

Chapter 4

Existing Services

OVERVIEW OF EXISTING TRANSIT SERVICES

This TDP is intended to address future transit services over a five-year period in Howard County and Anne Arundel County, and this chapter provides an overview of existing transit services in the region. Howard and Anne Arundel Counties are jointly served by the Regional Transit Agency of Central Maryland (RTA), which provides fixed-route service in both counties, ADA complementary paratransit, and demand-response service for seniors and persons with disabilities in Howard County. The RTA also provides fixed-route service in Prince George's County, which is addressed in this plan as it is an integral part of RTA service offerings.

The study region is also served by other transit providers. Central Maryland is located between the Washington, D.C. and Baltimore metropolitan areas, and there are transit routes from each urban area linking them with the RTA, including Maryland Transit Administration (MTA) services from Howard and Anne Arundel Counties to Baltimore; and Washington Metropolitan Area Transit Authority (WMATA) services providing connections from Anne Arundel County (Thurgood Marshall Baltimore-Washington International Airport (BWI) and Crofton) to the Washington Metro rail system; and in the City of Laurel and Prince George's County. In addition, there are regional services provided by the MTA through its MARC commuter rail services and commuter bus program. There are also intercity connections in the region, including Amtrak.

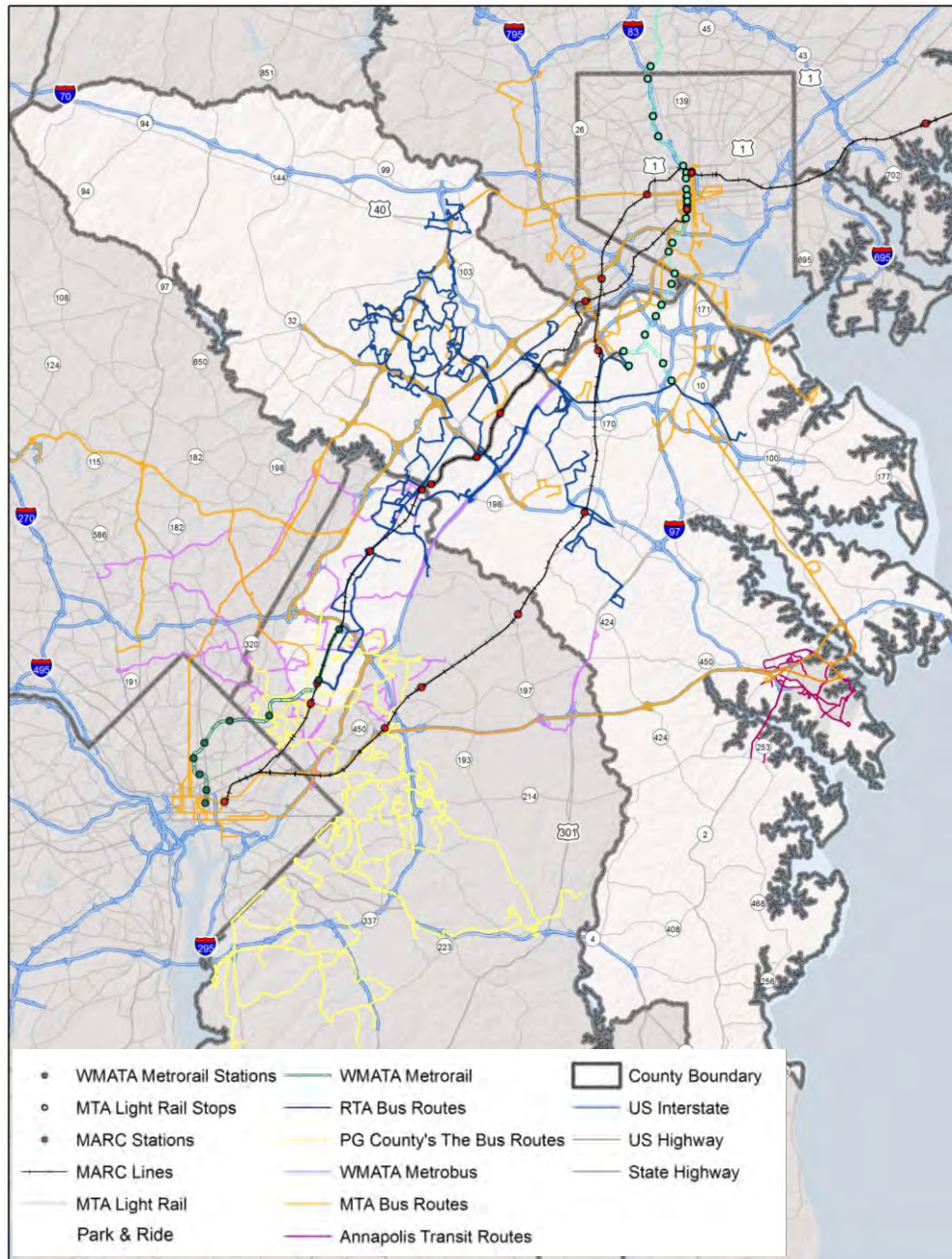
Specialized transportation services, including demand-response service for seniors and persons with disabilities are provided by the Anne Arundel County Office of Transportation (OOT), and similar services are provided by the RTA for Howard County. Other specialized transportation providers focus on the needs of particular populations. Finally, there are numerous private taxi firms, and ridesourcing or transportation network companies (TNCs) such as Uber and Lyft.

This section begins by examining the transit services provided by the RTA in Anne Arundel, Howard and Prince George's Counties, an overview of transit services in the region, and a review of transportation services, such as human service and specialized transportation.

RTA - EXISTING SERVICES

The RTA operates fixed-route and demand-response services within Anne Arundel, Howard, northern Prince George's Counties and the City of Laurel (see Figure 4-1). The RTA service area is located in the largely suburban counties between Baltimore and Washington, D.C. in Maryland. Transit connections are located throughout the service area and to connect passengers to Baltimore and Washington, D.C.

Figure 4-1: Central Maryland RTA Service Area



Fixed-Route Service

The RTA operates fifteen fixed routes throughout its service area. The routes are divided into numbering sequences:

- 200 series routes serve Anne Arundel County; Arundel Mills Mall serves as the primary transfer location,
- 300 series routes serve the City of Laurel; Towne Centre at Laurel serves as a major transfer location,
- 400 series routes serve Howard County; Columbia Mall serves as the primary transfer location, and
- 500 series routes provide regional connections between counties.

The route identifications in this TDP (and on the RTA website) use this numbering system, and also have an identification based on the historical route designation. Before consolidation under the RTA, Howard County routes were designated with a color. Routes in Anne Arundel and Prince George's Counties, once operated by Corridor Transportation Corporation and branded as Connect-a-Ride (and later operated by Central Maryland Regional Transit), had letter designations. To help long-term users identify routes, these designations are also used, for example, 401/Green (now RTA 401, formerly Howard Transit Green) or 201/J (now RTA 201, formerly the J route).

Service Span and Frequency

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 range between 30 and 120 minutes. Off-peak headways vary between 30 and 150 minutes.

On Saturdays, fourteen of the fifteen routes operate, with service spanning from 7 a.m. to 11 p.m. Headways vary between 60 and 120 minutes. On Sundays, eight of the fifteen routes operate with service spanning from 9 a.m. to 10 p.m. Headways range between 60 and 150 minutes. Table 4-1 presents the service characteristics, which include service area, origin-destination, days of service, span of service, and headways.

Detailed route-level characteristics are described in the Route Profiles Section.

Table 4-1: Fixed-Route Service Characteristics

Route	Service Area (County)	Service Characteristics			
		Day	Span	Peak Headways	Off-Peak Headways
201/J: Arundel Mills Mall – Freetown Village	Anne Arundel County	Weekday	6:30am – 11:55pm	45 min.	90 min.
		Saturday	8:30am – 11:00pm	-	90 min.
		Sunday	10:30am – 7:20pm	-	120 min.
202/K: Arundel Mills Mall – Odenton MARC Station	Anne Arundel County	Weekday	6:15am – 11:10pm	45 min.	120 min.
		Saturday	8:45am – 11:00pm	-	120 min.
		Sunday	9:00am – 9:50pm	-	120 min.
203/M1: Odenton MARC Station – Piney Orchard (The 203 was replaced by the 504 on 10/1/17)	Anne Arundel County	Weekday	7:50am – 6:50pm	30 min.	-
203/M2: Odenton MARC Station – Crofton Village (The 203 was replaced by the 504 on 10/1/17)	Anne Arundel County	Weekday	7:15am – 7:25pm	60 min.	-
301/A: Towne Centre at Laurel – South Laurel	Prince George’s County	Weekday	6:25am – 7:20pm	60 min.	60 min.
		Saturday	9:25am – 7:20pm	-	60 min.
302/G: Towne Centre at Laurel – College Metro Station	Prince George’s County	Weekday	6:00am – 9:15pm	60 min.	60 min.
		Saturday	9:00am – 7:15pm	-	60 min.
		Sunday	10:00am – 6:50pm	-	60 min.
401/Green: Columbia Mall – Clary’s Forest	Howard County	Weekday	5:40am – 11:10pm	30 min.	60 min.
		Saturday	7:40am – 10:10pm	-	60 min.
		Sunday	9:00am – 6:52pm	-	60 min.
404/Orange: Columbia Mall – Kings Contrivance Shopping Center	Howard County	Weekday	6:00am – 10:27pm	60 min.	60 min.
		Saturday	7:27am – 8:23pm	-	60 min.
		Sunday	9:00am – 6:42pm	-	60 min.
405/Yellow: Columbia Mall – North Chatham	Howard County	Weekday	6:00am – 10:11pm	60 min.	60 min.
		Saturday	7:45am – 8:11pm	-	120 min.
406/Red: Columbia Mall – Howard County Complex	Howard County	Weekday	5:35am – 11:19pm	30 min.	30 min.
		Saturday	7:37am – 10:20pm	-	60 min.
		Sunday	9:10am – 6:21pm	-	120 min.
407/Brown: Columbia Mall – Kings Contrivance Shopping Center	Howard County	Weekday	5:30am – 11:27pm	60 min.	60 min.
		Saturday	8:00am – 10:20pm	-	60 min.
		Sunday	9:05am – 6:48pm	-	120 min.
408/Gold: Columbia Mall – MD	Howard County	Weekday	5:53am – 10:17pm	60 min.	120 min.

Route	Service Area (County)	Service Characteristics			
		Day	Span	Peak Headways	Off-Peak Headways
Food Center		Saturday	7:53am – 10:17pm	-	120 min.
409/Purple: Towne Centre at Laurel – Elkridge Corners Shopping Center	Howard County	Weekday	6:00am – 9:55pm	60 min.	60 min.
		Saturday	9:00am – 9:50pm	-	120 min.
501/Silver: Columbia Mall – BWI Marshall Airport	Howard County, Anne Arundel County	Weekday	5:28am – 11:00pm	60 min.	60 min.
		Saturday	7:00am – 11:00pm		60 min.
		Sunday	9:00am – 7:00pm	-	120 min.
502/B: Towne Centre at Laurel – Arundel Mills Mall	Prince George's County, Anne Arundel County	Weekday	6:00am – 10:50pm	60 min.	60 min.
		Saturday	9:00am – 10:25pm		120 min.
		Sunday	10:00am – 7:50pm	-	150 min.
503/E: Towne Centre at Laurel – Columbia Mall	Prince George's County, Howard County	Weekday	5:30am – 9:15pm	60 min.	60 min.
		Saturday	8:30am – 8:15pm	-	60 min.

Source: Central Maryland RTA Route Maps & Schedules, 2017

Table 4-2 presents 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).

It should be noted that this table was generated from several different sources because it was determined that that this combination would present the most accurate depiction of the relative performance of the routes. Although it combines FY 2016 ridership with FY 2018 costs by route, the best information available on service hours by route was available only from the revised FY 2018 RTA system cost allocation. The FY 2018 overall system cost per service hour is projected to be \$75.43. There were only very minor changes in the routes and schedules over this period, so the combination of data from different periods should have little impact on the relative performance of the different routes. The revenue estimates are based on average FY 2016 revenue per passenger boarding by jurisdiction times the number of boardings. The revenue per jurisdiction varies because of the fact that RTA still has two different fare systems, a holdover from operating two separate systems.

Finally, the local cost recovery percentage is the sum of fare revenue and local subsidy for each route. The variance across routes reflects differences in the funding sources. Howard County provides a higher percentage of local funding for routes it funds, while the routes primarily serving Prince George's County are largely funded with state dollars so the local cost recovery percentage is basically equivalent to the percentage covered by passenger fares.

Table 4-2: System Wide Performance Statistics and Performance

Route	Unlinked Passenger Trips ⁽¹⁾	Vehicle Service Hours ⁽²⁾	Financial			Farebox Recovery Ratio	Local Recovery Ratio ⁽⁶⁾	Passengers per Service Hour ⁽⁷⁾	Cost per Trip ⁽⁸⁾
			Operating Cost ⁽³⁾	Farebox Revenue ⁽⁴⁾	Fare Revenue per Passenger ⁽⁵⁾				
201/J	77,556	8,092	\$610,380	\$105,017	\$1.35	17%	68.2%	9.58	\$7.87
202/K	93,254	9,109	\$687,092	\$126,273	\$1.35	18%	68.2%	10.24	\$7.37
203/M	8,938	3,514	\$265,061	\$12,103	\$1.35	5%	68.1%	2.54	\$29.66
301/A	34,149	4,497	\$339,209	\$46,240	\$1.35	14%	19.5%	7.59	\$9.93
302/G	114,453	9,752	\$735,593	\$154,978	\$1.35	21%	19.6%	11.74	\$6.43
401/Green	179,063	8,922	\$672,986	\$140,393	\$0.78	21%	70.2%	20.07	\$3.76
404/Orange	84,258	9,388	\$708,137	\$66,062	\$0.78	9%	70.4%	8.98	\$8.40
405/Yellow	81,230	9,558	\$720,960	\$63,688	\$0.78	9%	70.1%	8.50	\$8.88
406/Red	171,876	19,905	\$1,501,434	\$134,758	\$0.78	9%	63.7%	8.63	\$8.74
407/Brown	128,783	11,399	\$859,827	\$100,971	\$0.78	12%	70.2%	11.30	\$6.68
408/Gold	42,682	7,830	\$590,617	\$33,464	\$0.78	6%	70.4%	5.45	\$13.84
409/Purple	61,080	7,933	\$598,386	\$47,889	\$0.78	8%	53.9%	7.70	\$9.80
501/Silver	194,107	16,357	\$1,233,809	\$152,188	\$0.78	12%	70.2%	11.87	\$6.36
502/B	77,673	10,188	\$768,481	\$105,175	\$1.35	14%	19.5%	7.62	\$9.89
503/E	92,850	14,169	\$1,068,768	\$125,726	\$1.35	12%	19.5%	6.55	\$11.51
TOTAL	1,441,952	150,613	\$11,360,739	\$1,414,926	\$0.98	12%	54.8%	9.22	\$7.88

Successful
Acceptable
Needs Review

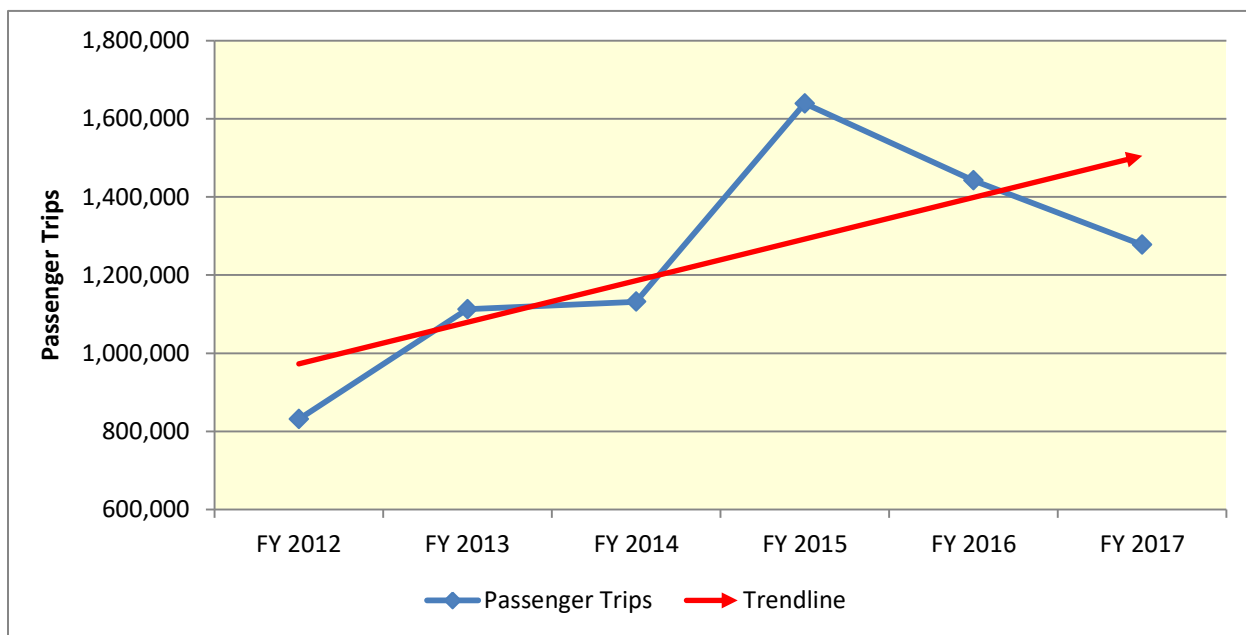
Notes:

- (1) From FY 2016 MTA Form 2A.
- (2) Vehicle Service Hours by Route from RTA FY 18 Cost Allocation.
- (3) Operating cost estimated by taking total fixed-route operating cost from FY 2018 Cost Allocation, dividing by total service hours (from the same document) to get fixed-route operating cost per service hour. Includes Management Fee.
- (4) Average revenue calculated from Form 2A data by summing revenue and ridership in two categories: the former CTC routes, and the former Howard Transit routes.
- (5) Fare revenue per passenger calculated by dividing estimated revenue per route by Form 2A ridership by route.
- (6) Local operating ratio taken from Form 2A verbatim.
- (7) Passengers per revenue hour developed by dividing ridership by route from the Form 2A by estimated revenue hours.
- (8) Cost per trip calculated by dividing estimated cost per route by Form 2A ridership.

Fixed-Route Ridership

Total system ridership has had a long-term growth trend, though it has dropped in the recent past. Figure 4-2 depicts the overall trend. The recent decline could be related to several factors — bus transit ridership both nationally and regionally has dropped over the past year or two. This is generally attributed to the impact of low gasoline prices (which attracts a shift to auto use) and the growth of TNCs such as Uber and Lyft which offer demand-responsive transportation. In the case of the RTA, ridership is also likely affected by a decline in service reliability related to the aging fleet.

Figure 4-2: RTA Total Fixed-Route Ridership, FY 2012-FY 2017



Ridership growth has generally followed an increase in the service provided, with service hours also expanding during this period. However, as can be seen in Figure 4-3, the amount of service has continued on this trend even with the recent short-term decline in ridership, which has resulted in a decrease in productivity (measured in terms of passenger trips per service hour), as shown in Figure 4-4.

Figure 4-3: RTA System Wide Fixed-Route Annual Service Hours, FY 2012-FY 2017

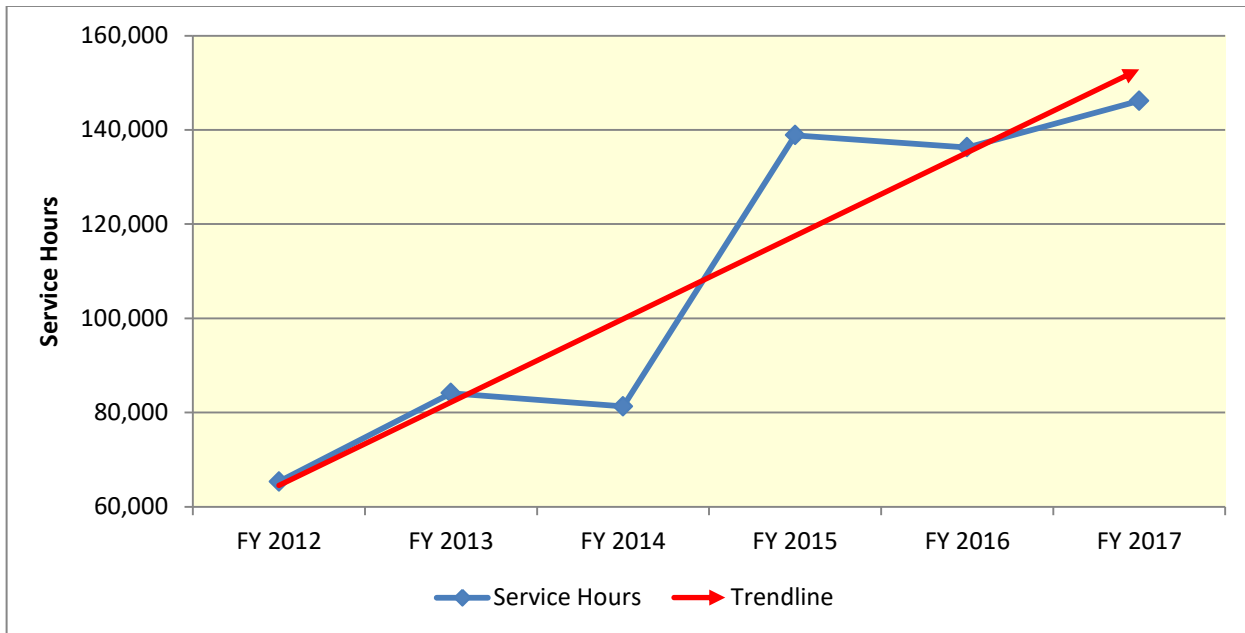


Figure 4-4: RTA System Wide Fixed-Route Trips per Service Hour, FY 2012-FY 2017

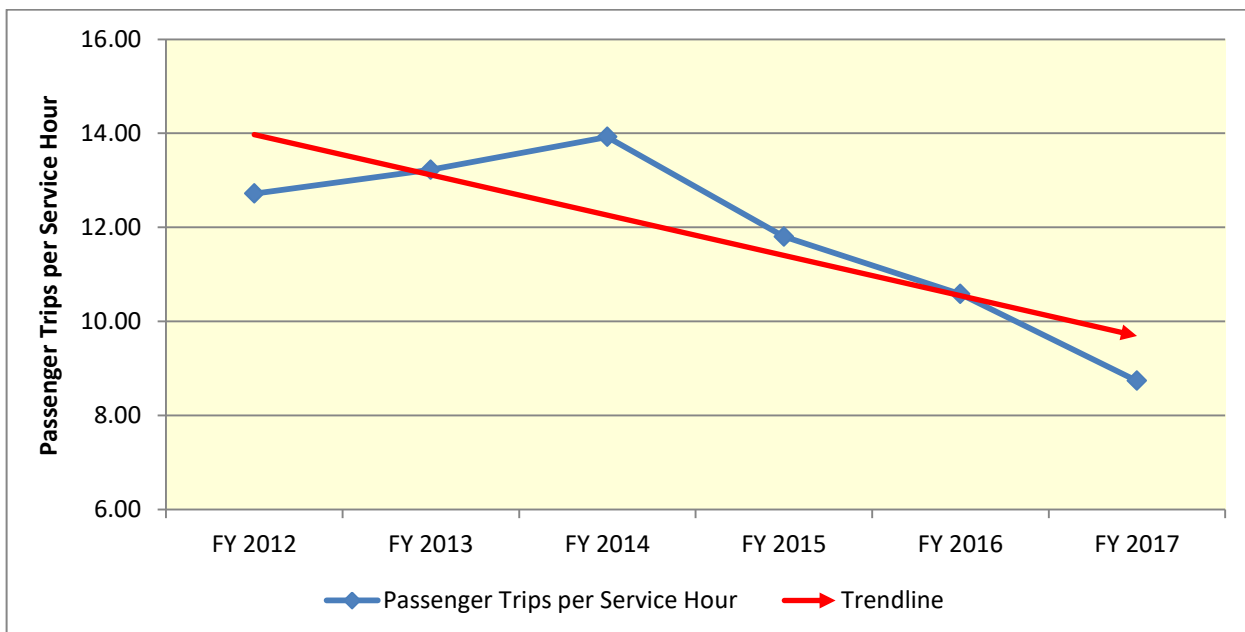


Figure 4-5 displays the fixed-route ridership ranking by route. Notable findings are:

- The 501/Silver ranks first and the 203/M ranks last in passenger boardings. It should be noted that the 203/M was discontinued effective October 1, 2017, replaced by a new route, the 504. The data used in this chapter was collected prior to the change, but it provides support for the elimination of the 203/M.
- System wide, there are an average of 96,130 boardings per route, and ten of the fifteen routes are below that average.
- The former Howard County routes account for 65% and the former Connect-a-Ride routes account for 35% of the boardings.
- After the 501/Silver regional route, three Howard County routes – 401/Green, 406/Red, and 407/Brown rank second, third, and fourth in ridership, respectively.

Figure 4-5: RTA Fixed-Route Ridership by Route

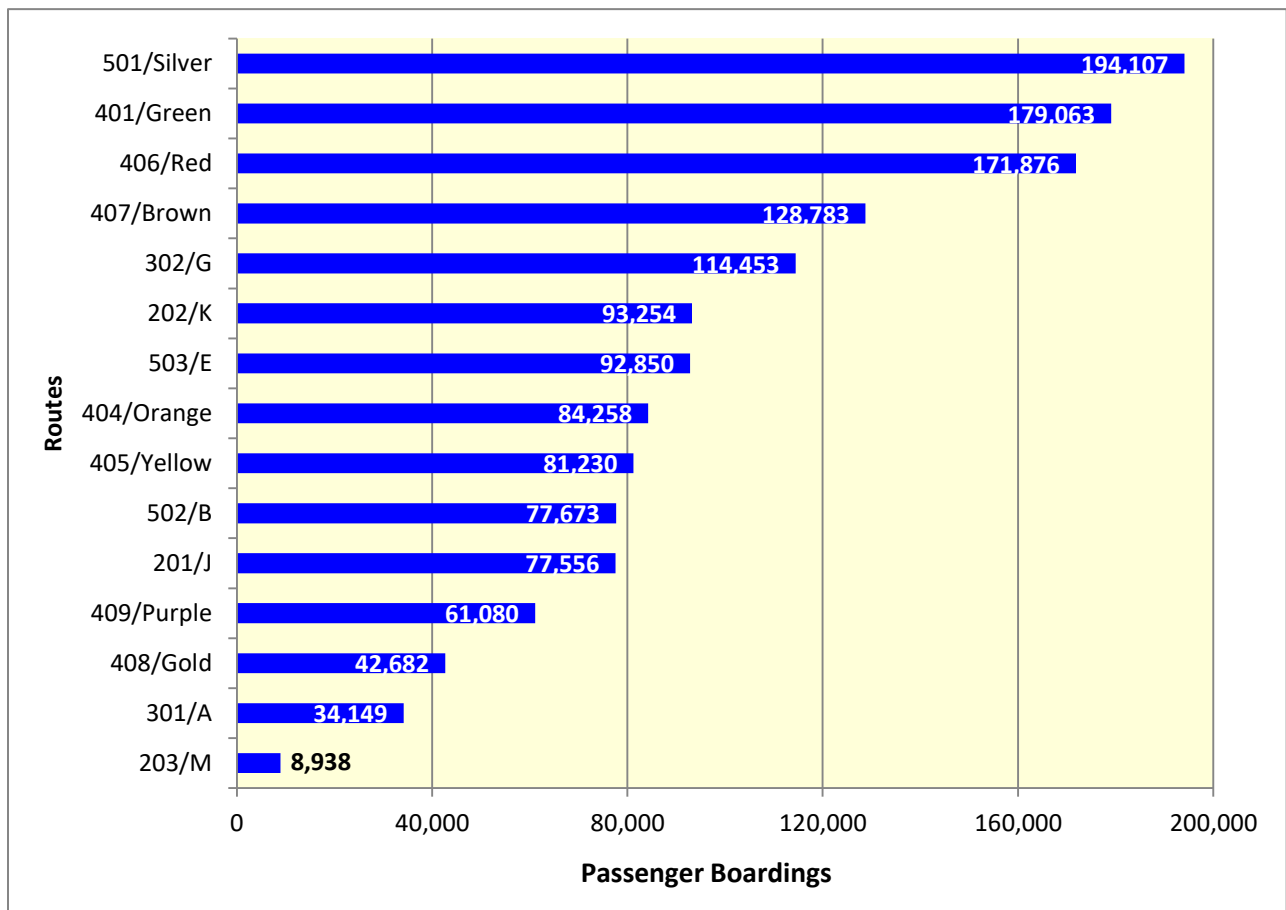
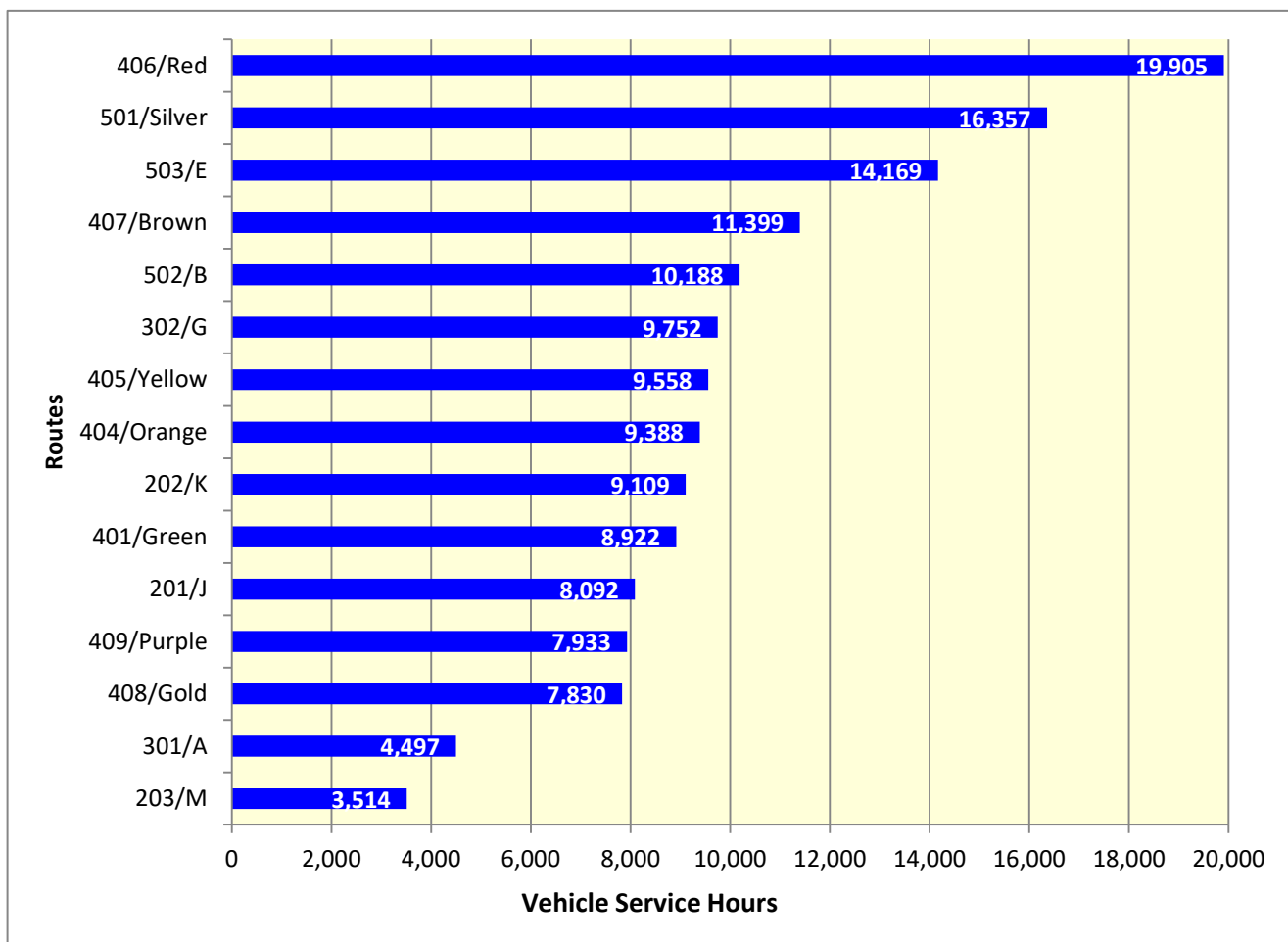


Figure 4-6 displays the vehicle service hours ranking by route. Notable findings are:

- The 406/Red provides 19,905 service hours, the most of the routes. This is 16% of the system wide hours supplied.
- The 203/M (now replaced by the 504) provided 3,514 service hours, the fewest of the routes. This was 2% of the system wide hours supplied.
- Howard County routes (400 series) account for 61% and other RTA (200, 300, and 500 series) account for 39% of the operating cost.

Figure 4-6: RTA Fixed-Route Vehicle Service Hours by Route

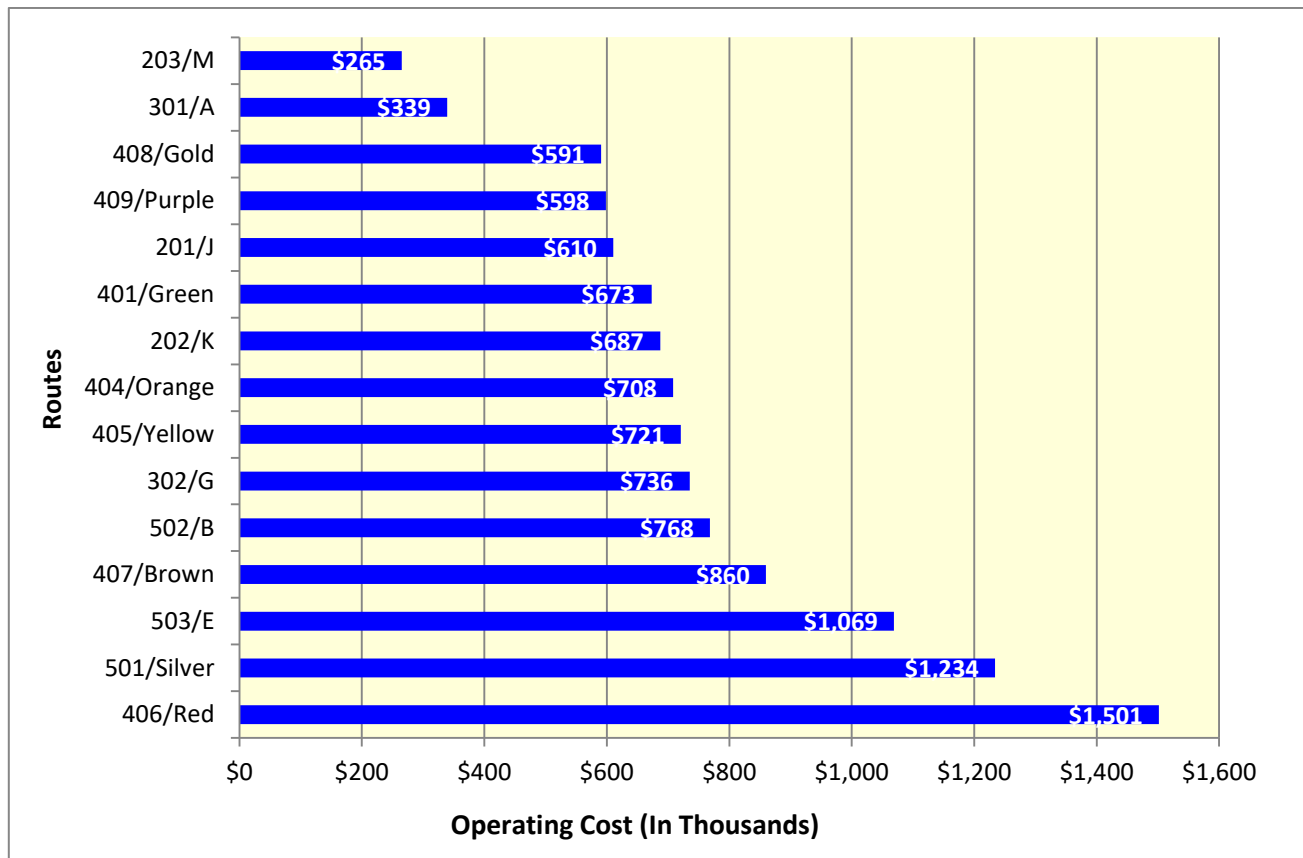


Financials

Figure 4-7 presents the operating cost ranking by route. The rankings (from lowest cost to highest) are the reverse of the number of service hours, as the average cost per service hour is applied to the services to estimate route level costs. Consequently:

- The 203/M (now replaced by the 504) was the cheapest bus route to operate, accounting for 2% of the operating cost.
- The 406/Red is the most expensive bus route to operate, accounting for 13% of the operating cost.
- Howard County routes (400 series) account for 61% and other RTA routes (200, 300, and 500 series) account for 39% of the operating cost.

Figure 4-7: RTA Fixed-Route Operating Cost by Route

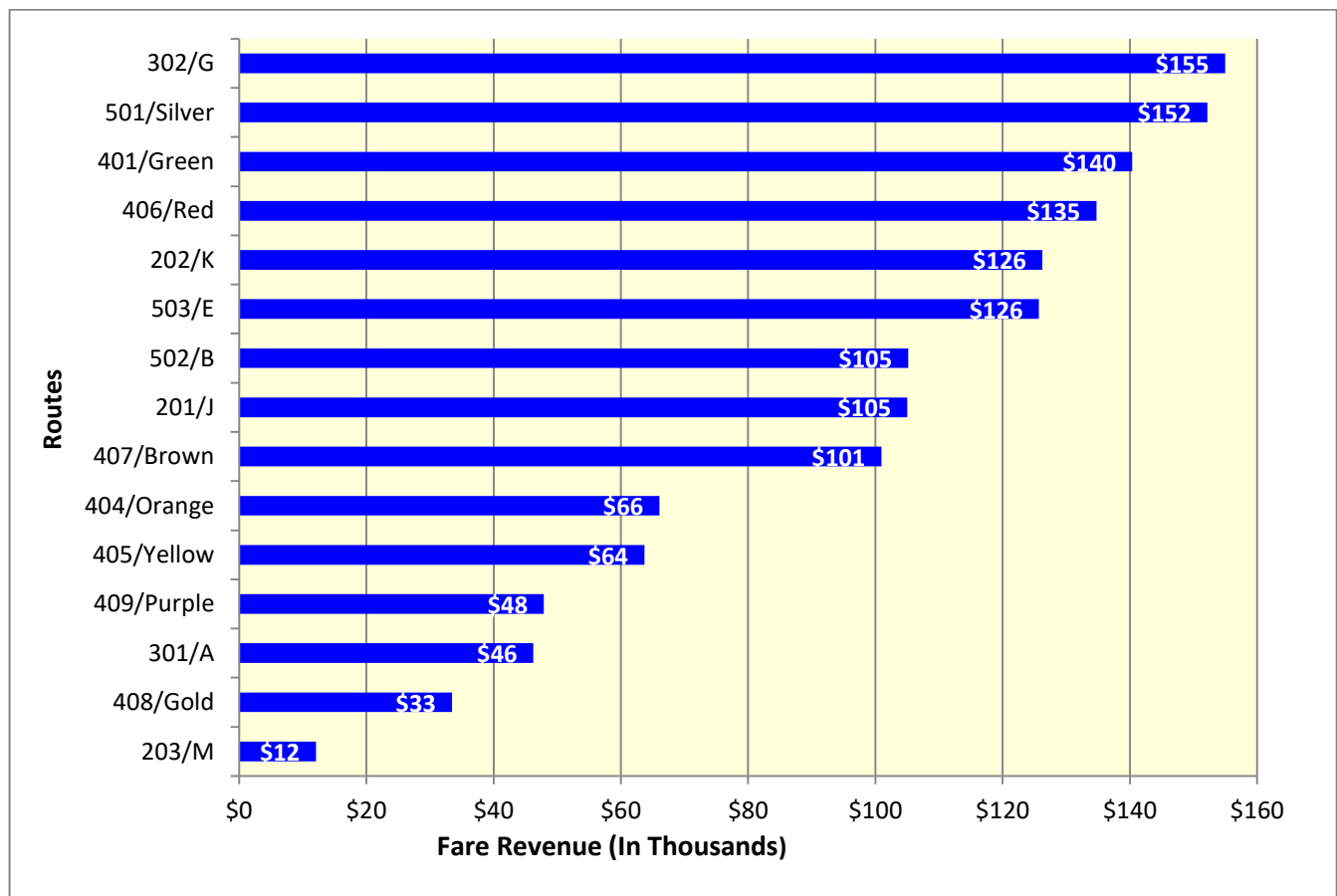


Fare Revenue

Figure 4-8 displays the fare revenue ranking by route. Notable findings are:

- The 302/G ranks 1st in fare revenue, accounting for 11% of the system wide fares.
- The 203/M (now replaced by the 504) ranked last in fare revenue, accounting for less than 1% of the system wide fares.
- Howard County routes (400 series) account for 52% of all fare revenue, and the Anne Arundel and Prince George's routes (200, 300, and 500 series) account for 48% of the fare revenue.

Figure 4-8: RTA Fixed-Route Fare Revenue by Route

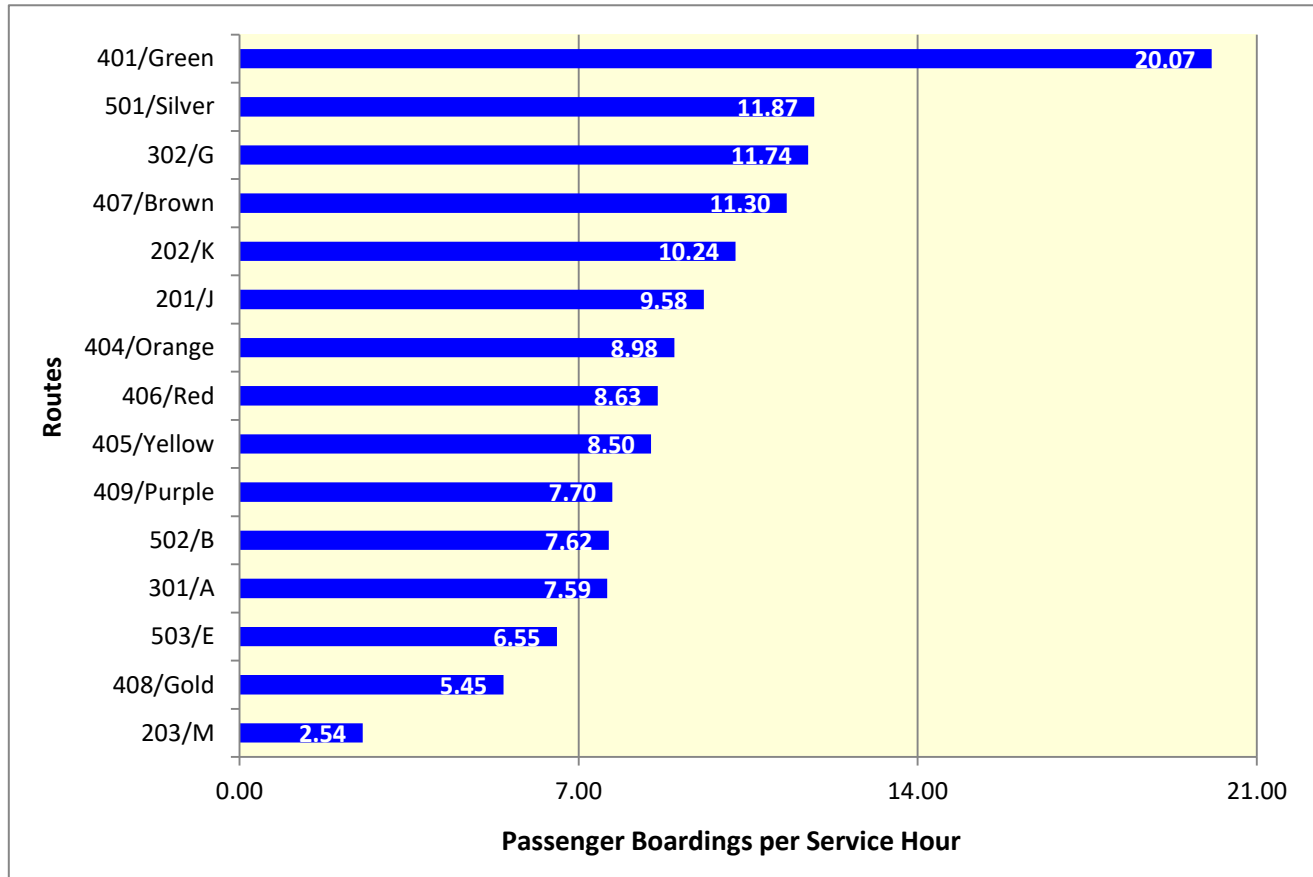


Passenger Boardings per Service Hour

Figure 4-9 displays passenger boardings per service hour, ranked by route. Notable findings are:

- The 401/Green transported 20.07 passengers per hour, the highest ranking route.
- After the 401/Green Route, passenger boardings per service hour decrease significantly. Thirteen of the other routes rank between 5.45 and 11.87 passenger boardings per service hour, nine of the routes are lower than the system average of 9.22 boardings per hour.
- The 203/M (now replaced by the 504) ranked last, with 2.54 boardings per service hour.

Figure 4-9: Passenger Boardings per Service Hour by Route

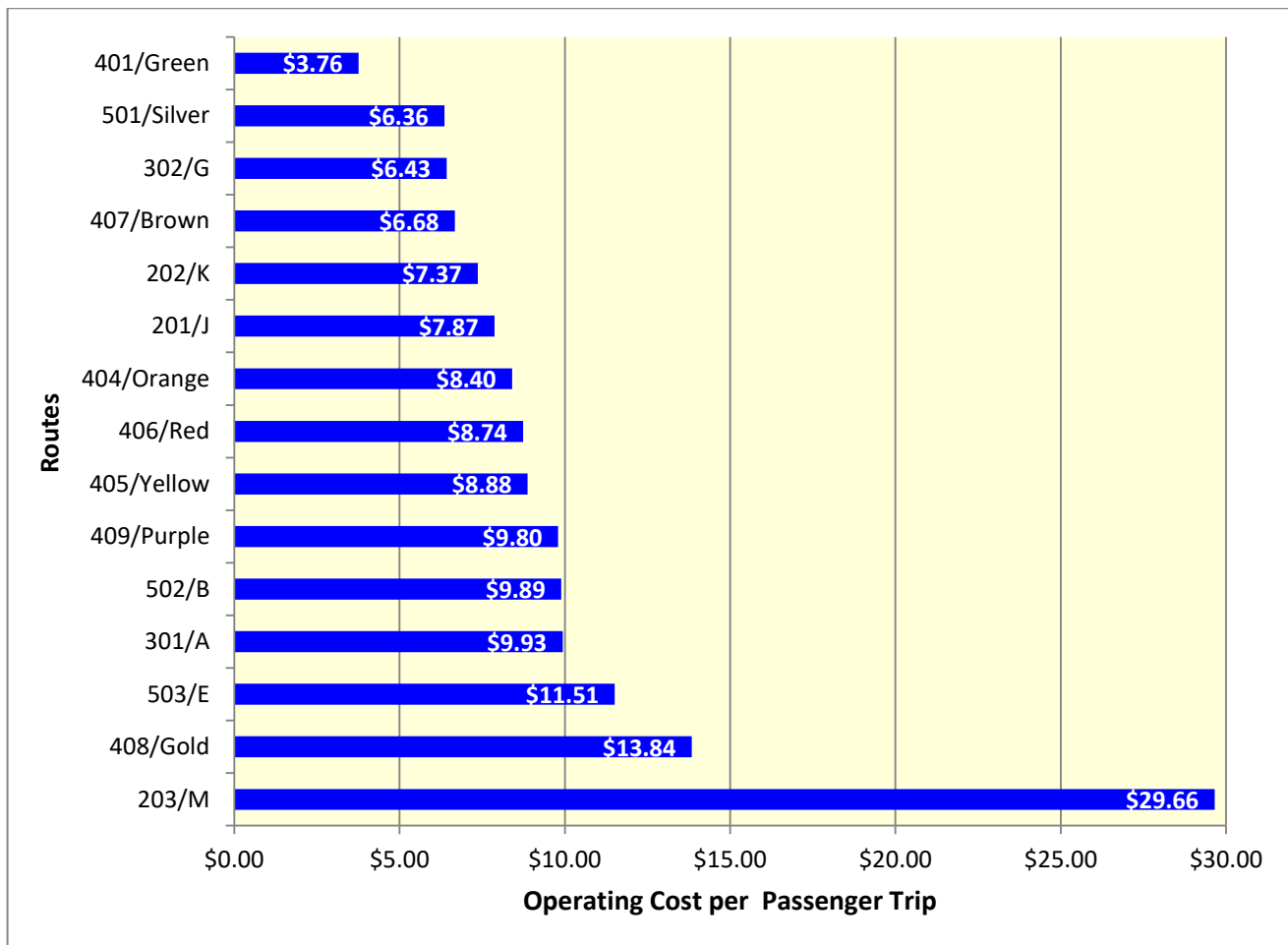


Operating Cost per Passenger Trip

Figure 4-10 displays operating cost per trip ranking by route. Notable findings are:

- The 401/Green ranks lowest in operating cost per trip.
- The 203/M (now replaced by the 504) operating cost per passenger trip ranked the highest.
- Eleven of the routes have an operating cost per passenger trip ranging between \$6.36 and \$9.93.

Figure 4-10: Operating Cost per Passenger Trip by Route

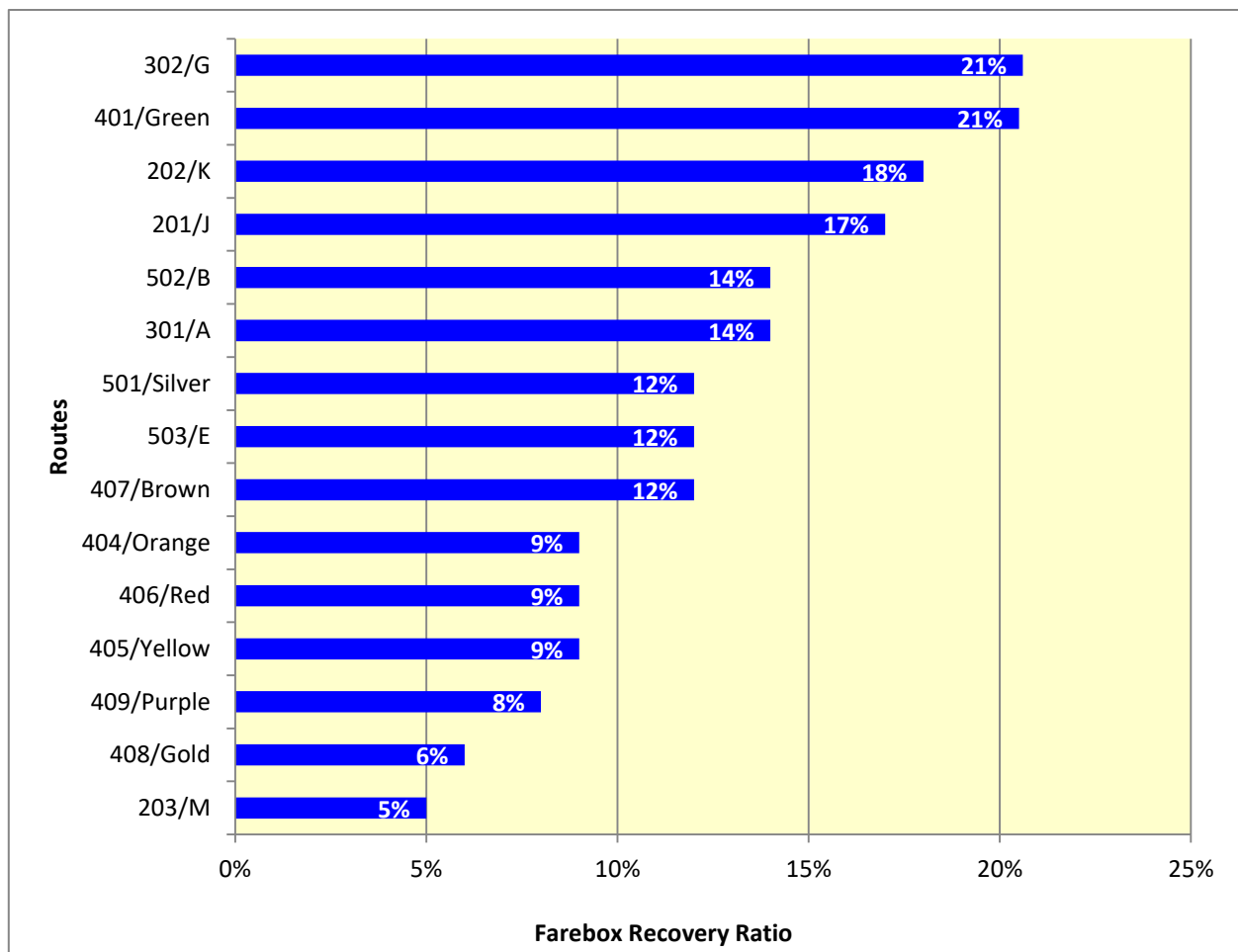


Farebox Recovery Ratio

Figure 4-11 displays the farebox recovery ratio ranking by route. Notable findings are:

- Both the 302/G and 401/Green farebox recovery ratios are 21%, the highest ranking among the routes.
- The remaining farebox recovery ratios vary from 5% to 18%.
- The system average is 12%, with six of the routes below that level.

Figure 4-11: Farebox Recovery Ratio by Route



On-Time Performance

System wide on-time performance was calculated using Howard County's Next Bus Schedule Adherence by Route report for September 2016. Table 4-3 summarizes the results by route. Service on a route is considered early if it 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 is the percentage of time points with early or late departures during September 2016, and the number is the number of time points checked for that route with early or late departures during that month.

For the system as a whole, on weekdays 18 percent of bus departures were more than a minute early, and 34% of bus departures were more than five minutes late. Forty-nine percent of departures were on time (between one-minute early and five minutes late). However, there are several routes that have much worse performance—the 503/E shows 75% late departures, the 302/G is late 71% of the time (based on this data). Also, based on the same data set, 15% of all departures system wide were over ten minutes late (which could include scheduled departures that were completely missed).

Overall on-time performance on weekdays and Saturdays is similar—49% of departures were on-time. The variation among the routes was greater than by day of the week. Overall 19% of departures were more than a minute early, and 32% percent were more than five minutes late—so the less-peaked traffic on a Saturday apparently allows slightly faster running.

For comparison, 75% of Baltimore's core bus routes are listed as on-time in MTA's Performance Improvement web page, although MTA does not share how it defines on-time. At WMATA, the most recent "Scorecard" report states that overall Metrobus services are operating 77% on time, defined as no more than two minutes before scheduled time, and not more than seven minutes after scheduled time. WMATA's goal is 79%. WMATA's definition of on-time makes it easier to achieve a higher percentage attainment.

RTA does not have an adopted goal or standard for on-time performance, but its 48-49% on-time performance is in need of improvement based on user input and comparison to regional peers. This is particularly important for the RTA services, as a high percentage of users must transfer between buses due to the dispersed nature of the region's population and destinations. The system is designed to facilitate timed transfers, but with relatively low frequencies, missing a transfer can easily double a rider's travel time. It is likely that the poor condition of the fleet is responsible for a significant portion of the late departures, due to breakdowns in service, delays required to swap out vehicles, or missed trips resulting from not having enough buses to service all the schedules.

Table 4-3: System Wide On-Time Performance

Route	Percentage of Time Points		Number of Time Points	
	Early	Late	Early	Late
Weekday				
201/J	8%	53%	176	1128
202/K	42%	13%	505	157
203/M	32%	21%	771	501
301/A	13%	51%	19	74
302/G	14%	71%	107	544
401/Green	15%	29%	786	1537
404/Orange	11%	41%	205	752
405/Yellow A	27%	21%	592	468
405/Yellow B	18%	33%	325	604
406/Red	19%	30%	1095	1739
407/Brown	12%	39%	541	1699
408/Gold	12%	33%	175	484
409/Purple	10%	45%	258	1119
501/Silver	18%	32%	772	1394
502/B	41%	24%	219	128
503/E	14%	75%	66	348
Weekday Average	18%	34%	6612	12676
Saturday				
201/J	34%	3%	61	5
202/K	25%	38%	67	102
301/A	26%	42%	8	13
302/G	15%	72%	31	146
401/Green	25%	18%	125	88
404/Orange	16%	21%	46	60
405/Yellow A	20%	39%	25	49
405/Yellow B	23%	25%	62	68
407/Brown	13%	20%	71	107
408/Gold	16%	32%	54	107
501/Silver	3%	53%	10	164
502/B	54%	18%	49	16
503/E	14%	76%	21	116
Saturday Average	19%	32%	630	1041

Route Profiles

This section of the TDP includes a complete route profile documenting service characteristics and performance. It includes information from the on-board survey of riders on that route, including trip purpose, transfer activity, demographic characteristics, least satisfying aspects of service, and key improvements desired. Each profile presents the following:

Service Area Description

- Where does the route operate?
- What are the key trip generators the route serves?
- What are the connecting routes and transit services (WMATA and MTA)?

