offsetting the thirteen inactive vehicles.

In comparison to the previous TDP, there have been major improvements in fleet management. Another issue that has been addressed is fleet ownership. The entire fleet is owned (or leased) by Howard County/RTA, and there is no longer any mixed ownership of the fleet. This does not mean that future local capital match for vehicle replacements (or expansions) should be paid entirely by Howard County. There is an opportunity for both Prince George's and Anne Arundel to contribute to the fleet in the future.

Table 2-2: RTA Vehicle Inventory

Fleet #	Status	Year	Vehicle Make/Model	Service Type*	Vehicle Type	Miles
			Revenue Vehicles			
12	Active	2015	FORD, FUSION HYBRID	DR	Accessible Car	225,773
14	Active	2015	FORD, FUSION HYBRID	DR	Accessible Car	197,218
16	Active	2021	TOYOTA, CAMRY HYBRID	DR	Accessible Car	7,264
17	Active	2021	TOYOTA, CAMRY HYBRID	DR	Accessible Car	126
18	Active	2021	TOYOTA, CAMRY HYBRID	DR	Accessible Car	0
19	Active	2021	TOYOTA, CAMRY HYBRID	DR	Accessible Car	0
20	Active	2021	TOYOTA, CAMRY HYBRID	DR	Accessible Car	0
21	Active	2021	TOYOTA, CAMRY HYBRID	DR	Accessible Car	0
200	Active	2014	FORD, CUTAWAY	FR	Light Duty	399,667
201	Active	2014	FORD, CUTAWAY	FR	Light Duty	398768
202	Active	2014	FORD, CUTAWAY	FR	Light Duty	402,502
203	Active	2014	FORD, CUTAWAY	FR	Light Duty	402,103

Fleet #	Status	Year	Vehicle Make/Model	Service Type*	Vehicle Type	Miles
204	Active	2014	FORD, CUTAWAY	FR	Light Duty	439,396
205	Active	2015	FORD, CUTAWAY	DR	Light Duty	350,655
206	Active	2015	FORD, CUTAWAY	DR	Light Duty	298,028
207	Active	2015	FORD, CUTAWAY	DR	Light Duty	285,414
208	Active	2015	FORD, CUTAWAY	DR	Light Duty	298,441
209	Active	2015	FORD, CUTAWAY	DR	Light Duty	325,829
210	Active	2015	FORD, CUTAWAY	DR	Light Duty	295,096
211	Inactive	2015	FORD, CUTAWAY	DR	Light Duty	301,219
212	Active	2015	FORD, CUTAWAY	DR	Light Duty	295,732
213	Active	2017	FORD, CUTAWAY	DR	Light Duty	190,539
214	Active	2017	FORD, CUTAWAY	DR	Light Duty	206,684
215	Active	2017	FORD, CUTAWAY	FR	Light Duty	212,479
216	Inactive	2017	FORD, CUTAWAY	DR	Light Duty	286,337
217	Active	2017	FORD, CUTAWAY	DR	Light Duty	233,203
218	Active	2017	FORD, CUTAWAY	DR	Light Duty	193,235
219	Active	2017	FORD, CUTAWAY	DR	Light Duty	238,265
220	Active	2017	FORD, CUTAWAY	DR	Light Duty	246,515
225	Active	2019	FORD, TRANSIT VAN	DR	Accessible Van	34,618
226	Active	2019	FORD, TRANSIT VAN	DR	Accessible Van	77,620
227	Active	2019	FORD, TRANSIT VAN	DR	Accessible Van	75,455
228	Active	2019	FORD, TRANSIT VAN	DR	Accessible Van	55,269
229	Active	2019	FORD, TRANSIT VAN	DR	Accessible Van	63,796
230	Active	2023	FORD, CUTAWAY	DR	Light Duty	N/A
231	Active	2023	FORD, CUTAWAY	DR	Light Duty	N/A
232	Active	2023	FORD, CUTAWAY	DR	Light Duty	N/A
233	Active	2023	FORD, CUTAWAY	DR	Light Duty	N/A
234	Active	2023	FORD, CUTAWAY	DR	Light Duty	N/A
235	Active	2023	FORD, CUTAWAY	DR	Light Duty	N/A
236	Active	2023	FORD, CUTAWAY	DR	Light Duty	N/A
237	Active	2023	FORD, CUTAWAY	DR	Light Duty	N/A
238	Active	2023	FORD, CUTAWAY	DR	Light Duty	N/A
1701	Active	2016	BYD, TRANSIT BUS	FR	Heavy Duty Large	42,528

Fleet #	Status	Year	Vehicle Make/Model	Service Type*	Vehicle Type	Miles
1702	Active	2016	BYD, TRANSIT BUS	FR	Heavy Duty Large	91,183
1703	Active	2016	BYD, TRANSIT BUS	FR	Heavy Duty Large	76,477
1704	Active	2017	ENC (EL DORADO), TRANSIT BUS	FR	Heavy Duty Medium	289,322
1705	Active	2017	ENC (EL DORADO), TRANSIT BUS	FR	Heavy Duty Medium	259,522
1706	Active	2017	ENC (EL DORADO), TRANSIT BUS	FR	Heavy Duty Medium	242,943
1707	Active	2017	ENC (EL DORADO), TRANSIT BUS	FR	Heavy Duty Medium	238,876
1708	Active	2017	ENC (EL DORADO), TRANSIT BUS	FR	Heavy Duty Medium	264,562
1709	Active	2017	ENC (EL DORADO), TRANSIT BUS	FR	Heavy Duty Medium	265,211
1710	Active	2017	ENC (EL DORADO), TRANSIT BUS	FR	Heavy Duty Medium	239,681
1801	Active	2018	ENC (EL DORADO), TRANSIT BUS	FR	Heavy Duty Medium	182,212
1802	Active	2018	ENC (EL DORADO), TRANSIT BUS	FR	Heavy Duty Medium	188,799
1803	Active	2018	ENC (EL DORADO), TRANSIT BUS	FR	Heavy Duty Medium	204,317
1804	Active	2018	ENC (EL DORADO), TRANSIT BUS	FR	Heavy Duty Medium	229,928
1805	Active	2018	ENC (EL DORADO), TRANSIT BUS	FR	Heavy Duty Medium	187,782
1806	Active	2018	ENC (EL DORADO), TRANSIT BUS	FR	Heavy Duty Medium	197,536
1901	Active	2019	ENC (EL DORADO), TRANSIT BUS	FR	Heavy Duty Medium	155,169
1902	Active	2019	ENC (EL DORADO), TRANSIT BUS	FR	Heavy Duty Medium	139,331
2201	Active	2022	ENC (EL DORADO), TRANSIT BUS	FR	Heavy Duty Medium	N/A
2202	Active	2022	ENC (EL DORADO), TRANSIT BUS	FR	Heavy Duty Medium	N/A
2203	Active	2022	ENC (EL DORADO), TRANSIT BUS	FR	Heavy Duty Medium	N/A
2204	Active	2022	ENC (EL DORADO), TRANSIT BUS	FR	Heavy Duty Medium	N/A
2205	Active	2022	ENC (EL DORADO), TRANSIT BUS	FR	Heavy Duty Medium	N/A
2206	Active	2022	ENC (EL DORADO), TRANSIT BUS	FR	Heavy Duty Medium	N/A
2207	Active	2022	ENC (EL DORADO), TRANSIT BUS	FR	Heavy Duty Medium	N/A
2208	Active	2022	ENC (EL DORADO), TRANSIT BUS	FR	Heavy Duty Medium	N/A
2209	Active	2022	ENC (EL DORADO), TRANSIT BUS	FR	Heavy Duty Medium	N/A
2210	Active	2022	ENC (EL DORADO), TRANSIT BUS	FR	Heavy Duty Medium	N/A
2211	Active	2022	ENC (EL DORADO), TRANSIT BUS	FR	Heavy Duty Medium	N/A
9520	Active	2008	GILLIG HYBRID, TRANSIT BUS	FR	Heavy Duty Large	681,069
9521	Active	2008	GILLIG HYBRID, TRANSIT BUS	FR	Heavy Duty Large	629,574
9525	Active	2009	GILLIG HYBRID, TRANSIT BUS	FR	Heavy Duty Large	632,979
9534	Active	2011	GILLIG HYBRID, TRANSIT BUS	FR	Heavy Duty Large	617,339

Fleet #	Status	Year	Vehicle Make/Model	Service Type*	Vehicle Type	Miles
9535	Active	2011	GILLIG HYBRID, TRANSIT BUS	FR	Heavy Duty Large	561,484
9536	Active	2011	GILLIG HYBRID, TRANSIT BUS	FR	Heavy Duty Large	508,812
9543	Inactive	2014	INTERNATIONAL/ELDORADO, TRUCK BUS	FR	Light Duty	336,128
9545	Inactive	2002	GILLIG, TRANSIT BUS	FR	Heavy Duty Large	N/A
9547	Inactive	2002	GILLIG, TRANSIT BUS	FR	Heavy Duty Large	N/A
9550	Inactive	2002	GILLIG, TRANSIT BUS	FR	Heavy Duty Large	N/A
Support (Non-Revenue) Vehicles						
8	Inactive	2014	FORD, FUSION HYBRID	NR	Support Vehicle	261,689
M1	Active	2015	FORD, PICKUP F250	NR	Support Truck	85,360
M3	Active	2017	CHEVY, PICKUP 2500	NR	Support Truck	71,050
M4	Active	2019	FORD, PICKUP 350	NR	Support Truck	17,948
M5	Active	2023	FORD, F150	NR	Support Truck	N/A
S2	Active	2014	CHEVY, MALIBU	NR	Support Vehicle	157,645
S3	Active	2014	CHEVY, MALIBU	NR	Support Vehicle	138,740
S13	Active	2019	FORD, TRANSIT 150	NR	Support Van	35,042
S14	Active	2019	FORD, TRANSIT 150	NR	Support Van	36,848
S20	Active	2018	FORD, ESCAPE	NR	Support Vehicle	60,512
S21	Active	2018	FORD, ESCAPE	NR	Support Vehicle	77,104
S22	Active	2018	FORD, ESCAPE	NR	Support Vehicle	61,801
S23	Active	2018	FORD, ESCAPE	NR	Support Vehicle	64,235
S24	Inactive	2018	FORD, ESCAPE	NR	Support Vehicle	81,233

*SERVICE TYPE: DEMAND RESPONSE (DR), FIXED ROUTE (FR), AND NON-REVENUE (NR)
SOURCE: HOWARD COUNTY OFFICE OF TRANSPORTATION, AUGUST 8, 2023.

Facilities

RTA Headquarters and administrative offices are located at 8510 Corridor Road, Savage, Maryland 20763. This facility includes office space and a large conference room. The Operations and Maintenance facility is located at 8800 Corridor Road, Annapolis Junction, Maryland 20701. The facility is about one mile away from RTA Headquarters and includes outside parking for buses and cars.

Figure 2-3: RTA Operations and Maintenance Facility (8800 Corridor Road)

SOURCE: HOWARD COUNTY, MD

Major Transfer Points

- **Columbia Mall** – The Columbia Mall Transit Center is located at 10300 Little Patuxent Parkway, Columbia, Maryland 21044. The transit center serves as the transfer point for eight RTA routes – Routes 401, 402, 403, 404, 406, 407, 408, 501, 503, and 505. MTA Express Bus 150 to Baltimore, MTA Commuter Buses 310 and 320 to Baltimore, and MTA Commuter Buses 203, 305, 315 and 345 also serve the transit center.

- **Towne Centre at Laurel** – The transfer center at Towne Centre at Laurel is located at 14708 Baltimore Avenue, Laurel, Maryland 20707. The transit center serves as the transfer point for five RTA routes – Routes 301, 302, 409, 502, and 503. Also serving the transit center are WMATA local bus routes 89M and Z7.

- **Arundel Mills Mall** – This transfer center is located at 7000 Arundel Mills Circle, Hanover, Maryland 21076. The transit center serves as the transfer point for two RTA routes – Routes 501, and 502. MTA local bus Route 75 and commuter bus Route 201 also serve the transit center.

- **Greenbelt Metro Station** – The Metro Station is located at 5600 Greenbelt Metro Drive, Maryland 20740. The station serves as the transfer point for RTA route 302, TheBus routes 11 and 16, and WMATA routes 89M, C2, G12, G14, and R12. The station also has access to WMATA rail, MTA MARC commuter rail (Baltimore Camden line), and intercity bus lines.

- **Catonsville Walmart** – This transfer point is located at 6205 Baltimore National Pike, Catonsville, MD 21228. The transfer point connects RTA's Route 505 to MTA Routes 77, 150, and CityLink Purple as well as UMBC's Route 40.

Figure 2-4: Columbia Mall Transit Center

Technology

The *Transit* App is RTA's officially endorsed mobile app. It provides a trip planner with real-time arrival information for transportation services across the entire region. Through a partnership between RTA and the *Transit* App, fare passes can be purchased through the app for mobile fare payment. The app also provides services alerts and a real-time bus tracker for specific routes.

Beyond the typical range of administrative tools and technologies, RTA employs several advanced technologies for public transit service. These include communication systems, video monitoring systems, vehicle tracking systems, fare validation systems, and automatic passenger counters. Bus stop annunciators became operational in October, 2023.

Figure 2-5: Transit App

Marketing

RTA conducts a wide range of marketing and advertising activities to educate the public, local agencies, and community leaders about the transit service. RTA participates in numerous community events and sets up informational displays with giveaway items. Recent outreach activities have included free far days, Bike-to-Work Week, Car Free Day, and local employment fairs. A recent focus has been engaging with high school and college students. RTA also provides travel training, on a limited basis, for individuals with limited experience riding the bus (e.g., students, seniors, individuals with disabilities, etc.).

RTA is very active through social media engagement with riders and the community. RTA maintains a Facebook account and X/Twitter account to engage with the users and provide notices of service alerts, upcoming events, and other key information. The primary source of RTA information is the website (transitrta.com). The website provides detailed service schedules, maps, contact information, and other resources for riders.
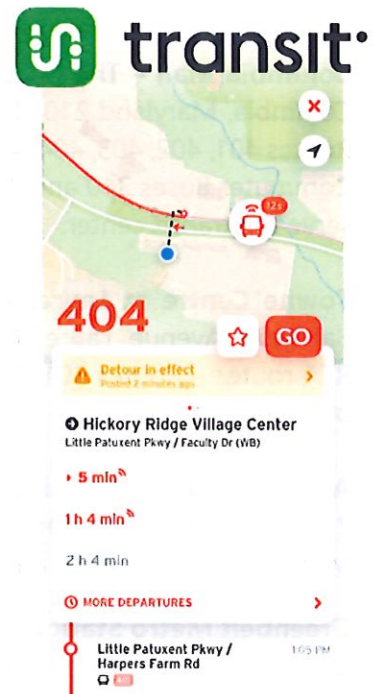
Funding Sources

MTA's Office of Local Transit Support (OLTS) administers Federal and State funding for the LOTS in Maryland, including RTA. During fiscal year 2023, RTA was awarded funding from the following programs:

- **FTA Section 5307** –Federal (and State matching when State finances allow) funding for small urban areas of the State (areas with a population of 50,000 to 200,000). Funds can be used to subsidize operating, capital, or administrative costs. For operating and administrative expenses, the FTA will fund up to 50 percent with the other 50 percent being funded locally (sometimes with State support). For capital expenses, the FTA will fund up to 80 percent, with a minimum of 20 percent State and local match required. These funds are allocated by the FTA to small urban areas. Allocations are published annually in the Federal Register. The State provides some of the non-Federal share and MTA staff are responsible for the administration of these grant funds. The systems apply annually for funds to be used for operating or capital.

- **Large Urban Capital and Operating Assistance**– State funds for operating and capital assistance in large urban areas. In FY 2022, eligibility for these funds is limited to the City of Annapolis, Anne Arundel County, Cecil County, Howard County, Montgomery County, Prince George's County, and Queen Anne's County.

- **Americans with Disabilities Act (ADA) Funding** – State funding for public transit systems that operate fixed routes are eligible to apply for these funds, as these are the only systems required by law to provide complementary paratransit service to individuals with disabilities. The State ADA funding program requires a minimum of 10 percent local match and can only be used for operating expenses. In some cases, this funding has been used to leverage additional 5307 funding. Howard County uses it to help support its ADA paratransit services.

- **Washington Area Grant--** State funding for Montgomery, Prince George's County, and Howard County to support eligible Local Bus Service operated in those counties. The program was established through state legislation in 1980 to complement the state aid provided to support Washington Metropolitan Area Transit Authority (WMATA) bus and rail services in Maryland. It provides both capital and operating funding for services provided in Montgomery and Prince George's Counties, subject to particular eligibility requirements, definitions, and performance measures. It is administered by the OLTS program despite being part of the overall Washington area transit funding provided by MDOT. Howard County receives WAG funding because of its services operated in Prince George's County.

- **SSTAP (Statewide Special Transportation Assistance Program)** – State funds to provide transportation for seniors and individuals with disabilities. This funding is distributed to the counties (and the City of Baltimore) on a formula basis annually to support specialized transportation services. In Howard County, this funding is used to support the General Public paratransit program.

Howard County applied for operating assistance from the state. Capital applications under the MTA program are for funding from MTA's Public Transportation Program (PTP) which includes state Large Urban, Section 5307, Section 5311, and FTA Section 5339 capital funding. MTA-OLTS may utilize capital funding from the different programs in its PTP category to address needs.

Operating Budget

RTA's operating budget for fiscal year 2022 was $20.4 million.

Table 2-4: RTA FY2022 Budget

Program Name	Share		Operating Assistance
Large Urban	State		$1,298,738
	Local		$7,701,193
		Subtotal	$8,999,931
MTA's PTP Capital Assistance	Federal		$2,427,340
	State		$303,418
	F&S Subtotal		$2,730,758
	Local		$303,414
		Subtotal	$3,034,172
Section 5307	Federal		$1,107,496
	State		$369,165
	F&S Subtotal		$1,476,662
	Local		$2,756,307
		Subtotal	$4,232,969
ADA	State		$430,000
	Local		$1,715,225
		Subtotal	$2,145,225
SSTAP	State		$162,520
	Local		$1,829,069
		Subtotal	$1,991,589
Total MTA – Funded Programs	Federal		$3,534,836
	State		$2,563,841
	F&S Subtotal		$6,098,677
	Local		$14,305,208
		Total	$20,403,885

Capital Budget

RTA's FY2022 capital budget (most recently completed prior to the start of this planning process) was $3,034,175 and included seven heavy-duty buses to be replaced and preventative maintenance for the entire fleet. As demonstrated in **Table 2-5**, this budget requires a 10 percent local funding match to secure federal and state funds.

Table 2-5: RTA FY2022 Capital Budget

Capital Project Plan FY 2022 Future Vehicle Requests				
Project Name or Brief Description	Vehicle Replaced	Total FY20 Project Cost	Requested Funding Source	PTP Local
2002 Gillig Heavy Duty Transit Bus	9545	$417,025		$41,702.50
2002 Gillig Heavy Duty Transit Bus	9547	$417,025		$41,702.50
2014 Ford Phoenix	201	$417,025		$41,702.50
2014 Ford Phoenix	200	$417,025	PTP (90% Federal, 10% Local)	$41,702.50
2014 Ford Phoenix	202	$417,025		$41,702.50
2014 Ford Phoenix	203	$417,025		$41,702.50
2014 Ford Phoenix	204	$417,025		$41,702.50
Preventive Maintenance	--	$115,000		$11,500.00
		$3,034,175		$303,417.50

Table 2-6 includes projected capital requests for FY 2023.

Table 2-6: RTA Projected Capital Requests

Capital Project Plan Future Vehicle Replacements				
Vehicle Fleet Number	Vehicle Replaced	Total	Fiscal Year	Requested Funding Source
9521	30' Heavy Duty	$417,025	FY23	PTP
9535	30' Heavy Duty	$417,025	FY23	PTP
205	Small Cutaway	$87,888	FY23	PTP
206	Small Cutaway	$87,888	FY23	PTP
207	Small Cutaway	$87,888	FY23	PTP
208	Small Cutaway	$87,888	FY23	PTP

Fare Policy

RTA's fare policy allows for free trips for children (5 and under) and seniors (60 and older or persons with disabilities). Students enrolled at a public middle school, high school, and Howard Community College may ride for free. Senior citizens can receive a Free Ride Card after applying on the RTA website.

Table 2-7: RTA Fare Policy

Fare Type	Amount
One-Way, Cash	$2.00
Children, Aged 5 and Under	Free
Seniors, Aged 60 and Older or Persons with Disability	Free
Students at Public Middle School, High School, and Howard County Community College	Free
Paying with your phone	
90-minute Pass	$2.00
Full Day Pass	$5.00
10-Ride Ticket Book	$15.00
Monthly Pass	$40.00
RTA Mobility	
One-way, ADA	$4.00
One-way, General Paratransit (GPT)	$5.00
ADA 10-Ride Ticket Book: System Wide	$35.00
GPT 10-Ride Ticket Book	$50.00

SOURCE: RTA WEBSITE

Regional Transfers

MTA CharmCards and WMATA SmarTrip Cards are accepted on some routes under some conditions. RTA fare boxes are simple drop boxes, not electronic registering fareboxes, therefore if a CharmCard or SmarTrip cardholder wants to ride an RTA bus, they show the card to the driver. If they are at a stop where it is allowed, the driver records the boarding, but the RTA receives no revenue (except for the $1 cash add-on fare for SmarTrip cardholders), as it has no way to accept the stored value on the card or to bill MTA or WMATA.

MTA CharmCards are accepted only at the following locations:

- On Route 501 at Arundel Mills Mall, and Snowden River Park and Ride stops
- On Route 405 at the Route 40 and Normandy Woods Drive stop
- On Route 407 at the Oakland Mills Village Center stop
- On New Route 505, as of July 1, 2023, Catonsville Walmart at US 40 and Rolling Road.

SmarTrip Cards can be used to pay RTA fares, with an additional $1 fee, at the following locations.

- Routes 301, 302, 502, and 503 at the Laurel Mall stop
- Route 501, 502 at the Arundel Mills Mall stop
- Route 302 at the Greenbelt Metro Station stop
- Routes 301, 302, 502, and 503 at all shared WMATA Metro bus stops; except for the 4th Street Northbound shared stops

Sales Locations

Cash fare is accepted on the bus or passes can be purchased at the following locations. In addition, customers can also mail a check to the RTA or pay online with PayPal, and the fare media will be mailed to the customer.

Regional Transportation Agency (RTA)
8510 Corridor Road, Suite 110
Savage, Maryland 20763
Hours of operations for ticket sales:

Monday-Friday: 8:30 a.m.- 4:30 p.m.

Bain Center
5470 Ruth Keeton Way
Columbia, MD 21044
Hours of operations for ticket sales
Monday-Friday: 9 a.m. – 4 p.m.

(Paratransit only – Howard County 10-Ride)

East Columbia 50+ Center
6600 Cradlerock Way
Columbia, MD 21045
(Paratransit only – Howard County 10-Ride)

Elkridge Senior Center
7071 Montgomery Road, Elkridge
6540 Washington Blvd.
Elkridge, MD 21075
Hours of operations for ticket sales
Monday-Friday: 9 a.m. – 4 p.m.

(Paratransit only – Howard County 10-Ride)

Glenwood Senior Center
2400 Route 97
Cooksville, MD 21723
410-313-5442
Hours of operations for ticket sales
Monday-Friday: 9 a.m. – 4 p.m.

(Paratransit only – Howard County 10-Ride)

Howard Community College Finance
Student Monthly Passes
Senior/Disabled Monthly pass ($16.00)
10901 Little Patuxent Parkway
Columbia, MD 21044
410-772-4800
Hours of operations for ticket sales
Mon-Thurs 8:45am-7:30pm,
Friday 8:45 a.m. – 5 p.m.
(Must be a current student at HCC and show I.D.)

Longwood Senior Center
6150 Foreland Garth
Columbia, MD 21045
410-313-7217
Hours of operations for ticket sales
Monday-Friday: 9 a.m. – 4 p.m.

(Paratransit only – Howard County 10-Ride)

North Laurel 50+ Center
9411 Whiskey Bottom Road
Laurel, MD 20723
Hours of operations for ticket sales
Monday-Friday: 9 a.m. – 4 p.m.

(Paratransit only – Howard County 10-Ride)

Central Maryland Regional Transit
312 Marshall Avenue, Suite 100
Laurel, Maryland 20707
240)-581-5800
Hours of operations for ticket sales

Monday-Friday: 8:30 a.m. – 4:30 p.m.

Ellicott City Senior Center
9401 Frederick Road
Ellicott City, MD 21042
410-313-1400
Hours of operations for ticket sales
Monday-Friday: 8:30 a.m. – 4 p.m.

(Paratransit only – Howard County 10-Ride)

Kings Contrivance Village Center
7251 Eden Brook Drive
Columbia, MD 21046
410-381-9600
Hours of operations for ticket sales
Monday-Thursday: 9 a.m. – 9 p.m.
Friday: 9 a.m. – 5 p.m.
Saturday: 10 a.m. – 1 p.m.
(Assorted 10-Ride books, Regular Fare; $13.50,
10-Ride Reduced Senior/Disabled; $4.50,
10-Ride Reduced Student; $4.50.
No Monthly Passes, No Paratransit)

Oakland Mills Community Association
5851 Robert Oliver Place
Columbia, MD 21045
410-730-4610
Hours of operations for ticket sales
Monday-Friday: 9 a.m. – 5 p.m.
(Assorted 10-Ride books, Regular Fare; $13.50,
10-Ride Reduced Senior/Disabled; $4.50,
10-Ride Reduced Student; $4.50.
No Monthly Passes, No Paratransit)

Service Performance Evaluation

This section presents a summary of system-wide performance and route by route comparisons. More detailed information is available in **Appendix A**: RTA Route Profiles.

MDOT MTA applies performance standards to the LOTS to monitor the effectiveness and efficiency of each system's services. The performance standards are based on a composite of hundreds of national peer agencies with similarly sized operations. Services are rated as "Successful," "Acceptable" or "Needs Review" based on how they perform in each of the operating measures.

These standards are utilized in determining whether new services requested by each system should be funded based on their potential for success. MDOT MTA's current standards for urban transit service are shown in **Table 2-8**.

Table 2-8: MDOT MTA Performance Standards

Urban Fixed route Bus	Revised LOT Performance Standards		
	Successful	Acceptable	Needs Review
Operating Cost per Hour	<$66.11	$66.11 - $86.45	>$111.87
Operating Cost per Passenger Trip	<$7.12	$7.12 - $8.14	>$8.14
Local Operating Revenue Ratio	<$3.81	$3.81 - $4.58	>$4.58
Farebox Recovery Ratio	>25%	20% - 25%	<20%
Passenger Trips per Mile	>2.25	1.75 – 2.00	<1.75
Passenger Trips per Hour	>30.0	20.0 – 30.0	<20.0

SOURCE: MTA 2017 LOTS MANUAL ATTACHMENT 3.F, MTA PERFORMANCE STANDARDS

Table 2-9 presents RTA's system-wide statistics and performance information including unlinked passenger trips, services supplied (vehicle service hours), effectiveness (passenger trips per service hour), financial indicators (operating cost, farebox revenue, and farebox recovery ratio), and efficiency (operating cost per passenger trip and operating cost per hour).

Table 2-9: RTA System-Wide Performance Data (FY 2022)

| Route | Unlinked Passenger Trips | Vehicle Service Hours | Financial | | | Farebox Recovery Ratio | Local Recovery Ratio | Passengers per Service Hour | Cost per Trip |
			Operating Cost	Farebox Revenue	Fare Revenue / Passenger				
301: South Laurel	18,278	3,861	$394,619	$14,134	$0.77	3.6%	N/A	4.7	$21.59
302: Laurel – Greenbelt	57,813	9,478	$975,003	$44,399	$0.77	4.6%	N/A	6.1	$16.86
401: Clary's Forest	58,240	5,894	$605,087	$35,623	$0.61	5.9%	6.90%	9.9	$10.39
402: Dobbin Center	16,376	5,169	$424,018	$9,992	$0.61	2.4%	3.40%	4	$25.89
403: Executive Park Drive	21,435	4,921	$499,784	$13,223	$0.62	2.6%	3.70%	4.4	$23.32
404: Hickory Ridge	20,914	5,068	$516,242	$12,780	$0.61	2.5%	3.50%	4.1	$24.68
405: Ellicott City	25,880	9,821	$1,006,576	$15,886	$0.61	1.6%	2.60%	2.6	$38.89
406: Columbia Gateway	2,866	1,649	$160,883	$1,644	$0.57	1.0%	1.90%	1.7	$56.13
407: Kings Contrivance	69,546	11,678	$1,200,018	$42,983	$0.62	3.6%	4.60%	6	$17.26
408: Waterloo Park	59,035	11,078	$1,137,218	$36,067	$0.61	3.2%	4.20%	5.3	$19.26
409: Elkridge Corners	42,428	8,995	$924,950	$28,325	$0.67	3.1%	4.10%	4.7	$21.80
501: Arundel Mills – Columbia	79,512	11,660	$1,198,065	$52,202	$0.66	4.4%	5.40%	6.8	$16.37
502: Laurel – Arundel Mills	48,950	9,804	$181,711	$20,358	$0.42	11.2%	N/A	5	$3.71
503: Laurel – Columbia	74,224	11,992	$1,214,851	$47,955	$0.65	3.9%	5.10%	6.2	$18.89
Totals	595,497	111,068	$10,439,025	$375,571	-	3.6%	N/A	5.4	-
Averages	42,536	7,933	$745,645	$26,827	$0.63	3.83%	N/A	5.1	$22.50

Note: Service was not restored to pre-pandemic (FY2019) levels until November 2022 (after FY2022)

Fixed Route Ridership

Ridership by Year

Figure 2-6 depicts the annual fixed route ridership trends between FY2016 and FY2022. In the past seven years, systemwide ridership for RTA's fixed route service peaked in FY2016 at 943,079 total trips. Ridership gradually decreased in FY2017 and FY2018, hitting a low of 753,882 trips in FY2018. Ridership rebounded in FY2019 to 892,820 annual trips. However, ridership was dramatically reduced in FY2020 and FY2021 due to COVID-19 pandemic related travel restrictions and reduced service hours.

The ridership decline in FY2020 and FY2021 and the subsequent rise in FY2022 mirrors national trends due to the public's adjustment to the COVID-19 pandemic and increased work from home opportunities. In FY2022, ridership numbers increased by 113% from the previous year. However, FY2022 ridership still represents a decrease of 32% since FY2019.

Figure 2-6: RTA Total Fixed Route Ridership, FY 2016 – 2022
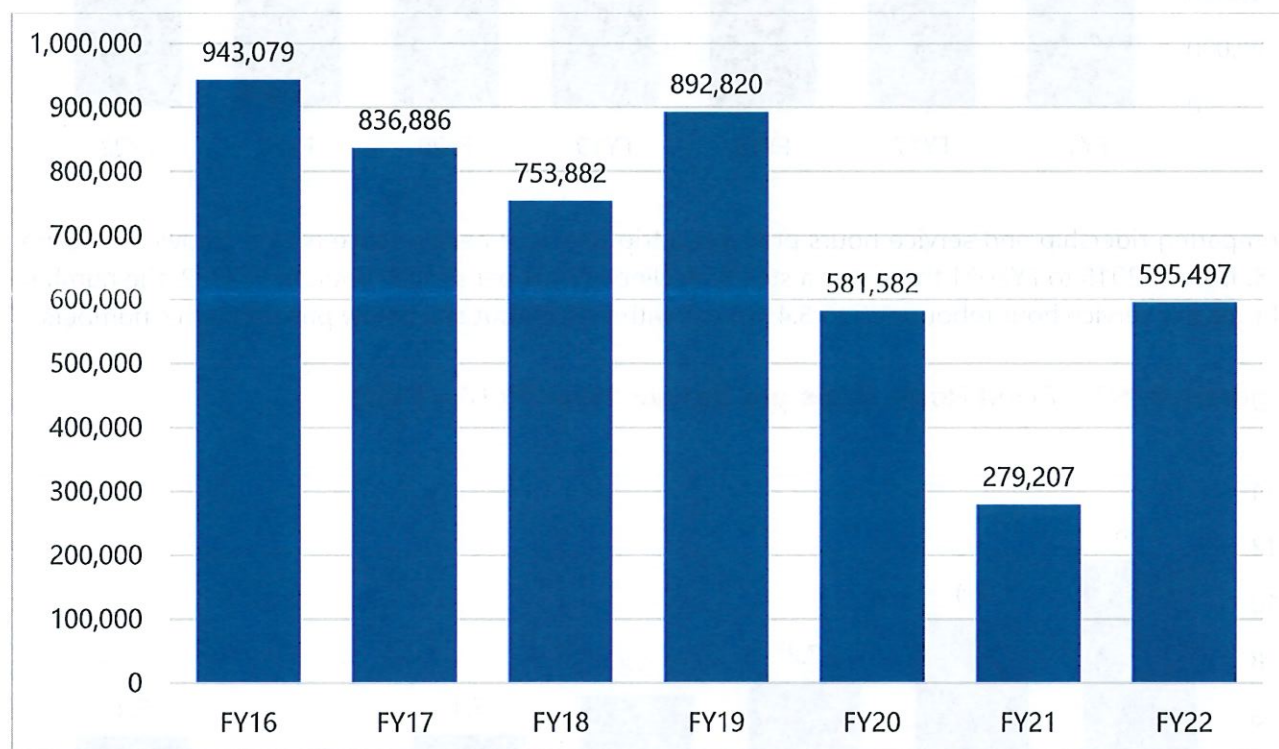
SOURCE: HOWARD COUNTY ANNUAL TRANSPORTATION PLANS (ATPS) AND RTA PERFORMANCE DATA:

Productivity by Year

From FY2016 to FY2019, system service hours had a steady long-term growth trend, though it dropped in FY2020 because of the onset of the COVID-19 pandemic. In FY2022, annual service hours totaled about 111,000 service hours. This is an 18% decrease in annual service hours from FY2019 (131,000 hours). **Figure 2-7** depicts the overall trend.

Figure 2-7: RTA Fixed Route Annual Service Hours FY16 – FY22
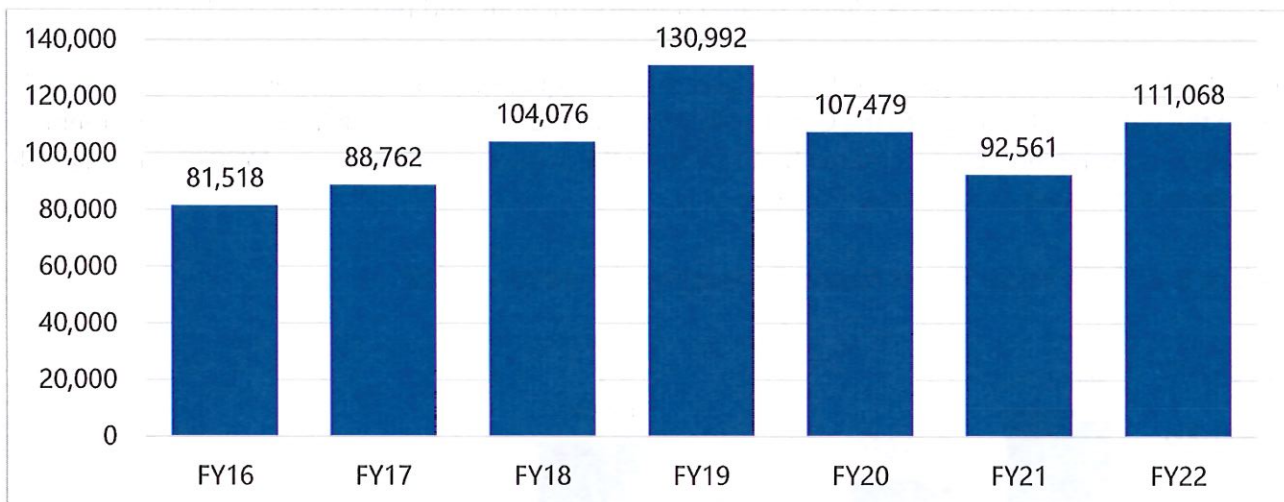
Comparing ridership and service hours provides a trip per hour performance metric. Shown in **Figure 2-8**, from FY2016 to FY2021 there was a steady decline in trips per service hour. In FY2022, the number of trips per service hour rebounded to 5.4, on par with FY2020 but still below pre-pandemic numbers.

Figure 2-8: RTA Fixed Route Trips per Service Hour FY16 – FY22
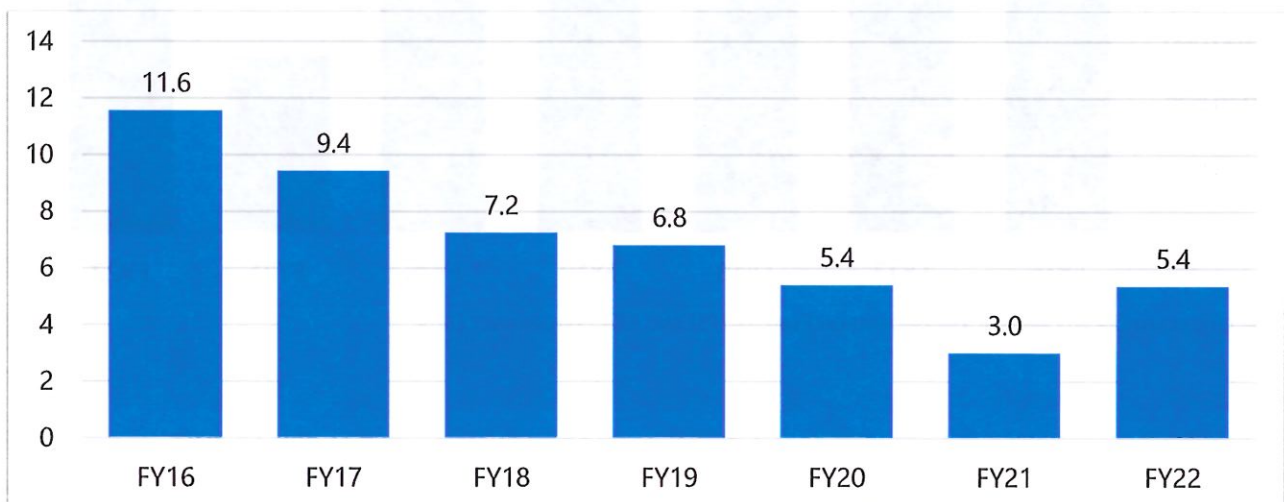
Fiscal Year 2022 Fixed Route Performance

Fixed Route Ridership

Figure 2-9 displays the fixed route ridership ranking by route. Notable findings include:

- Route 501: Arundel Mills – Columbia ranks first with about 80,000 trips, closely followed by the 503 Laurel – Columbia route (74,000 trips) and the 407 Kings Contrivance route (70,000 trips).

- System-wide, there are an average of 42,536 boardings per route, and seven of the fifteen routes are below that average.

- The Howard County focused (400 series) routes account for 53.2% of boardings, the regional (500 series) routes account for 34% of boardings, and the Laurel focused (300 series) routes account for 12.8% of boardings.

- Ridership in FY2022 was still being impacted by reduced service levels which were not restored to pre-pandemic levels until FY2023.

Figure 2-9: RTA Fixed Route Ridership by Route (FY2022)

Route	Boardings
301: South Laurel	18,278
302: Laurel – Greenbelt	57,813
401: Clary's Forest	58,240
402: Dobbin Center	16,376
403: Executive Park Drive	21,435
404: Hickory Ridge	20,914
405: Ellicott City	25,880
406: Columbia Gateway	2,866
407: Kings Contrivance	69,546
408: Waterloo Park	59,035
409: Elkridge Corners	42,428
501: Arundel Mills – Columbia	79,512
502: Laurel – Arundel Mills	48,950
503: Laurel – Columbia	74,224

Fixed Route Service Hours

Figure 2-10 displays the vehicle service hours ranking by route. Notable findings are:

- Route 503 Laurel – Columbia provides the most hours of all routes, with 11,992 service hours. This is closely followed by Routes 407 and 501. Each of these three routes provided about 11% of the system-wide hours supplied.

- The 406 Columbia Gateway provided 1649 service hours, the fewest of the routes, totaling just 1% of the system-wide hours supplied.

- The nine routes almost exclusively serving Howard County (400 series) account for 57% of service hours, while the five other RTA routes service multiple jurisdictions (300, and 500 series) account for 43% of service hours.

- FY2022 service hours were 84% of FY2019 service hours due to continued driver shortage.

Figure 2-10: Service Hours by Route

Figure 2-10: Service Hours by Route
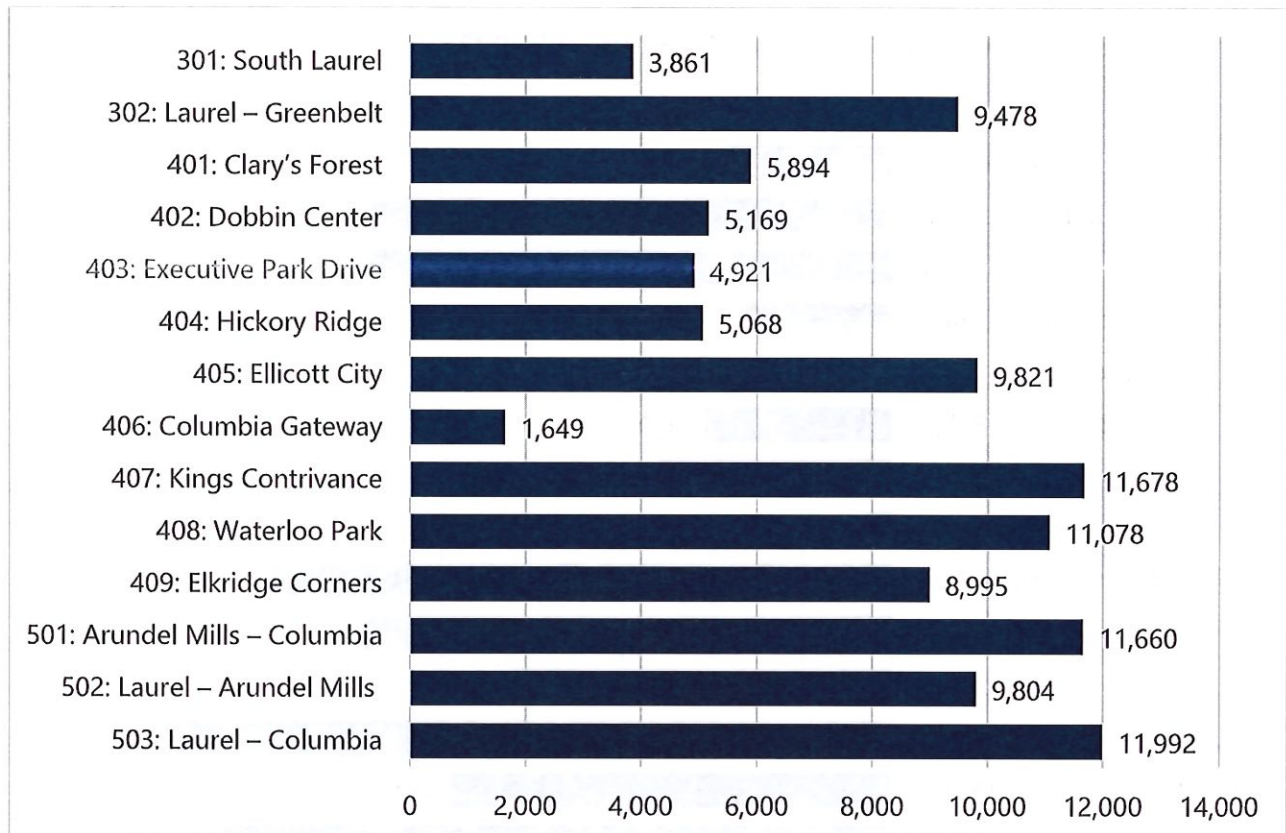
Fixed Route Passenger Boardings per Service Hour

Figure 2-11 displays passenger boardings per service hour, ranked by route. Notable findings include:

- Route 401 Clary's Forest route transported 10 passengers per hour, the highest-ranking route.

- The average boardings per service hour are 5.4 passengers (FY22).

- Routes 302, 401, 407, 408, 501, and 503 exceeded the average boardings per service hour.

- Route 406 Columbia Gateway transported 1.7 passengers per hour, the lowest ranking route.

- In FY2019, prior to the pandemic, the average passenger per hour was 6.8.

Figure 2-11: Passenger Boardings per Service Hour by Route (FY2022)
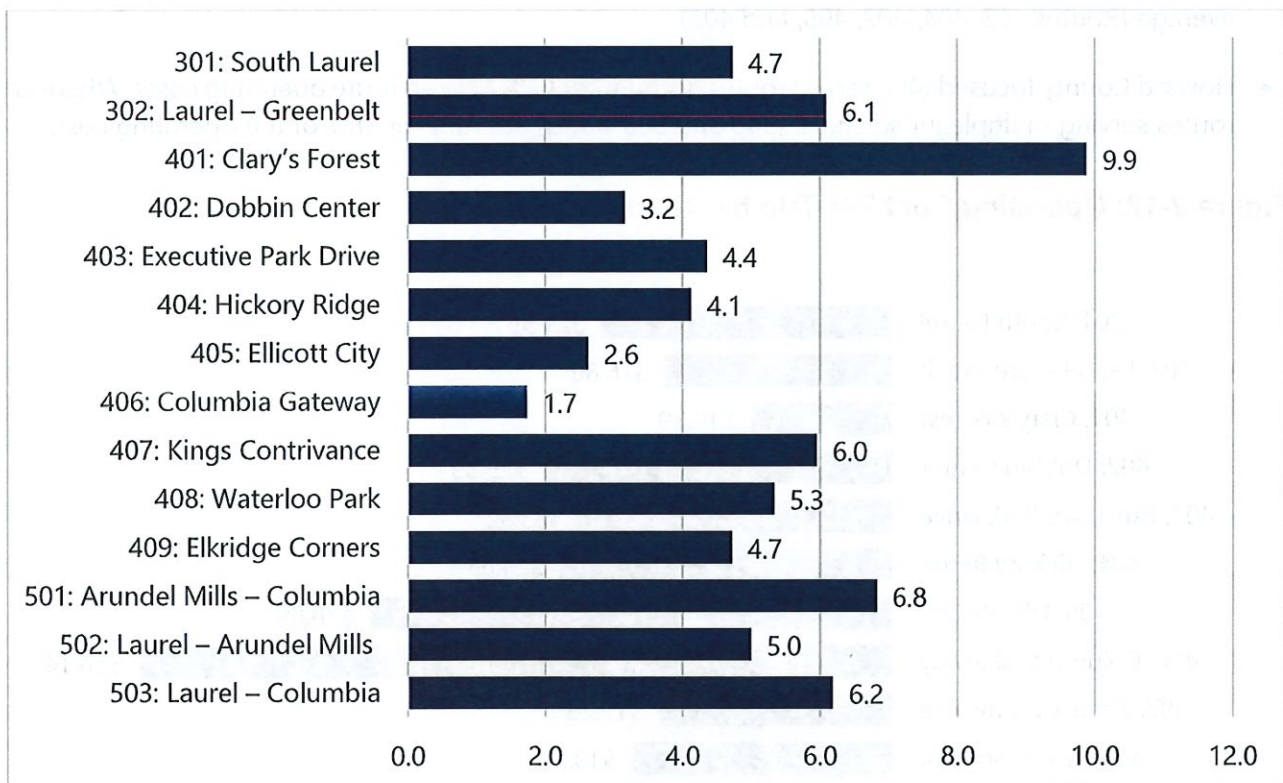
Fixed Route Operating Costs and Farebox Recovery

Operating Costs per Trip

Figure 2-12 presents the operating cost ranked by route. Notable findings include:

- Route 502 Laurel – Arundel Mills was the most affordable to operate on a per trip basis, at $3.71 spent per passenger trip. The most expensive was Route 406 Columbia Gateway route, at $56.13 per trip, which was 15 times greater than the 502 to operate.