For each route, there is a table or figure that presents:

- Strengths and Challenges
- Service and Operating Characteristics
- Route alignment to include ridership by stop and identification of major activity centers
- Travel characteristics
- Demographic and Socioeconomic Characteristics, and
- Rider satisfaction

The route profiles conclude with identifying themes from the rider surveys.

Route 201/J: Arundel Mills – Freetown Village

Service Area Description

Route 201/J provides daily service within northern Anne Arundel County. The route originates at Arundel Mills Mall and provides connections to Routes 202/K, 501/Silver and 502/B, MTA LocalLink Route 75 and MTA Commuter Bus Route 201. From the mall, the route travels along Dorsey Road toward Cromwell Light Rail Station, connecting with MTA LocalLink 70 and light rail service. From Cromwell Station, the route travels along Baltimore-Annapolis Boulevard to Sun Valley Shopping Center, and service terminates at Freetown Village. Service to ITT Tech in Hanover has been discontinued, as the school is closed.

Table 4-4: Route 201/J Strength and Challenges

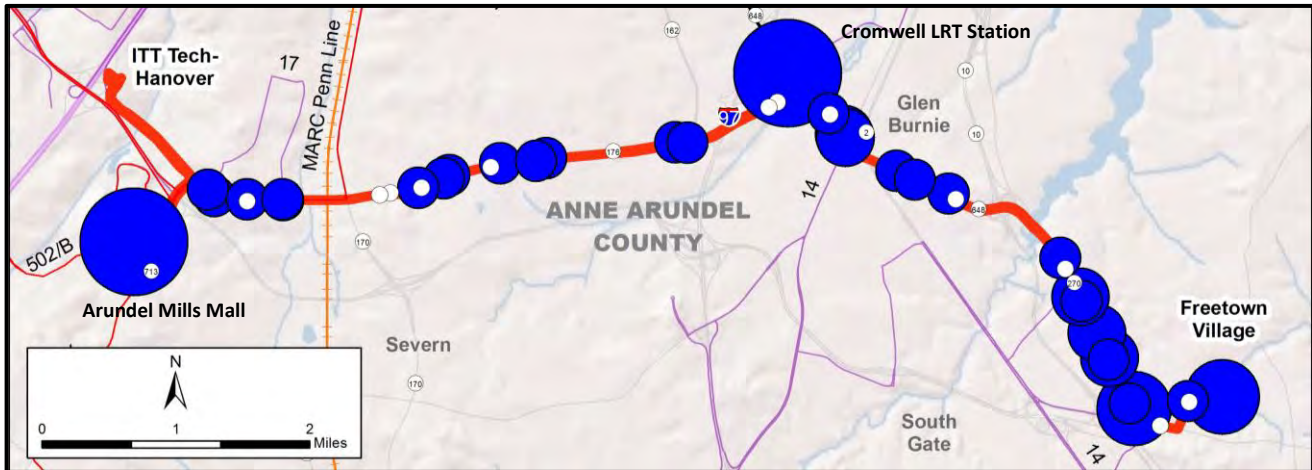
Strengths	Challenges
- Serves Arundel Mills Mall, one of the largest activity centers and employment centers in the service area. - Serves Cromwell Light Rail Station which allows passengers to connect to MTA services to Baltimore.	Short layover times.

Table 4-5: Route 201/J Service Operating Characteristics

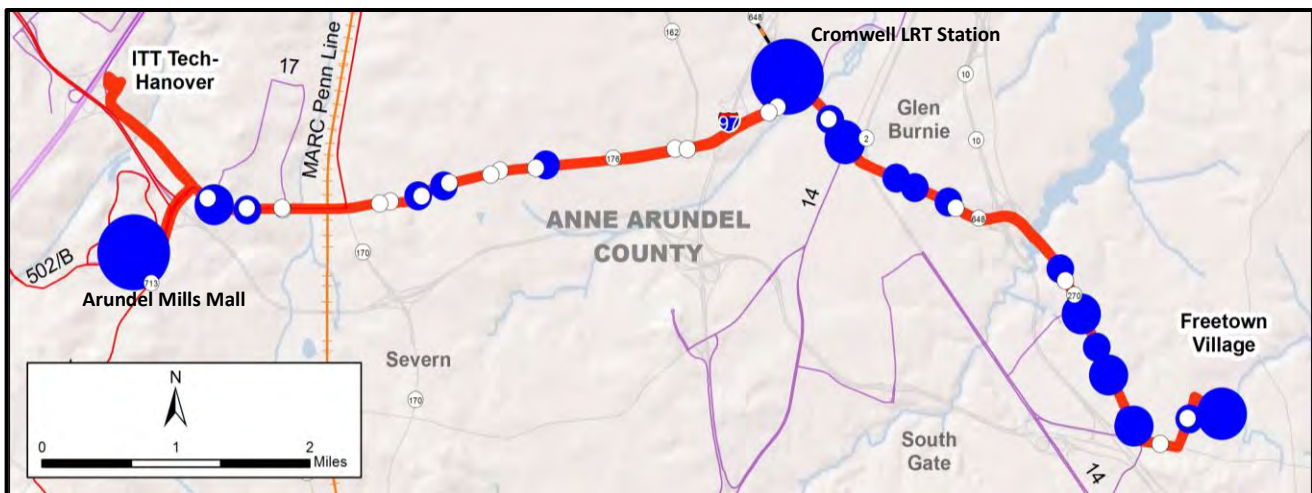
Service and Operating Characteristics		Weekdays	Saturday	Sunday
Service Span		6:30 am – 11:55 pm	8:36 am – 10:58 pm	10:33 am – 7:20 pm
Frequency (minutes)	Peak	45	-	-
	Off-Peak	75	75	120
One-way Trips		18	9	4
Cycle Time (minutes)		80	80	80
Layover Time (minutes)		0	0	7
Daily Service Hours		24.00	12.00	5.33

Figure 4-12: Route 201/J - Ridership by Stop

Weekday



Saturday



Legend

- Route
- Other RTA Routes
- WMATA Metrobus
- MTA Bus Routes
- MARC Lines
- MTA Light Rail
- WMATA Metrorail
- WMATA Metrorail Stations
- MTA Light Rail Stops
- MARC Stations
- County Boundary

Ridership by Stop

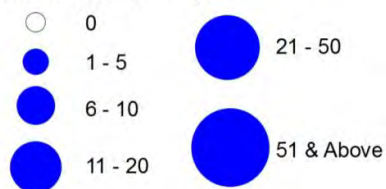


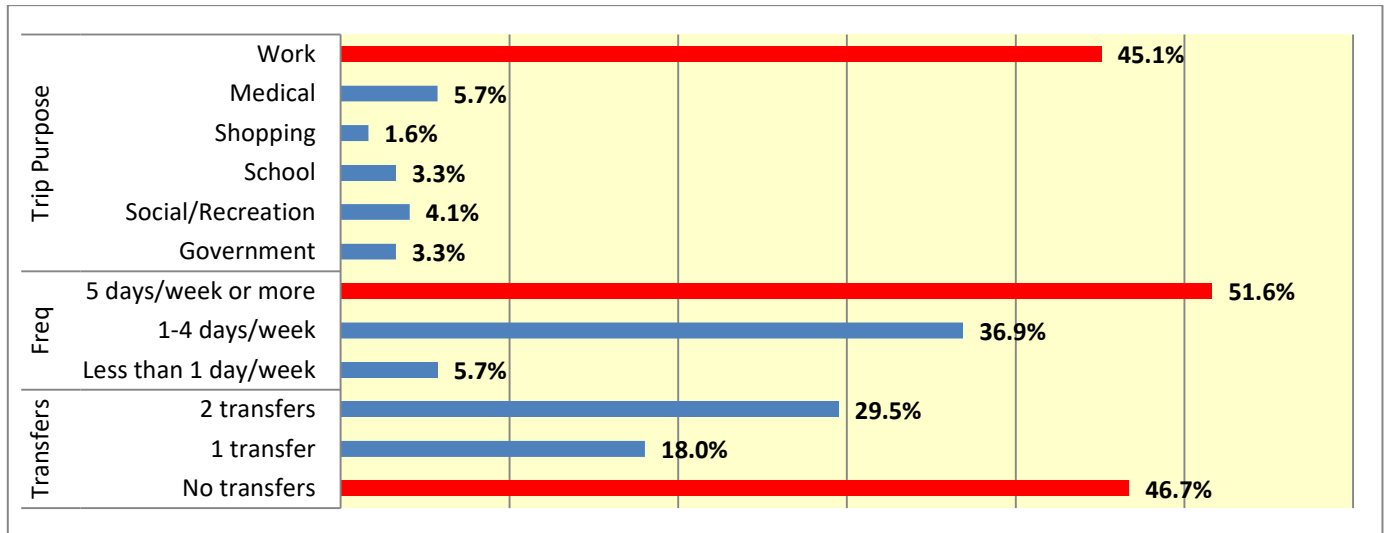
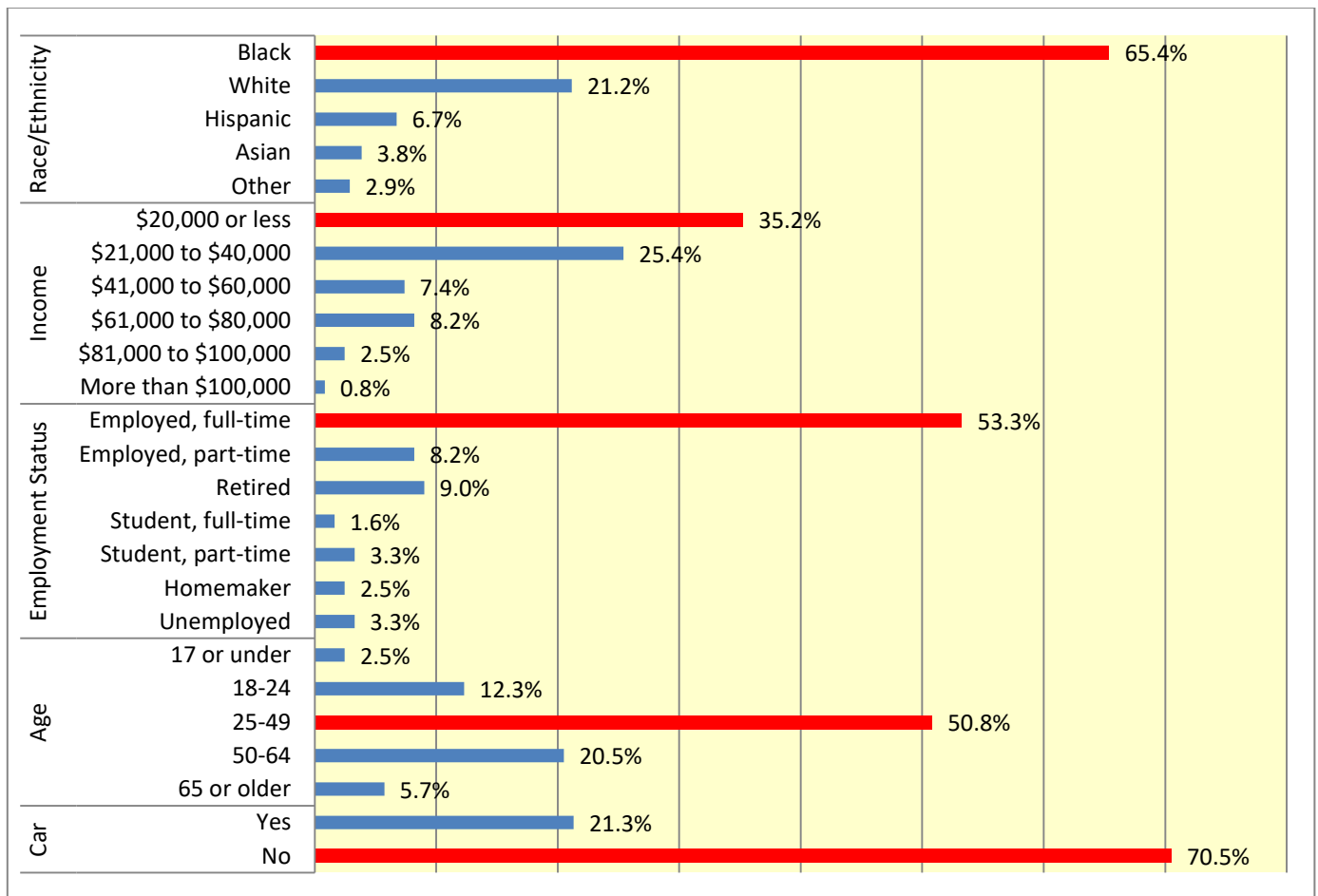
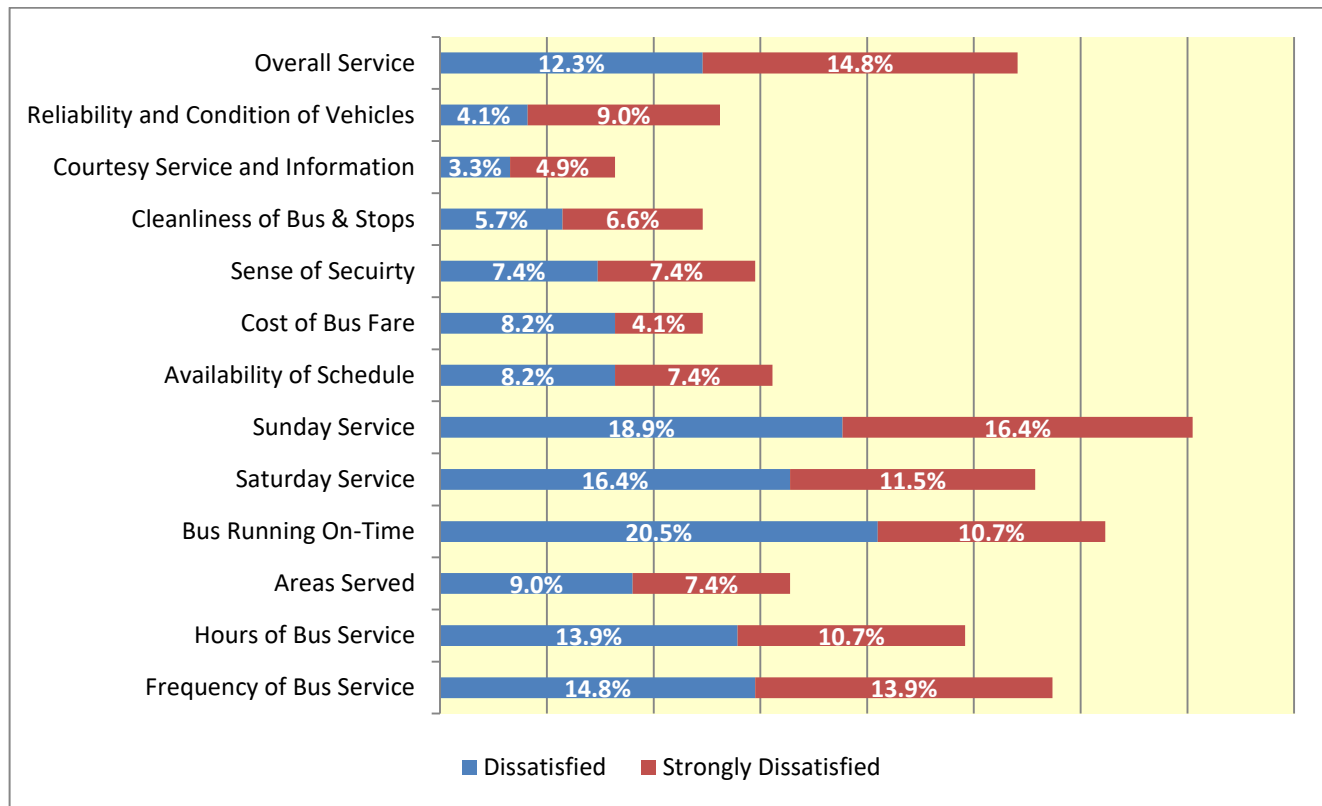
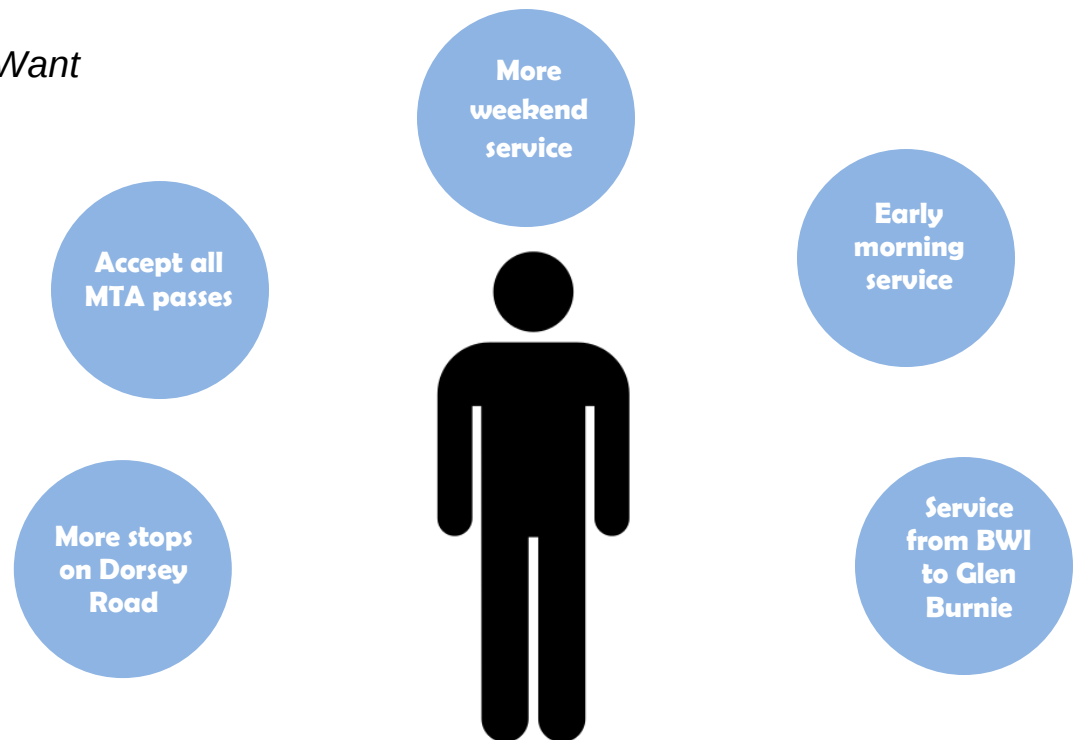
Figure 4-13: Route 201/J - Travel Characteristics**Figure 4-14: Route 201/J - Demographic and Socioeconomic Characteristics**

Figure 4-15: Route 201/J Rider Dissatisfaction**What Riders Want**

Route 202/K: Arundel Mills – Odenton Health Campus

Service Area Description

Route 202/K originates at Arundel Mills Mall, providing connections to Routes 201/J, 501/Silver, 502/B, and 504; MTA LocalLink Route 75; and MTA Commuter Bus Route 201. From the mall, the route travels along Ridge Road, to Annapolis Road, and Reece Road and continues to Meade Village. From Meade Village, the route travels along Charter Oaks Boulevard to Seven Oaks Apartment Homes. On weekdays, from Seven Oaks Apartments, the route travels along Blue Waters Boulevard – Annapolis Road, terminating service at Odenton MARC Station.

Table 4-6: Route 202/K Strength and Challenges

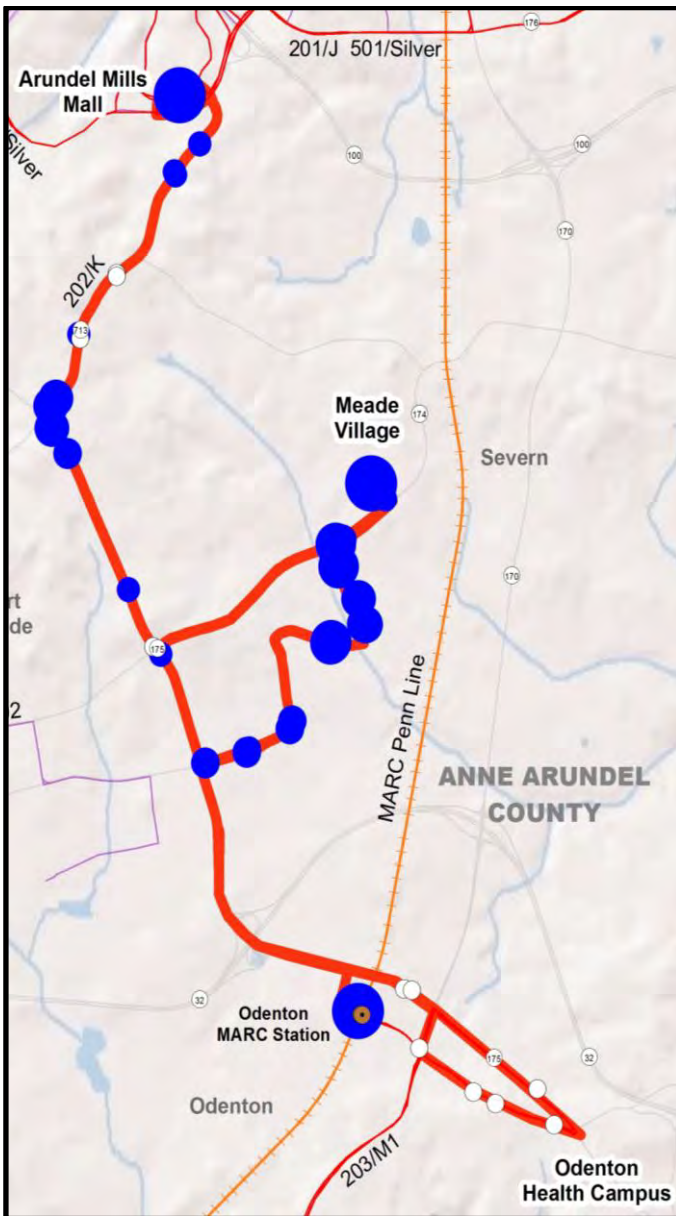
Strengths	Challenges
- The route serves Arundel Mills Mall, one of the largest activity centers within the service area. - The route serves Odenton MARC Station, providing connection to commuter rail service to downtown Baltimore and Washington, D.C. - The route serves Odenton Health Campus.	Undefined.

Table 4-7: Route 202/K - Service and Operating Characteristics

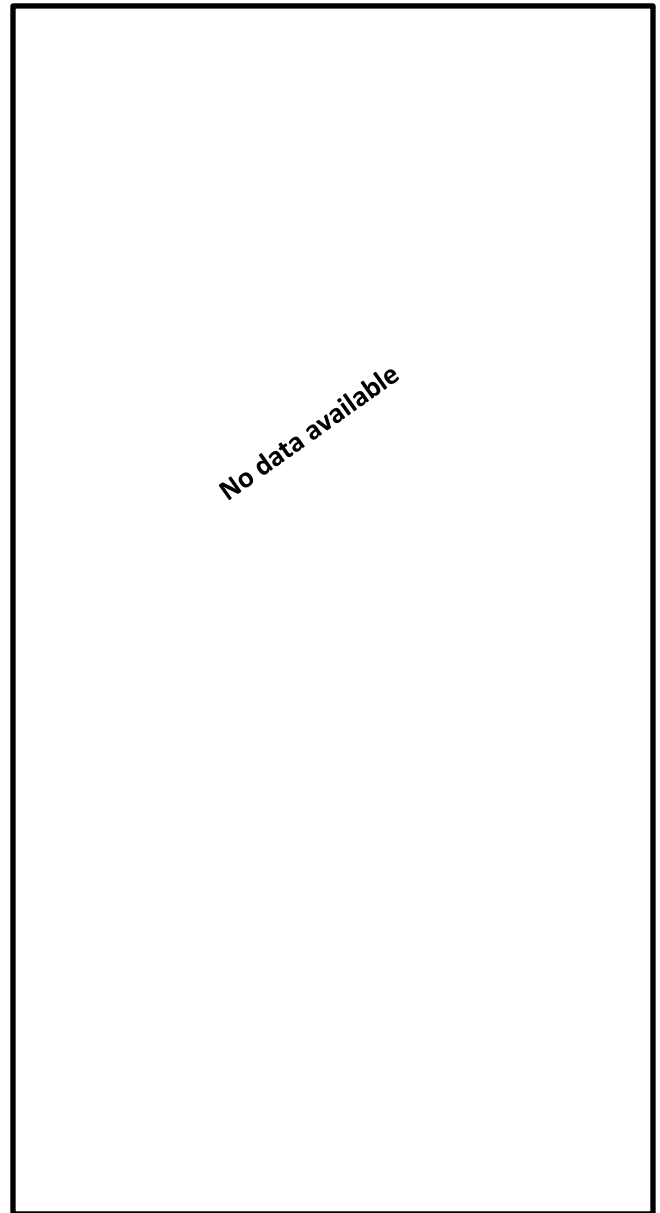
Service and Operating Characteristics		Weekdays	Saturday	Sunday
Service Span		6:15 am – 11:55 pm	8:36 am – 10:58 pm	9:00 am – 9:50pm
Frequency (minutes)	Peak	45	-	-
	Off-Peak	80	80	80
One-Way Trips		18	12	10
Cycle Time (minutes)		84	85	85
Layover Time (minutes)		6	6	6
Daily Service Hours		25.20	16.80	12.60

Figure 4-16: Route 202/K - Ridership by Stop

Weekday



Saturday



Legend

- Route
- Other RTA Routes
- WMATA Metrobus
- MTA Bus Routes
- MARC Lines
- MTA Light Rail
- WMATA Metrorail
- WMATA Metrorail Stations
- MTA Light Rail Stops
- MARC Stations
- County Boundary

Ridership by Stop

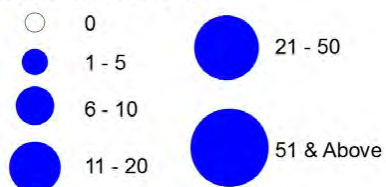


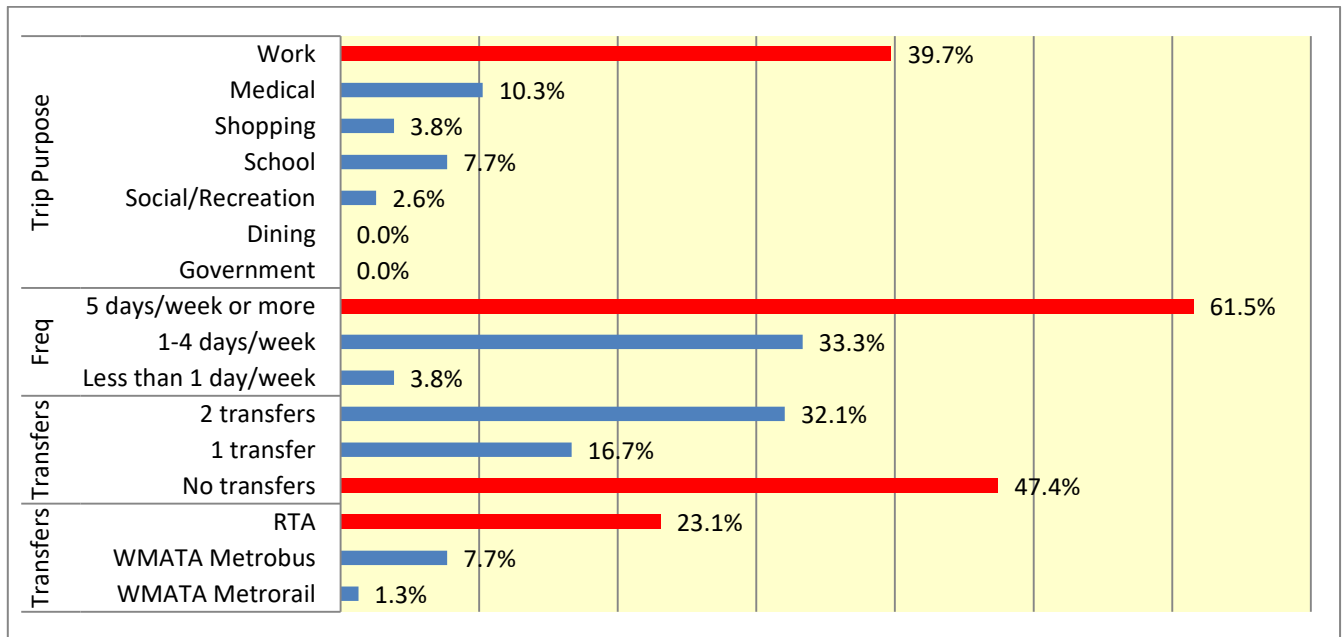
Figure 4-17: Route 202/K – Travel Characteristics

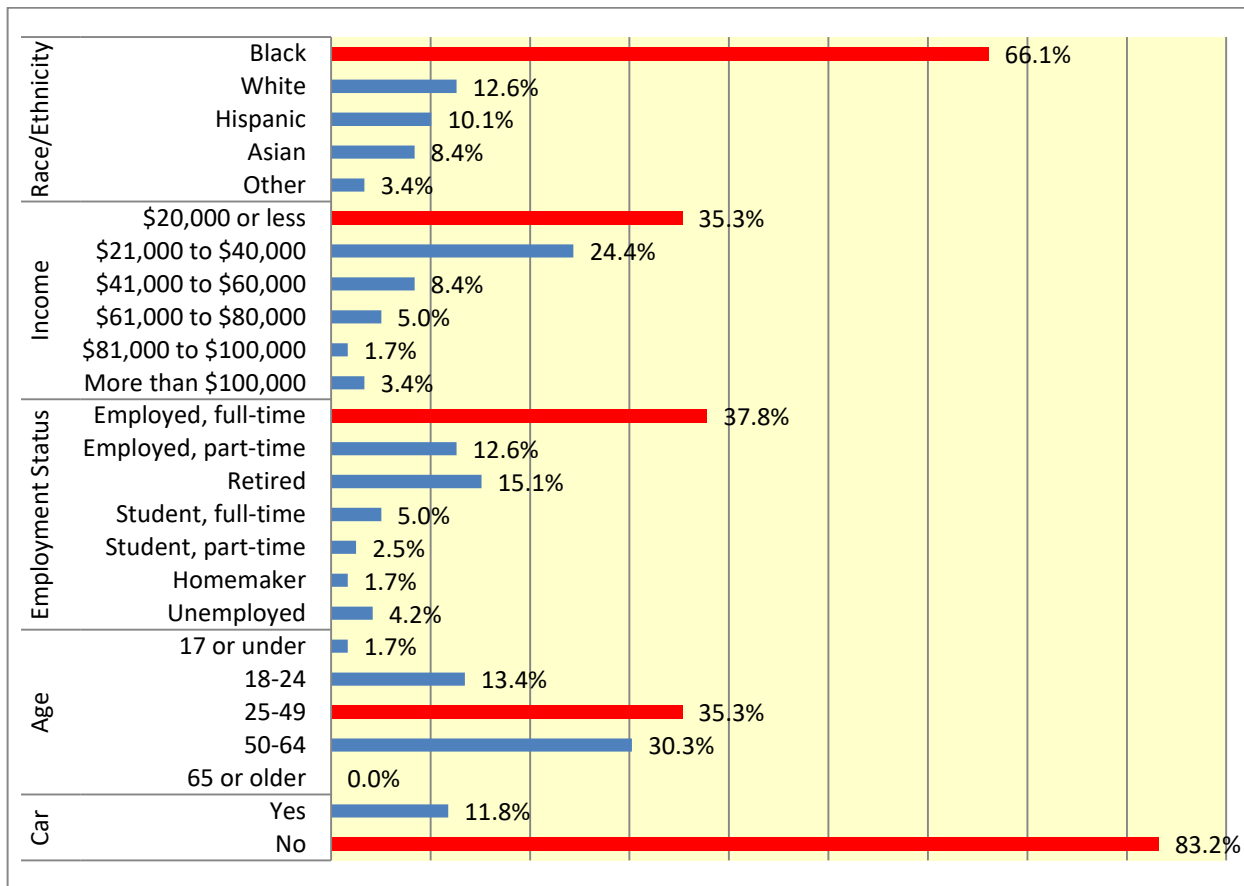
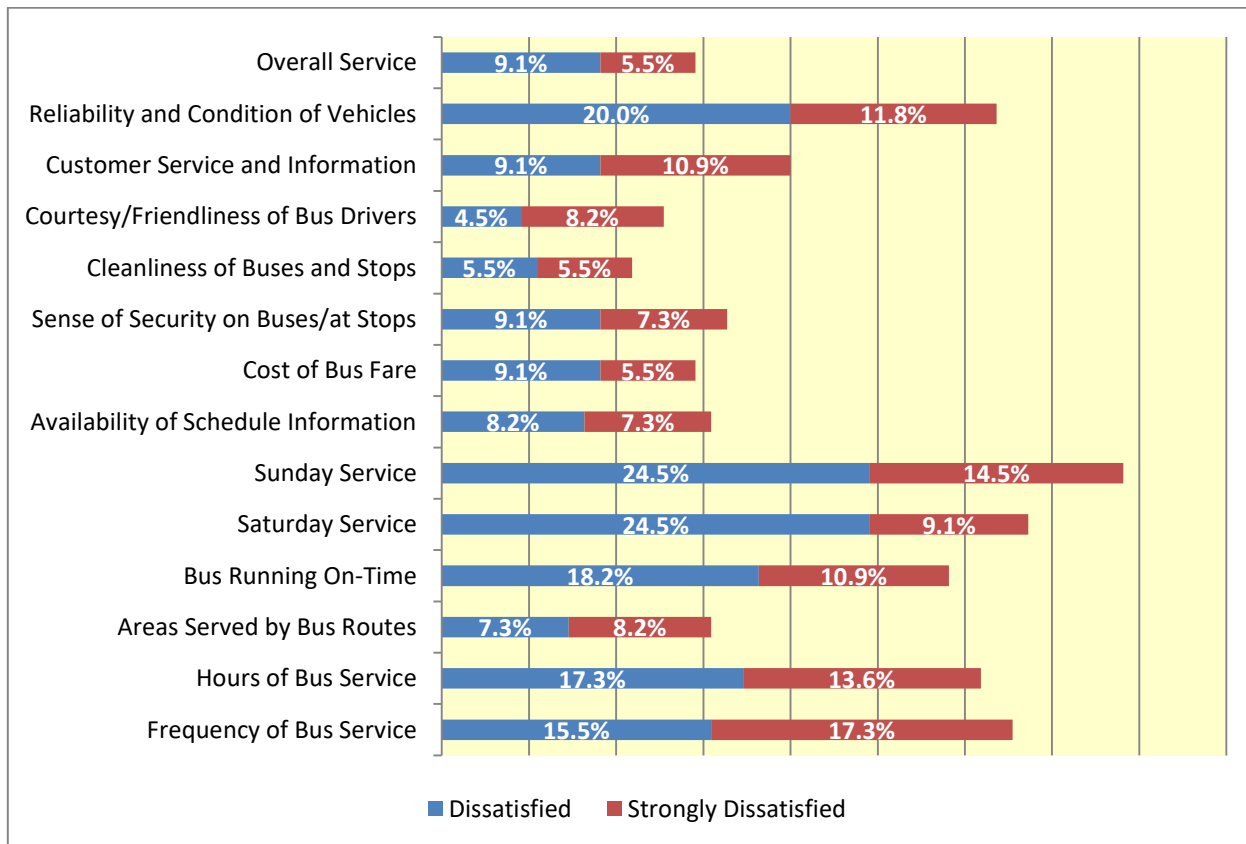
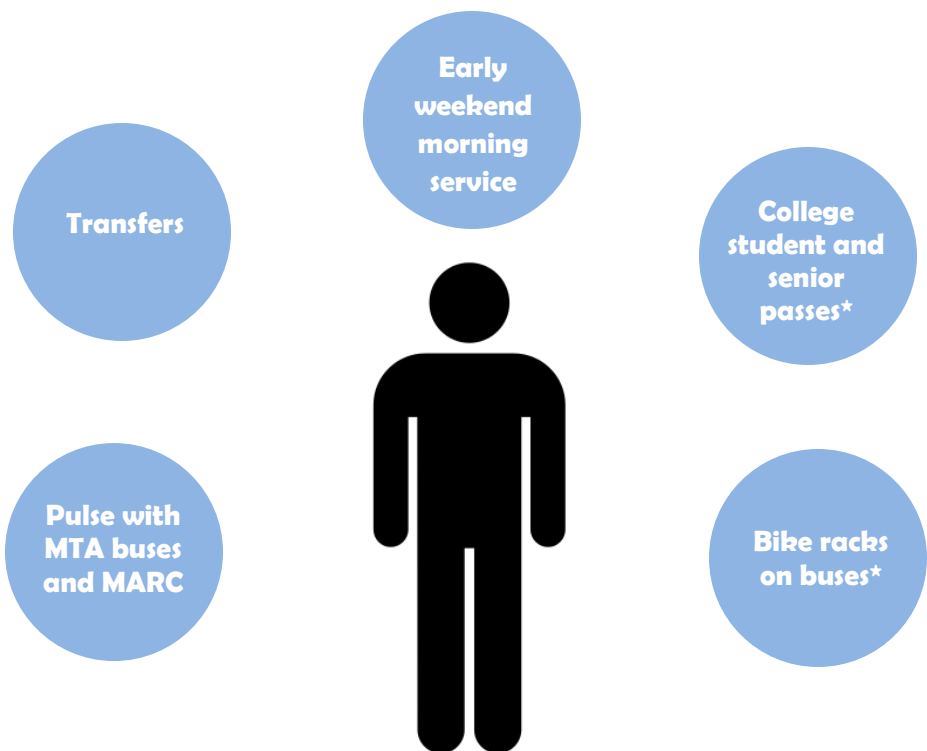
Figure 4-18: Route 202/K – Demographic and Socioeconomic Characteristics

Figure 4-19: Route 202/K – Rider Dissatisfaction**What Riders Want**

*RTA already offers these features, but riders still requested them, indicating a lack of rider awareness or inconsistent availability.

Route 504 (old Route 203)/M: Odenton MARC Station – Crofton Village

Service Area Description

Route 203/M was replaced by a new service, the Route 504, on 10/1/2017. A map of the new service is included in Figure 4-20. The data was collected when the 203/M was still in operation, and the analysis here pertains to the 203/M. It operated two weekday route patterns in western Anne Arundel County. Route M1 operated peak periods between Odenton MARC Station and Piney Orchard Village Center, and it also provided service to the Odenton Health Campus. During off-peak periods, Route M2 followed the Route M1 alignment between Odenton MARC Station and Piney Orchard Village Center. From the Center, the route traveled along Waugh Chapel Road to Crofton Village, providing service to the Village at Waugh Chapel shopping area. Once at the MARC Station, commuter rail service is available to downtown Baltimore and Washington, D.C.

Table 4-8: Route 203/M Strength and Challenges

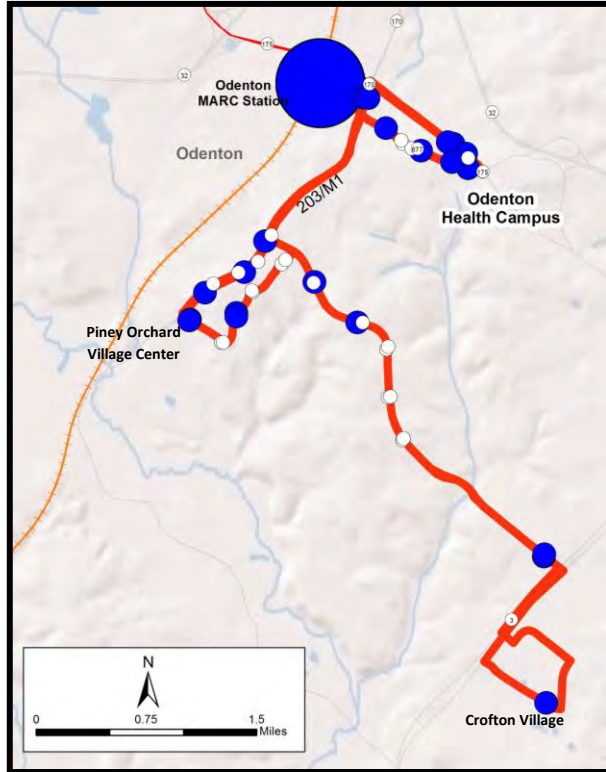
Strengths	Challenges
- Serves Odenton MARC Station providing a connection to commuter rail service to downtown Baltimore and Washington, D.C. - Serves Odenton Health Campus.	- Poorest performing route overall. - Serves no major activity centers. - Does not connect to Fort Meade.

Table 4-9: Route 203/M – Service and Operating Characteristics

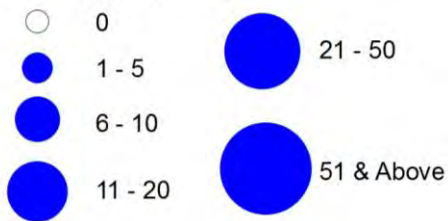
Service and Operating Characteristics		Route M1 Weekday Peak	Route M2 Weekday Off-Peak
Span of Service		7:50 am - 6:50 pm	10:15 am - 4:07 pm
Frequency (minutes)	Peak	30	-
	Off-Peak	-	60
Cycle Time (minutes)		25	52
Layover Time (minutes)		0	0
One-Way Trips		9	7
Daily Service Hours		3.75	8.55

Figure 4-20: Route 203/M Ridership by Stop and New Route 504 (no ridership data is yet available)

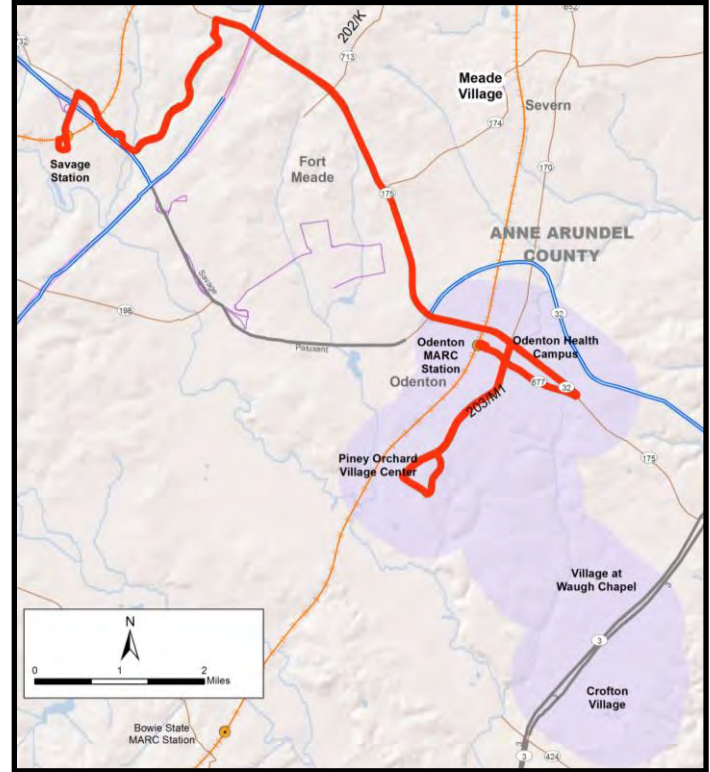
Former Route 203/M



Ridership by Stop



New Route 504



Legend

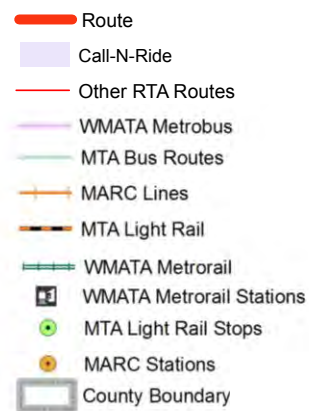


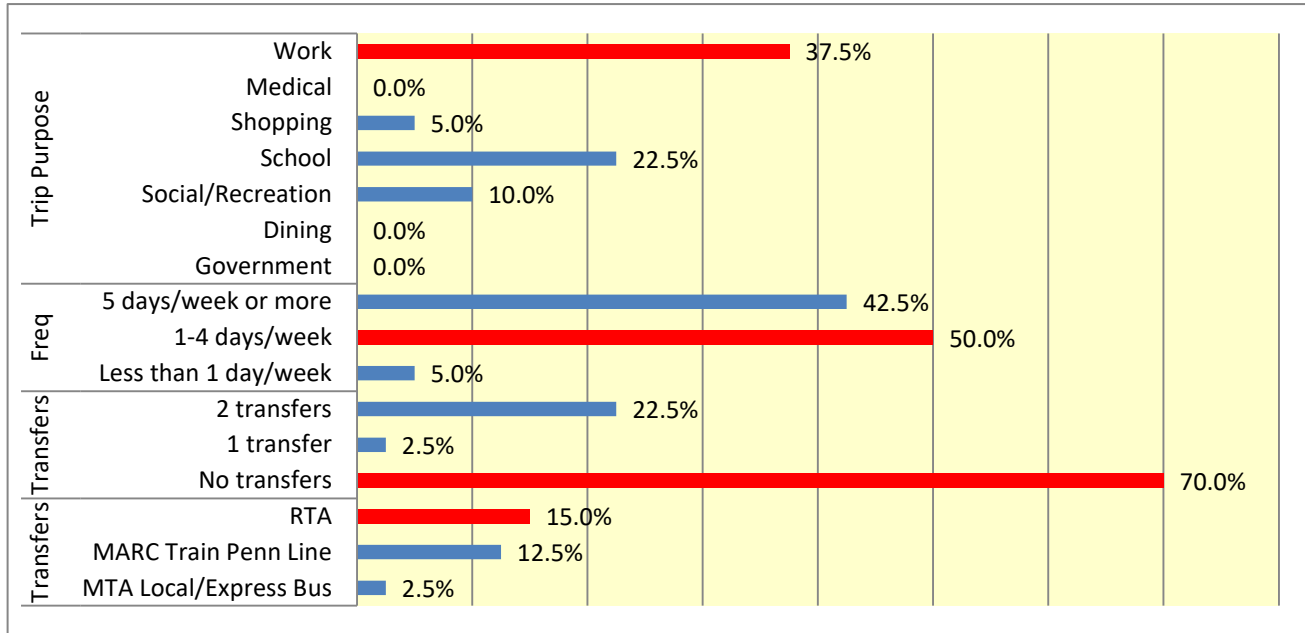
Figure 4-21: Route 203/M – Travel Characteristics

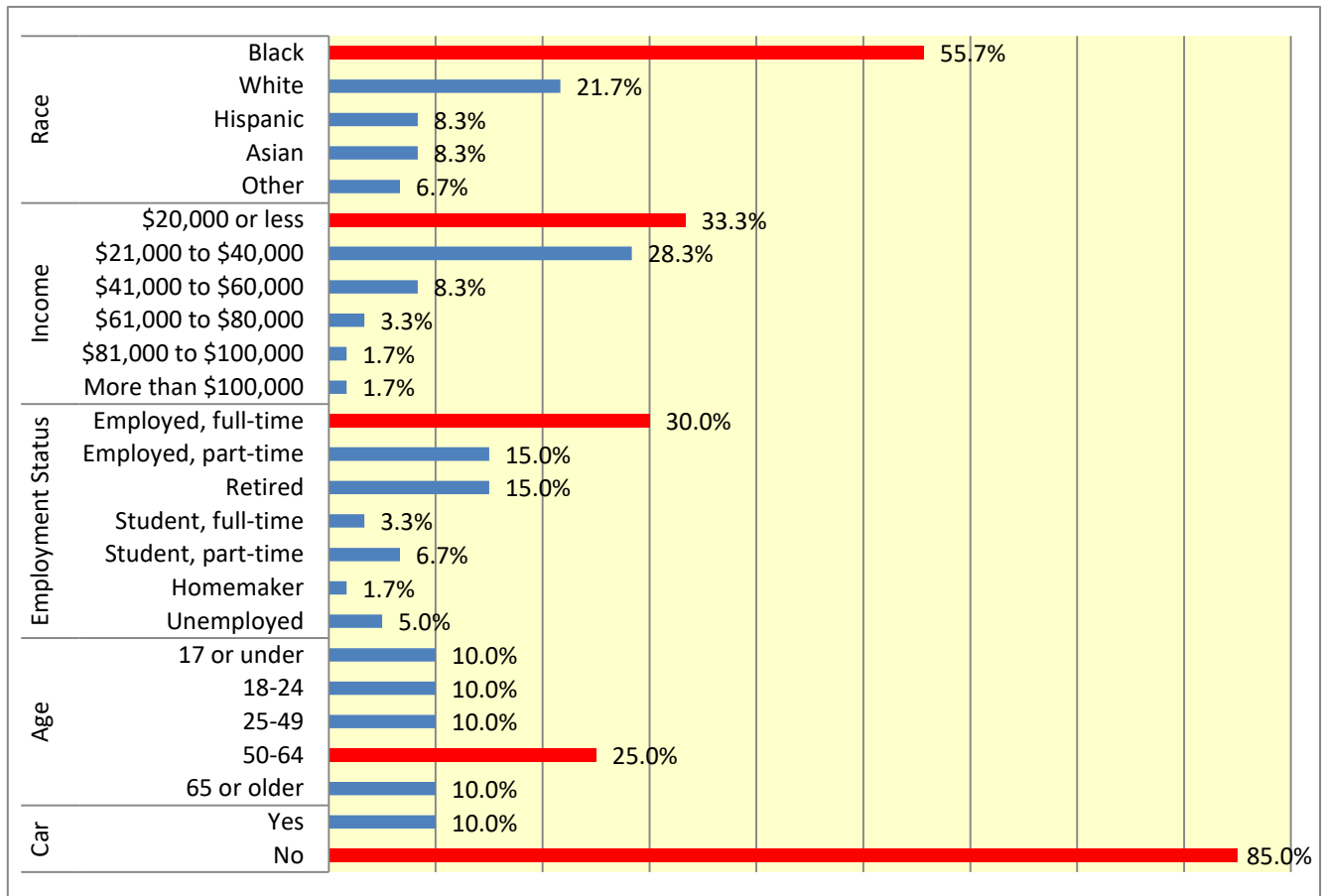
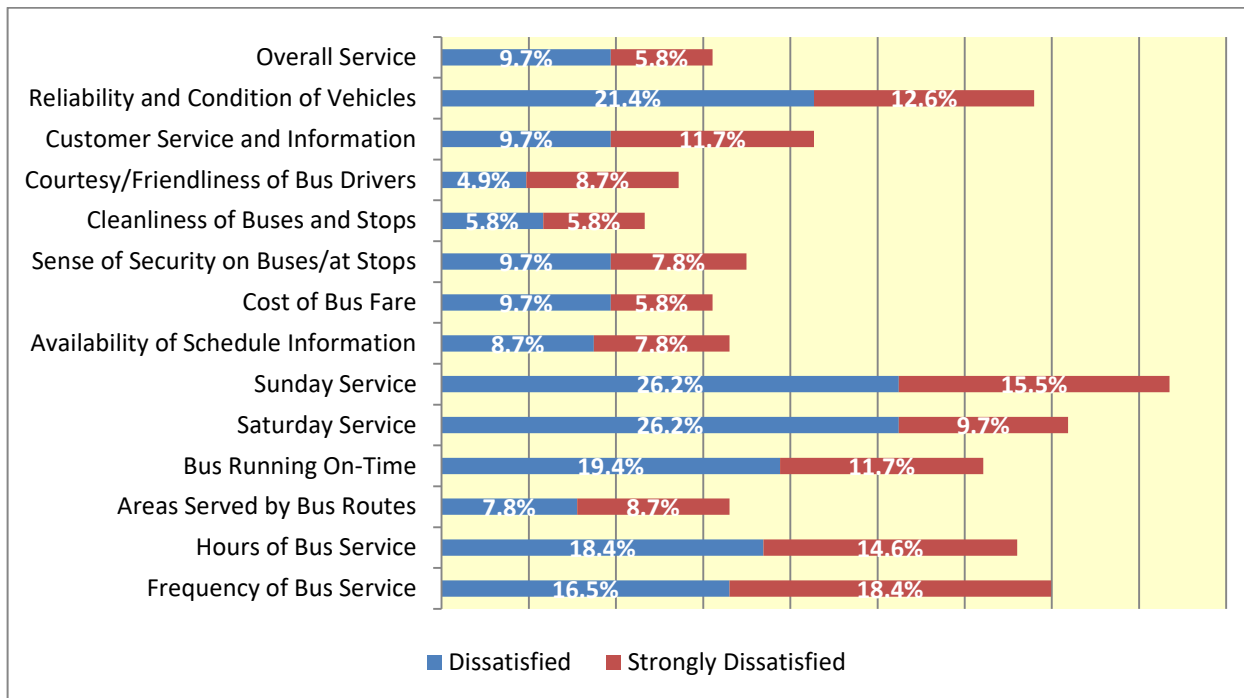
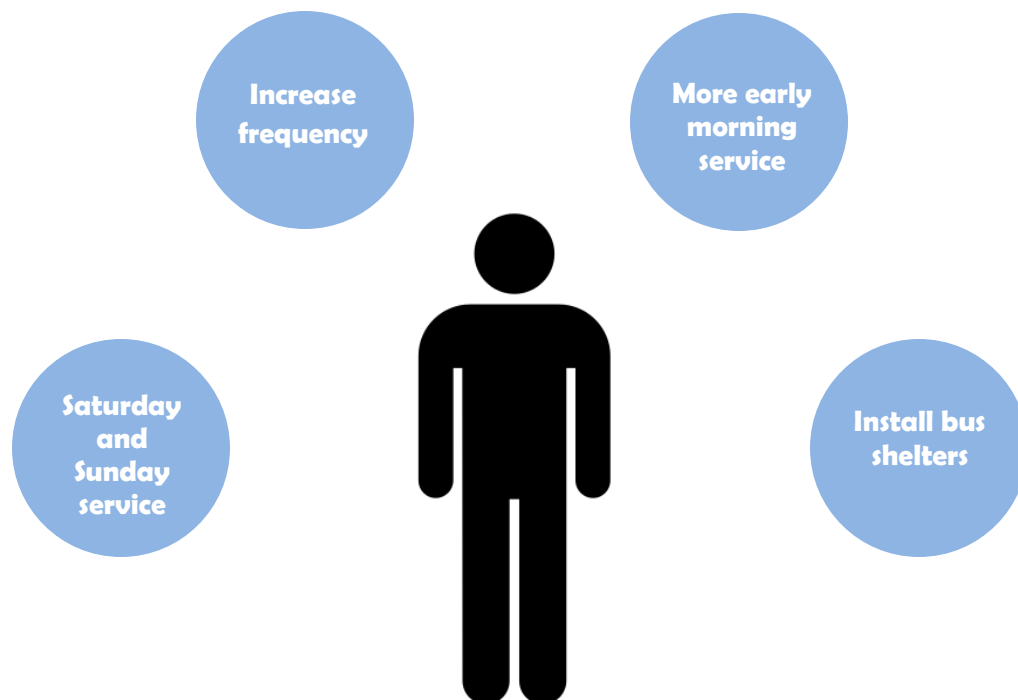
Figure 4-22: Route 203/M – Demographic and Socioeconomics Characteristics

Figure 4-23: Route 203/M – Ridership Dissatisfaction**What Riders Want**

Route 301/A: Towne Centre at Laurel – South Laurel

Service Area Description

Route 301/A operates weekday and Saturday service in northern Prince George's County. The route originates at the Towne Centre at Laurel, providing connections to Routes 302/G, 409/Purple, 502/B, and 503/E, and WMATA local bus Routes 87, 88, 89, and 89M. From Towne Centre, the route travels along Cherry Lane and Van Dusen Road to Laurel Regional Hospital. The route continues along Contee Road and Laurel Bowie Road to the terminus at the intersection of South Laurel Drive and Laurelwalk Drive.