- While the 406 costs significantly more to operate per trip, its overall cost was 1.5% of total operating costs, as it provides significantly fewer service hours. Route 502 has a similar overall cost, making up 1.7% of total operating costs.

- The average operating cost per trip was $22.50. Five routes have a cost per trip greater than the average (Routes 403, 404, 402, 405, and 406).

- Howard County focused (400 series) routes account for 62% of fixed route operating costs. Whereas routes serving multiple jurisdictions (300 and 500 series) account for 38% of the operating cost.

Figure 2-12: Operating Cost Per Trip by Route

Farebox Recovery Ratio

Figure 2-13 displays the farebox recovery ratio ranking by route. Notable findings include:

- Route 502 Laurel – Arundel Mills route has the highest ratio by far – at 11.2%. The next highest ratio is the 401 Clarys Forest route at 5.9%

- The remaining farebox recovery ratios vary from 1% to 4.6%

- The system average is 3.8%, with nine of the routes below that level.

Figure 2-13: FY2022 Farebox Recovery Ratio by Route
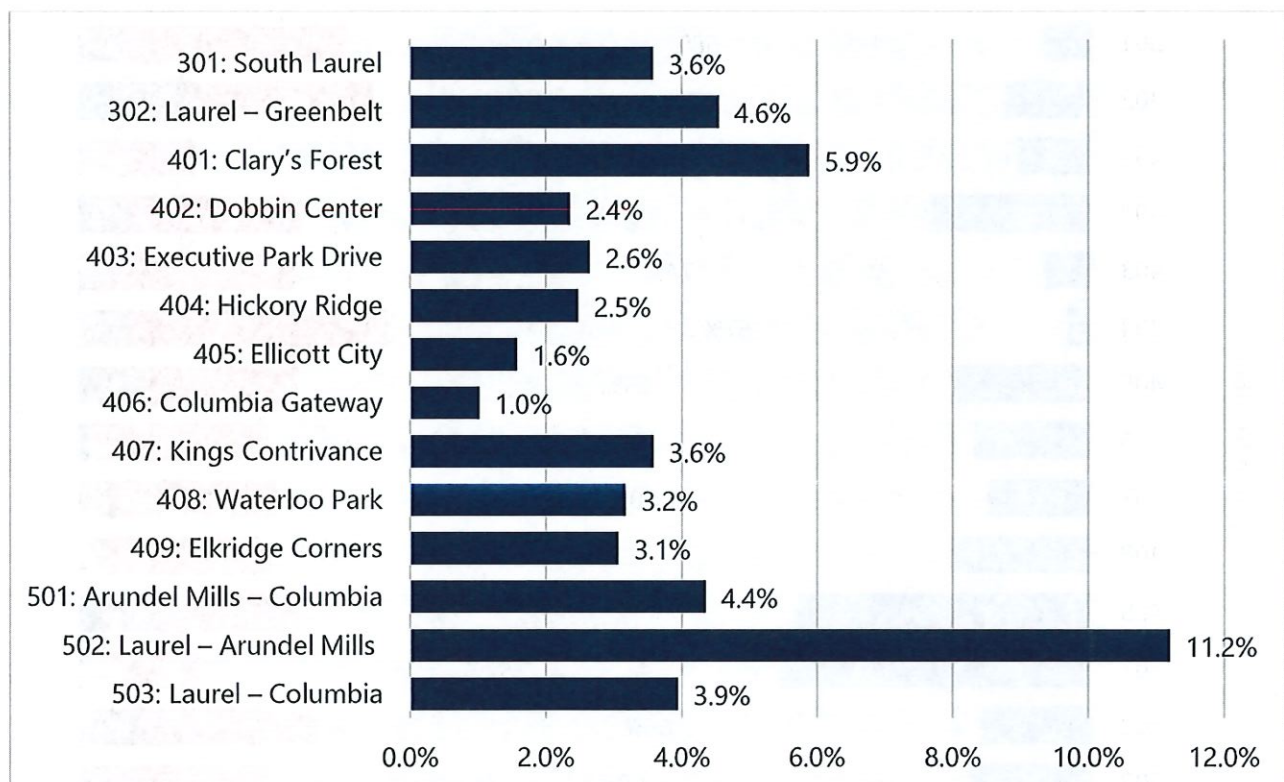
Fixed Route On-Time Performance

System-wide on-time performance was calculated using RTA's Fixed Route Ridership Data obtained from August 12 to November 12, 2022. **Figure 2-14** and **Table 2-10** summarize the performance by route. Service on a route is considered early if a bus departs more than one minute before the scheduled time, and it is considered late if it departs more than five minutes after the scheduled time. The percentage shown atop each bar in **Figure 2-14** is the percentage of total bus stop departures within the three-month study period which fell within the on-time performance standards. The corresponding number of on-time, early, and late departures are found in **Table 2-10**.

Figure 2-14: RTA On-Time Performance by Route

Systemwide, on-time performance averages out to 67%, though performance varies greatly between routes. The 401 has the best performance with 81% on-time arrivals, nine routes (301, 403, 404, 405, 406, 407, 408, 502, 503) were between 65% and 74%, three routes (302, 402, 501) were between 57% and 62% and route 409 had the worst performance at 51% on-time. Of departures that were not on time systemwide, most were either 5-10 minutes late (15% of all departures) or 1-10 minutes early (14%). The only notable outliers in those categories were line 404 where 25% of departures were 5-10 minutes late and routes 409 and 501 where 28% and 30% of departures respectively were 1-10 minutes early. Outside of these categories, only 3.4% of departures were greater than 10 minutes early or late.

Table 2-10: Detailed RTA Bus Performance by Route

| Route	On-Time Performance Class														Total
	>10 Min Early		1-10 Min Early		On-Time		5-10 Min Late		>10 Min Late		>20 Min Late		>30 Min Late		
301	0	0%	33	5%	447	68%	145	22%	27	4%	1	0%	0	0%	653
302	6	0%	122	8%	923	62%	257	17%	129	9%	28	2%	15	1%	1,480
401	0	0%	383	7%	4,232	81%	528	10%	49	1%	9	0%	1	0%	5,202
402	0	0%	99	16%	392	62%	105	17%	28	4%	2	0%	2	0%	628
403	0	0%	253	5%	3,823	74%	987	19%	109	2%	3	0%	3	0%	5,178
404	0	0%	96	3%	2,495	67%	939	25%	186	5%	3	0%	1	0%	3,720
405	50	1%	567	12%	2,979	65%	692	15%	242	5%	31	1%	18	0%	4,579
406	0	0%	25	12%	148	69%	37	17%	1	0%	0	0%	2	1%	213
407	1	0%	747	10%	5,125	70%	1,163	16%	243	3%	11	0%	2	0%	7,292
408	2	0%	873	14%	4,184	67%	1,036	17%	138	2%	5	0%	1	0%	6,239
409	12	1%	446	28%	775	49%	216	14%	99	6%	16	1%	12	1%	1,576
501	53	1%	2,656	30%	4,990	57%	851	10%	154	2%	11	0%	9	0%	8,724
502	2	0%	209	11%	1,280	66%	326	17%	109	6%	7	0%	2	0%	1,935
503	9	0%	692	12%	3,988	69%	927	16%	145	3%	13	0%	3	0%	5,777
Total	135	0%	7,201	14%	35,781	67%	8,209	15%	1,659	3%	140	0%	71	0%	53,196

SOURCE: RTA ON-TIME PERFORMANCE DATA, THREE MONTH SAMPLE (AUG. 12 TO NOV 12, 2022)

On-time performance varied little between weekdays and weekends – on-time performance was 68% for the former and 65% for the latter. Performance for each day of the week fell between 64% and 68% except for Monday when performance was 74% (**Table 2-11**). Throughout the course of the day, service is best in the morning and late evening. Performance dips below 62% for the hours between 2:00 pm and 5:00 pm (**Figure 2-15**).

Table 2-11: RTA Bus Performance by Day of Week

Day of Week	On-Time Performance Class						
	> 10 Min Early	1-10 Min Early	On-Time	5-10 Min Late	> 10 Min Late	> 20 Min Late	> 30 Min Late
Monday	0%	15%	**74%**	10%	1%	0%	0%
Tuesday	0%	14%	**67%**	16%	3%	0%	0%
Wednesday	0%	14%	**68%**	14%	3%	0%	0%
Thursday	0%	13%	**67%**	16%	3%	0%	0%
Friday	0%	12%	**68%**	16%	3%	0%	0%
Weekday Total	*0%*	*13%*	*68%*	*15%*	*3%*	*0%*	*0%*
Saturday	0%	12%	**66%**	17%	5%	0%	0%
Sunday	0%	16%	**64%**	16%	3%	0%	0%
Weekend Total	*0%*	*14%*	*65%*	*16%*	*4%*	*0%*	*0%*
Total	0%	14%	**67%**	15%	3%	0%	0%

Figure 2-15: RTA On-Time Performance by Time of Day
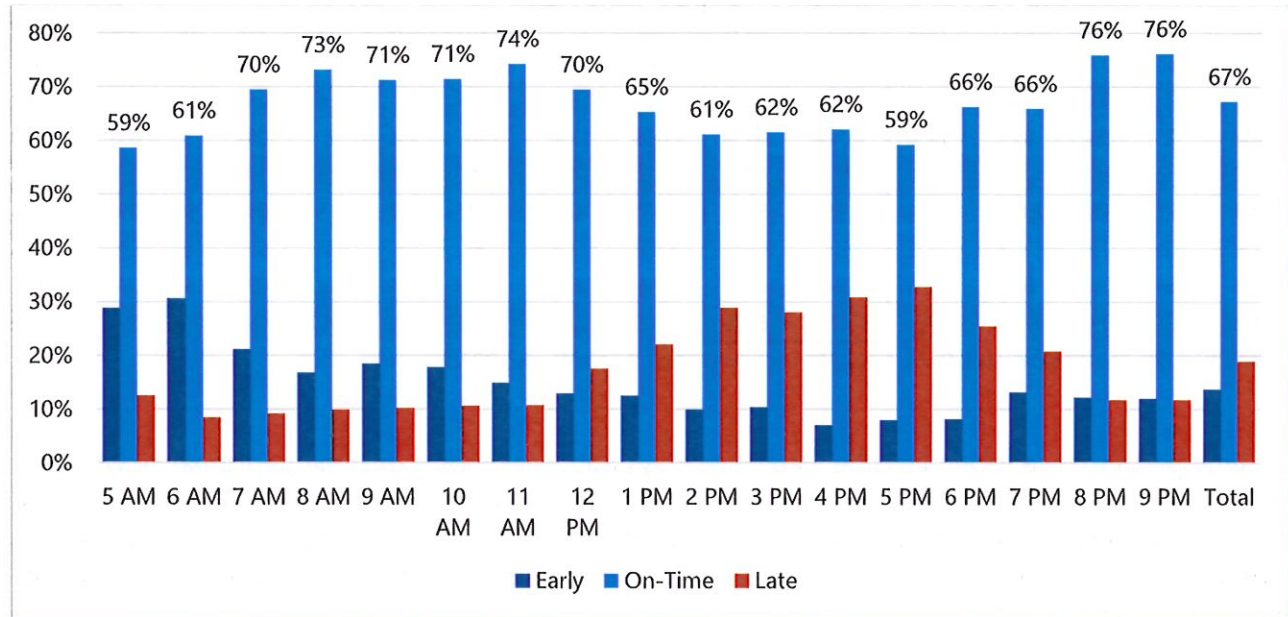
To place RTA's performance in context, MTA's average on-time performance (defined as less than two minutes early or seven minutes late) for its core bus systems was 72% between August and November 2022. WMATA Metrobus performance was slightly better, averaging 77% on time by the same standard as MTA between July and September 2022. If MTA/WMATA's standard (on-time is two minutes early to seven minutes late) is applied to RTA's on-time performance data then its systemwide on-time performance rises to 81% (**Figure 2-16**), exceeding its regional peers. Nevertheless, improving on-time performance must remain a priority in order to increase public confidence in the system and boost ridership. This is of particular importance for RTA given the system's long headways and the common use of the system as a connecting service to other transit networks.

Figure 2-16: RTA Performance by MTA/WMATA On-Time Standards
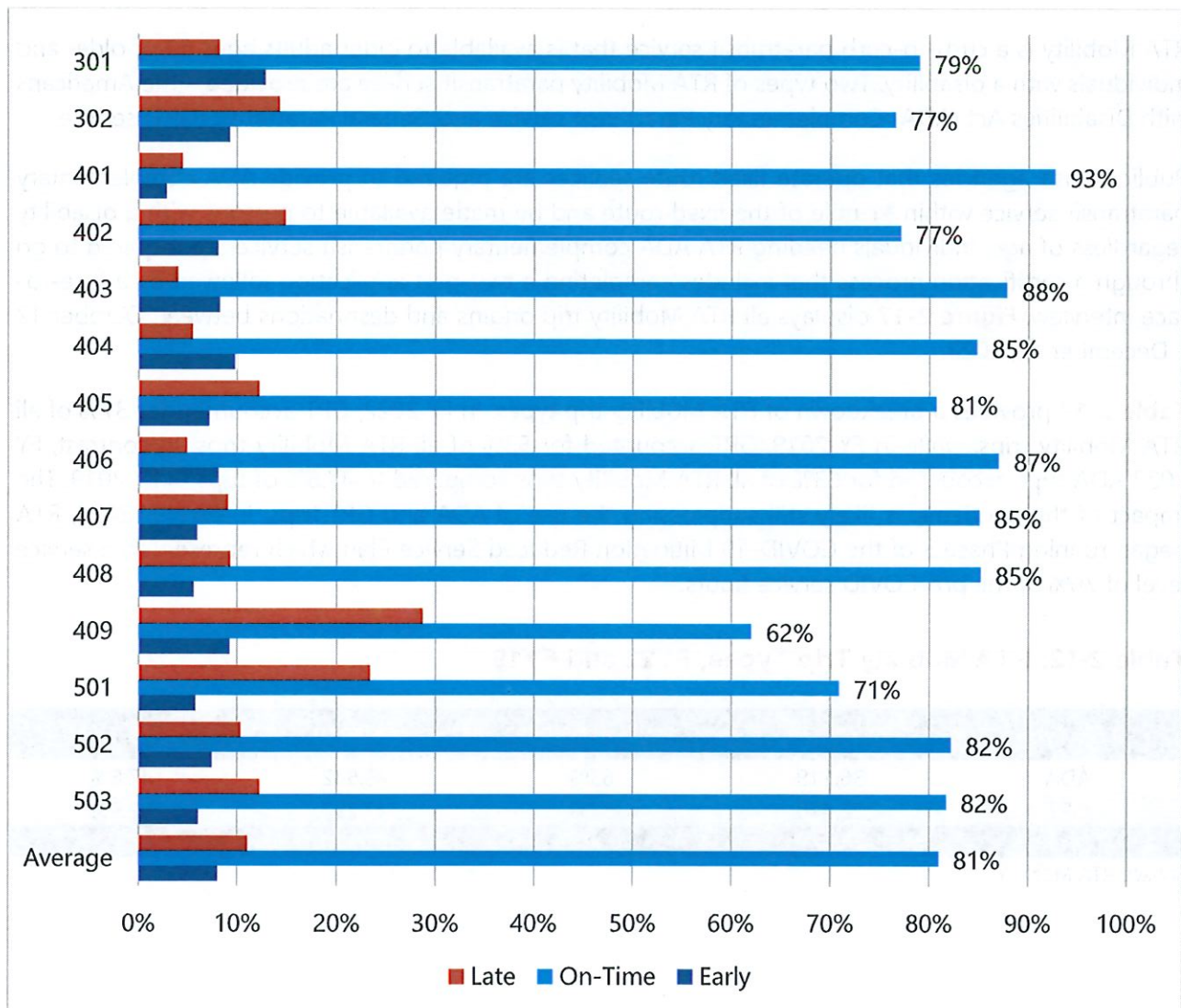
Demand Response Service

In addition to fixed route services in the region, demand response services in central Maryland are available to older adults and persons with disabilities.

RTA's demand-response service is called RTA Mobility. This service provides the ADA complementary paratransit and general paratransit (GPT) service throughout Howard County and ADA complementary paratransit zone of the RTA service areas in Anne Arundel and Prince George's County. This section will provide a review of these services.

RTA Mobility

RTA Mobility is a curb-to-curb paratransit service that is available to older adults ages 60 or older and individuals with a disability. Two types of RTA Mobility paratransit service are provided – the Americans with Disabilities Act (ADA) Complementary Paratransit service and General Paratransit (GPT) service.

Public transit agencies that operate fixed route services are required to provide ADA complementary paratransit service within ¾-mile of the fixed route and be made available to persons with a disability regardless of age. Individuals needing RTA ADA complementary paratransit service are required to go through a certification process that includes completing a two-part application followed by a face-to-face interview. **Figure 2-17** displays all RTA Mobility trip origins and destinations between October 12 – December 12, 2022.

Table 2-12 provides a breakdown of RTA Mobility trip types. In FY 2022, GPT accounted for 37% of all RTA Mobility trips, while in FY 2019, GPT accounted for 52% of all RTA Mobility trips. In contrast, FY 2022 ADA trips accounted for 63% of all RTA Mobility trips compared to 47.6% of trips in FY 2019. The impact of the pandemic is likely still suppressing the use of ADA and GPT trips. In early FY2022, RTA began running Phase 3 of the COVID-19 Mitigation Reduced Service Plan which represented a service level of 76% of the pre-COVID service hours.

Table 2-12: RTA Mobility Trip Types, FY22 and FY19

Trip Type	FY 2022	% of Trips	FY 2019	% of Trips
ADA	36,119	63%	43,532	47.6%
GPT	22,470	37%	47,792	52.3%
Total	58,589	100%	91,324	100%

SOURCE: RTA MOBILITY

Table 2-13: RTA Mobility Service Characteristics

Service and Operating Characteristics	Weekdays*	Saturday (ADA only)	Sunday (ADA only)
Span of Service	8:00am – 5:00pm	9:00am – 4:00pm	9:30am – 3:30pm
One-Way Trips	58,589 (includes weekend)	N/A	N/A
Daily Service Miles	2,164 (includes weekend)	N/A	N/A
Daily Service Hours	144 (includes weekend)	N/A	N/A

* INCLUDES MEDICAL TRIPS TO BALTIMORE CITY TO SELECTED HOSPITALS M,W,F
SOURCE: RTA MOBILITY FY2022 ATP

Overall, the RTA Mobility program provided 58,589 trips in FY2022 compared to 91,324 trips in FY2019, a decrease of 35.8%. In addition, overall operating costs over the same period increased by 2.2% from about 3.9 million to 3.5 million. FY 2022 GPT service's total costs were approximately $1.6 million which accounted for 48% of the overall paratransit program costs. **Table 2-14** displays the performance characteristics of RTA Mobility Services in FY2022 compared to FY2019. Between October 12, 2022 and December 12, 2022, there were 32,759 RTA Mobility trips, averaging 7 miles and 13 minutes in duration for each trip.

Table 2-14: RTA Mobility Performance Characteristics, FY2022 and FY2019

Performance Characteristics	FY 2022*	FY 2019
Ridership	58,589	91,324
Vehicles Miles	789,834	1,068,786
Vehicle Hours	52,668	61,825
Operating Cost	$3,481,973	$3,899,926
Fare Revenue	$252,971	$258,667

*ADDS TRIPS FROM LAUREL ATPS
SOURCE: RTA MOBILITY FY2022 ATP

Using a ridership sample from October 12 – December 12, 2022, the analysis found that more than 96% of all RTA Mobility Trips had an origin or destination stop in Howard County, while 1.8% of stops were in Prince George's County or City of Laurel, 0.8% were in Baltimore County, and 0.5% were in Anne Arundel County.

Table 2-15: RTA Mobility Riders by Jurisdiction

Type of Trip	Howard County	% of Type	Anne Arundel County	% of Type	Prince George's County / City of Laurel	% of Type	Baltimore County	% of Type	Total
ADA	6,794	94.7%	64	1%	212	3%	103	1.4%	7,173
GPT	4,540	100%	----------	-----------	-----------	-----------	----------		4,540
Total	11,334	**96.7%**	64	**0.5%**	212	**1.8%**	103	**0.8%**	11,713

SOURCE: RTA MOBILITY OCTOBER 12 – DECEMBER 12, 2022

Figure 2-17: RTA Mobility Origins and Destinations
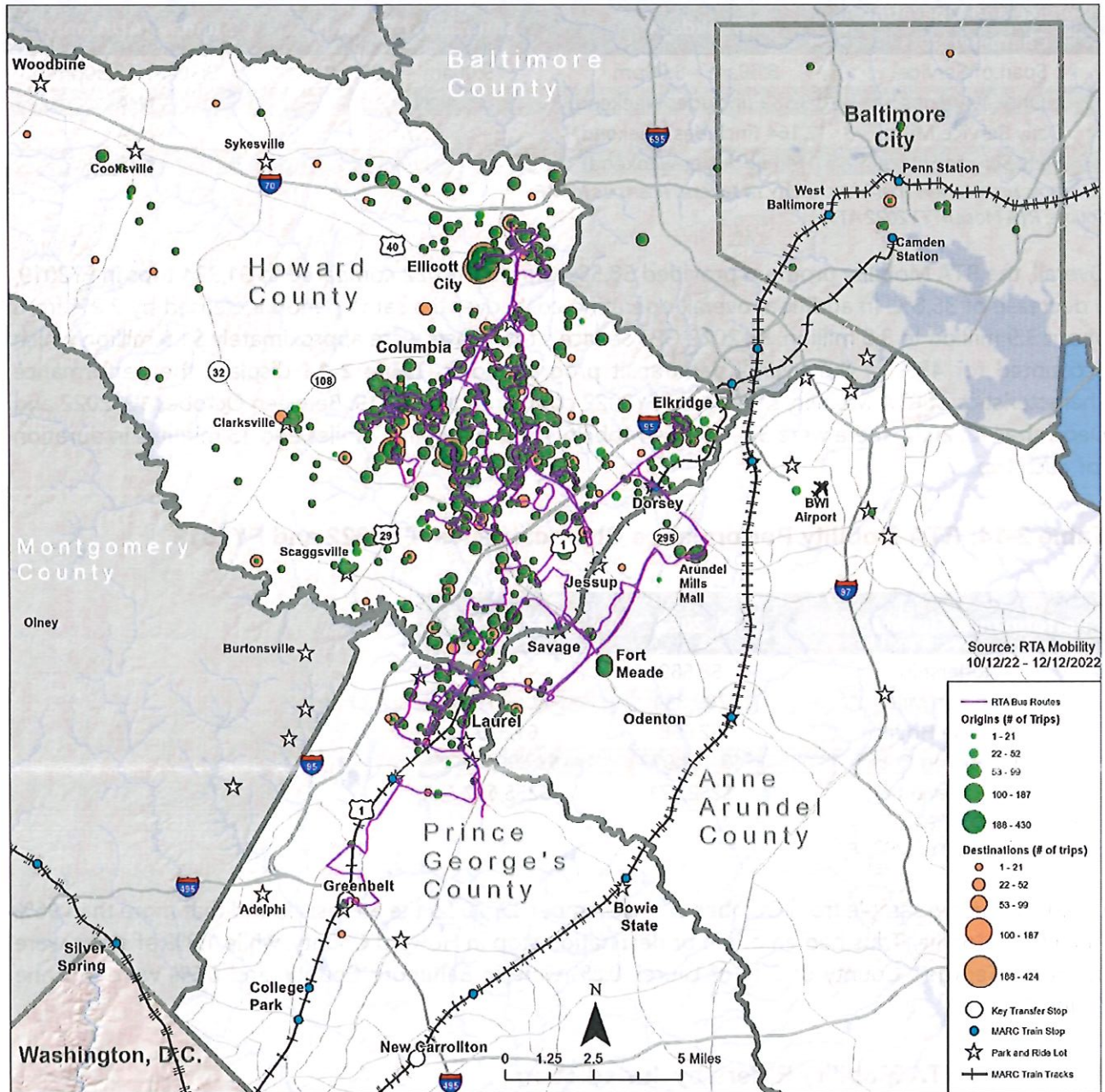
ADA Paratransit

Trips on ADA complementary paratransit service can be scheduled from one to seven days in advance. The ADA fare for a one-way trip is $4.00, an increase from the $2.50 fare from the 2018 TDP. Trips must begin and end within ¾ of a mile of a current RTA fixed route and service is available on the same days and times as RTA's fixed route service.

ADA complementary paratransit service is provided with a combination of sedans and cutaways (small buses). In FY2022, approximately 63 percent of all RTA Mobility trips were ADA trips and cost approximately $1.8 million, which accounts for 39% of the overall cost for the paratransit program.

General Paratransit (GPT) Service

GPT service is provided only in Howard County, serving residents that are ages 60 and older and disabled adults ages 18 to 59. Adults ages 18 to 59 must be determined eligible for the service after completing the certification process. Unlike the ADA service, trips on the GPT may be outside of the ¾- mile transit shed.

GPT service is available Monday through Friday 8:00 a.m. to 5:00 p.m. and costs $5.00 for a one-way trip, an increase from the $2.50 fare from the 2018 TDP. Reservations must be made at least two business days in advance and up to seven days in advance. Eligible trips include medical appointments, senior centers, social service agencies, places of employment, and colleges. Medical trips to select hospitals in Baltimore are provided Monday, Wednesday, and Friday.

Table 2-16 displays the GPT demand-response trips (Howard County only) that occurred both within a ¾ mile and a ¼ mile transit shed. A ¾ mile transit shed was used since this is what is used for ADA complementary paratransit service and a ¼ mile transit shed was used as this is the generally accepted reasonable walking distance to a transit stop. Out of a total of 4540 General Paratransit Trips (GPT) from October 12th – December 12th, 2022, approximately 71% of GPT origins or destinations are within ¾ mile from the transit shed, while 63% of GPT origins or destinations are within ¼ mile from the transit shed. **Figure 2-18** displays the GPT origins and destinations within ¼ mile, within ¾ mile, and outside ¾ mile of the RTA network.

Table 2-16: General Paratransit Trips within Transit Shed

| Trip End | RTA Transit Shed | | | |
| | ¾ mile from Transit Shed | | ¼ mile from Transit Shed | |
	#	%	#	%
Origins	3233	71.2%	2859	63%
Destinations	3208	70.6%	2868	63.2%

SOURCE: RTA MOBILITY OCTOBER 12 – DECEMBER 12, 2022

Figure 2-18: General Paratransit Trips (GPT) within Transit Shed
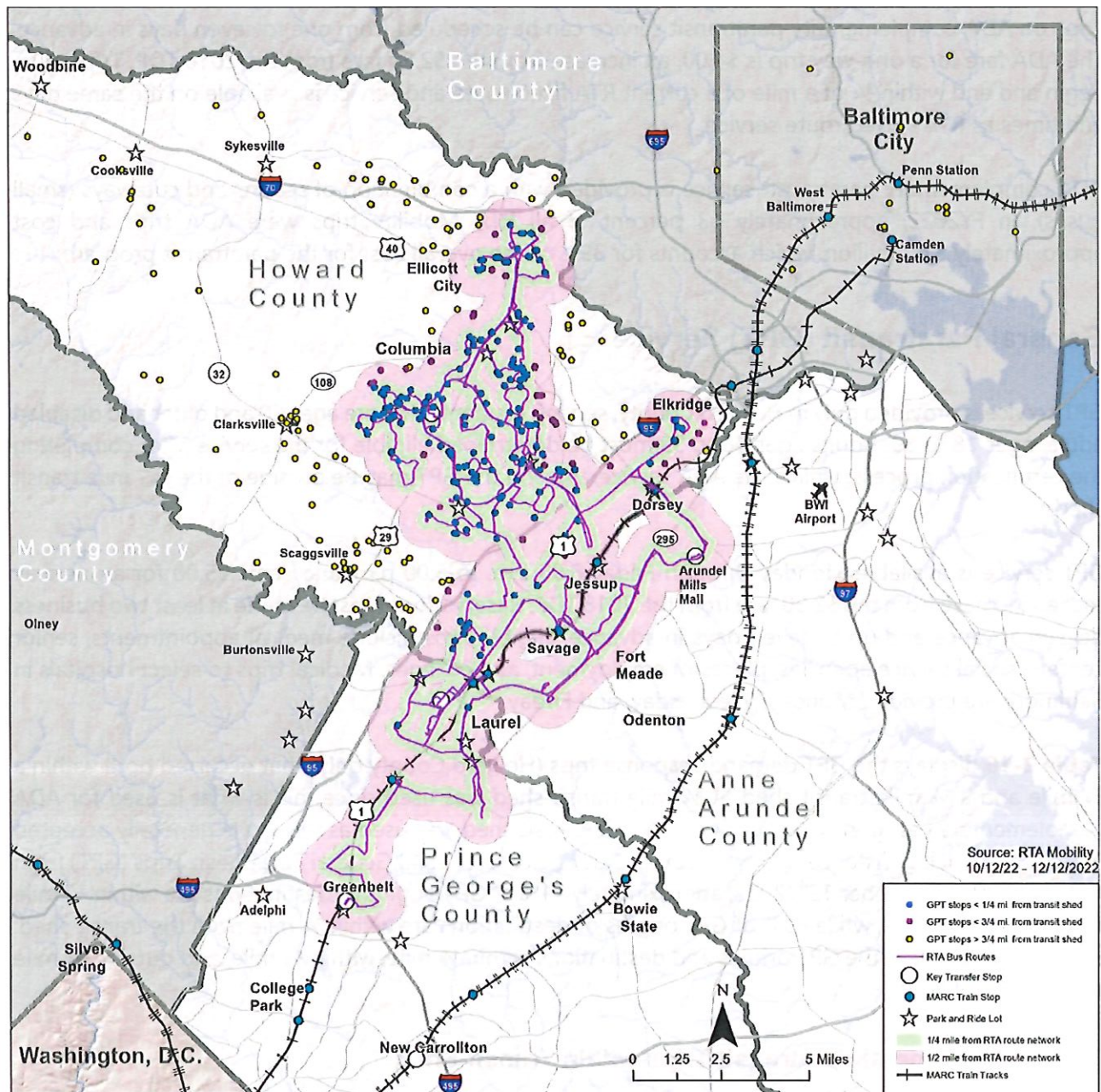
The top RTA Mobility trip origins and destinations are displayed in **Table 2-17** and **Table 2-18**. For both origins and destinations, the top five locations are the same (Ellicott / Miller Senior Center Plus, Davita Woodside Court in Columbia, Ellicott City Dialysis Center, Davita Dialysis Center in Columbia, and Lorien Nursing Home in Columbia). These trips made up about 14% of all RTA Mobility trips. Other notable locations include the Maryland Live! Casino at Arundel Mills, Bain Senior Center in Columbia, and Weis Market Place in Laurel. Of the top 17 trip origins, ten are in Columbia, two are in Ellicott City, two are in Elkridge, one each in Hanover, Laurel, and Fort Meade. The top destinations are similar.

The trip sample results show that the most common trip purpose was Employment (41%), followed by Medical (12.9%), and Dialysis Davita (12.4%). Top employers include Weis Market, Home Depot, Maryland Live! Casino, Wegman's, Giant Food Store, and the NSA Visitor Control Center. Other top purposes include shopping, Giant Food Store, senior centers, and education (mostly Howard Community College). All dialysis trips made up at least 18.8% of all trips, which made it the second-most common trip purpose. **Figure 2-19** displays RTA Mobility Trip Purposes by percentage. **Figure 2-20** displays the top RTA Mobility trip types by origin and purpose.

Table 2-17: RTA Mobility Top 17 Trip Origins

Name	Address	Trips
Ellicott / Miller Senior Center Plus	9401 Frederick Rd, Ellicott City	430
Davita Woodside Court	6304 Woodside Ct, Columbia	351
Ellicott City Dialysis Center	3419 Plum Tree Dr, Ellicott City	310
Davita Dialysis Center	5999 Harpers Farm Rd, Columbia	306
Lorien Nursing Home	6334 Cedar Ln, Columbia	187
Maryland Live! Casino & Hotel Maryland	7002 Arundel Mills Cir, Hanover	99
Bain Senior Center	5470 Ruth Keeton Way, Columbia	98
Weis Market Place	9250 Washington Blvd N, Laurel	96
Howard County General Hospital	10710 Charter Dr, Columbia	92
Howard Community College	10901 Little Patuxent Pkwy, Columbia	83
Elkridge Senior Center or Library	6540 Washington Blvd, Elkridge	79
Weis Market	6551 Waterloo Rd, Elkridge	76
Wegman's – Pharmacy	8855 McGaw Rd, Columbia	72
BJ's Restaurant and Brewhouse	6181 Columbia Crossing Cir	70
Clay's Crossing Apartments	11335 Little Patuxent Pkwy Unit	70
Home Depot	9051 Snowden River Pkwy, Columbia	68
Williams & Elizabeth Building Door-to-Door (Behind Visitor Center)	9800 Savage Rd, Fort Meade	67

SOURCE: RTA MOBILITY OCTOBER 12 – DECEMBER 12, 2022

## Table 2-18: RTA Mobility Top 17 Trip Destinations

Name	Address	Trips
Ellicott / Miller Senior Center Plus	9401 Frederick Rd, Ellicott City	424
Davita Woodside Court	6304 Woodside Ct, Columbia	310
Ellicott City Dialysis Center	3419 Plum Tree Dr, Ellicott City	295
Davita Dialysis Center	5999 Harpers Farm Rd	214
Lorien Nursing Home or Dialysis Center	6334 Cedar Ln, Columbia	163
Howard Community College	10901 Little Patuxent Pkwy, Columbia	96
Howard County General Hospital	10710 Charter Dr, Columbia	95
Wegman's – Pharmacy	8855 McGaw Rd, Columbia	92
Weis Market Place	9250 Washington Blvd N	90
Bain Senior Center	5470 Ruth Keeton Way, Columbia	88
Weis Market	6551 Waterloo Rd, Elkridge	81
Howard County General Hospital	10710 Charter Dr, Columbia	92
Maryland Live! Casino & Hotel Maryland	7002 Arundel Mills Cir, Hanover	99
Heartlands Senior Living Village	3004 N Ridge Rd, Ellicott City	79
Giant Food at Chatham Mall	9200 Baltimore National Pike	78
Residence	6564 Quilting Way, Columbia	75
Stevens Forest Elm School	6045 Stevens Forest Elm School	72
Elkridge Senior Center or Library	6540 Washington Blvd, Elkridge	72

SOURCE: RTA MOBILITY OCTOBER 12 – DECEMBER 12, 2022

Figure 2-19: RTA Mobility Trips by Purpose
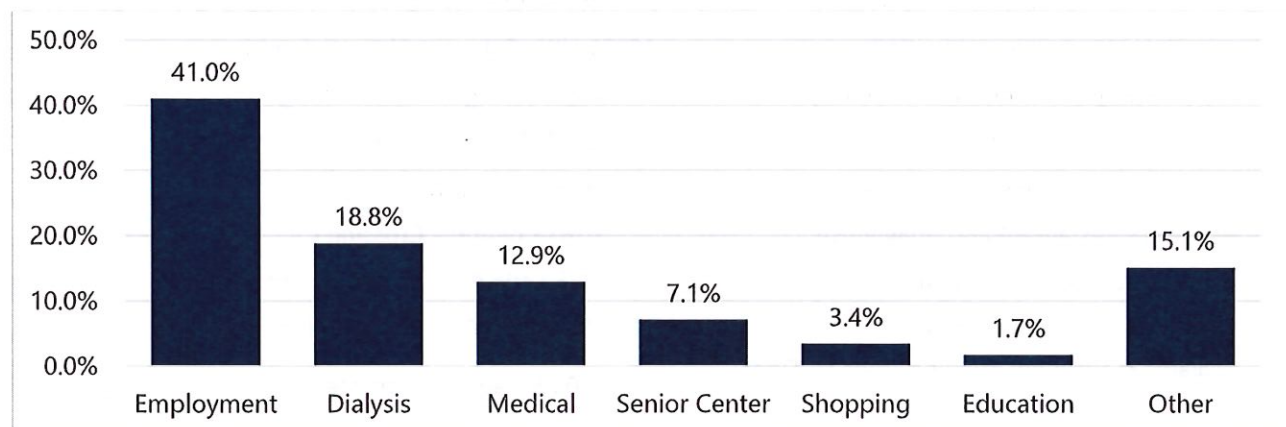
SOURCE: RTA MOBILITY OCTOBER 12 – DECEMBER 12, 2022

Figure 2-20: RTA Top Trip Types by Origin and Purpose
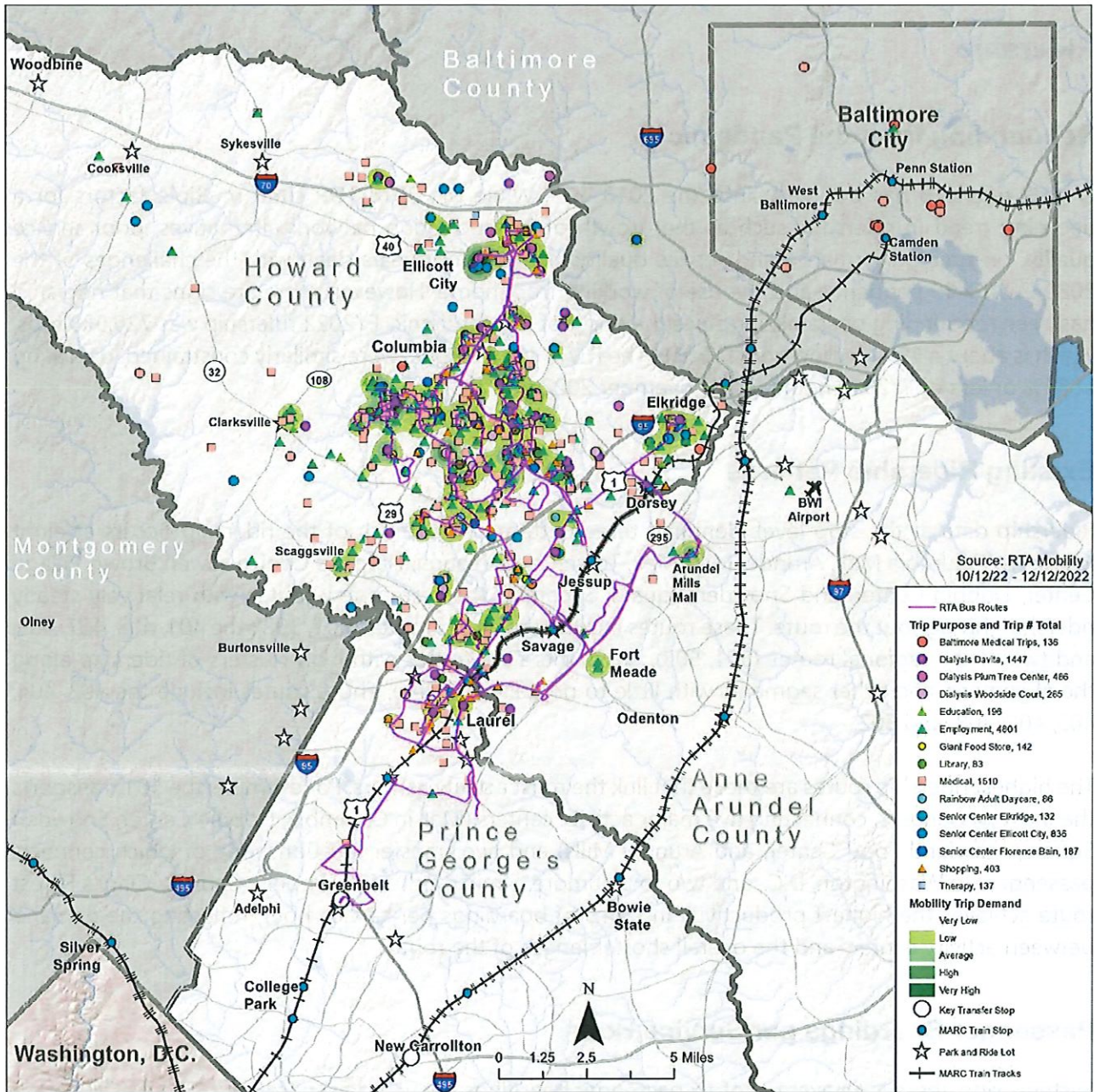
Summary Observations – RTA Services

Ridership

Rebounding from the Pandemic

Overall ridership has declined since the 2018 TDP. While the 2018 TDP cited multiple factors for a declining trend in ridership, such as the growth of transportation network alternatives, poor service quality, on-time performance and service quality, the past four years dealt with the challenges of the 2020 COVID-19 pandemic and the rise of working from home. However, there are signs that ridership has been rebounding or stabilizing since the onset of the pandemic. FY2022 ridership was 720,538 trips, which is about a 19% decline from FY2019. The RTA's service hours were similarly constrained, operating at 84% or less of FY2019 hours until November 2022 (FY2023).

Existing Ridership Patterns

Ridership data at the stop level identified three patterns. First, much of the ridership occurs at eight locations: Columbia Mall, Arundel Mills Mall, Town Centre Laurel, Harper's Choice, Owen Brown Village Center, Dobbin Center, and Snowden Square. Secondly, there are a few routes with relatively steady ridership throughout the route. These routes include the Laurel routes (301, 302), the 401, 403, 407, 409, and two of the regional routes (501, 503). Third, there are routes with high clusters of ridership along the alignment, and other segments with little to no daily ridership. Those routes include the 402, 404, 405, 406, 408, and 502.

The highest ridership routes are those that link the most activity centers. For example, the 501 transports the most passengers, connecting five major activity centers (Mall in Columbia, Dobbin Center, Snowden Square, Maryland Food Center, and Arundel Mills) and two transfer locations, one of which connects passengers to Washington, D.C., and two to Baltimore. Similarly, the 401 Harper's Choice / Clary's Forest route achieves the highest productivity in terms of boardings per service hour, reflecting the demand between activity centers and the overall shorter length of the route.

Passenger Boardings per Service Hour

System-wide, there is an average of six passenger boardings per vehicle service hour. The 408 Waterloo Park route most closely resembles the system-wide rate, with 5.3 boardings per hour. The 401 Clary's Forest route achieves about 10 passenger boardings per hour (the highest among all routes), while the 406 Columbia Gateway route performs an average of 1.7 boardings per hour, well below the average. Factors contributing to the high performance are (1) long span of service, (2) 30-minute frequencies Monday – Saturday except after 6:00 pm, (3) connections to multiple routes, and (4) service to multiple and diverse activity centers (Mall in Columbia, Village Centers, Howard County General Hospital, etc.

Transfer Locations

While this review did not conduct a thorough transfer analysis, based on boarding and alighting data, and connections to RTA and other transit systems including MTA, WMATA Metrobus, WMATA Metrorail, TheBus (Prince George's), and OOT (Anne Arundel), several locations are identified as primary transit facilities: Arundel Mills Mall, Town Centre laurel, Mall in Columbia, and Greenbelt Metro Station. MARC stations in the service area did not have high numbers of riders transferring to or from an RTA bus.

Span of Service and Frequency

Saturday: Lack of Early Morning Service

A common theme from the rider survey was the limited span of service on weekends. For the routes that operate on Saturday, there was a desire for routes to start early in the morning to service employment shifts that start before RTA's current service times.

Headways

Route 401 Clary's Forest / Harper's Choice is the only route that has 30-minute headways (except Sundays) and it is also the most productive route largely due to ridership from Howard Community College. The second-most productive route, the 501 Arundel Mills – Columbia could be a prime candidate for increased service frequency.

Operational Issues

On-Time Performance

The observed on-time performance varies, with a system average of 67% weekday on-time arrivals (less than a minute early and no more than 5 minutes late). Route 401 has the best performance with 81% on-time arrivals, nine routes were between 65% and 74%, three routes were between 57% and 62% and route 409 had the worst performance at 51%. The overall system average is a marked improvement from the 2018 TDP when the average for on-time arrivals was 48%.

RTA's on-time performance exceeds or equals that of nearby peer transit systems if a peer system's on-time performance standard is applied to RTA's data. However, improving on-time performance should remain a priority to increase public confidence and boost ridership. This is of particular importance for RTA given the one-hour headways for most routes, the dispersed nature of popular destinations and the use of RTA to connect to MTA commuter and express routes during peak hours and other local transit networks.

Other Area Transportation Providers

The RTA service area has many options for regional connections. Four agencies operate transit services within the RTA service area, which is mid-way between Baltimore and Washington, D.C.

The Maryland Transit Administration (MTA) operates local bus, express bus, commuter bus, and commuter rail (MARC) within the service area, primarily providing connections to Baltimore. The MTA also operates light rail service from Baltimore but not within the RTA service area.

Washington Metropolitan Area Transit Authority (WMATA) provides local and express bus, and heavy rail services (Greenbelt) near the service area, primarily providing connections to Washington, D.C. WMATA provides transfers to RTA at Greenbelt Station and in Laurel.

Finally, TheBus operates local bus service within Prince George's County, with transfers available to RTA at Greenbelt Station and Laurel.

Anne Arundel County Office of Transportation (AAOOT) operates local bus service within Anne Arundel County with transfers available to RTA at Arundel Mills Mall in Severn.

These regional connections which intersect with the RTA service area are displayed in **Figure 2-21**.

Figure 2-21: Regional Transportation Connections in RTA Service Area
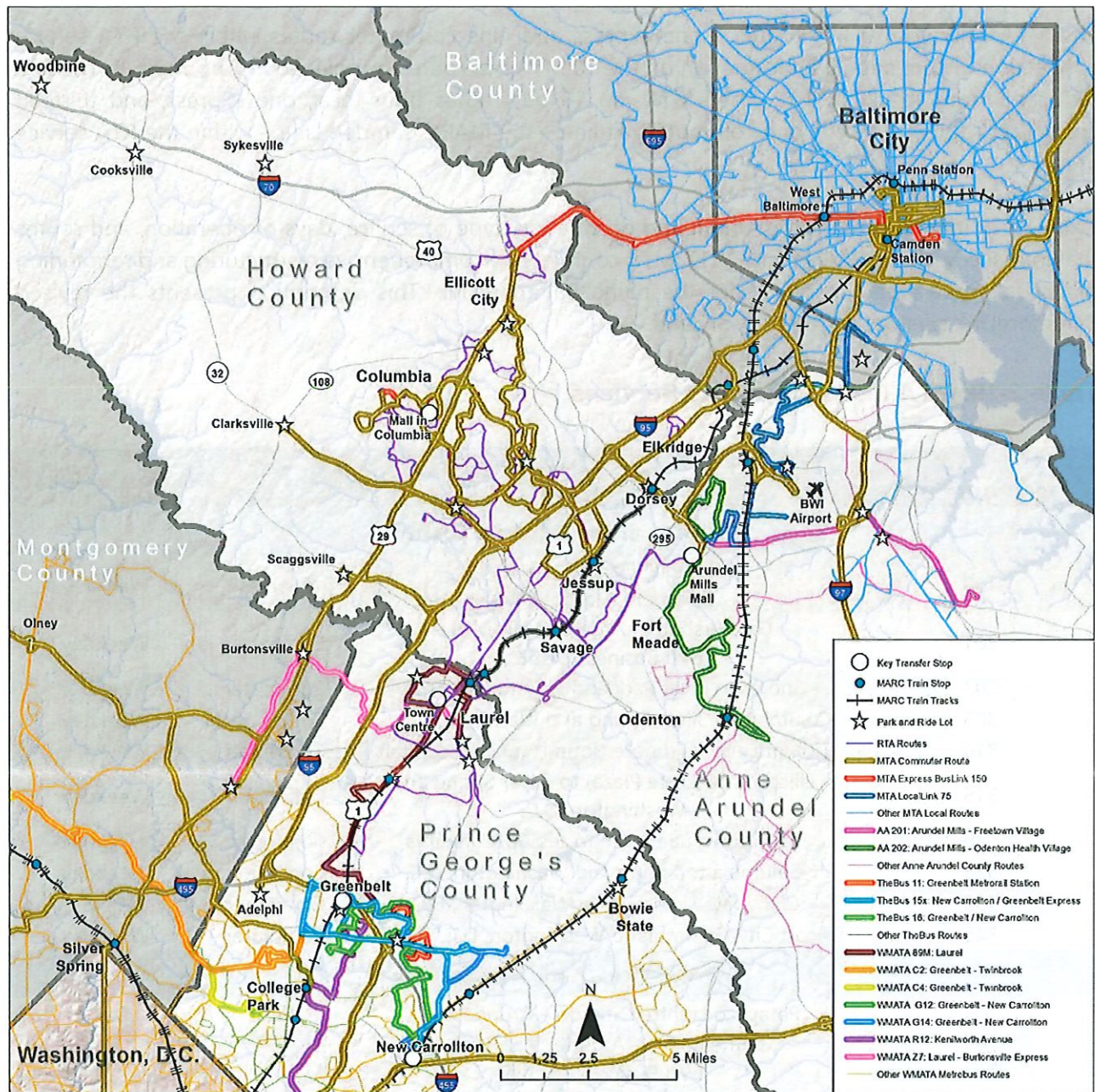
Maryland Transit Administration (MTA)

The MTA operates 10 bus routes – one express and nine commuter routes within the RTA service connections. More detailed information on the 10 MTA bus routes is provided in **Appendix B**. This is a reduction from the 2018 TDP when MTA ran 18 bus routes (four local, one express, and thirteen commuter routes). There is one commuter rail line – the MARC Camden Line – within the RTA service area.

Table 2-19 identifies the route, origin and destination, type of service, days of operation, and routes that intersect with the RTA. In mid-2017, MTA completed a comprehensive restructuring and rebranding of its Baltimore-area services under the name BaltimoreLink. This description presents the revised BaltimoreLink services in Central Maryland.

Table 2-19: MTA Intersecting Bus Services

Route	Origin-Destination	Type	Days of Operation
MTA Service – Howard County			
150	Columbia (Harpers Choice) – Baltimore (Harbor East)	Express	Weekday
201	Gaithersburg – Arundel Mills Mall – BWI Business District	Commuter	Weekday
203	Snowden River Park and Ride to Bethesda	Commuter	Weekday
305	Columbia to Silver Spring and Washington, D.C.	Commuter	Weekday
310	Columbia to Baltimore (John Hopkins Hospital)	Commuter	Weekday
315	Ellicott City (Lotte Plaza) to Silver Spring and Washington, D.C.	Commuter	Weekday
320	Downtown Baltimore to Jessup/Columbia	Commuter	Weekday
325	Columbia to Spring and Washington, D.C.	Commuter	Weekday
335	Clarksville/Columbia to Washington, D.C.	Commuter	Weekday
345	Ellicott City/Columbia to Washington, D.C. via I-95	Commuter	Weekday
MTA Service – Anne Arundel County			
75	Patapsco Lightrail Station – Arundel Mills	Local	Daily
201	Gaithersburg – Arundel Mills Mall – BWI Business District	Commuter	Weekday

Table 2-20: MTA Intersecting Rail Services

Route	Origin-Destination	Type	Stations
Camden Line	Baltimore Camden Station – Washington, D.C. Union Station	Commuter Rail	Jessup, Savage, Laurel, Muirkirk College Park

Maryland Area Regional Commuter (MARC) Train

The MTA provides regional connections to the study area with two commuter rail lines that link Baltimore and Washington, D.C. with stops in the study area.

The MARC Camden Line links Washington, D.C., and Baltimore, with its terminus in Baltimore at Camden Station. The MARC services share the tracks with CSX freight services. Stations in the study area include Dorsey, Jessup, Savage, and Laurel Park —which are all on the Howard/Anne Arundel County line. In the portion of Prince George's County served by the RTA, Camden line trains stop at Laurel, Muirkirk, and Greenbelt stations. In the morning, there are six westbound trains headed for Washington and four northbound, with the pattern reversed in the evening. However, there is limited service in Jessup with just one morning westbound and one evening eastbound train. There are no mid-day or weekend trains.

The MARC Penn Line also serves the electrified Northeast Corridor tracks with Amtrak, with stops formerly in the study area including at the BWI MARC/Amtrak station and Odenton, which are served by MTA and Anne Arundel County Transit (which replaced the RTA Lines in the area).

Table 2-21 summarizes the station locations, level of service, available parking, and bus transit connections at each of the MARC stations in the study area.

Table 2-21: MARC Service in Central Maryland (Camden Line)

Station Name	Number of Trips (All on Weekdays)	Location	Number of Parking Spaces	Connecting Bus Service		
				MTA Route #	RTA Route #	WMATA Route #
MARC – Anne Arundel County Stations						
Dorsey	AM 4 Eastbound, 6 Westbound PM 7 Eastbound, 4 Westbound	7000 Deerpath Rd at MD 100, Elkridge, MD 21075	802 spaces	201 Commuter	501	None
Jessup	AM 0 Eastbound, 1 Westbound PM 1 Eastbound, 0 Westbound	8 Old Jessup Rd, Jessup, MD 20794	75 spaces	None	None	None
Savage	AM 4 Eastbound, 6 Westbound PM 7 Eastbound, 4 Westbound	9009 Dorsey Run Rd, Annapolis Junction, MD 20710	914 spaces	None	409, 502	None
Laurel Park	AM 4 Eastbound, 6 Westbound PM 7 Eastbound, 4 Westbound	Laurel Racetrack Rd, Laurel, MD 20725	300 spaces	None	502	None
MARC – Prince George's County Stations						
Laurel	AM 4 Eastbound, 6 Westbound PM 7 Eastbound, 4 Westbound	22 Main St, Laurel, MD 20707	396 spaces	None	301, 409	89M
Muirkirk	AM 4 Eastbound, 6 Westbound PM 7 Eastbound, 4 Westbound	7012-B Muirkirk Rd, Beltsville, MD 20705	650 spaces	None	302	None

Park and Ride Lots

There are 19 park-and-ride lots or facilities in the RTA service area. Eleven of which are in Howard County, seven are in Prince George's County, and one is in Anne Arundel County. The facility with the largest number of spaces is in the Greenbelt MARC/Metro station in Prince George's County, which provides 3,399 spaces.

Table 2-3: Park and Ride Facilities in RTA Service Area

Name	Address	City/Town	County	Zip Code	# of Spaces
Broken Land East	9601 Broken Land Pkwy	Columbia	Howard	21046	346
Broken Land West	9601 Broken Land Pkwy	Columbia	Howard	21046	346
Clarksville	5020 Signal Bell Ct	Clarksville	Howard	21029	170
Long Gate	4951 Meadowbrook Ln	Ellicott City	Howard	21043	302
MARC Dorsey Station	Dorsey Station Dr	Hanover	Howard	21076	802
MARC Jessup Station	8001 Old Jessup Rd	Jessup	Howard	20794	100
MARC Laurel Racetrack Station	10101 Columbia St	Laurel	Howard	20723	300
Oakland Ridge	9380 Presbyterian Circle	Columbia	Howard	21045	99
Scaggsville	11260 Scaggsville Rd	Fulton	Howard	20759	416
Snowden River	8880 Snowden River Pkwy	Columbia	Howard	21045	305
West Friendship	2030 Sykesville Rd	Sykesville	Howard	21784	88
MARC Savage Station	909 Dorsey Run Rd	Annapolis Junction	Anne Arundel	20701	822
B/W Parkway Armory	64 Southway	Greenbelt	Prince George's	20770	123
MARC/Metro Greenbelt Station	5600 Greenbelt Metro Dr	Greenbelt	Prince George's	20770	3,399
MARC Muirkirk Station	7012 Muirkirk	Beltsville	Prince George's	20705	650
Montpelier Recreational Fringe Parking	Laurel Bowie Rd (MD-197) & Brock Bridge Rd	Laurel	Prince George's	20708	70
South Laurel Fringe Parking	Laurel Bowie Rd (MD-197) and Briarcroft Ln	Laurel	Prince George's	20708	684
MARC Laurel Station	22 Main St & Lafayette Ave	Laurel	Prince George's	20707	299
Laurel Fringe Parking	Old Sandy Spring Rd & Van Dusen Rd	Laurel	Prince George's	20707	56

Anne Arundel County Office of Transportation

Currently, the Anne Arundel County Office of Transportation (AAOOT) provides a variety of public transit services. All services are currently fare-free, though in the past AAOOT did charge a fare for their services, and they might revisit their policy in the future.

Transit services include fixed route services, shuttle services, on-demand services, ADA complementary paratransit, and general paratransit services.

Two routes connect to Arundel Mills Mall, Route 201 (Arundel Mills – Freetown Village) and Route 202 (Arundel Mills – Odenton Health Village). These routes were formerly run by RTA and currently connect to RTA routes 501 (Arundel Mills – Mall in Columbia) and 502 (Arundel Mills – Town Centre in Laurel). The OOT Route 201 includes a stop at the Cromwell station which connects to the MTA light rail network. The OOT Route 202 includes a stop at the Odenton Marc Station which is part of the MARC Penn Line.

Figure 2-22 displays the AAOOT fixed route services adjacent to the RTA service area.

AAOOT provides on-demand services in southern Anne Arundel County (South County Call N' Ride) and northern Anne Arundel County (the Northern County Call N' Ride Service), which provides service Monday – Friday between 7:00 am and 7:00 pm. General paratransit services are provided for eligible customers who have a disability that prevents them from making some or all trips on fixed route services.

In the 2018 Central Maryland TDP, RTA provided fixed route services within Anne Arundel County. Since then, the county has replaced those RTA routes with its fixed route services through the Anne Arundel County Office of Transportation (AAOOT). AAOOT serves two routes in the RTA service area which stop at Arundel Mills Mall, where transfers are available to RTA (501, 502) and MTA (LocalLink 75, Commuter 201).

Figure 2-22: Anne Arundel County Transit Routes in RTA Service Area

Anne Arundel County Routes

- 201: Arundel Mills Mall - Freetown Village
- 202: Arundel Mills Mall - Odenton Health Village
- Brooklyn Park Connector
- Crofton Connector
- Crofton Express
- Gold Edgewater
- Gold Extension
- Yellow
- ○ Anne Arundel County Bus Stops
- Ⓞ Transfers

RTA Routes

- 501: Mall in Columbia - Arundel Mills Mall
- 502: Town Centre Laurel - Arundel Mills Mall
- RTA Routes
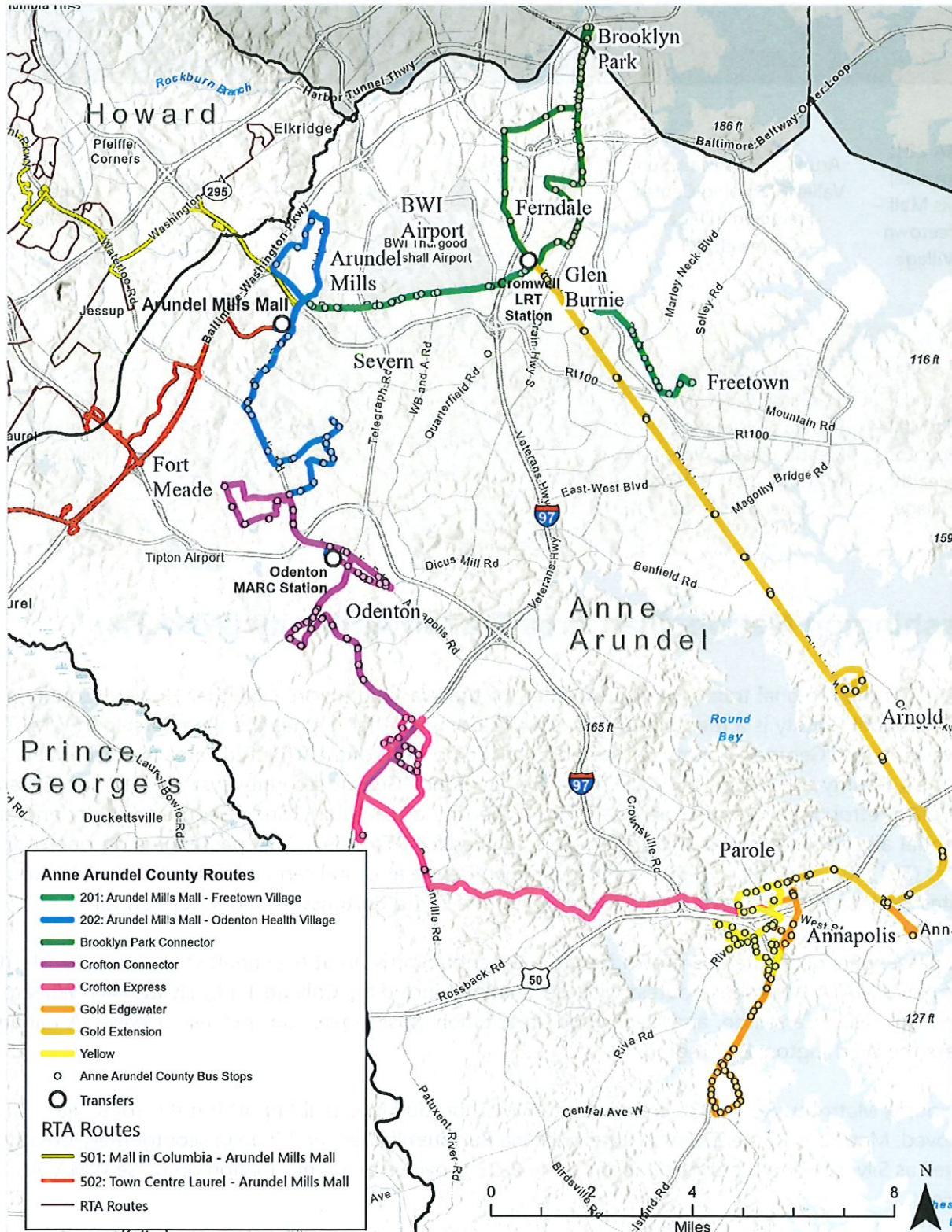
Table 2-22: Anne Arundel County Transit Routes in RTA Service Area

Route	Key Stops	# of Trips	Headway	Span from Arundel Mills Mall	RTA Route Number	Transfer
AA 201: Arundel Mills Mall – Freetown Village	Arundel Mills Mall, Sun Valley Shopping Center, Freetown Village, Cromwell LRT	24	15-95 min	6:45am – 12:39am	501 502	Arundel Mills Mall
AA 202: Arundel Mills Mall – Odenton Health Village	Arundel Mills Mall, Preston Gateway Dr. (Amazon Warehouse), Meade Village, Odenton MARC Station, Odenton Health Campus	12	15-95 min	6:15am – 12:17am	501 502	Arundel Mills Mall

Washington Metropolitan Area Transit Authority (WMATA)

WMATA is the regional transit service provider for the Washington area. Neither Howard County nor Anne Arundel County is a member of the WMATA Compact that defines the membership in WMATA. However, Prince George's County is a member, and so portions of the RTA study area in northern Prince George's County are served by WMATA as well as Prince George's county system, The Bus. Several WMATA Metrobus routes offer service to/from the City of Laurel in Prince George's County and are potential alternative services or transfer opportunities for RTA riders. RTA passengers on one of five routes (301, 302, 409 502, and 503) arriving at Town Centre at Laurel can transfer to WMATA Metrobus Routes 89M (to Beltsville and Greenbelt station) or the Z7 (to Burtonsville and Silver Spring).

RTA passengers on Route 302 (Town Centre – Greenbelt) arriving at Greenbelt station can transfer to multiple WMATA Metrobus routes; with destinations including College Park, Hyattsville, Wheaton, Twinbrook, New Carrollton, and Deanwood. In addition, passengers can transfer to WMATA rail and access the Washington, D.C. region.

Previously, Metrobus Route B30 connected to BWI Thurgood Marshall Airport but this route was removed. Metrobus Route Z7 links Laurel with the Burtonsville Park and Ride in Montgomery County, as well as Silver Spring Metrorail Station. **Table 2-23** provides more information on these WMATA services.

Figure 2-23: WMATA Routes in RTA Service Area

Table 2-23: WMATA Routes in RTA Service Area

Route	Key Stops	Number of Trips	Headway	Span	RTA Route Number	Transfer
89M: Laurel Line	South Laurel Park and Ride Lot, Towne Centre Shopping Center, Laurel Plaza, Beltsville, Greenbelt Station	Weekdays Only Southbound AM: 9, PM: 13 Northbound AM: 8, PM: 13	AM 45-60 min. PM 40-60 min. Late PM 60 min.	5:20 a.m. to 11:47 p.m.	301, 302, 409 502, 503	Town Centre at Laurel, Greenbelt Station
Z7: Laurel – Burtonsville Express Line	South Laurel Park and Ride Lot, Town Centre Shopping Centre, Laurel Regional Hospital, Burtonsville Crossing Park and Ride Lot, Silver Spring Station	Weekdays Only Southbound AM: 6, PM: 3 Northbound AM: 2, PM: 6	AM 30-35 min. PM 40 min.	4:59 a.m. to 5:44 p.m.	301, 302, 409 502, 503	Town Centre at Laurel
G12: Greenbelt – New Carrollton	Greenbelt Station, Capital Office Park, North End, Old Greenbelt, Roosevelt Center, South End / Old Greenbelt, Greenbelt East, Doctors Community Hospital, Lanham, New Carrollton Station	Weekdays Only Eastbound AM: 10, PM: 17 Westbound AM: 11, PM: 14	AM 30-60 min. PM 30-60min.	7:00 a.m. to 10:42 p.m. (eastbound)	302	Greenbelt Station
G14: Greenbelt Rd. – Good Luck Rd. Line	Greenbelt Station, Beltway Plaza, Roosevelt Center, South End / Old Greenbelt, NASA – Goddard Space Flight Center, Goddard Corporate Park, Lanham, New Carrollton Station	Weekdays Only Eastbound AM: 12, PM: 15 Westbound AM: 11, PM: 15	AM 30-60 min. PM 30-60min.	5:15 a.m. to 11:02 p.m. (eastbound)	302	Greenbelt Station
R12: Greenbelt - Deanwood	Greenbelt Station, Beltway Plaza, College Park Station, Kenilworth Towers, Deanwood Station	Weekdays Only Southbound AM: 12, PM: 14 Northbound AM: 12, PM: 16	AM 30-60 min. PM 30-60min	5:00 p.m. to 12:17 p.m. (southbound)	302	Greenbelt Station
C2/C4: Greenbelt – Twinbrook Line	Greenbelt Station, Hyattsville Crossing, Wheaton Station, Twinbrook Station	Weekdays Only Southbound AM: 12, PM: 14 Northbound AM: 12, PM: 16	AM 30-60 min. PM 30-60min	5:40 a.m. to 12:42 (westbound)	302	Greenbelt Station

TheBus (Prince George's County)

TheBus is the public transportation system serving Prince George's (PG) County, providing Monday – Saturday service. There are 28 bus routes operating, with most connecting to Washington Metro stations within PG county. There are three TheBus routes that stop at Greenbelt Station which has connections to RTA (Route 302) and WMATA Metrorail and Metrobus routes.

Table 2-24: TheBus Routes in RTA Service Area

Route	Key Stops	Number of Trips	Headway	Span	RTA Route Number	Transfer
11: Greenway Center	Greenbelt Station, Greenbelt Federal Courthouse, Crescent Road at Parkway	25	30 min.	6:28am – 6:57pm	302	Greenbelt Station
15x: New Carrollton via NASA	New Carrollton Metrorail Station, Goddard Spaceflight Center Visitor Center, Greenbelt Station Community, Greenbelt Station	14	40 min.	6:00am – 8:05pm	302	Greenbelt Station
16: New Carrollton via Lamont Dr.	New Carrollton Metrorail Station, Riverdale Road at Carrollton Mall, Doctors Community Hospital, Beltway Plaza, Greenbelt Station	26	30 min.	6:00am – 7:11pm	302	Greenbelt Station

Figure 2-24: TheBus (Prince George's County) Routes in RTA Service Area
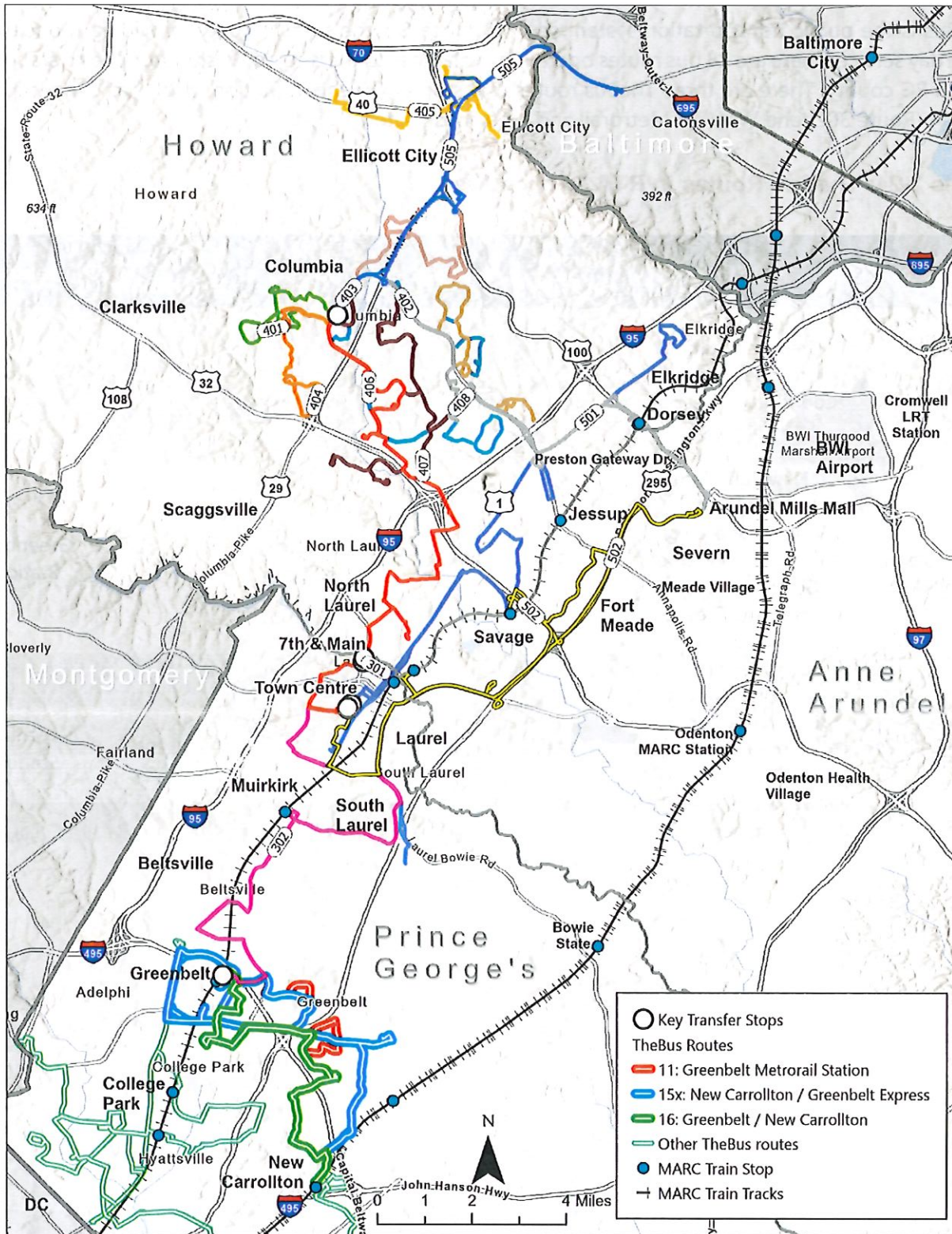
Other Area Providers and Purchasers

Other public and private transportation services are available to area residents in addition to those offered by RTA. Residents also have access to intercity buses, regional rail services, commuter bus services, local transit connections, and multiple park-and-ride locations. Specialized door-to-door transportation is provided by local human service transportation providers and other private transportation providers within the study area. These service providers are detailed in this section.

Intercity Buses

Greyhound

Greyhound provides intercity bus service in Maryland. Their Baltimore to Washington, D.C. route travels the Baltimore-Washington Parkway through Central Maryland. There is a Greyhound stop at the 7-Eleven at 605 7th Street, in Laurel, where passengers can transfer to the 503/E. Greyhound offers intercity connections across the US and into Mexico and Canada. (https://www.greyhound.com/en-us/bus-station-190245).

OurBus

OurBus currently runs two round trips a day, generally on Tuesday, Wednesday, Saturday, and Sunday from Columbia (MD) to New York City, with a stop in Robbinsville Township in New Jersey before continuing to New York. The bus stops once in the morning, and once in the afternoon at the Broken Land Park & Ride, East Lot. OurBus offers curbside intercity bus service, operating across the U.S.

Amtrak Rail Service

Amtrak serves one stop in Central Maryland--the BWI Marshall Airport Rail Station, in Anne Arundel County. It is linked to the airport terminal by a free shuttle bus. Three types of Amtrak service call at the BWI Station: the Acela Express, which travels between Washington, D.C., and Boston; the Northeast Regional, which runs between Virginia Beach, Washington, D.C., New York, Hartford, and Boston; the Silver Service/Palmetto trains which run from New York, through Washington, D.C. and into Miami; and the Vermonter, which runs between Washington, D.C. and St. Albans in northern Vermont. (https://www.amtrak.com/northeast-train-bus-stations)

Human Service Agencies

Government/Public Entities

Anne Arundel County Department of Health

The Anne Arundel County Department of Health offers Medical Assistance Transportation under the Medicaid program. They provide rides to approved medical providers for people covered for full medical assistance, live in Anne Arundel County, and have no other means of transportation. Clients are encouraged to use public transit and the Department of Aging Transportation before contacting them to schedule a ride. Rides must be scheduled at least two days in advance, and are offered Monday through Friday from 8:00 a.m. to 2:30 p.m. The service is free.
https://www.aahealth.org/medical-assistance-transportation/

Anne Arundel County Department of Aging and Disabilities (AADOAD)

The Anne Arundel County Department of Aging and Disabilities (DOAD) is the local Area Agency on Aging (AAA) for Anne Arundel County. DOAD provides a range of services to meet the needs of seniors and adults with disabilities, including operating a van shuttle service and taxi subsidy program.

The demand-response transportation program is operated in collaboration with First Transit, using a fleet of 41 vehicles. First Transit provides drivers, dispatch, and intake and DOAD staff provides oversight and scheduling. Vehicles are owned by Anne Arundel County and maintained by Anne Arundel County Office of Central Services. Eligible riders include people ages 55 and older and people with disabilities. The focus of the program is to provide transportation to the senior center and medical appointments. DOAD asks for donations from riders to help offset the cost of providing transportation services but does not charge a fee.

DOAD's subsidized taxi program, called the taxi voucher program, provides eligible participants with $10 worth of taxi fare coupons for a $5 fee. A maximum of $75/month in coupons can be purchased. People with verified employment of at least twenty hours per month can purchase an additional $40 worth of coupons. Eligible participants must be ages 55 or older, or be ages 18 or older and have a verifiable transportation disability.

There is a disability verification form requiring verification from a physician, psychiatrist, psychologist, or program director of a social service agency (serving the developmentally disabled). In some cases, persons with particular medical conditions are eligible to purchase additional coupons.
(http://www.aacounty.org/services-and-programs/taxi-voucher-program)

Howard County Health Department

Within the Health Department, the Medical Assistance/HealthChoice Transportation Program provides transportation services, for Howard County residents who are Medical Assistance/HealthChoice recipients, to medical providers who accept these programs.

All active Medical Assistance/Health/Choice clients who use mobility devices and need accessible non-emergency transportation may use Area Agency on Aging (AAA) Transport. AAA Transport conducts the screening for eligible recipients and requires 24-hour advance reservations for rides to approved medical providers. The Health Department encourages individuals requesting transportation services to exhaust all other options before seeking Medical Assistance transportation; this includes directing clients to RTA Mobility. Transportation is provided to those with an active Medical Assistance number from Monday through Friday between the hours of 5:00 a.m. and 9:00 p.m., with limited Saturday service. Business hours for scheduling appointments are Monday through Friday from 8:00 a.m. to 3:00 p.m.

Nonprofit Agencies

Active Day of Harford Medical Adult Day Care

Active Day provides adult daycare services for older adults and people with disabilities. They provide door-to-door transportation services for clients to medical and recreational destinations. Their fleet accommodates both ambulatory and non-ambulatory individuals.

American Cancer Society

The American Cancer Society's "Road To Recovery" program provides transportation for cancer patients to cancer related medical appointments. Patients must be able to walk unassisted to and from the vehicle or have an accompanying caregiver to assist. Patients under the age of 18 must be accompanied by a legally responsible adult. It can take several business days to coordinate riders which are provided by volunteers, so riders should schedule ride requests well in advance.

The Arc of Howard County

The Arc of Howard County provides services to individuals with intellectual and developmental disabilities. Services include employment, family and individual support, respite care, residential services, day programs, and retirement support. The Arc provides transportation for clients to their service centers using their fleet of vehicles and drivers. However, transportation services were suspended in February 2021 due to the COVID-19 pandemic.

The Arc of the Central Chesapeake Region

The Arc of the Central Chesapeake Region serves Anne Arundel County and is a non-profit agency,

providing residential services, community supported homes, employment, education, and advocacy. They serve people with cognitive disabilities and their families. They operate their own vehicles, providing clients transportation to employment and services.

The Arc of Prince George's County

The Arc of Prince George's County provides support and services for people with cognitive disabilities and their caregivers. They are a membership organization serving Prince George's County. The Arc of Prince George's County facilitates transportation for clients through MetroAccess or their own transportation services. Transportation is provided between Arc programs and participants' homes, and between Arc programs and community locations.
(https://www.thearcofpgc.org/our-programs/adult/transportation/)

Athelas Institute, Inc.

The Athelas Institute, Inc. provides residential, employment, and educational services to adults with cognitive disabilities. They serve Howard and Baltimore Counties, and parts of Anne Arundel and Carroll Counties. They provide door-to-door transportation for clients to grocery stores, doctor appointments, and errands with attendants. They have wheelchair accessible vehicles and require advanced reservations.

Bello Machre

Bello Machre is a non-profit, residential, and support service agency serving people with cognitive and developmental disabilities. They operate and run their own vehicles in Anne Arundel County and parts of Carroll County.

Columbia Association

One of the community services provided by the Columbia Association is a free Seniors Events Shuttle. This service provides curb-to-curb evening (after 4:30 pm) and weekend transportation shuttle to cultural events throughout Howard County for groups of four or more older adults (aged 60 and over). These events include theaters, art exhibits, and concerts. Service is provided for groups of four or more. Smaller groups are referred to as Neighbor Ride. The Special Events Shuttle is open to all Howard County residents. Columbia Association does not use their own vehicles for this service, but contracts with senior living communities who provide their vehicles for this service. In FY 2017 this service provided 1,374 passenger trips. (https://www.columbiaassociation.org/).

Disabled American Veterans Transportation Program (DAV)

DAV is a non-profit agency that supports veterans across the United States. Their Maryland office is located in Baltimore. They help veterans with non-emergency medical transportation, benefit claims, and employment. DAV provides transportation to Veterans Administration medical centers for injured veterans.
(https://www.dav.org/)

Neighbor Ride

Neighbor Ride provides affordable, volunteer-based supplemental transportation to older adults in Howard County. Passengers are transported door-to-door by volunteer drivers in personal vehicles. Passengers may utilize Neighbor Ride for religious services, classes, volunteer activities, social outings, medical appointments, and shopping. They do not provide rides to the airport, cruise terminals, Amtrak stations, or gaming venues. They will drive passengers to the Baltimore and Washington, D.C. areas. The maximum one-way distance is 35 miles from pick up. Rides can be scheduled by phone or website at least three days in advance. Fees are based on mileage: if less than one mile one-way the fare is $10 round trip. Mileage and fees increase incrementally with a 20 to 35 mile one way trip costing $36 round trip.
(http://neighborride.org)

Partners in Care

Partners in Care is a community non-profit organization dedicated to helping seniors and adults with disabilities to live independently in their own homes. Established in 1993, Partners in Care uses a time-banking system to tap into its network of 2,400 members to support seniors and adults with disabilities in their daily tasks. They serve Anne Arundel County, Calvert County, Fredrick County, and the Upper Shore. Transportation is one of their most requested services and is available seven days per week including evenings and weekends. Ride requests for appointments have to be made at least one week in advance. Once a request is made, volunteer matchmakers match passengers with an available driver in the area. Members may request up to one ride per week. Partners in Care offers an on-demand Mobility Bus service for wheelchair users and individuals who require the use of a lift to board the bus.
(https://partnersincare.org/about-us/faq/)

Winter Growth

Winter Growth provides medical day, respite care, assisted living, and assisted transportation for older adults and adults with disabilities in Howard County. Winter Growth's Assisted Transportation drivers provide rides for local medical appointments with modest fees and subsidies available for income-eligible passengers.
(https://www.wintergrowthinc.org/transportation/)

Woods Adult Day Services

Woods Adult Day Services is a non-profit organization providing adult medical day care in Anne Arundel County. They operate their own handicapped accessible vehicles, providing rides for clients to adult day care, medical, recreation, and shopping.
(https://www.woodsadultdayservices.com/essential-services)

Private Transportation Providers

BWI Marshall Airport

Baltimore Washington International Marshall Airport in Linthicum, Maryland, offers both domestic and international flights. Ground transportation options for BWI Marshall Airport include taxi, bus, van/shuttle, rail service, and car rental. Taxi service from the airport is provided by BWI Airport Taxi and is available 24 hours a day. Taxis going to the airport are open to all local cab companies. Hotel courtesy shuttles, Supreme Airport Shuttle, and Bay Runner Shuttle provide shuttle service to and from the airport. Amtrak, MARC, and MTA Light Rail are the available rail services at or near the airport. Bus services include MTA Commuter Bus Route 201 (connects Gaithersburg with Shady Grove, Arundel Mills, and BWI) and MTA LocalLink 75 (connects to Baltimore). The County Connector Shuttle operated by the BWI Business Partnership, in conjunction with the Anne Arundel County Office of Transportation, provides a free 15 min. shuttle ride (365 days a year) from the BWI Marc/Amtrak station to key locations in the area, including Arundel Mills Mall. RTA no longer runs direct service to the airport. In FY22, the County Connector served 71,025 riders.

Figure 2-25: County Connector Service Map
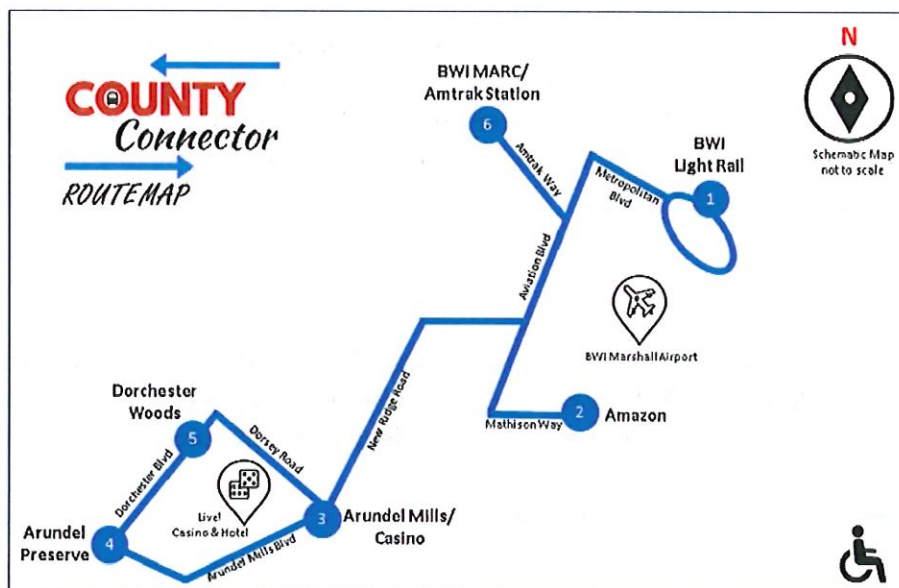
Taxi and Private Car Service

Central Maryland is served by several taxi and private transportation services:

- AA County Cab (Rides originating in Anne Arundel County)
- AAA Transport (Anne Arundel, Prince George's)
- American Limousines (Howard County)
- Anne Arundel Taxi Inc. (Anne Arundel County)
- Associated Cab of A.A. County / SunCab (Brooklyn, Glen Burnie, Pasadena, Severna Park, Linthicum, Hanover, Annapolis)
- Beltway Transportation Service (Howard, Anne Arundel, Prince George's)
- BWI Airport Taxi (Howard, Anne Arundel, Prince George's)
- Columbia Taxi Service (Serves regional airports from Howard County and surrounding areas)
- Diamond Cab of AA County (Hanover, Glen Burnie, Brooklyn, Severna Park)
- Independent Taxi Association Inc. (Baltimore City, Baltimore County, and Anne Arundel County)
- Laurel Taxi (Laurel, Fulton, Beltsville, Burtonsville, Annapolis Junction)
- Prince George's County Call-A-Cab provides taxi vouchers at a 50 percent reduced rate for senior and people with disabilities through a network of taxicabs that accept the discount vouchers.
- Ride Taxi (Howard County, PG County, Montgomery County, Anne Arundel County, Baltimore and Washington metropolitan regions).
- Uzurv (Baltimore City, Baltimore County, Anne Arundel County)

Private Non-Emergency Transportation Service Organizations

National Security Agency (NSA) Transportation Services

NSA Transportation Services runs two in-house shuttles Monday – Friday for employees between the Odenton MARC station and Fort Meade.
(https://home.army.mil/meade/index.php/about/Garrison/transportation)

Home Life Help Services

Home Life Help Services specialize in wheelchair transport. They provide transportation, for a fee to the general public, for non-emergency medical appointments and airport transport. Their service area covers Maryland suburban counties.

Med-Care Transportation

Med-Care Transportation provides 24-hour accessible van transportation services to the general public for a fee. Transportation must be arranged in advance. They serve Annapolis and Baltimore City, as well as Anne Arundel, Baltimore, Carroll, Harford, Howard, Montgomery, and Prince George's Counties.

Saferide

Saferide provides accessible non-emergency medical transportation to the general public for a fee. They have wheelchair accessible vehicles and offer personal care attendant service. Reservations must be made in advance. They serve Anne Arundel and Baltimore, and Carroll, Harford, and Howard Counties. Fees start at $19.95.

Transport-U

Transport-U provides accessible non-emergency medical transportation to the general public for a fee. They require 24-hour advance notice and have wheelchair accessible vehicles. They provide both door-to-door and door-through-door services. They serve Annapolis, Anne Arundel, Baltimore City, Baltimore County, Carroll, Harford, Howard, Montgomery, and Prince George's Counties. (http://www.mdtrip.org/transit-directory/)

Associations

BWI Business Partnership

The BWI Business Partnership is a non-profit, membership organization that includes nearly 175 local and regional businesses and government agencies. The oldest Transportation Management Association (TMA) in the country according to the Association of Commuter Transportation, the BWI Business Partnership works with major employers in Central Maryland to promote ride sharing and transit use. The organization promotes public policy that centers on good transportation resources and business infrastructure in the BWI area, which includes BWI Marshall Airport, National Security Agency, Fort Meade, and Arundel Mills Mall. The BWI Business Partnership supports improvements to transportation in the corridor, including operating employment-targeted shuttle service and promoting commuting alternatives.

The BWI Business Partnership operates the Mills Ride Shuttle that takes Arundel Mills and Maryland Live! employees to and from the Cromwell Light Rail Station when local transit is unavailable. The shuttle is free and runs 365 days a year. On weekdays and Saturdays, the shuttle runs from 9:15 p.m. to 11:30 p.m. There are special schedules for Sundays and holidays. (https://www.bwipartner.org/transportation/millsride).

Transportation Network Companies (TNCs)

Uber and Lyft provide on-demand, ride-hailing transportation services in the region. Service is available 24 hours a day, 7 days a week, though the supply of vehicles varies by time of day and geographic area. Customers are required to set up an account with Uber or Lyft and link a debit/credit card to their account. No cash is exchanged between drivers and passengers, and two or more passengers can split payments. Both Uber and Lyft offer several classes of service at different costs, which vary by the vehicle used and whether the ride is shared with other passengers. To reserve a trip, customers are required to use a smartphone to request a vehicle, indicating their pickup location and destination. Passengers are sent the type, color, and license plate number of the vehicle coming to pick them up. Upon arrival at the requested origin, drivers wait two minutes for passengers. After two minutes, the driver cancels the trip and charges the passenger a cancellation fee.

Chapter 3
Review of Needs

Introduction

This chapter analyzes demographic and land use data to assess the need for transit in and around the RTA's service area including Howard County and portions of Anne Arundel and Prince George's counties. Data ranging from major trip generators to population subgroups are documented and analyzed. Data sources include the 2020 Census and the American Community Survey (ACS) 2017-2021 five-year estimates.

The study area for this TDP was defined using three basic areas:

- Areas currently served by RTA's fixed route and Mobility/ADA service.
- RTA's General Paratransit (GPT) service area including all of Howard County.
- Areas within Anne Arundel and Prince George's counties that are within close proximity to RTA services.

This review will assist in the identification of underserved and unserved population areas that should be considered for future public transit service enhancements. Combined with the results of the review of existing services and community outreach, this information will provide the basis for developing service recommendations.

This chapter is divided into the following sections:

- **Population and Employment** – Overview of the study area's population growth, population projections, and employment density.

- **Transit Dependent Populations** – Description of socio-economic demographic groups that typically show a propensity to use transit services.

- **Title VI Demographic Analysis** – Review of low-income, minority, and limited English proficiency populations.

- **Land Use Profile** – Detailed listing of major trip generators in the study area and analysis of regional employment commuting patterns.

- **Summary of Needs** – Brief synopsis of the trends, patterns, and potential needs identified throughout the memo.

Population and Employment

Historical Population

As shown in **Table 3-1**, since 2000, each of the three counties in the RTA service area has experienced moderate to high population growth. Howard County has seen the greatest percentage population increase (34.1%), Prince George's has the second-greatest increase (20.7%), and Anne Arundel showed a 20.1% increase – all above the state's overall percentage increase of 16.6%.

In the ten years from 2010 to 2020, Howard County has shown significant population growth (15.8%). Both Anne Arundel (9.8%) and Prince George's (7.7%) have also continued to grow; however, the population growth rate in Prince George's County was lower than the Maryland state average (9%) during this period.

Table 3-1: Historical Populations

County / Area	2000	2010	2020	% Change 2010 - 2020	% Change 2000 - 2020
Howard	247,842	287,085	332,317	15.8%	34.1%
NW Anne Arundel	489,656	537,656	588,261	9.8%	20.1%
N. Prince George's	801,515	863,420	967,201	7.7%	20.7%
Region Total	1,539,013	1,688,161	1,887,779	9.7%	22.7%
State of Maryland	5,296,486	5,773,552	6,177,224	9.0%	16.6%

SOURCE: U.S. CENSUS BUREAU

Future Population Projections

Population projections developed by the Maryland Department of Planning, shown in **Table 3-2,** estimate that the population for Howard, Anne Arundel, and Prince George's counties will continue to increase over the next thirty years. The projections indicate that Howard County's significant population growth rate in the 2010s (15.8% growth) will likely be more representative of regional trends in the 2020s (projected 9.5% growth rate) and in the coming decades. **Figure 3-1** provides a visualization of historical population growth and future population projections.