Table 4-10: Route 301/A Strength and Challenges

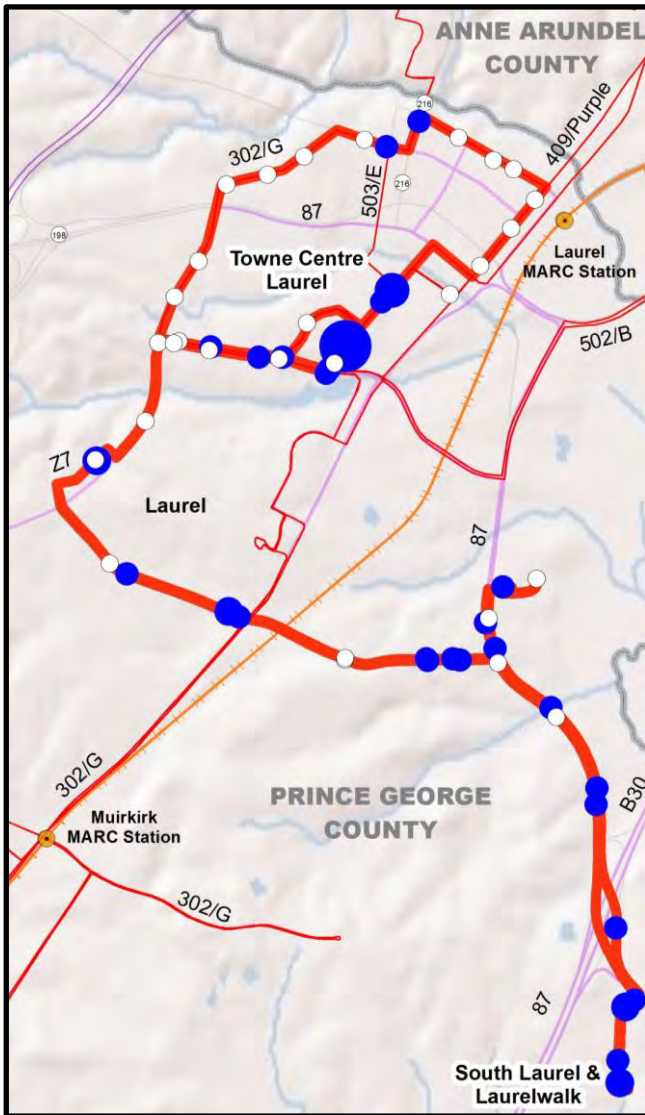
Strengths	Challenges
- Serves Towne Centre at Laurel, connecting with four routes. - Provides local service in Laurel.	- Low ridership. - Poor on-time performance. - Serves only one regional activity center.

Table 4-11: Route 301/A - Service and Operating Characteristics

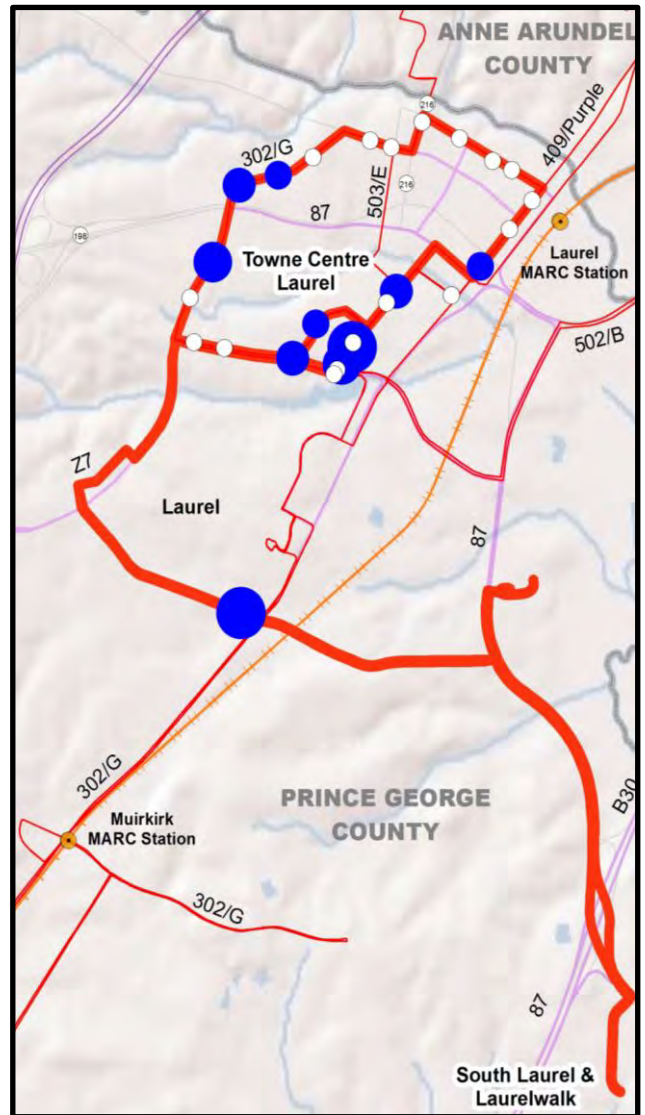
Service and Operating Characteristics		Weekdays	Saturday
Span of Service		6:25 am - 7:20 pm	9:25 am - 7:20 pm
Frequency (minutes)	Peak	60	-
	Off-Peak	60	60
One-Way Trips		13	10
Cycle Time (minutes)		55	55
Layover Time (minutes)		5	5
Daily Service Hours		11.92	9.17

Figure 4-24: Route 301/A – Ridership by Stop

Weekday



Saturday



Legend

- Route
- Other RTA Routes
- WMATA Metrobus
- MTA Bus Routes
- MARC Lines
- MTA Light Rail
- WMATA Metrorail
- WMATA Metrorail Stations
- MTA Light Rail Stops
- MARC Stations
- County Boundary

Ridership by Stop

- 0
- 1 - 5
- 6 - 10
- 11 - 20
- 21 - 50
- 51 & Above

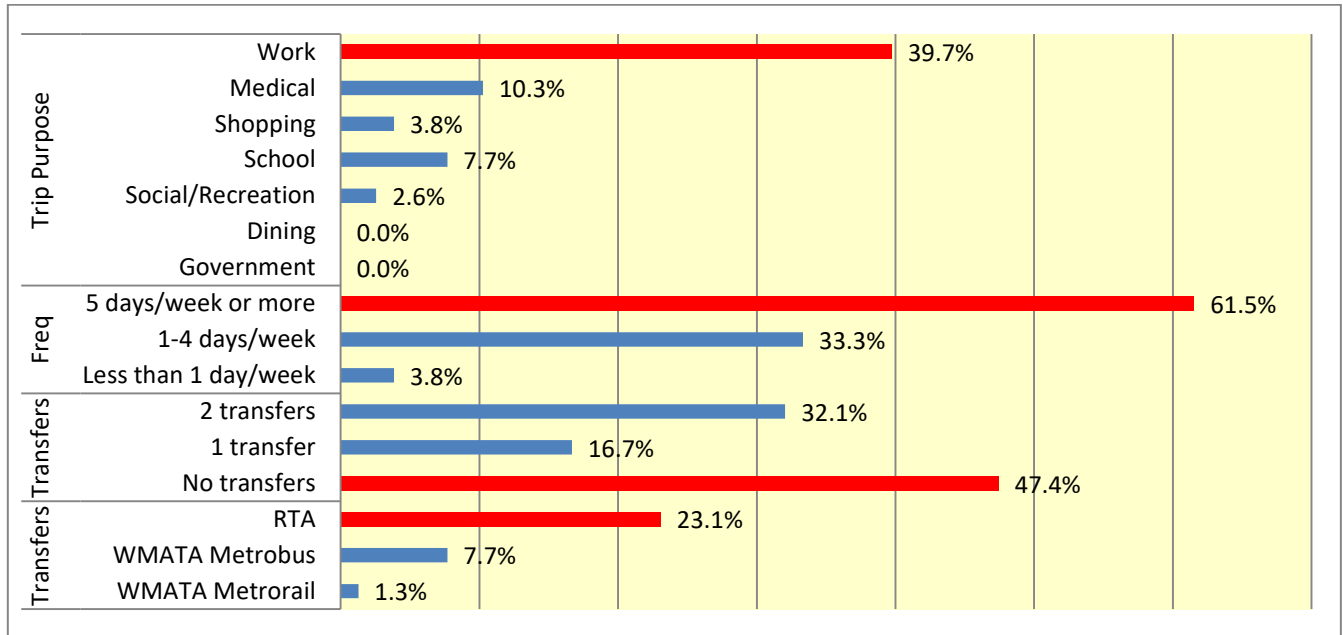
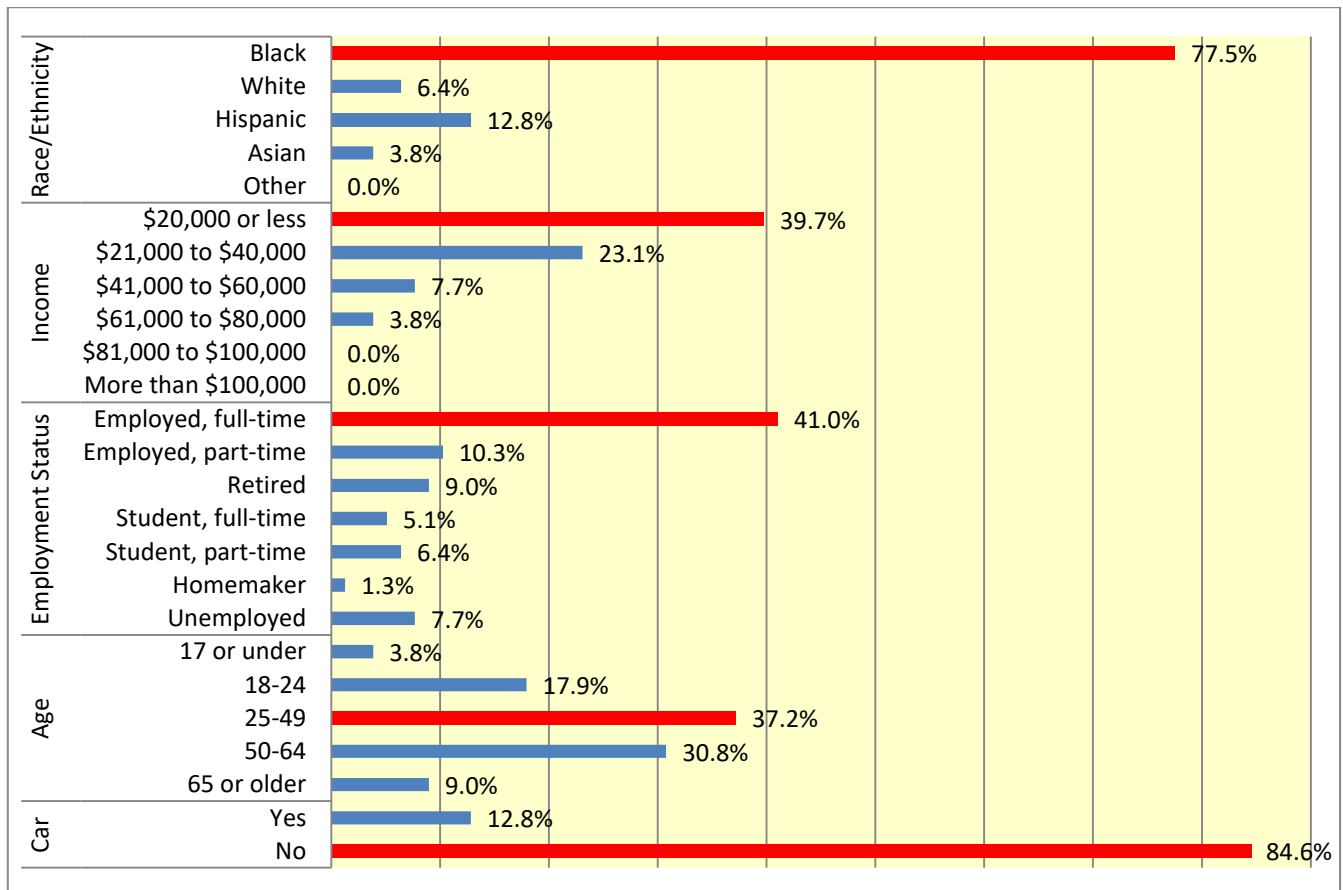
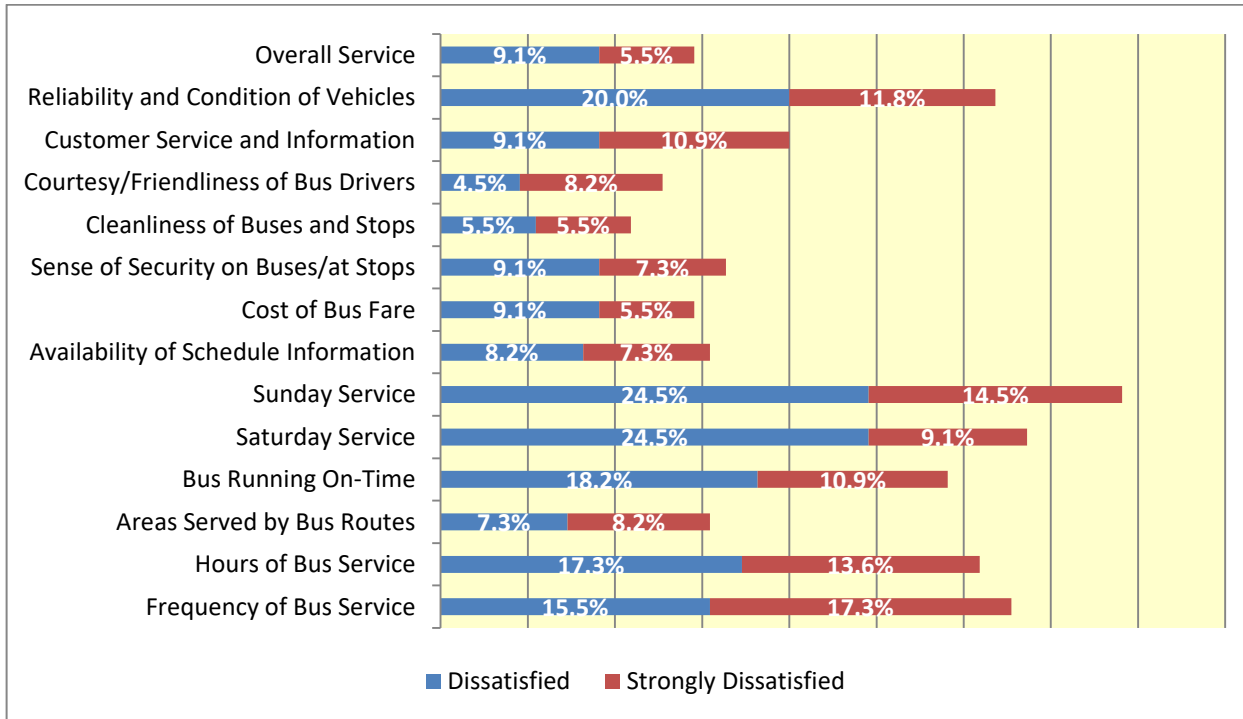
Figure 4-25: Route 301/A – Travel Characteristics**Figure 4-26: Route 301/A – Demographic and Socioeconomic Characteristics**

Figure 4-27: Route 301/A – Ridership Dissatisfaction**What Riders Want**

Route 302/G: Towne Centre at Laurel – Greenbelt Metro Station

Service Area Description

Route 302/G provides daily service within northern Prince George's County. The route originates at Towne Centre at Laurel, providing connections to Routes 301/A, 409/Purple, 502/B, and 503/E, and WMATA Routes 87, 88, 89, 89M, Z9, and Z29. From Towne Centre, the route travels along U.S. 1 towards Muirkirk MARC Station, providing direct connections to downtown Baltimore and Washington, D.C. From the station, the route continues along Muirkirk Road to FDA Muirkirk Campus. From the FDA Muirkirk Campus, the route travels along Old Baltimore Pike to Kenilworth Avenue and College Park Metro Station. On the return trip, the route loops around Towne Centre at Laurel prior to terminus. On Saturdays, the bus does not serve the Muirkirk Campus. In addition, on Sundays the bus does not serve the College Park Metro Station.

Table 4-12: Route 302/G Strength and Challenges

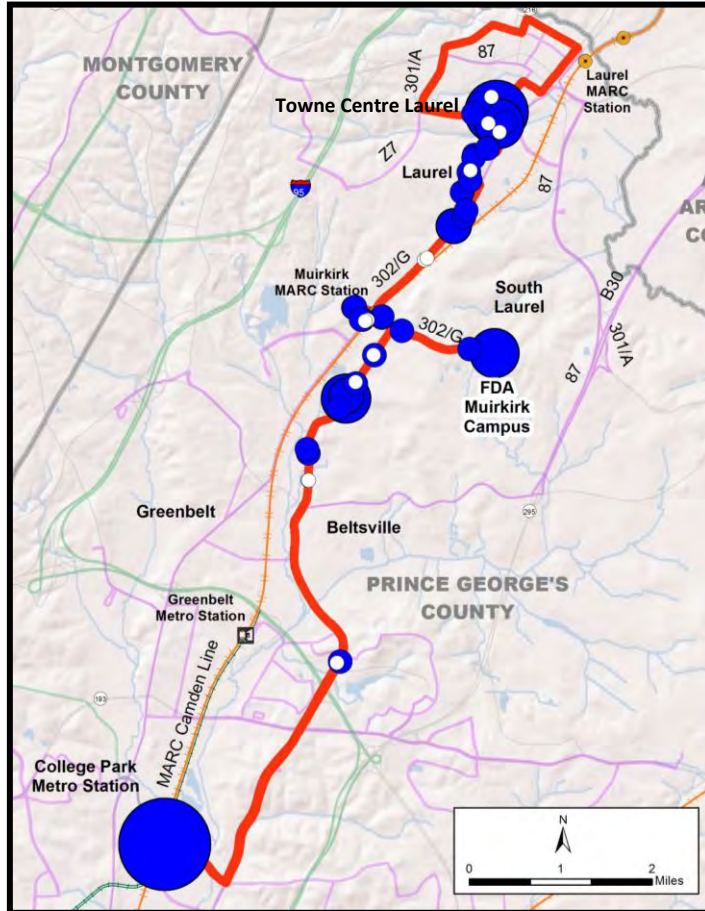
Strengths	Challenges
- Serves 2 activity centers – Towne Centre at Laurel, and FDA Muirkirk Campus. - Serves 3 transit centers – Muirkirk MARC Station, College Park Metro Station, and Greenbelt Metro Station. - Consistent 60-minute headways all day.	Undefined.

Table 4-13: Route 302/G - Service Operating Characteristics

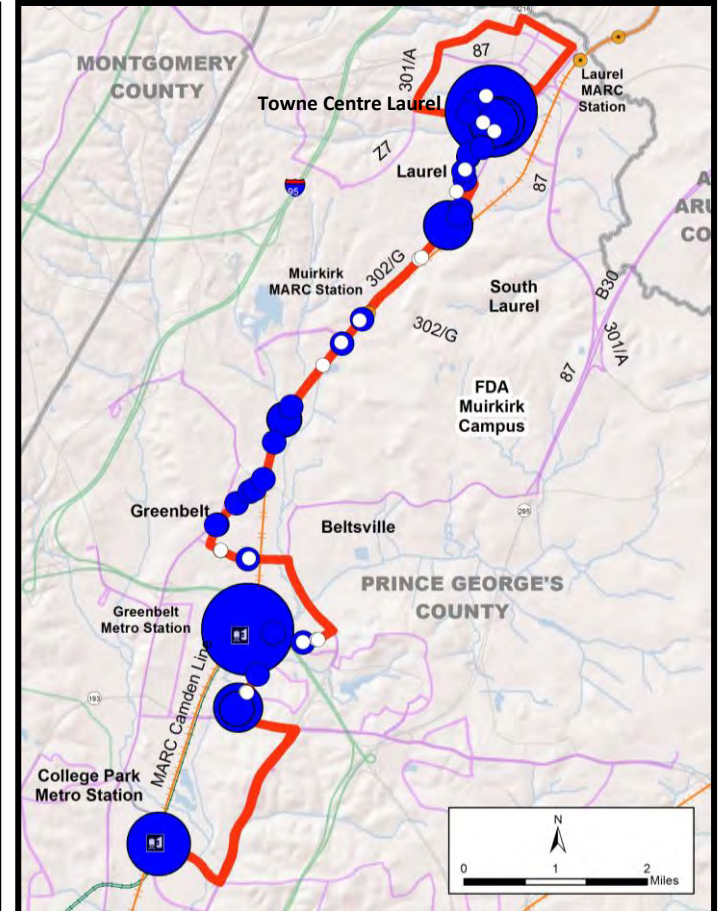
Service and Operating Characteristics		Weekdays	Saturday	Sunday
Span of Service		6:25 am - 7:20 pm	9:25 am - 7:20 pm	10:00 am – 6:50 pm
Frequency (minutes)	Peak	60	-	-
	Off-Peak	60	60	60
One-Way Trips		13	10	9
Cycle Time (minutes)		110	110	108
Layover Time (minutes)		5	5	1
Daily Service Hours		31.25	20.83	18.75

Figure 4-28: Route 302/G Ridership by Stop

Weekday



Saturday



Legend

- Route
- Other RTA Routes
- WMATA Metrobus
- MTA Bus Routes
- MARC Lines
- MTA Light Rail
- WMATA Metrorail
- M WMATA Metrorail Stations
- L MTA Light Rail Stops
- S MARC Stations
- County Boundary

Ridership by Stop

- | | |
|--|--|
| 0 | 21 - 50 |
| 1 - 5 | 51 & Above |
| 6 - 10 | |
| 11 - 20 | |

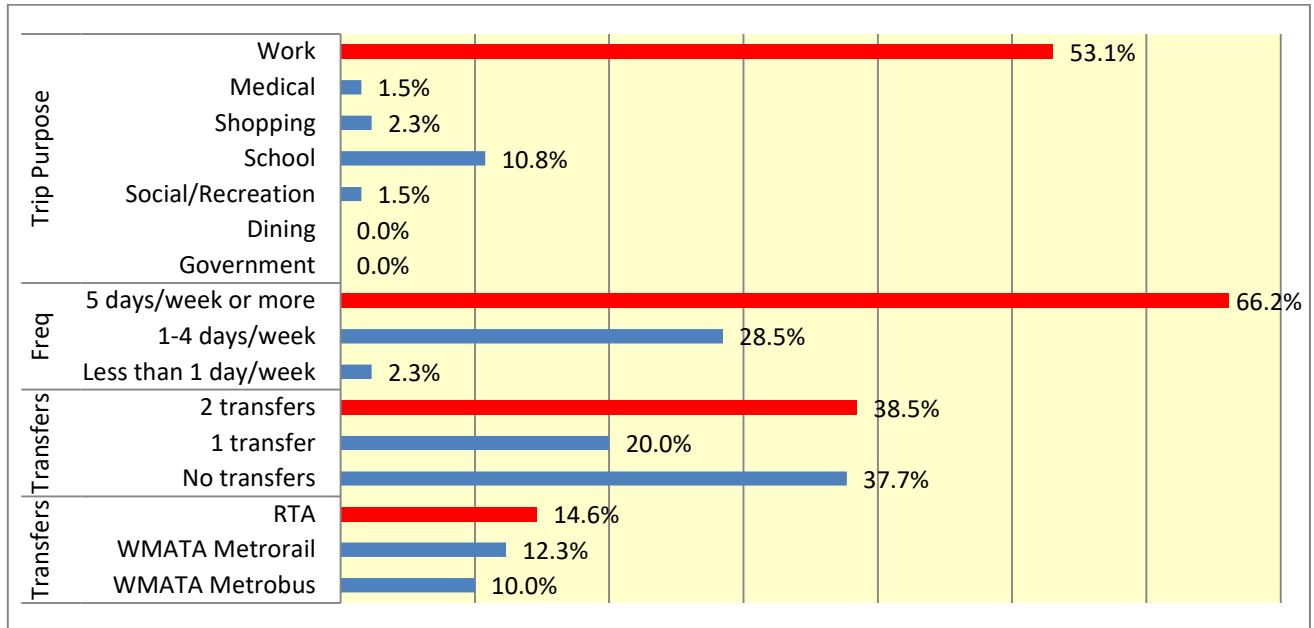
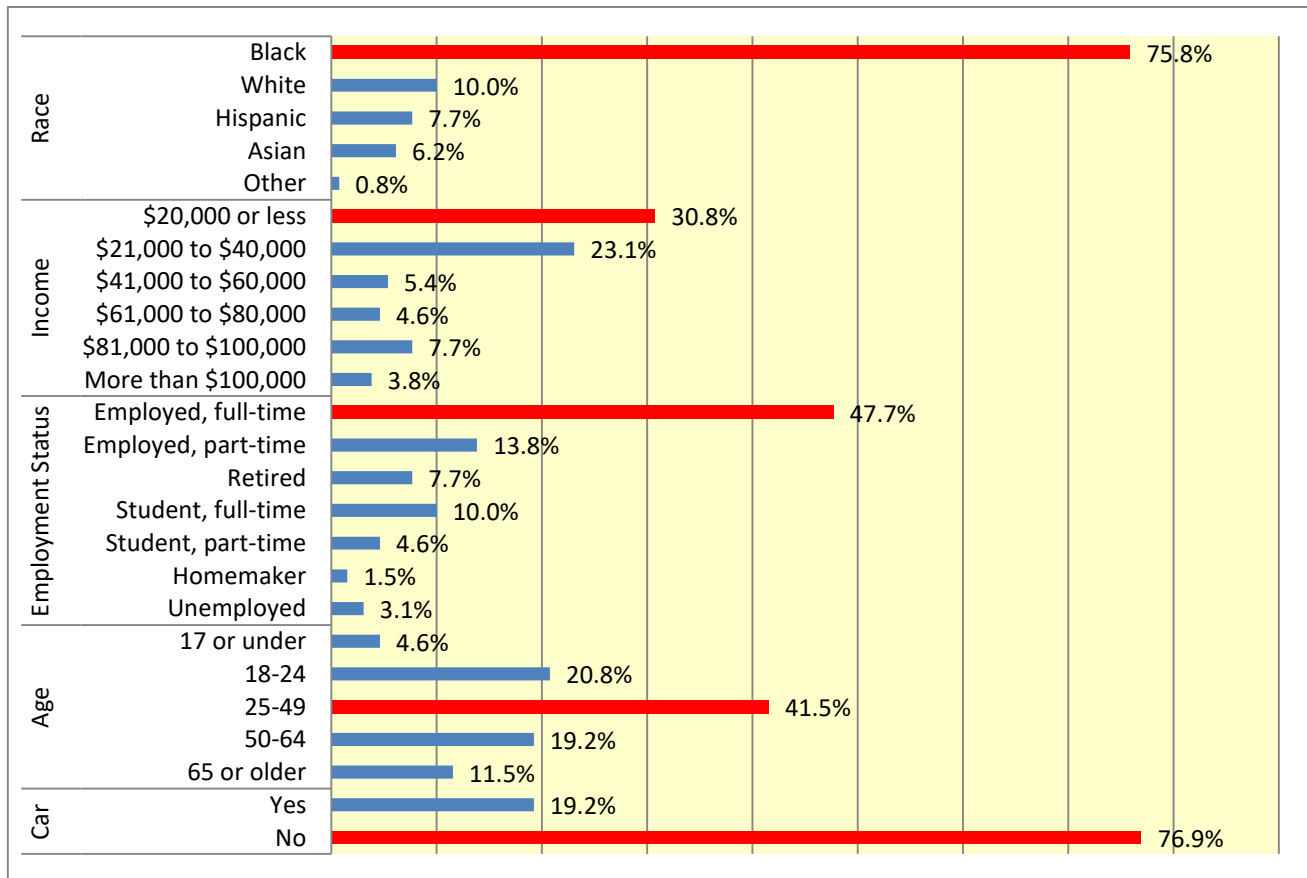
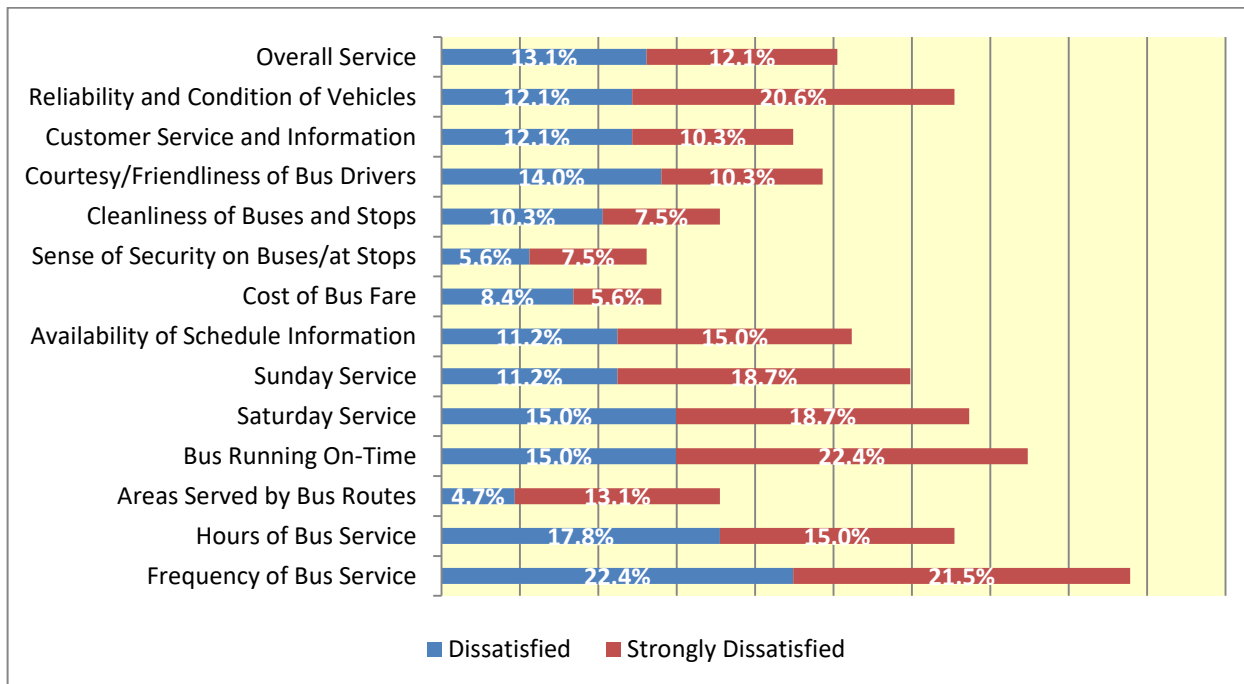
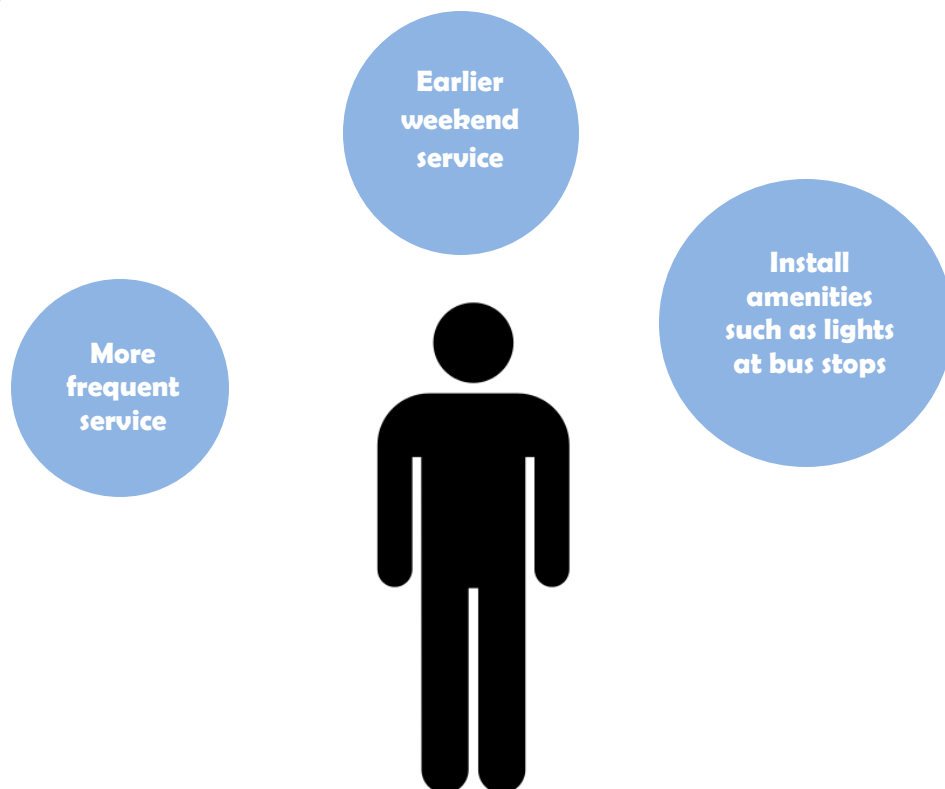
Figure 4-29: Route 302/G – Travel Characteristics**Figure 4-30: Route 302/G – Demographic and Socioeconomic Characteristics**

Figure 4-31: Route 302/G – Rider Dissatisfaction**What Riders Want**

Route 401/Green: Columbia Mall – Clary’s Forest

Service Area Description

Route 401/Green provides daily service within Howard County. The route originates at Columbia Mall, providing connections to Routes 404/Orange, 405/Yellow, 406/Red, 407/Brown, 408/Gold, 501/Silver, and 503/E. From the mall, the route travels along Twin Rivers Road, serving Wilde Lake Village Center, continuing along Harpers Farm Road to Harper’s Choice Village Center and the Bain Center. From the Village Center, the route travels along Cedar Lane to Howard County General Hospital, continuing to Howard County Community College. From the community college, the route loops around Clary’s Forest servicing Hickory Ridge Place and Little Patuxent Parkway.

Table 4-14: Route 401/Green Strength and Challenges

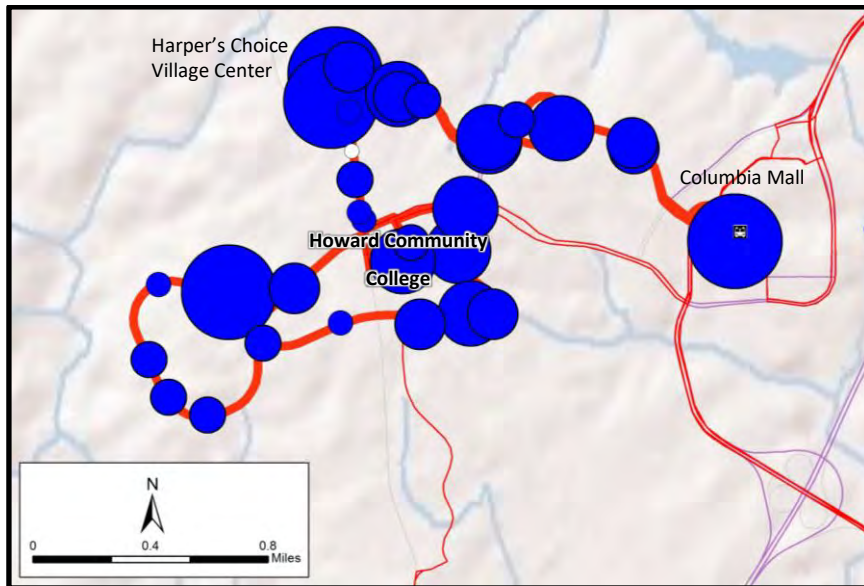
Strengths	Challenges
- Serves three activity centers –Columbia Mall, Howard County Community College, Howard County General Hospital, and Wilde Lake Village Center. - Frequent peak hour service – 30 minute headways. - Connects with seven RTA routes. - Long weekday and Saturday span of service.	Undefined.

Table 4-15: Route 401/Green Service and Operating Characteristics

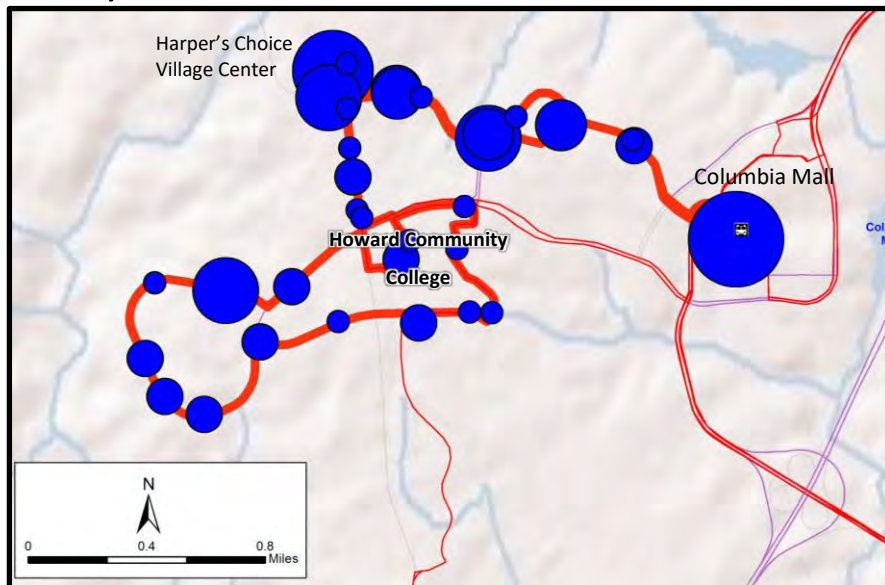
Service and Operating Characteristics		Weekdays	Saturday	Sunday
Span of Service		5:40 am - 11:10 pm	7:40 am - 10:10 pm	9:00 am - 6:52 pm
Frequency (minutes)	Peak	30	-	-
	Off-Peak	60	60	60
Cycle Time (minutes)		52	52	52
Layover Time (minutes)		8	8	8
One-way Trips		27	15	10
Daily Service Hours		20.80	13.00	8.67

Figure 4-32: Route 401/Green Ridership by Stop

Weekday



Saturday



Legend

- Route
- Other RTA Routes
- WMATA Metrobus
- MTA Bus Routes
- MARC Lines
- MTA Light Rail
- WMATA Metrorail
- WMATA Metrorail Stations
- MTA Light Rail Stops
- MARC Stations
- County Boundary

Ridership by Stop

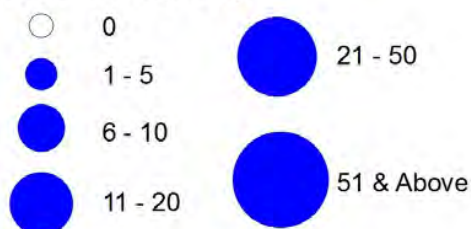


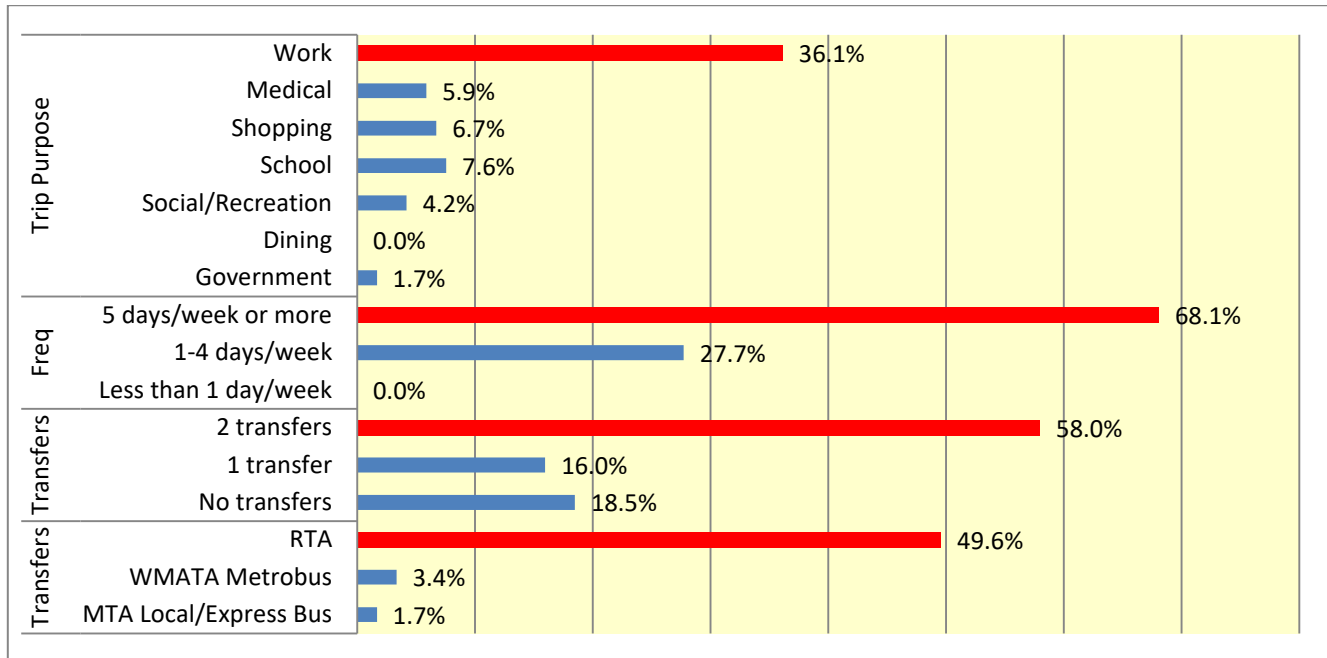
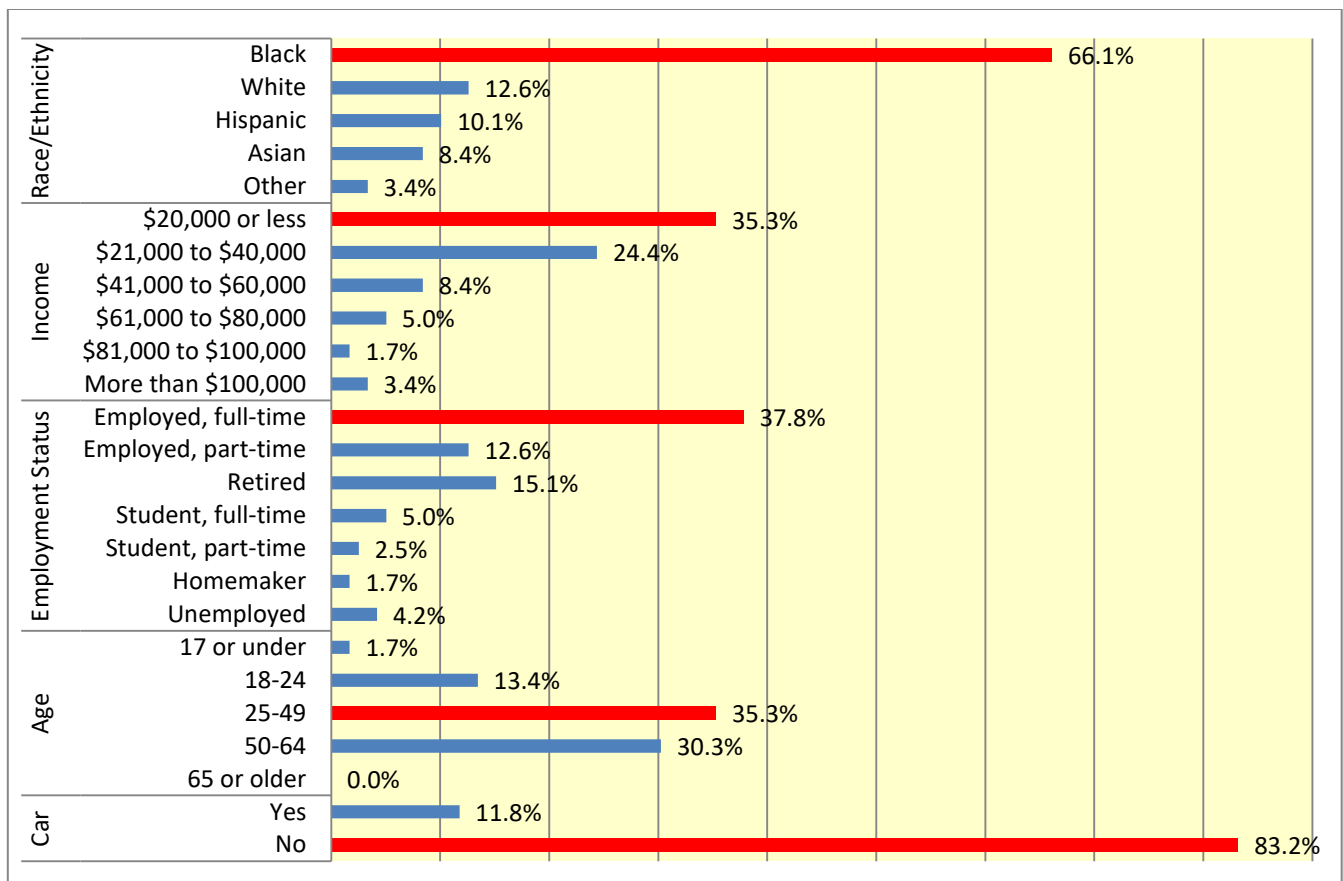
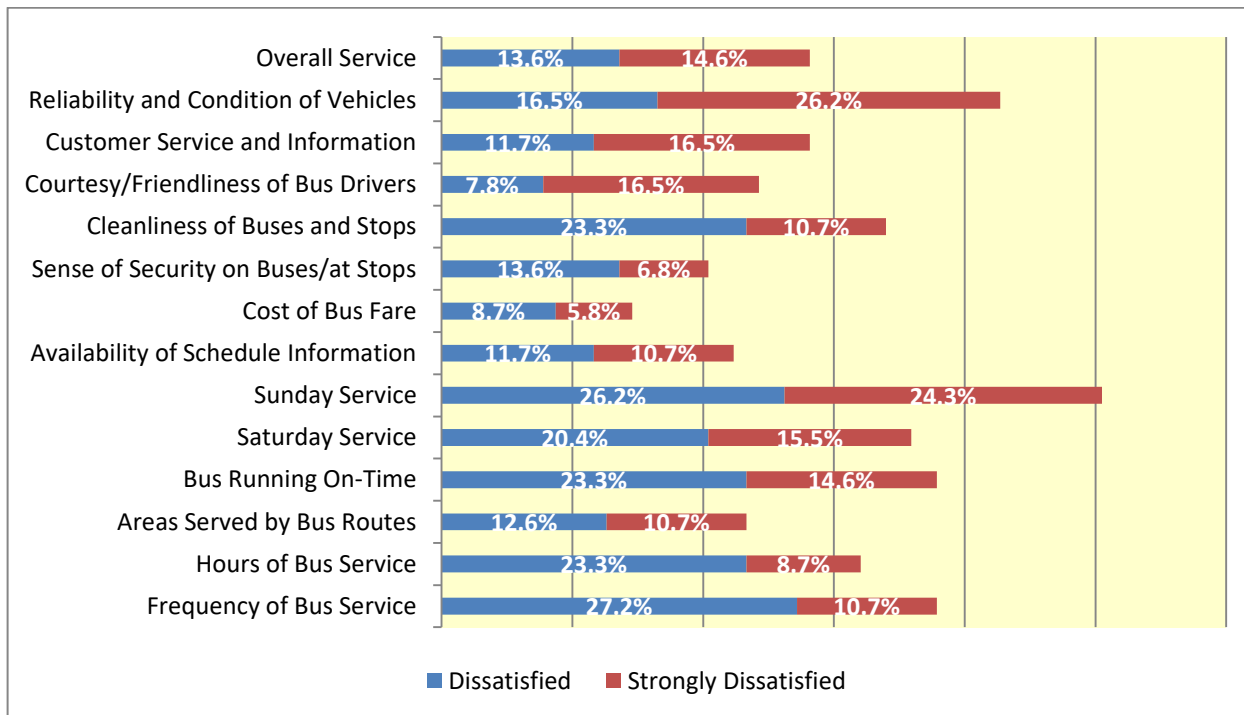
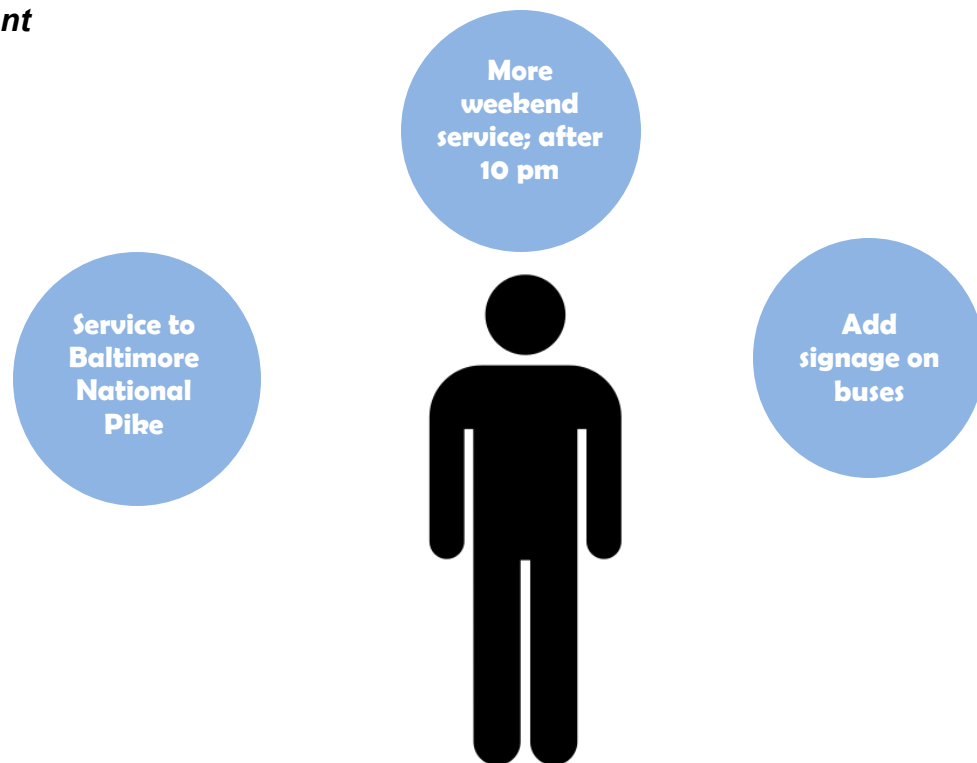
Figure 4-33: Route 401/Green – Travel Characteristics**Figure 4-34: Route 401/Green – Demographic and Socioeconomic Characteristics**

Figure 4-35: Route 401/Green – Rider Dissatisfaction**What Riders Want**

Route 404/Orange: Columbia Mall – Kings Contrivance Village

Service Area Description

Route 404/Orange provides daily service within Howard County. The route originates at Columbia Mall, providing connections to Routes 401/Green, 405/Yellow, 406/Red, 407/Brown, 408/Gold, 501/Silver, and 503/E. From Columbia Mall, the route travels along Little Patuxent Parkway toward Howard County General Hospital, and loops back to Howard County Community College and Hickory Ridge Place. The route continues along Sandy Spring and Cedar Lane to Hickory Ridge Village Center. From the Village Center, the route loops around to Quarter Road and Martin Road. Next, the route continues south to provide service to Atholton Shopping Center, continuing to the terminus at Kings Contrivance Village Center.