Table 3-2: Future Population Projections

Area	2020 Census	2030	2040	2050	% Change 2020 - 2030	% Change 2020-2040	% Change 2020-2050
Howard	332,317	363,990	393,640	414,820	9.5%	15.6%	19.9%
Anne Arundel	588,261	646,210	677,420	694,240	9.9%	13.2%	15.3%
Prince George's	967,201	1,018,940	1,056,470	1,082,480	5.3%	8.4%	10.6%
Region Total	1,887,779	2,029,140	2,127,530	2,191,540	7.5%	11.3%	13.9%
State of Maryland	6,177,224	6,576,840	6,909,050	7,183,020	6.5%	10.6%	14.0%

SOURCE: MARYLAND DEPT. OF PLANNING, PROJECTIONS AND STATE DATA CENTER, DEC. 2022

Figure 3-1: Historical Population and Future Population Projections
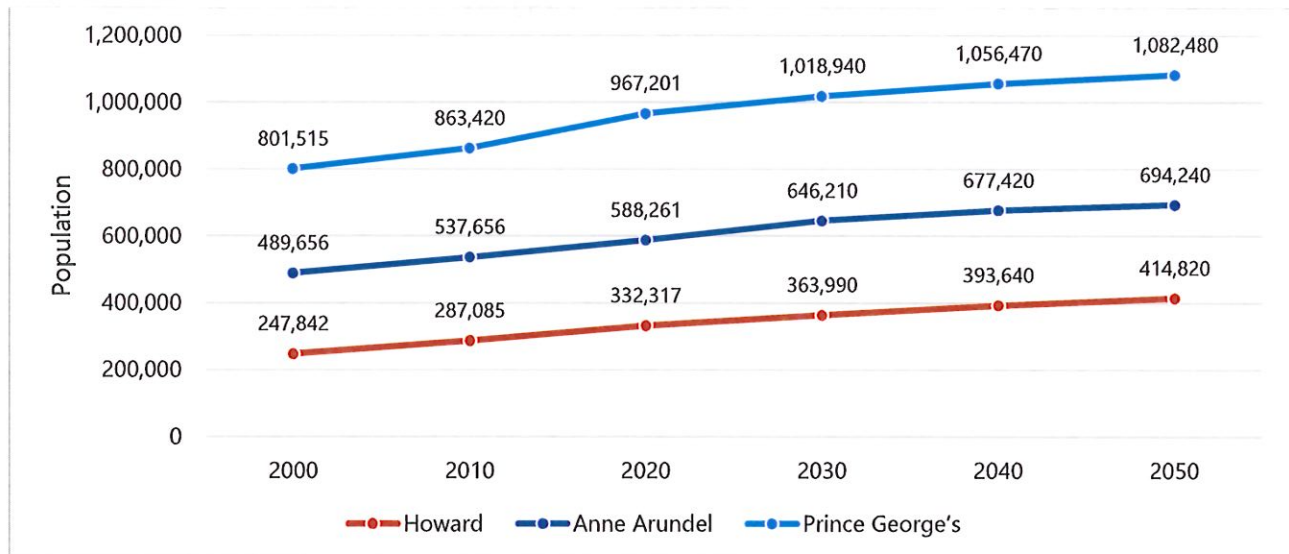
SOURCE: U.S. CENSUS BUREAU AND MARYLAND DEPT. OF PLANNING, PROJECTIONS AND STATE DATA CENTER, DEC. 2022

Demographic Change – Aging Population

In addition to overall population growth, another factor that will affect the need for public transportation is the aging of the baby boomer generation in the central Maryland region. **Table 3-3** provides projections from the Maryland Department of Planning, indicating that from 2025 to 2045 the population of those aged 60 and above will increase by 13.1 percent in Anne Arundel County, 25.8 percent in Howard County, and 27 percent in Prince George's County.

While a significant number of persons continue to drive as they age, the percentage of non-drivers increases as the cohort ages, increasing the need and demand for public transportation to maintain mobility. Howard and Anne Arundel County have programs to provide general demand-responsive transportation to seniors, aged 55 and above in Anne Arundel, and 60 and above in Howard County. In Prince George's County, demand response service is available to all residents, but priority is given to senior and disabled persons. A program dedicated to older adults is also available. The implication is that these services will face calls to expand. There will also be a need to implement and maintain quality fixed-route services and provide travel training to those who do not know how to use public transportation.

Table 3-3: Central Maryland 60+ Population Projections by Jurisdiction

Area	2025	2035	2045	% Change 2025-2035	% Change 2035-2045	% Change 2025-2045
Howard	83,260	97,204	104,768	16.7%	7.8%	25.8%
Anne Arundel	145,500	158,624	164,524	9.0%	3.7%	13.1%
Prince George's	208,440	243,699	264,645	16.9%	8.6%	27.0%
Region Total	437,200	499,527	533,937	14.3%	6.9%	22.1%
State of Maryland	1,554,717	1,747,399	1,842,011	12.4%	5.4%	18.5%

SOURCE: MARYLAND DEPT. OF PLANNING, PROJECTIONS AND STATE DATA CENTER, DEC. 2020

Population Density

The population of the region is not spread uniformly across this large area but is concentrated in several population centers that have developed around historic communities, transportation facilities, or as a result of planned development. **Figure 3-2** presents a map of the region showing the population density in terms of persons per square mile.

As illustrated in the population density map, the central Maryland region has a greater population density in eastern Howard County (near Columbia, Ellicott City, and the Route 1 corridor), in northern and northwestern Anne Arundel County (near Laurel, Maryland City, and Severn), and in northern Prince George's County (near Laurel, Greenbelt, and College Park). Much of western Howard County and large areas within Anne Arundel County are rural by policy, as the counties have adopted land-use plans that preserve low density and limit intensive development. Much of the region has developed with typical suburban land use patterns and relatively low residential density. Concentrations of multi-family and townhouse development are located in the region's town centers.

Population density is often an effective indicator of the types of public transit services that are most feasible within a given area. While exceptions exist, an area with a density of 2,000 persons per square mile will generally be able to sustain frequent, daily fixed route transit service. Conversely, an area with a population density below 2,000 persons per square mile may be better suited for deviated fixed routes, flex schedules, or on-demand services. As can be seen in **Figure 3-2**, the existing transit network generally provides service in or between the areas with supportive population density. However, there are areas with potentially supportive population density in each county that lack fixed-route service (or have limited service).

In Howard County, these populations include the Ilchester neighborhood between Elkridge and Columbia, areas in greater Ellicott City, areas around Clarksville south of River Hill village, and North Laurel.

In northwestern Anne Arundel County, these populations include Maryland City, Jessup, areas outside of Arundel Mills in Severn, Fort Meade, Odenton, Crofton, and areas just north of BWI Airport including Linthicum and Ferndale. While these areas have fixed route service from the Anne Arundel Office of Transportation, residents of these areas must connect at Arundel Mills to access RTA services.

In northern Prince George's County, most populations are covered with at least some fixed route service from one of three transit systems (RTA, TheBus, and/or WMATA), however, parts of South Laurel and Beltsville have limited RTA service.

Figure 3-2: Population Density
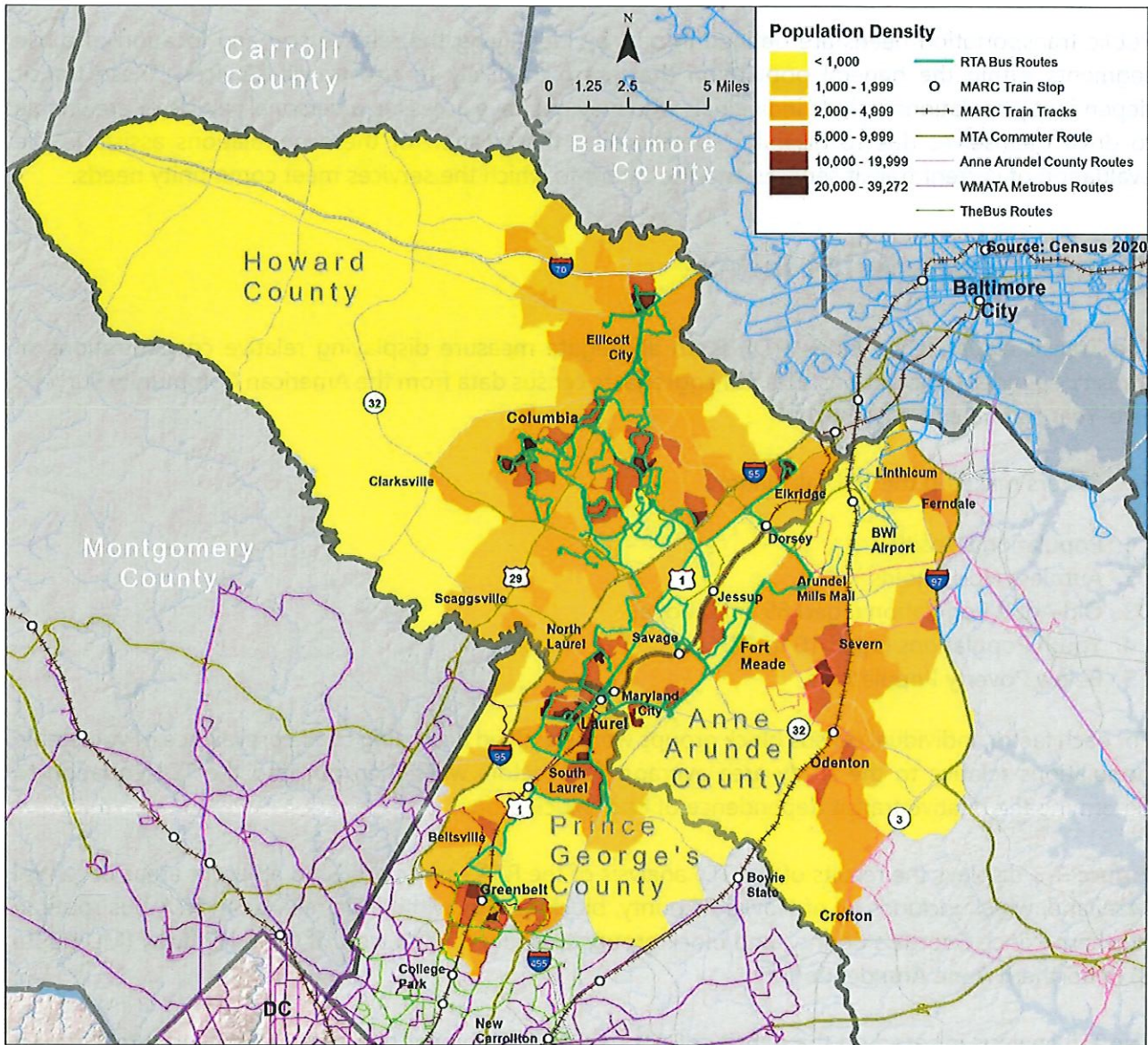
Transit Dependent Populations

Public transportation needs are defined in part by identifying the relative size and location of those segments within the general population that are most likely to use transit services. These transit dependent populations include individuals who may not have access to a personal vehicle or are unable to drive themselves due to disability. Determining the location of these populations assists in the evaluation of current transit services and the extent to which the services meet community needs.

Transit Dependence Index

The Transit Dependence Index (TDI) is an aggregate measure displaying relative concentrations of transit dependent populations. The TDI aggregates census data from the American Community Survey's Five-Year Estimates (2017-2021).

Five factors make up the TDI calculation:

1. Population Density
2. Autoless Households
3. Old Adult Population (aged 65 and above)
4. Youth Populations (aged 10 to 17)
5. Below Poverty Populations

For each factor, individual census block groups were classified according to the prevalence of vulnerable populations relative to the study area average. The factors were then put into the TDI equation to determine the relative transit dependence of each block group.

Figure 3-3 displays the results of the TDI analysis of the RTA service area and adjacent areas in central Maryland, which includes all of Howard County, block groups within one mile of an RTA bus route in northern Prince George's County, and block groups west of I-97 and west of Crain Highway (MD Route 3) in northern Anne Arundel County.

The TDI analysis is based on the density of populations with higher levels of transit need. Areas shown in darker shading are reflective of a higher density of persons with a potentially greater need for public transportation. The high-need areas are somewhat scattered, but again the existing transit network generally connects these areas, especially in Columbia. Most of Columbia's higher density areas are concentrated in ten self-contained villages; however, there is a high-need residential block group in the Hickory Ridge village area that has fewer RTA bus stops relative to other villages such as Owen Brown or Harper's Choice. **Figure 3-4** displays the RTA network along with the TDI analysis.

Figure 3-3: Transit Dependence Index
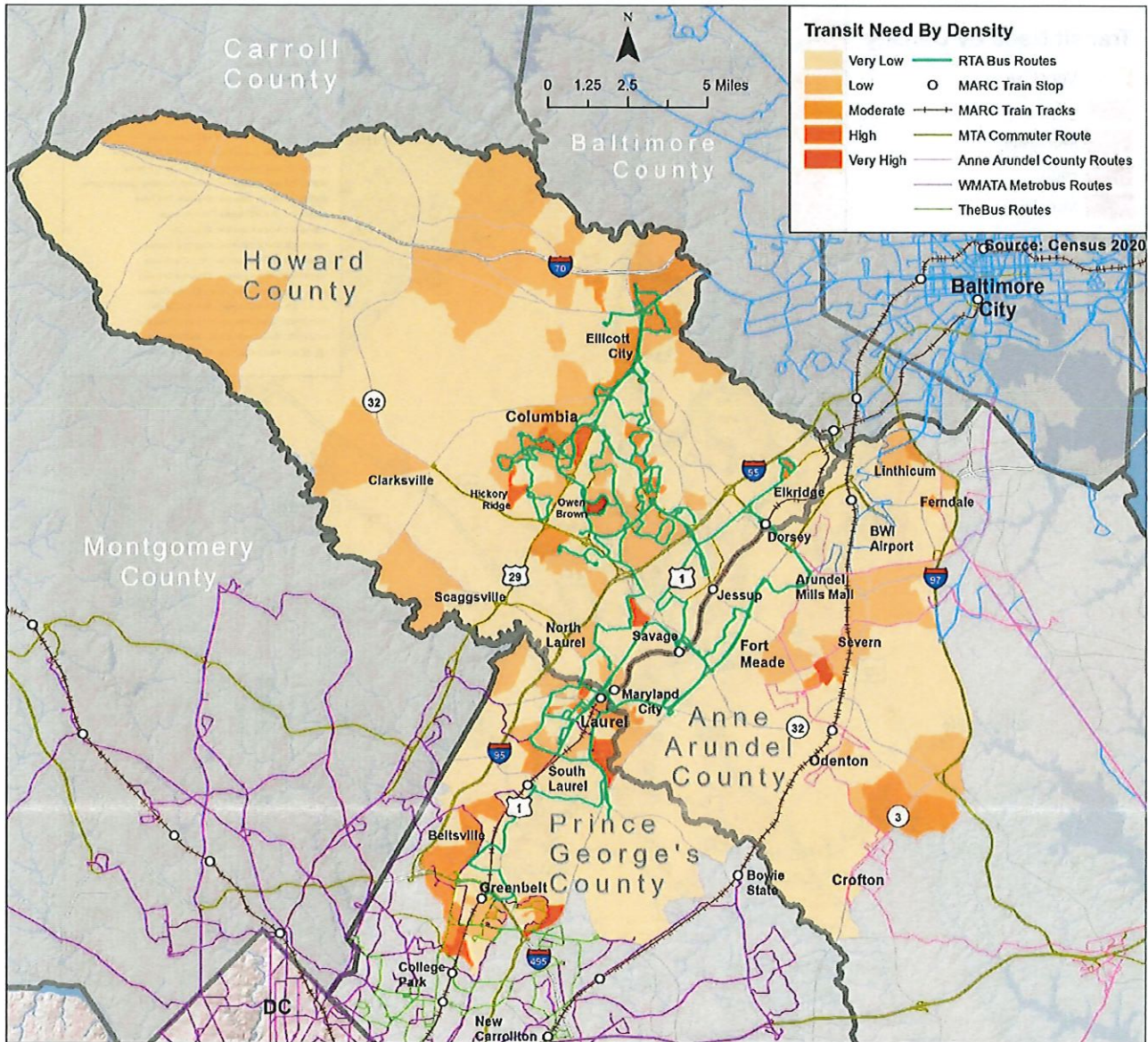
Figure 3-4: Transit Dependence Index by RTA Route

Transit Need by Density

- Very Low
- Low
- Moderate
- High
- Very High

Key Transfer Stop
MARC Train Stop
MARC Train Tracks
Park and Ride Lot
RTA Bus Stop

301: Town Centre - Laurel - South Laurel
302: Town Centre Laurel - Greenbelt Metro Station
401: Mall in Columbia - Howard County Hospital
402: Mall in Columbia - Columbia Crossing - Dobbin Center
403: Mall in Columbia - Executive Park Drive
404: Mall in Columbia - Hickory Ridge
405: Mall in Columbia - Ellicott City
406: Mall in Columbia - Columbia Gateway
407: Mall in Columbia - Kings Contrivance
408: Mall in Columbia - Sherwood Crossing
409: Town Centre Laurel - Elkridge Corners
501: Mall in Columbia - Arundel Mills Mall
502: Town Centre Laurel - Arundel Mills Mall
503: Town Centre Laurel - Mall in Columbia
505: Mall in Columbia - Catonsville (proposed)

Transit Dependence Index Percentage

The Transit Dependence Index Percent (TDIP) provides a complementary analysis to the TDI measure. It is nearly identical to the TDI measure except for the population density factor. Removing population density from the TDI highlights transit needs in areas with smaller populations by utilizing absolute population numbers from the demographic groups.

Figure 3-5 presents a map showing areas with a high relative percentage of typically transit dependent demographic groups. There are several areas with projected moderate to high transit needs that have limited service from RTA. This includes areas around Ellicott· City, Hickory Ridge, Kings Contrivance Village in Columbia, Greenbelt, Beltsville, South Laurel, and Severn.

Figure 3-5: Transit Dependence Index Percentage
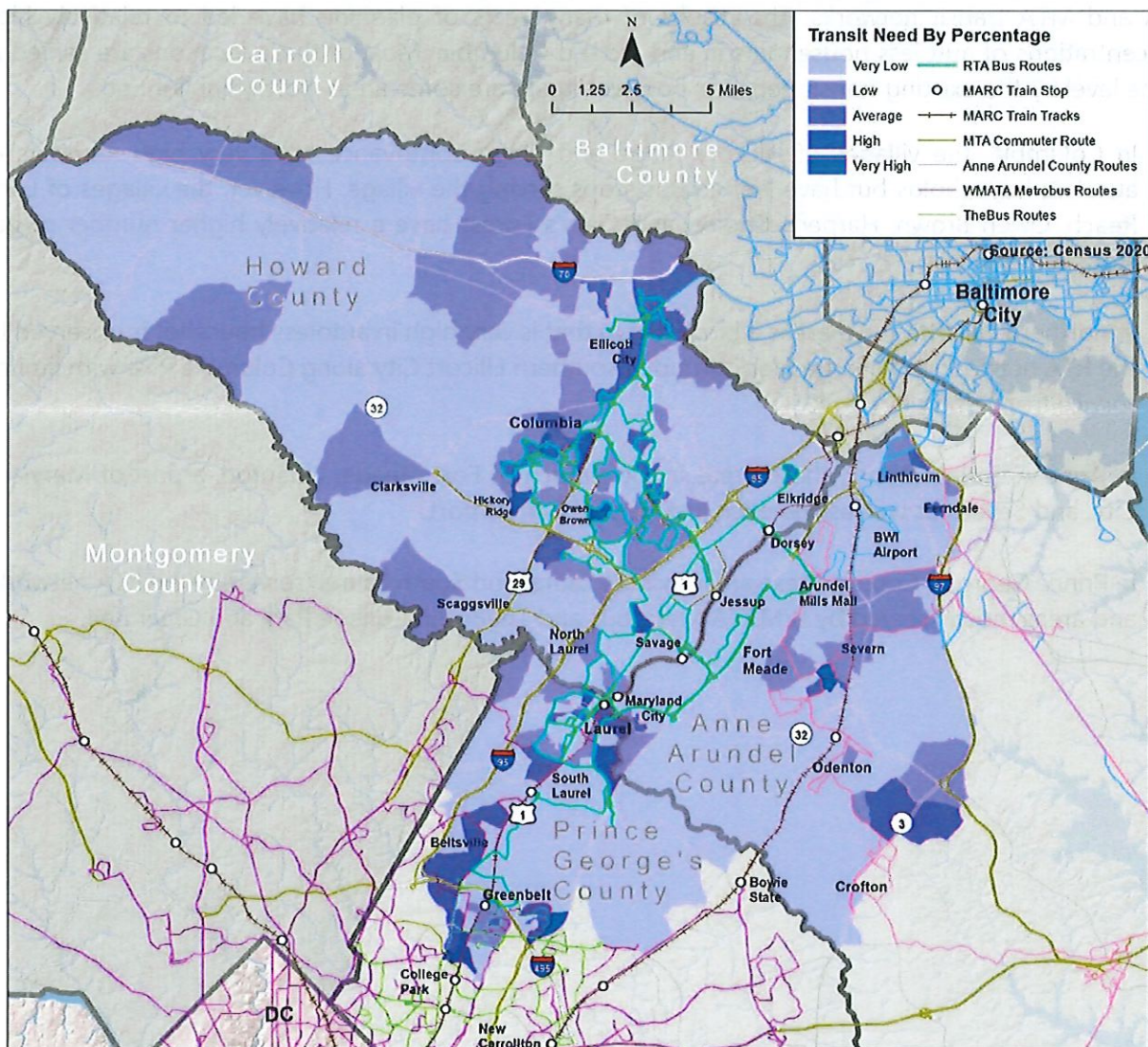
Analysis of Individual Needs Factors

As noted above, the use of a combined index of potential transit dependence can sometimes mask variations that may indicate a greater or lesser need for transit based on the impact of one or two factors. For that reason, each of the factors is presented separately.

Autoless Households

Households without at least one personal vehicle are more likely to depend upon the mobility offered by public transit than those households with access to a car. Although households with no automobiles are reflected in both the TDI and TDIP measures, displaying this segment of the population is important because many land uses in the region are at distances too far for non-motorized travel. **Figure 3-6** presents the relative density of households with no personal vehicles available along with the existing RTA and MTA transit networks. The results of many years of planning have led to relatively high concentrations of autoless households in and around Columbia. Most of these locations are served at some level by the existing transit network; however, there are some areas worth highlighting.

- In Columbia, the villages of Hickory Ridge and Kings Contrivance have very high numbers of autoless households but have limited bus stops serving the village. However, the villages of Long Reach, Owen Brown, Harper's Choice, and Clary's Forest have a relatively higher number of bus stops and services.

- In northern Ellicott City, there is a block group that is very high in autoless households unserved by the RTA network and a large block group in southern Ellicott City along Columbia Pike with limited service from along Route 405.

- In Anne Arundel County, these areas include much of Fort Meade, Odenton, a part of Maryland City, and Severn as well as Hanover, just west of BWI Airport.

- In Prince George's County, these areas include Laurel and South Laurel (served by the RTA network), and areas mostly served by WMATA Metrobus and TheBus in College Park and Greenbelt.

Figure 3-6: Autoless Households
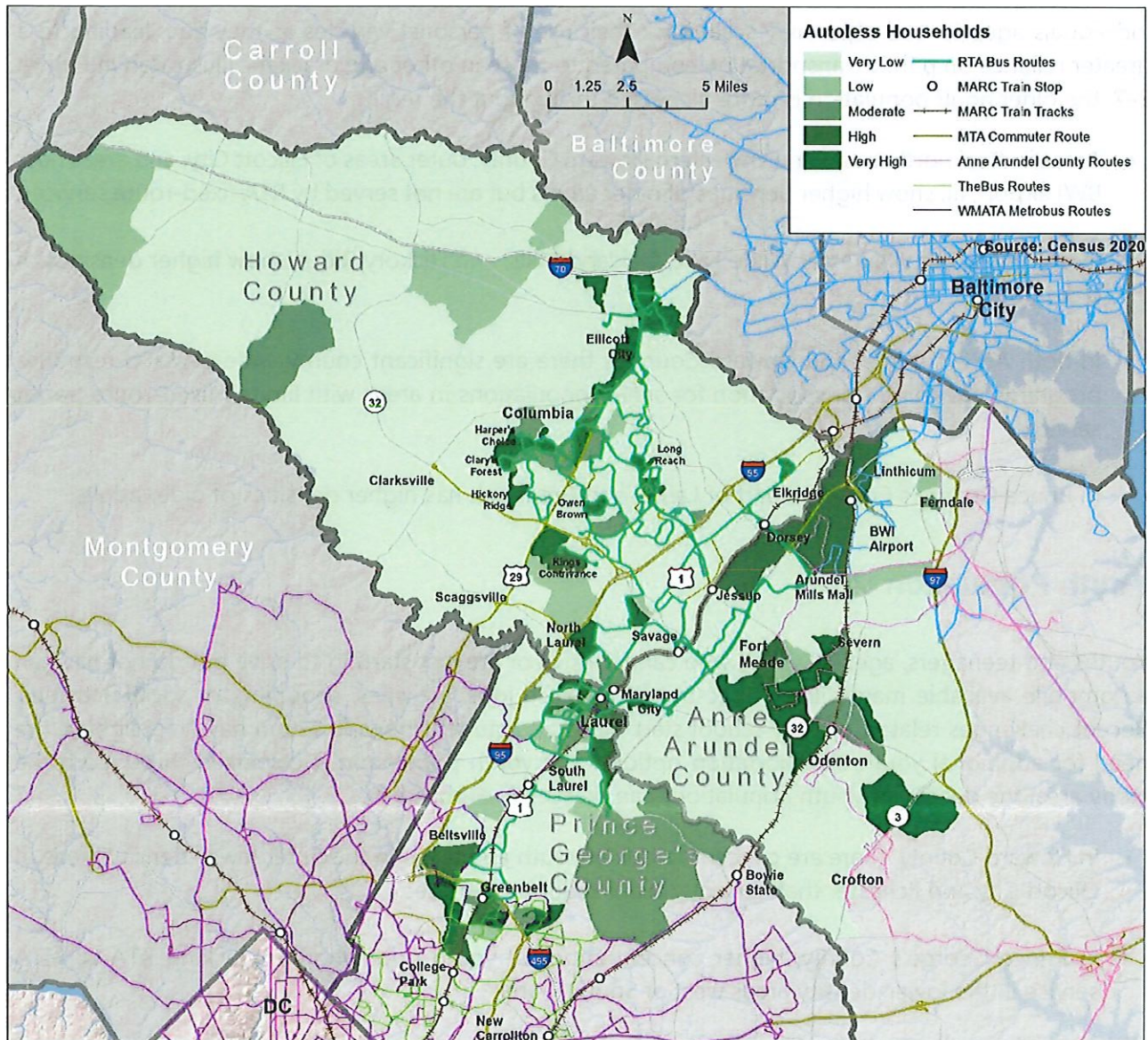
Older Adult Population

Individuals ages 65 and older may scale back their use of personal vehicles as they age, leading to a greater reliance on public transportation compared to those in other age brackets. Illustrated in **Figure 3-7**, the older adult population is more dispersed throughout the region.

- Areas in rural northern and northwestern Howard County, outer areas of Ellicott City, and areas near BWI airport, all show higher densities of older adults but are not served by RTA fixed-route services.

- In Columbia, the villages of Wilde Lake, Oakland Mills, and Hickory Ridge show higher densities of older adults.

- In both Anne Arundel and Howard Counties there are significant county-wide demand response programs providing transportation for senior populations in areas with limited fixed-route transit service.

- In Prince George's County, a part of Laurel and Greenbelt has higher densities of older adults.

Youth Population

Youths and teenagers, ages 10 to 17, who cannot drive or are just starting to drive but do not have an automobile available may utilize public transit to reach jobs, activities, shopping, or social activities. Recent challenges related to later school start times and student transportation have highlighted the need for additional youth transportation options. The youth population is dispersed throughout the study area, the density of youth populations can be seen in **Figure 3-8**.

- In Howard County, there are concentrations of youth and teens in the outer lower-density areas of Ellicott City and Ilchester that currently lack fixed route services.

- In Prince George's County, higher concentrations of youth population are lacking RTA or MTA service in the lower-density areas west of South Laurel.

- In Anne Arundel County, these areas include a block group in Fort Meade.

Figure 3-7: Older Adult Population
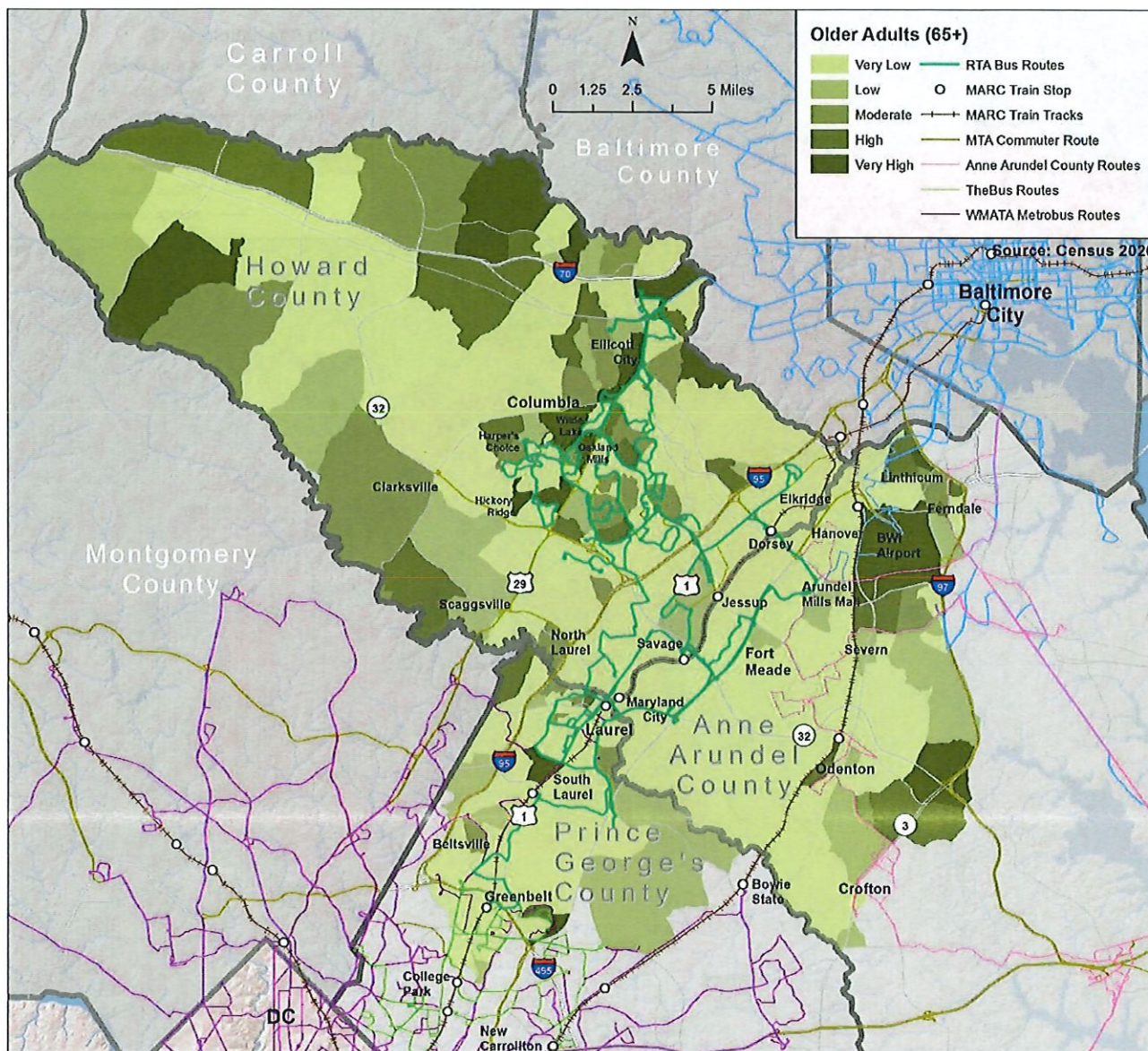
Figure 3-8: Youth Population
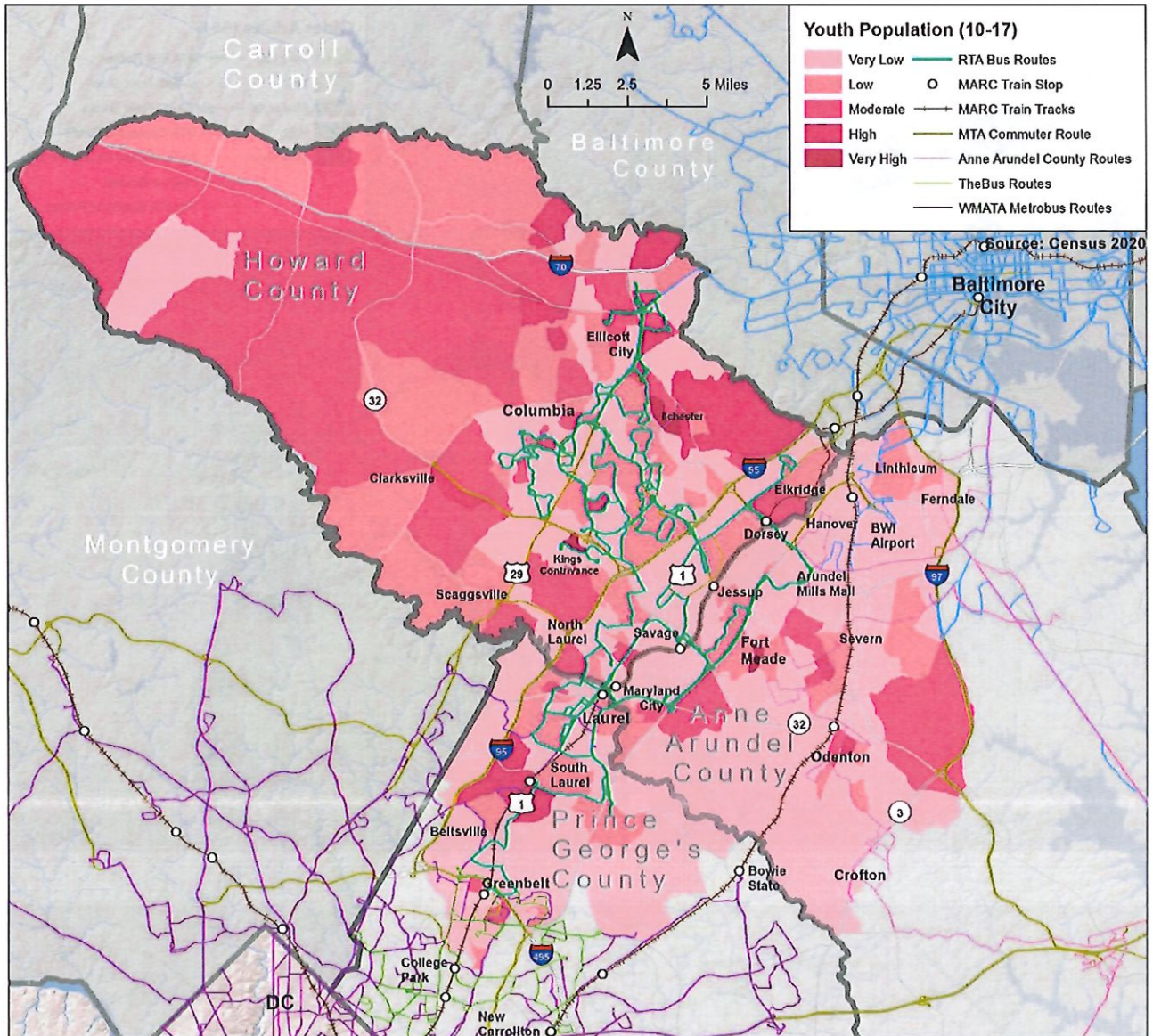
Individuals with Disabilities

Individuals with disabilities may be unable to operate a personal vehicle and consequently be more likely to rely on public transportation. Enhancing access to bus stops and maintaining the availability of demand-response transportation are good strategies to best meet the need. **Figure 3-9** displays that disabled populations are dispersed throughout the region, generally in proportion to the overall population density.

- In Columbia, several block groups stand out as having relatively higher numbers of individuals with disabilities, including the villages of Hickory Ridge, Owen Brown, and Harper's Choice.

- In the northeastern part of Ellicott City, there is a block group with a high number of individuals with disabilities.

- In Anne Arundel County, these areas include a block group in Severn and Odenton, and several between I-97 and the MARC Penn line including in Linthicum Heights and Severn, which have demand response service but have limited fixed route transit service through the Anne Arundel Office of Transportation.

- Other areas with higher numbers of individuals with disabilities include parts of Laurel, South Laurel, Beltsville, Greenbelt, and College Park.

- Maintaining the availability of demand-response transportation for persons with disabilities is likely to be the best way to meet the needs in these areas.

Title VI Demographic Analysis

Minority populations, low-income populations, and populations with limited English proficiency are federally protected. Federally funded public transportation providers are mandated to consider these three population groups when considering transit improvement projects. As part of the Civil Rights Act of 1964, Title VI prohibits discrimination on the basis of race, color, or national origin in programs and activities receiving federal subsidies.

Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations augments Title VI to include federal protection for low-income populations. This section examines the minority and populations living below the poverty level in central Maryland and summarizes the prevalence of residents with Limited-English Proficiency (LEP).

Figure 3-9: Individuals with Disabilities
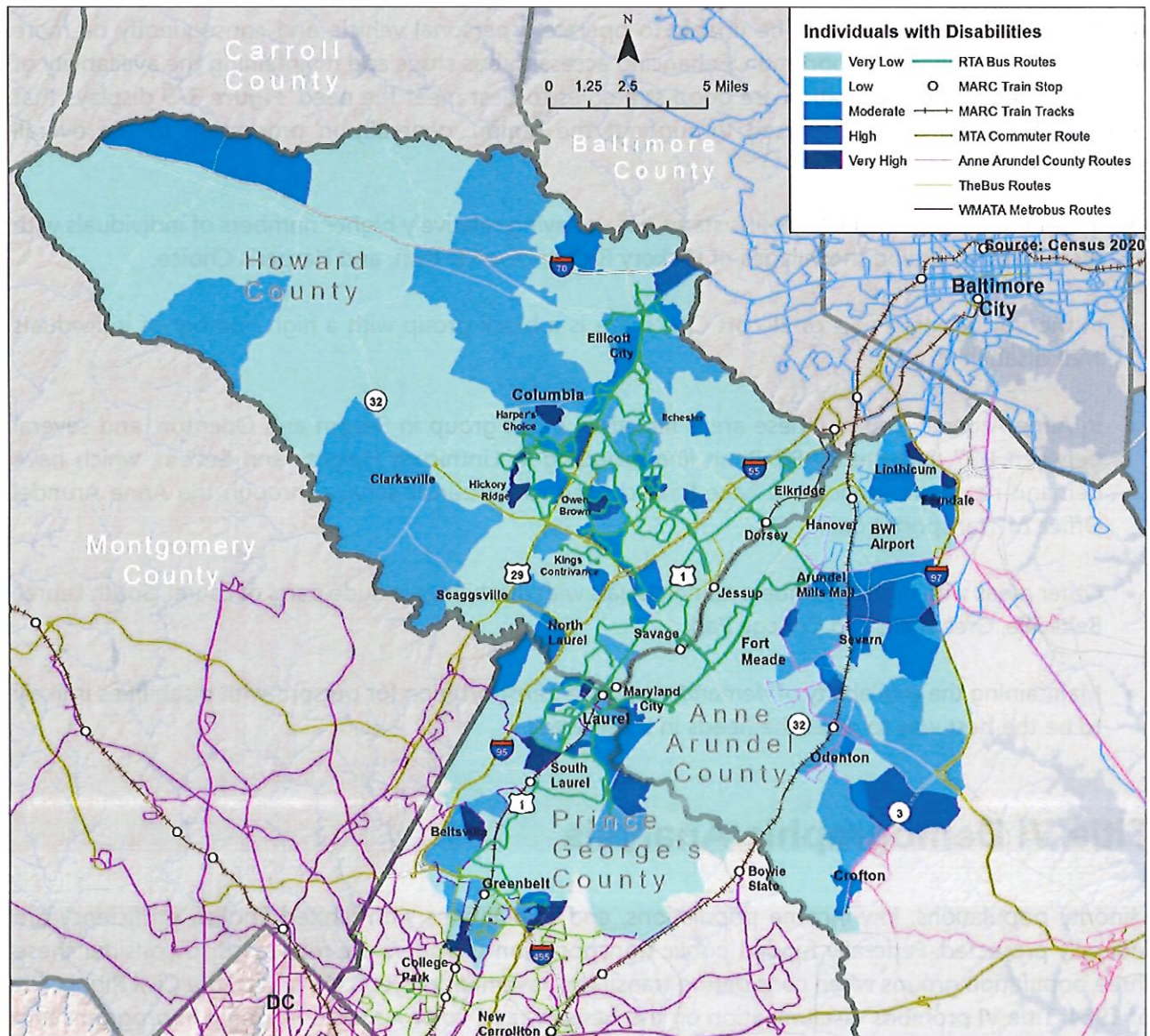
Minority Populations

Per FTA Circular 4702.1B: Title VI Requirements and Guidelines for Federal Transit Administration Recipients, transit grant recipients are mandated to ensure there are no disparate impacts towards minority persons for transit improvement projects. To determine whether a transit investment would have a disparate impact it is necessary to first understand where concentrations of minority individuals reside. **Figure 3-10** provides a map of the service area showing the Census block groups shaded according to whether they have minority populations above or below the service area average (53%). In **Figure 3-10**, the first two levels of shading are below the average percentage of minorities —e.g. "Above Average" to "High" are all above 53% percent minority population.

- Generally, RTA routes cover areas with above average levels of minority populations, but some areas on both ends of the RTA network such as parts of Ellicott City, North/West and South Laurel, Greenbelt, and rural areas between South Laurel and Bowie, have limited RTA fixed-route service.

- Residents of north Prince George's County, which generally has a much higher percentage of minority populations, also have access to WMATA and TheBus fixed route services, which connect residents mostly to the south in Washington, D.C. as well as adjacent counties.

- In Anne Arundel County, these areas include Severn and areas south of Savage.

Low-Income Populations

FTA Circular 4703.1: Environmental Justice Policy Guidance for Federal Transit Administration Recipients provides guidance for identifying and analyzing low-income populations. The Circular identifies low-income populations as "persons whose median household income is at or below the U.S. Department of Health and Human Services (HHS) poverty guidelines". A low-income population means any readily identifiable group of low-income persons who live in geographic proximity. These individuals face financial hardships that may make ownership and maintenance of a personal vehicle difficult and may be more likely to depend on public transportation. **Figure 3-11** presents a map showing the percentage of the population living below the poverty level by the Census block group. The areas that are below the average for the region (6.4%), are indicated by the first two levels of shading.

- RTA routes generally cover places with above-average levels of populations below the poverty level.

- Some unserved areas include block groups in rural Howard County, a low density and largely industrial/commercial-zoned block group in Columbia, and areas on the ends of the RTA fixed-route network such as Elkridge, Ellicott City, western Laurel, and College Park.

- In Anne Arundel County, these areas include Maryland City, Laurel, Severn, Fort Meade, and Arundel Mills Mall.

Figure 3-9: Minority Populations
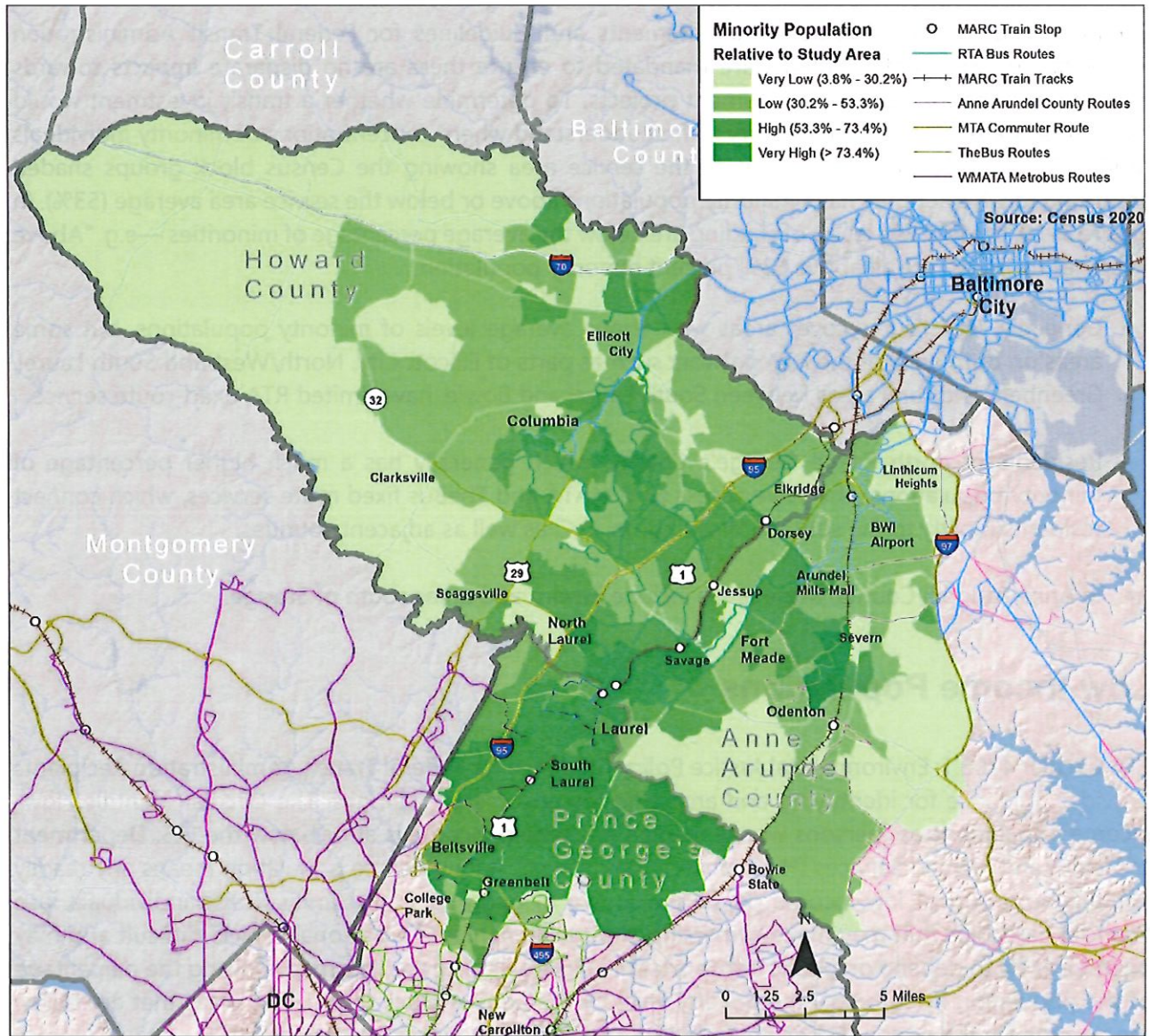
Figure 3-11: Below-Poverty Level Populations
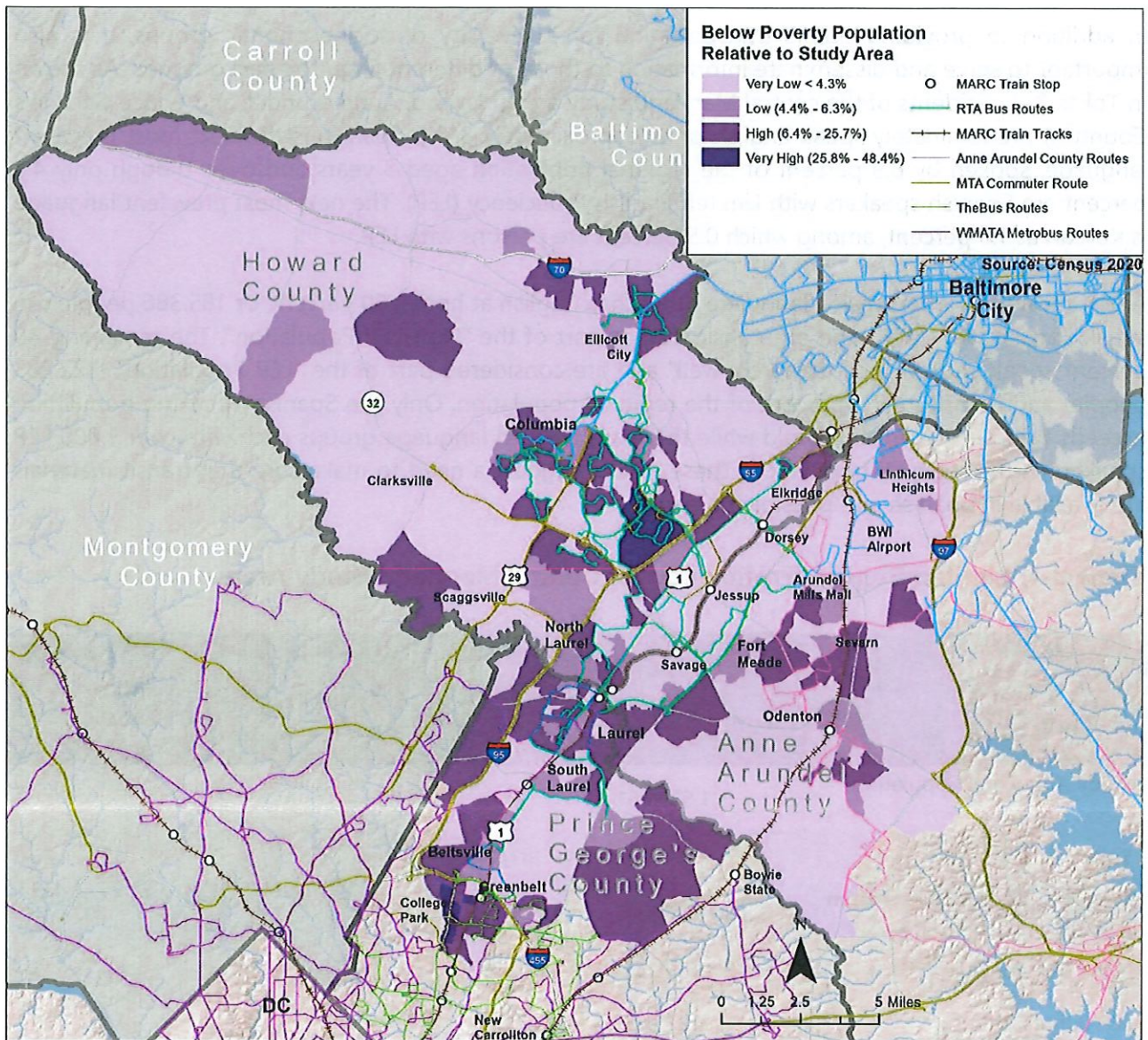
Limited-English Proficiency

In addition to providing public transportation for a diversity of socioeconomic groups, it is also important to serve and disseminate information to those of different linguistic backgrounds. As shown in **Table 3-4**, residents of the central Maryland study area (Howard, Anne Arundel, and Prince George's Counties) predominately speak English only (approximately 81%). Spanish is the next most prevalent language, spoken by 8.9 percent of the regional population aged 5 years and over, though only 4.4 percent are Spanish speakers with Limited English Proficiency (LEP). The next most prevalent language is Korean at 1.8 percent, among which 0.5 percent are persons with LEP.

Among residents who speak a language other than English at home, 60 percent, or 185,386 people can speak English "very well" and are considered as part of the "Non-LEP Population". The remaining 40 percent speak English "less than very well" and are considered part of the "LEP Population" (122,283 people) and constitute 7.5 percent of the regional population. Only the Spanish-speaking population exceeds the five percent threshold while there are thirteen language groups each with over 1,000 LEP speakers in the regional population. These results suggest a need to make sure that transit materials are available in Spanish and possibly Korean.

Table 3-4: Limited English Proficiency for Central Maryland Study Area

Central MD Study Area	Total Population	Percent of Total Population	LEP Population	LEP Population as Percent of Total Population
Study Area Total Population (Ages 5+)	1,638,861	100%	-	-
Speaks English Only	1,331,192	81.2%	-	-
Speaks Language Other than English	**307,669**	**18.8%**	-	-
Non LEP Population	185,386	11.3%	-	-
LEP Population	122,283	7.5%	-	-
Language Spoken - Total Population 5 years and older				
Spanish or Spanish Creole	145,774	8.89%	72,151	4.40%
Korean	29,810	1.82%	8,903	0.54%
Chinese	16,046	0.98%	7,222	0.44%
African Languages	15,367	0.94%	6,524	0.40%
Tagalog	15,106	0.92%	3,582	0.22%
French (incl. Patois, Cajun)	12,038	0.73%	3,374	0.21%
Vietnamese	9,410	0.57%	3,120	0.19%

Central MD Study Area	Total Population	Percent of Total Population	LEP Population	LEP Population as Percent of Total Population
Other Indic Languages	6,655	0.41%	2,359	0.14%
Other Asian Languages	5,952	0.36%	2,012	0.12%
French Creole	5,717	0.35%	1,716	0.10%
Urdu	5,390	0.33%	1,562	0.10%
Hindi	5,378	0.33%	1,354	0.08%
Gujarati	4,125	0.25%	1,006	0.06%
Arabic	3,720	0.23%	917	0.06%
Other Indo-European Languages	3,571	0.22%	825	0.05%
German	3,108	0.19%	685	0.04%
Portuguese or Portuguese Creole	2,748	0.17%	637	0.04%
Russian	2,685	0.16%	603	0.04%
Persian	2,196	0.13%	578	0.04%
Italian	1,952	0.12%	443	0.03%
Japanese	1,519	0.09%	416	0.03%
Other Pacific Island Languages	1,417	0.09%	412	0.03%
Mon-Khmer, Cambodian	1,124	0.07%	311	0.02%
Other and Unspecified Languages	920	0.06%	264	0.02%
Polish	854	0.05%	230	0.01%
Greek	726	0.04%	227	0.01%
Other Slavic Languages	646	0.04%	181	0.01%
Armenian	579	0.04%	160	0.01%
Serbo-Croatian	543	0.03%	126	0.01%
Other West Germanic Languages	530	0.03%	95	0.01%
Thai	497	0.03%	72	0.00%
Laotian	455	0.03%	72	0.00%
Hungarian	333	0.02%	64	0.00%
Hebrew	320	0.02%	45	0.00%
Other Native North American Languages	227	0.01%	24	0.00%
Scandinavian Languages	134	0.01%	11	0.00%
Navajo	97	0.01%	0	0.00%

SOURCE: AMERICAN COMMUNITY SURVEY, FIVE-YEAR ESTIMATES (2017- 2021), TABLE S1601

Land Use Profile

Regional Employment Travel Patterns

It is important to account for the commuting patterns of residents working inside and outside of the current RTA service area. The region is unique in having significant employment within each county, commuting between counties, and significant commuting to both Baltimore and Washington, D.C. The RTA service area is defined as northwest Anne Arundel County (west of I-97 and MD-3), north Prince George's County (between Laurel and Greenbelt and block groups 1 mile within the current RTA fixed route system), and all of Howard County.

According to 2019 inflow/outflow job count data for the RTA service area (displayed in **Table 3-5**), a very high proportion of residents work outside of their respective county, with northern Prince George's County having the largest percentage (89.6%) and northwest Anne Arundel County closely behind with the second-highest percentage (84.6%). Fewer Howard County residents work outside of the county (about 70%), and twice as many residents work within the county compared to northwest Anne Arundel County residents.

Table 3-5: Inflow/Outflow Job Counts for RTA Service Area Residents

County of Residence	Employment Location			
	In-County		Outside County	
	Count	Percentage	Count	Percentage
Howard	46,910	29.5%	111,959	70.5%
(Northwest) Anne Arundel	10,477	15.4%	57,461	84.6%
(North) Prince George's	6,710	9.1%	57,789	89.6%

SOURCE: US CENSUS, ONTHEMAP APPLICATION AND LEHD ORIGIN-DESTINATION EMPLOYMENT STATISTICS (2019)

Job Destinations by Place

Table 3-6 and **Figure 3-12** present the location of the top fifteen job destinations for Howard, northern Prince George's, and northwestern Anne Arundel County residents. Altogether these jobs make up about 60% of the job destinations for RTA service area residents. Most of these jobs are concentrated in Baltimore (10% or 34,000 workers), followed by Columbia (28,000 workers) and Washington, D.C. (12,000 workers). When D.C. and Baltimore are combined, they represent about 14% of all destinations – transit connections are provided through MTA commuter bus service, but are not connected by RTA.

In Howard County – Columbia, Ellicott City, and Elkridge – are among the top fifteen job destinations representing about 47,000 jobs. In Anne Arundel County, top job locations including Arundel Mills Mall in Severn, Glen Burnie, Odenton, and Linthicum represent about 23,000 jobs. In Prince George's County, top job locations include Laurel and Bowie, which represent about 7,800 jobs. Top job locations are also found in Montgomery County in Rockville and Bethesda. Several top destinations are not served by the RTA including Fulton (the location for the Scaggsville Park and Ride) in Howard County. Other locations are accessible via transferring from RTA to another transit provider; these include Glen Burnie, Odenton, and Linthicum in Anne Arundel County; Rockville and Bethesda in Montgomery County; and Bowie in Prince George's County.

Table 3-6: Job Destinations for RTA Service Area Residents

Job Locations	Count	Share
All Places (Cities, CDPs, etc.)	340,094	100%
Baltimore	33,483	9.8%
Columbia (Howard)	27,617	8.1%
Washington, DC	12,182	3.6%
Ellicott City (Howard)	11,327	3.3%
Glen Burnie (Anne Arundel)	7,704	2.3%
Severn (Anne Arundel)	6,728	2.0%
Odenton (Anne Arundel)	4,535	1.3%
Fulton (Montgomery)	4,333	1.3%
Woodlawn (Baltimore)	4,282	1.3%
Laurel (Prince George's)	4,143	1.2%
Elkridge (Howard)	3,989	1.2%
Bowie (Prince George's)	3,985	1.2%
Linthicum (Anne Arundel)	3,790	1.1%
Rockville (Montgomery)	3,767	1.1%
Bethesda (Montgomery)	2,931	0.9%
All other locations	134,796	39.6%

SOURCE: US CENSUS, ONTHEMAP APPLICATION AND LEHD ORIGIN-DESTINATION EMPLOYMENT STATISTICS (2019)

Figure 3-12: Job Destinations for RTA Service Area Residents
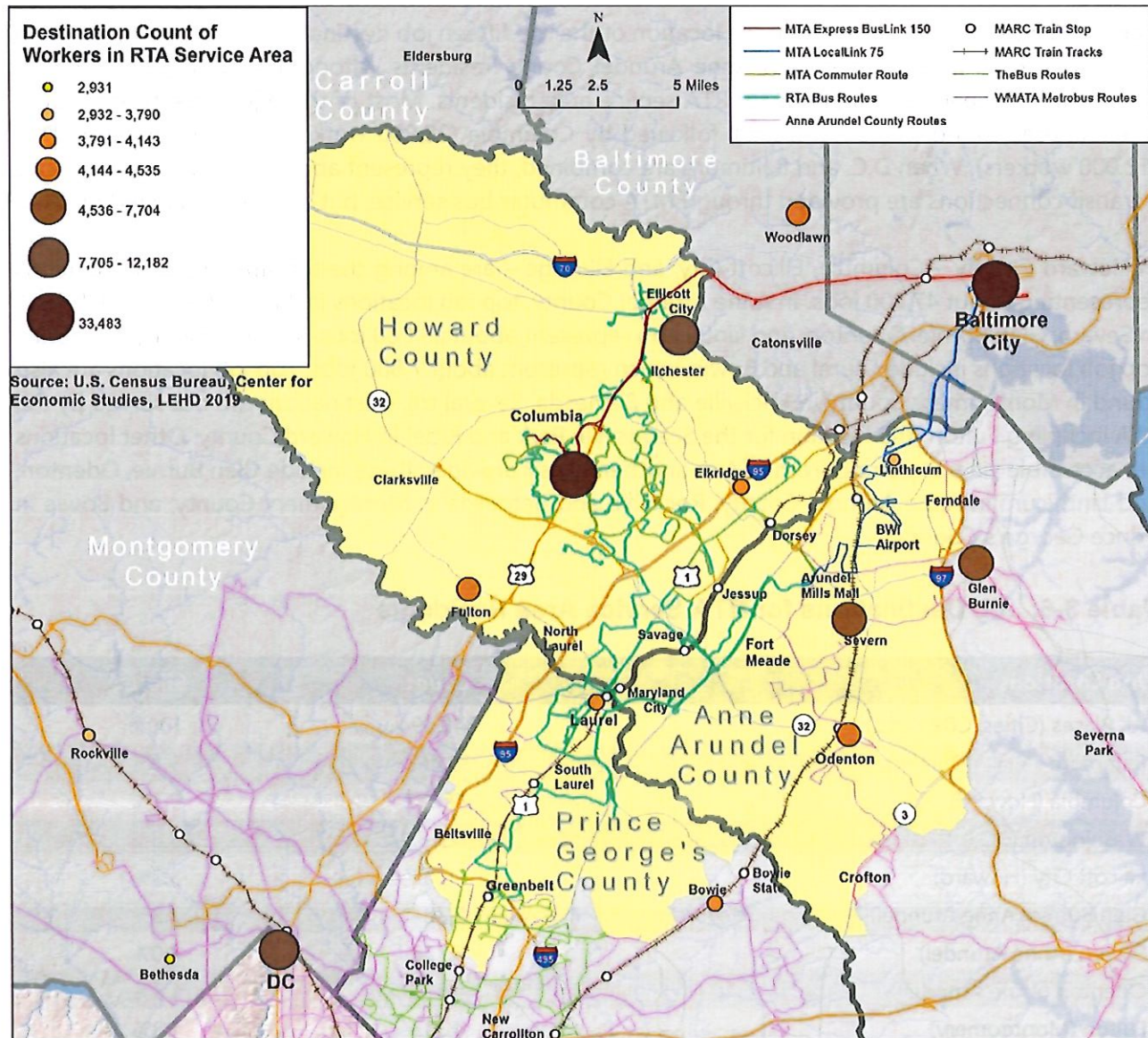
Table 3-7 displays the top ten job destinations for Howard County residents. There are about 159,000 residents who are workers, with the top employment destinations being Columbia (14.2%), Baltimore (12.3%), and Ellicott City (5.1%). Washington, D.C. is the 4th most common destination with about 7,807 workers or five percent of all workers. Fulton, MD (2.7%) in Montgomery County is the 5th most common destination, and is about 10 minutes west of Scaggsville which has a MTA commuter bus stop. Rockville, MD in Montgomery County and Woodlawn (20 minutes east of Ellicott City) in Baltimore County are the next most common destinations, with 1.8% of destinations each. For Howard County residents, there are no cities from Prince George's County in the top 10 most common job destinations. However, there are three Montgomery County cities in the top ten destinations (Fulton, Rockville and Bethesda).

Table 3-7: Top Job Destinations for Howard County Residents

Job Destination	Count	Share
All Places (Cities, CDPs, etc.)	158,868	100%
Columbia (Howard)	22,588	14.2%
Baltimore	19,555	12.3%
Ellicott City (Howard)	8,160	5.1%
Washington, DC	7,807	4.9%
Fulton (Montgomery)	4,333	2.7%
Rockville (Montgomery)	2,921	1.8%
Woodlawn (Baltimore)	2,838	1.8%
Linthicum (Anne Arundel)	2,576	1.6%
Elkridge (Howard)	2,556	1.6%
Bethesda (Montgomery)	2,382	1.5%
All Other Locations	83,152	52.3%

SOURCE: US CENSUS, ONTHEMAP APPLICATION AND LEHD ORIGIN-DESTINATION EMPLOYMENT STATISTICS (2019)

In Anne Arundel County (displayed in **Table 3-8**), there are about 67,938 residents who are workers, with the top employment destinations being Baltimore (9.8%), Washington, DC (7.7%) and Columbia (6%). The next most common destinations are outside the RTA service area (Parole, Glen Burnie, Odenton, Linthicum), all of which are about 2.5-4% of destinations. Severn has a similar percentage at 3% or about 2,000 workers. Jessup, which is on the border of Howard and Anne Arundel, is 1.8% of all destinations.

Table 3-8: Top Job Destinations for Northwestern Anne Arundel County Residents

Job Destination	Count	Share
All Places (Cities, CDPs, etc.)	67,938	100%
Baltimore, MD	6,645	9.8%
Washington, DC	5,214	7.7%
Columbia, MD (Howard)	4,053	6.0%
Parole, MD (Anne Arundel)	2,659	3.9%
Glen Burnie, MD (Anne Arundel)	2,341	3.4%
Severn, MD (Anne Arundel)	2,072	3.0%
Odenton, MD (Anne Arundel)	1,842	2.7%
Linthicum, MD (Anne Arundel)	1,709	2.5%
Annapolis, MD	1,236	1.8%
Jessup, MD (Anne Arundel)	1,209	1.8%
All other locations	38,958	57.3%

SOURCE: US CENSUS, ONTHEMAP APPLICATION AND LEHD ORIGIN-DESTINATION EMPLOYMENT STATISTICS (2019)

In northern Prince George's County (displayed in **Table 3-9**), which includes the region between Laurel and Greenbelt, there are about 36,000 workers employed (as a whole, the county has about 440,000 workers). About 1/5 of the workers in northern Prince George's County are employed in Washington, D.C. The next most common destinations are Columbia (3.4%), followed closely by Baltimore, Beltsville, and College Park with more than 3% each of all destinations. Other top destinations include Rockville, Bethesda, and Silver Spring in Montgomery County which each represent almost 3% of all destinations. Laurel is the 8th most common destination (2.4%) or 1,531 workers, while Greenbelt is the 10th most common (1.8%).

Table 3-9: Top Job Destinations for Northern Prince George's County Residents

Job Destination	Count	Share
All Places (Cities, CDPs, etc.)	64,499	100%
Washington, DC	12,819	19.9%
Columbia, MD	2,221	3.4%
Baltimore, MD	2,153	3.3%
Beltsville, MD	1,972	3.1%
College Park, MD	1,892	2.9%
Rockville, MD	1,788	2.8%
Bethesda, MD	1,715	2.7%
Laurel, MD	1,531	2.4%
Silver Spring, MD	1,213	1.9%
Greenbelt, MD	1,157	1.8%
All other locations	36,038	55.9%

SOURCE: US CENSUS, ONTHEMAP APPLICATION AND LEHD ORIGIN-DESTINATION EMPLOYMENT STATISTICS (2019)

Home Origins by Place

The top seventeen home origins for Howard, north Prince George's, and northwestern Anne Arundel County employees make up about 38% of all origins. All other origins make up less than 1% of the total. Baltimore and Columbia combined make up almost 14% of all origins. The next most common origins are Ellicott City (3.7%), Glen Burnie (2.7%), Severn (2.3%), and Washington, D.C. (1.7%). Several of these top origins are outside of the RTA service area including Glen Burnie, Odenton, Ilchester, Bowie, Woodlawn, and Eldersburg. Of these places, five are in Howard County, four are in Anne Arundel, and three are in Prince George's.

A closer look at the home origins for people employed in the current RTA service area region (Howard, northwest Anne Arundel, and north Prince George's Counties) is displayed in **Table 3-10** and **Figure 3-13**.

Table 3-10: Origins for Howard, North Prince George's, and Northwest Anne Arundel Employees

Home Origins	Count	Share
All Places (Cities, CDPs, etc.)	364,499	100%
Baltimore, MD	28,118	7.7%
Columbia, MD (Howard)	21,251	5.8%
Ellicott City, MD (Howard)	13,451	3.7%
Glen Burnie, MD (Anne Arundel)	9,743	2.7%
Severn, MD (Anne Arundel)	8,565	2.3%
Washington, DC	6,211	1.7%
Odenton, MD	5,908	1.6%
Ilchester, MD (Howard)	5,426	1.5%
Catonsville, MD (Baltimore)	4,773	1.3%
Bowie	4606	1.3%
Laurel, MD	4,579	1.3%
Elkridge, MD (Howard)	4,544	1.2%
North Laurel (Howard)	4,289	1.2%
Woodlawn, MD	3,936	1.1%
Severna Park, MD	3,848	1.1%
South Laurel, MD	3,790	1.0%
Eldersburg, MD (Carroll)	3,558	1.0%
All Other Locations	227,903	62.5%

SOURCE: US CENSUS, ONTHEMAP APPLICATION AND LEHD ORIGIN-DESTINATION EMPLOYMENT STATISTICS (2019)

Figure 3-13: Origins of Howard, Anne Arundel, and Prince George's County Employees
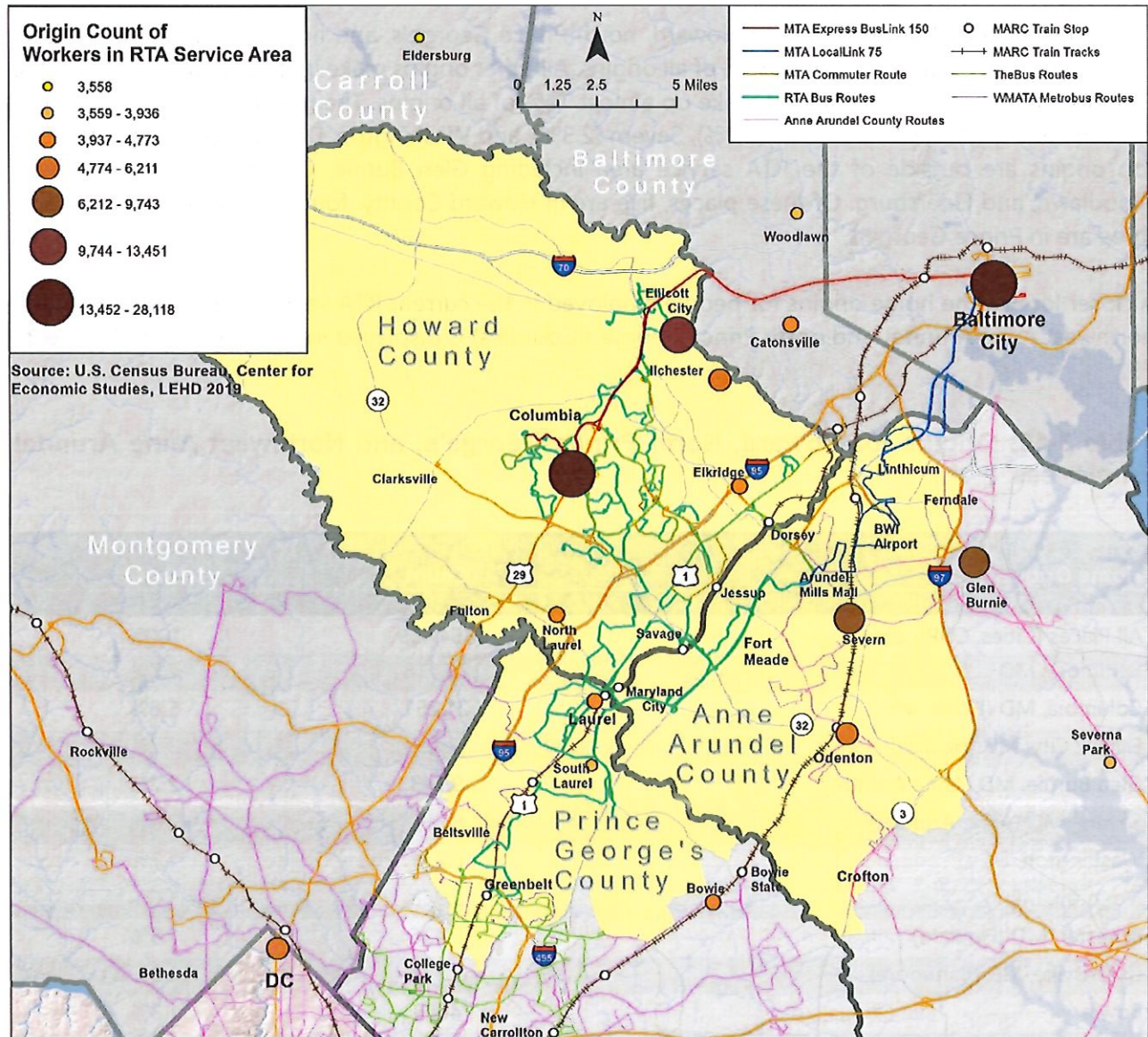
In 2019, there were about 183,000 people employed in Howard County. Their top home origin is Columbia (8.9%) with 16,222 workers, followed by Baltimore (7.7%), and Ellicott City (5.6%). Ilchester (2.1%) is the 4th most common origin with 3,900 workers living there. While there is no RTA fixed route service in Ilchester, there are some riders who use RTA Mobility demand-response services. Glen Burnie, (2.0%) and Severn in Anne Arundel County are the fifth and sixth most common origins respectively. While Severn is served by RTA at Arundel Mills, Glen Burnie is served by Anne Arundel County Transit and MTA. The next most common origins are Eldersburg (1.8%) in Carroll County and Catonsville (1.7%) in Baltimore County. RTA's recently established Route 505 would connect Columbia to the Catonsville Walmart. Overall, about 5% of Howard County workers reside in northwest Anne Arundel County while less than 3% reside in north Prince George's County (mostly from Laurel, South Laurel, and Bowie). **Table 3-11** displays the top home origins of people employed in Howard County.

Table 3-11: Origins of People Employed in Howard County

Home Origin	Count	Share
All Places (Cities, CDPs, etc.)	183,273	100%
Columbia, MD (Howard)	16,222	8.9%
Baltimore, MD	14,190	7.7%
Ellicott City, MD (Howard)	10,284	5.6%
Ilchester, MD (Howard)	3,900	2.1%
Glen Burnie, MD (Anne Arundel)	3,701	2.0%
Severn, MD (Anne Arundel)	3,440	1.9%
Eldersburg, MD (Carroll)	3,351	1.8%
Catonsville, MD (Baltimore)	3,155	1.7%
Elkridge, MD (Howard)	3,111	1.7%
North Laurel (Howard)	2,643	1.4%
All Other Locations	119,276	65.1%

SOURCE: US CENSUS, ONTHEMAP APPLICATION AND LEHD ORIGIN-DESTINATION EMPLOYMENT STATISTICS (2019)

In northwest Anne Arundel County (displayed in **Table 3-12**), there are about 107,000 people whose employer is in the county. Their top home origin is Baltimore (11%), followed by Glen Burnie (4.8%), and Severn (3.9%). The next most common origins include Columbia (2.9%), Odenton (2.8%), Ellicott City (2.1%) and Severna Park (1.9%). Just about 5% of northwest Anne Arundel workers are from Howard County, while less than 1% are from Prince George's County. **Table 3-12** displays the top home origins of people employed in northwest Anne Arundel County.

Table 3-12: Origins for People Employed in Northwest Anne Arundel County

Home Origin	Count	Share
All Places (Cities, CDPs, etc.)	107,574	100%
Baltimore, MD	11,804	11.0%
Glen Burnie, MD (Anne Arundel)	5,147	4.8%
Severn, MD (Anne Arundel)	4,144	3.9%
Columbia, MD (Howard)	3,108	2.9%
Odenton, MD (Anne Arundel)	2,977	2.8%
Ellicott City, MD (Howard)	2,215	2.1%
Severna Park, MD (Anne Arundel)	1,993	1.9%
Pasadena, MD (Anne Arundel)	1,841	1.7%
Crofton, MD (Anne Arundel)	1,546	1.4%
Dundalk, MD (Anne Arundel)	1,408	1.3%
All Other Locations	71,891	66.4%

SOURCE: US CENSUS, ONTHEMAP APPLICATION, AND LEHD ORIGIN-DESTINATION EMPLOYMENT STATISTICS (2019)

In north Prince George's County (displayed in **Table 3-13**), there are about 74,000 employees. Their top home origins are Washington, D.C. (4.6%), Baltimore (2.9%), and Bowie (2.7%). Bowie is the most common home origin within north Prince George's County. The next most common origins are Columbia (2.6%), Laurel (2.3%), and South Laurel (2.1%). Other origins include places outside the county such as Silver Spring (1.4%) and Severn (1.3%). About 6% of workers employed in north Prince George's County reside in Howard County (primarily Columbia, Ellicott City, and Elkridge).

Table 3-13: Home Origins for People Employed in North Prince George's County

Home Origin	Count	Share
All Places (Cities, CDPs, etc.)	73,652	100%
Washington, DC	3,359	4.6%
Baltimore, MD	2,124	2.9%
Bowie, MD (Prince George's)	1,955	2.7%
Columbia, MD (Howard)	1,921	2.6%
Laurel, MD (Prince George's)	1,715	2.3%
South Laurel, MD (Prince George's)	1,525	2.1%
Greenbelt, MD (Prince George's)	1,297	1.8%
Silver Spring, MD (Montgomery)	1,000	1.4%
Severn, MD (Anne Arundel)	981	1.3%
Ellicott City, MD (Howard)	952	1.3%
All Other Locations	56,823	77.2%

SOURCE: US CENSUS, ONTHEMAP APPLICATION AND LEHD ORIGIN-DESTINATION EMPLOYMENT STATISTICS (2019)

Home Origins by Census Tract

After examining regional travel patterns from a regional perspective and by place, the next section summarizes travel patterns at a more local level, by census tract.

Table 3-14 presents the locations of the top 17 origins, for anyone who works in the vicinity of the current RTA fixed-route service area, by census tract. The top 17 census tracts where these RTA service area workers reside in are pretty evenly spread out in eastern Howard County, except for one census tract in Anne Arundel County (0.5% of workers) which includes parts of Jessup and Severn. This is a relatively low density area which is served by Route 502.

Most of the census tracts where workers reside in are in central or western Columbia, while one is in north Elkridge, the tract with the 2nd most workers (0.8% or 1332 workers), which is served by Route 409, but which does not serve major job centers in Howard County without a transfer, such as Columbia. Two other census tracts with a high volume (but not high density) of RTA service area worker residences are in southwest Howard County (which includes Fulton and Maple Lawn) and northern Ellicott City (0.6% or 1075 people), both of which does not have any RTA fixed route service.

Table 3-14: Home Origins for RTA Service Area Workers by Census Tract

Rank	Census Tract	Count	Share
	All Census Tracts	170,088	100%
1	6051.02 (Fulton)	1,535	0.9%
2	6012.01 (Elkridge)	1,332	0.8%
3	6056.02 (Columbia)	1,236	0.7%
4	6054.02 (Columbia)	1,164	0.7%
5	6066.03 (Columbia)	1,149	0.7%
6	6021 (Ellicott City)	1,075	0.6%
7	6069.01 (Savage)	1,069	0.6%
8	6067.04 (Columbia)	997	0.6%
9	6068.06 (North Laurel)	987	0.6%
10	6023.02 (Ellicott City)	977	0.6%
11	6055.03 (Columbia)	959	0.6%
12	6012.04 (Ellicott City)	955	0.6%
13	6069.05 (Savage)	951	0.6%
14	7401.02 (Jessup and Severn)	932	0.5%
15	6012.03 (Ellicott City)	896	0.5%
16	6026 (Ellicott City)	890	0.5%
17	6028 (Ellicott City)	881	0.5%

SOURCE: US CENSUS, ONTHEMAP APPLICATION AND LEHD ORIGIN-DESTINATION EMPLOYMENT STATISTICS (2019)

Figure 3-14 displays where workers who live near RTA fixed route service reside. The top ten census tracts where these workers reside are labeled. Outside of Columbia, areas where many workers reside generally live in the outskirts of the RTA fixed route service area (Ellicott City, Fulton and Elkridge).

Figure 3-14: Where RTA Service Area Workers Reside By Census Tract (Ranked)
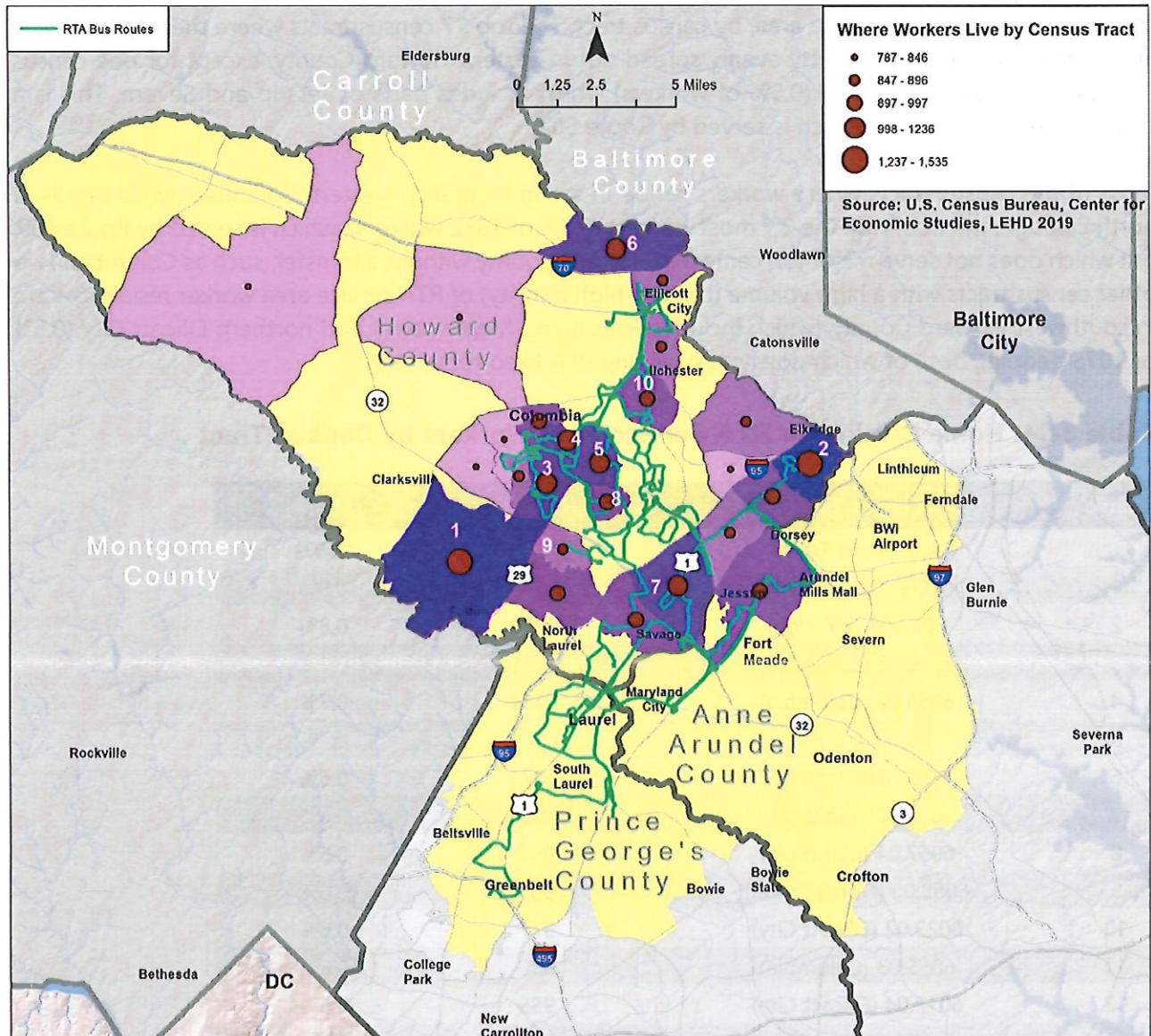
Job Destinations by Census Tract

Figure 3-15 presents the locations of the top seventeen destinations by census tract, for those Howard County residents that live in the current RTA fixed route service area (mostly southern and eastern Howard County). This includes those who live in Columbia, Ellicott City, Elkridge, Savage and Fulton. The census tract where most residents are employed (4.2% of residents) is in southeastern Columbia, which is covered by Route 406 (Columbia Gateway). However, the closure of the Howard County Gateway complex and the rise of work from home opportunities has meant that Route 406 ridership has declined dramatically. The census tract where the 2nd most residents are employed (3.0%) is in Fulton, which is a relatively low-density area west of Columbia Pike and south of MD-32, including Maple Lawn. However, this area is not served by any RTA fixed route. The next census tract with the most residents employed (2.7%) is another low-density area which includes Arundel Mills Mall, Linthicum Heights and areas west and north of BWI Airport. The census tract where the 4th most residents are employed (2.5%) is in Baltimore City. Residents commuting to Baltimore City from Howard County do not have RTA service, but only have limited service through MTA Express Route 150.

Table 3-15: Job Destinations for RTA Service Area Residents by Census Tract

Rank	Census Tract	Count	Share
	All Census Tracts		
1	6067.07 (Columbia)	5,763	4.2%
2	6051.02 (Fulton)	4,089	3.0%
3	7512 (Linthicum Heights)	3,731	2.7%
4	401 (Baltimore city)	3,432	2.5%
5	6054.02 (Columbia)	2,842	2.1%
6	6056.02 (Columbia)	2,664	2.0%
7	7401.02 (Severn)	1,989	1.5%
8	6023.02 (Ellicott City)	1,882	1.4%
9	6028 (Ellicott City)	1,848	1.4%
10	6069.01 (Savage)	1,815	1.3%
11	8072 (College Park)	1,403	1.0%
12	402 (Baltimore city, MD)	1,275	0.9%
13	6069.05 (Savage)	1,229	0.9%
14	6012.03 (Elkridge/Jessup, MD)	1,082	0.8%
15	6023.06 (Ellicott City, MD)	1,036	0.8%
16	7060.13 (Bethesda, MD)	1,028	0.8%
17	4011.02 (Woodlawn, MD)	981	0.7%

SOURCE: US CENSUS, ONTHEMAP APPLICATION AND LEHD ORIGIN-DESTINATION EMPLOYMENT STATISTICS (2019)

Overall work trends suggest that most workers will continue working at the office at lower rates compared to pre-pandemic levels. While most census tracts in Columbia have high fixed route coverage, there are destinations such as Fulton, Maple Lawn, and Linthicum Heights (which includes the BWI Business District) that do not have any RTA fixed route services as an option.

Figure 3-15: Where RTA Service Area Workers in Eastern Howard County Are Employed By Census Tract
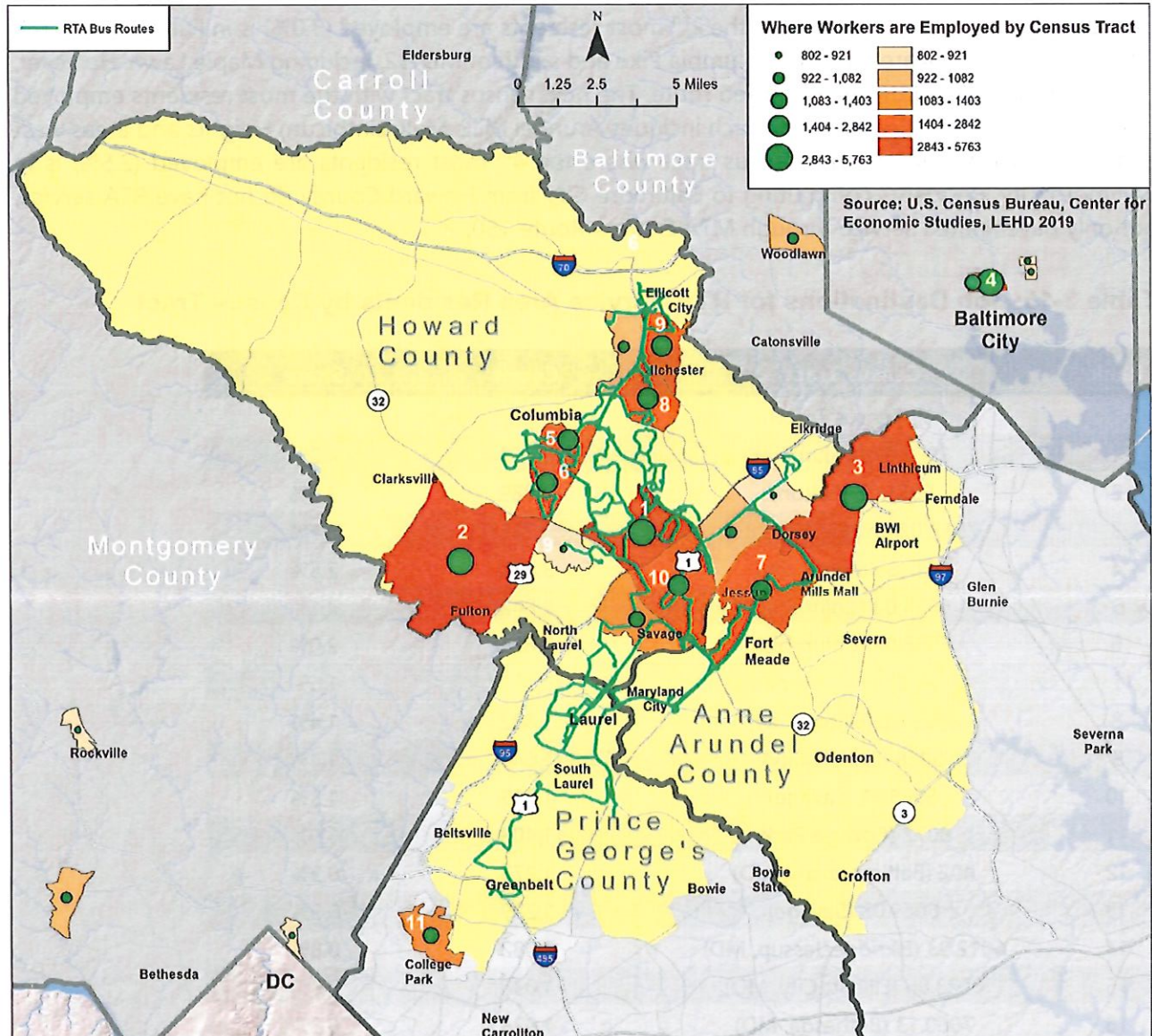
Figure 3-16 displays the general commuter patterns of residents that live near RTA fixed route service, along with rankings of census tracts with the most workers.

Figure 3-16: Where RTA Service Area Workers in Eastern Howard County Reside and Work By Census Tract
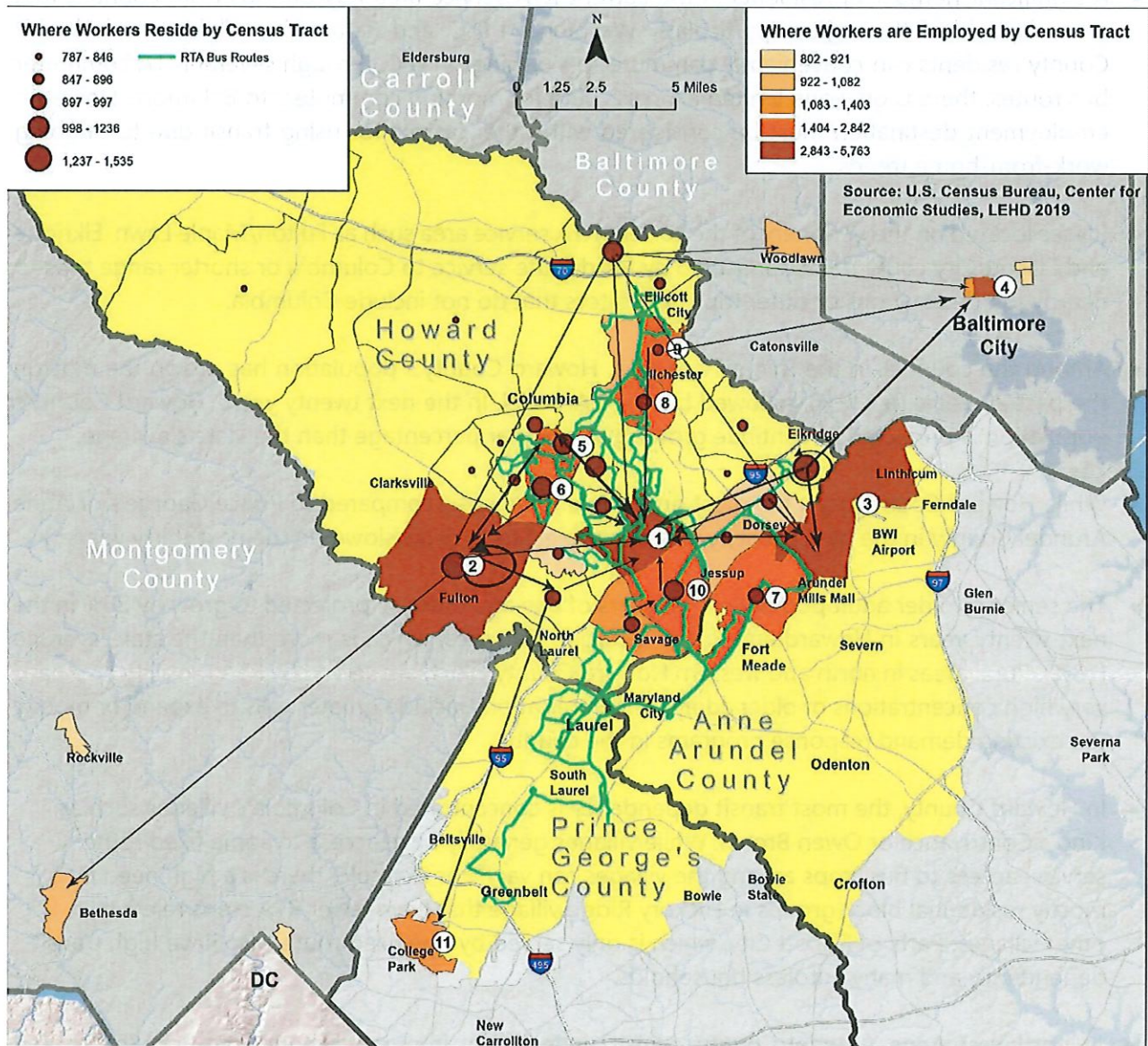
Summary of Needs

When combining the demographic, land-use, and commuter trends contained within this section the following needs and themes emerge:

- A significant number of residents in the current RTA service area rely on jobs from counties and areas outside of the region (particularly Washington D.C. and Baltimore), While some Howard County residents can conveniently commute to Washington D.C. through several MTA commuter bus routes, there is only one limited express route for morning commuters to Baltimore. However, employment destination must be considered with other factors for using transit due to ongoing work-from-home trends.