Table 4-16: Route 404/Orange Strength and Challenges

Strengths	Challenges
- Provides service to five activity centers. - Connects with seven other RTA routes.	- Long headways (120 minutes) on Sundays. - Very low ridership between Hickory Ridge Village Center and King's Contrivance

Table 4-17: Route 404/Orange - Service and Operating Characteristics

Service and Operating Characteristics		Weekdays	Saturday	Sunday
Span of Service		6:00 am - 10:27 pm	7:27 pm - 8:23 pm	9:00 am - 6:42 pm
Frequency (minutes)	Peak	60	-	-
	Off-Peak	60	60	120
One-way Trips		16	15	6
Cycle Time (minutes)		144	144	144
Layover Time (minutes)		10	20	14
Daily Service Hours		27.75	22.20	16.65

Figure 4-36: Route 404/Orange – Ridership by Stop

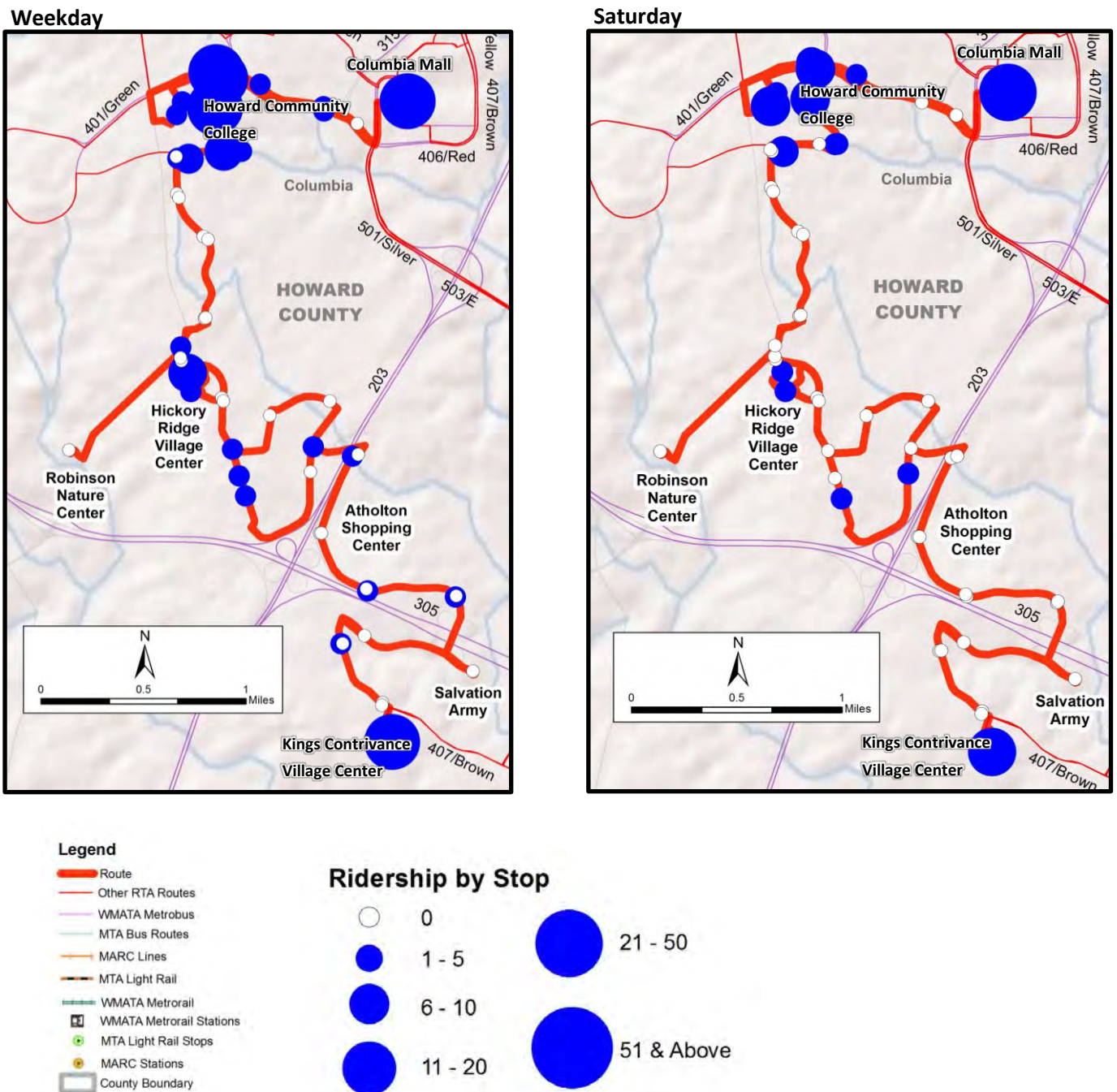


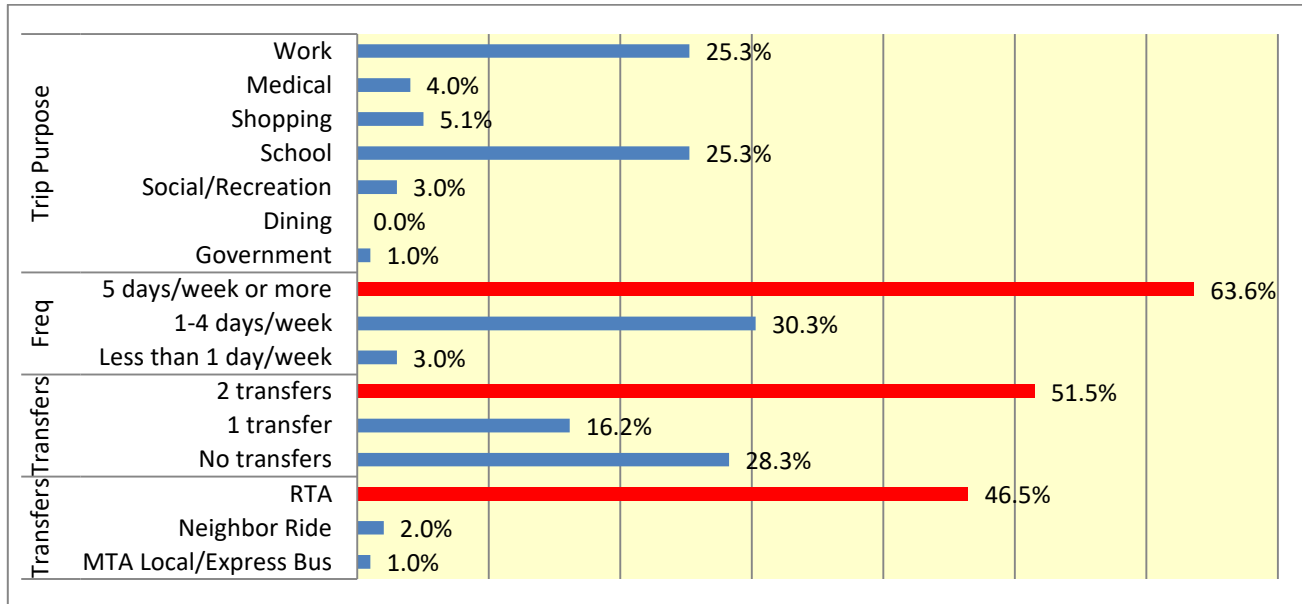
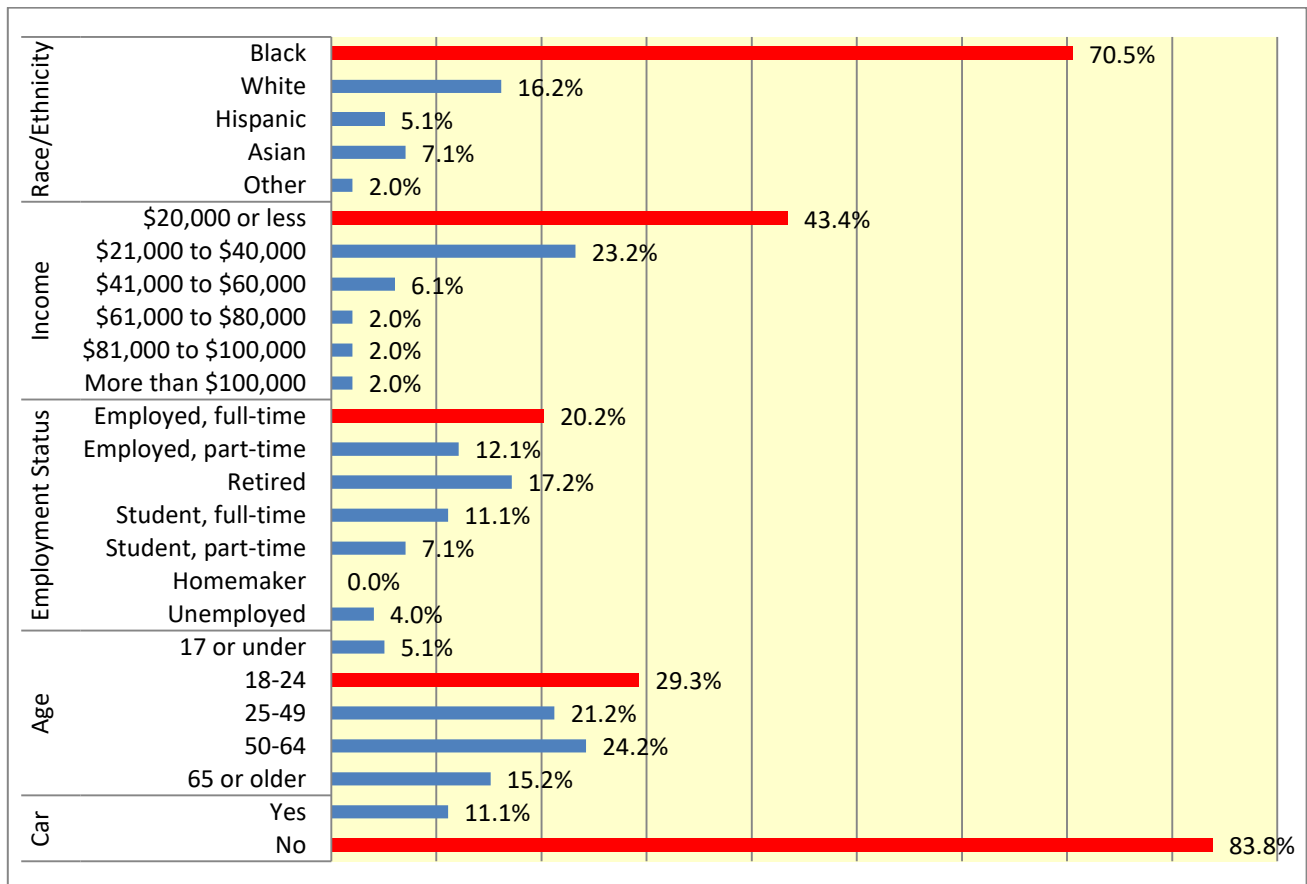
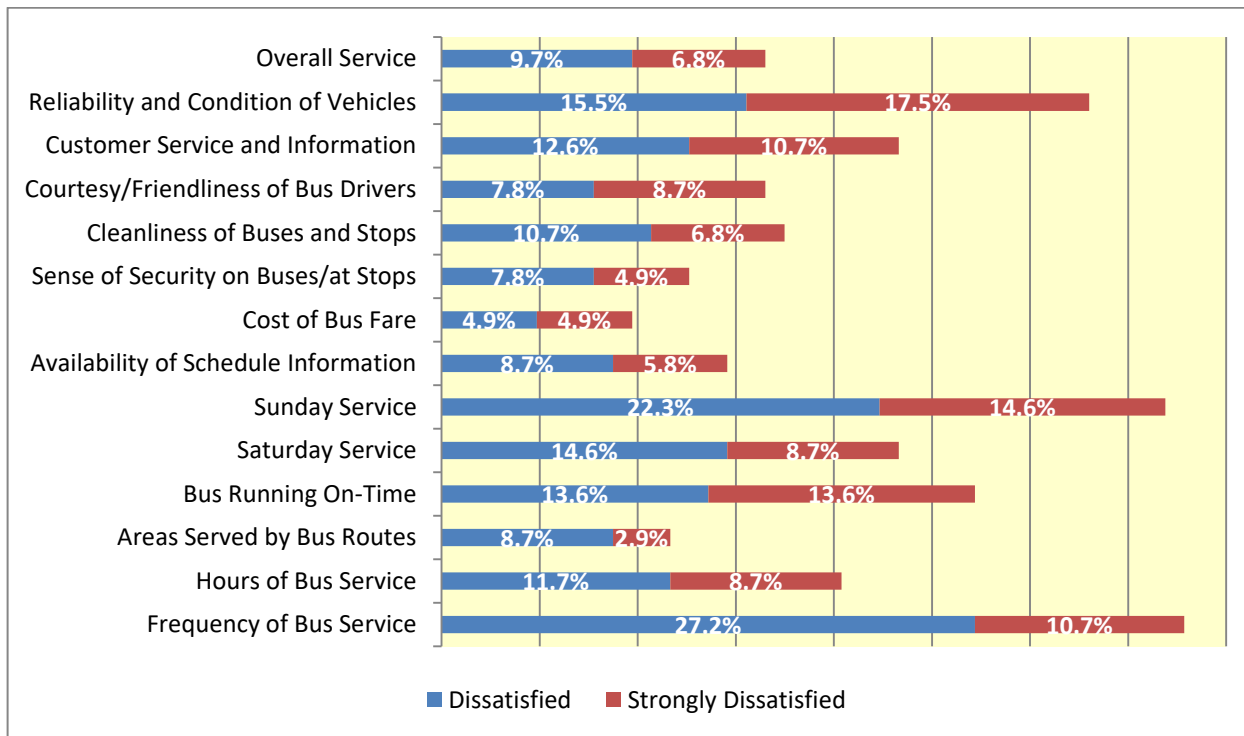
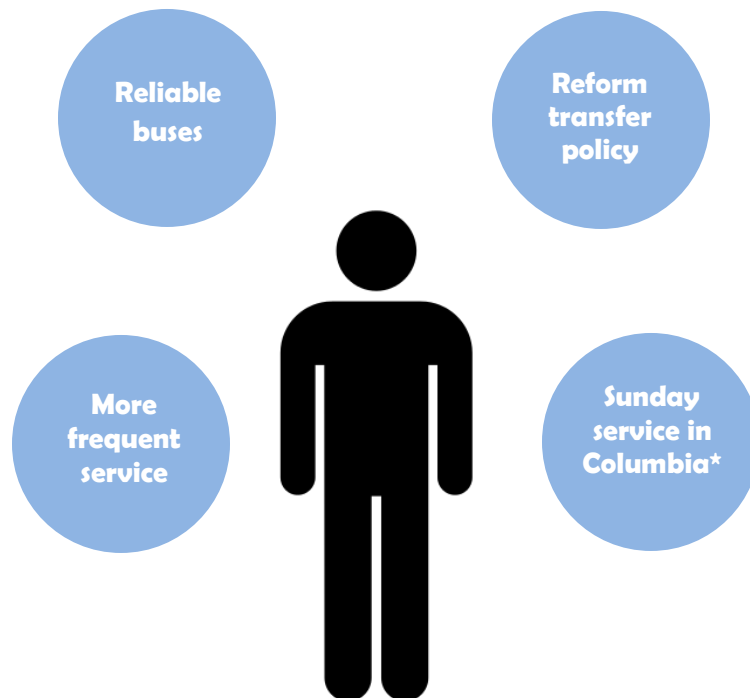
Figure 4-37: Route 404/Orange – Travel Characteristics**Figure 4-38: Route 404/Orange – Demographic and Socioeconomic Characteristics**

Figure 4-39: Route 404/Orange – Rider Dissatisfaction**What Riders Want**

*RTA already offers Sunday service in Columbia, but riders still requested it suggesting a lack of rider awareness, inconsistent availability or a desire for more frequency.

Route 405/Yellow: Columbia Mall – Miller Library/EC Senior Center

Service Area Description

Route 405/Yellow operates weekday and Saturday service throughout northern Howard County. The route originates at Columbia Mall, and has connections to Routes 401/Green, 404/Orange, 406/Red, 407/Brown, 408/Gold, 501/Silver, and 503/E. From Columbia Mall, the route continues north providing service to Dorsey's Search Village Center, Howard County Government Center, Normandy Shopping Center, Walmart and HCLS Miller Library/Ellicott City Senior Center.

Table 4-18: Route 405/Yellow Strength and Challenges

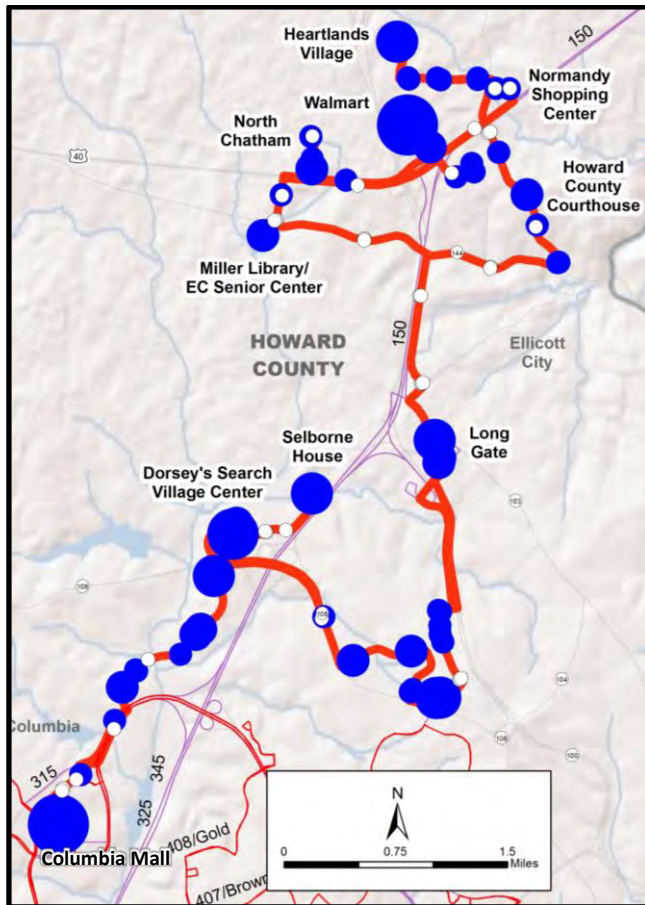
Strengths	Challenges
Consistent ridership throughout the route, highest ridership at Walmart, Miller Library, and Columbia Mall.	- Long headways (120 minutes). - Circuitous routing at the end of the route; long travel times. - No Sunday service.

Table 4-19: Route 405/Yellow – Service and Operating Characteristics

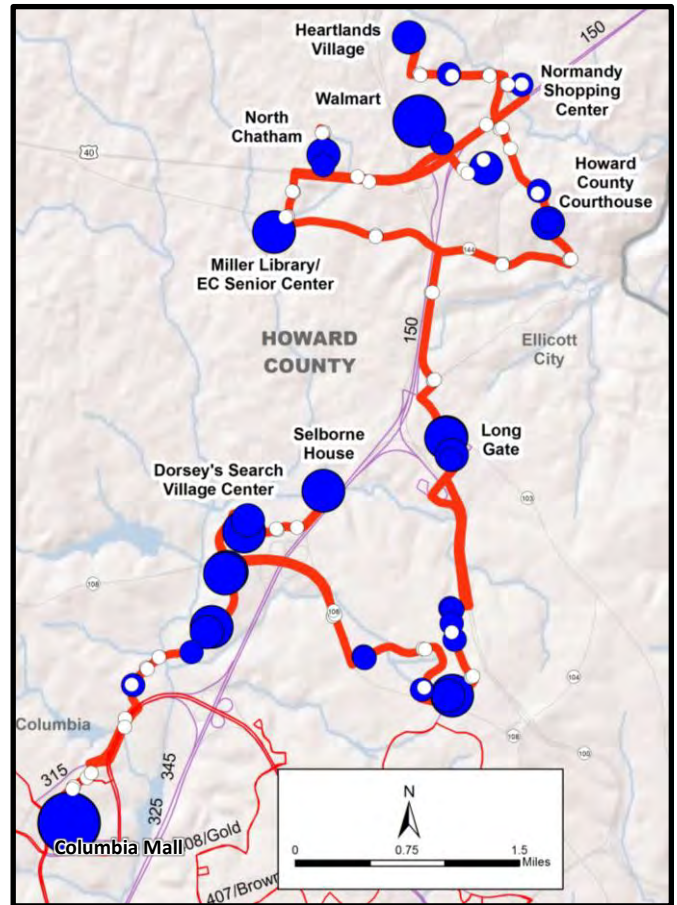
Service and Operating Characteristics		Loop A		Loop B	
		Weekdays	Saturday	Weekdays	Saturday
Span of Service		6:00 am - 10:11 pm	8:00 am - 8:11 pm	6:08 am – 6:10 pm	8:03 am – 6:10 pm
Frequency (minutes)	Peak	120	-	120	-
	Off-Peak	120	120	120	120
Cycle Time (minutes)		112	112	112	112
Layover Time (minutes)		7	7	7	7
One-way Trips		9	6	6	5
Daily Service Hours		13.10	11.20	11.20	9.30

Figure 4-40: Ridership by Stop

Weekday



Saturday



Legend

- Route
- Other RTA Routes
- WMATA Metrobus
- MTA Bus Routes
- MARC Lines
- MTA Light Rail
- WMATA Metrorail
- WMATA Metrorail Stations
- MTA Light Rail Stops
- MARC Stations
- County Boundary

Ridership by Stop

- 0
- 1 - 5
- 6 - 10
- 11 - 20
- 21 - 50
- 51 & Above

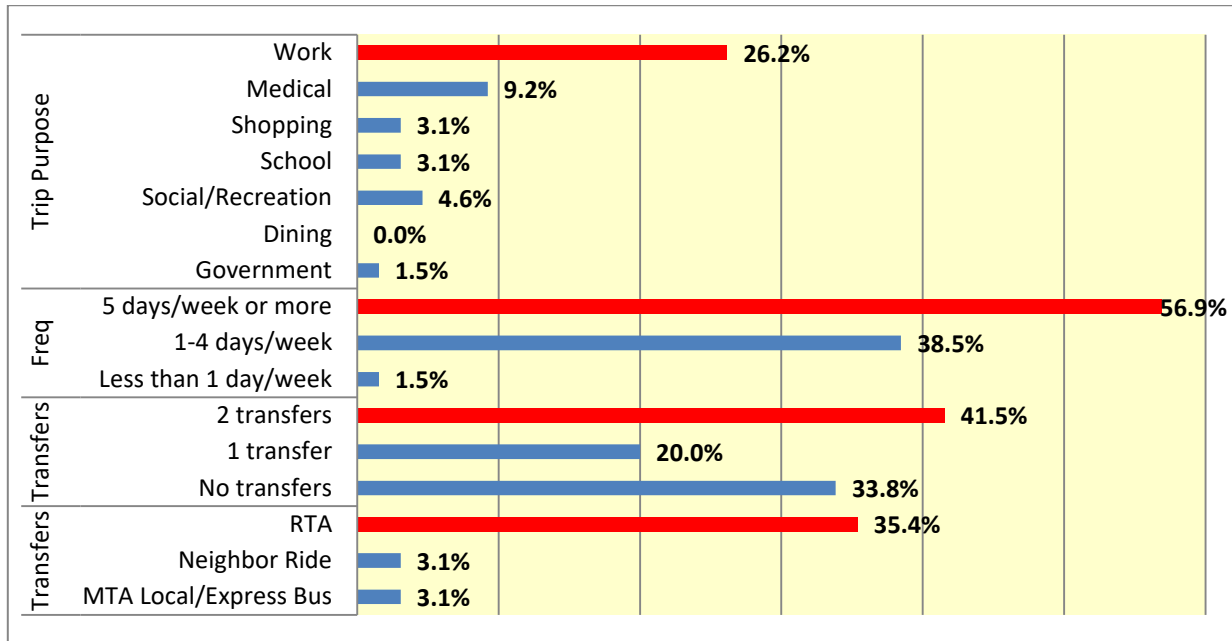
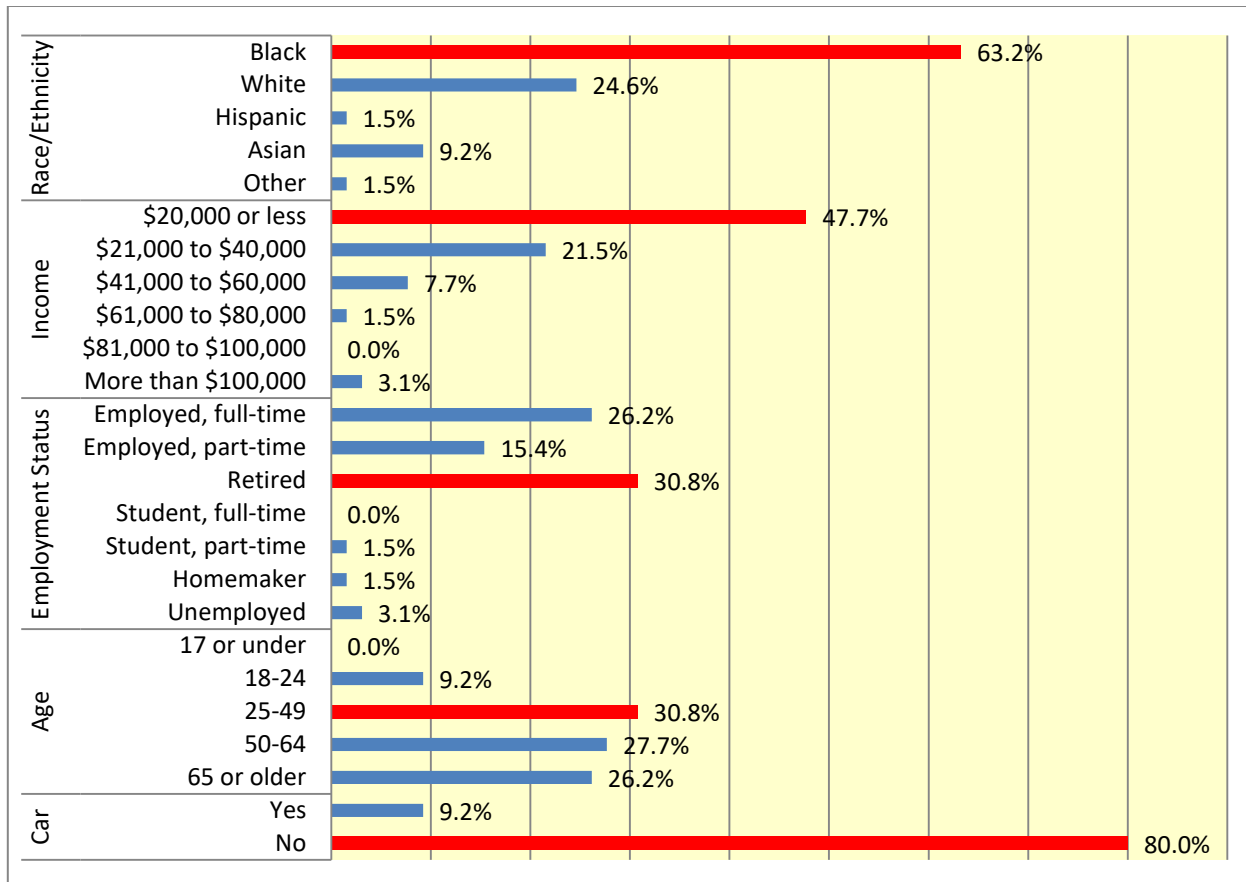
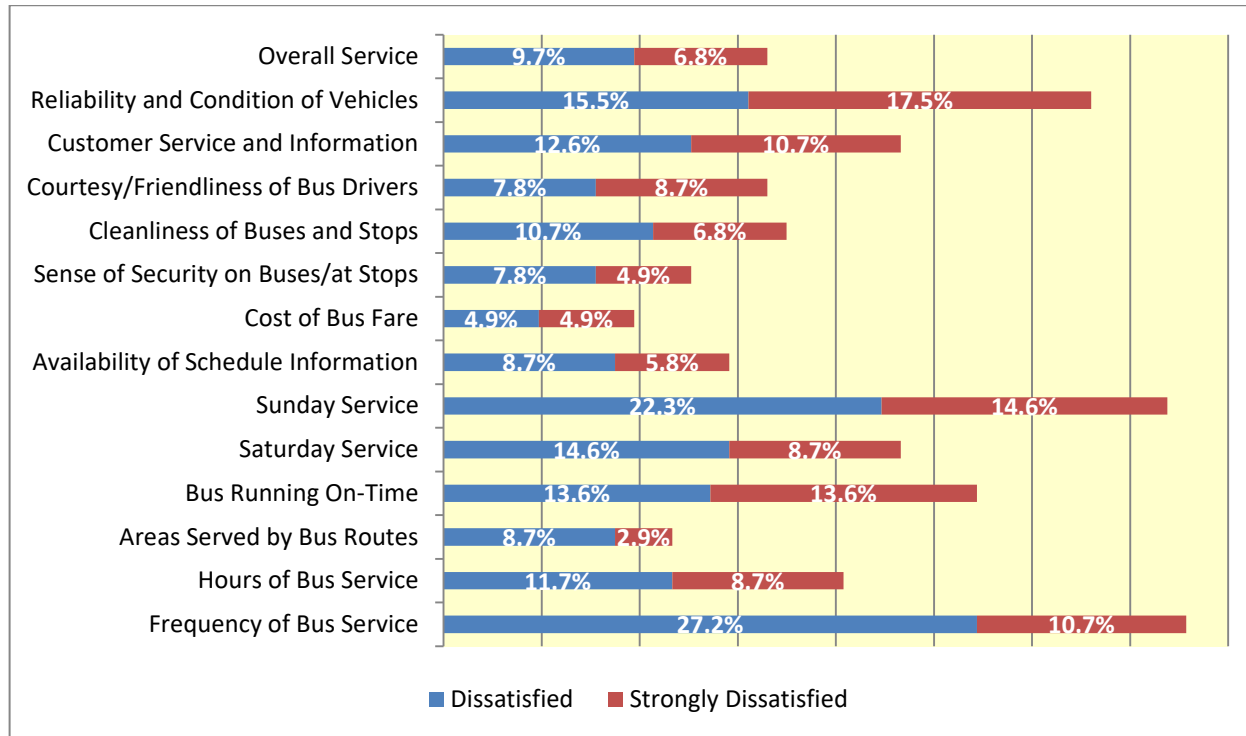
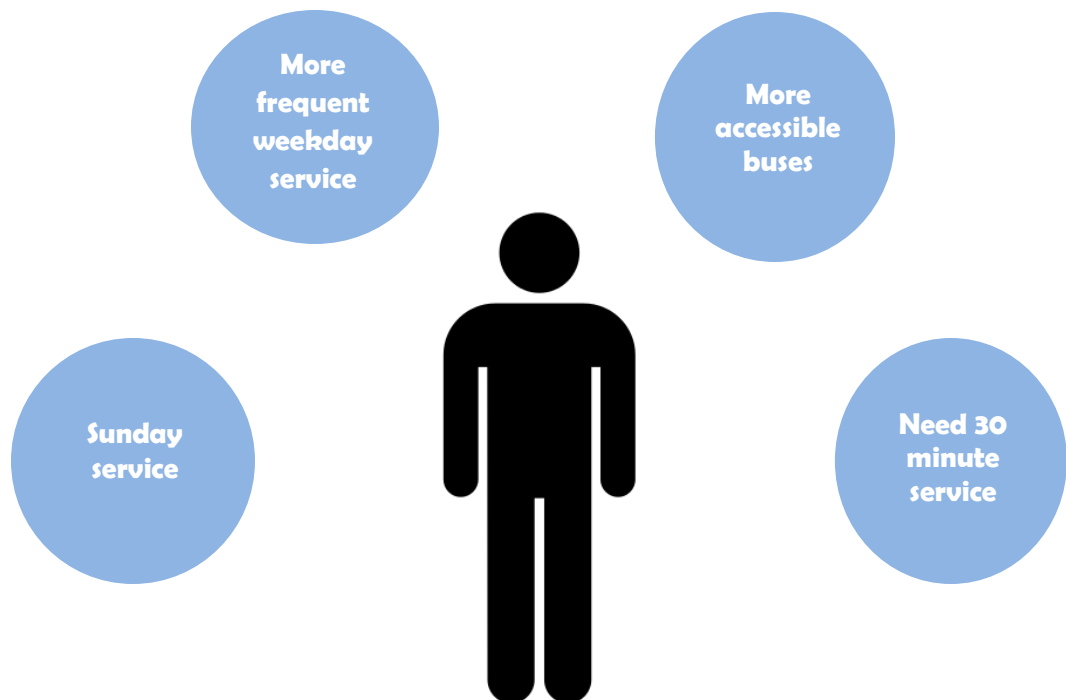
Figure 4-41: Route 405/Yellow – Travel Characteristics**Figure 4-42: Route 405/Yellow – Demographic and Socioeconomic Characteristics**

Figure 4-43: Route 405/Yellow – Rider Dissatisfaction**What Riders Want:**

Route 406/Red: Columbia Mall – Howard County Complex

Service Area Description

Route 406/Red provides daily service in Howard County. The route originates at Columbia Mall, providing connections to Routes 401/Green, 404/Orange, 405/Yellow, 407/Brown, 408/Gold, 501/Silver, and 503/E. From Columbia Mall, the route travels west in Howard County, serving Long Reach Village Center. From the Village Center, the route travels south providing service to Columbia Crossing, Dobbin Center, Howard County Complex, and terminates at Snowden Square.

Table 4-20: Route 406/Red Strength and Challenges

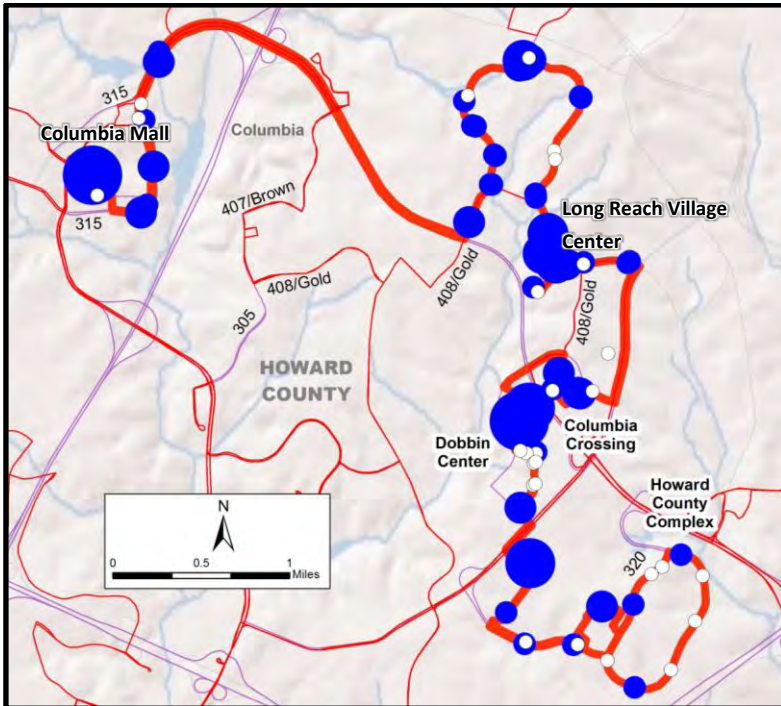
Strengths	Challenges
- Consistent ridership along eastern part of route. - Long Saturday span of service. 30 minute frequency all day on weekdays.	Two hour headways on Sundays, on what is a retail-heavy route.

Table 4-21: Route 406/Red Service and Operating Characteristics

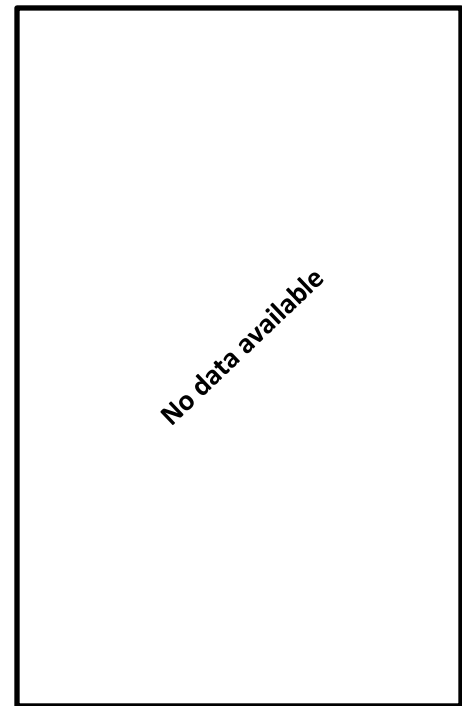
Service and Operating Characteristics		Weekdays	Saturday	Sunday
Span of Service		5:35 am - 11:19 pm	7:37 am - 10:20 pm	9:10 am - 6:21 pm
Frequency (minutes)	Peak	30	-	-
	Off-Peak	30	60	120
One-way Trips		30	13	6
Cycle Time (minutes)		110	118	117
Layover Time (minutes)		10	11	12
Daily Service Hours		55.28	24.97	8.92

Figure 4-44: Route 406/Red – Ridership by Stop

Weekday



Saturday



Legend

- Route
- Other RTA Routes
- WMATA Metrobus
- MTA Bus Routes
- MARC Lines
- MTA Light Rail
- WMATA Metrorail
- WMATA Metrorail Stations
- MTA Light Rail Stops
- MARC Stations
- County Boundary

Ridership by Stop

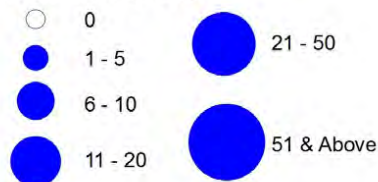


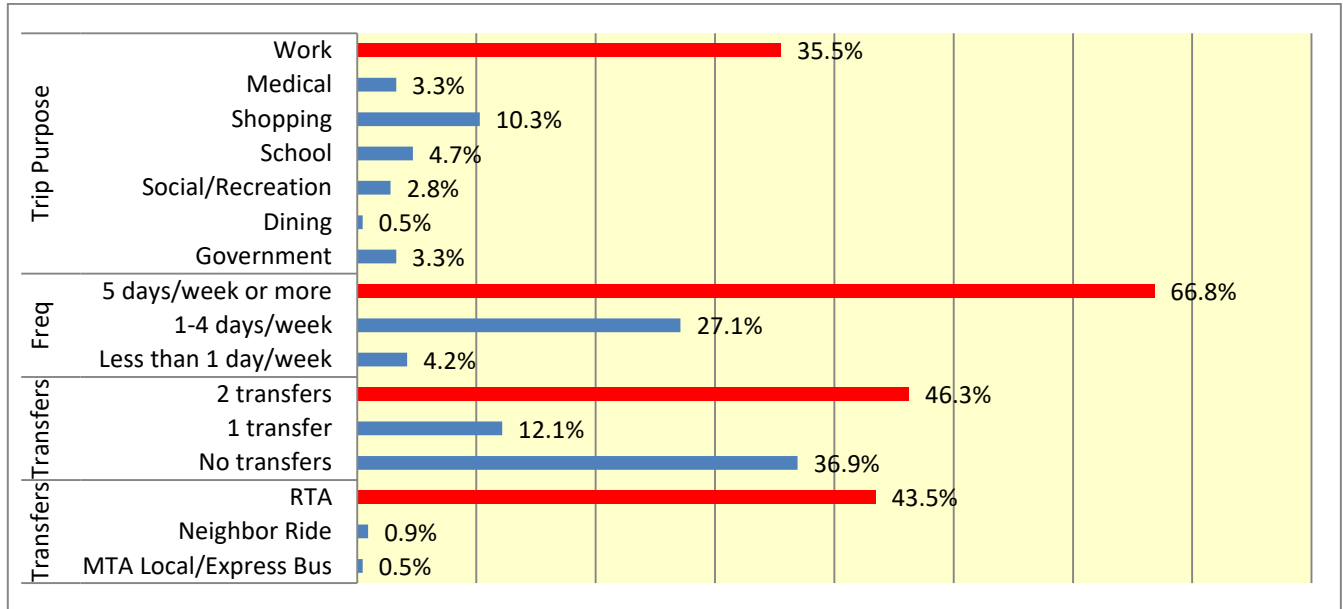
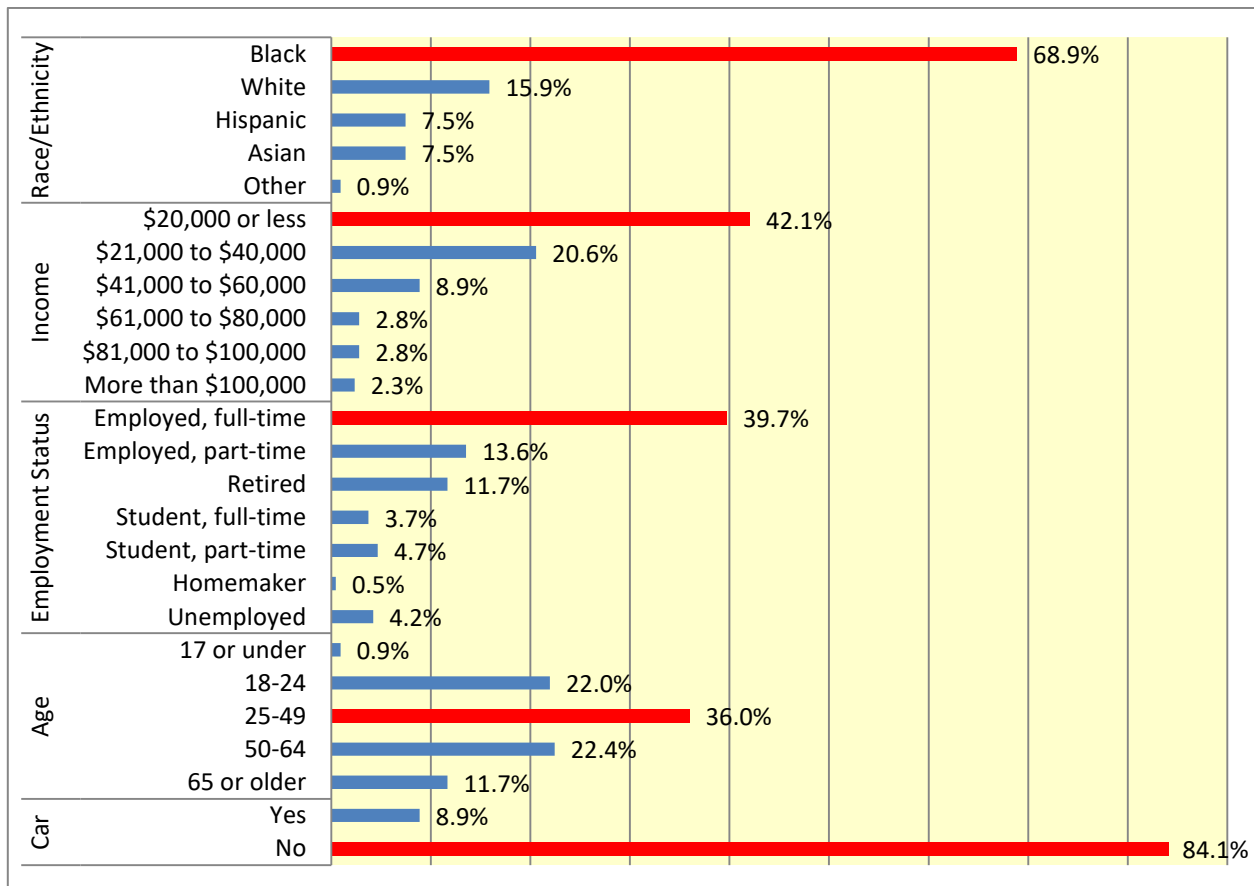
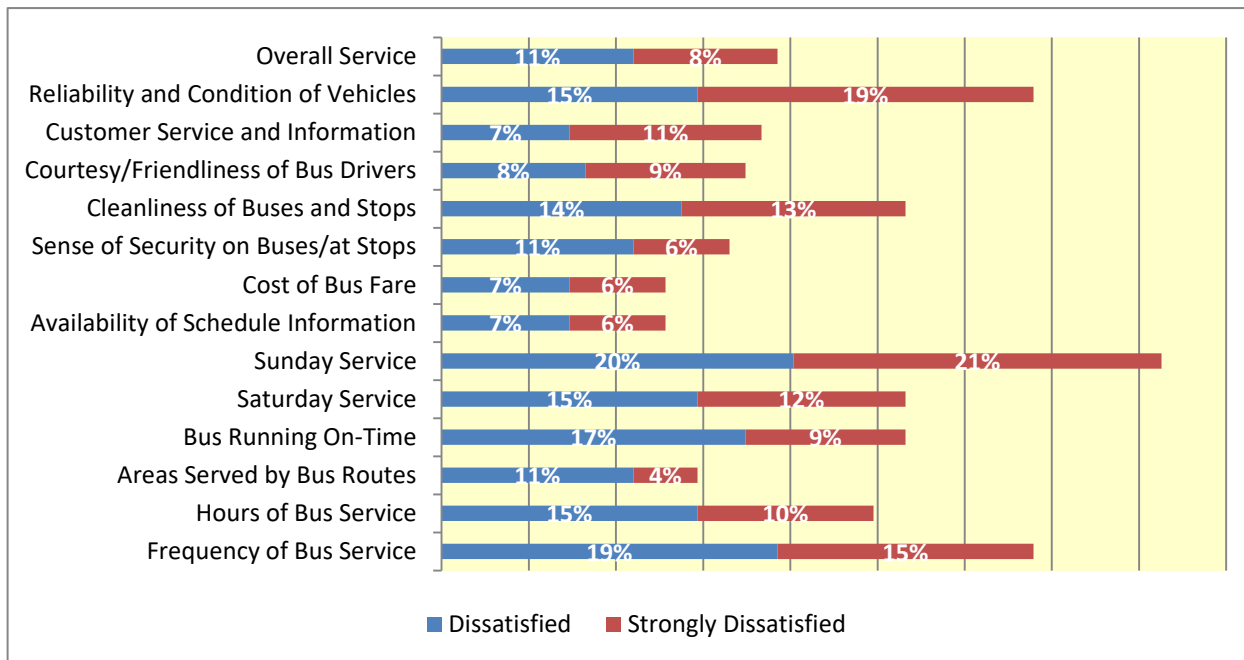
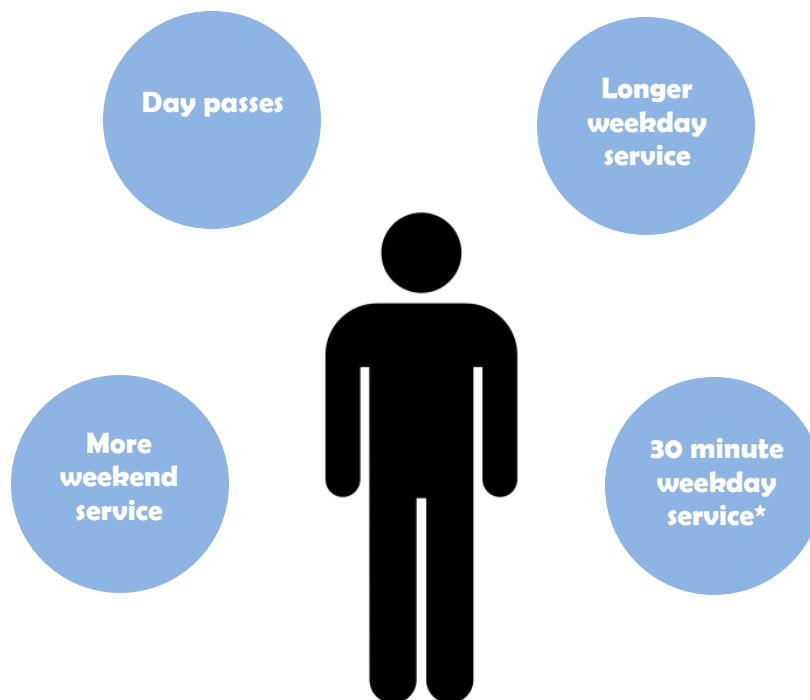
Figure 4-45: Route 406/Red – Travel Characteristics**Figure 4-46: Route 406/Red – Demographic and Socioeconomic Characteristics**

Figure 4-47: Route 406/Red – Rider Dissatisfaction**What Riders Want**

*This route already has 30 minute weekday service, so the rider request suggests a lack of awareness or inconsistent availability.

Route 407/Brown: Columbia Mall – Kings Contrivance Village Center

Service Area Description

Route 407/Brown provides daily service within northern Howard County. The route originates at Columbia Mall, providing connections to Routes 401/Green, 404/Orange, 405/Yellow, 406/Red, 408/Gold, 501/Silver, and 503/E. From Columbia Mall, the route serves the Oakland Mills Village Center, Owen Brown Village Center, Snowden Square, and Guildford Elementary School. The route then travels west and terminates service at Kings Contrivance Village Center.

Table 4-22: Route 407/Brown Strength and Challenges

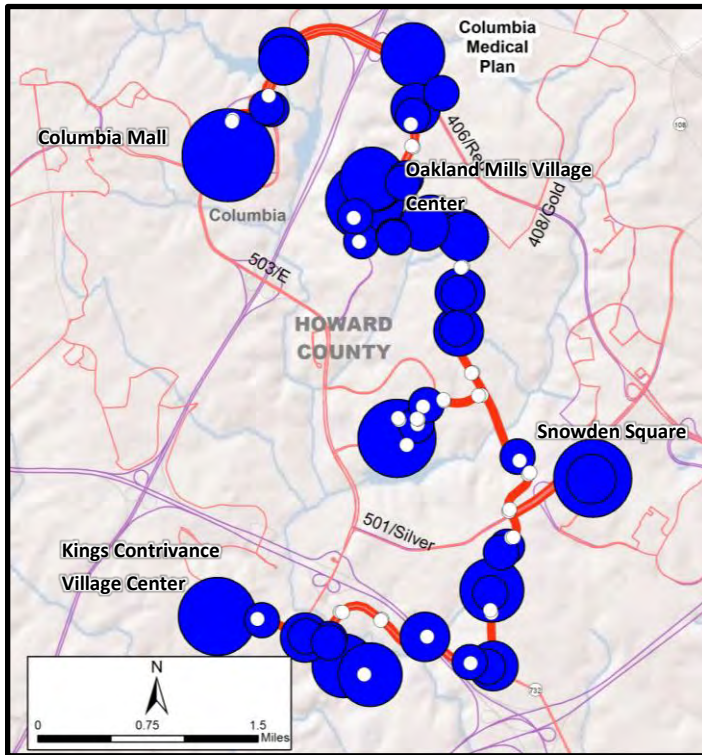
Strengths	Challenges
- Alternates with 408 at many stops to offer 30 minute service at those locations. - Serves five activity centers – Columbia Mall, Oakland Mills Village Center, Owen Brown Village Center, Snowden Square, and Kings Contrivance Village Center. - High ridership.	- Route makes four deviations from alignment, which increases running time. - Long Sunday headways (120 minutes).

Table 4-23: 407/Brown Service and Operating Characteristics

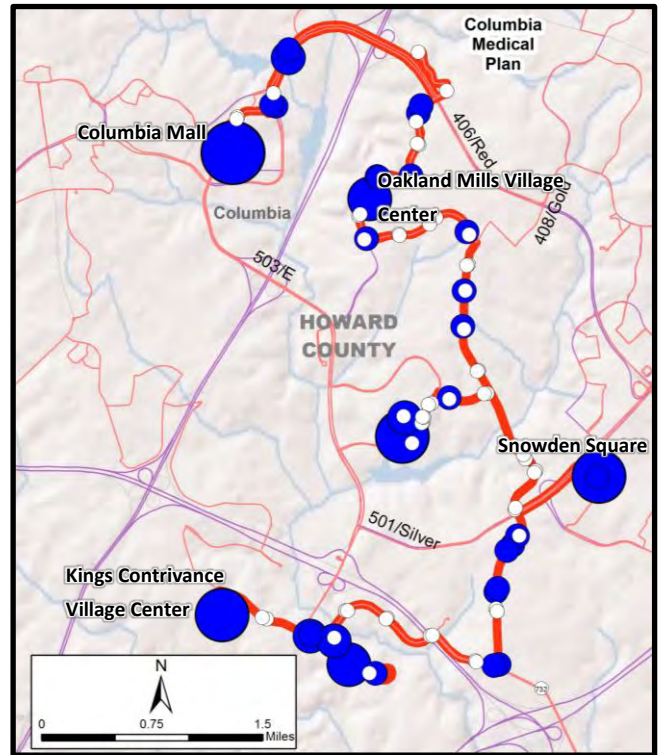
Service and Operating Characteristics		Weekdays	Saturday	Sunday
Span of Service		5:35 am - 11:19 pm	7:37 am - 10:20 pm	9:05 am - 6:48 pm
Frequency (minutes)	Peak	60	-	-
	Off-Peak	60	60	120
Cycle Time (minutes)		107	107	107
Layover Time (minutes)		10	2	10
Roundtrips		66	26	12
Daily Service Hours		29.33	18.33	9.17

Figure 4-48: Route 407/Brown – Ridership by Stop

Weekday



Saturday



Legend

- Route
- Other RTA Routes
- WMATA Metrobus
- MTA Bus Routes
- MARC Lines
- MTA Light Rail
- WMATA Metrorail
- WMATA Metrorail Stations
- MTA Light Rail Stops
- MARC Stations
- County Boundary

Ridership by Stop

- 0
- 1 - 5
- 6 - 10
- 11 - 20
- 21 - 50
- 51 & Above

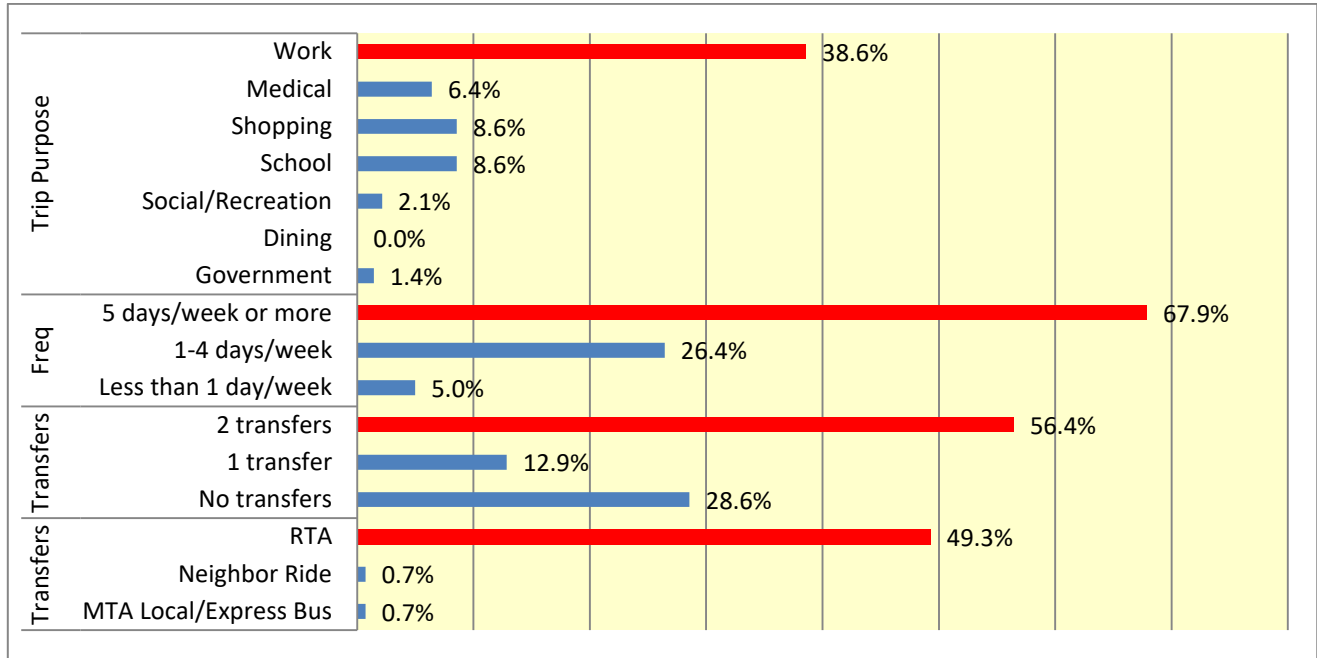
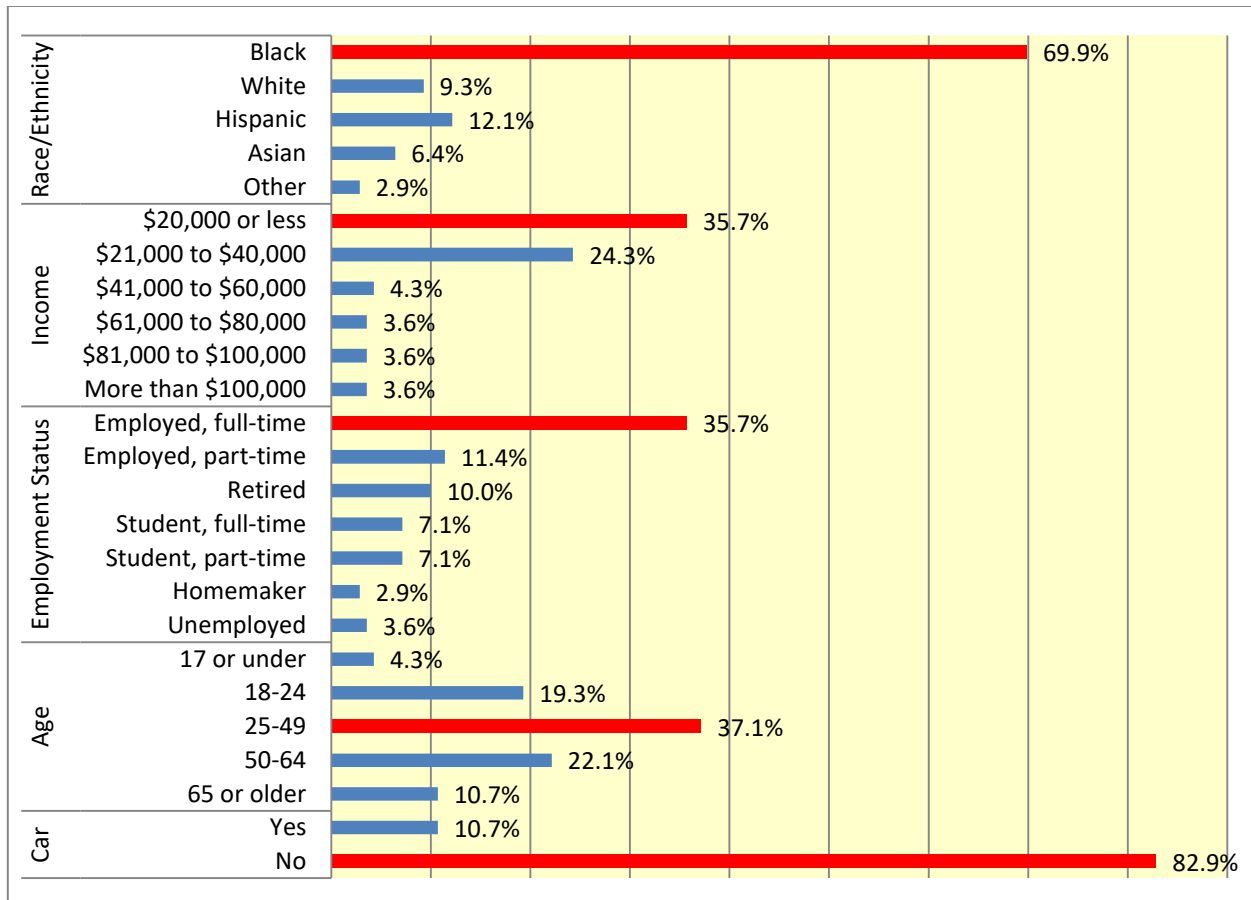
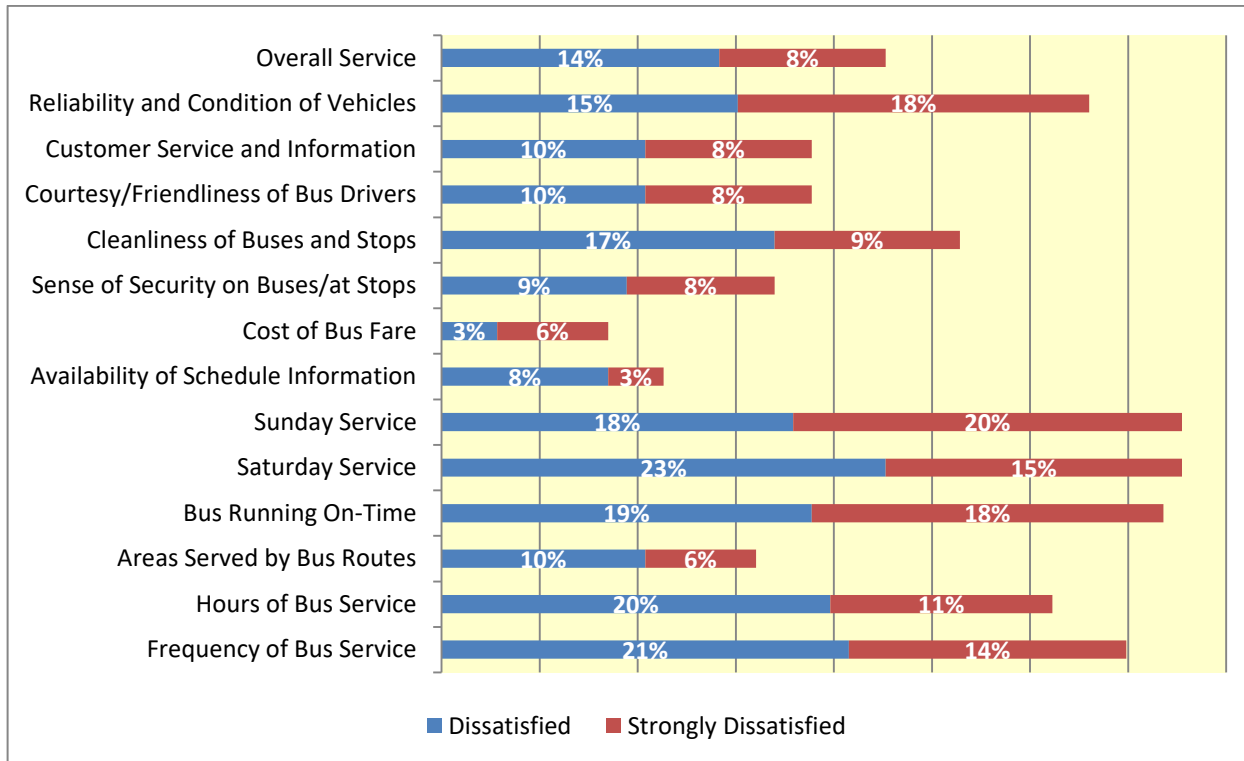
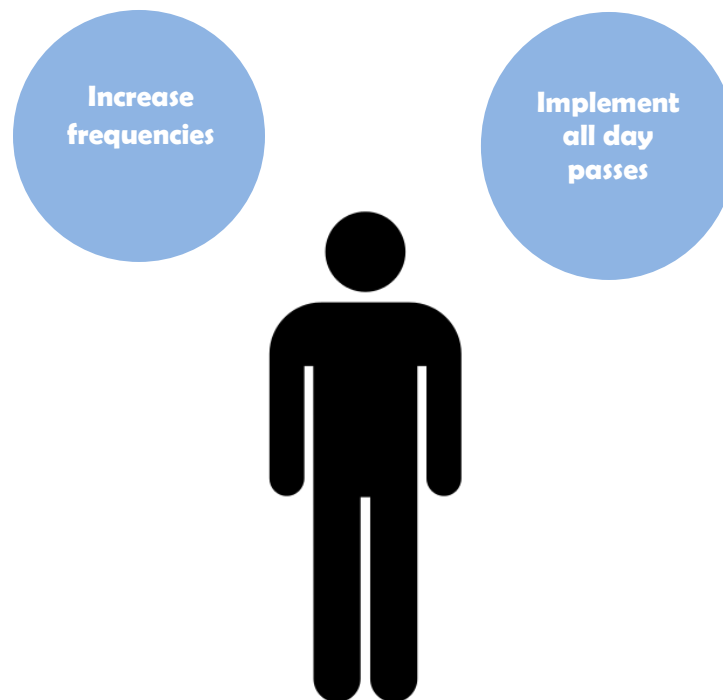
Figure 4-49: Route 407/Brown – Travel Characteristics**Figure 4-50: Route 407/Brown – Demographic and Socioeconomic Characteristics**

Figure 4-51: Route 407/Brown – Rider Dissatisfaction**What Riders Want**

Route 408/Gold: Columbia Mall – MD Food Center

Service Area Description

Route 408/Gold operates weekday and Saturday service throughout northern Howard County. The route originates at Columbia Mall, providing connections to Routes 401/Green, 404/Orange, 405/Yellow, 406/Red, 407/Brown, 501/Silver, and 503/E. From Columbia Mall, the route travels west providing service to Columbia Medical Plan, Oakland Mills Village Center, and Long Reach Village Center. From the Village Center, the route travels south to serve the Snowden River Park and Ride and Sherwood Crossing, terminating service at the MD Food Center.