- Places located on the periphery of the current RTA service area such as Fulton/Maple Lawn, Elkridge and Ellicott City could be better served by fixed route service to Columbia or shorter range trips to nearby job destinations or other trips generators that do not include Columbia.

- Among the counties in the RTA service area, Howard County's population has grown the most in the past 20 years (by 32%), followed by Anne Arundel. In the next twenty years, Howard County's population is projected to continue growing at a higher percentage than the state's average.

- While Howard County grew the most on a percentage basis compared to Prince George's or Anne Arundel County in the past twenty years, it is projected to grow slower in the next thirty years.

- The senior or older adult population (60 years of age and older) is projected to grow by 26% in the next twenty years in Howard and Prince George's Counties, which is more than the state average (18%). Rural areas in north and western Howard County which are served by RTA Mobility also have very high concentrations of older adults. The implications include greater calls to expand or modify the existing demand response programs in the county.

- In Howard County, the most transit dependency is concentrated in Columbia's villages such as King's Contrivance or Owen Brown. While villages generally have access to some fixed route service, access to bus stops among the villages can vary. For example, there is a high need in mostly residential block groups in Hickory Ridge village that have fewer RTA stops relative to other villages. Parts of Ellicott City, which is only served by one fixed route, also have high transit dependency and many autoless households.

- In northwest Anne Arundel County, transit dependency is primarily found around Severn and Odenton. Residents accessing RTA have to connect to RTA services at Arundel Mills. However, there are also Howard County residents, particularly near Elkridge and Dorsey who commute towards Linthicum Heights for work, and do not have fixed route service as an option. There are also many autoless households and individuals with disabilities in Maryland City near Laurel. In north Prince George's County, there is high transit dependency in Laurel and Greenbelt.

Chapter 4
Community Outreach

Introduction

This chapter summarizes the community outreach process and the input that was received during the development of the TDP.

This information will assist in the identification of underserved and unserved areas and populations that should be considered for future service improvements and expansions. Combined with the results of the review of existing services and review of needs, this information will provide a basis for developing future service recommendations.

This chapter is organized into the following sections:

- **Stakeholder Input:** Review of input from a list of community stakeholders.

- **Public Meetings:** Four meetings were held throughout RTA's service area.

- **RTA Customer (Rider) Survey:** Review of rider feedback collected onboard buses, handed out at transit stops, and collected through the survey website.

- **RTA Mobility Paratransit Survey:** Assessment of feedback from Americans with Disabilities Act (ADA) riders and General Paratransit (GPT) via surveys distributed onboard vehicles and direct mailed to customers.

- **RTA Community (General Public) Transportation Survey:** a review of the feedback received during four public meetings held throughout the RTA's service area and email links through HOAs.

- **Survey Comparisons:** Discussion on differences and similarities among the three surveys.

- **Summary of Community Feedback:** A review of all the community input received for the TDP.

Stakeholder Input

Local stakeholders are a critical part of the community outreach process, they serve a large array of clients with varied transportation needs and possess a unique understanding of transportation challenges. Stakeholder outreach was conducted between January and March of 2023.

Identified Stakeholders

Through consultation with Howard County and RTA, key stakeholders (below) were invited to participate in the TDP planning process. Those that provided specific feedback **bold**:

- Arundel Mills Mall
- **BWI Business Partnership**
- Central Maryland Transportation Alliance
- Chin Association of Maryland
- Chinese American Parent Association of Howard County
- **City of Laurel, Economic and Community Development**
- Columbia Association
- Community Action Council of Howard County
- Downtown Columbia Partnership
- **Ft. Meade/National Security Agency**
- **Grassroots**
- HCPSS Hispanic Achievement Program
- Howard Community College
- **Howard County Board of Education**
- Howard County Chamber of Commerce
- Howard County Commission on Aging
- **Howard County Council**
- **Howard County Department of Planning and Zoning**
- Howard County Department of Social Services
- **Howard County Library System**
- Howard Hughes Corporation
- **John Hopkins University Applied Physics Laboratory**
- Korean Community Service Center of Greater Washington
- La Alianza Latina Commission
- **Liminus Network for New Americans**
- **Maple Lawn Homeowners Association**
- Maryland Food Center
- **MTA Commuter Bus**
- **Neighbor Ride**
- **Prince George's County, Department of Public Works and Transportation**
- Salvation Army
- The Mall in Columbia

The study team reached out to each stakeholder, providing background information on the TDP and requesting feedback on transportation needs and potential improvements. Stakeholder input spanned a range of topics which have been categorized into the following six sections as seen below.

- Organizational Information
- Staff/Client Transit Usage
- Transit Improvements
- Unmet Needs
- Strengths and Weaknesses of Transit
- Vision for Public Transit

Organizational Information

To aid in framing the stakeholder input, it is important to first understand how each stakeholder organization serves the community. The services that each stakeholder organization provides varied greatly from local government agencies and research institutions, library systems, on-demand transportation, transit advocacy groups, chambers of commerce, recovery centers, business partnerships, and immigrant services. All organizations serve the general Howard County area, with some extending into Baltimore or Washington, DC, and northern Prince George's and Anne Arundel Counties. The clientele served are just as varied as the services provided, including the federal government, the general public, the homeless, food and housing insecure, those in mental health crises, low-income populations, new immigrants, refugees, asylees, asylum seekers, and first-generation Americans.

Staff/Client Transit Usage

Most of the stakeholders responded that their staff and clients use public transit on a regular basis; however, about 40% of stakeholders noted that they were not aware of anyone who uses public transit. Of those organizations with frequent transit users, representatives noted that transit trips were primarily based in Howard County with most also noting regional trips in areas surrounding the Baltimore and Washington metropolitan areas.

Going further on transportation usage, stakeholders were asked if they assisted their clients or staff in finding transportation when needed. The vast majority of stakeholders said that they do provide assistance finding alternative transportation options. Similarly, the stakeholders were asked if they provided any form of financial assistance to clients for their transportation needs. Roughly 20% of stakeholders said that they do provide financial assistance of those clients and staff that qualify.

Transit Improvements

The area's stakeholders know their clients well and they know their needs. To elaborate on their client's transportation needs, they were asked what is the most important thing that could be done to improve transit services. Similar to the survey results, most of the responses fell under three general categories: better reliability, higher frequency, and better connectivity to other systems or cities. Some stakeholders recognize the challenges presented to those who rely on transit such as long waiting times for transfers and the availability, or lack of service in certain areas.

When asked for any specific improvements, responses included more frequency, expanded routes, better or more connections to other systems (WMATA, MTA) and to Washington, D.C., and Baltimore. One stakeholder mentioned a need for improving first and last mile access, suggesting the implementation of on-demand services.

Unmet Needs

While some of the unmet needs were similar to the desired improvements, there were a variety of different answers to this question. Among some of the unique responses were calls for safer walking and biking infrastructure, better bus waiting facilities at bus stops, and the need for transit to be more responsive to an aging population. Connections to other transit services were also noted, including connections to the MTA core service area and WMATA Metrorail. Many of the respondents called for expanded service to areas with difficult to reach or no transit service such as areas along the Route 1 corridor, Ellicott City, River Hill/Clarksville, Maple Lawn, Scaggsville, the Board of Education, local high schools, Ft. Meade and BWI Airport.

Strengths and Weaknesses of Transit

Stakeholders were asked to give their opinions on what are the strengths and weaknesses of the current regional public transit network. Most responses echoed the same sentiments, mentioning reliability and frequency. Some stakeholders went into a bit more detail when giving their thoughts.

Strengths

- Number of routes serving Howard County
- Affordability of transit service
- Supportive of walkable developments
- Regional connections to MARC, MTA, RTA, and WMATA

Weaknesses

- The lack of service near Interstate 70
- Lack of service around high schools
- Limited number of bus stops
- Bus only (vs. rail, etc.) service limits ridership from the professional contingent

Vision for Public Transit

Stakeholders were asked to describe their vision or dream for public transit in the region. Almost every comment mentioned equitable transit access for everyone in the community. Shorter ride times, dependability, and increased frequency were also common topics. One stakeholder called for a transit system that lessens car dependence and benefits the environment, but also noted that it must be reliable and efficient. Among the more unique responses was a call for local control of the regional bus system, referring to MTA service, and for more on-demand services that would meet the community's first and last mile needs. Lastly, one comment was particularly poignant and summarized many of the opinions succinctly:

"The vision is for a system that is connected, runs on a frequent schedule thereby allowing anyone who uses it to not feel hamstrung for using it. I would like to see a system robust enough that people choose it because it is the best option and not because they have no other choice."

Public Meetings

Throughout the month of January 2023, four public meetings were held throughout RTA's service area to inform the public of the TDP and to gather comments, opinions, and suggestions from the greater public on how RTA is operating and how it can improve. Public outreach meetings were held at the following locations:

- **Ellicott City** (George Howard Building)
  January 10th, 2023, 2:00 p.m. to 4:00 p.m.

- **Columbia** (Columbia Library)
  January 11th, 2023, 6:00 p.m. to 7:30 p.m.

- **Hanover** (Anne Arundel Community College)
  January 18th, 2023, 6:00 p.m. to 7:30 p.m.

- **North Laurel** (North Laurel Community Center)
  January 26th, 2023, 6:00 p.m. to 7:30 p.m.

Figure 4-1: Public Meeting Participant Provides Input on Ideas for Future Improvements

Common themes at each of the public meetings were the need for expanded services, the reliability of existing service/vehicle conditions, and other specific requests. The following summarizes common themes that were discussed and specific requests that came from the public meetings:

Expanded Service and Access

Expanding services to provide more direct connections was the most common theme throughout each of the four public meetings. Many participants focused on the need for increased frequency or improved employment connections among other topics. The following specific service improvements and expansions were noted by public meeting participants:

- 30-Minute Frequency on Most/All Routes
- Columbia to Annapolis (Direct Connection)
- Columbia to BWI Airport (Direct Connection)
- Columbia to Elkridge (Direct Connection)
- Connections to Baltimore universities

- Connections to Light Rail Stations
- Expanded service in Western Howard County
- Expand RTA Mobility services
- Howard County to Ft. Meade/NSA

Transit Vehicles

Vehicle reliability and buses breaking down were mentioned by several meeting participants. These issues have led to people being late for work and missing medical appointments among other things. Others commented that they have experienced issues with the lack of bike racks on select vehicles. The primary issue relates to consistency, as there is no guarantee that the next bus will have a bike rack. This is especially important for riders who must travel long distances from the bus stop to reach their destination. One rider reported that their morning bus has a bike rack, but the evening bus does not. RTA only permits bikes to be stored on exterior bike racks, and not onboard the vehicle. The lack of consistency discourages riders who rely on their bike and can limit their mobility options. RTA recently purchased 20 new vehicles that were put into revenue service June 2023. This should have a positive impact on many of the reliability issues and consistency of bike rack equipped vehicles.

Specific Requests

The following outlines some of the more specific requests that originated from the public meetings.

- Direct service between Columbia and the BWI Airport was the most common specific request. Several participants noted that large employment centers have recently opened in the airport area.

- The need for expanded and improved services on the Route 1 corridor, specifically around the North Laurel area, was mentioned several times. Recommendations included increased frequency and expanded connectivity to MTA services and Metrorail Stations.

- Expanded service to Catonsville was suggested to provide an additional transfer opportunity to MTA local bus service. (Route 505 Columbia- Catonsville was implemented July 2023)

- Additional bus stops will provide a transfer opportunity for Routes 407 and 503 in Guilford – both routes overlap on a short stretch of Guilford Road near the intersection of Gerwig Lane.

- Route 407 should be extended to serve Snowden Square, as there are many stores and offices.

- RTA Mobility should extend their hours and provide trips for all purposes, expanding beyond the current restrictions for only work, medical, and senior centers trips. *(Note: RTA Mobility provides county-wide demand response service; however, trips outside of the ADA Paratransit area are restricted by trip purpose.)*

- Better connections are needed to the MARC Penn Line. The Penn line has all day, evening, and weekend service to Baltimore and Washington, D.C. but is not served by RTA.

- Service around high schools should be analyzed. Bus stops at high schools should also be improved.

RTA Customer Survey

As the group that interfaces with RTA's services the most, feedback from RTA customers/riders is a pivotal part of the community outreach effort. The survey sought out information on riders' transportation needs and habits, their feelings on the strengths and weaknesses of the system, as well as some of their demographic information. Respondents also had the opportunity to provide open-ended feedback about RTA's services. Detailed summary responses to the RTA customer survey are provided in **Appendix C**.

Survey Outreach Efforts

The RTA Customer Survey was available starting on December 5, 2022 and closed on March 31, 2023. The survey period was extended due to a relatively low response rate and in order to accommodate additional outreach, including a survey pop-up event at The Mall in Columbia (see **Figure 4-2**). Out of the three TDP surveys (RTA Customer, RTA Mobility, and Community), the customer survey had the highest number of responses at 174 (out of 370 total surveys received).

Figure 4-2: Riders Complete Surveys at The Mall in Columbia

The customer survey was placed onboard all RTA vehicles along with a survey drop box. Push notifications were sent through the Transit App, RTA's official real-time mobile application. Surveys were also advertised through public outreach materials including QR codes on posters and handouts as well as a website link to the survey. The response rates for each of these methods are shown in **Figure 4-3**.

Figure 4-3: Survey Collection Methods

Method	Response Rate
Onboard Bus/Pop-Up Event	32%
App	28%
QR Code	12%
Website	27%
Mailed Physical Survey	2%
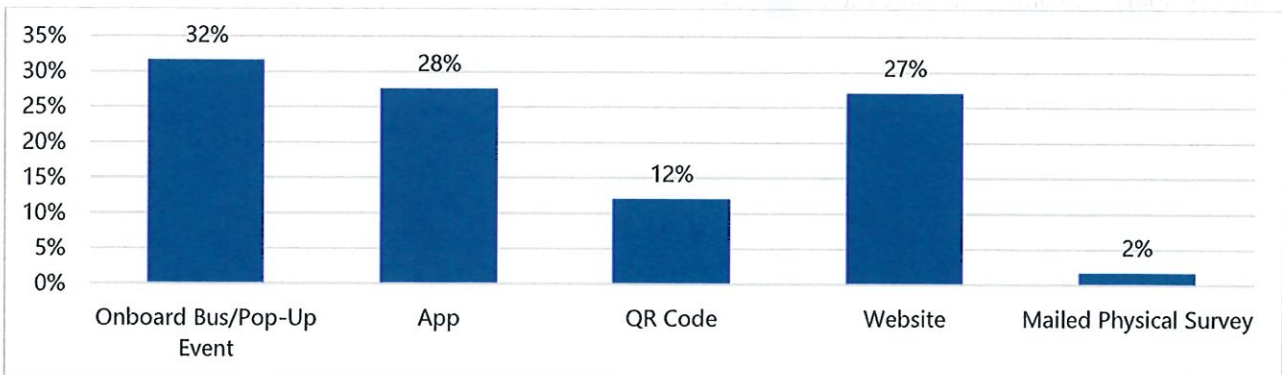
Trip Information

The survey first asks RTA riders questions about their trip patterns. Riders from each route are represented in the survey results. The most common routes used by respondents were Route 503 Laurel/Columbia, 401 Harper's Choice / Clary's Forest, and 403 Executive Park Drive. **Figure 4-4** shows the distribution of routes.

Figure 4-4: Route of Origin

Route	Percentage
503 Laurel / Columbia	14%
401 Harper's Choice / Clary's Forest	14%
403 Executive Park Drive	13%
407 Owen Brown / Kings Contrivance	12%
501 Columbia / Arundel Mills	10%
302 Greenbelt Metro Station	8%
408 Lark Brown / Waterloo	5%
404 Hickory Ridge	5%
405 Ellicott City	4%
409 US Route 1 Corridor	4%
502 Laurel / Arundel Mills	4%
406 Columbia Gateway	3%
301 South Laurel	3%
402 Columbia Crossing / Dobbin Center	1%

Trip Origins and Destinations

Customers were asked to list their origin and destination stops. The most common origin stop was by far The Mall in Columbia which was also the most common destination stop. Some of the common origins included Arundel Mills Mall and Laurel Town Center. Other major destinations include Snowden Square shopping center, Towne Centre Laurel, Arundel Mills Mall, and the Greenbelt Metrorail Station. It should be noted that there were more destinations in Baltimore City than there were origin trips. The origins and destinations can be seen in **Figures 4-5** and **4-6**.

Figure 4-5: Trip Origins   Figure 4-6: Trip Destinations
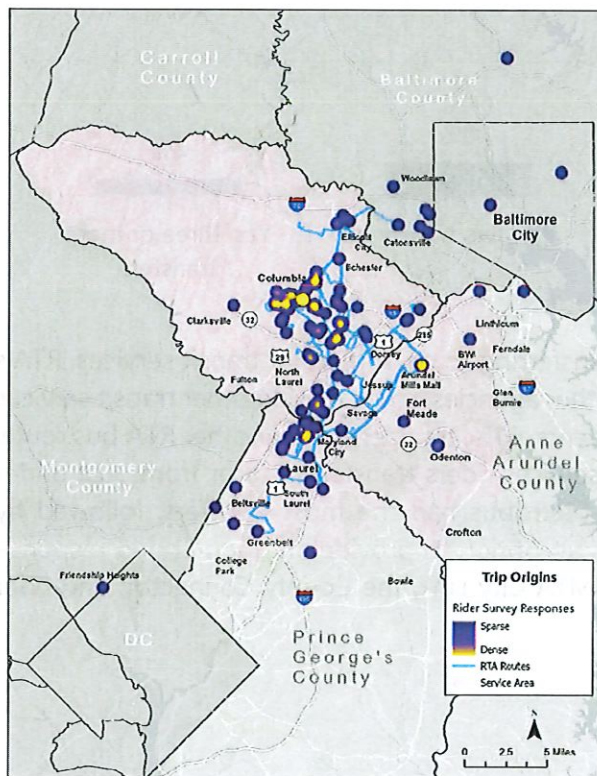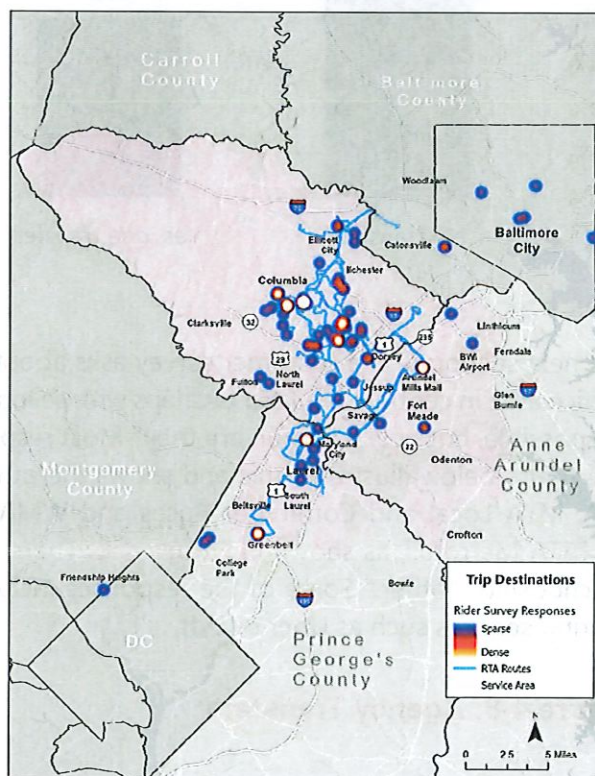
Transfer Activity

Next, the survey question inquired about transfers. Almost 50% of respondents said that their trip involved no transfers, while 40% said their trip involved one transfer. Fewer people said their trips required two, or three or more transfers. **Figure 4-7** displays these findings.

Figure 4-7: Transfer Information
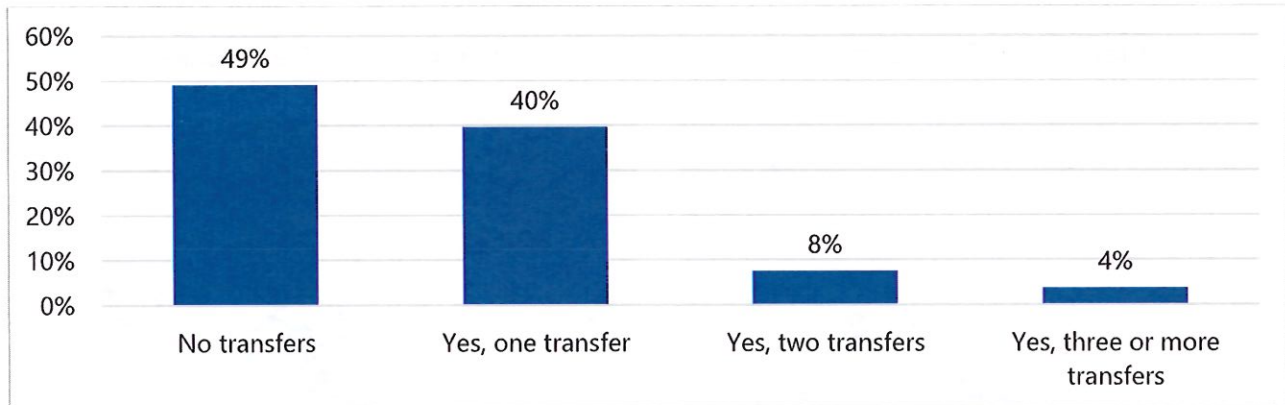
The next section of the customer survey asks about transferring to or from other transit services. RTA's service area in central Maryland overlaps with several other agencies, so trips using other transit services are possible, but how common are they? Most respondents, 61%, transferred to another RTA bus route. The figure below illustrates this and shows the other services riders transferred to or from. Just under RTA, MTA Local and Commuter Buses and WMATA Metrobus had the most transfers, followed by WMATA Metrorail, as shown in **Figure 4-8.** There was an option to provide an open-ended response by choosing "other." Some of the responses include MTA City Link, the County Connector, and rider sharing services such as Uber or Lyft.

Figure 4-8: Agency Transfers
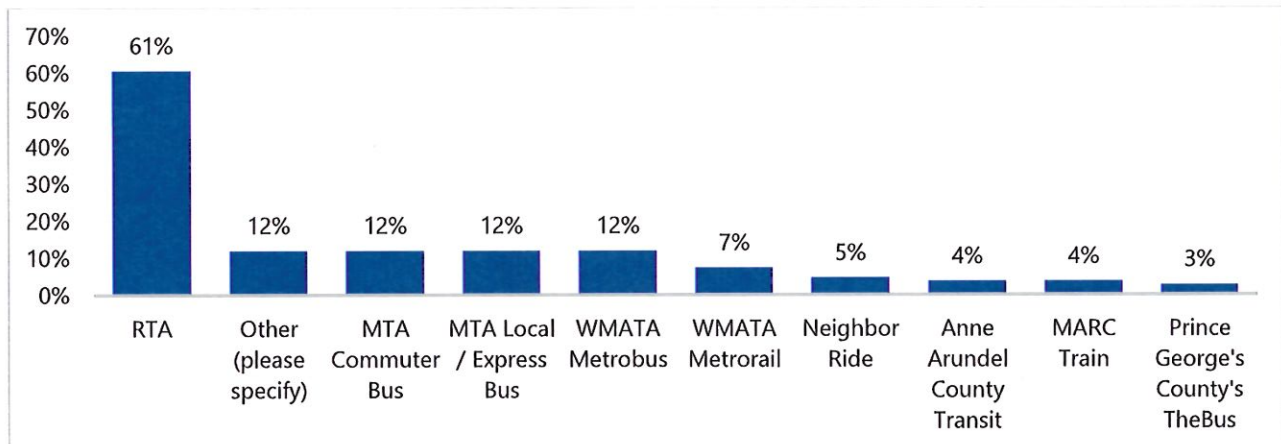
Destinations Not Served by Transit

RTA strives to serve an array of destinations to fit the needs of its diverse customer base. When asked if there are destinations that need to be reached regularly that transit does not serve, 64% of respondents replied no, meaning the current routes reach all their desired destinations. Still, 36% of those surveyed indicated that transit does not serve destinations they wish to reach. While some of the individual responses were for places that currently have transit service, it could be interpreted as these trips were not available for individuals, not that the destinations themselves do not have transit service. This is reflected in **Figure 4-9. Figure 4-10** shows the individual responses for those that replied Yes. See below for the destinations that are not served by transit.
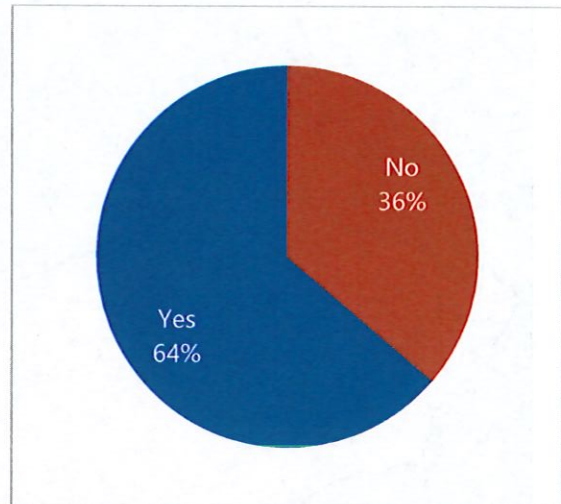
Figure 4-9: Are All Desired Destinations Served by Transit?

Trip Purpose

To get a better understanding of the customers' destinations they were asked what the purpose of their trip was. This can help RTA take a more targeted approach to serving specific destinations. A strong majority of customers, 61%, said the purpose of their trip was for work. Other common purposes were shopping, at 27%, and social/recreation at 15%. **Figure 4-11** shows these results.

Figure 4-10: Purpose of Trip
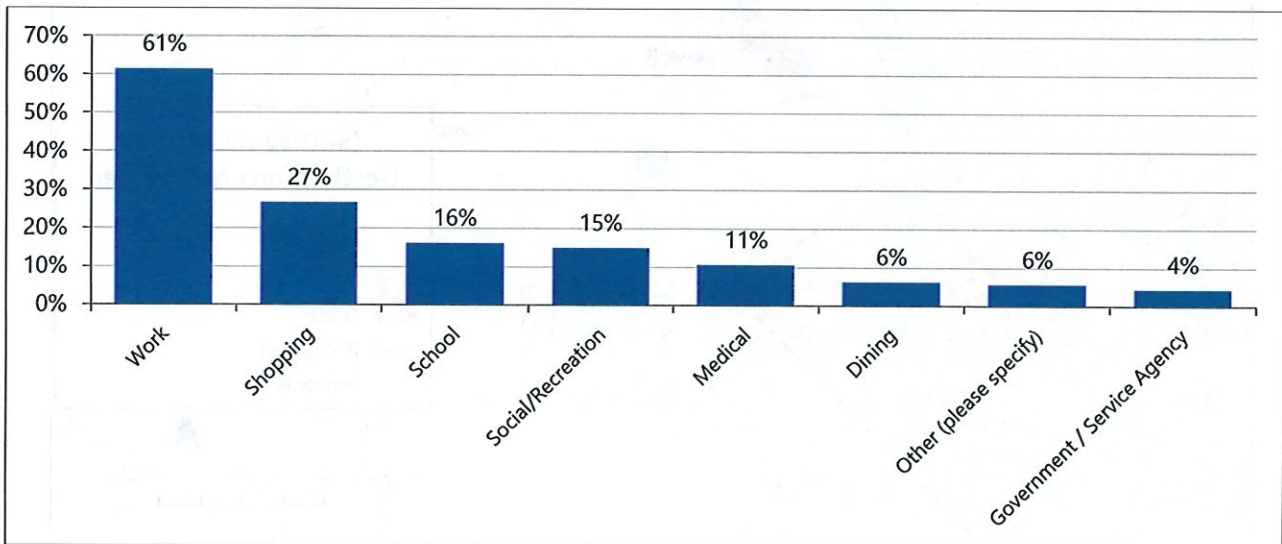
Figure 4-11: Distribution of Desired Destinations Not Served by Transit
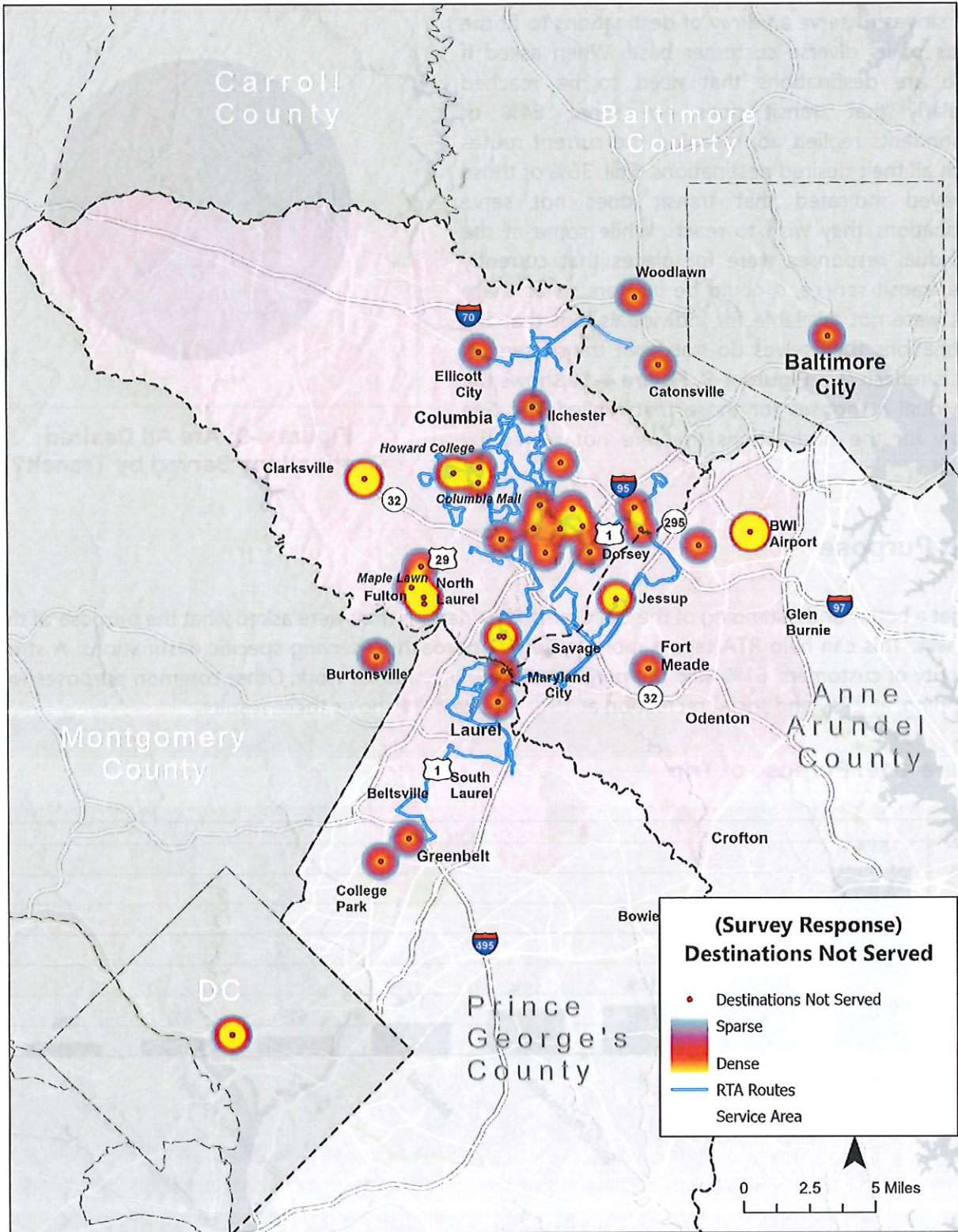
Rider Satisfaction

Satisfaction with RTA Service

A vital element of the customer survey dealt with rider satisfaction. Respondents were asked to rate 17 aspects of RTA's service, from strongly satisfied to strongly dissatisfied. Riders were most dissatisfied with Sunday's hours of operations, a sentiment that is echoed in the previous transit development plan. The cost of bus fare had the highest proportion of strongly satisfied responses. **Figure 4-12** illustrates the responses.

Figure 4-12: Rider Satisfaction

Category	Strongly Satisfied	Satisfied	Neutral	Dissatisfied	Strongly Dissatisfied
Cost of Bus Fare	29%	37%	22%	5%	6%
Ride Time/Time Spent on Bus	21%	44%	20%	11%	5%
Safety and Security on Buses/at Stops	25%	39%	19%	7%	10%
Response/Precautions for COVID-19	26%	35%	24%	8%	7%
Courtesy/Friendliness of Drivers	26%	34%	25%	9%	6%
Comfort of Ride	19%	40%	26%	10%	5%
Cleanliness of Buses and Stops	19%	35%	22%	15%	9%
Overall Service	17%	36%	24%	12%	11%
Customer Service and Information	21%	32%	21%	16%	11%
Availability of Schedule Information	22%	30%	22%	16%	10%
Areas Served by Bus Routes	17%	34%	24%	13%	11%
Frequency of Bus Service	22%	27%	20%	17%	15%
Reliability and Condition of Vehicles	17%	29%	21%	18%	15%
Hours of Bus Service	17%	27%	23%	18%	15%
Bus Running On-Time	13%	27%	19%	21%	20%
Saturday Service Hours	17%	19%	28%	19%	18%
Sunday Service Hours	12%	15%	27%	18%	27%

Legend: ■ Strongly Satisfied ■ Satisfied ■ Neutral ■ Dissatisfied ■ Strongly Dissatisfied

Potential Technological Improvements

When considering aspects that could improve riders' experiences, the survey asked customers which technological improvements would provide them with the most benefit. As shown in **Figure 4-13**, most customers would find real-time arrival screens at bus stops beneficial, followed by Wi-Fi onboard buses.

Figure 4-13: Technological Improvements with the Most Benefit
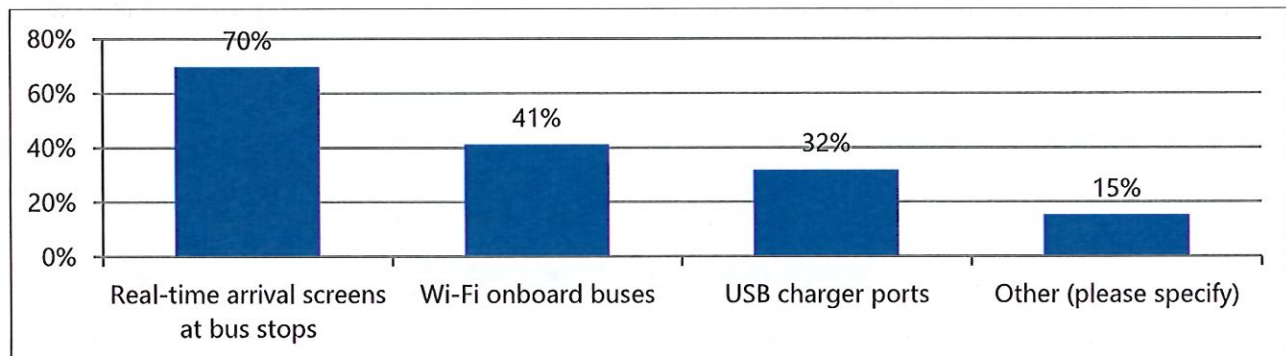
Rider Profile

To gain insights on existing riders, the survey asked questions pertaining to frequency of transit use, employment information, and other aspects to create a rider profile.

Vehicle Availability

The survey asked riders if they own a car or other vehicle. Only 12% of surveyed riders said that they own a vehicle and 88% indicated that they do not own a vehicle (see **Figure 4-14**).

A follow-up question asked if riders have a driver's license. Responses to this question were evenly split with 51% of riders reporting that they do have a driver's license and 49% reporting that they do not (see **Figure 4-15**).
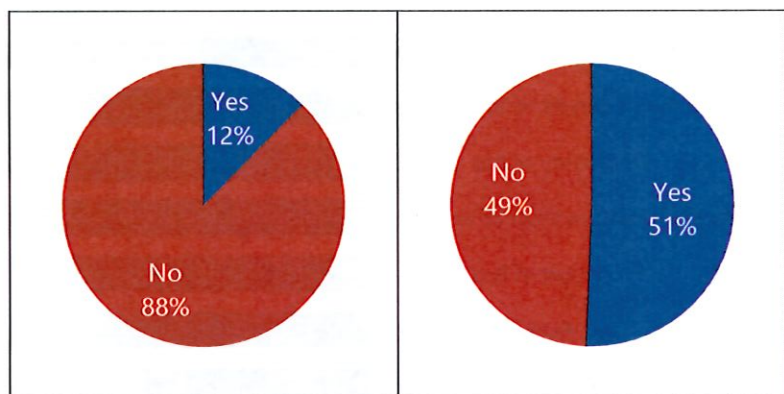
Figure 4-14: Vehicle Ownership

Figure 4-15: Driver's License

Transit Usage

The next question was utilized to gauge how often riders used public transport. The survey results show that the majority, 63%, of survey respondents use public transit five days per week. The next group, those who ride 3-4 days per week, make up 25% of customers, as shown in **Figure 4-16**.

Figure 4-16: Frequency of Transit Use
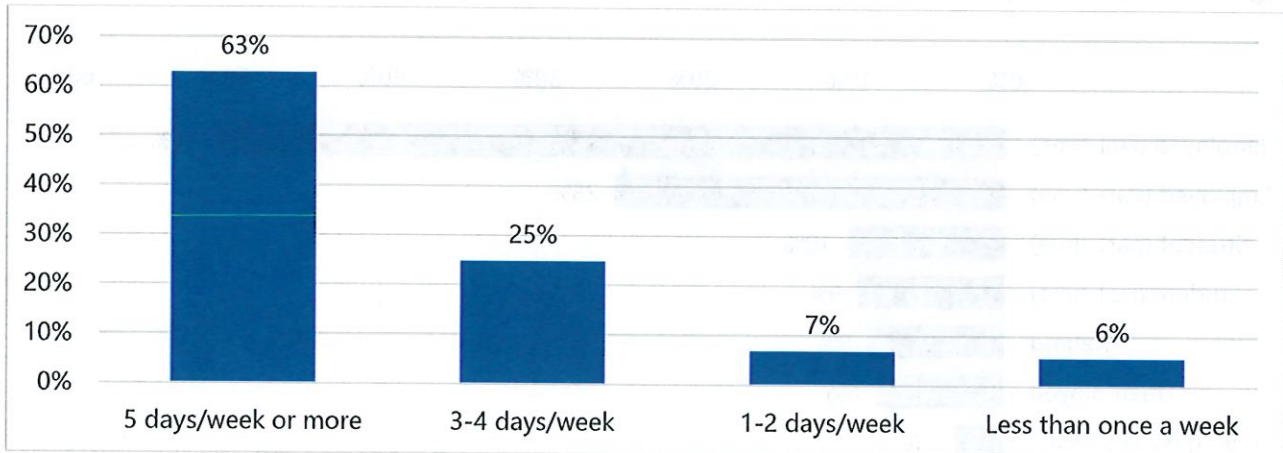
Age Distribution

Questions pertaining to demographic information were presented to respondents. Riders were asked to choose one of the given age ranges. The bulk of responses indicated they were under the age of 49. See **Figure 4-17** for details on all age groups of riders surveyed.

Figure 4-17: Age Distribution
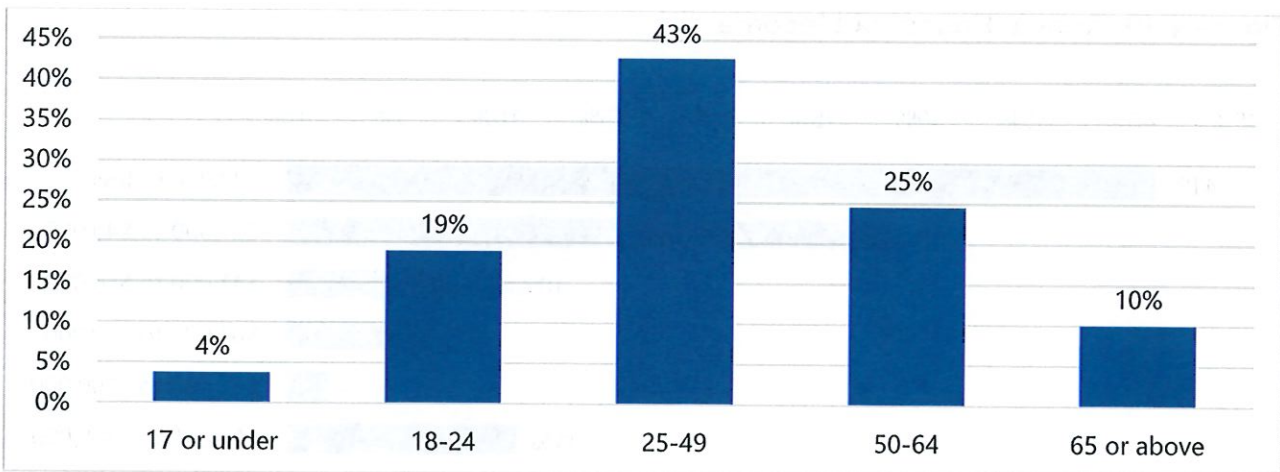
Employment Status

Riders were also asked about their employment status. A majority of riders (51%) indicated they were employed full-time, which is consistent with the previous question of trip purpose. Further, 25% said that they were employed part-time and 10% indicated that they were part-time students. These findings can be found in **Figure 4-18**.

Figure 4-18: Employment Status
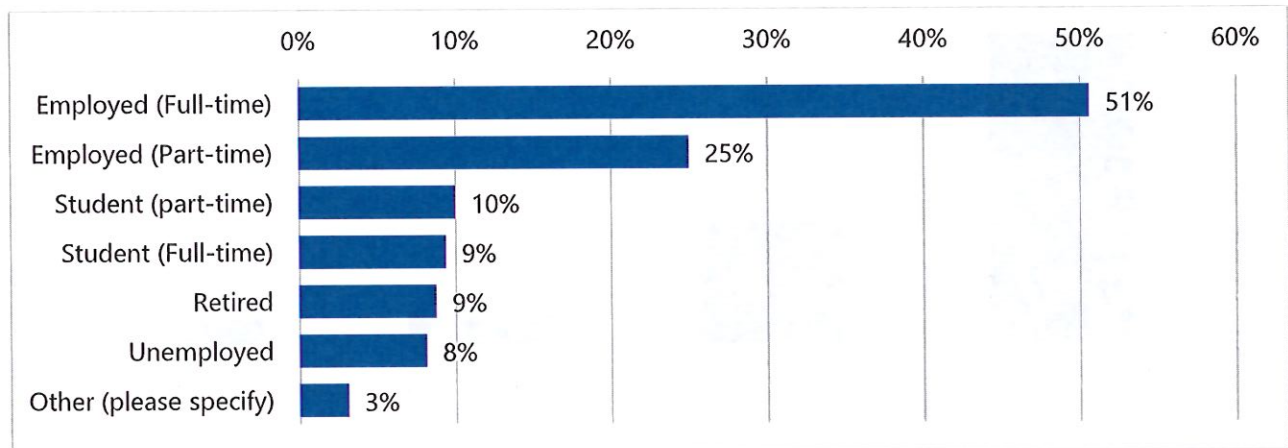
Annual Household Income

The rider survey also asked riders about their annual household income. The vast majority of riders, or 70%, earned less than $40,000 annually. There is a notable amount of riders whose annual income is $100,000 and over at 11%. Just 10% of RTA customers earned between $41,000 and $60,000. **Figure 4-19** provides details on these trends.

Figure 4-19: Annual Household Income
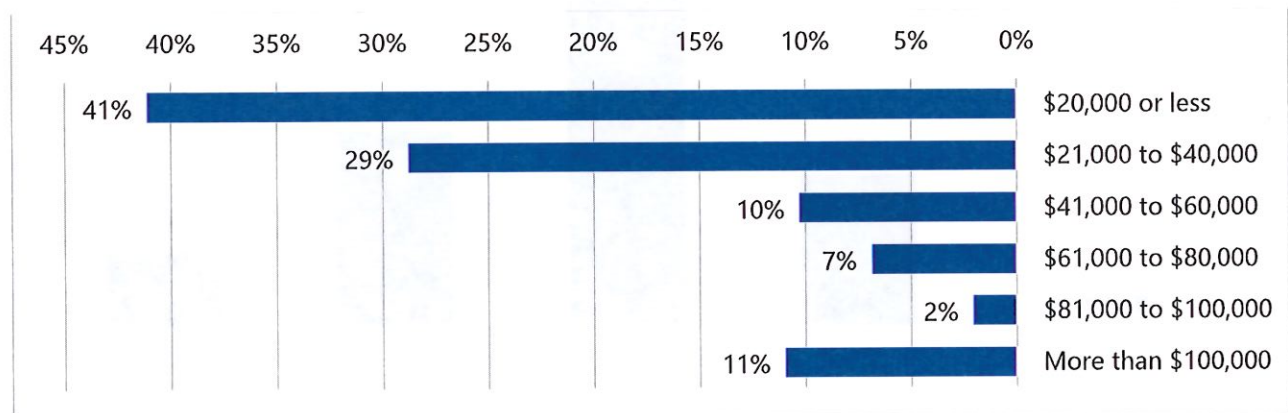
Language Spoken at Home

When asked if RTA riders spoke any language other than English at home, 71% indicated they did not. Of the 29% who replied yes, some of the individual responses included American Sign Language, French Creole, Spanish, Mandarin, Punjabi, French, Creole, Twi, Georgian, Swahili, and Urdu. **Figure 4-22** shows the yes or no responses and **Table 4-1** lists the individual responses with the most common shown at the top of the table.

Figure 4-22: Language Other than English Spoken at Home?
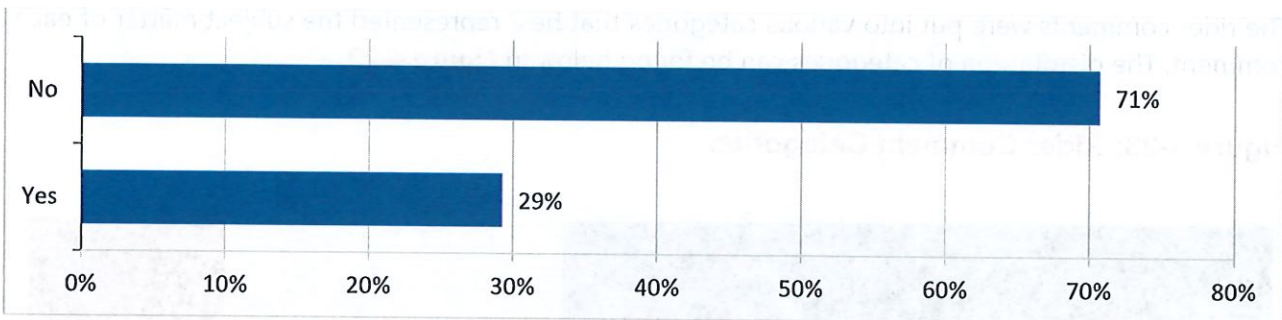
Table 4-1: Individual Responses of Languages Spoken

Language	Count
Spanish	11
Creole/French Creole	4
American Sign Language (ASL)	2
French	2
Nepali	2
Urdu	2
Georgian	1
Igbo	1
Italian	1
Jamaican	1
Latin	1
Mandarin	1
Marathi	1
Punjabi	1
Spanish Hebrew	1
Swahili	1
Twi	1
Yoruba	1

Rider Comments

The customer survey gave riders the chance to share their thoughts on RTA and public transit at large in central Maryland. For the most part, riders were concerned with issues of reliability, frequency, and weekend service. This is somewhat similar to the comments in the previous TDP. Here is an example of a comment regarding frequency.