Table 4-24: Route 408/Gold Strength and Challenges

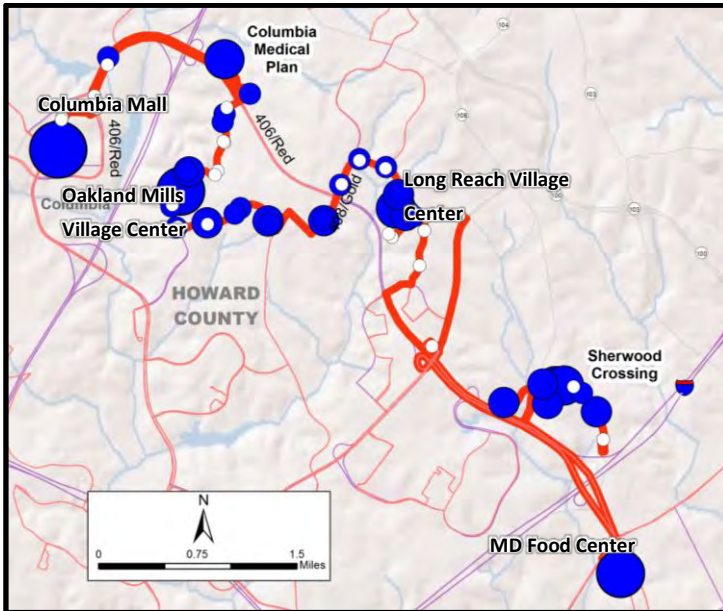
Strengths	Challenges
Long weekday span of service.	- Long frequencies (120 minutes). - Lack of Sunday service on retail-heavy route.

Table 4-25: 408/Gold Service and Operating Characteristics

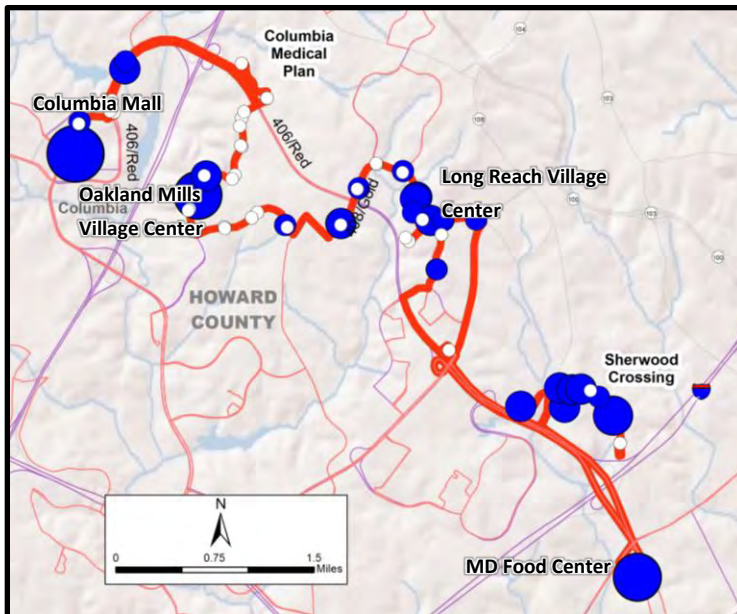
Service and Operating Characteristics		Weekdays	Saturday
Span of Service		5:53 am - 10:17 pm	7:53 am- 10:17 pm
Frequency (minutes)	Peak	60	-
	Off-Peak	120	120
One-Way Trips		26	8
Cycle Time (minutes)		111	111
Layover Time (minutes)		5	5
Daily Service Hours		24.05	24.05

Figure 4-52: Route 408/Gold – Ridership by Stop

Weekday



Saturday



Legend

- Route
- Other RTA Routes
- WMATA Metrobus
- MTA Bus Routes
- MARC Lines
- MTA Light Rail
- WMATA Metrorail
- WMATA Metrorail Stations
- MTA Light Rail Stops
- MARC Stations
- County Boundary

Ridership by Stop

- 0
- 1 - 5
- 6 - 10
- 11 - 20
- 21 - 50
- 51 & Above

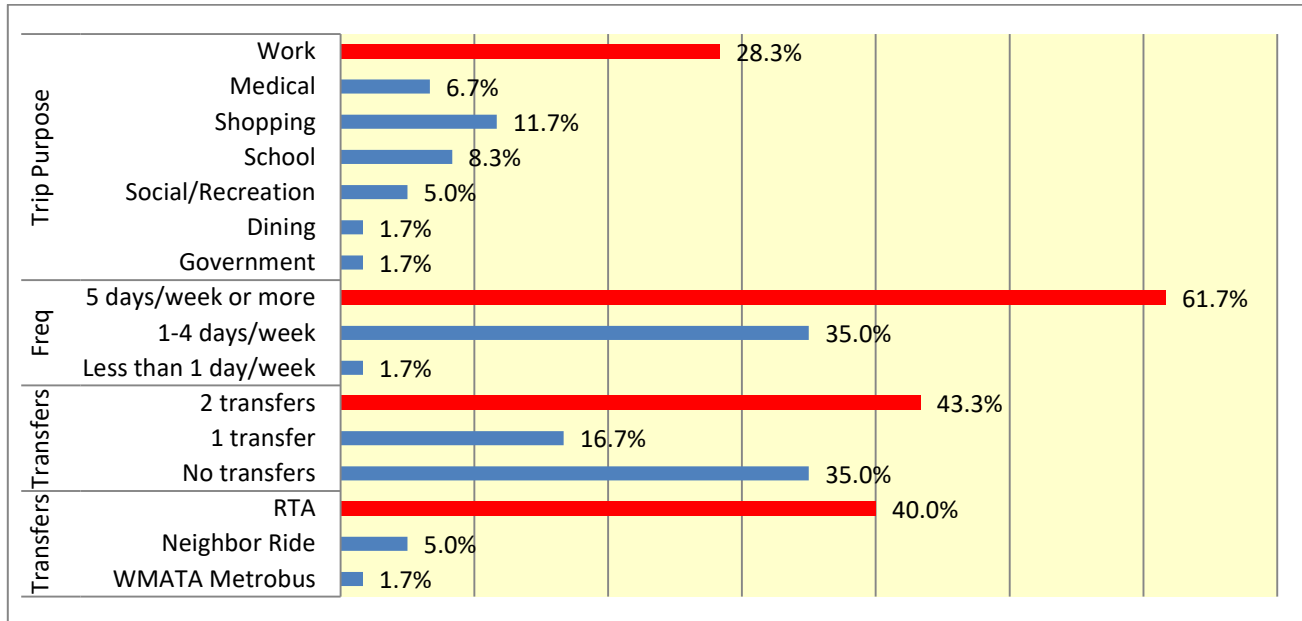
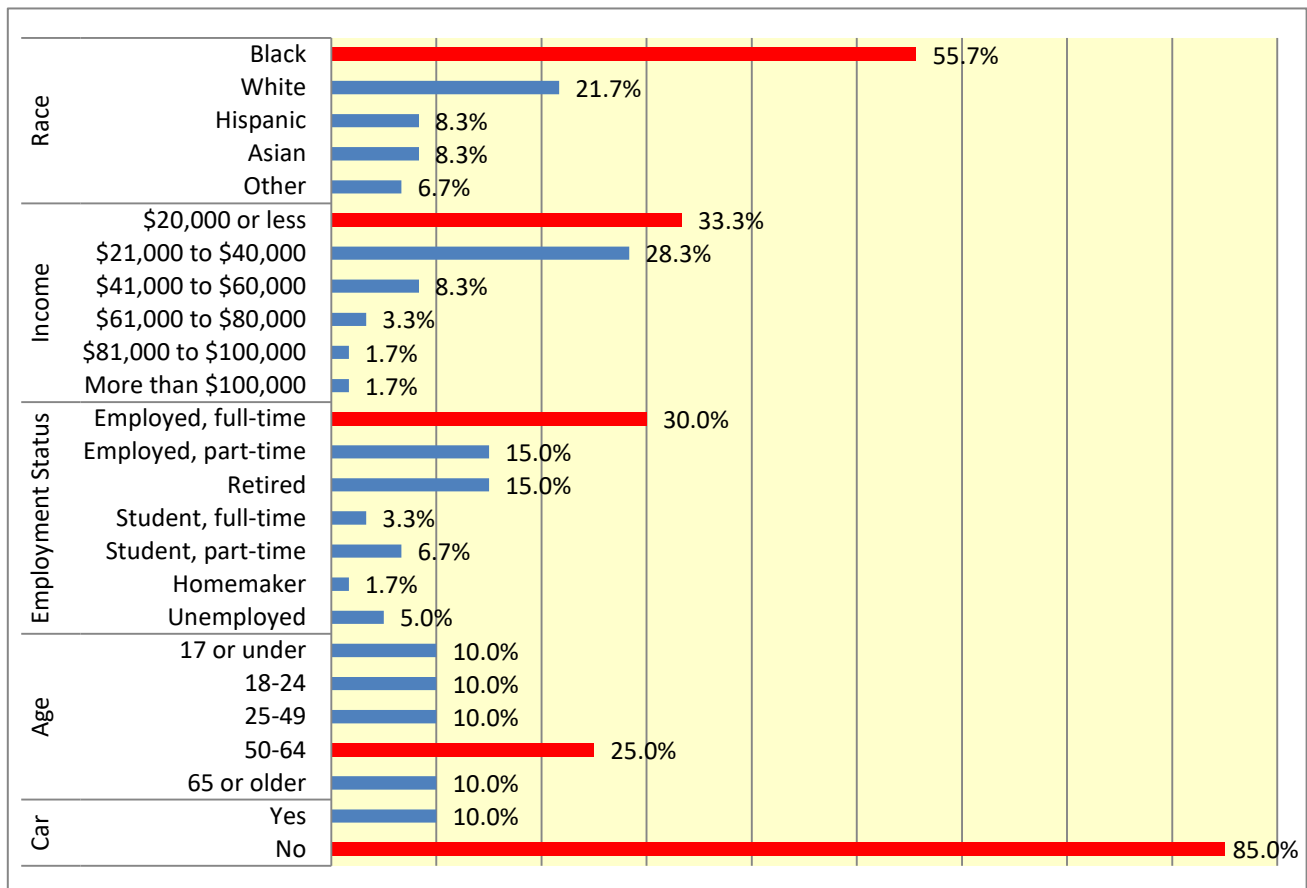
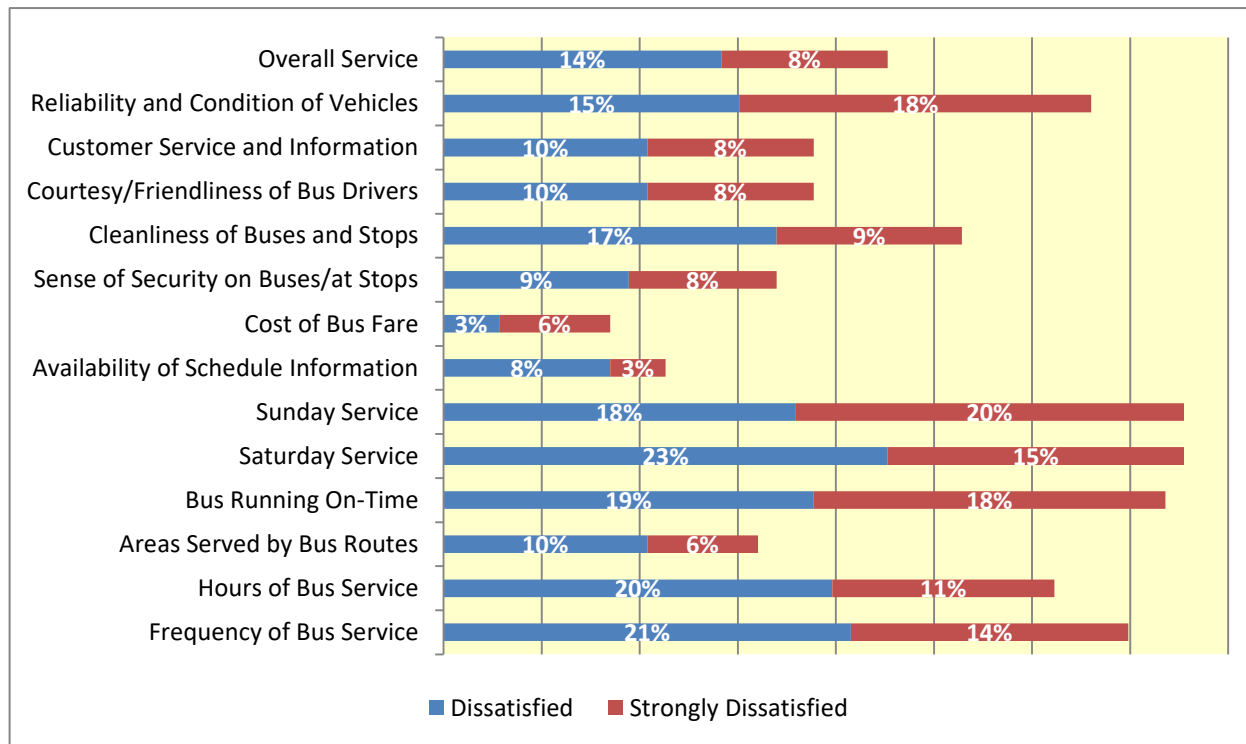
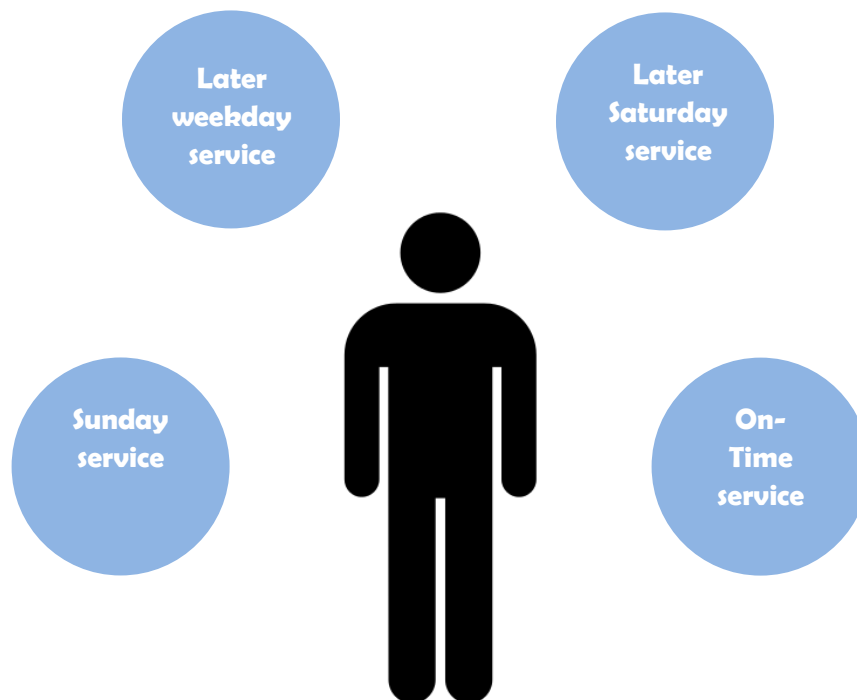
Figure 4-53: Route 408/Gold – Travel Characteristics**Figure 4-54: Route 408/Gold – Demographic and Socioeconomic Characteristics**

Figure 4-55: Route 408/Gold – Rider Dissatisfaction**What Riders Want**

Route 409A (Previous 409/Purple): Towne Centre at Laurel – Elkridge Corners Shopping Center and 409/B: North Laurel Community Center and MD Food Center

Service Area Description

Route 409A (previous 409/Purple) provides weekday and Saturday service along Route 1, mostly in Howard County. The route originates at the Towne Centre at Laurel, providing connections to Routes 301/A 302/G, 502/B, and 503/E. From the Towne Centre, the route primarily travels along Washington Boulevard, providing connections to Perkins Hospital, MD Food Center, and Dorsey MARC Station, terminating service at Elkridge Corners. The recently implemented 409/B operates between the North Laurel Community Center and MD Food Center, providing service to the Salvation Army.

Since the 409/B was implemented in October 2017, the following tables and figures are not reflective of that service.

Table 4-26: Route 409/Purple Strength and Challenges

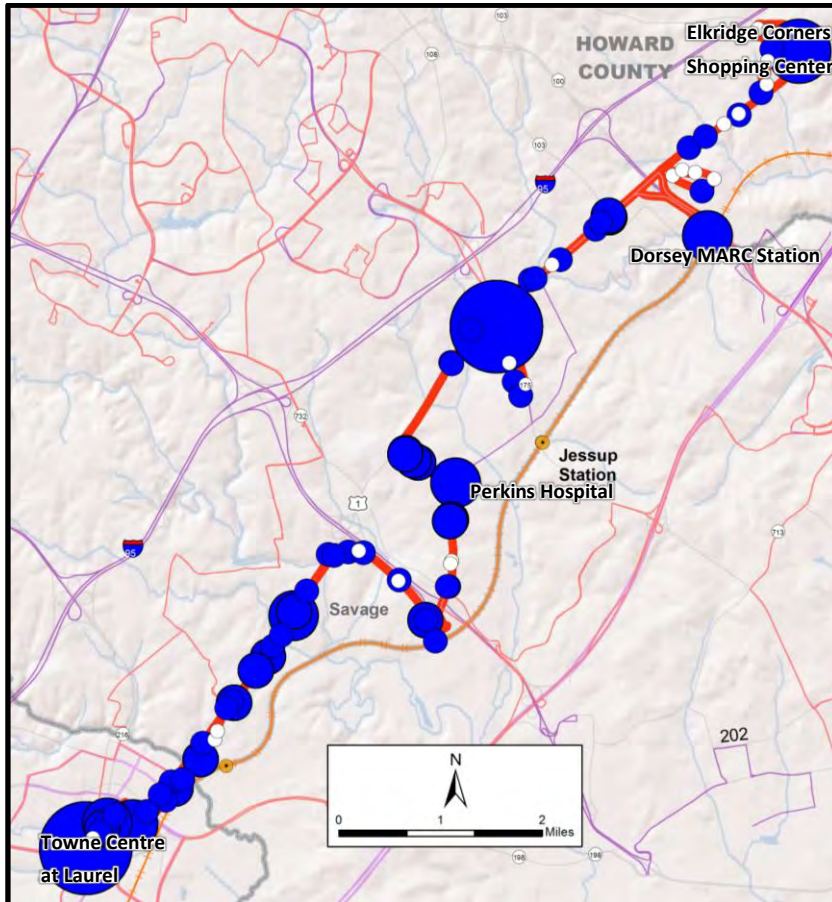
Strengths	Challenges
- Primarily straight alignment along Washington Boulevard. - Serves three trip generators/destinations, and one transit center.	- Long off peak frequencies (120 minutes). - Difficulty making running time - No Sunday service.

Table 4-27: Route 409/Purple Service and Operating Characteristics

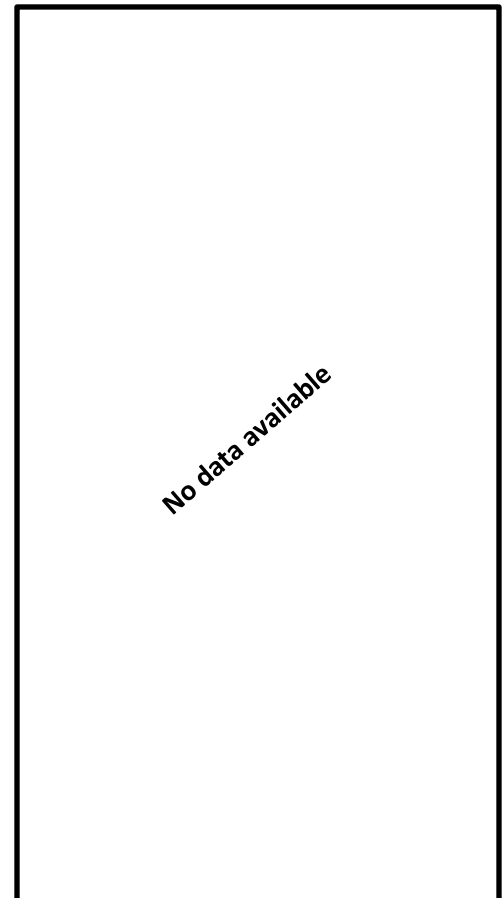
Service and Operating Characteristics		Weekdays	Saturday	Sunday
Span of Service		6:00 am - 9:55 pm	9:00 am - 9:50 pm	-
Frequency (minutes)	Peak	60	120	-
	Off-Peak	120		
One-Way Trips		12	6	-
Cycle Time (minutes)		115	110	-
Layover Time (minutes)		5	10	-
Daily Service Hours		23.00	13.42	-

Figure 4-56: Route 409/Purple – Ridership by Stop

Weekday



Saturday



Legend

- Route
- Other RTA Routes
- WMATA Metrobus
- MTA Bus Routes
- MARC Lines
- MTA Light Rail
- WMATA Metrorail
- M WMATA Metrorail Stations
- MTA Light Rail Stops
- MARC Stations
- County Boundary

Ridership by Stop

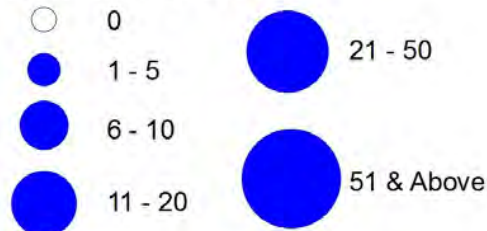


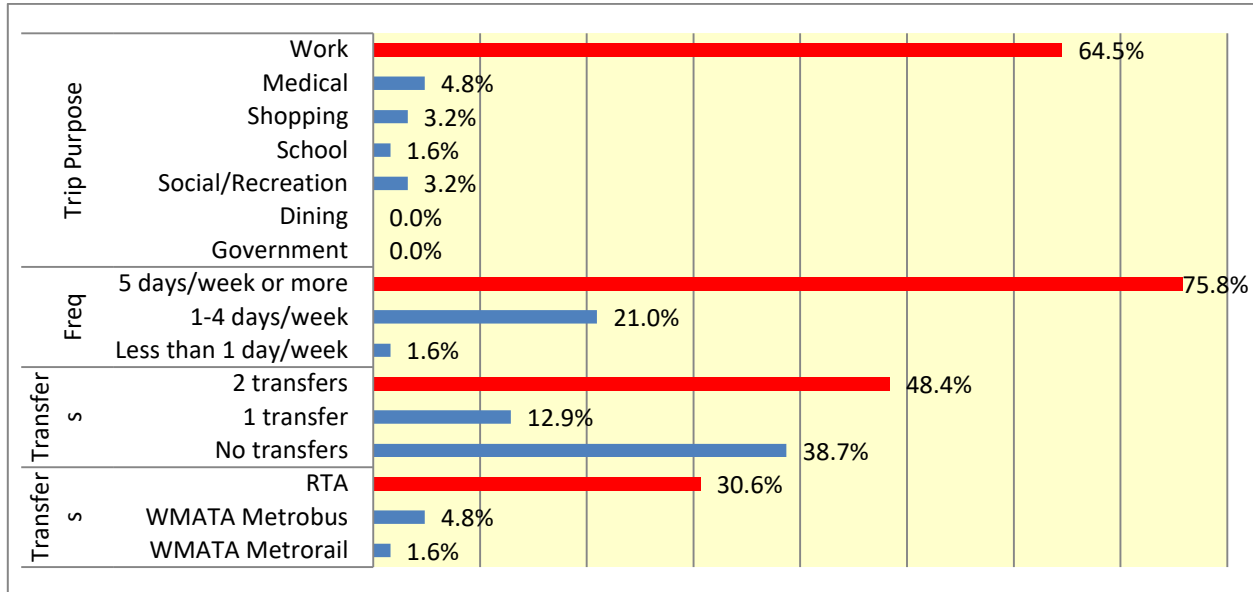
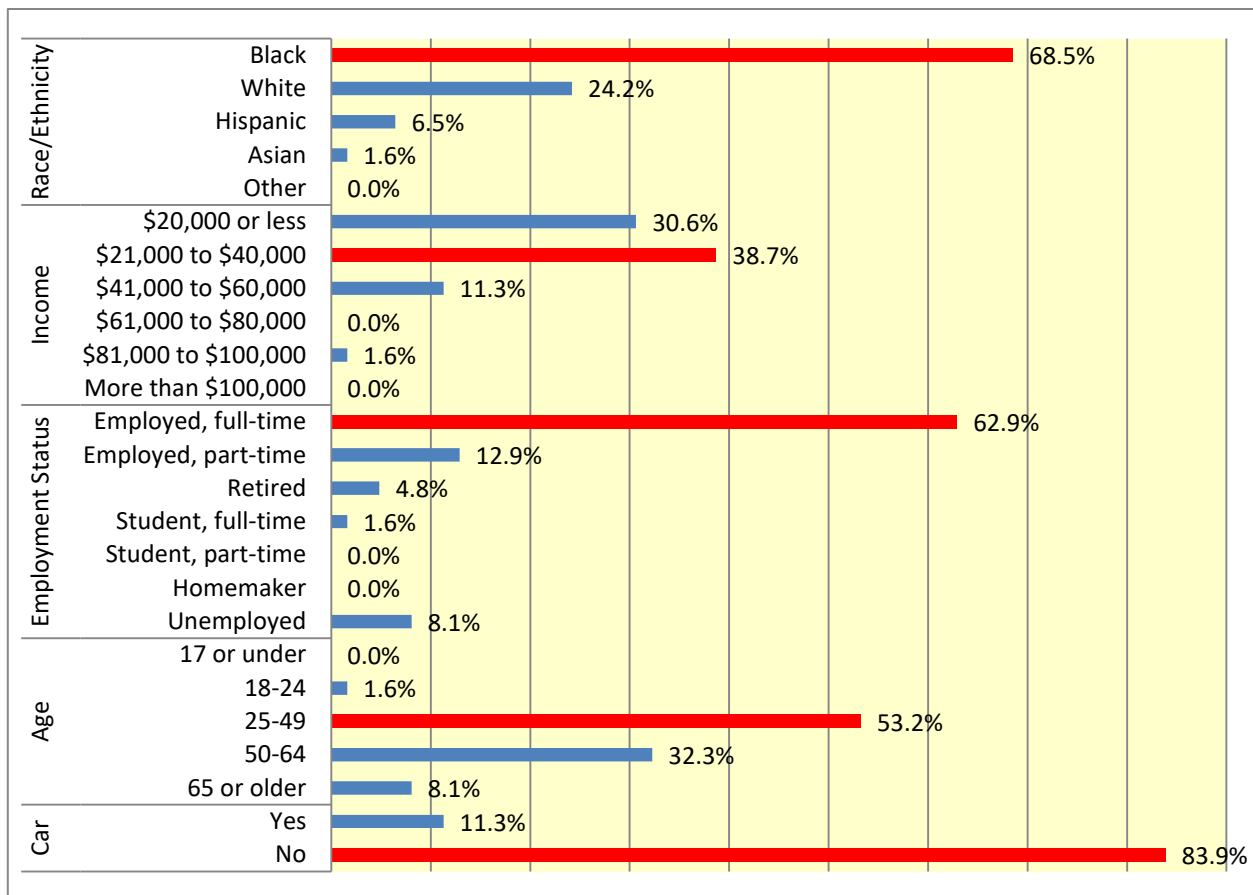
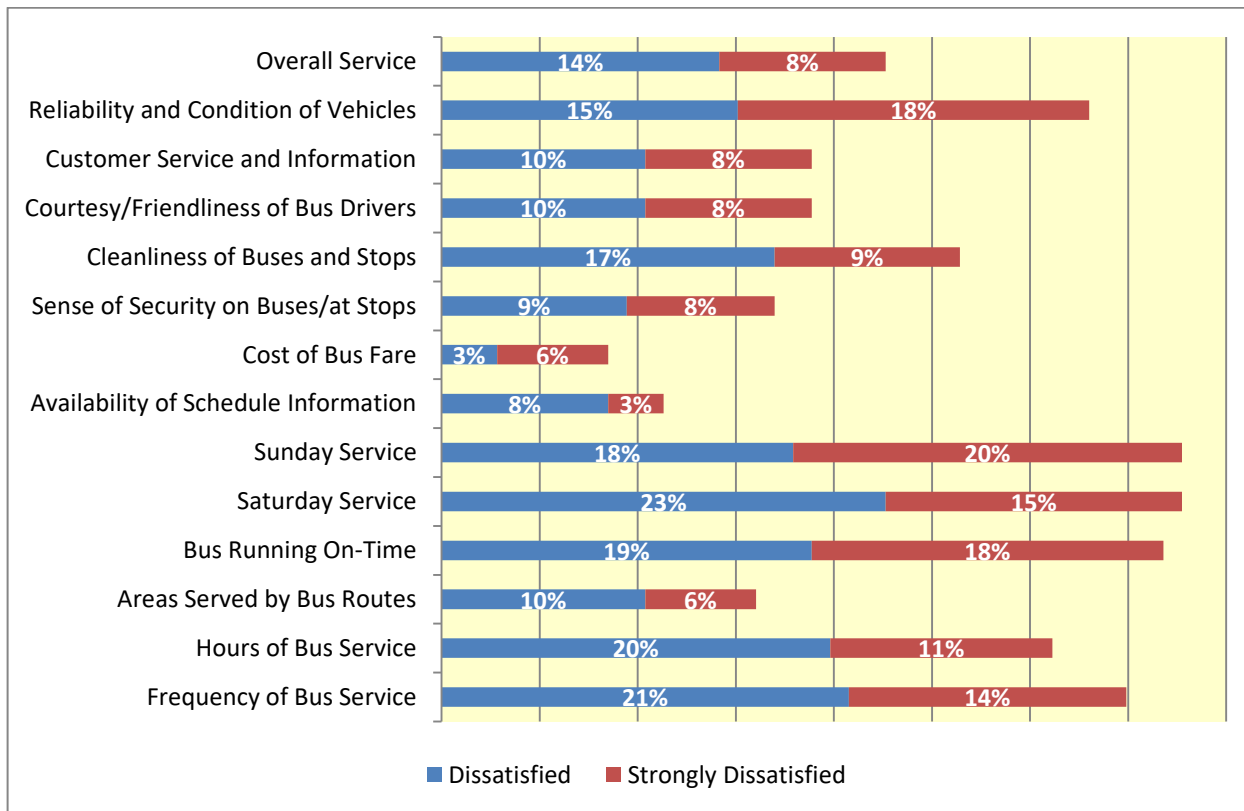
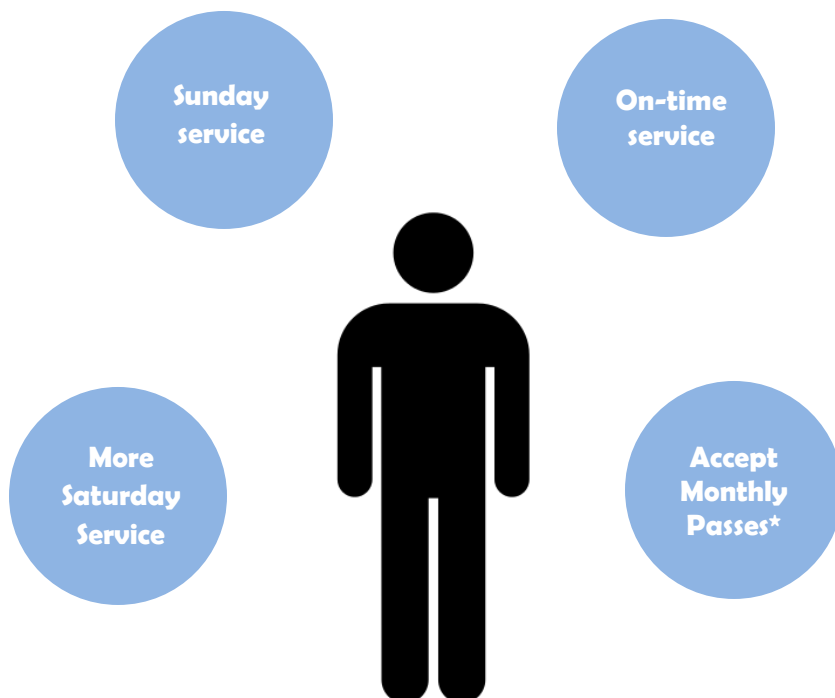
Figure 4-57: Route 409/Purple – Travel Characteristics**Figure 4-58: Route 409/Purple – Demographics and Socioeconomic Characteristics**

Figure 4-59: Route 409/Purple – Rider Dissatisfaction**What Riders Want**

*Rider request. Only "Howard Transit" monthly passes accepted on this route. RTA "Connect-a-Ride" monthly passes valid on Anne Arundel and Prince George's routes due to continuation of separate fare policies.

Route 501/Silver: Columbia Mall – BWI Marshall Airport

Service Area Description

Route 501/Silver provides daily service within eastern Howard County and western Anne Arundel County. The route originates at the Columbia Mall, providing connections to Routes 401/Green, 404/Orange, 405/Yellow, 406/Red, 407/Brown, 408/Gold, and 503/E. From Columbia Mall, the route travels east toward Snowden Square and Snowden River Park and Ride. The route continues east providing service to the MD Food Center (connections to 409 and 409B), Dorsey MARC Station, Arundel Mills Mall (connections to 201/J, 202K, 502/B, and MTA 75), and BWI MARC/Amtrak Station, and finally terminates at BWI Marshall Airport.

Table 4-28: Route 501/Silver Strength and Challenges

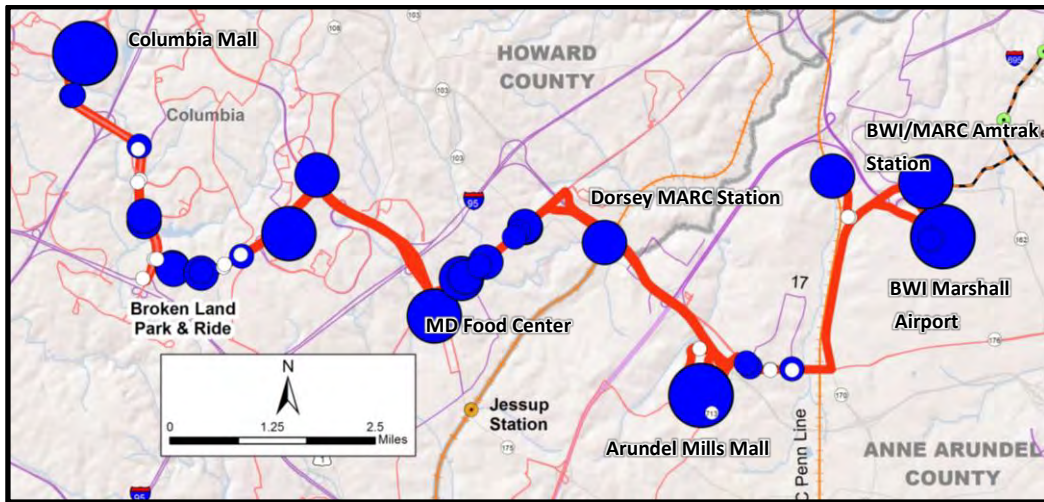
Strengths	Challenges
- Serves six activity centers – Columbia Mall, Snowden Square, MD Food Center, Arundel Mills Mall, BWI Marshall Airport and BWI Business Park. - Serves two transit facilities - Dorsey MARC Station and BWI/MARC Amtrak Station.	- Running time. 90-minute headways (effective 10/1/2017)

Table 4-29: Route 501/Silver Service and Operating Characteristics

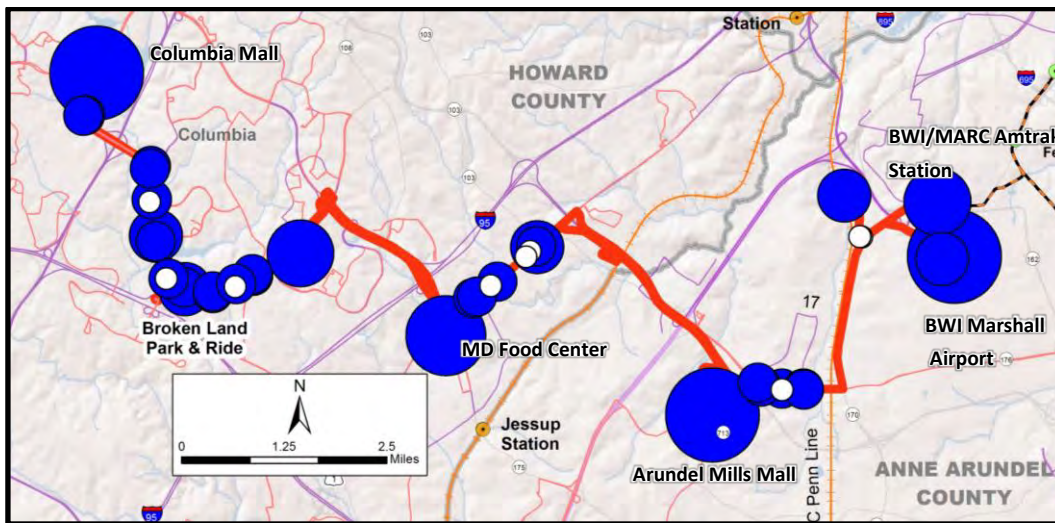
Service and Operating Characteristics		Weekdays	Saturday	Sunday
Span of Service		5:28 am - 10:59 pm	7:03 am - 10:59 pm	9:03 am – 6:59 pm
Frequency (minutes)	Peak	90	-	-
	Off-Peak	90	60	120
One-Way Trips		17	12	5
Cycle Time (minutes)		169	113	117
Layover Time (minutes)		4	4	4
Daily Service Hours		49.30	37.70	14.50

Figure 4-60: Route 501/Silver – Ridership by Stop

Weekday



Saturday



Legend

- Route
- Other RTA Routes
- WMATA Metrobus
- MTA Bus Routes
- MARC Lines
- MTA Light Rail
- WMATA Metrorail
- WMATA Metrorail Stations
- MTA Light Rail Stops
- MARC Stations
- County Boundary

Ridership by Stop

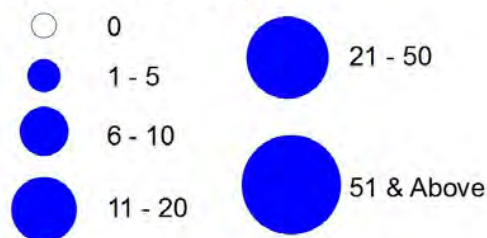


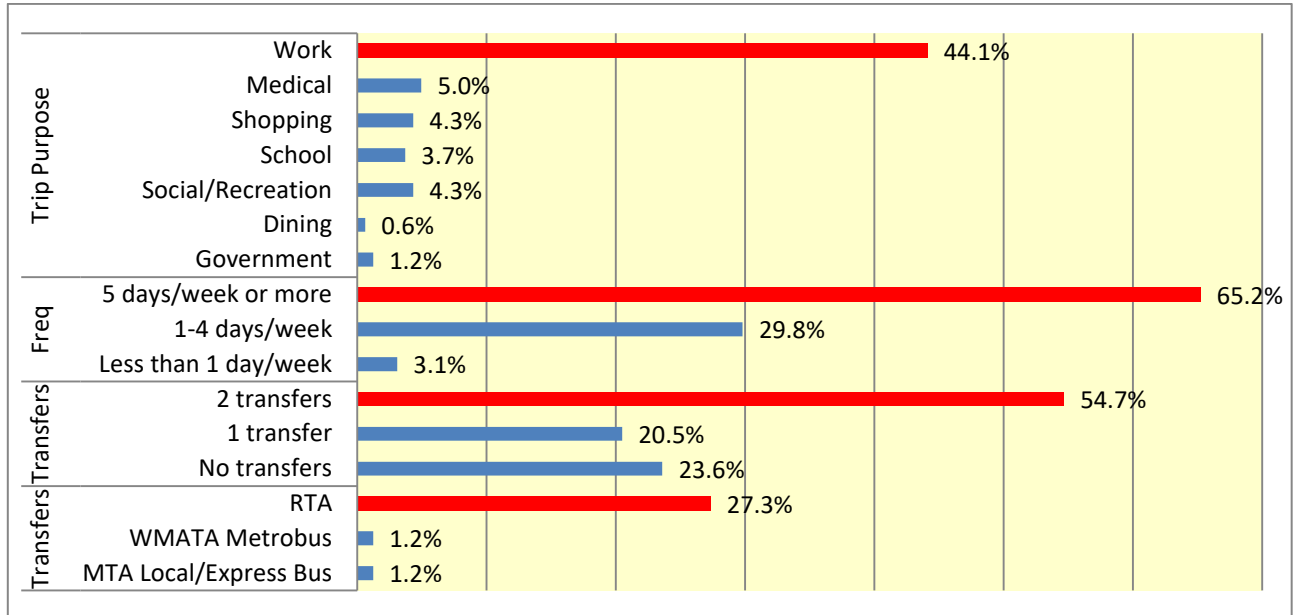
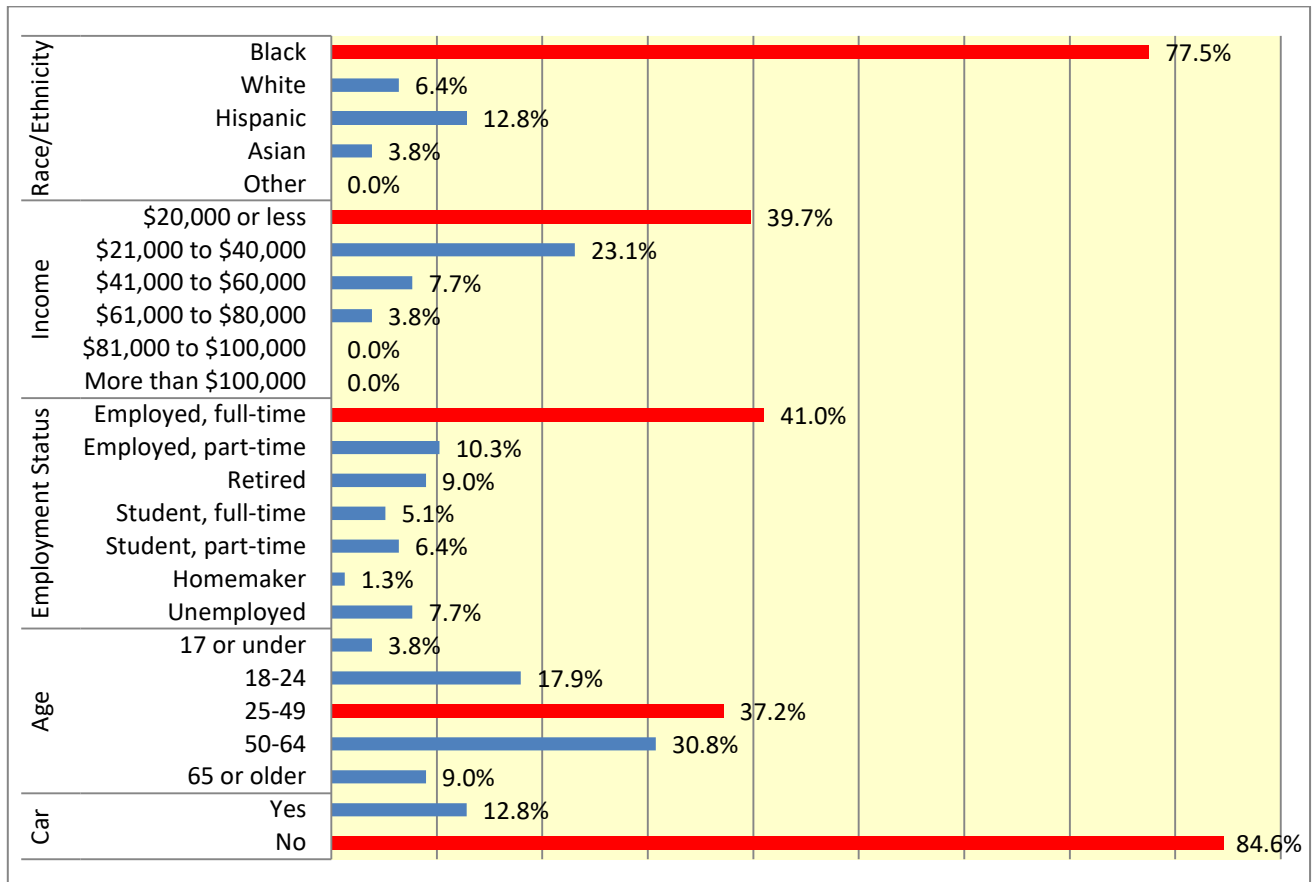
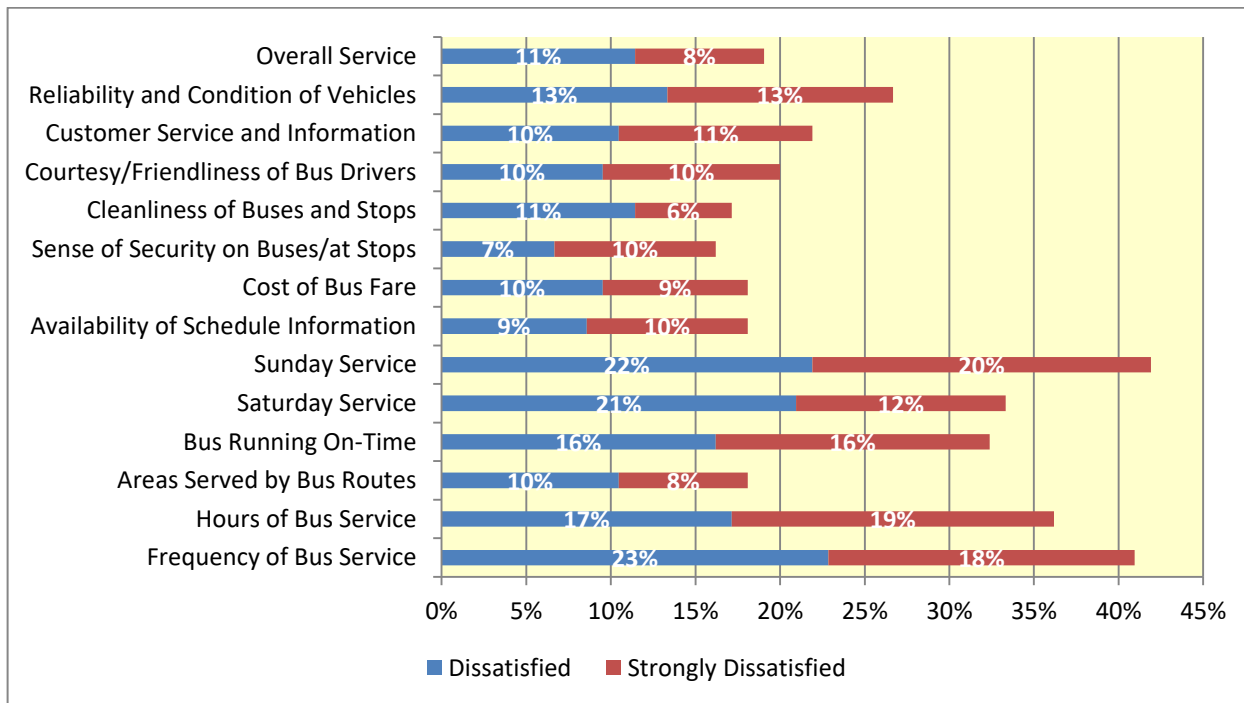
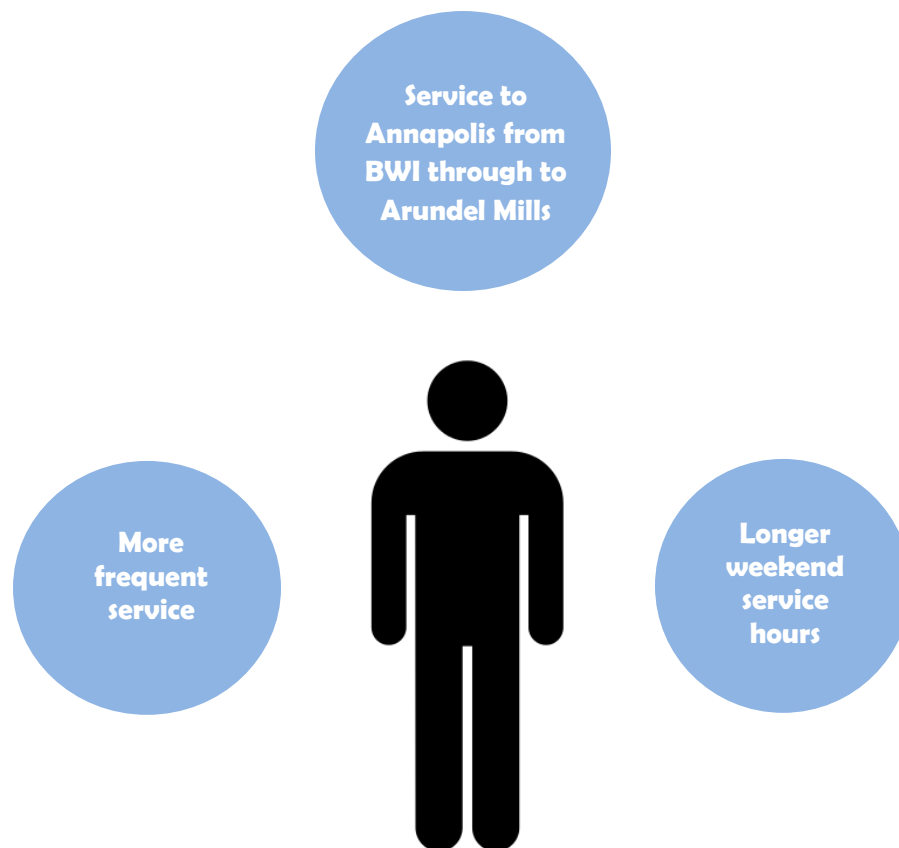
Figure 4-61: Route 501/Silver – Travel Characteristics**Figure 4-62: Route 501/Silver- Demographic and Socioeconomic Characteristics**

Figure 4-63: Route 501/Silver – Rider Dissatisfaction**What Riders Want**

Route 502/B: Towne Centre at Laurel – Arundel Mills Mall

Service Area Description

Route 502/B provides daily service between Anne Arundel County and Laurel. The route originates at Towne Centre at Laurel, providing connections to Routes 301/A, 302/G, 409/Purple, and 503/E. From the Towne Centre at Laurel, the route travels east providing service to the Maryland City Plaza, Walmart, National Business Park, and terminates service at Arundel Mills Mall.

Table 4-30: Route 502/B Strength and Challenges

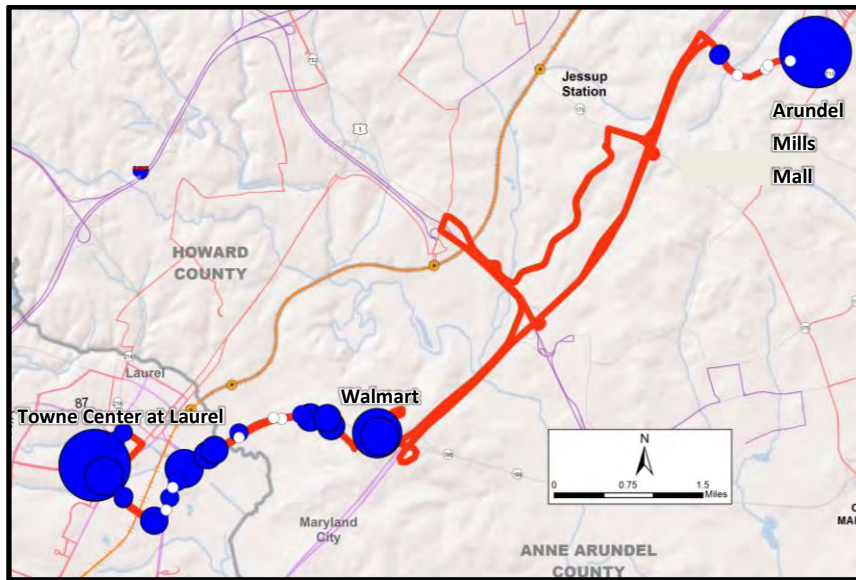
Strengths	Challenges
Serves two activity centers – Towne Centre at Laurel and Arundel Mills Mall.	Long weekend headways: Saturday (120 minutes) and Sunday (150 minutes).