"I have a problem getting to work in the morning. Most of the time I'm late for work. No bus and no driver for route 405."

The rider comments were put into various categories that best represented the subject matter of each comment. The distribution of categories can be found below in **Figure 4-23.**

Figure 4-23: Rider Comment Categories
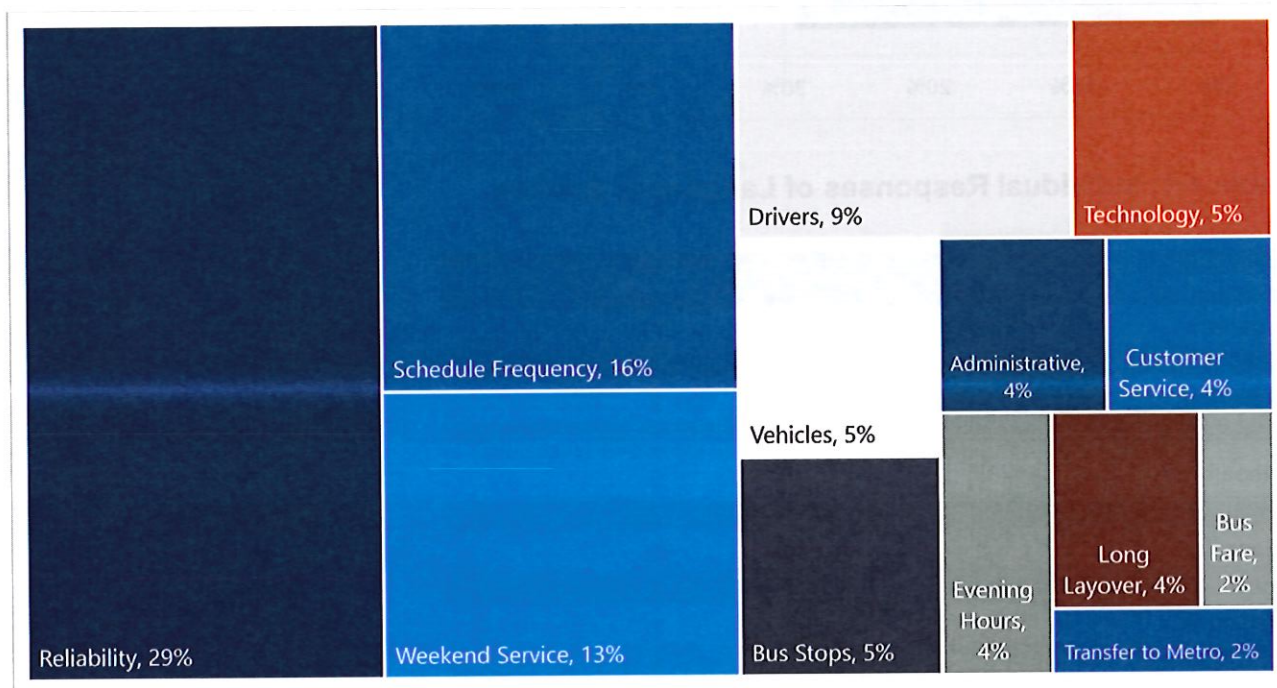
A strong majority of riders' comments dealt with reliability, whether the bus showed up on time or at all, buses breaking down, etc. Frequency was also a common theme in customer comments, occupying 16% of comments; riders would like buses to run more frequently. The issue of frequency and being late to work came up multiple times as well. While RTA has added weekend service since the last transit development plan, riders still wish to see better service and frequency on weekends since many of them still must work on weekends. Thirteen percent of respondents indicated issues with weekend bus service. Further comments can be found below organized by the above categories.

Reliability

- "The bus is a blessing, however it's very limiting to time and certain areas. Like Sundays I would like to go to church but the bus doesn't run in my area at that time and I don't have any alternative and have to use Lyft which is more expensive."

- "Please whenever the bus is not able to get to Columbia at the scheduled time, the riders should be informed via the app. It is frustrating that you would be waiting for the bus and it doesn't come at the scheduled time."

- "Reliability has been an issue plaguing the RTA for years. I think more people in the community would be interested in riding public transit if the headways weren't so infrequent and reliability wasn't an issue. At its worst, it's a guessing game to whether or not I'll have a way home from work or school. Service hours are also awful for the workforce that doesn't get out until later at night or has to work in the early morning hours."

Schedule Frequency

- "Need [the] buses to be on time and consistent."

- "More buses needed. One every hour is too few."

- "Frequency and reliability is the most important. RTA has satisfactory reliability but frequency isn't good at all. A bus every hour isn't very useful for most people so that impacts ridership negatively."

Weekend Service

- "Everything is good but the bus could be more on time. The bus colors was easier and having all of the buses running on Sundays would help."

- "The 503 should go from Columbia to the Laurel Town Centre at 8pm instead of 7pm on Saturdays"

Drivers

- "Some drivers have to be more professional and not let emotions determine their judgment or choice of words."

- "Sometimes the drivers miss people at stops, such as the 409 bus stop at Howard Road and Route 1 in Savage, going north. The driver needs to look and see if anyone is at the less-used stops, not just whiz on by."

Vehicles

- "In the past, the buses were clean. But today, the interior of the buses is very dirty and smells sometimes."

- "Clean the buses."

- "Buses are so dirty."

Bus Stops

- "I would like that all the buses provide a stop key, It's better to ask the stop."

- "Sometimes the drivers miss people at stops... the driver needs to look and see if anyone is at the less-used stops, not just whiz on by."

Evening Hours

- "The buses need to run until midnight. Many people end up stranded because they work evenings or have to travel in the evenings. Also the buses should be every 30 mins. That will help the overall economy. Many people have trouble getting to work which leads to unemployment. Also we need more intercounty Access."

Transfer to Metro

- "Please start a direct service to metro station over the weekends."

Administrative

- "Please offer training on how to ride the bus - perhaps through high schools or partner with libraries. Get more people to ride!"

- "Give the drivers a raise and keep salaries competitive to other companies drivers-besides the consumer is the precious cargo on board and drivers are responsible for driving-safety-comfort-cleanliness and quality of life during their ride"

Layover Waiting on Bus

- "Open bus doors 5 minutes to scheduled depart times at the mall to leave on time, add a bus stop on Columbia Road in front of Columbia Glade apartments and add more bus depots with shelters"

- "Letting all riders get on the busses 10 minutes early in fall and freezing conditions."

Technology

- "need to have a way to have accurate arrival times because I have experienced only this bus being late or not arriving."

- "You guys need to run later and adjust your bus stops. And develop you own app and put a tracker on the bus so that we can see where the bus is and get an accurate time of when it is coming. Also weekend services for all buses, 95% of workers work on the weekends and it's a hassle and expensive paying for Ubers or Lyft."

Customer Service

- "Better customer service, accurate info when calling the office."

Bus Fares

- "Thank you for serving the community. Cheaper fares & later evening hours."

RTA Mobility Paratransit Survey

The RTA Mobility Paratransit Survey was distributed to riders by several methods. Most riders received their surveys onboard vehicles, while others were directly mailed surveys. A smaller number of riders completed their surveys online through the QR code or TDP Website. There were 36 total responses for the paratransit survey. Detailed summary responses to the RTA Mobility customer survey are provided in **Appendix D**.

Rider Type

Participants were asked which type of rider they are. The options were the Americans with Disabilities Act (ADA), General Paratransit (GPT), or both. Over half of the respondents, 52%, reported that they are ADA riders. Thirty-three percent of riders said they were GPT and the remaining 15% said they were both ADA and GPT. **Figure 4-24** shows the responses to this question.

Figure 4-24 Rider Type
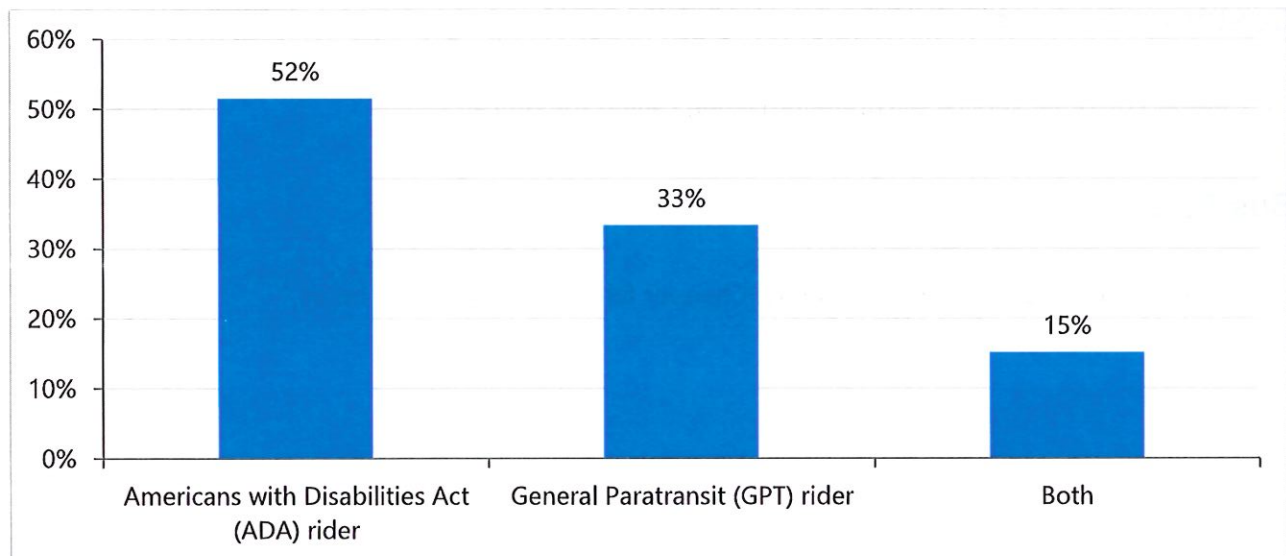
Usage Information

Trip Purpose

Riders were asked what the purpose of their trip was. More than one option could be selected for this question and the options included work, school, medical, social/recreational, senior center, government/service agency, shopping/errands, and other. Out of these options, 64% said the purpose of their paratransit trip was medical. Thirty-nine percent replied that they were using paratransit for work and 25% were going to a senior center. One person chose the "other" option and indicated that they use paratransit for voting. The results can be found below in **Figure 4-25**.

Figure 4-25: Ride Purpose
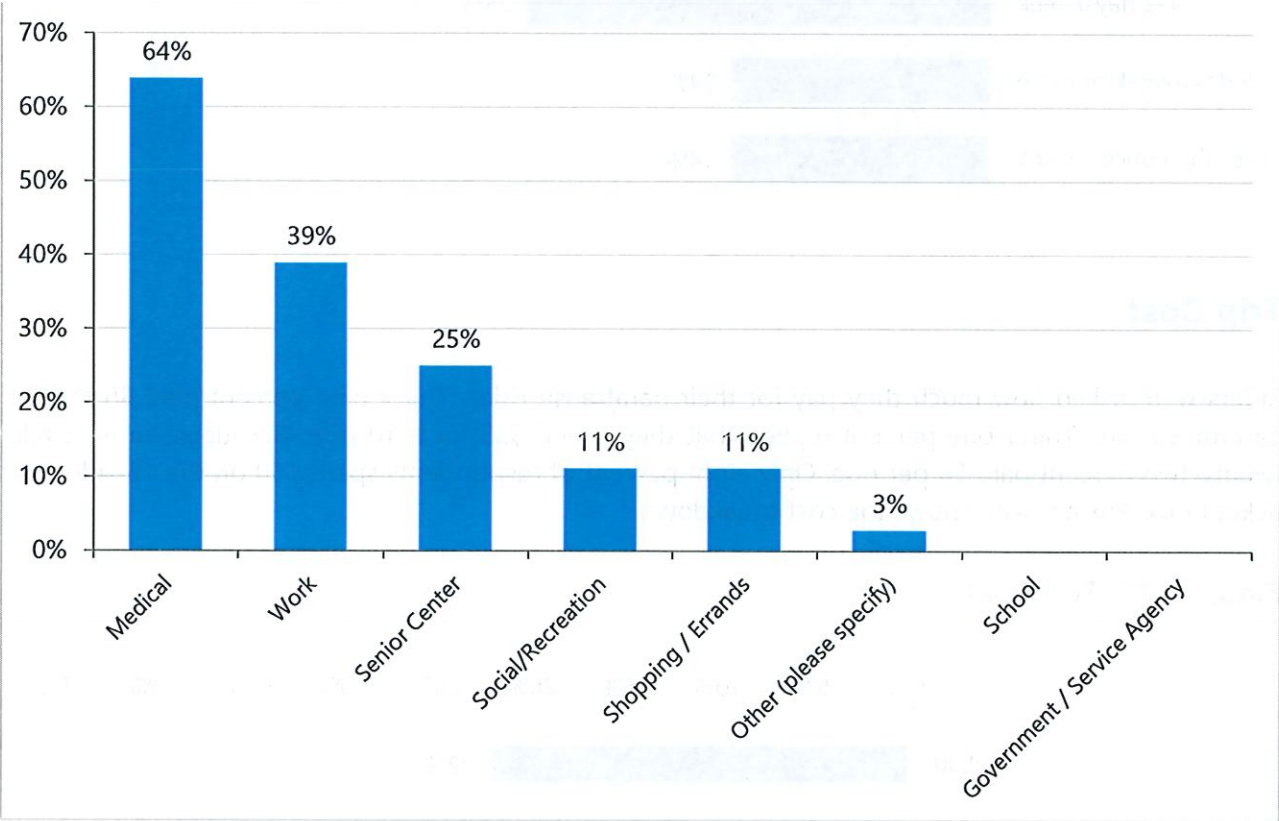
Usage

The survey asked mobility riders how often they use paratransit services. Most of the riders, use paratransit services only 3-4 times per week. Those that only rode 1-2 times per week represented 25% of the responses. There was a tie between riding 5 days a week and riding less than once per week, each accounting for 14% of survey responses. See **Figure 4-26** for details.

Figure 4-26: Ride Frequency
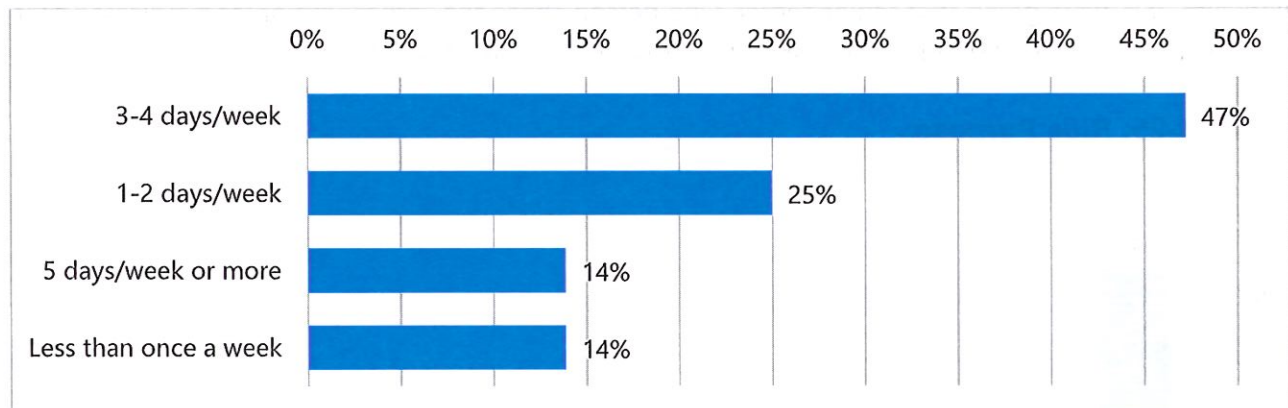
Trip Cost

Riders were asked how much they pay for their paratransit rides. Thirty-nine percent paid $5 for the paratransit fare. Thirty-one percent replied that they spend $35 for a 10-ride ADA ticket book, while twenty-two percent paid $4 per ride. Only eight percent of respondents spent $50 on the 10-ride GPT ticket book. **Figure 4-27** shows the cost breakdown.

Figure 4-27: Trip Cost
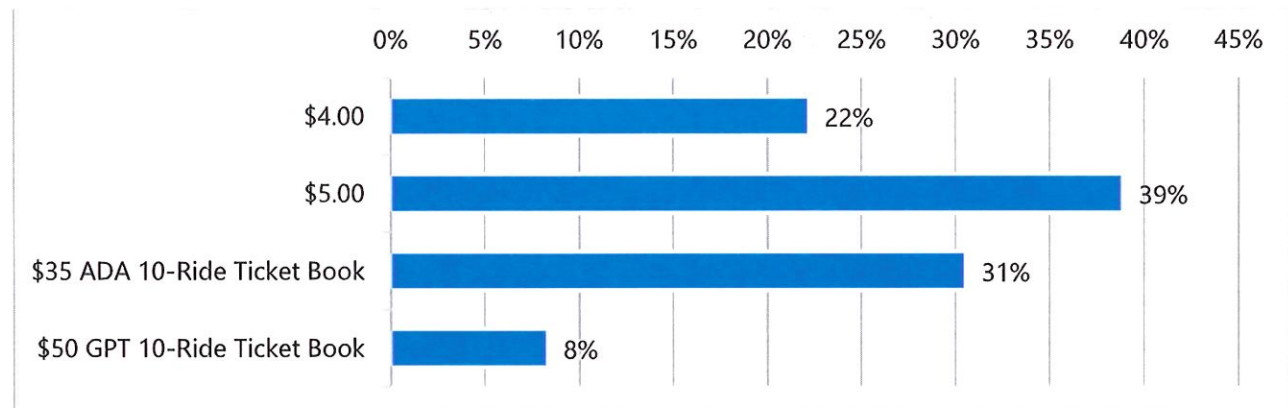
History of Usage

Following trip cost, the survey then asked riders how long they have been using RTA's paratransit services. Those who had been using paratransit for more than 2 years represented 49% of responses. Thirty-one percent (31%) of riders had been using the service for 1-2 years, 14% replied that they had been using it for 6-12 months, and only 6% had been using paratransit for 6 months or less. **Figure 4-28** shows these trends.

Figure 4-28: Use Duration
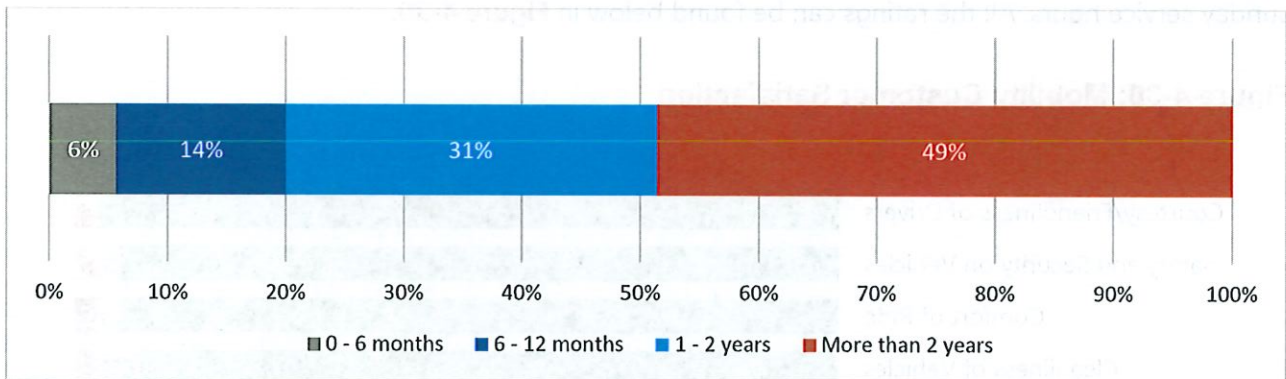
Mobility riders were asked what other transportation services they use in addition to paratransit services. Out of the eleven options they were given, 40% said they used RTA's fixed routes in addition to mobility services while 10% said they used Anne Arundel Transit. Thirty percent of respondents chose to answer "other," with most of them saying they also used Lyft. These responses can be seen in **Figure 4-29**.

Figure 4-29: Alternative Transit Usage
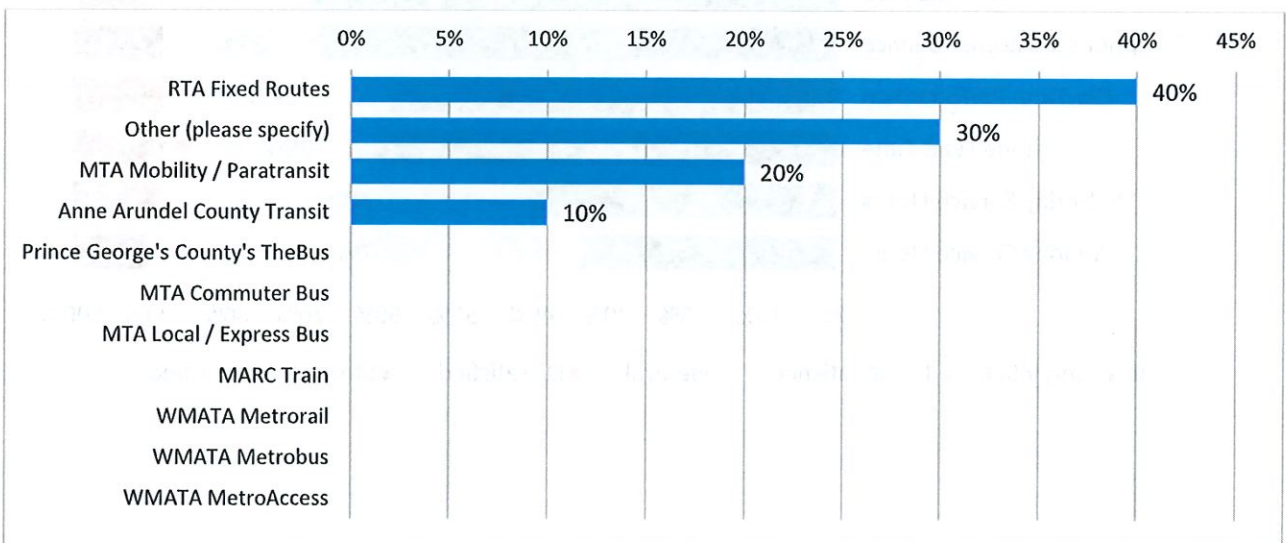
Customer Satisfaction

RTA Mobility Service Satisfaction

Mobility customers' satisfaction with the service is a key element of the survey. Respondents were given fifteen categories to rate on a scale ranging from "strongly satisfied" to "strongly dissatisfied." These categories include several aspects of RTA's mobility services including customer service, cost of fare, and cleanliness of vehicle. Customers were also asked to give their overall rating for mobility services. Customers were most satisfied with the courtesy or friendliness of drivers and most dissatisfied with Sunday service hours. All the ratings can be found below in **Figure 4-30**.

Figure 4-30: Mobility Customer Satisfaction
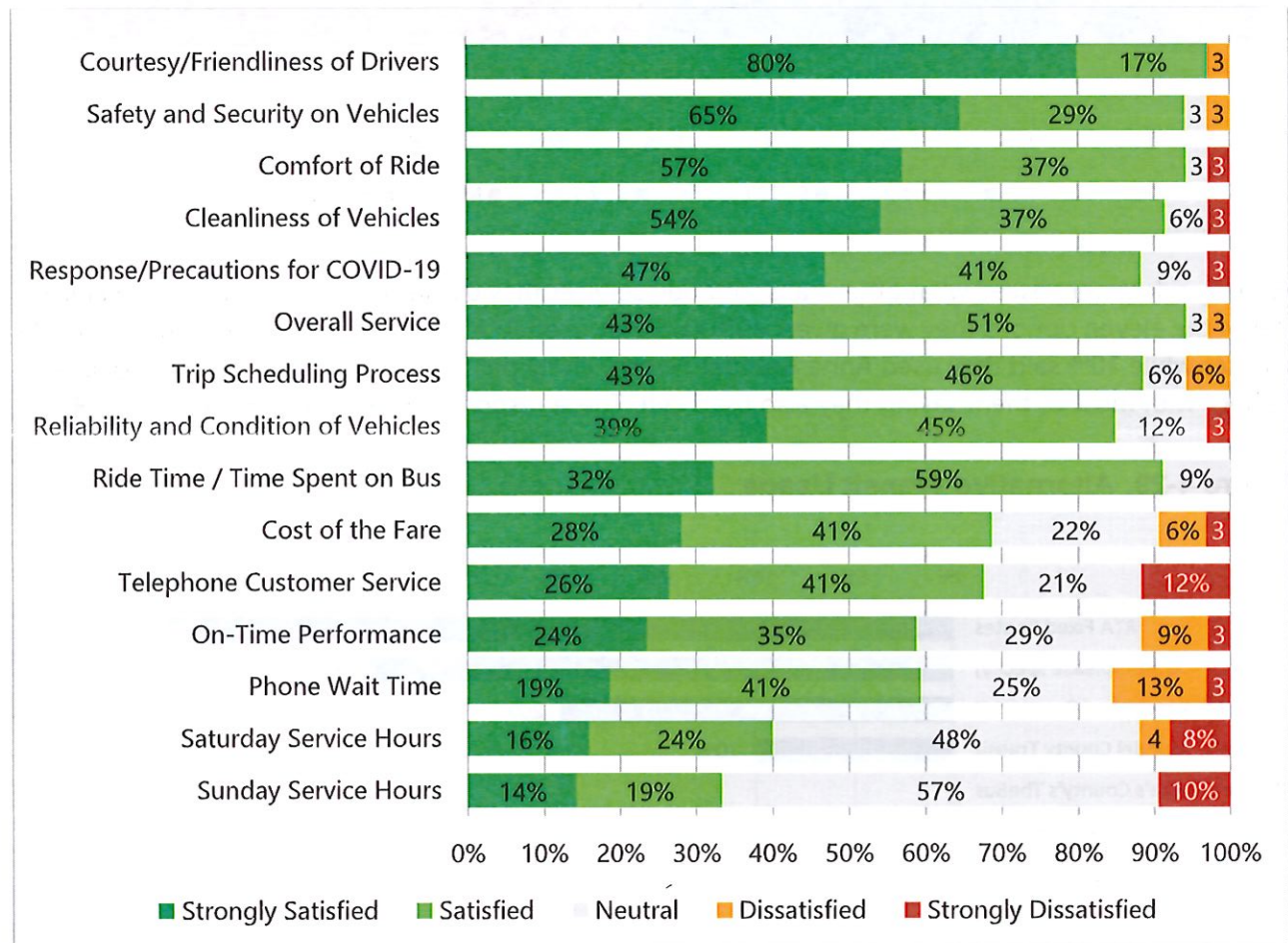
RTA Mobility's Contracted Taxicab Service Satisfaction

The next section of the survey dealt with RTA Mobility's cab services. RTA contracts with taxicab companies to fill in service gaps. The survey sought to understand riders' satisfaction with the cab services. Respondents generally had a positive opinion about the cab services, with safety and security of vehicles ranking at the top. Customers were most dissatisfied with properly identified vehicles. The rest of customer's satisfaction levels can be found in **Figure 4-31**.

Figure 4-31: Cab Service Satisfaction

	Strongly Satisfied	Satisfied	Neutral	Dissatisfied	Strongly Dissatisfied
Reliability and Condition of Vehicles	50%	32%	14%		4
Properly Identified Vehicles	54%	21%	18%		7%
Cleanliness of Vehicles	54%	32%	14%		
Courtesy/Friendliness of Drivers	62%	17%	17%	3	
Safety and Security on Vehicles	62%	21%	17%		
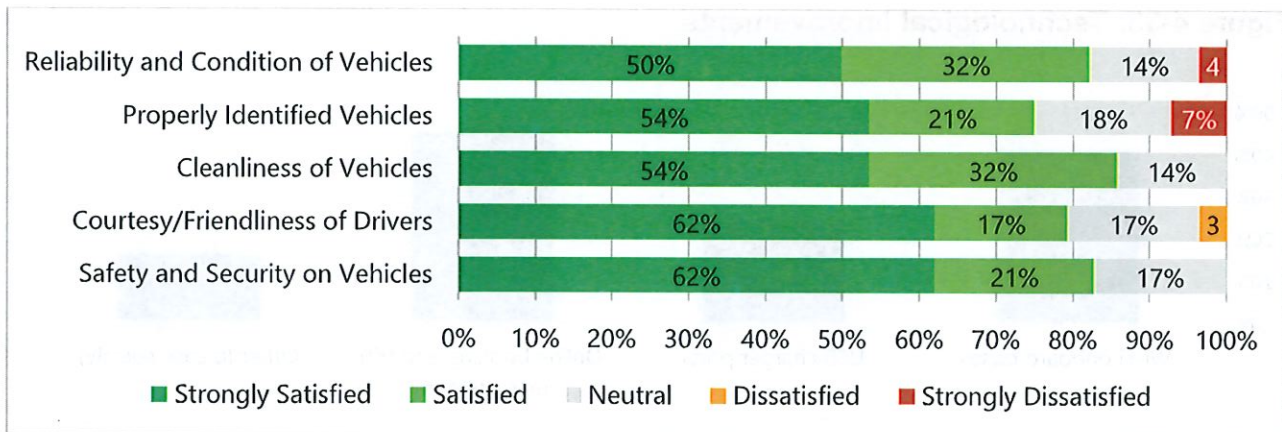
Locations Not Served by RTA Mobility

The survey asked paratransit customers if there were any destinations, they could not reach using RTA mobility. Seventy-one percent of respondents indicated that there were no destinations they could not reach using paratransit, while twenty-nine percent said there were destinations not served by paratransit. **Figure 4-32** shows this below. Individual responses of destinations that are not served by RTA Mobility included locations outside of the RTA service area in Baltimore City, Baltimore County, and Anne Arundel County.
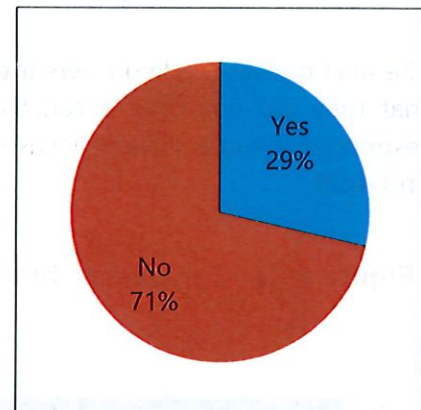
Figure 4-32: Are there Destinations Not Served by Mobility?

Potential Technological Service Improvements

Participants were given a list of technological improvements and were asked which of these they felt would benefit them the most. The top response was online booking and trip management, accounting for 46% of responses. Following closely behind online booking was Wi-Fi onboard buses at 42%. Twenty-five percent preferred USB charger ports on vehicles. There was an "other" option so respondents could fill in their own answers. Seventeen percent of people chose this response, one suggesting weekend and evening service and service to places other than work/medical/senior center. See **Figure 4-33** below for details.

Figure 4-33: Technological Improvements
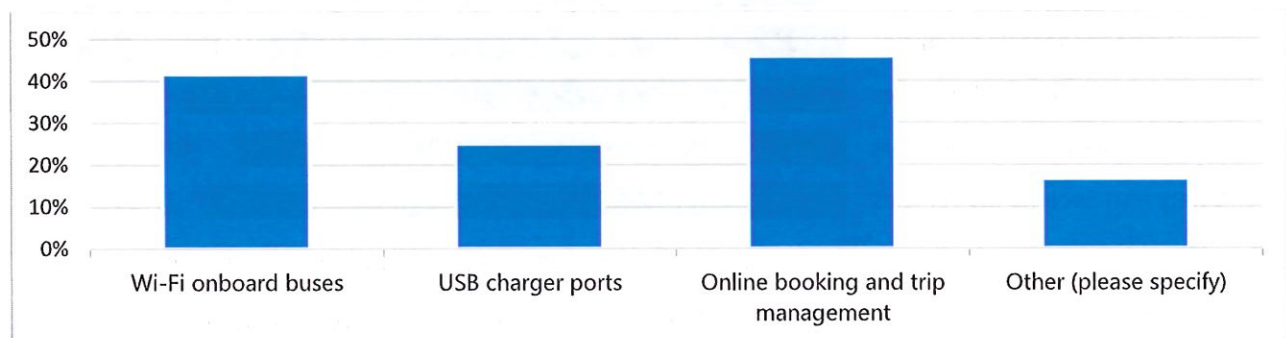
Vehicle Ownership

The next question asked riders if they have a car. The overwhelming majority of riders, at 89%, stated that they did not have a car. Similar to the fixed route customer survey, a higher proportion of respondents had a driver's license while not having a car. These trends can be found in **Figures 4-34** and **4-35**.

Figure 4-34: Car Ownership
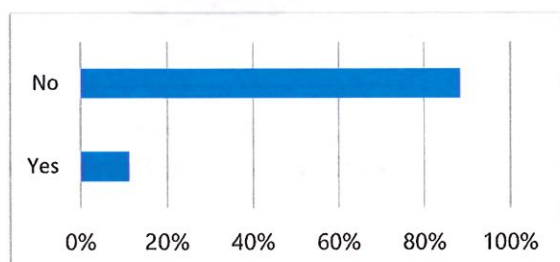
Figure 4-35: Driver's License
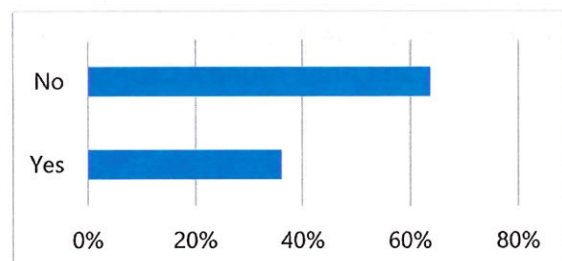
Demographic Information

Age Distribution

In order to learn more about its customers, RTA asked paratransit customers about some demographic information. The first of these questions asked for the age of the participants. Most, or 40%, of riders said they were ages 65 and above. The next age cohort of 49 and under consisted of 26% of responses. Eleven percent of riders said they were between the ages of 60-64 and 20% said they were within the 55-59 age range. These results can be seen in **Figure 4-36.**

Figure 4-36: Age
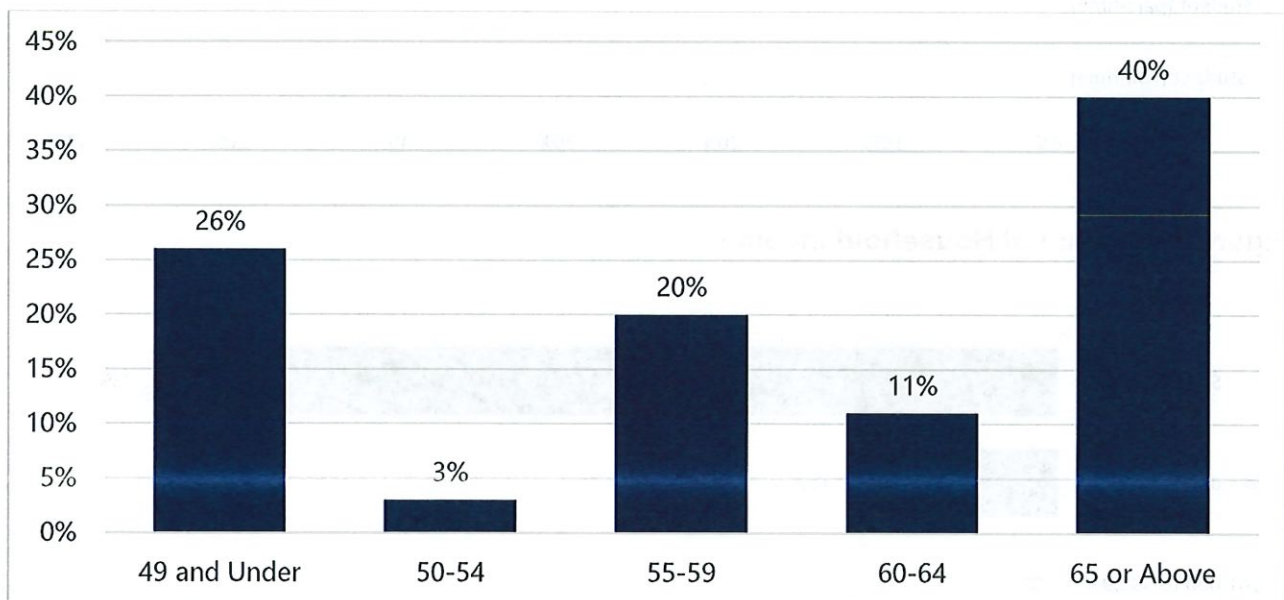
Employment Status and Annual Household Income

The next set of demographic questions were concerning employment status and annual household income. Similar to the last survey in the 2018 TDP, the majority, or 53% of riders indicated they were retired. Half of customers also made $20,000 or less, annually. A quarter were employed part-time, while those that were employed full-time consisted of 14%. Unemployed riders represented just 8% of responses. As for their income, over 73% of respondents earned under $40,000 annually. These can be seen in detail in **Figures 4-37** and **4-38.**

Figure 4-37: Employment Status

Retired — 53%
Employed (Part-time) — 25%
Employed (Full-time) — 14%
Unemployed — 8%
Other (please specify) — 3%
Student (part-time) —
Student (Full-time) —
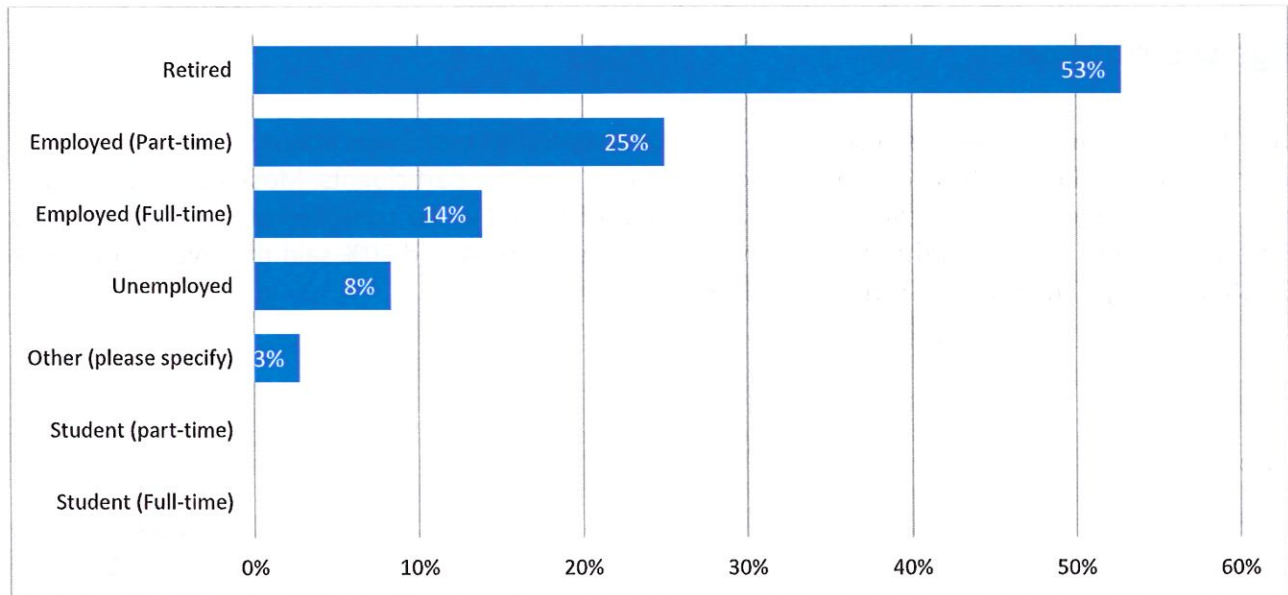
Figure 4-38: Annual Household Income

$40,000 or less — 73%
$41,000 to $60,000 — 17%
$61,000 to $80,000 — 0%
$81,000 to $100,000 — 3%
More than $100,000 — 7%
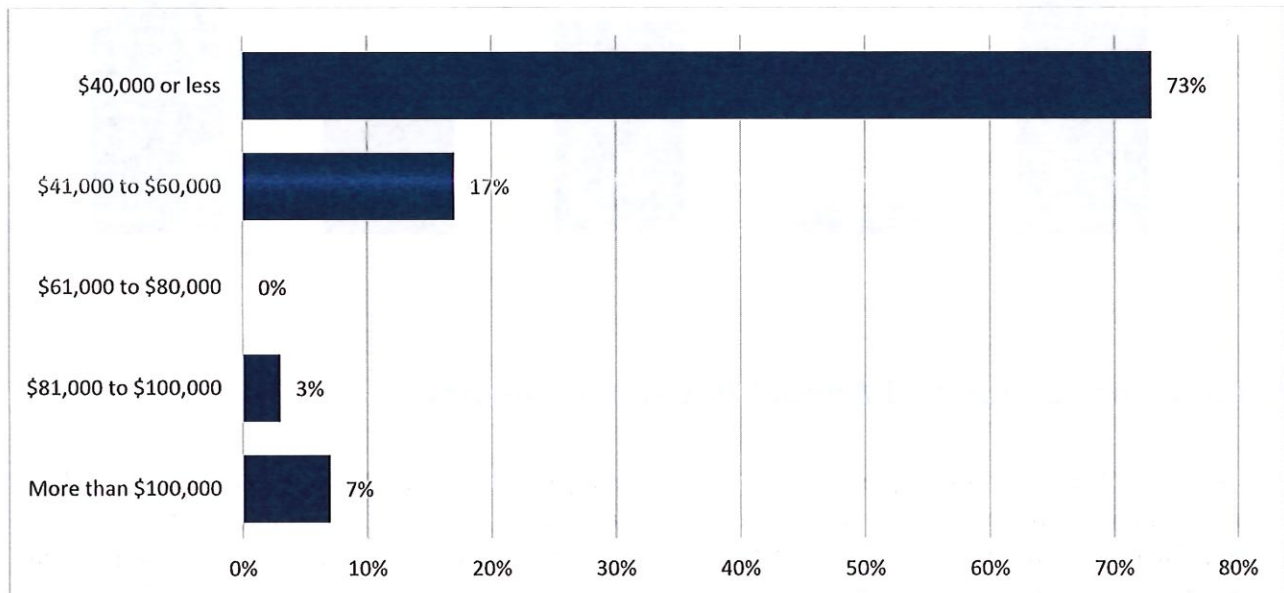
Language Spoken at Home

The last demographic question on the survey asked riders if they speak a language other than English at home. A majority at 81% said they did not speak any other languages besides English. 19% said that they did speak another language at home. Respondents were given the option to go into more detail if they selected "Yes." Some of those replies include Tamil, Hindi, Spanish, Tagalog, with Spanish being the most common answer.

Rider Comments and Suggestions

One of the primary components of the RTA Mobility survey was to gather opinions and suggestions from its riders. At the end of the survey, respondents were provided a space to fill in open ended comments and suggestions. The majority of the comments were overall positive and spoke highly of the system and its drivers in particular. Riders were appreciative of the punctuality and positive attitudes of drivers. Issues and suggestions with the call/scheduling system followed close by the positive comments. Late drivers were mentioned three times and one respondent thought the fares were too high. Below is a sample of some of the comments.

"The call system informing of rides has far too much information about fares, etc. For someone with a disability, they get lost in all that information."

"Very grateful for the RTA service. I couldn't get around to medical appointments always and I'm grateful for the service."

"Call wait time when trying to schedule trip and check on my pick up while waiting in the doctor or lab office. I am cut off and need to call back."

"The driver that takes me to my appointments, Ms. Michelle, is very dependable, always pleasant, and on time. I appreciate her professionalism and she helps me get on the bus when needed. The medical shuttle driver for Baltimore is great."

"I would like to be able to schedule less than 2 days in advance, as I do not see my work schedule until Sunday, which prohibits me from scheduling a Monday trip."

"I am visually impaired. Contracted vehicles, it is important that they are well identified since I work in a busy restaurant area. It would be helpful if all future transport had wi-fi service available and USB chargers."

Community Transportation Survey

Another key component of the TDP's community outreach efforts includes input and comments from the general public. This was accomplished through a variety of methods including public meetings, email, the project's website, and an HOA email list. The public was made aware of the survey through public meetings, government and non-profit agencies, and the project website Through these efforts, 160 surveys were completed. Detailed summary responses to the community transportation survey are provided in **Appendix C**.

Travel Habits

Primary Mode of Transportation

The first few questions sought to understand more about the public's travel habits. They were asked what their primary mode of transportation was. The overwhelming majority of respondents use a car for their main transportation needs. Only 4% of people who took the survey reported any public transit use. **Figure 4-41** shows this.