Table 4-31: Route 502/B Service and Operating Characteristics

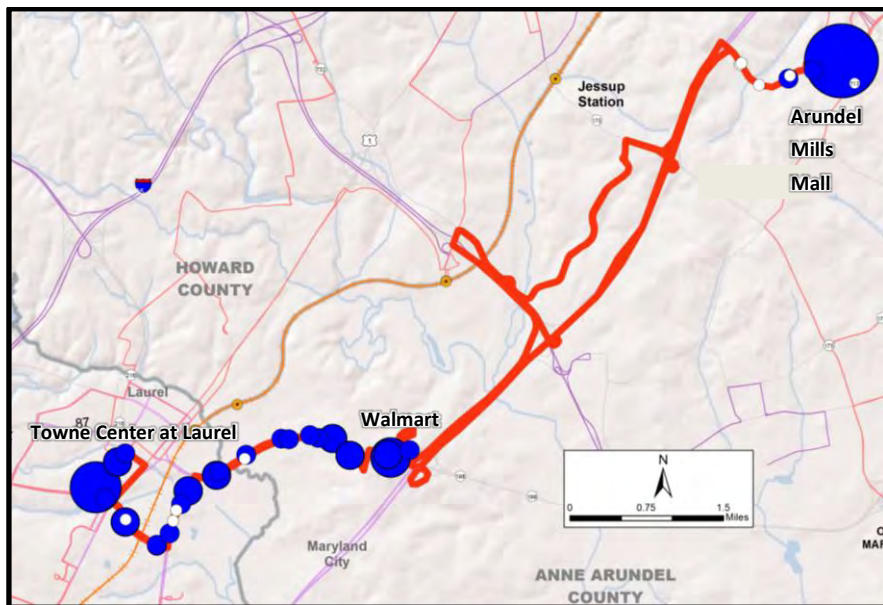
Service and Operating Characteristics		Weekdays	Saturday	Sunday
Span of Service		6:00 am – 10:48 pm	9:00 am – 10:26 pm	10:00 am – 7:50 pm
Frequency (minutes)	Peak	60	-	-
	Off-Peak	60	120	150
One-Way Trips		17	6	4
Cycle Time (minutes)		112	112	112
Layover Time (minutes)		6	10	-
Daily Service Hours		32.02	11.30	7.53

Figure 4-64: Route 502/B Ridership by Stop

Weekday



Saturday



Legend

- Route
- Other RTA Routes
- WMATA Metrobus
- MTA Bus Routes
- MARC Lines
- MTA Light Rail
- WMATA Metrorail
- WMATA Metrorail Stations
- MTA Light Rail Stops
- MARC Stations
- County Boundary

Ridership by Stop

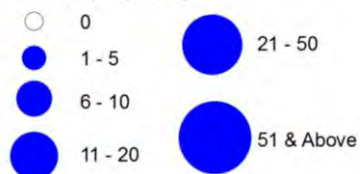


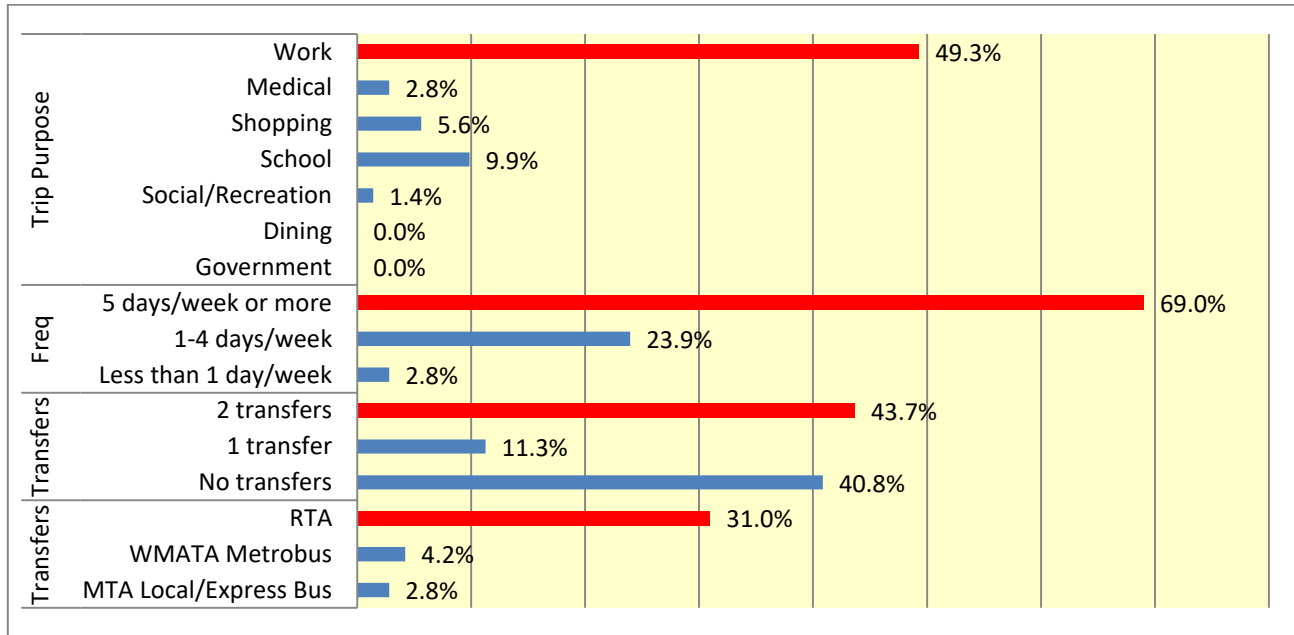
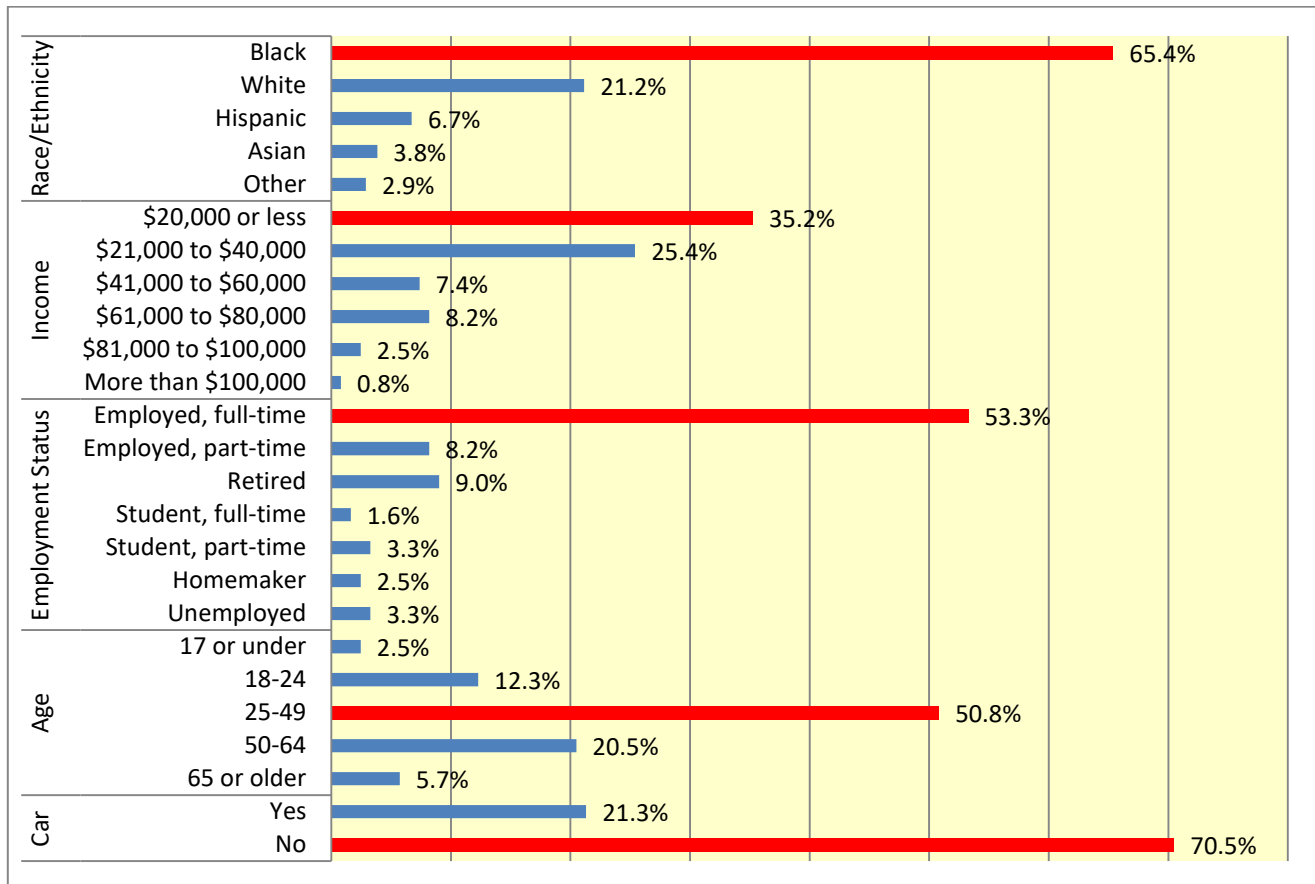
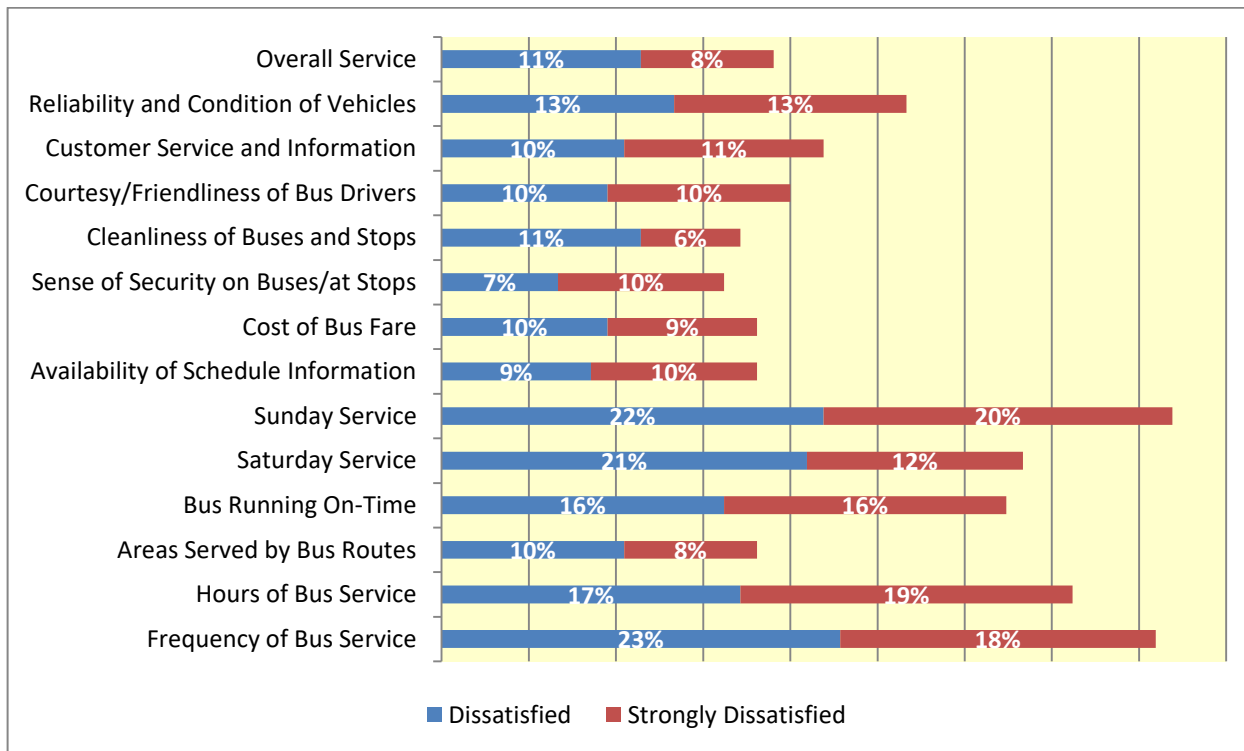
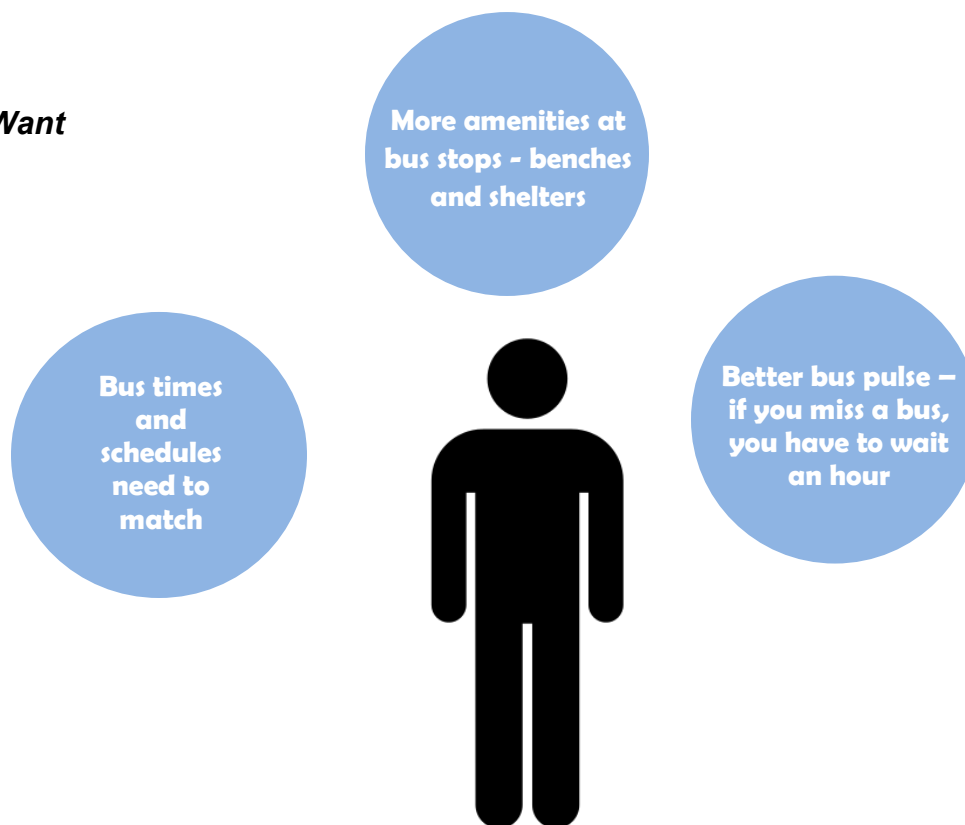
Figure 4-65: Route 502/B – Travel Characteristics**Figure 4-66: Route 502/B – Demographic and Socioeconomic Characteristics**

Figure 4-67: Route 502/B – Rider Dissatisfaction**What Riders Want**

Route 503/E: Towne Centre at Laurel – Columbia Mall

Service Area Description

Route 503/E provides weekday and Saturday service to Howard County. The route originates at the Columbia Mall, providing connections to Routes 401, 404, 405, 406, 407, 408, and 501, and MTA Routes 203, 310, and 320. From Columbia Mall, the route travels along Broken Land Parkway, servicing Owen Brown Village Center and the Non-Profit Center at Patuxent Woods. It then takes Snowden River Parkway to Minstrel Way and Gerwig Lane, serving the Howard County Food Bank. The route then continues along Guilford Road to Savage Mill, and to North Laurel Community Center. From the community center, the route travels along several roads before terminating at the Towne Centre at Laurel.

Table 4-32: Route 503/E Strength and Challenges

Strengths	Challenges
Serves three activity centers – Towne Centre at Laurel, Columbia Mall, and North Laurel Community Center.	Running time issues.

Table 4-33: Route 503/E Service and Operating Characteristics

Service and Operating Characteristics		Weekday	Saturday	Sunday
Span of Service		5:30 am - 9:15 pm	8:30 am - 8:15 pm	-
Frequency (minutes)	Peak	60	-	-
	Off-Peak	60	60	-
One-Way Trips		17	13	-
Cycle Time (minutes)		165	165	-
Layover Time (minutes)		15	15	-
Daily Service Hours		41.25	30.25	-

Figure 4-68: Route 503/E Ridership by Stop

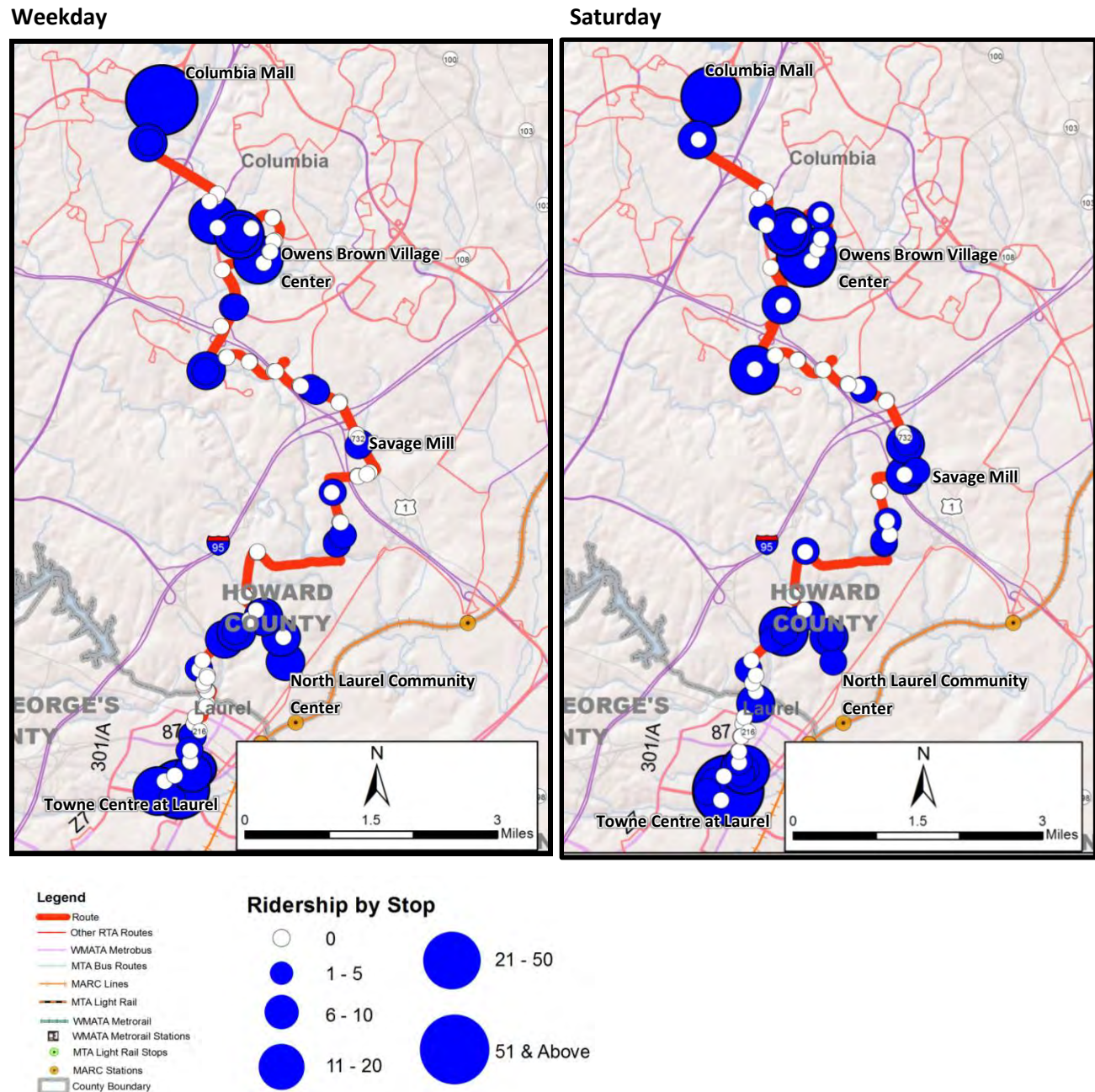


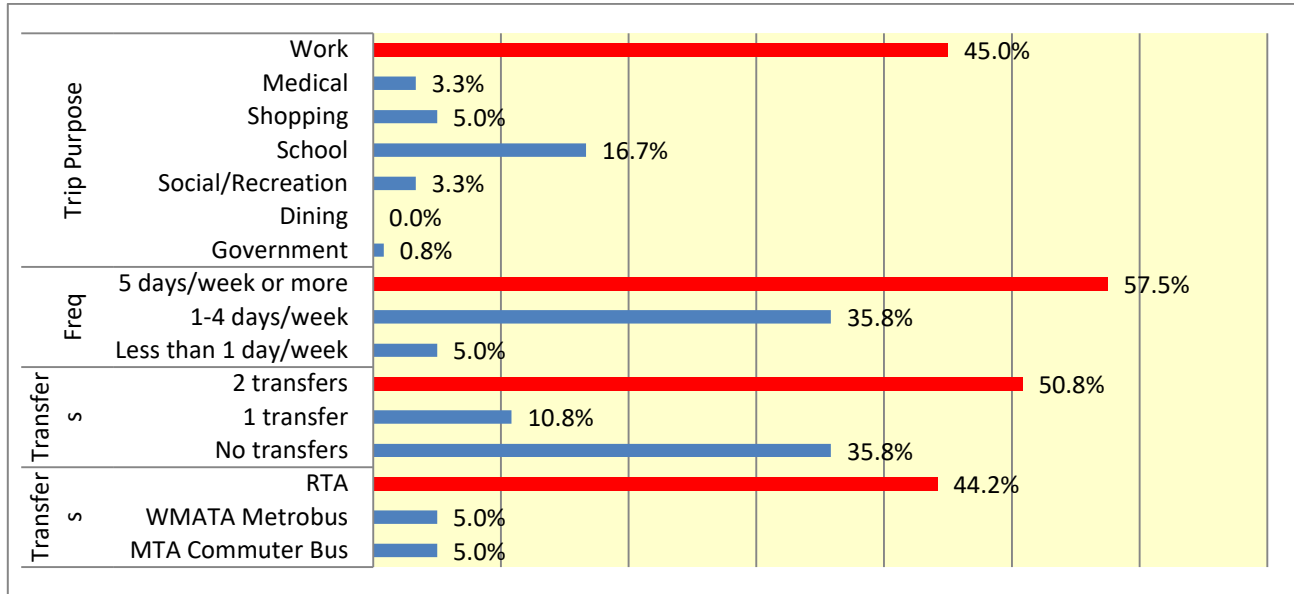
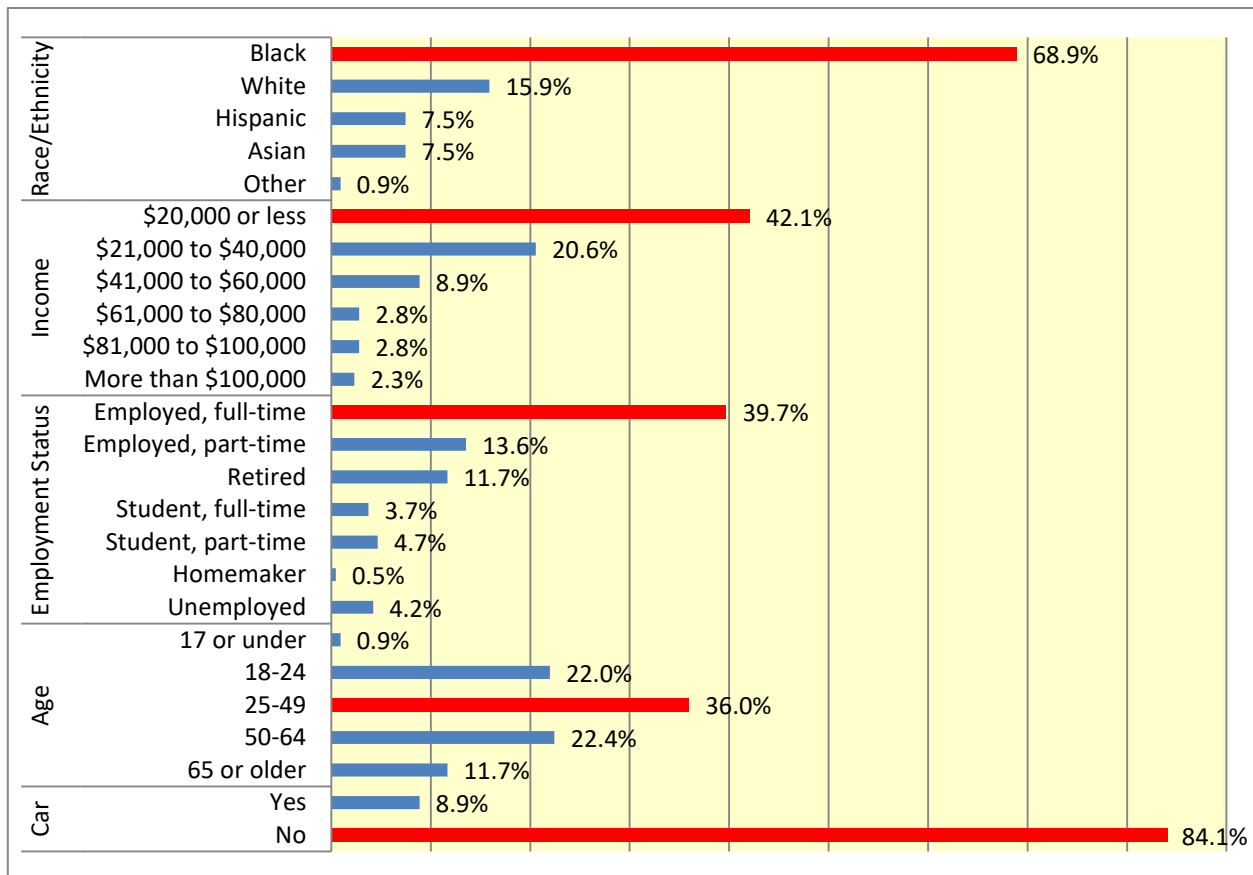
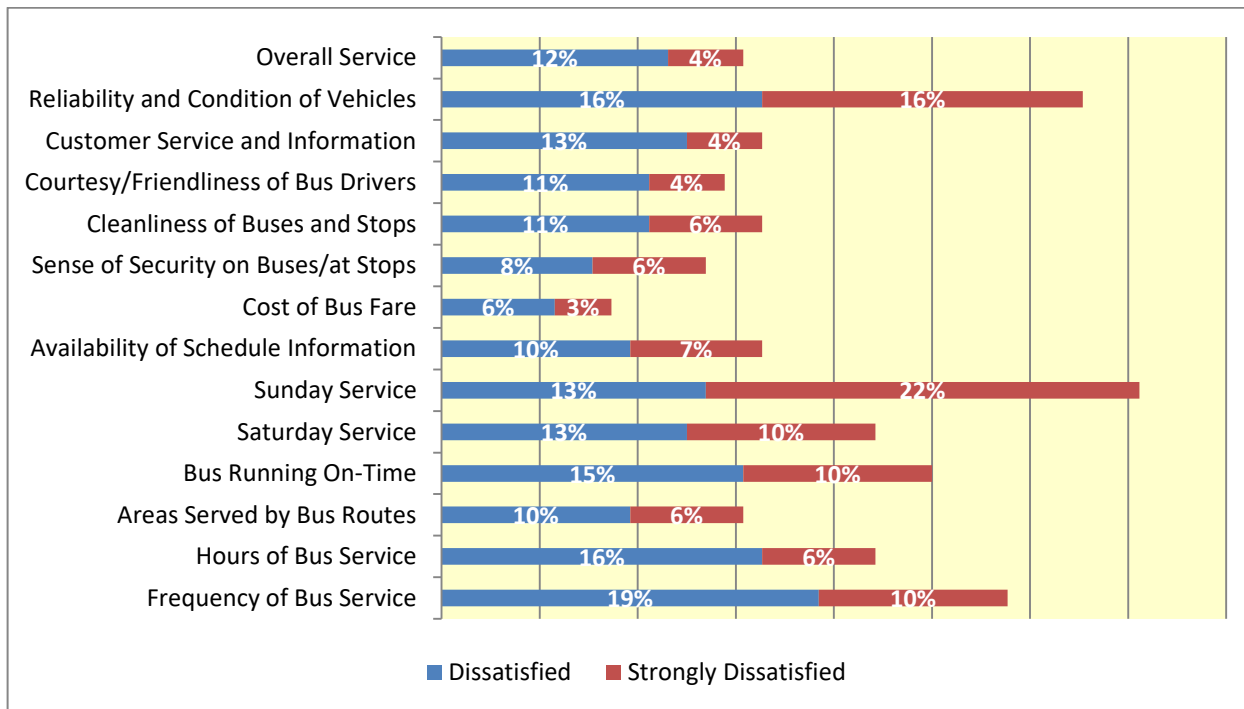
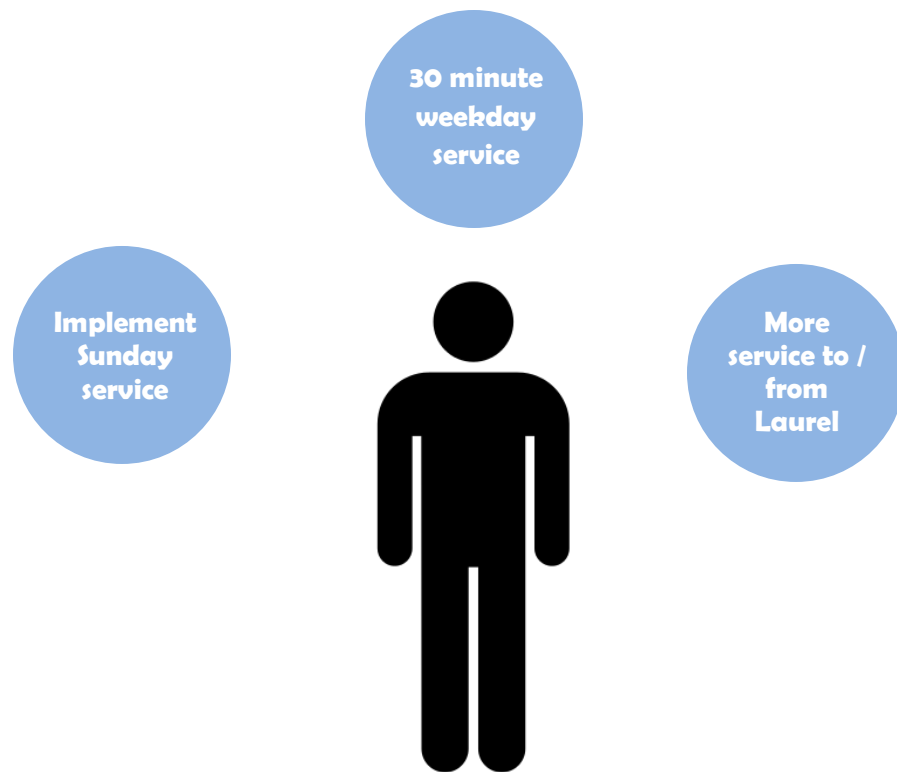
Figure 4-69: Route 503/E – Travel Characteristics**Figure 4-70: Route 503/E – Demographic and Socioeconomic Characteristics**

Figure 4-71: Route 503/E – Rider Dissatisfaction**What Riders Want**

Summary Observations—RTA Services

Based on the review of existing services, one can make some general observations about the existing RTA services:

Ridership

Significant Ridership Decreases

Overall ridership has declined considerably since its FY 2015 high, with the loss of another 175,000 fixed-route trips in FY 2017 (a 22% decline from the peak year). Although low gas prices and the growth of transportation network alternatives are likely factors, given the continuing growth of population and employment in the service area, a significant factor in the decline in ridership has to be poor service quality, particularly late running buses and unreliable service. These problems combine with circuitous routing to make for long and unpredictable travel times. Many passengers must transfer (sometimes more than once) to reach destinations, and these issues affect the ability to make timely transfers. It is likely that many passengers seek alternatives if they can.

Existing Ridership Patterns

Ridership data at the stop level identified three patterns. First, the majority of the ridership occurs at five locations: Arundel Mills Mall, Towne Centre Laurel, Columbia Mall, Cromwell Light Rail Station, Odenton MARC Station. These locations are likely to be one end of the trip for a majority of riders. Second, there are routes with steady ridership along the alignment. Those routes include: 201/J, 401/Green, 405/Yellow, 406/Red, 407/Brown, 408/Gold, 409/Purple, 501/Silver, and 503/E. Third, there are routes with high clusters of ridership along the alignment, and other segments with no ridership. Those routes include: 202/K, 203/M, 301/A, 302/G, 404/Orange, and 502/B. Also of note, Saturday ridership levels on the 302/G and 501/Silver are comparable to weekday ridership levels.

The highest ridership routes are those that link the most activity centers. For example, the 501/Silver transports the most passengers. This route serves six major activity centers, and two transfer locations, one of which connects passengers to Washington, D.C. and two to Baltimore. Similarly, the 401/Green route links four major activity centers in Howard County. It has 30 minute headways (as do the 203/M and 406/Red), but it also achieves the highest productivity in terms of boardings per service hour—reflecting the demand between activity centers.

Passenger Boardings per Service Hour

System wide, there are 9.22 passenger boardings per hour. While twelve routes perform within a -/+4 difference of the average, one route has thirteen boardings above the average, and one route performs well below the average. The 401/Green is the top performing route with 23 boardings per hour. Factors contributing to the route's high performance are (1) long

span of service, (2) 30-minute peak hour frequencies, (3) connection to multiple routes, and (4) serves three activity centers. The 203/M, the lowest ranking route, only served one activity center and one transit center—during the course of the study it was discontinued and replaced by a new route, the 504.

Transfer Locations

Understanding transfer patterns is critical from a service evaluation standpoint. While this review did not conduct a transfer analysis, based on boarding and alighting data, evidence identifies locations where passengers transfer to other buses and other transit services. Based on this review of existing conditions, the following locations are identified as primary transit facilities: Arundel Mills Mall, Towne Centre Laurel, Columbia Mall, and the MD Food Center. The RTA also serves Cromwell Light Rail Station, Odenton MARC Station, South Laurel (Route 197) Park and Ride, Greenbelt Metro Station, Dorsey MARC Station, College Park Metro Station, Snowden River Park and Ride, and BWI MARC/Amtrak Station. The other connecting services increase the RTA rider's access to Washington, D.C. and Baltimore employment centers.

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.

Long Headways

When headways are more than 60 minutes, ridership decreases dramatically.

Table 4-34 identifies the routes that operate off-peak headways that are more than 60 minutes. During the course of the study, the weekday headway on Route 501 was increased to 90 minutes peak and off-peak on weekdays

Table 4-34: RTA Routes with Headways of 90 Minutes or more

Weekday Off-Peak		Saturday		Sunday	
Route	Headway (Minutes)	Route	Headway (Minutes)	Route	Headway (Minutes)
201/J	90	201/J	120	202/K	120
202/K	120	202/K	120	404/Orange	120
408/Gold	120	405/Yellow	120	405/Yellow	120
		408/Gold	120	406/Red	120
		409/Purple	120	407/Brown	120
		501/Silver	90	501/Silver	120
				502/B	150

Operational Issues

On-Time Performance

The observed on-time performance is poor, with a system average of 48% of weekday arrivals on-time (less than a minute early and no more than 5 minutes late). For the majority of the routes, there is less than 10 minutes of scheduled layover time at the end of the route. For some routes, there is zero schedule layover time. If a bus is running behind schedule, this decreases the opportunity to make up time at the end of the route, and contributes to lower on-time performance. Additionally, reduced vehicle fleet availability is reducing on-time performance because of missed trips.

Pulsing

Based on a review of the schedule and responses from riders, passengers miss connections at transit facilities. This is attributed to a combination of the buses running behind schedule, and not enough layover time built into the scheduled to recover at the end of the routes.

Scheduling: Some Route Schedules Are Difficult to Interpret

On the 201/J, 406/Red, and 407/Brown certain stops are served only on half the trips. This causes confusion for passengers when determining if the bus will serve both the origin and destination stop, and on what schedule. Clearer information is needed to assist riders when the service patterns vary by route/trip.

Circuitous Routing

Numerous routes make one-way loops and route deviations into residential communities. Specifically, the 302/G, 401/Green, 404/Orange, 405/Yellow, 406/Red, 407/Brown, 408/Gold, 409/Purple, and 503/E. This impacts on-time performance and travel times, making service less attractive—the question is whether the ridership loss that would result from more direct routing (and longer walk distances for those living on the deviations) would be greater than the gain in ridership from faster travel times and more reliable service.

PARATRANSIT 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. Demand-response services are provided by the RTA and the Anne Arundel County Department of Aging and Disabilities (DOAD).

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 in the RTA service areas of Anne Arundel and Prince George's County. Anne Arundel County's DOAD offers a taxi voucher program and county-wide paratransit for adults ages 55 and older and individuals with disabilities. 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 service are required to provide ADA complementary paratransit service within $\frac{3}{4}$ -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.

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 \$2.50 in Howard County, \$4.00 in Anne Arundel County and either \$2.00 or \$4.00 in Prince George's County (\$2.00 along the 203/M Route, \$4.00 on the other routes).

ADA complementary paratransit service is provided with a combination of sedans and cutaways (small buses). In FY2016, approximately 43 percent of all RTA Mobility trips were

ADA trips and cost approximately \$1.6 million, which accounts for 39% of the overall cost for the paratransit program.

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 $\frac{3}{4}$ - mile transit shed.

GPT service is available Monday through Friday 8:00 a.m. to 5:00 p.m. and costs \$2.50 for a one-way trip. Reservations may be made between two and seven 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.

In FY 2016, GPT accounted for 57% of all RTA Mobility trips. Based on the trips that occurred in September 2016, 21% were to North Laurel Senior Plus Center, Ellicott City Senior Center, DaVita Cedar Lane Dialysis Center, Glenwood 50+ Senior Center, and Florence Bain Senior Center. Table 4-35 provides a breakdown of RTA Mobility paratransit trips. In FY 2016, GPT service costs approximately \$2.8 million which accounted for 61% of the overall paratransit program.

Table 4-35: RTA Mobility Trips

Trip Type	FY 2015	FY 2016
ADA	36,510	35,526
GPT	50,125	46,930
Total	86,635	82,456

Source: MTA Form 2a - Service Performance Summary, FY 2015 and FY2016

In FY 2016, the RTA Mobility program provided 82,456 one-way trips compared to 86,635 in FY 2015, a decrease of 4.8% in ridership. Operating costs over the same period increased 3.5% from \$4.0 million to approximately \$4.2 million. Farebox revenue also increased 2.8% between FY 2015 and FY 2016.

Generally an increase in farebox revenue is the result of a fare increase and/or an increase in ridership. No fare increases were implemented during this period, and while paratransit ridership went down in Howard County and Prince George's County the number of ADA trips in Anne Arundel County increased approximately 47%. The ADA fare in Anne Arundel County and Prince George's County (except in the area served by the 203M) is \$4.00, and \$2.50 in Howard County. The increase ADA in ridership in Anne Arundel County coupled with the \$4.00 fare may have resulted in increased farebox revenue even as overall RTA paratransit ridership decreased. Given the fact that in Anne Arundel County seniors and persons with disabilities age 18 and above can ride free on the demand-response service

provided by the Office of Transportation, the mystery is why ADA ridership in Anne Arundel increased if the fare is \$4.00.

Other performance characteristics such as service miles and service hours also increased. This may be an indication that more GPT trips are made farther out in Howard County and that trips are longer distances. This combined with lower ridership and increased costs would result in lower performance measures.

A map of RTA Mobility trips for a sample month (September 2016) along with the top ten paratransit destinations is provided in Figure 4-72. Table 4-36 and Table 4-37, provide basic service data, performance characteristics, and performance measures for the RTA Mobility service.

Table 4-36: RTA Mobility Service Characteristics

Service and Operating Characteristics	Weekdays	Saturday (ADA Only)	Sunday
Span of Service	5:30 am - 9:15 pm	8:30 am - 8:15 pm	-
One-Way Trips	307	202	-
Daily Service Miles	3,591	2,363	-
Daily Service Hours	198	130	-

Source: RTA published schedules, 2017

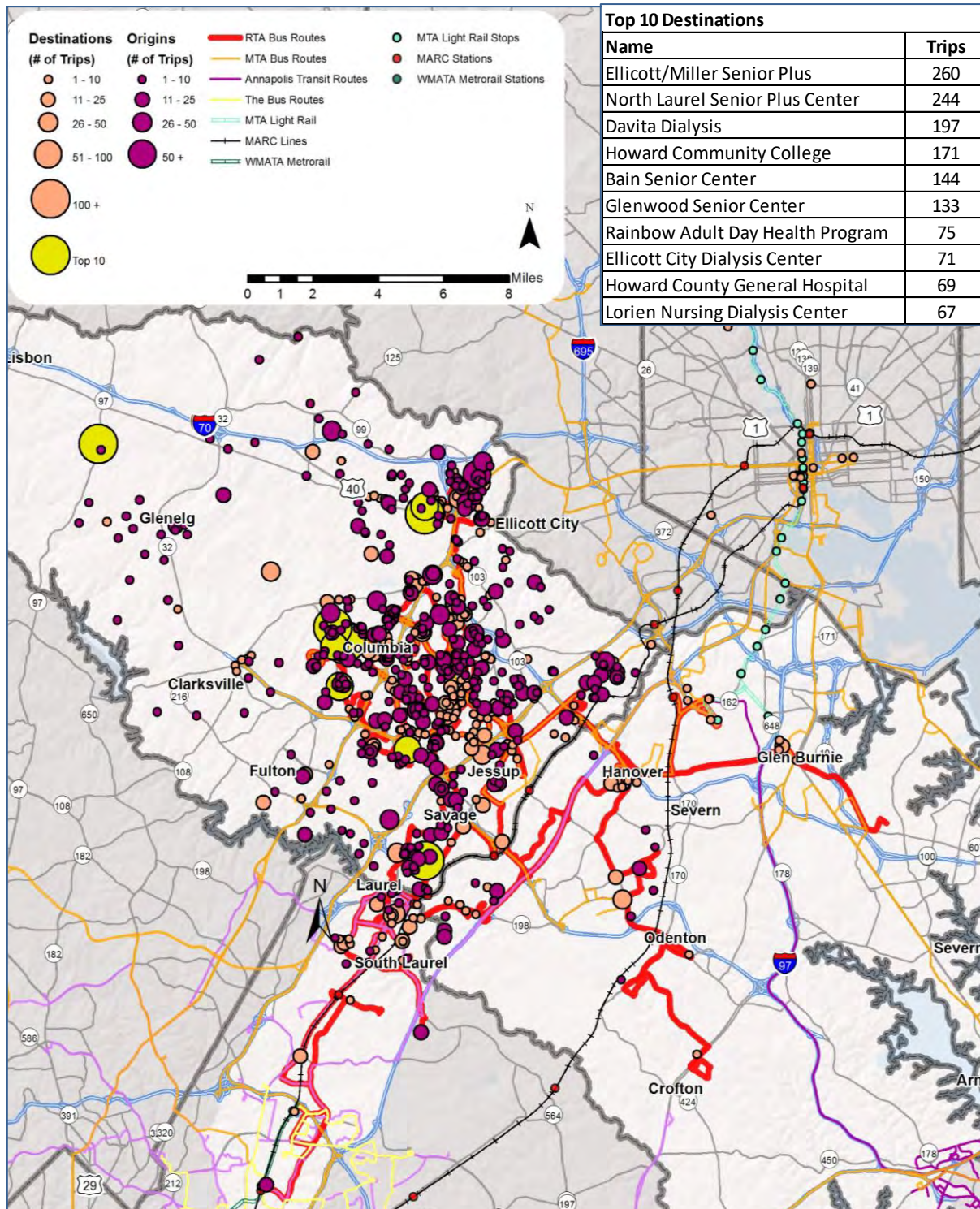
Table 4-37: RTA Mobility Performance Characteristics

Performance Characteristics	FY 2015	FY 2016	FY 2015 – FY 2016
Ridership	86,635	82,456	-4.8%
Vehicle Miles	893,280	964,372	8%
Vehicle Hours	51,552	53,355	3%
Operating Cost	\$4,054,968	\$4,205,793	3.7%
Fare Revenue	\$211,652	\$217,619	2.8%

Source: MTA Form 2a - Service Performance Summary, FY 2015 and FY2016

The MTA's performance standards for Locally-Operated Transit Systems (LOTS) call for demand-response service productivity to be approximately two passengers per service hour. RTA Mobility paratransit service carries 1.55 riders per vehicle service hour. Because this measure includes the RTA's ADA service (which generally has lower productivity because it is more difficult to group trips) and is based on vehicle hours (which includes deadhead time), it is lower than the two passengers per hour threshold.

Figure 4-72: RTA Mobility Origins and Destinations



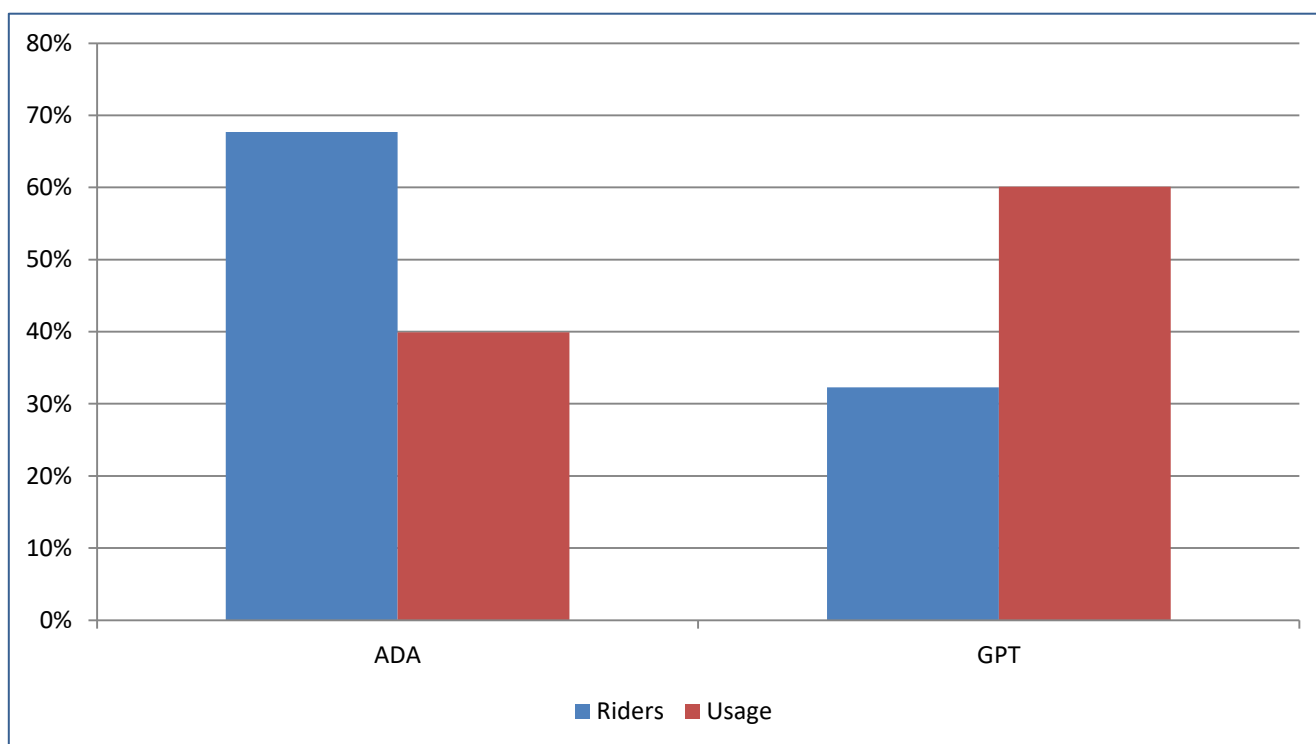
Based on RTA Mobility trips in September 2016, there were more ADA riders registered for paratransit service than GPT riders as illustrated in Table 4-38. ADA riders made up approximately 68% of those registered for MTA Mobility in this sample (some are registered for both). However, in terms of usage, GPT riders used paratransit service much more than ADA riders. While GPT riders made up 32% of riders, they accounted for approximately 60% of paratransit trips as shown in Table 4-39 and Figure 4-73. GPT riders generally have fewer mobility challenges than ADA riders and therefore are likely to make more trips. In addition, the GPT service provides access to many senior centers and communities in Howard County which account for a significant number of these trips.

Table 4-38: Percentage of RTA Mobility Riders by Jurisdiction (September 2016)

Type of Trip	Howard County	Anne Arundel County	Prince George's County/ City of Laurel
ADA	63%	2.6%	2.1%
GPT	32.3%	0%	0%
Total	95.3%	2.6%	2.1%

Table 4-39: Percentage of RTA Mobility of Trips by Jurisdiction (September 2016)

Type of Trip	Howard County	Anne Arundel County	Prince George's County/ City of Laurel
ADA Paratransit	34.6%	3.6%	1.7%
GPT	60.1%	0%	0%
Total	94.7%	3.6%	1.7%

Figure 4-73: Demand-Response Usage by Program Users: ADA vs GPT

Source: September 2016 RTA Paratransit Trips

Table 4-40 provides an analysis of RTA's GPT demand-response trips (Howard County only) that occurred within both a $\frac{3}{4}$ -mile and a $\frac{1}{4}$ -mile transit shed. A $\frac{3}{4}$ -mile transit shed was used since this is what is used for ADA complementary paratransit service and a $\frac{1}{4}$ -mile transit shed was used as this is the generally accepted reasonable walking distance to a transit stop. It should be noted that the general paratransit trips include trips to dialysis centers (less than 7%) that did not qualify for ADA complementary paratransit service.

Table 4-40: GPT Trips within Transit Shed

Trip End	RTA Transit Shed	
	$\frac{3}{4}$ Mile	$\frac{1}{4}$ Mile
Origin or Destination	77% (3,239)	67% (2,833)
Both Origin and Destination	70% (2,969)	44% (1,873)

Source: September 2016 RTA Paratransit Trips

The majority of riders on paratransit service are older adults that have been using the service for more than two years primarily for medical appointments and access to senior centers.

These riders are heavily dependent on this service since an overwhelming majority (92%) of paratransit riders either do not own a car or do not have access to a car.

The paratransit rider survey that was described in the previous chapter indicated that the majority of riders are satisfied overall with the service. Riders also provided input on service needs and improvements. The top three service improvements that are needed according to riders are:

- Add GPT service on Saturday and Sunday
- On-time performance
- Decrease phone wait time

Some of the comments include:

“Great service except for unreliability of delivery time. I am sometimes late for work because my ride is late.”

“My rides are regularly late. I use public transportation to get to work. The lateness may cost me my job.”

“It has been horribly hard to ever reach someone on the phone. Problems therefore take forever to fix.”

“Really need to have transportation available on Saturday and Sunday. There is no other transportation available on Saturday and Sunday. Awesome service!!!!”

A number of comments were also made with regards to the difficulty in traveling regionally particularly across county lines. RTA provides ADA complementary paratransit in all three counties but only within 3/4 -mile of its fixed-routes. GPT paratransit service operates only in Howard County, and the Anne Arundel County Office of Transportation paratransit operates only in Anne Arundel County with limited trips into Baltimore. Currently there is no coordination or connection other than RTA ADA paratransit between paratransit service in Howard and Anne Arundel Counties.

“I wish you had outside Howard County for Deaf Event. Since I’m deaf and ASL. I would love to have outside Howard County to be available for me to join deaf event would be nice. Let me know about available paratransit that provide outside Howard County.”

“It would be nice to get transport to go to other counties for medical appointments and worship centers. Sometimes I have to go to Kaiser Permanente at Security Blvd, Towson, or Halethorpe for specialist appointments.”

“In August I needed a ride to Rolling Road for a doctor’s appointment. I was told the service did not go that far. But I have seen the bus out there. So I have to find another way.”

“I wish that it was easier to visit my sister, who lives in the heart of Catonsville. There is no regular service from Ellicott City/Columbia to Baltimore County. I am very happy with the telephone staff and the drivers. They are all very kind to me. Thank you for all you do, RTA/Paratransit.”

Anne Arundel County Office of Transportation

The Office of Transportation (OOT) is now the provider of the formerly paratransit service previously provided by the Department of Aging and Disabilities (DOAD). The DOAD is the local Area Agency on Aging (AAA) for Anne Arundel County. The DOAD operates two transportation programs, a taxi voucher program and a demand-response program that provides van transportation. Eligible riders include persons ages 55 and older and ages 18 and older with disabilities.

The demand-response program is operated through a contract with First Transit, using a fleet of 41 vehicles. These vehicles are owned and maintained by Anne Arundel County. For the demand-response program, DOAD staff provides oversight and scheduling while contractor First Transit staff provides drivers, dispatch, and intake.

For the taxi voucher program, eligible clients can purchase coupons that can be used for a taxi ride. Each coupon book contains \$10.00 worth of coupons and is sold to clients for \$5.00. The coupons can only be used to pay the fare of the taxi ride, and may not be used for the tip.

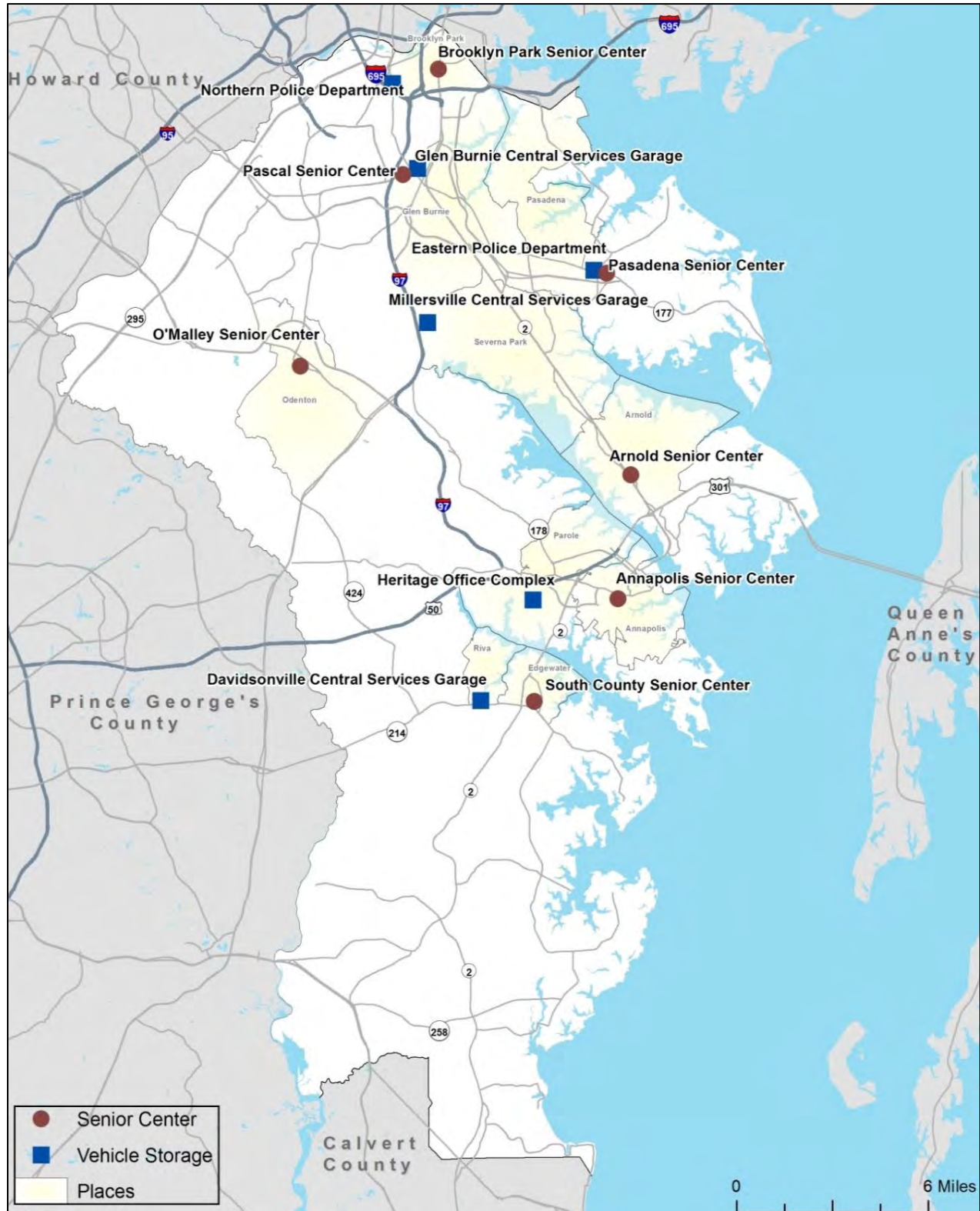
The transportation program provides transportation primarily to senior centers and medical appointments, although other trip purposes are accommodated if possible. Due to limited capacity, riders are generally limited to getting services three days per week. Riders are not charged a fare but are asked to provide a donation.

The senior centers that are served include:

- Annapolis Senior Center, Annapolis
- Arnold Senior Center, Arnold
- Brooklyn Park Senior Center, Brooklyn
- O’Malley Senior Center, Odenton
- Pasadena Senior Center, Glen Burnie
- South County Senior Center, Edgewater

Figure 4-74 provides a map of these senior locations and locations where vehicles are stored.

Figure 4-74: Locations of DOAD Senior Centers and OTT Vehicle Storage



Source: Anne Arundel Paratransit Service Evaluation, 2015

The following performance characteristics are based on the Anne Arundel County's Paratransit Service Evaluation report that was completed in FY 2015. In FY 2015, the program provided approximately 121,000, one-way trips, an increase from the previous two fiscal years. Table 4-41 provides a breakdown of the types of trips that were provided. Performance characteristics and measures for service are provided in Table 4-42.

Table 4-41: DOAD Trip Type

Trip Type	Percentage
Senior Centers	33%
Dialysis	23%
Other Purposes	45%

Source: Anne Arundel Paratransit Service Evaluation, 2015

Table 4-42: DOAD Transportation Performance Characteristics

Performance Measurements	FY 2012	FY 2013	FY 2014	FY 2015 – FY 2016
Trips per Mile	0.17	0.17	0.16	0%
Trips per Hour	2.29	2.21	2.15	-6.1%
Cost per Trip	-	\$20.51	\$21.78	6.2%
Cost per Mile	-	\$5.81	\$9.25	60%
Cost per Hour	-	\$45.25	\$46.77	3.3%
Speed	13.45	13.37	13.14	-2.3%

Source: Anne Arundel Paratransit Service Evaluation, 2016

DOAD's paratransit service had 2.15 passenger boardings per revenue hour in FY 2014. Productivity has declined slightly over the three-year period, down from 2.29 trips per revenue hour in FY 2012. No-shows have been reduced slightly over the period, from just over eleven percent in FY 2012 to 9.1% in FY 2014.

As part of the paratransit service evaluation study in Anne Arundel County, a focus group and an informal survey were conducted. Together, the focus group with riders and input from the survey, revealed that users generally were pleased and glad to have the service. There was interest in five day per week service, being able to go to more distant destinations, and service that could support employment. There was a willingness to consider a fare, and the acceptable amount was \$1.00 per trip. Even at that fare there was concern that some current users would be unable to pay so some special arrangement would be needed. The major issues concerned the quality of scheduling service–non-response, long phone wait times and inconsistencies in the application of policies.

RTA Fares

Structure

RTA's current fare policy sets the fares charged for different types of trips and provides rules regarding how fares are applied. The Regional Transportation Agency (RTA) has two separate fare structures for its fixed-route system. One structure covers routes in Howard County and the other covers routes in the Laurel area. In Howard County, RTA predecessors operated service under contract to Howard County, branded as Howard Transit, using this fare structure. It is still applied to the routes that serve Columbia, Ellicott City, Savage, and other locations in and around Howard County. These are RTA routes 401/Green, 404/Orange, 405/Yellow, 406/Red, 407/Brown, 408/Gold, 404/Purple, and 501/Silver. Similarly, the predecessor organization to the RTA provided daily bus service in the Laurel area, northern Prince George's County and Anne Arundel County branded as Connect-A-Ride, using a different fare structure. These fares are still in use by the RTA on Routes 201/J, 202/K, 203/M, 301/A, 302/G, 502/B, and 503/E.

Table 4-43, from RTA's November 9, 2016 *RTA Fare Policy Update*, illustrates the two different fare structures.

Table 4-43: RTA Fare Policy

Fare Type	RTA Howard Transit	RTA Connect-A-Ride
One-Way, Cash	\$2.00	\$2.00
One-Way, Reduced	\$1.00	\$1.00
Transfers	Free	N/A
Daily Pass	N/A	\$5.00
Daily Pass, Reduced	N/A	\$2.50
Ten-Trip	\$13.50	N/A
Monthly Pass	\$47.00	\$60.00
Monthly Pass, Reduced	\$16.00	\$30.00
Monthly Youth Pass	N/A	\$40.00
Children under Five	Free	Free
Student	Same as reduced	N/A
Paratransit, One Way	\$2.50	\$4.00

Source: RTA's November 9, 2016 *RTA Fare Policy Update*

Fare Media

In addition to the different rates for fixed-route service, the separate structures require different fare media. There are twelve different fare media items that can be purchased and used to ride the RTA system. These media items include monthly passes, books of discounted passes, and colored tokens. Eight of these media tools can be used on RTA Howard Transit routes, and six of them can be used on RTA Connect-A-Ride routes. The red and yellow tokens can be used on either RTA Howard Transit or RTA Connect-A-Ride routes. RTA's November 9, 2016 *RTA Fare Policy Update*, provide sample images of the passes and tokens that can be used on RTA Howard Transit Routes. These images are used as training aids and references for staff.

Figure 4-75: RTA Monthly Passes and Booklets/Tickets**Figure 4-76: RTA Connect-A-Ride Passes and Tokens**

Figure 4-75 displays monthly passes for RTA. Howard Transit routes cost \$47 for the regular fare. Seniors and people with disabilities can purchase a monthly pass for \$16 or a 10-ride booklet for \$4.50. Students pay \$16 for a monthly pass and \$4.50 for a 10-ride booklet.

In addition, the following passes and tokens, shown in Figure 4-76, are used on RTA Connect-A-Ride routes.

The RTA Connect-A-Ride passes and tokens are collected on Routes 201/J, 202/K, 203/M, 301/A, 302/G, 502/B, and 503/E. The RTA Howard Transit fare media are collected on Routes 401/Green, 404/Orange, 405/Yellow, 406/Red, 407/Brown, 408/Gold, 409/Purple, 501/Silver.

Monthly passes for RTA Connect-A-Ride routes cost \$60 for regular riders. Seniors and people with disabilities can purchase a monthly pass for \$16 or a 10-ride booklet for \$4.50. Students pay \$16 for a monthly pass and \$4.50 for a 10 ride booklet.

RTA Mobility, the ADA paratransit service also has different booklets that correspond with the RTA Howard Transit and RTA Connect-A-Ride routes.

A booklet of 10-ride passes costs \$25 for RTA Mobility (paratransit) service for Howard Transit routes and \$40 for RTA Connect-A-Ride routes.

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 card holder 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/Silver at Arundel Mills Mall, BWI Airport Terminal, BWI Business District Light Rail Station, BWI Amtrak/MARC Station, Broken Land Park and Ride and Snowden River Park and Ride stops
- On Route 405/Yellow at the Route 40 and Normandy Woods Drive and Long Gate Park and Ride stops
- On Route 407/Brown at the Oakland Mills Village Center stop
- On Route 408/Gold at Oakland Mills Village Center and Snowden River Park and Ride stops
- On Route 404/Purple at the Route 1 and Amberton Drive (Route 100 Industrial Park) stop

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

- Route 501/Silver at the BWI Airport Terminal stop
- Routes 404/Purple, 301/A, 302/G, 502/B, and 503/E at the Laurel Mall stop
- Route 201/J and 202/K at the Arundel Mills Mall stop
- Route 302/G at the Greenbelt Metro Station stop
- Route 302/G at the College Park Metro Station stop
- Routes 301/A, 302/G, 502/B, and 503/E at all shared WMATA Metro bus stops; with the exception of the 4th Street Northbound shared stops

Sales Locations

Cash can be paid 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 (HCLS Elkridge Branch is currently closed for construction. HCLS Elkridge Express Branch is open.) 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)

FACILITIES

Headquarters, Operations, and Maintenance

- **Headquarters** – Administrative offices are located at 8510 Corridor Road, Savage, Maryland 20763.
- **Operations and Maintenance** – The operations and maintenance facility is located at 8800 Corridor Road, Annapolis Junction, Maryland 20701.

Transit Centers

- **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 routes – Routes 401, 404, 405, 406, 407, 408, 501, and 503. MTA commuter bus routes also serve the transit center – Routes 203, 310, and 320.
- **Towne Centre at Laurel** – The transit 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 routes – Routes 301, 302, 409, and 502. WMATA local bus routes also serve the transit center – Routes 87, 88, 89, and 89M.
- **Arundel Mills Mall** – This transit center is located at 7000 Arundel Mills Circle, Hanover, Maryland 21076. The transit center serves as the transfer point for four routes – Routes 201, 501, and 502. MTA local bus Route 75 and commuter bus Route 201 also serve the transit center.

Park and Ride Lots

Name	Address	City/Town	Zip Code	# of Spaces
Arundel Mills Mall	7000 Arundel Mills Circle	Hanover	21076	n/a
Benfield	I-97 & Benfield Blvd.	Odenton	21113	93
Bristol	MD 4 & MD 258	Lothian	20711	100
BWI Airport	Flightime Dr. & MD 170	BWI	21240	n/a
BWI Amtrak/MARC Station	Aviation Blvd. & Amtrak Way	BWI	21240	3200
Crofton	Crofton Pkwy & Crain Hwy	Crofton	21114	100
Cromwell Light Rail Station	7378 Baltimore Annapolis Blvd.	Glen Burnie	21061	795

Davidsonville	John Hanson Hwy & Davidsonville Rd.	Davidsonville	21035	199
Earleigh Heights Volunteer Fire Department	Government Ritchie Hwy & Earleigh Heights Rd.	Severna Park	21146	50
Glen Burnie County Government	Baltimore Annapolis Blvd & Government Ritchie Hwy	Glen Burnie	21061	555
Hahn Drive	7920 Ritchie Hwy	Glen Burnie	21061	200
Hammonds Ferry Rd.	Hammonds Ferry Rd & Baltimore	Linthicum	21090	203
Harry S. Truman	Harry S Truman Pkwy & Riva Rd	Annapolis	21401	500
Jessup MARC Station	Jessup Rd & Old Jessup Rd	Jessup	20794	100
Lower Pindell Rd.	MD 4 & Lower Pindell Rd	Lothian	20711	100
Mountain Rd.	Mountain Rd & Catherine Ave	Pasadena	21122	n/a
Navy-Marine Corps Stadium	Rowe Blvd & Taylor Ave	Annapolis	21402	400
North Linthicum Light Rail	Camp Meade Rd & Baltimore Annapolis Blvd	Linthicum	21090	347
Nursery Road Light Rail	Baltimore Annapolis Blvd & Nursery Rd	Linthicum	21090	
Snowden River Park & Ride	MD-175 Exit and Snowden River Parkway	Columbia	21045	345
Broken Land Parkway Park & Ride	9601 Broken Land Parkway	Columbia	21046	325
South Laurel Park & Ride	Briarcroft Land at the intersection of Laurel Bowie Road (Rt. 197)	Laurel	20708	684

MTA Transit Facilities

- Cromwell Light Rail Station** is located on Baltimore Annapolis Boulevard (MD-648) north of the intersection of Dorsey Road (8th Ave NW), Ferndale, Maryland 21061. The station primarily serves as an MTA light rail stop, and is served by local bus Routes 14 and 17, the Nixon Shuttle, and RTA Route 201/J. There are 795 parking spaces available.
- Odenton MARC Station** is located at 1400 Odenton Road, Odenton, Maryland 21113. The station primarily serves as a stop for the Penn Line commuter rail service between Baltimore and Washington, D.C. Routes 202/K serves the station. There are 1300 parking spaces available.

- **Muirkirk MARC Station** is located at 7012-B Muirkirk Road (just east of the bridge over US-1), Beltsville, Maryland 20705. The Muirkirk Station primarily serves as a stop for Camden Line commuter rail service between Baltimore and Washington, D.C. Routes 302/G, and WMATA local bus Routes 89 and 89M serve the station. There are 650 parking spaces available.
- **Dorsey MARC Station** is located at 7000 Route 100, which is on Exit 7, between US-1 and MD-295 in Elkridge, Maryland 21075. The Dorsey Station primarily serves as a stop for Camden Line commuter rail service between Baltimore and Washington, D.C. RTA Routes 409/Purple and 501/Silver serve the station. There are 802 parking spaces available.
- **BWI Business District Light Rail Station** is located in the BWI Business District on Aviation Boulevard, Linthicum, Heights, Maryland 21090 near the intersection with Terminal Road. It primarily serves as an MTA light rail stop, and is served by RTA Route 501/Silver, MTA LocalLink 75 and commuter bus Route 201; and WMATA local bus Route B30. There are 36 parking spaces available.
- **Laurel MARC Station** is located on the western end of Main Street at 1st Street in the City of Laurel, Maryland 20707. The Laurel MARC Station serves a stop for the Camden Line Commuter rail service between Baltimore and Washington, D.C. RTA Route 409/Purple and WMATA bus Routes 87 and 89M serve the station. There are 309 parking spaces available.
- **Laurel Racetrack MARC Station** is located on Race Track Road between MD 98 and Whiskey Bottom Road in Maryland City, Maryland 20724. The station serves as a flag stop along the Camden Line commuter rail service between Baltimore and Washington, D.C. As a flag stop, on certain trips, trains will pick up passengers standing on the platform and discharge passengers when if the conductor has been notified upon boarding. While there are no bus routes that serve this station directly, RTA Route 502/B has a stop on MD 198 at Race Track Road. There are 300 parking spaces available.

WMATA Transit Facilities

- **Greenbelt Metro Station** is located at 5600 Greenbelt Metro Drive, Greenbelt, Maryland 20770. The Greenbelt Metro Station serves as the Metro Green Line heavy rail and MARC Camden Line commuter rail stop. The station is served by RTA (Route 302/G); Metrobus (Routes 81,87,89,89M,B30,C2,C7,C9,R12,R3,T16,T17); The Bus (Routes 11, 15, and 16), and Connect-A-Ride (Route H). There are 3,399 parking spaces available.

- **College Park/University of Maryland Metro Station** is located on River Road, College Park, Maryland 20737, about ¼ mile south of the intersection with Campus Drive. This Metro station serves as the Metro Green Line and MARC Camden Line commuter rail stop. The station is served by RTA (Route 302/G); Metrobus, Connect-A-Ride (Routes G and H); The Bus (Routes 14 and 17); and UM Student Shuttle to Cherry Hill. There are 1,820 parking spaces available.

Amtrak

- **Amtrak/MARC – BWI Rail Station** is located at 7 Amtrak Way, Baltimore, Maryland 21240, near the intersection of Aviation Boulevard (MD-170) and Amtrak Way. It primarily serves as a stop for the MARC Penn Line commuter rail and Amtrak intercity rail passenger service. Route 501/Silver serves the station. MTA LocalLink 75, and MTA Commuter Bus 201 also serve the station. There are 1,600 parking spaces available.

Airport

- **BWI Airport Shuttle** stops at Terminal A, E, and the International terminal at BWI Airport. At Terminal E, connections are available to RTA Route 501/Silver, MTA light rail, MTA Commuter Bus 201, and MTA LocalLink bus Route 75.

OTHER TRANSIT SERVICES

Four agencies operate transit services within the RTA service area. The Maryland Transit Administration (MTA) operates local bus, express bus, commuter bus, commuter rail, and light rail services within the service area, primarily providing connections to Baltimore. Washington Metropolitan Area Transit Authority (WMATA) provides local bus, express bus, and heavy rail services within the service area, primarily providing connections to Baltimore and Washington, D.C.

Maryland Transit Administration (MTA)

The MTA operates 18 bus routes – four local, one express, and 13 commuter buses within the RTA service area. Two commuter rail lines – the Camden Line and Penn Line – serve the RTA service area. One light rail line serves the area.

Table 4-44 and

Table 4-45 identify the route, origin and destination, type of service, days of operation, and routes that intersect with the RTA. It should be noted that 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 4-44: MTA Intersecting Bus Services

Route	Origin-Destination	Type	Days of Operation
MTA Service – Howard County			
BusLink 150	Columbia (Harper East) Baltimore (Harbor East)	Express	Weekday
201	Gaithersburg Park & Ride-BWI Marshall Airport	Commuter	Daily
203	Snowden River Park and Ride-Bethesda	Commuter	Weekday
305	Columbia-Silver Spring/Washington, D.C.	Commuter	Weekday
310	Columbia- John Hopkins Hospital	Commuter	Weekday
315	Ellicott City-Silver Spring/Washington, D.C.	Commuter	Weekday
320	Jessup/Columbia-Downtown Baltimore	Commuter	Weekday
325	Columbia/Silver Spring-Washington, D.C.	Commuter	Weekday
335	Clarksville/Columbia-Washington, D.C.	Commuter	Weekday
345	Ellicott City/Columbia-Washington, D.C.	Commuter	Weekday
MTA Service – Anne Arundel County			
LocalLink 67	Marley Neck (Energy Parkway)-Downtown	Local	Daily
LocalLink 69/70	Patapsco Light Rail Station-Jumpers Hole	Local	Daily
LocalLink 75	Patapsco Light Rail Station-Parkway Center	Local	Daily
BusLink 107	Old Court Metro Station-BWI Marshall Airport	Express	Weekday
BusLink 164	Riviera Beach-Downtown	Express	Weekday
201	Gaithersburg Park & Ride-BWI Marshall Airport	Commuter	Weekday
210	Kent Island-Annapolis-Downtown Baltimore	Commuter	Weekday
215	Annapolis- Downtown Baltimore	Commuter	Weekday
220	Annapolis-Washington, D.C.	Commuter	Weekday
230	Severna Park & Ride-Washington, D.C.	Commuter	Weekday
250	Kent Narrows/Stevensville/Davidsonville Park & Ride	Commuter	Weekday
260	Severna Park/Davidsonville-Washington, D.C.	Commuter	Weekday
291	Annapolis-New Carrollton	Commuter	Weekday

Table 4-45: MTA Intersecting Rail Services

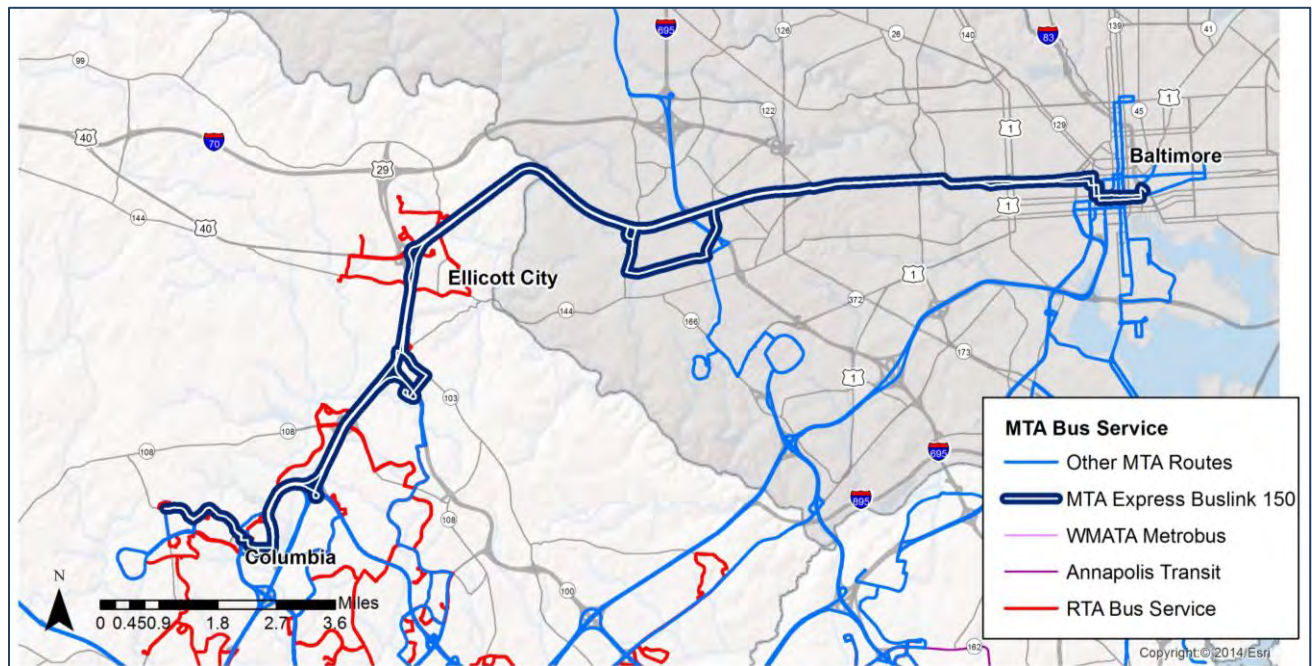
Route	Origin-Destination	Type	Station
Camden Line	Baltimore Camden Station – Washington, D.C. Union Station	Commuter Rail	Jessup
			Savage
			Laurel
			Muirkirk
			College Park
Penn Line	Baltimore Penn Station – Washington, D.C. Union Station	Commuter Rail	BWI Rail Station
			Odenton
Hunt Valley – Cromwell/Glen Burnie		Light Rail	Cromwell/Glen Burnie
Hunt Valley – BWI Marshall Airport		Light Rail	BWI Business District
			BWI Marshall Airport

MTA Service-Howard County

In Howard County MTA provides two types of service: “Express” and “Commuter”. Express service is limited stop service operated directly by MTA under MTA’s fare policy, while the commuter bus service is operated under contract to MTA by private bus companies. The express service utilizes standard 40-foot long MTA transit buses, while the commuter bus service is operated using high-deck, over-the-road coaches with a single front door. The commuter bus fleet is a mixture of MTA-owned and contractor owned coaches. The fleet will be shifting to one that is completely owned by the contractors as the MTA coaches are retired. The Howard County services include the following routes.

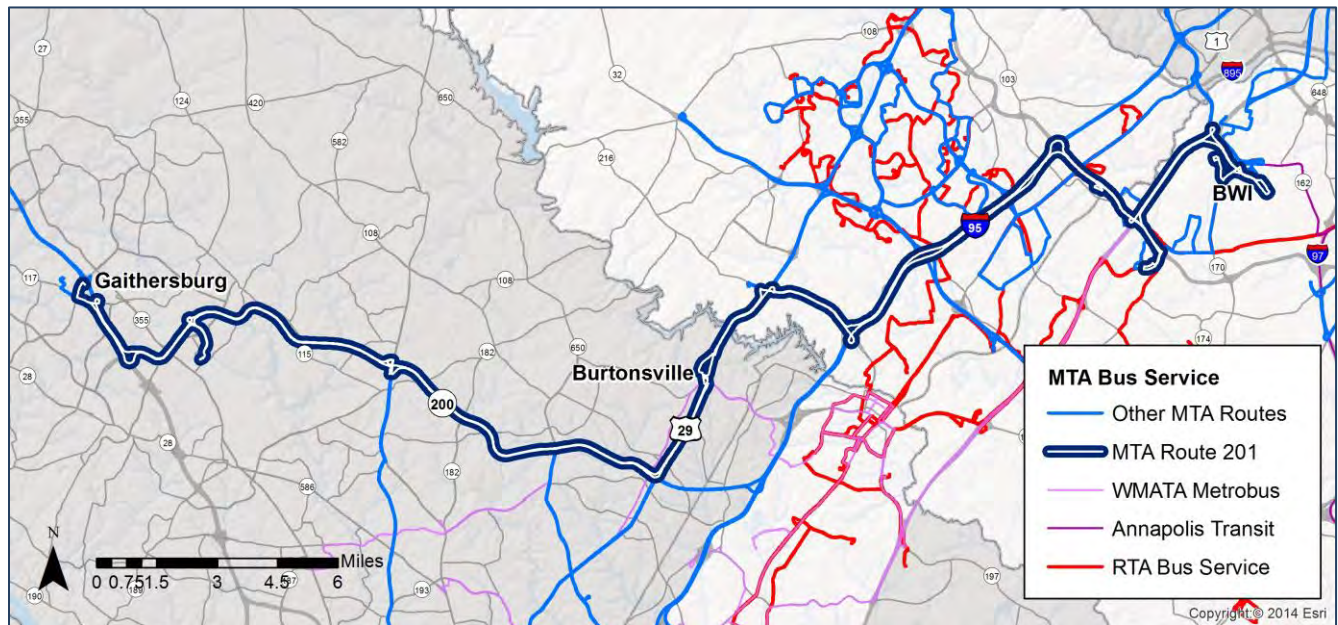
Express BusLink 150: Columbia (Harper’s Choice) to Baltimore (Harbor East)

MTA Express BusLink 150 operates from Harper’s Choice Village Center to downtown Baltimore and then east to Harbor East, via Columbia Town Center, Long Gate Shopping Center (at the Park and Ride), with additional stops on U.S. 40 in Ellicott City between Route 29 and the Baltimore County line. Service operates between 6:00 a.m. and 6:30 p.m. weekdays, but is limited to peak hour service only. There are three morning inbound trips (to Baltimore) and two afternoon inbound trips; and two morning outbound trips and three afternoon inbound trips. Fares are the standard MTA \$1.80 one-way single cash fare, with a day pass at \$3.50 plus \$0.40 per ride. There are also multi-ride fares, a weekly pass at \$16.50 plus \$0.40 per ride, or \$80.00 per month, and senior/disabled fares at a reduced rate. MTA Express BusLink 150 is shown in Figure 4-77.

Figure 4-77: MTA Express BusLink 150 – Harper’s Choice to Baltimore

Commuter Route 201: Gaithersburg Park and Ride to BWI Marshall Airport

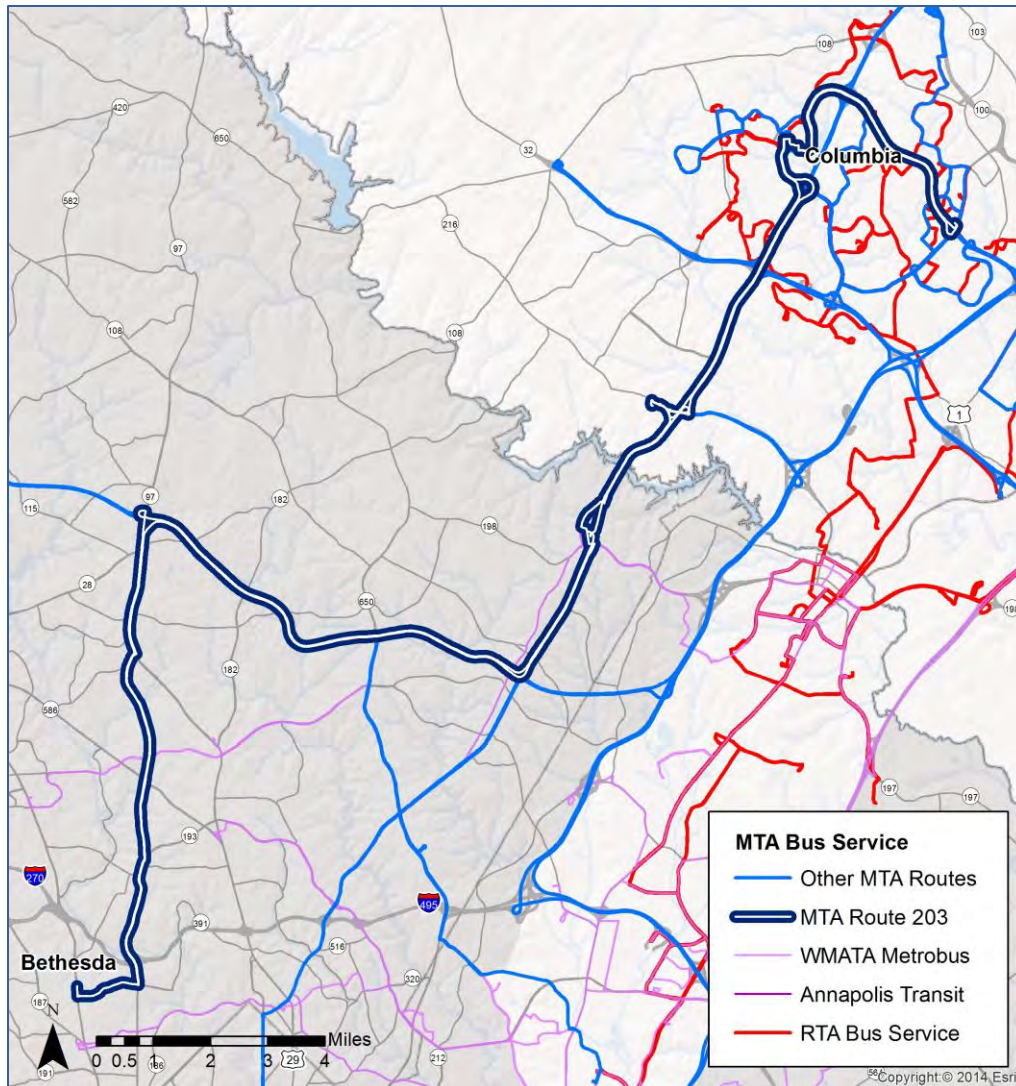
Route 201 operates from Gaithersburg to BWI Marshall Airport. It traverses Howard County, but has only one stop in Howard County at the Dorsey MARC station. Although this route operates on weekends, the Dorsey stops are weekday only because that is when there are MARC trains operating. On weekdays there are six eastbound stops at Dorsey Station between 1:56 p.m. and 6:56 p.m., and six westbound stops: four between 5:25 a.m. and 8:25 a.m., one at 1:25 p.m. and one at 10:25 p.m. It is described more fully in the Anne Arundel County MTA services. Figure 4-78 presents the route of the MTA 201.

Figure 4-78: MTA Commuter Bus 201: Gaithersburg Park & Park-BWI Marshall Airport

Commuter Route 203: Snowden River Park and Ride to Bethesda

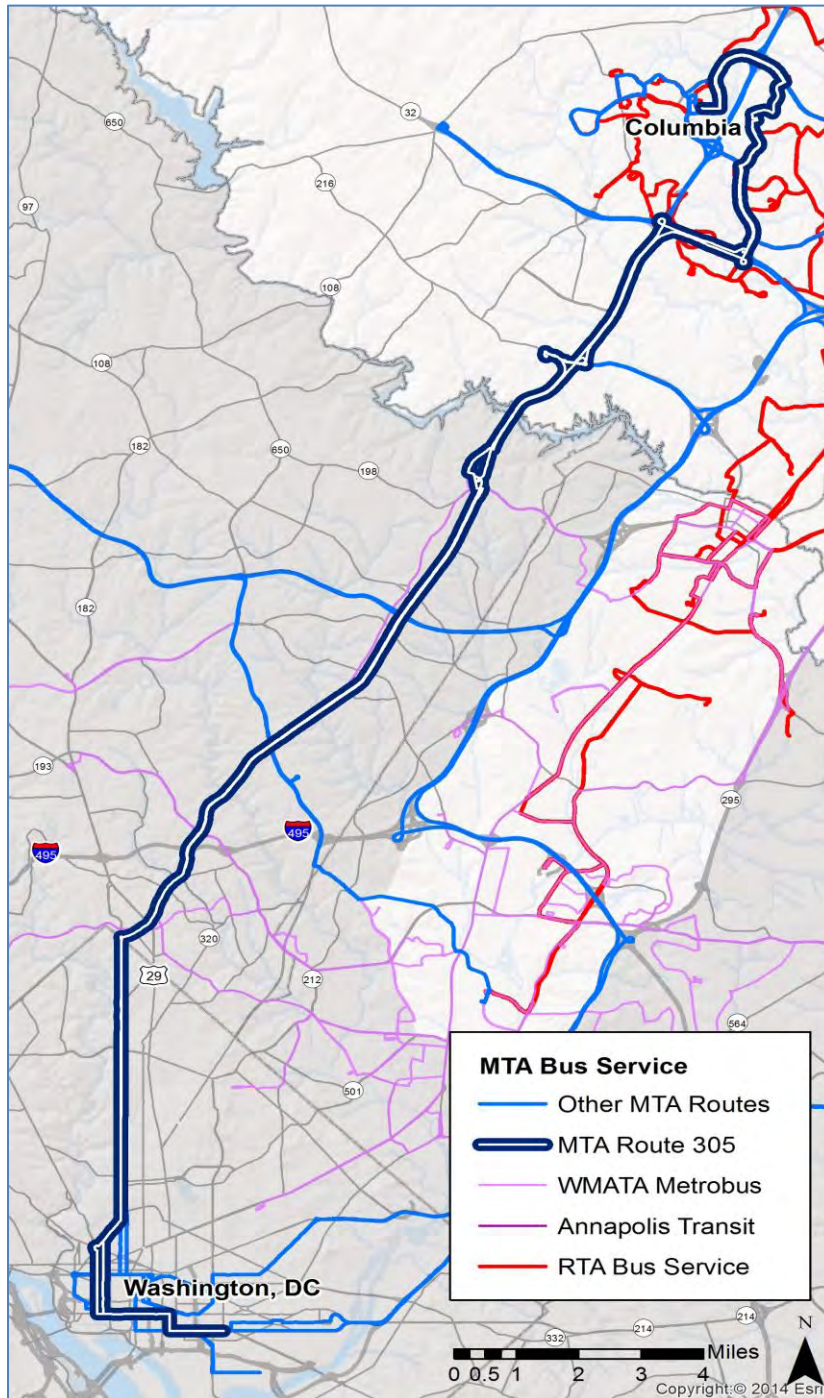
Commuter Route 203 offers commuter bus service between Howard County (with stops at Snowden River Park and Ride, Columbia Town Center, and Scaggsville Park and Ride) and the USUHS/Naval Medical Center/National Institutes of Health campus (Medical Center Metro Station) in Bethesda, Maryland. It is operated under contract by Dillon's Bus Service, Inc. Service. It runs weekdays only; with three southbound trips between 5:33 a.m. and 6:33 a.m., and four northbound trips between 3:40 p.m. and 5:10 p.m. Fares are MTA Zone 3 commuter fares; \$5.00 for a one-way cash fare, senior/disabled fares (\$4.00), and ten-trip tickets and monthly passes. A Transit Link Card is available offering unlimited use of the commuter bus, Metrorail, Metrobus and Ride-On during the indicated month. A Guaranteed Ride Home program is available if users register with Commuter Connections. MTA Commuter Route 203 is shown in Figure 4-79.

Figure 4-79: MTA Commuter Route 203 - Snowden River Park and Ride to Bethesda



Commuter Route 305: Columbia to Silver Spring and Washington, D.C.

Figure 4-80: MTA Commuter Route 305 – Columbia to Silver Spring and Washington, D.C.



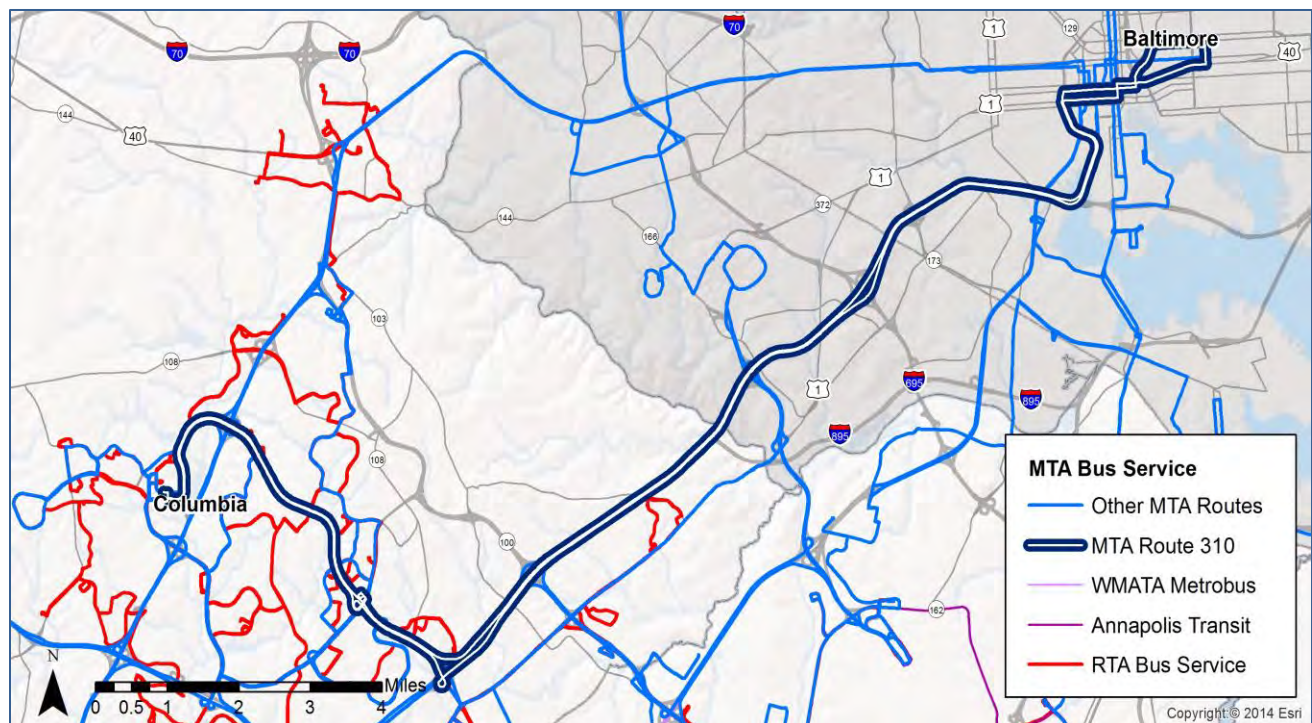
This commuter bus route connects Howard County stops at Columbia Town Center, Broken Land Park and Ride, and Scaggsville Park and Ride with the Silver Spring Metro Station and downtown Washington, D.C. It is operated under contract by Dillon's Bus Service, Inc. Service is weekday only, with twelve southbound trips between 4:30 a.m. and 7:50 a.m., and twelve northbound trips between 1:00 p.m. and 7:00 p.m. Trips between Howard County and Silver Spring are Zone 2 fares; \$4.00 for a one-way full fare, while trips to downtown Washington, D.C. are MTA Zone 3 commuter fares; \$5.00 for a one-way cash fare, senior/disabled fares, and ten-trip tickets and monthly passes. Free transfers are available to MTA Commuter buses at the Columbia Mall and Broken Land Parkway. A Transit Link Card is available offering unlimited use of the commuter bus, Metrorail, Metrobus and Ride-On during the indicated month. A Guaranteed Ride Home program is available if users

register with Commuter Connections. Route 305 is shown in Figure 4-80.

Commuter Route 310: Columbia to Johns Hopkins Hospital (Baltimore)

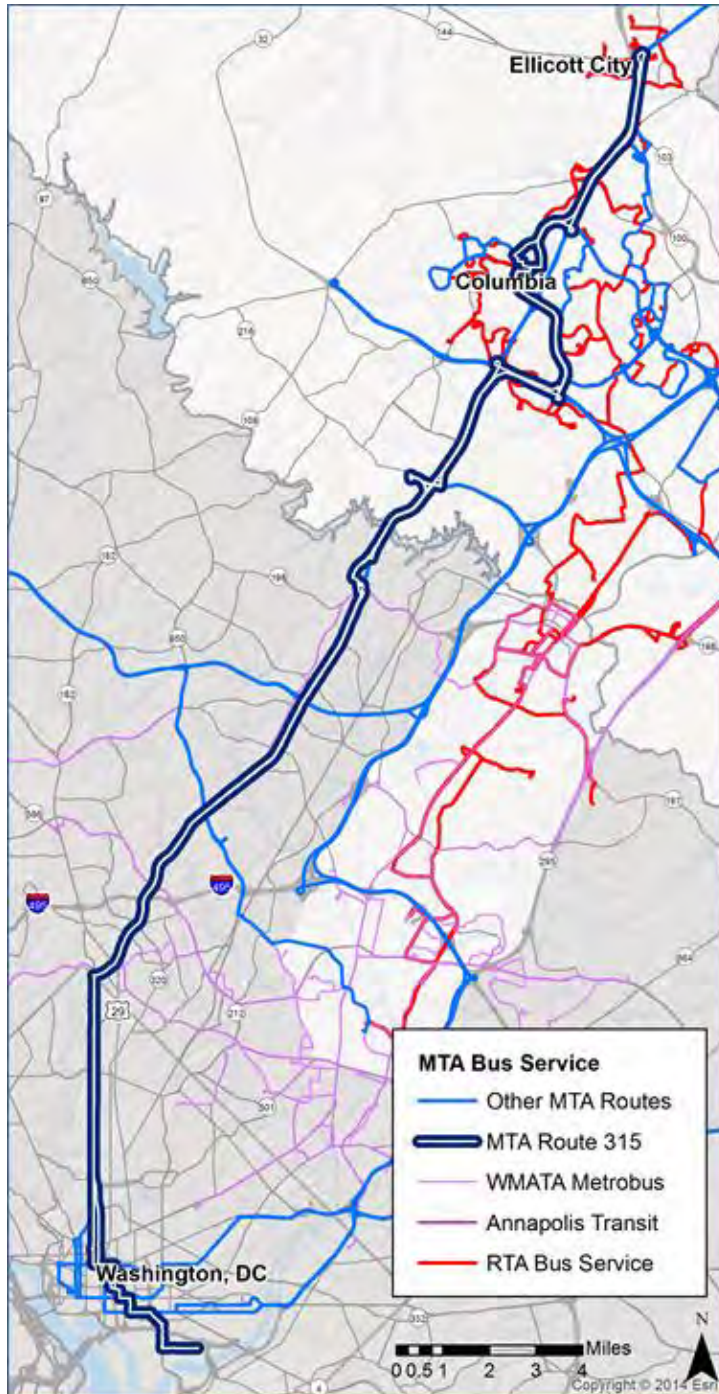
Commuter Route 310 connects Columbia Mall and the Snowden River Park and Ride with the University of Maryland at Baltimore, and the Charles Center and the Johns Hopkins Hospital in Baltimore. There are four morning inbound trips originating at Columbia Mall between 6:12 a.m. and 8:12 a.m. and an additional three originating at Snowden River Park and Ride during that period. There are seven outbound evening trips between 1:00 p.m. and 6:35 p.m., three terminating at Snowden River and the rest continuing on to Columbia. The service is operated under contract by Eyre Bus Service. Service is weekdays only, and fares are MTA commuter Zone 2 fares. Route 310 is shown in Figure 4-81.

Figure 4-81: MTA Commuter Route 310 – Columbia to Johns Hopkins



Commuter Route 315: Ellicott City (Lotte Plaza) to Silver Spring and Washington, D.C.

Figure 4-82: MTA Route 315 – Ellicott City to Silver Spring and Washington, D.C.

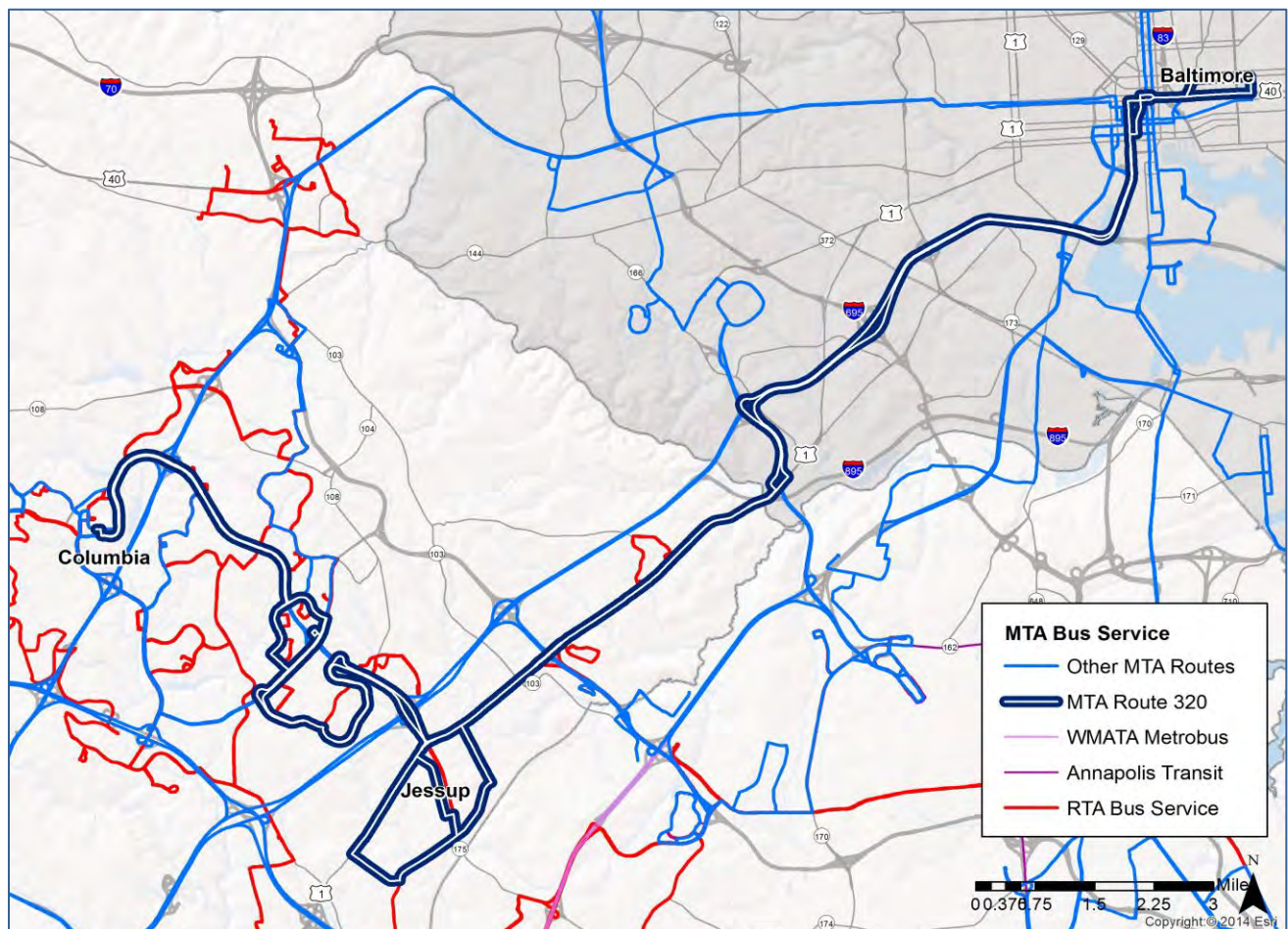


This commuter bus route connects Howard County stops at Lotte Plaza in Ellicott City, Columbia Mall, Broken Land Parkway, Broken Land Park and Ride, and Scaggsville Park and Ride with the Silver Spring Metro Station and downtown Washington, D.C. It is operated under contract by Dillon's Bus Service, Inc. Service is weekdays only, with ten southbound trips between 4:45 a.m. and 7:45 a.m., three of which originate at Lotte Plaza and the rest at Columbia Mall. There are ten northbound evening trips between 2:40 p.m. and 6:06 p.m., three of which continue only beyond Columbia Mall to Lotte Plaza. Trips between Howard County and Silver Spring are Zone 2 fares; \$4.00 for a one-way full fare, while trips to downtown Washington, D.C. are MTA Zone 3 commuter fares; \$5.00 for a one-way cash fare, senior/disabled fares, and ten-trip tickets and monthly passes. Free transfers are available to MTA Commuter buses at Columbia Mall and Broken Land Parkway. A Transit Link Card is available offering unlimited use of the commuter bus, Metrorail, Metrobus and Ride-On during the indicated month. A Guaranteed Ride Home program is available if users register with Commuter Connections. Route 315 is shown in Figure 4-82.

Commuter Route 320: Downtown Baltimore to Jessup/Columbia

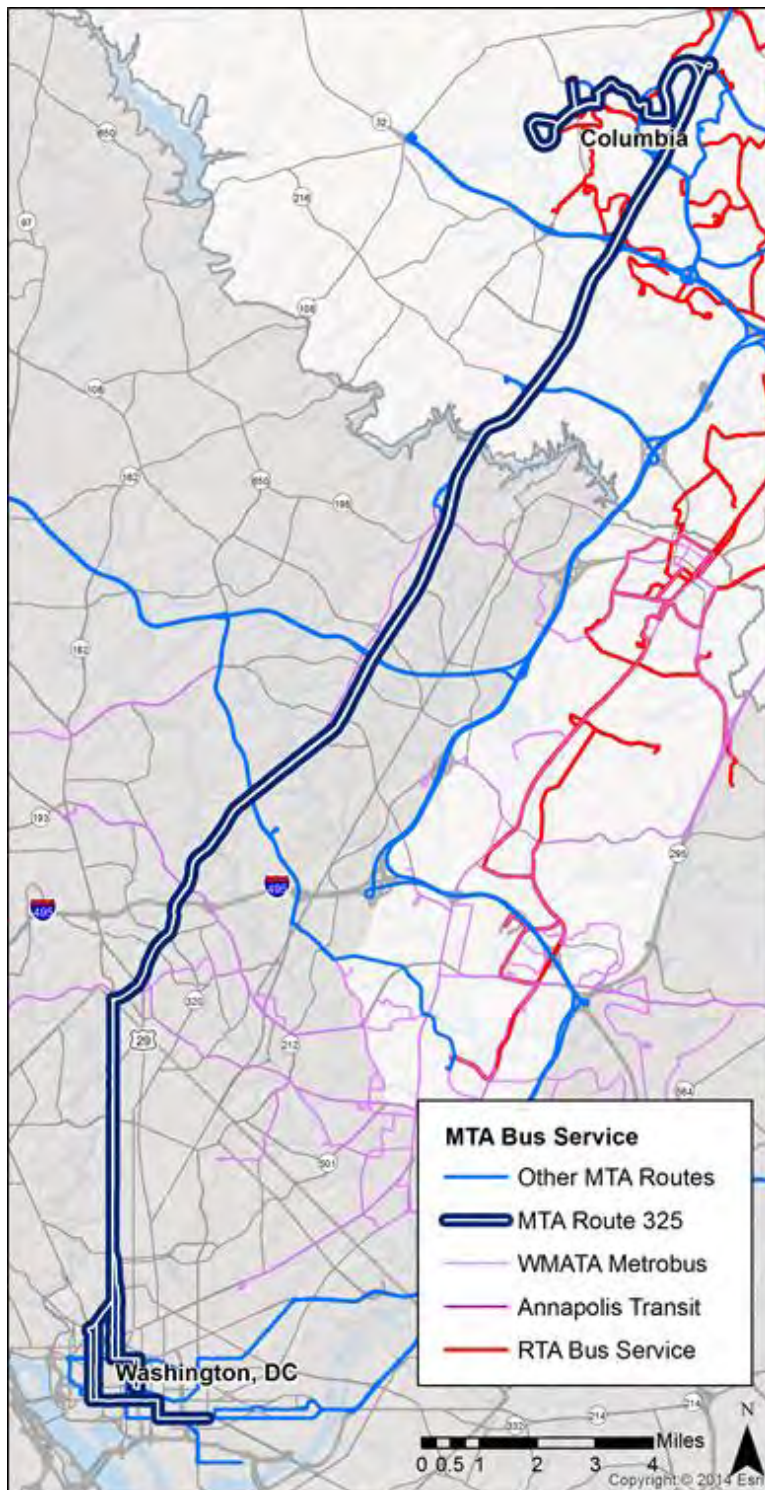
Commuter Route 320 provides service connecting Columbia, Jessup, Baltimore, and Johns Hopkins Hospital. The stops in Howard County include Columbia Mall, Snowden River Park and Ride, the Gateway area, Jessup, and Route 1 in Elkridge. Service is operated under contract by Eyre Bus Service, Inc. Route 320 operates southbound from Baltimore in the morning, and northbound to Baltimore in the evening (reverse commute). There are seven morning departures from Johns Hopkins Hospital, with four going to Columbia Mall and three going to Snowden River Park and Ride. Morning services depart between 5:05 a.m. and 7:35 a.m. Afternoon and evening northbound service begins at 11:47 a.m. and continues until the last departure at 5:10 p.m. Four northbound trips originate at Columbia Mall, and three at the Snowden River Park and Ride lot. Trips between downtown Baltimore, Elkridge and Jessup are MTA Zone 1, and longer trips are Zone 2. Zone 1 fares begin with a \$3.00 one-way cash fare, compared to the \$4.00 Zone 2 fare. Both Zones offer senior/disability fares, ten-ride tickets, and monthly passes. Route 320 is shown in Figure 4-83.

Figure 4-83: MTA Route 320 – Baltimore to Jessup/Columbia



Route 325: Columbia to Silver Spring and Washington, D.C.

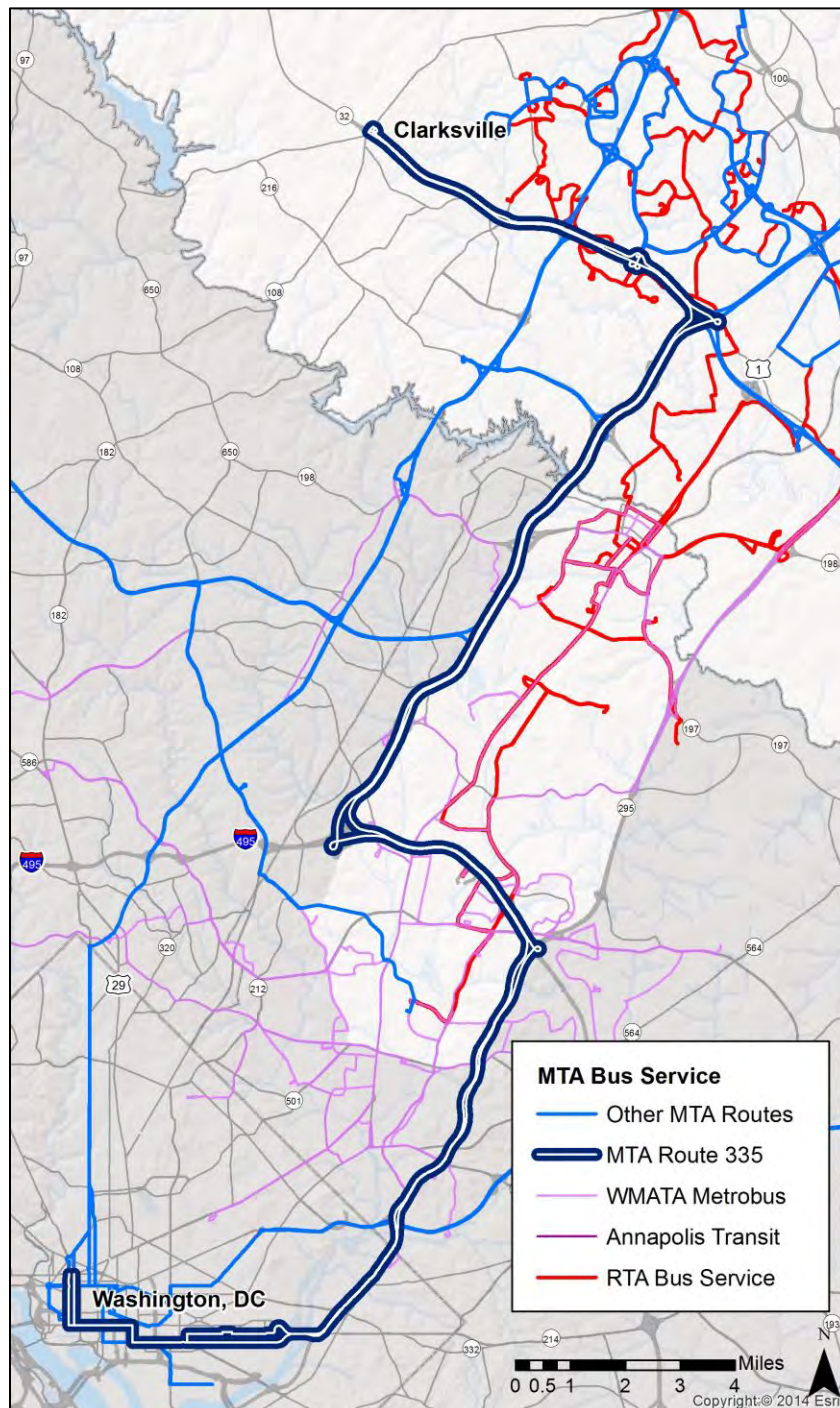
Figure 4-84: MTA Route 325 – Columbia to Silver Spring and Washington, D.C.



Route 325 offers a second line connecting Columbia to Washington, D.C. with seven trips originating at the Harper's Choice Village Center in the morning. There are stops at Columbia Mall and in downtown Columbia, and express service from there to Silver Spring and on to Washington, D.C. There are two different routings going to Capitol Hill and to Metro Center. Services depart between 5:35 a.m. and 7:35 a.m. Northbound evening services offer seven trips from downtown Washington, D.C. between 3:15 p.m. and 5:20 p.m. Trips between Howard County and Silver Spring are Zone 2 fares; \$4.00 for a one-way full fare, while trips to downtown Washington, D.C. are MTA Zone 3 commuter fares; \$5.00 for a one-way cash fare, senior/disabled fares, ten-trip tickets and monthly passes. Free transfers are available to MTA Commuter buses at Columbia Mall and Broken Land Parkway. A Transit Link Card is available offering unlimited use of the commuter bus, Metrorail, Metrobus and Ride-On during the indicated month. A Guaranteed Ride Home program is available if users register with Commuter Connections. Route 325 is shown in Figure 4-84.

Commuter Route 335: Clarksville/Columbia to Washington, D.C.

Figure 4-85: Clarksville/Columbia-Washington, D.C.

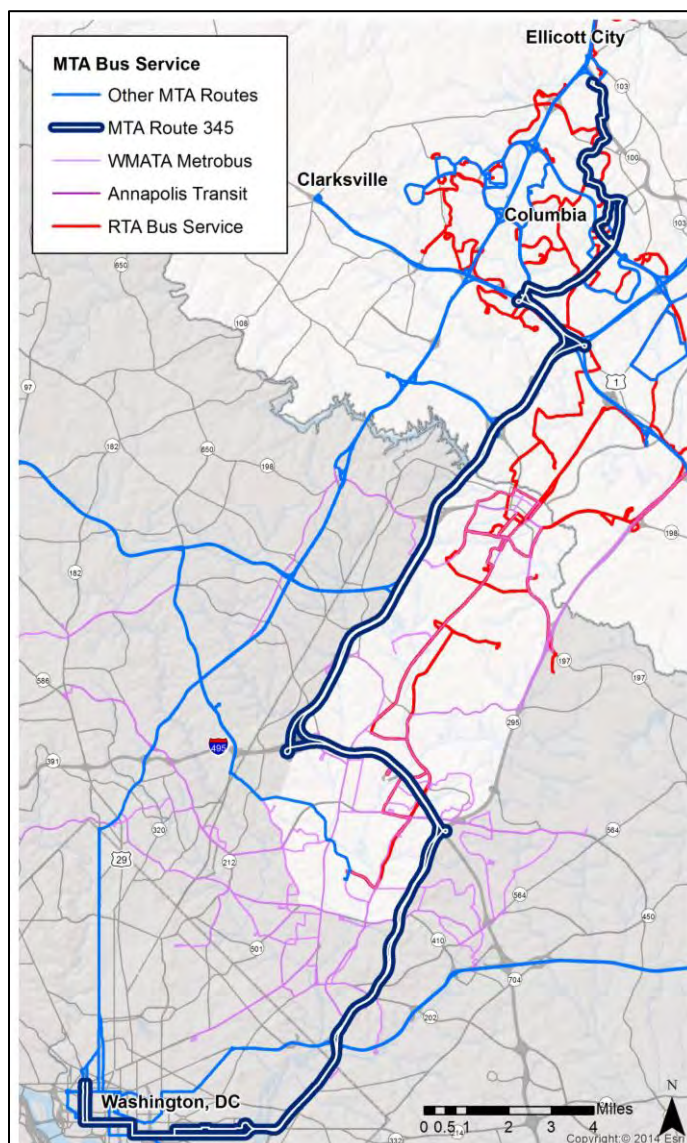


Another service to downtown Washington, D.C. is provided by Commuter Route 335 with Howard County stops in Clarksville and Broken Land Park and Ride, followed by an express ride to the west end of downtown Washington, D.C. southwest and Capitol Hill (Figure 4-85). The service is operated under contract by Dillon's Bus Service. There are seven inbound trips between 5:08 a.m. and 7:13 a.m. In the afternoon there are seven return trips between 2:25 p.m. and 5:15 p.m. plus two Route 345 trips (that make local stops in Howard County) at 1:35 p.m. and 5:30 p.m. All services are MTA Zone 3, and free transfers are available to other MTA Commuter buses at Broken Land Parkway. A Transit Link Card is available offering unlimited use of the commuter bus, Metrorail, Metrobus and Ride-On during the indicated month. A Guaranteed Ride Home program is available if users register with Commuter Connections.