Figure 4-41: Primary Mode Transportation
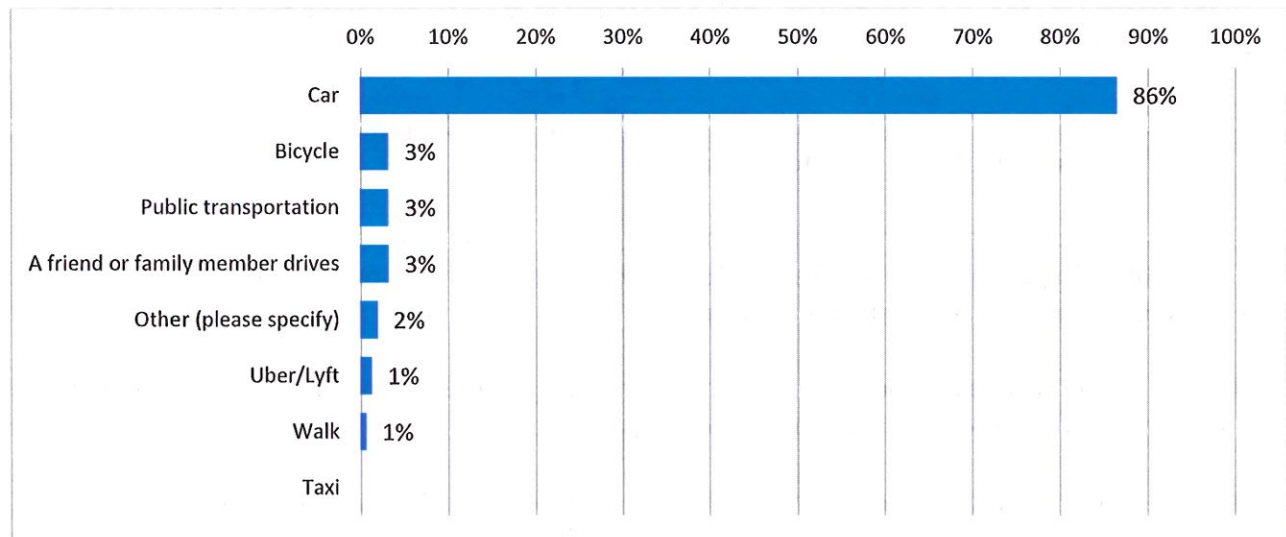
Awareness of RTA's Services

The following question asked if the greater public was aware of the services RTA provides. While 45% of people reported being unaware of the transit services RTA already provides, 55% indicated they already knew about these services. See **Figure 4-42.**

Figure 4-42: Awareness of RTA's Services
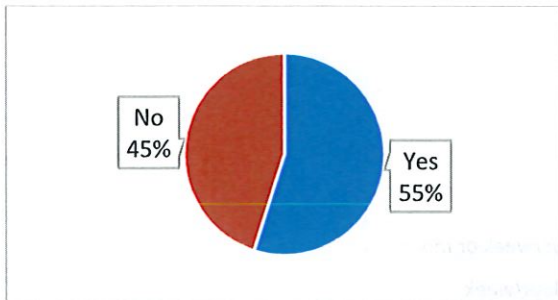
Staying on the topic of the public's transportation knowledge and habits, the community survey asked respondents if they use any of the public transit services listed on the survey. Multiple selections could be made. The top responses were WMATA Metrorail at 43%, MARC Train at 38%, and RTA at 26%. Those that rode MTA commuter buses consisted of 25% of responses. Twenty-seven percent of people also chose "other" and went into detail about their selection. Some of these other modes include Baltimore light rail, Uber/Lyft, RideOn Flash, Capital Bikeshare, and car pooling with friends. The full results can be found in **Figure 4-43**.

Figure 4-43: Transportation Services Used
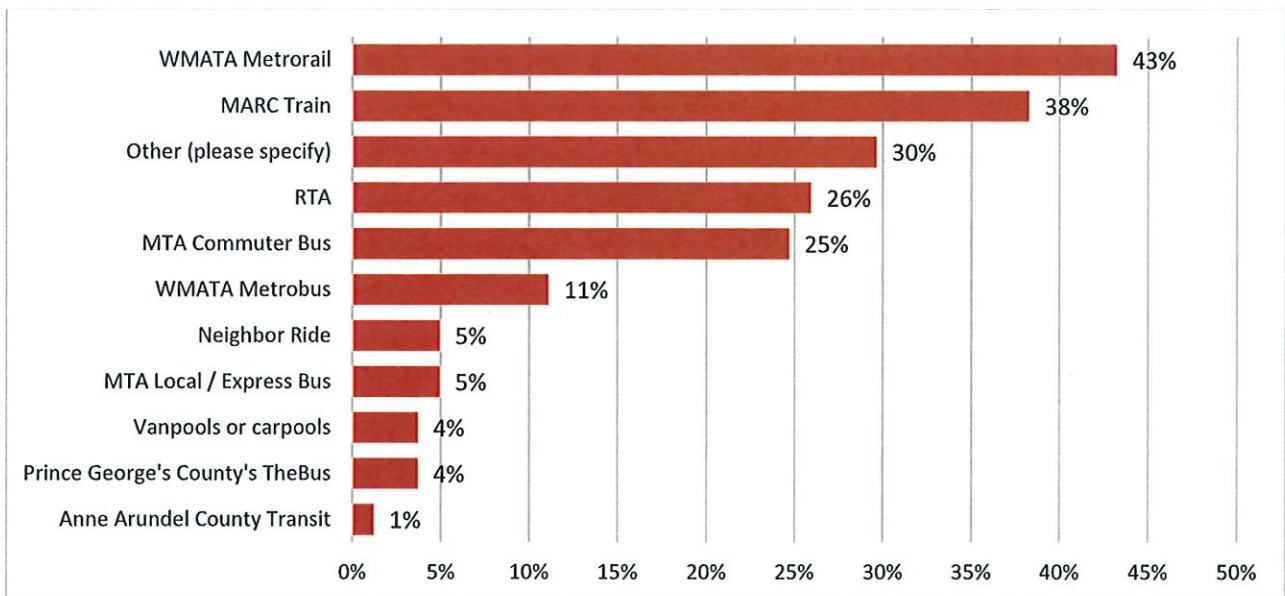
Public Transit Usage

The community survey asked that if the respondents currently use public transportation services, how frequently do they use them? Unlike the RTA Customer Survey, over 75% of respondents use public transit less than once per week. Thirteen percent of those surveyed said they use public transit services 1-2 days per week and only 8% reported using it five days or more. **Figure 4-44** shows the full results.

Figure 4-44: Public Transit Usage Frequency
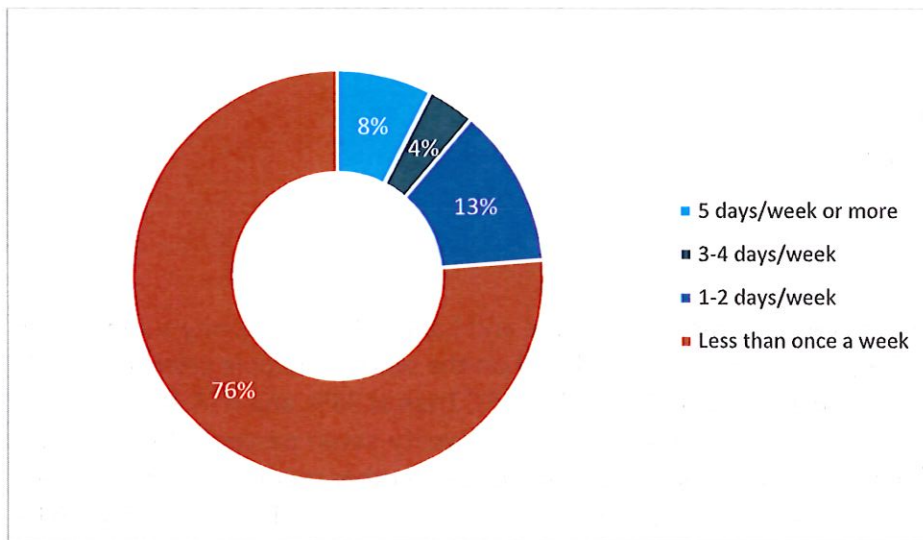
Locations Not Served by Transit

Further inquiry into the travel habits of the public, the survey asked if there were specific destinations that respondents regularly need to go to that transit does not serve. The public was almost evenly split on this topic with 47% responding with "yes," meaning RTA does not serve destinations they wish to reach, and 53% saying "No," meaning that there are no places they wish to reach that are not served by RTA. **Figure 4-45** shows this breakdown.

Figure 4-45: Destinations not Served by Public Transit
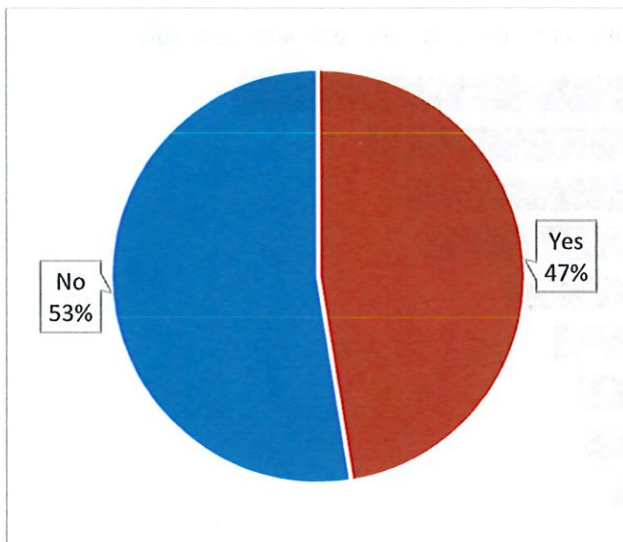
This question included a section to write in a response if "Yes" was chosen. Some of those responses include:

- "North Laurel from Laurel MARC Station."
- "Bowie town center"
- "Residential area Tamar & Snowden River Parkway"
- "Route 40 and Rolling Rd"
- "The Giant Food store located at 6020 Marshalee Dr, Elkridge MD 21075"
- "Washington, DC"
- "Rockville"

Reasons for Not Using Transit

The public was asked to choose from a list of reasons why they do not currently use public transportation. Almost half of people chose "I prefer to drive" as their reason. The second and third most common responses were "Trips via transit take too much time" and "Transit is not available near my home/work/school," respectively. Those who use public transit were asked to skip the question. Full results of the responses can be found in **Figure 4-46**.

Figure 4-46: Reasons for not Using Public Transit
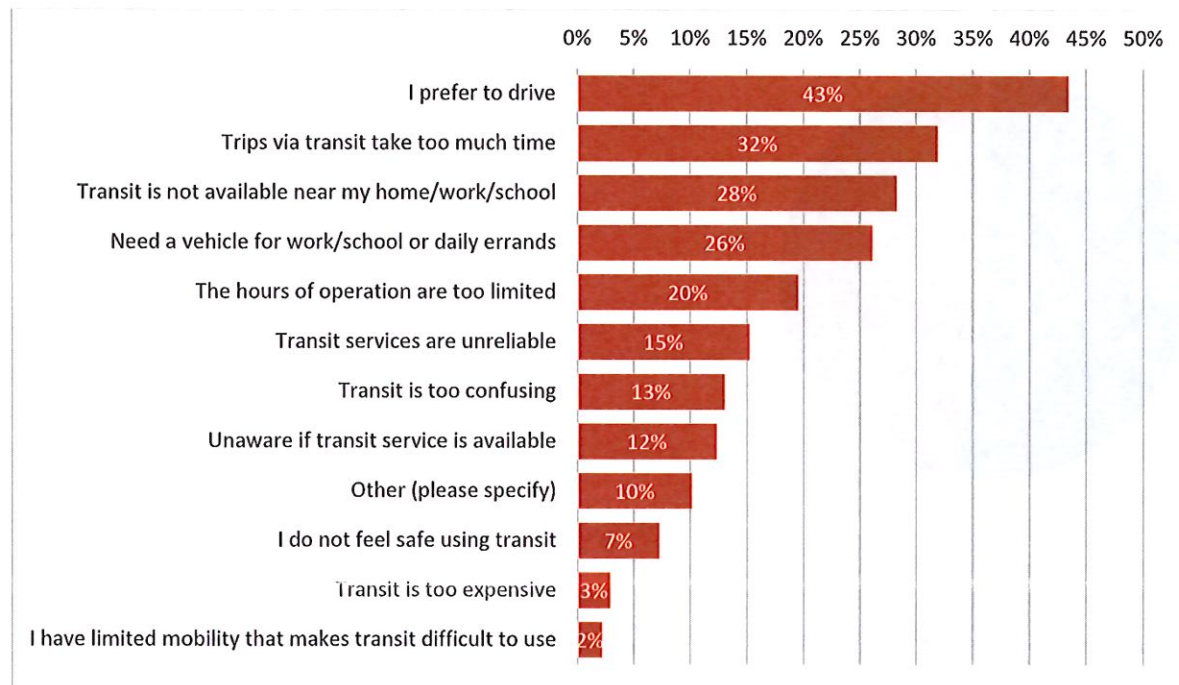
Service Improvements that will Encourage Transit Usage

Going off the previous question, the survey asked the community which improvements would be needed for them to ride public transportation. Current transit users were asked to skip this question. By and large, the most commonly desired improvement was more frequent service, at 54%. Shorter travel times, better service reliability, and bus stop shelters were among the other improvements listed. This question included an "other" response which allowed respondents to give their own opinions and suggestions. Some "other" suggestions include: "Somehow to get into DC from Columbia on weekends and non-rush hour times," "UMBC route from Howard County," "more stops in rural areas.," and "More regular service on Rt. 29 corridor from Howard County to DC." It should be noted that 27 respondents chose to skip this question. **Figure 4-47** provides details on the responses.
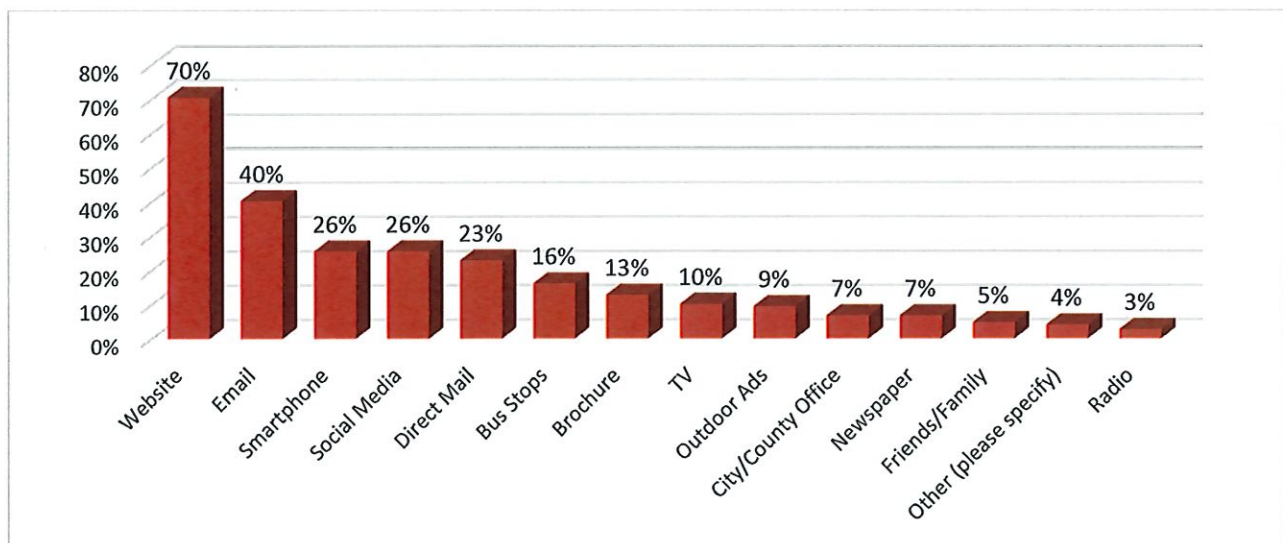
Figure 4-47: Desired Improvements

Improvement	Percentage
More frequent service	54%
Shorter travel time	43%
Improved information	31%
Longer hours of service	26%
Better service reliability	26%
Fewer transfers	25%
Other (please specify)	24%
Bus stop shelters	22%
Guaranteed ride home for emergencies/overtime	17%
Additional park and ride facilities	11%
Safer vehicles	6%
Less crowded vehicles	4%
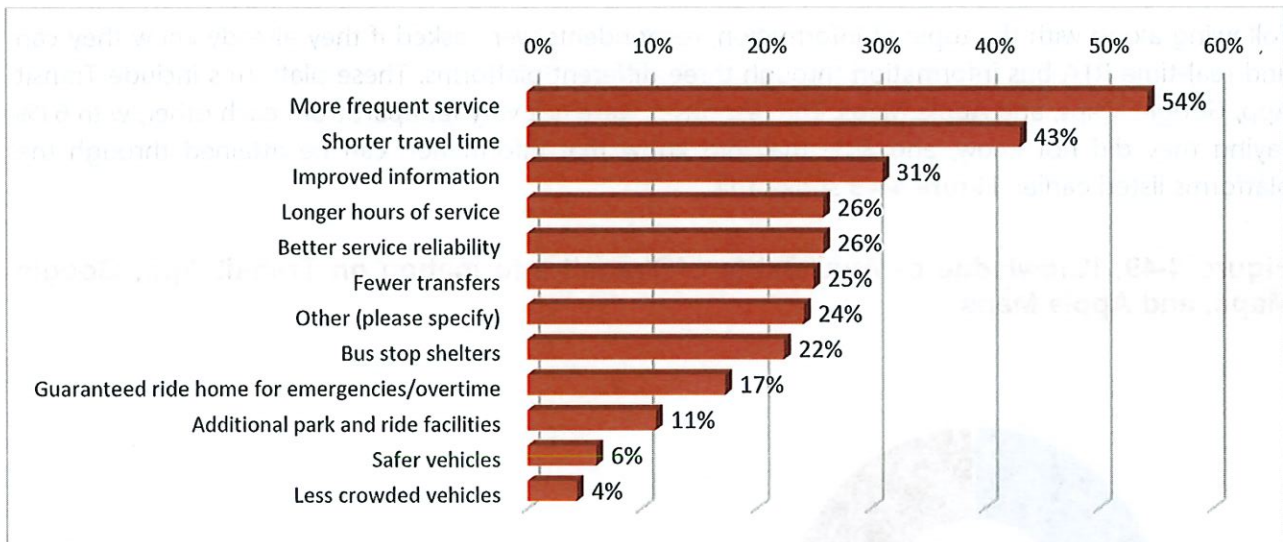
Preferred Distribution Method for Transit Information

The survey asked the community how they would like to receive information about their public transit services. Seventy-two percent reported that they would like to receive this information on RTA's website. Others would like to receive information on public transit through email, social media, smartphones, and bus stops. **Figure 4-48** shows all the options that respondents chose.

Figure 4-48: Receiving Information on Public Transit

Method	Percentage
Website	70%
Email	40%
Smartphone	26%
Social Media	26%
Direct Mail	23%
Bus Stops	16%
Brochure	13%
TV	10%
Outdoor Ads	9%
City/County Office	7%
Newspaper	7%
Friends/Family	5%
Other (please specify)	4%
Radio	3%

Awareness of Existing Transit Information

Following along with the topic of information, respondents were asked if they already knew they can find real-time RTA bus information through three different platforms. These platforms include Transit App, Google Maps, and Apple Maps. The responses were not very far apart from each other, with 61% saying they did not know, and 38% they did know that information can be attained through the platforms listed earlier. **Figure 4-49** shows this.

Figure 4-49: Knowledge of Availability of Transit Information on Transit App, Google Maps, and Apple Maps
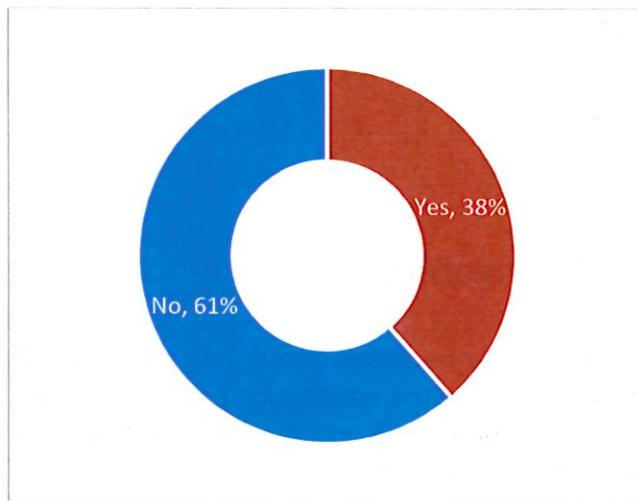
Demographic Information

Resident Zip Codes

Participants in the survey were asked what their home zip code was. The majority of people live in Columbia, Ellicott City, and Elkridge.

Vehicle Ownership

Next, the community survey asked if respondents had a driver's license. A significant portion of the respondents replied "Yes" at 95%, with only 5% responding with "No." Immediately following this question, the survey asks if the respondent has a car. The responses to this question are very similar to the last question with 90% replying "Yes" and only 10% responding with "No." **Figures 4-50** and **4-51** show these results.

Figure 4-50: Driver's License
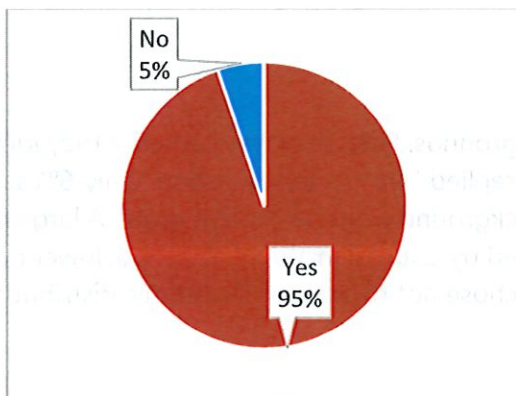
Figure 4-51: Car Ownership
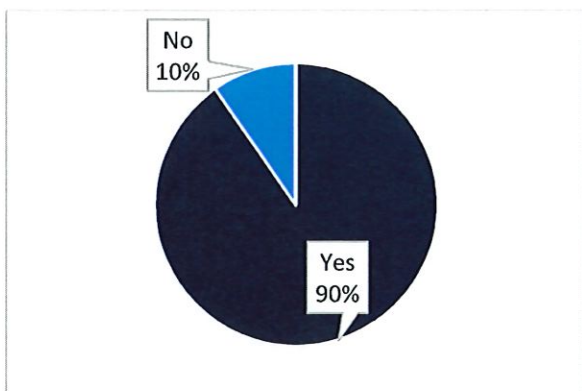
Age Distribution

In order to learn more about the community members who were surveyed, the survey asked respondents for some demographic information. To begin, participants' age was inquired. Nearly half of those surveyed selected the 49 and under, age range (including 4% between 18-24). Following that, 23% selected the 50-64 age group and 31% chose 65 or above. The breakdown can be seen in **Figure 4-52**.

Figure 4-52: Age
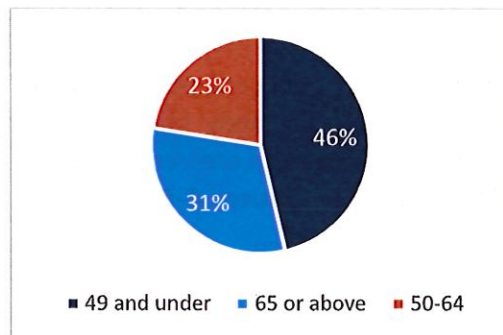
Ethnic Background

The next two questions dealt with people's ethnic backgrounds. First, they were asked if they identified as Hispanic or Latino in origin. 94% of those surveyed replied "No" to this question. Only 6% said yes. Respondents were then asked to classify their ethnic background with the choices given. A large margin of responses chose African American/Black 65%, followed by Caucasian/White at 22%. A lower number, 6%, replied to this question by choosing Asian and 8% chose not to answer. The ethnic distribution can be better seen in **Figures 4-53** and **4-54**.

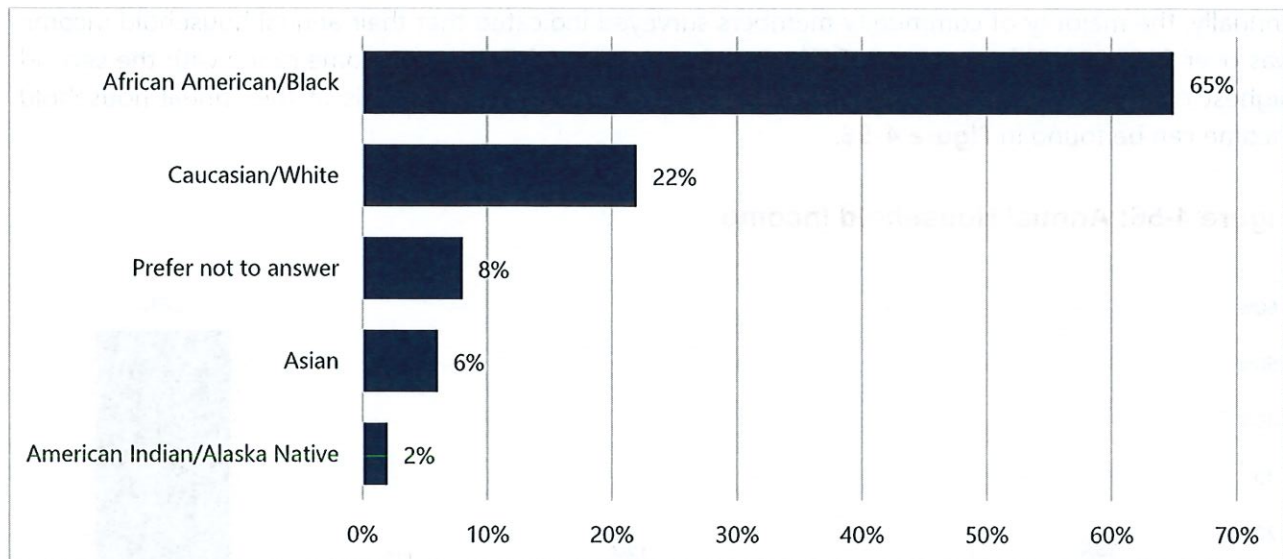**Figure 4-53: Hispanic or Latino Origin**
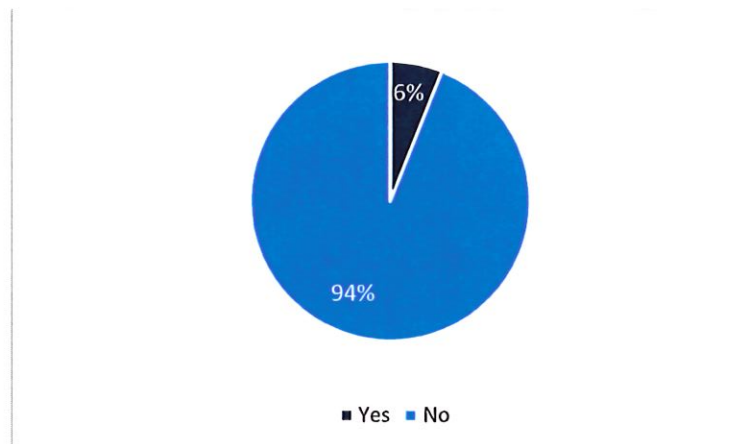
## Figure 4-54: Ethnic Background

Employment Status and Annual Household Income

Continuing with demographic information, the survey asked community members about their employment status. Well over half, or 61%, indicated that they are employed full-time. 19% said they were retired and 11% indicated they were employed part-time. Only 6% said they were students and 2% of people chose unemployed as their answer. This can be seen in **Figure 4-55.**

Figure 4-55: Employment Status
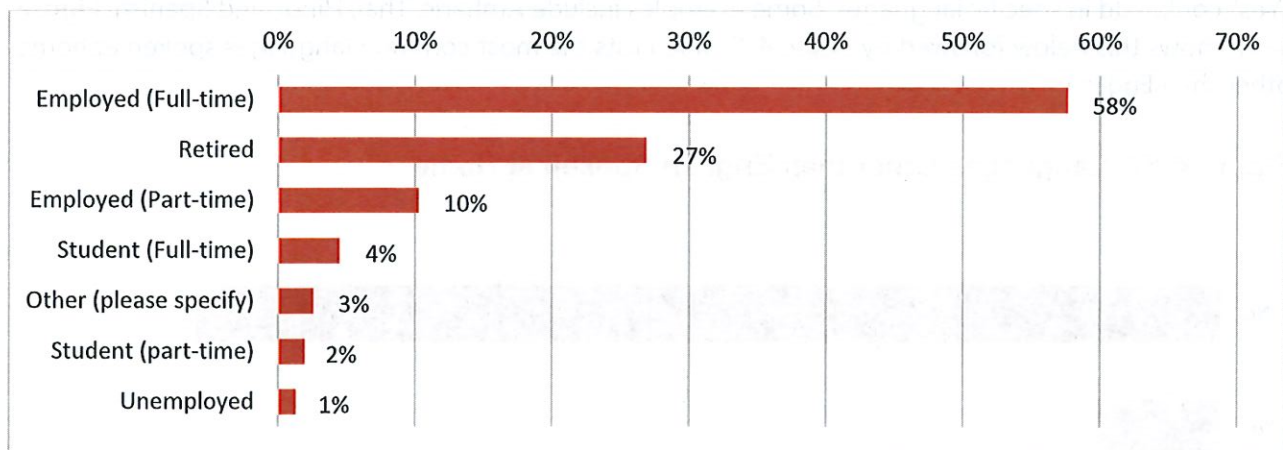
Community members who participated in the survey were then asked about their annual household income. In stark opposition to the RTA customer survey where the most riders earned less than $40,000 annually, the majority of community members surveyed indicated that their annual household income was over $100,000. This represents 56% of all those surveyed. The next income range with the second highest number of responses was $41,000-$60,000 at 13%. The full details of the annual household income can be found in **Figure 4-56**.

Figure 4-56: Annual Household Income
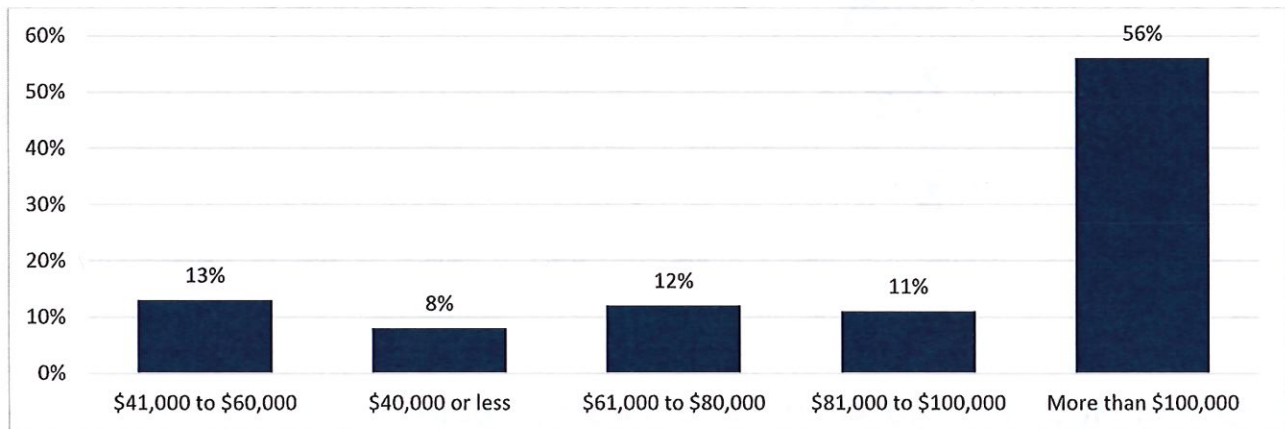
Language Spoken at Home

The last of the questions on demographics concerned languages. Specifically, the survey asked if community members speak any language other than English at home. A significant majority of participants chose "No," indicating that English is the only language spoken at home. Nine percent replied that there are other languages spoken in their households. Community members who replied "Yes" could add in specific languages. Some examples include Amharic, Thai, Hindi, and Spanish. **Figure 4-57** shows this below followed by **Table 4-2** which lists the most common languages spoken at home other than English.

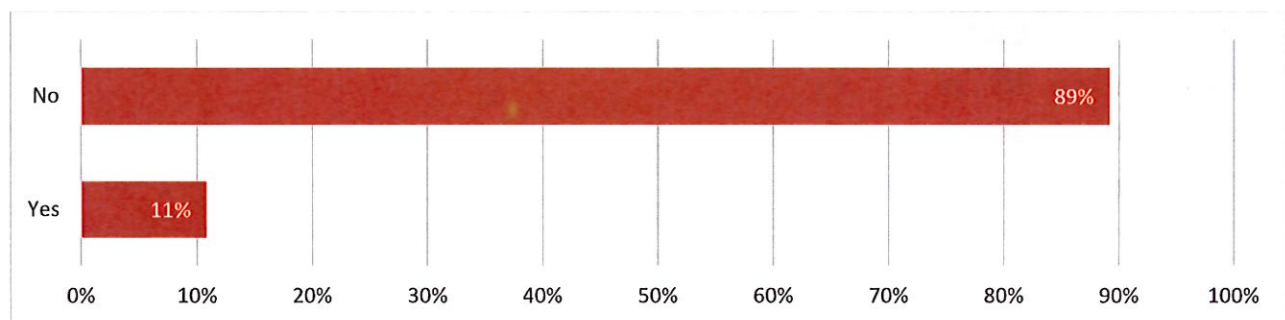## Figure 4-57: Languages Other than English Spoken at Home

Table 4-2: Languages Spoken Other than English

Language	Count
Spanish	6
Amharic	2
Russian	1
Japanese	1
Portuguese	1
French	1
Marathi	1
Hindi	1
Thai	1

Community Comments

The last part of the survey provided community members an opportunity to share their ideas, opinions, and suggestions. A significant number of comments touched on the topic of service. Some would like expanded bus service to places that currently have none. Other wish for more frequency, particularly on main corridors. The reliability of bus service was also brought up a few times. Still more commented on their desire to have reliable and convenient connections to Washington, DC and Baltimore City. Some members of the public did take time out to show their appreciation for public transit services provided by RTA. Below are some examples of comments community members left.

"Not convenient for my transportation needs."

"I will use the commuter bus or MARC when I want to go to the city during the weekday just for fun."

"It is tough to take public transit for a 2 hour and 15-minute ride when a drive takes ~25 minutes."

"Service must be the same no matter where you reside in Howard County. Drivers should be respectful and on time (have had clients late or no show due to transportation no show and no call)."

"Would like to be able to connect to MTA Routes by riding RTA more easily into the Ellicott City area."

"Thank you for taking the time and effort to expand reliable public transit."

"I'd like to see the RideOn Flash Bus service connect into Howard County. The last bus to Baltimore from Columbia Mall is 6:30 pm on Fridays and has no weekend service, I do not consider mall entertainment options because of this. BWI rail station is the best regional transit connection, RTA does not service it."

"I am very enthusiastic about reducing car dependency and would like to see local alternate transit options continue to improve."

"The buses need to stay on schedule. Too many times I've had to get an Uber because the bus came early or never came because the bus driver took a different route. I don't understand how the 403 bus would not come up Columbia Road to get to the mall."

"I rode the 503 bus five times this past fall. 2 or 3 out of 5 times there was no bike rack. The bike rack should be more reliable. I would like to have an efficient way to go by bus from Kings Contrivance to Columbia Crossing/Dobbin Center.

Survey Comparisons

While there are many similarities among the three surveys that have been covered, there are also many differences between them. The most common similarity among the groups was that the majority spoke English. However, their responses diverged sharply in some key areas: ethnic background, income, vehicle ownership, and trip purpose. Even the number of responses to the three surveys were different. This can be examined in **Table 4-3** below.

Table 4-3: Survey Responses

Survey Type	Responses
Customer Survey	174
Community Survey	160
Mobility Survey	36
Total	370

Among the sharpest differences in all three surveys was the demographic information provided by respondents. English as the primary language is the only similarity among the three groups, as seen below in **Table 4-4**.

Table 4-4: Demographic Comparisons

Category	Customer	Community	Mobility
Age	65%: 49 and Under	46%: 49 and Under	40%: 65 or above
Employment	51%: Full-Time	58%: Full-Time	53%: Retired
Income	70% Less than $40k	56% More than $100k	73% Less than $40k
Ethnicity	53%: African American	65% Caucasian	40% African American 40% Caucasian
Language	71%: English	89%: English	81%: English
Car Ownership	88%: No	9%: No	89%: No

This table shows many of the differences between the three groups. RTA customers and mobility riders made significantly less income than did members of the community by a large margin. The majority of both customers and community members were employed full-time while the majority of mobility riders were retired. The customers and mobility riders were both predominantly African American which is contrasted by the community members being predominantly Caucasian. Similar to this trend was the rates of car ownership. The customers and mobility riders had nearly identical rates of no car ownership, 88% and 89% respectively, while only 9% of community members reporting not have a car. The community members and customers shared similarities in age, with most of those groups reporting to be between the ages of 25-49. The mobility riders skewed much older, with most reporting to be the 65 and above age range.

More differences can be found in each group's usage of public transport. 63% of RTA's customers reported using transit 5 days per week or more, 47% of mobility riders used transit 3-4 days per week, and 76% of community members indicated they used transit less than once per week. A graphical comparison of these findings can be found below in **Figure 4-58**.

Figure 4-58: Transit Usage
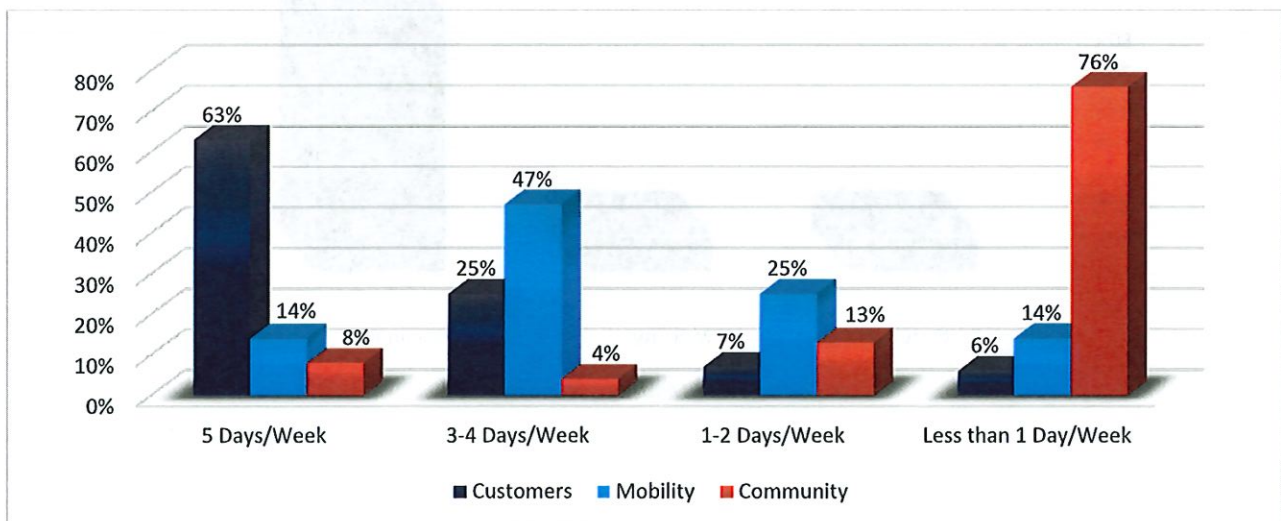
The differences in annual household income were one of the greatest differences between the groups. **Figure 4-59**, found below, shows the relationship among the majority of responses for each group.

Figure 4-59: Annual Household Income
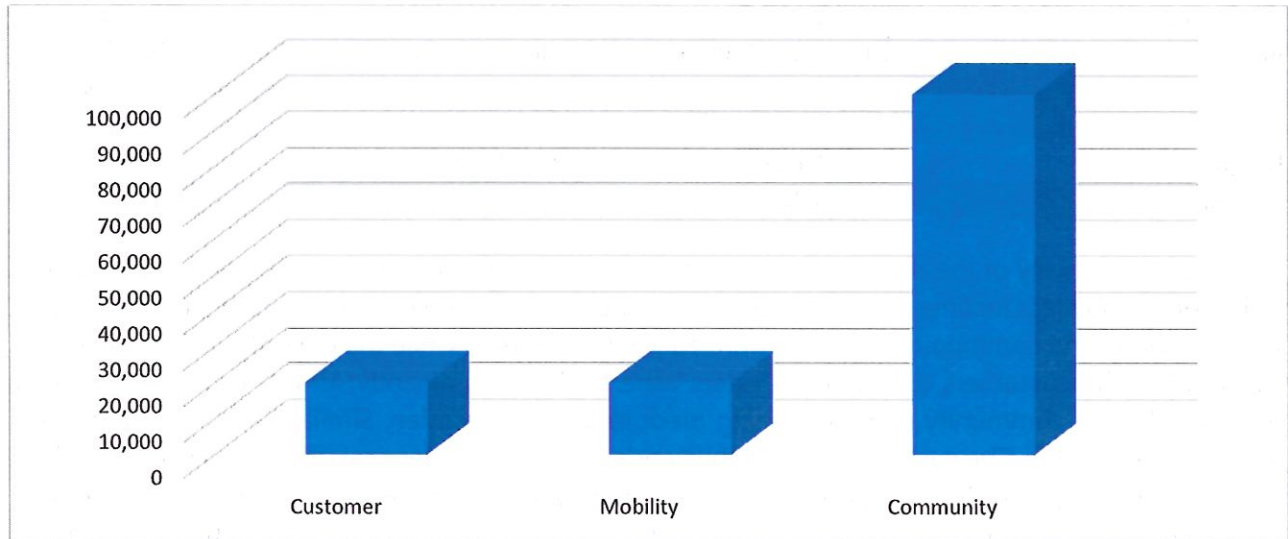
RTA customers and mobility riders were significantly less likely to own a car than the general public who completed the community survey. This is another example of a sharp divergence among these three groups of respondents. **Figure 4-61** shows the "yes" responses and can be found below.

Figure 4-60: Car Ownership
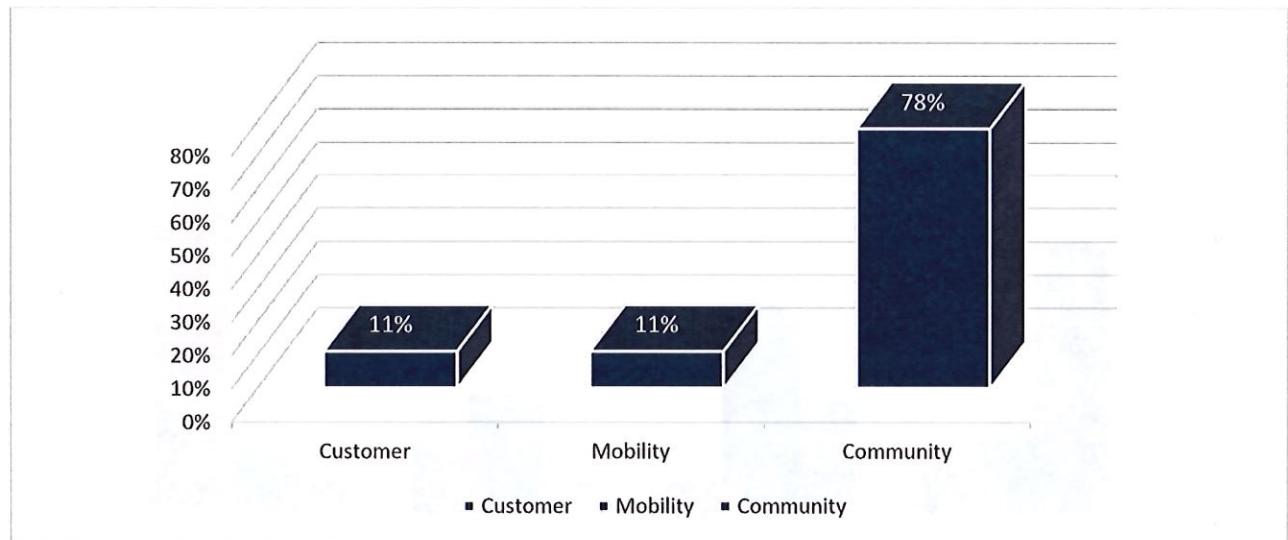
The last category to be discussed is ethnic backgrounds of the three survey respondents. Again, the majority of RTA customers and mobility riders were African American while most of the community respondents identified as Caucasian. **Figure 4-61** shows all the relationship between all three.

Figure 4-61: Ethnicity
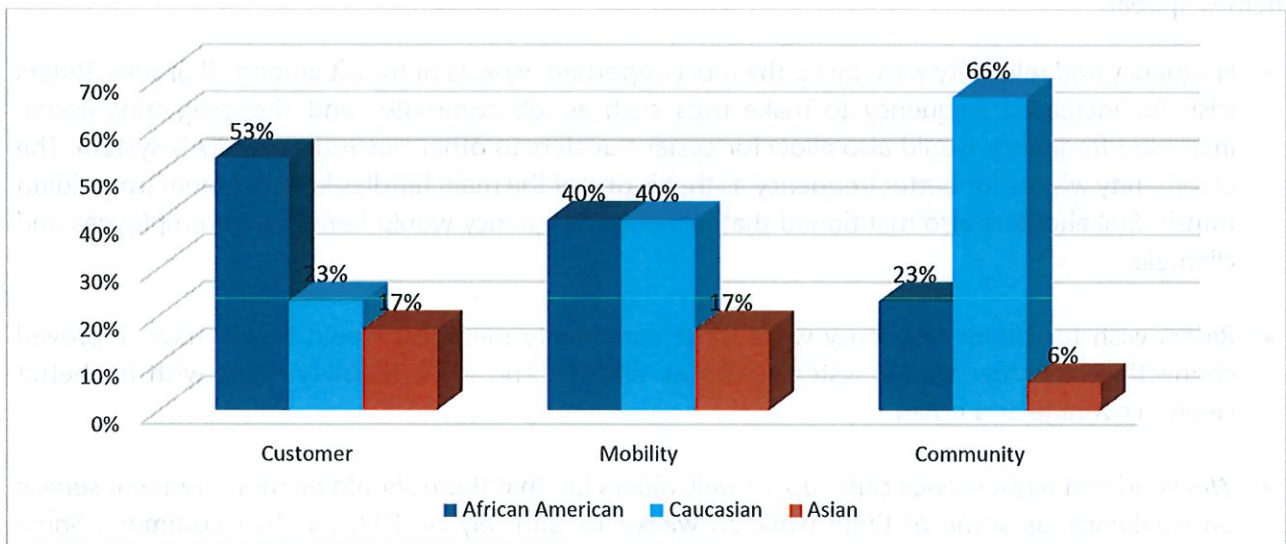
Summary of Community Feedback

The TDP asked for the community's input through several different avenues including public meetings, surveys, pop-up events, and stakeholder questionnaires. The public, riders, and stakeholders all provided valuable and necessary feedback for RTA. After examining this feedback in detail, several themes appear.

- Frequency and reliability were by far the most important aspects of transit among all groups. Riders wish for increased frequency to make trips such as job commutes and shopping trips easier. Increased frequency would also allow for easier transfers to other bus routes in RTA's system. The community wishes for better frequency as that is one of the main hurdles keeping them from riding transit. Stakeholders also mentioned that increased frequency would benefit their employees and clientele.

- Riders wish for better frequency while most community members would like to have improved connections to other transit systems such as WMATA and MTA. Mobility riders wish for better service coverage and hours.

- Weekend and night service came up, as well. Riders felt that there should be more frequent service on weekends, as some of them work on weekends and rely on RTA for their commute. Some mobility riders also wish to see weekend and evening services to better fit their needs.

- The condition of buses is also an issue that was mentioned. Riders wanted buses to be cleaned better and for more reliable vehicles with fewer breakdowns, leading to delays.

- There are some destinations that all groups would like to see served. The top destination that is currently not served by RTA is BWI Airport. Maple Lawn, Scaggsville, and Clarksville were also mentioned frequently as places people would like to go that are not currently served by RTA.

- Despite some dramatically different demographics among the groups, all of them want to see better and increased service in RTA's area and expansions to unserved destinations.