Commuter Route 345: Ellicott City/Columbia to Washington, D.C. via I-95

This commuter route 345 (Figure 4-86) connects Howard County stops at Long Gate Park and Ride, Snowden River Park and Ride, and Broken Land Park and Ride with Washington, D.C. via I-95. In addition to the park and ride lots there are a number of on-street stops in the Long Reach area. On weekdays only, there are seven southbound morning departures between 5 a.m. and 7:10 a.m., and seven northbound return trips between 12:15 p.m. and 5:30 p.m. Service is operated by Dillon's Bus Service. All services are MTA Zone 3, and free transfers are available to other MTA Commuter buses at Broken Land Parkway. The Transit Link Card is available offering unlimited use of the commuter bus, Metrorail, Metrobus and Ride-On during the indicated month. Guaranteed Ride Home is available if users register with Commuter Connections.

Figure 4-86: MTA Commuter Route 345 – Ellicott City/Columbia to Washington, D.C.



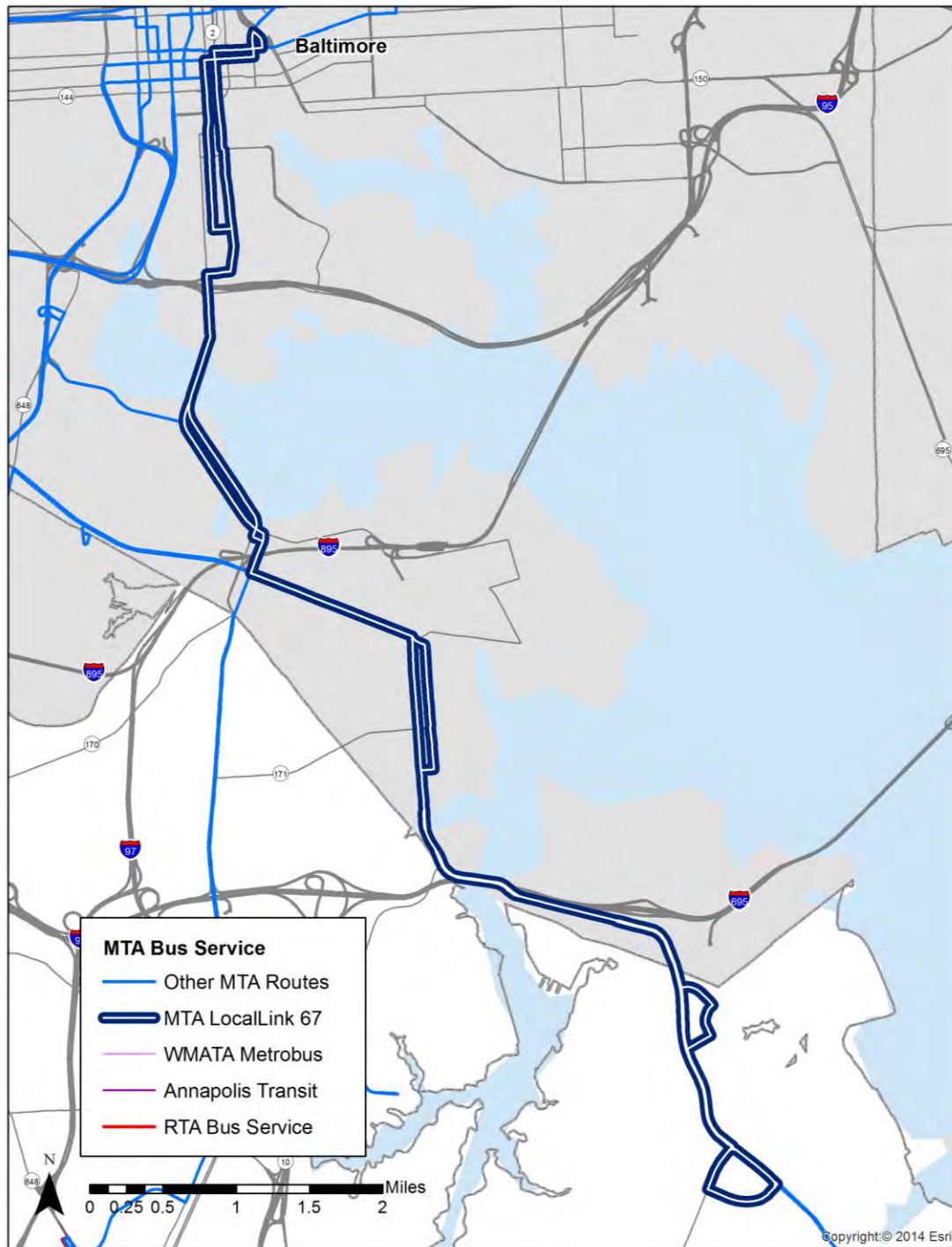
MTA Service—Anne Arundel County

In Anne Arundel County MTA provides a substantial amount of service, including four local bus service routes, five commuter bus routes, light rail service and commuter rail service. Some of this service will be affected by the Baltimore area transit service restructuring now underway as “BaltimoreLink”. The MTA services in Anne Arundel County are described below.

MTA LocalLink 67: Marley Neck (Energy Parkway) to Downtown (City Hall)

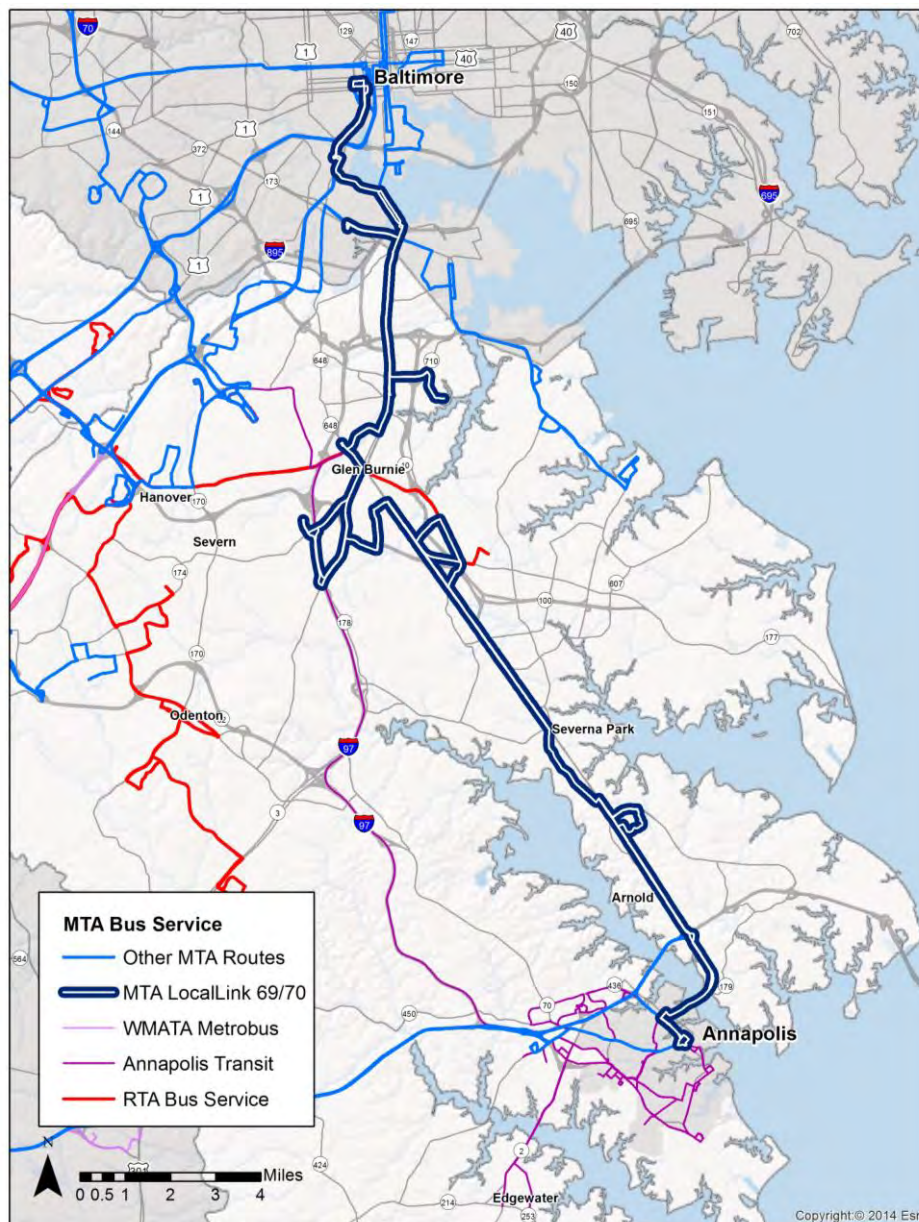
MTA LocalLink 67 provides local bus service connecting northeastern Anne Arundel County to downtown Baltimore. Key origins include Energy Business Park, Marley Neck and Curtis Bay. There is weekday and weekend service (both days). The Anne Arundel portion of the route originates at Marley Neck, makes a deviation into Marley Neck Industrial Park providing service to the Under Armour Factory House, and then continues north. Weekdays, from Marley Neck there are six a.m. northbound trips and ten southbound a.m. trips between 4:57 a.m. and 9:55 a.m., no late morning service, and then 13 northbound and 14 southbound trips between 12:21 p.m. and 1:06 a.m. Weekend service is reduced to four a.m. and 8 p.m. trips each way. Fares are MTA local bus fares, and there is no connectivity to RTA bus services on these services. The service was formerly called MTA Route 64, and it was heavily modified as part of the BaltimoreLink restructuring. As noted above, the section between Marley Neck/Energy Parkway and Curtis Bay was replaced with a new service, LocalLink 67, which will continue to downtown Baltimore. The former service between Curtis Bay and North Avenue was incorporated into the new higher-frequency CityLink Silver service (but without the deviation into Port Covington), which is a longer route that extends to University Parkway and the Morgan State University campus. Riviera Beach is now served by Express BusLink 164. LocalLink 67 can be seen in Figure 4-87.

Figure 4-87: MTA LocalLink 67 - Curtis Bay/Energy Parkway to North Avenue



MTA LocalLink 69/70: Patapsco Light Rail Station to Annapolis/Jumpers Hole

Figure 4-88: MTA LocalLink 69/70: Patapsco Light Rail Station to Annapolis/Jumpers Hole



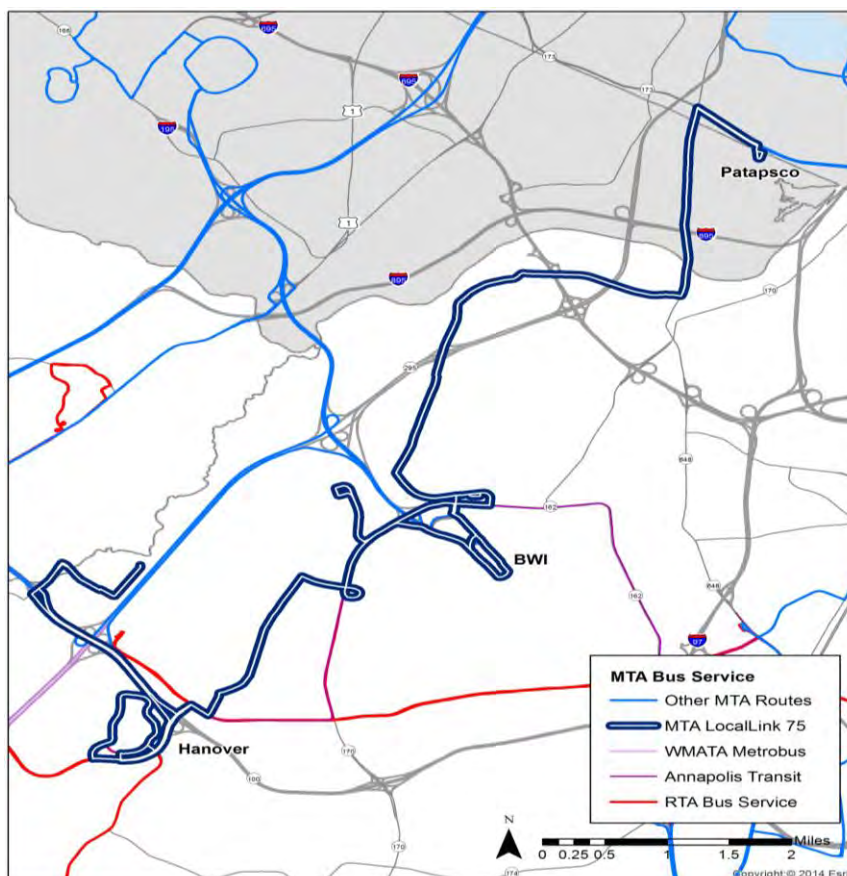
The BaltimoreLink plan rebrands the former MTA Route 14, with the Jumper's Hole service now called LocalLink 69, and the routing to Annapolis called LocalLink 70 (Figure 4-88). The only change on both services is the elimination of the service to Bayview Industrial Park. This local service route serves key Anne Arundel County points including Brooklyn Park, Glen Burnie, Cromwell Light Rail Station, Pasadena, Severna Park, Anne Arundel Community College, and Baltimore Washington Medical Center (not all trips). There are deviations on different trips and not all destinations

are served on each schedule. There are 14 trips to Annapolis, and another route that only goes as far as Jumpers Hole Road. Service operates from 4:45 a.m. to 2:00 a.m. on weekdays, and from 6:00 a.m. to midnight on Saturday and Sunday. The frequency on weekdays and Saturday is 60 minutes, stretching to 65 minutes on Sunday (10 a.m. to 7:00 p.m.) and two hours at other times on Sunday. There is limited service to downtown Baltimore (University of Maryland Transit Center) when the light rail system is not operating. Connections to RTA Route 201/J can be made at Cromwell Light Rail Station. Fares are MTA local fares.

MTA LocalLink 75: Patapsco Light Rail Station to Parkway Center

This local service in western Anne Arundel County recently was changed as part of the e BaltimoreLink restructuring. Formerly MTA Route 17, the changes include a rebranding to the LocalLink 75 name, elimination of service to Parkway Center South, and service to Parkway Center North only during the morning peak. A routing change moved service from Aviation Boulevard/Dorsey Road to New Ridge Road to serve the Baltimore Commons Business Park. LocalLink 75 continues to Route 17 links the Patapsco Light Rail Station with the Nursery Road business area, BWI Business Park, BWI Marshall Airport, BWI Amtrak/MARC Rail Station, Arundel Mills Mall and Parkway Center North. The span of service is 24 hours, and there is an extension to downtown Baltimore when light rail service is not operating. However, not all stops are served at all times - and headways vary from 30 to 60 minutes. Daytime service between Patapsco and Arundel Mills Mall is provided on all trips, but the extension to Parkway Center North now operates only during the morning peak period. At night, service operates from the University of Maryland Transit Center downtown (rather than Patapsco Light Rail) to Arundel Mills Mall. Fares are MTA local bus fares. There is connecting service to RTA's Route 201/J, 202/K, 501/Silver, and 502/B at Arundel Mills Mall. The route alignment is shown in Figure 4-89.

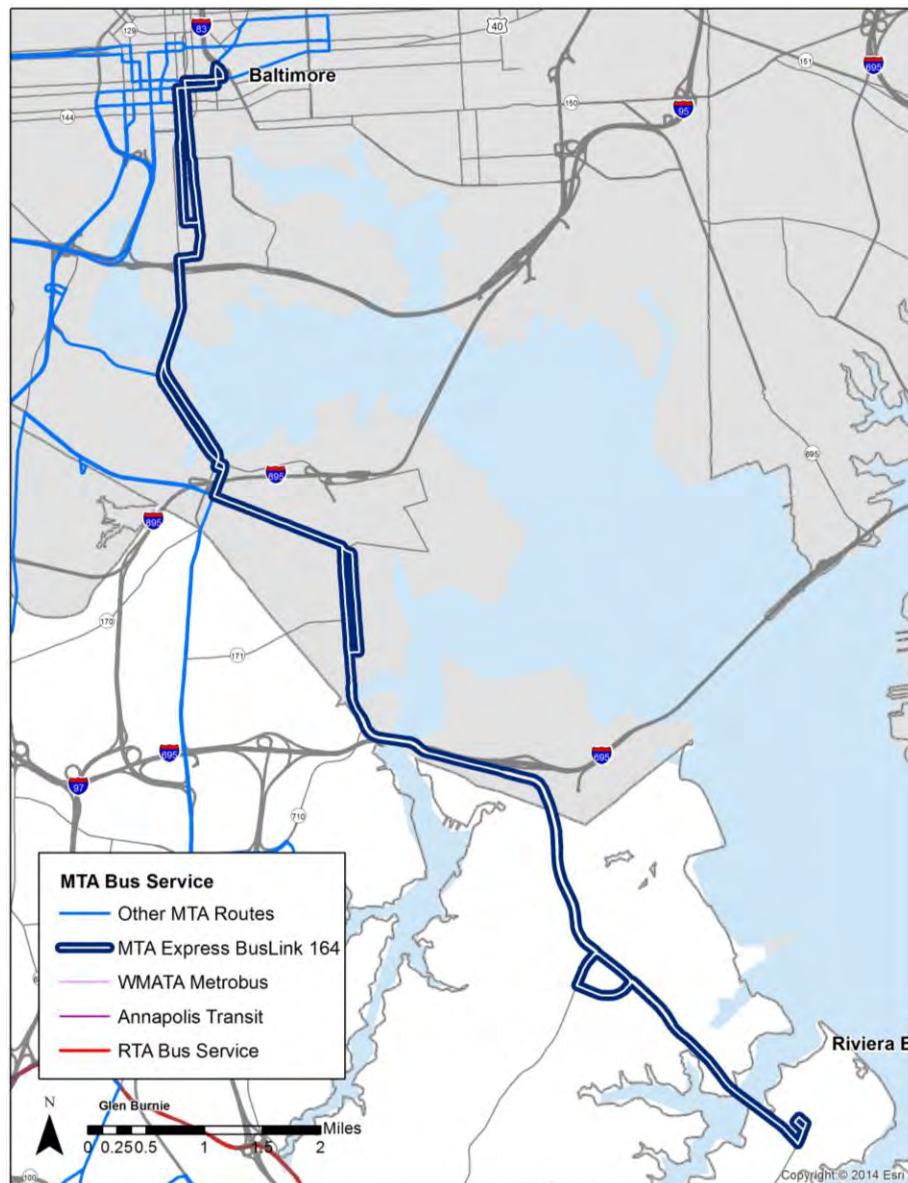
Figure 4-89: MTA LocalLink 75: Patapsco Light Rail Station to Parkway Center



MTA Express BusLink 164: Riviera Beach to Downtown

Between Riviera Beach and downtown, a new Express BusLink 164 provides service on weekdays only. Despite the name, the service operates as a local service making all stops. However, the frequency was reduced to two morning (5:55 and 7:45 a.m.) and two evening peak trips (leaving City Hall at 3:30 and 5:15 p.m.) because of the current low ridership from Riviera Beach. The service originates in Riviera Beach, deviates through Brandon Woods via Energy Parkway, and continues to Hawkins Point, through Curtis Bay to downtown Brooklyn, Harbor Hospital and then to Charles Center and City Hall. The new route has MTA local bus fares. The Express BusLink 164 route is presented in Figure 4-90.

Figure 4-90: MTA Express BusLink 164 – Riviera Beach to Downtown



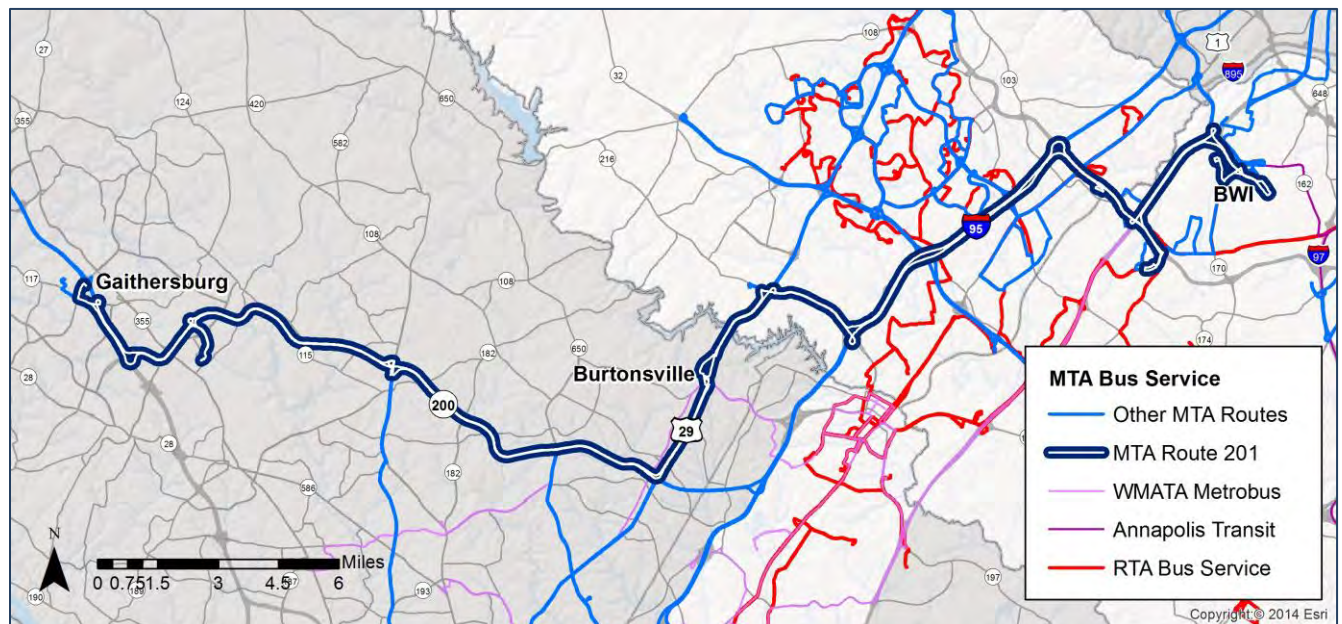
Express BusLink 107: Old Court Metro Station to BWI Marshall Airport

This route connects northwest Baltimore (the Metro, Centers for Medicare and Medicaid Services (CMS) and Security Square Mall) with the BWI employment centers via Catonsville (Community College of Baltimore County and University of Maryland Baltimore County campuses). The routing is circumferential, with local service in northwest Baltimore, express service on I-695, and local service in the Catonsville area to BWI Marshall Airport. Service is weekdays only, during morning and afternoon evening peak. Express BusLink 107 provides two round-trips in the morning peak and two in the afternoon peak. RTA Route 501/Silver connects at BWI Marshall Airport. Fares are MTA local bus fares. Under the BaltimoreLink plan, this service was modified from the former Route 99, with some of the local service between Old Court Metro and UMBC shifted to a new LocalLink 37 route, and the longer connection between Old Court Metro, Security Boulevard, Catonsville and BWI Marshall Airport is already being provided by the new Express BusLink 107.

MTA Commuter Bus Service

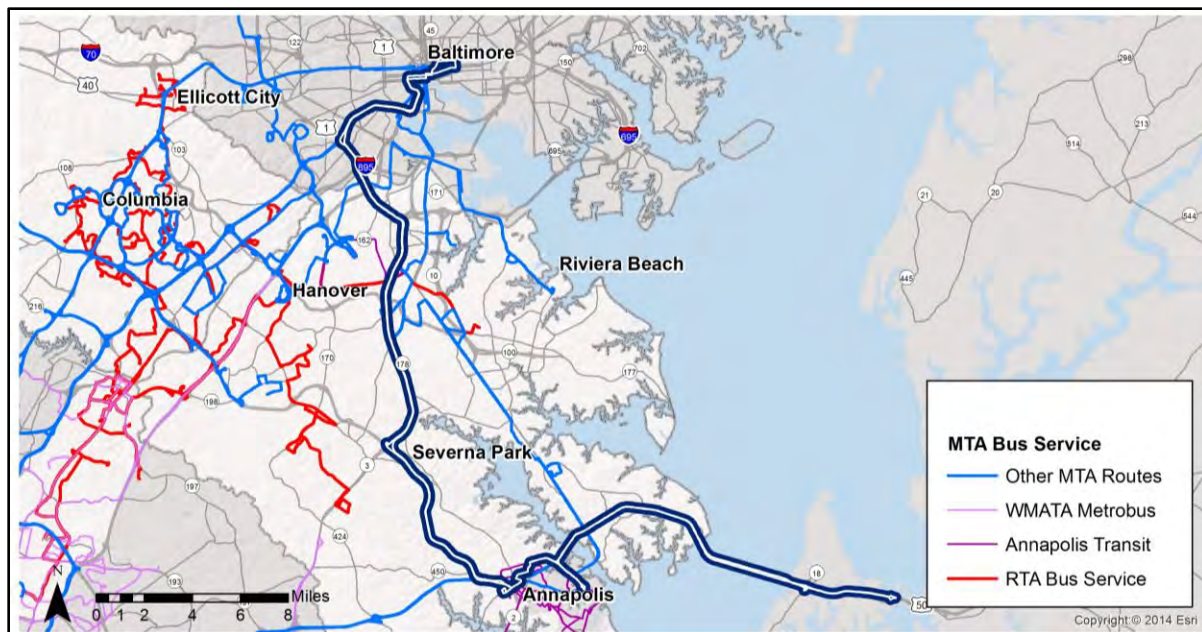
Commuter Route 201: Gaithersburg Park and Ride to BWI Marshall Airport

Route 201 links Gaithersburg with BWI Marshall Airport using Maryland 200, the Intercounty Connector, Route 29 and Route 32. On weekdays there are fifteen eastbound departures per day from the Gaithersburg Park and Ride lot, hourly beginning at 4:00 a.m. with the last departure at 6:00 p.m. All trips continue to the airport, but as noted previously, the Dorsey MARC Station stops are weekday only because that is when there are MARC trains operating. On weekdays there are six eastbound stops at Dorsey MARC Station between 1:56 p.m. and 6:56 p.m., and six westbound stops: four between 5:25 a.m. and 8:25 a.m., one at 1:25 p.m. and one at 10:25 p.m. There are no weekend or holiday stops at the Dorsey Station, but there are fifteen trips each way between Gaithersburg and BWI Marshall Airport on weekends and holidays; service is hourly in each direction between 4:00 a.m. and 6:57 p.m. All services are MTA Zone 3, and the Transit Link Card is available offering unlimited use of the commuter bus, Metrorail, Metrobus and Ride-On during the indicated month. Guaranteed Ride Home is available if users register with Commuter Connections. See Figure 4-91.

Figure 4-91: MTA Commuter Route 201: Gaithersburg Park and Ride-BWI Marshall Airport

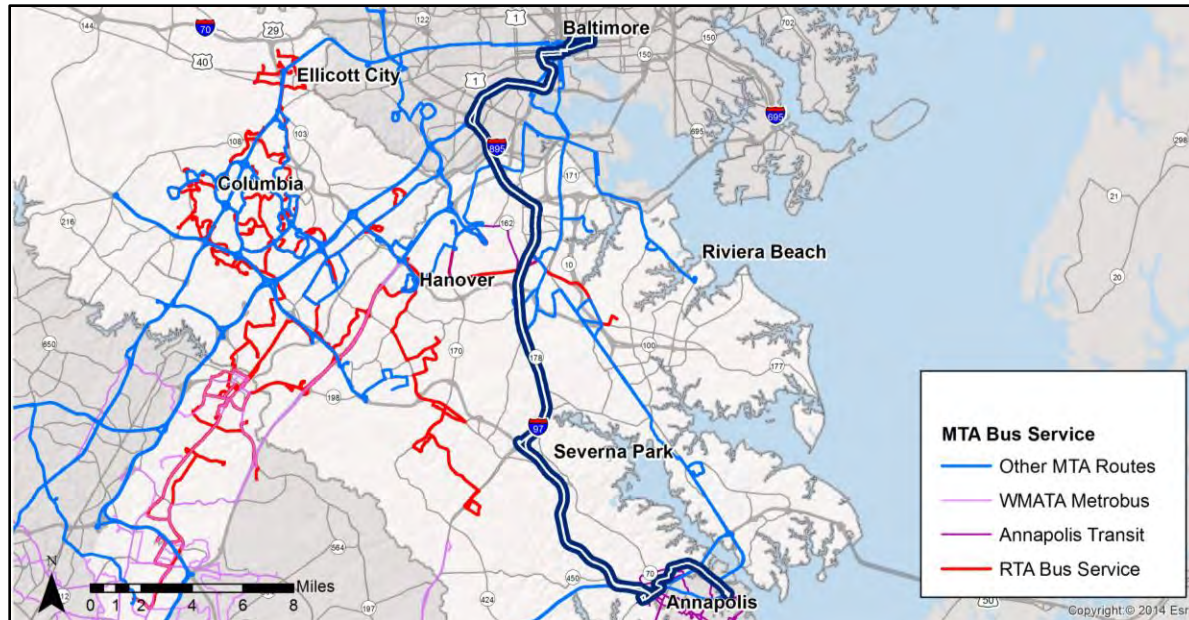
Commuter Route 210: Kent Island and Downtown Baltimore

Commuter Route 210 offers commuter bus service between Kent Island (with stops four stops in Annapolis) and Downtown Baltimore. It runs weekdays only; with four northbound trips between 5:30 a.m. and 7:30 a.m., and five southbound trips between 3:10 p.m. and 5:10 p.m. Kent Island to Annapolis is \$4.00, Annapolis to Baltimore is \$5.00, and Kent Island to Baltimore is \$6.00. A Transit Link Card is available offering unlimited use of the commuter bus, Metrorail, Metrobus and Ride-On during the indicated month. A Guaranteed Ride Home program is available if users register with Commuter Connections. MTA Commuter Route 210 is shown in Figure 4-92.

Figure 4-92: MTA Commuter Route 210 – Kent Island and Downtown Baltimore

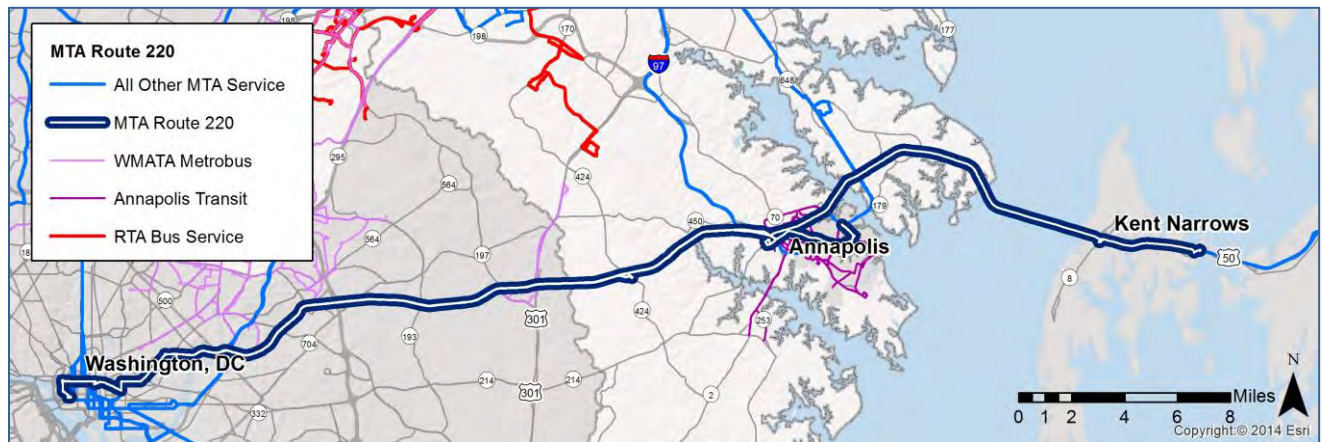
Commuter Route 215: Annapolis and Downtown Baltimore

Commuter Route 215 offers commuter bus service between Annapolis (with stops 1 stop at the Cromwell Light Rail Station) and Downtown Baltimore. It runs weekdays only; with three southbound trips between 5:45 a.m. and 7:45 a.m., and three northbound trips between 3:17 p.m. and 5:17 p.m. The route is Zone 3, and the cost is \$5.00. A Transit Link Card is available offering unlimited use of the commuter bus, Metrorail, Metrobus and Ride-On during the indicated month. A Guaranteed Ride Home program is available if users register with Commuter Connections. MTA Commuter Route 215 is shown in Figure 4-93.

Figure 4-93: MTA Commuter Route 215 – Annapolis and Downtown Baltimore

Commuter Route 220: Annapolis to Washington, D.C.

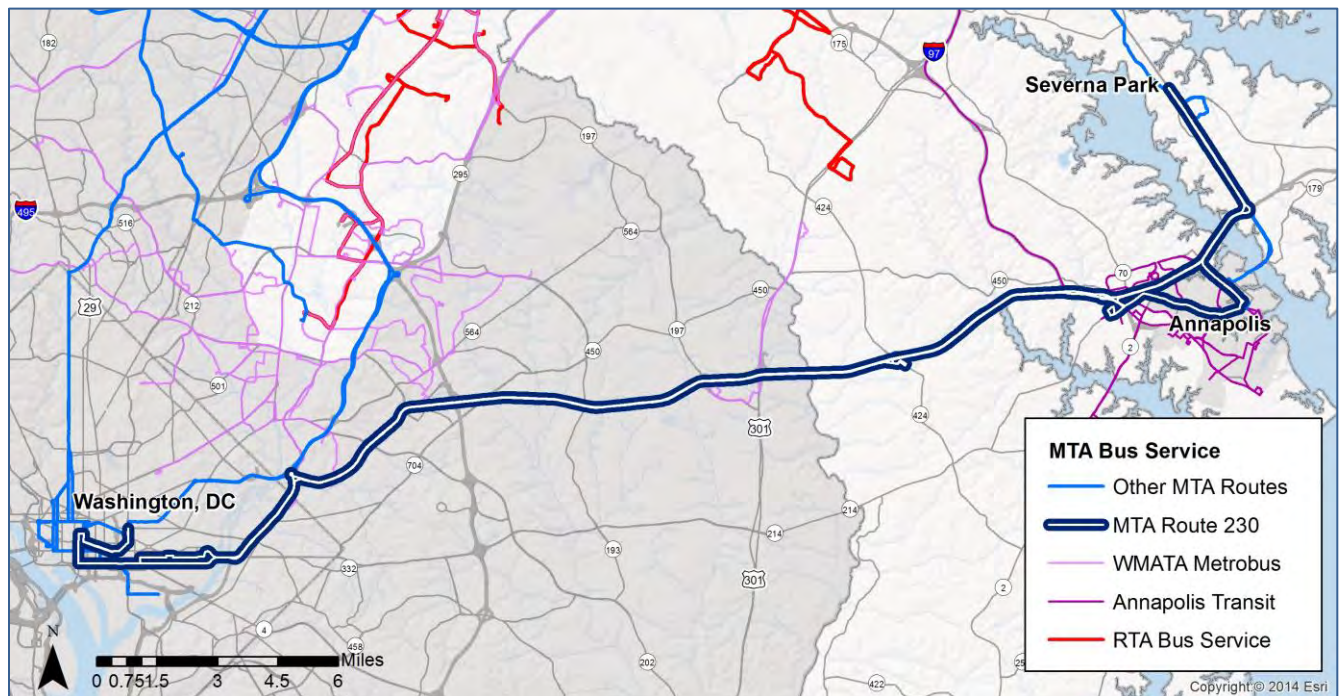
Twelve round-trips per weekday are operated on Commuter Route 220 connecting Anne Arundel County with downtown Washington, D.C. In the morning, six trips originate at the Harry S. Truman Park and Ride in Parole, and then operate express service to K Street NE on Capitol Hill. They are provided on half-hour headways from 5:30 a.m. to 8:00 a.m. Another six trips originate in Annapolis, leaving Rowe Boulevard and Taylor Avenue between 4:55 a.m. and 7:25 a.m., making on-street stops on West Street and Riva Road on the way to the Harry S. Truman Park and Ride, after which the service operates express to downtown. In the evening the pattern is reversed, with a total of fourteen departures from downtown stops between 12:15 p.m. and 6:30 p.m. Two make stops at Davidsonville Park and Ride, and stop at Harry S. Truman Park and Ride. Seven of them make on-street stops on West Street. The service is operated under contract by Dillon's Bus service. All fares from Anne Arundel County are MTA Commuter Zone 3. The Transit Link Card is available offering unlimited use of the commuter bus, Metrorail, Metrobus and Ride-On during the indicated month. In addition there are free transfers at the Harry S. Truman Park and Ride lot to eastbound 220 trips. MTA Commuter Route 220 is shown in Figure 4-92.

Figure 4-924: MTA Commuter Route 220 – Annapolis to Washington, D.C.

Commuter Route 230: Severna Park and Parole/Annapolis to Washington, D.C.

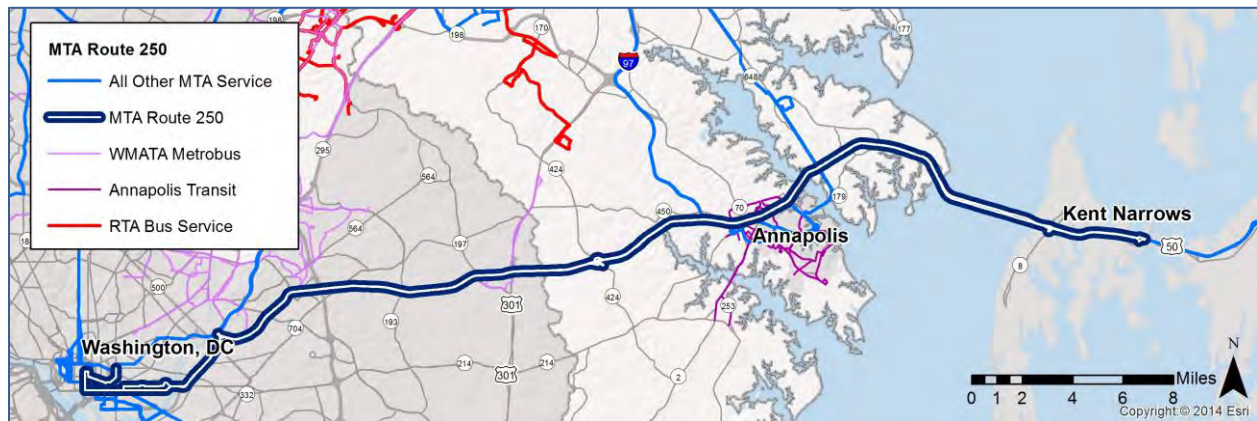
Ten round-trips per weekday are operated on Commuter Route 230. In the morning five trips originate at the Severna Park Park and Ride between 6:00 a.m. and 7:00 a.m. They operate express to the Harry S. Truman Park and Ride in Parole, and then express to Capitol Hill. Another five trips originate in Annapolis, leaving Rowe Boulevard and Taylor Avenue between 5:10 a.m. and 7:10 a.m., making on-street stops on West Street and Riva Road on the way to the Harry S. Truman Park and Ride, after which the service operates express to Capitol Hill. In the evening the pattern is reversed, with a total of ten departures from Union Station between 12:05 p.m. and 6:00 p.m. Three of them make stops at Davidsonville Park and Ride, all of them stop at the Harry S. Truman Park and Ride, seven make on-street stops on West Street, and seven continue on to the Severna Park Park and Ride. The service is operated under contract by Dillon's Bus service. All fares are MTA Commuter Zone 3. The Transit Link Card is available offering unlimited use of the commuter bus, Metrorail, Metrobus and Ride-On during the indicated month. In addition there are free transfers at the Harry S. Truman Park and Ride lot to eastbound 220 trips. MTA Commuter Route 230 is shown in Figure 4-.

Figure 4-95: MTA Commuter Route 230 – Severna Park and Parole/Annapolis to Washington, D.C.



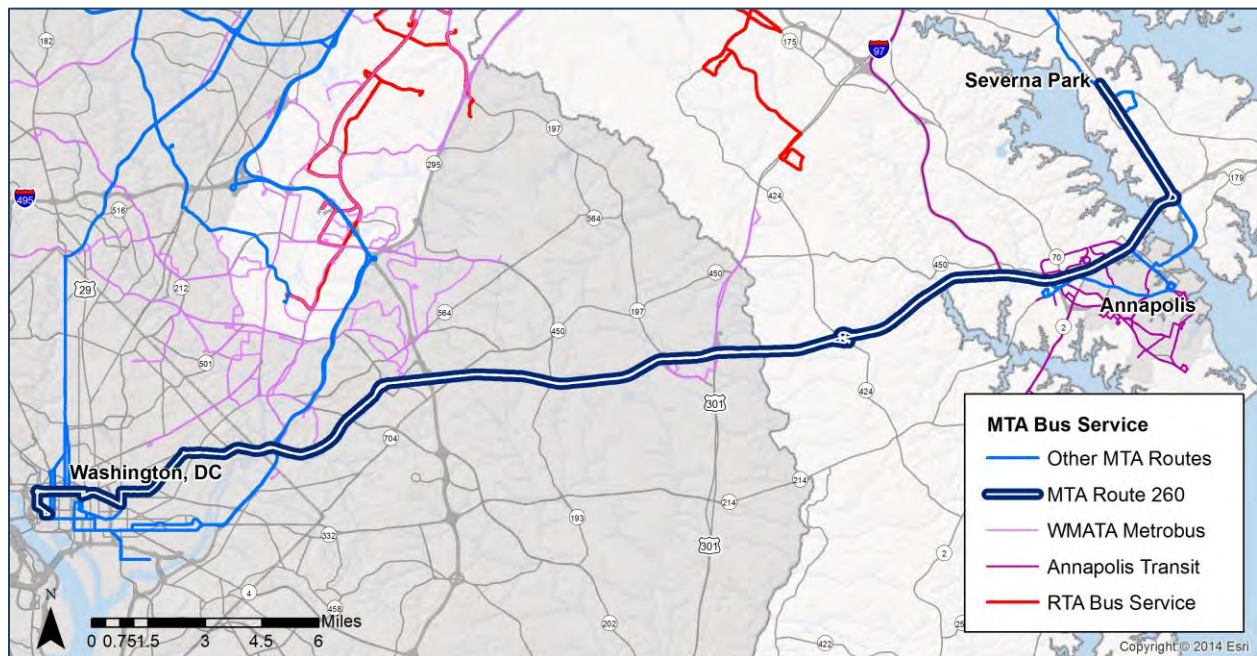
Commuter Route 250: Kent Narrows, Stevensville, and Davidsonville Park and Ride Lots to Downtown Washington, D.C.

This commuter bus service originates in Queen Anne's County, and has one stop in Anne Arundel County, at the Davidsonville Park and Ride lot at U.S. 50 and MD 424. The service is weekday peak hours only, with six inbound trips departing Davidsonville between 5:20 a.m. and 7:26 a.m. Six afternoon return trips leave Union Station between 3:16 p.m. and 5:20 p.m. The service is operated under contract by Dillon's Bus Service, Inc. Fares from Davidsonville are MTA Commuter Zone 3 fares, with a base one-way cash fare of \$5.00, with senior/disability fares, ten-trip tickets and monthly passes available. MTA Commuter Route 250 is shown in Figure 4-93.

Figure 4-936: MTA Commuter Route 250 – Kent Narrows to Washington, D.C.**Commuter Route 260: Severna Park and Davidsonville to Washington, D.C.**

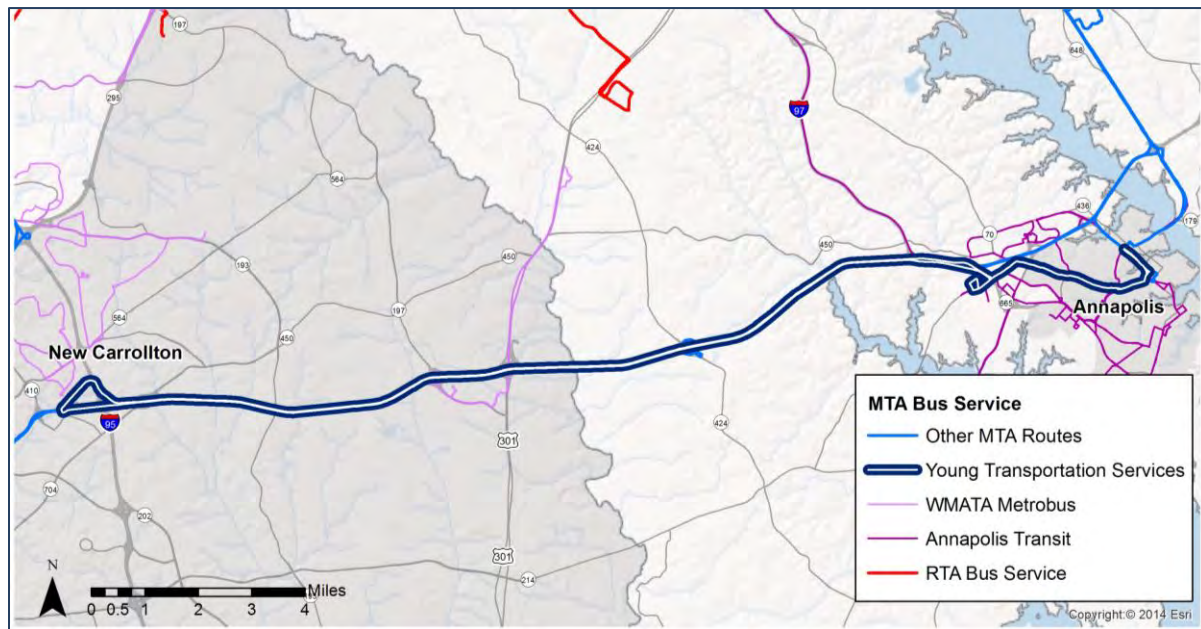
Anne Arundel County is also served by another MTA Commuter Bus route that originates at the Severna Park Park and Ride, stops at the Davidsonville Park and Ride, and continues to K Street in downtown Washington, D.C. The service is weekday only, peak hour with six inbound trips between 5:10 a.m. and 7:40 a.m., and outbound trips in the afternoon between 3:15 p.m. and 5:45 p.m. The service is operated under contract by Dillon's Bus Service, Inc. Fares from both Anne Arundel County stops are MTA Commuter Zone 3 fares, with a base one-way cash fare of \$5.00, with senior/disability fares, ten-trip tickets and monthly passes available. The Transit Link Card is available offering unlimited use of the commuter bus, Metrorail, Metrobus and Ride-On during the indicated month. In addition there are free transfers at the Davidsonville Park and Ride lot to eastbound Route 250 trips headed for Kent Island. MTA Commuter Route 260 is shown in Figure 4-94.

Figure 4-947: MTA Commuter Route 260 – Severna Park and Davidsonville to Washington, D.C.



Commuter Route 291: New Carrollton to Annapolis (Young Transportation Services)

In addition to the MTA commuter bus service, Young Transportation Services, a private for-profit firm, operates the daily commuter service between New Carrollton Metrorail and Annapolis with no state, federal or local subsidy. Figure 4-95 presents the route. Weekday service includes five a.m. roundtrips and four p.m. roundtrips, with three a.m. and four p.m. trips on Saturday and two a.m. and three p.m. trips on Sunday. There are 15 potential Annapolis stops that include Taylor Avenue, downtown, West Street, Parole, the Anne Arundel Medical Center, Westfield Mall and the Harry S. Truman Park and Ride. An intermediate stop is made at the Davidsonville Park and Ride. Fares are based on a \$10 one-way adult fare, Annapolis to New Carrollton, with an \$8 Senior fare, \$6 for children over 5 and \$3 for those under 5. A ten-trip ticket is \$100 (\$80 for seniors). The fares are somewhat lower from Davidsonville, with the base cash fare one-way of \$7, a \$6 senior fare, the same fares for children, a \$70 ten-ride ticket (\$60 for seniors). Young Transportation Services (Route 921) is shown in Figure 4-95.

Figure 4-958: YTS Route 921 Annapolis to New Carrollton Metrorail Station

MTA Light Rail Service

MTA operates light rail service into the study area on two north-south lines that link the northern suburbs of Baltimore, downtown, and portions of Anne Arundel County (there is no light rail service in Howard County). These two lines share tracks through much of their length, but are split at both the north and south ends. One of the lines connects Hunt Valley and BWI Marshall Airport, with stops in Anne Arundel County at Nursery Road, North Linthicum, Linthicum, the BWI Business District, and BWI Marshall Airport. The other line connects Timonium with Cromwell-Glen Burnie, with stops in Anne Arundel County at Ferndale and Cromwell in Glen Burnie. Table 4-46 summarizes the service levels, parking and connecting bus transit services at each station on these routes.

Table 4-46: MTA Light Rail Service in Central Maryland

Light Rail - Anne Arundel County Stations						
Station Name	Headway	Location	Number of Parking Spaces	Connecting Bus Service		
				MTA Route Number	RTA Route Number	WMATA Route Number
Hunt Valley-BWI Marshall Airport Route						
Nursery Road	<u>Weekdays AM and PM:</u> 20 minutes <u>Weekend Midday, PM:</u> 30 minutes	6852 Baltimore Annapolis Boulevard Linthicum Heights, MD 21090	35 spaces	17	None	None
North Linthicum	<u>Weekdays AM and PM:</u> 20 minutes <u>Weekend Midday, PM:</u> 30 minutes	450 N. Camp Meade Road, Linthicum Heights, MD 21090	324 spaces	None	None	None
Linthicum	<u>Weekdays AM and PM:</u> 20 minutes <u>Weekend Midday, PM:</u> 30 minutes	595 Camp Meade Road, Linthicum Heights, MD 21090	None	None	None	None
BWI Business District	<u>Weekdays AM and PM:</u> 20 minutes <u>Weekend Midday, PM:</u> 30 minutes	678 Elkridge Landing Road, Linthicum Heights, MD 21090	34 spaces	17, 99, Express BusLink 107	501/Silver	B30
BWI Marshall Airport	<u>Weekdays AM and PM:</u> 20 minutes <u>Weekend Midday, PM:</u> 30 minutes	BWI Marshall Airport, Baltimore, MD 21240-0766	No Light Rail Parking	17, 99, Express BusLink 107, 201	501/Silver	B-30

Light Rail - Anne Arundel County Stations						
Station Name	Headway	Location	Number of Parking Spaces	Connecting Bus Service		
				MTA Route Number	RTA Route Number	WMATA Route Number
Timonium-Cromwell/Glen Burnie Route						
Ferndale	<u>Weekdays AM and PM:</u> 20 minutes <u>Weekend Midday, PM:</u> 30 minutes	10 Broadview Boulevard, Glen Burnie, MD 21061	None	None	None	None
Cromwell/Glen Burnie	<u>Weekdays AM and PM:</u> 20 minutes <u>Weekend Midday, PM:</u> 30 minutes	7378 Baltimore Annapolis Boulevard, Glen Burnie, MD 21061	765 spaces	14	201/J	None

MARC Commuter Rail Service

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 Penn Line services share the electrified Northeast Corridor tracks with Amtrak, with stops in the study area at the BWI MARC/Amtrak station and Odenton, both of which have very large commuter parking lots. It provides significant capacity with 28 daily (weekday) trains scheduled each way, with a higher level of frequency in the morning headed toward Washington, D.C. and a similar higher level in the evening headed away from Washington, D.C. The Penn Line also offers weekend service.

The Camden Line also links Washington, D.C., and Baltimore, but its terminus in Baltimore is Camden station rather than Penn Station. The MARC services also share the tracks with CSX freight services. Stations in the study area include Dorsey, Jessup, Savage and Laurel Park—they are all on the Howard/Anne Arundel County line. In the portion of Prince George’s County served by the RTA Camden line trains also stop at Laurel and Muirkirk stations. Compared to the Penn line, frequencies are lower, with weekday service only. In the morning there are six southbound trains headed for Washington and three northbound, with the pattern reversed in the evening. There are no mid-day or weekend trains.

Table 4-47 summarizes the station locations, level of service, available parking and bus transit connections at each of the MARC stations in the study area.

Table 4-47: MARC Service in Central Maryland

MARC - Anne Arundel County Stations						
Station Name	Number of Trips	Location	Number of Parking Spaces	Connecting Bus Service		
				MTA Route Number	RTA Route Number	WMATA Route Number
Penn Line- Anne Arundel County						
BWI MARC/Amtrak	<u>AM</u> 11 Northbound, 15 Southbound <u>Midday</u> 4 Northbound, 5 Southbound <u>PM</u> 13 Northbound, 8 Southbound	2 Amtrak Way, Linthicum, MD 21240	3,200 spaces	201 Commuter, 17	501/Silver	B30
Odenton	<u>AM</u> 11 Northbound, 15 Southbound <u>Midday</u> 4 Northbound, 5 Southbound <u>PM</u> 13 Northbound, 8 Southbound	1400 Odenton Road, Odenton, MD 21113	1,977 spaces	None	504 202K	None
Camden Line – Anne Arundel/Howard County Stations						
Dorsey	Weekdays only <u>AM</u> 3 Northbound, 6 Southbound <u>Midday</u> None <u>PM</u> 6 Northbound, 3 Southbound	7000 Deerpath Road at MD 100, Elkridge, MD 21075	802 spaces	201 Commuter	501/Silver 409/Purple	None

MARC - Anne Arundel County Stations						
Station Name	Number of Trips	Location	Number of Parking Spaces	Connecting Bus Service		
				MTA Route Number	RTA Route Number	WMATA Route Number
Jessup	Weekdays only <u>AM</u> 3 Northbound, 6 Southbound, <u>Midday</u> None <u>PM</u> 6 Northbound, 3 Southbound	8 Old Jessup Road, Jessup, MD 20794	75 spaces	None	None	None
Savage	Weekdays only <u>AM</u> 3 Northbound, 6 Southbound <u>Midday</u> None <u>PM</u> 6 Northbound, 3 Southbound	9009 Dorsey Run Road, Annapolis Junction, MD 20710	914 spaces	None	501/Silver	None
Laurel Park	Weekdays only <u>AM</u> 3 Northbound, 6 Southbound <u>Midday</u> None <u>PM</u> 6 Northbound, 3 Southbound	Laurel Racetrack Road, Laurel, MD 20725	300 spaces	None	502/B	None

MARC - Prince George's County Stations						
Station Name	Headway	Location	Number of Parking Spaces	Connecting Bus Service		
				MTA Route Number	RTA Route Number	WMATA Route Number
Laurel	Weekday only <u>AM</u> 3 Northbound, 6 Southbound <u>Midday</u> None <u>PM</u> 6 Northbound, 3 Southbound	22 Main Street, Laurel, MD 20707	396 spaces	None	409/Purple	89M, 87
Muirkirk	Weekday only <u>AM</u> 3 Northbound, 6 Southbound <u>Midday</u> None <u>PM</u> 6 Northbound, 3 Southbound	7012-B Muirkirk Road, Beltsville, MD 20705	650 spaces	None	302/G	None

Washington Metropolitan Area Transit Authority (WMATA)

WMATA is the regional transit service provider for the Washington area, and neither Howard 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 there are portions of the RTA study area in northern Prince George's County that are served by WMATA and Prince George's own county system, The Bus. However, many of these routes do not provide transfer opportunities with the RTA route except indirectly as they both serve the same Metrorail stations or transfer points. Several of the Metrobus routes do offer service in or to/from the City of Laurel in Prince George's County, and are potential alternatives services or transfer opportunities for RTA riders.

These include the WMATA Metrobus Routes 89 and 89M which serve Laurel, linking it with Greenbelt Metrorail station via Route 1, providing coverage on many of the same streets in Laurel served by the RTA. Metrobus Route 87 also serves Laurel, providing express bus service to New Carrollton Metrorail Station via the Baltimore-Washington Parkway and I-95/495. Finally, Metrobus Route Z7 links Laurel with Burtonsville, in Montgomery County, and then it travels down Route 29 to the Silver Spring Metrorail Station. Schedule changes resulting from FY 2018 WMATA budget resulted in a reduction in frequency to 35 minutes on the entire route. There are six southbound trips in the morning and three in the afternoon, and two northbound a.m. and six p.m. northbound trips. Service is weekday only.

In addition, there are two WMATA routes that extend into Anne Arundel County. The Metrobus B-30 route links the Greenbelt Metrorail station with BWI Marshall Airport and the BWI Business District Light Rail Station. The WMATA FY 2018 budget reduced service on this route to hourly service, 6:00 a.m. to 10:30 p.m., weekdays only. The fare on the B30 is \$7.50 (or \$3.75 for seniors and persons with disabilities). In addition, Anne Arundel County is served by Metrobus B-29 which offers peak hour express service from the Crofton Country Club Park and Ride Lot to Bowie and New Carrollton Metrorail Station. Table 4-48 provides more information on these WMATA services.

Table 4-48: Key WMATA Services

Route	Key Stops	Number of trips	Headway	Span	RTA Route Number	Transfer
89/89M: Laurel Line	South Laurel Park and Ride Lot (89M), Towne Centre Shopping Center (89M), Laurel Plaza, Laurel Shopping Center, Laurel Centre Mall, Laurel Lakes Shopping Center, Konterra, Beltsville, Greenbelt Metrorail	Weekdays Only <u>Southbound</u> AM: 7 trips Midday: 6 trips (89M) PM: 9 Trips (89) <u>Northbound</u> AM: 5 a.m. trips (89) Midday: 6 trips (89M) PM: 9 trips	<u>AM</u> 30-45 minutes <u>Midday</u> 60 minutes <u>PM</u> 50 minutes <u>Late PM</u> 60 minutes	5:45 a.m. to 11:31 p.m.	302/G, 301/A, 409/Purple, 502/B, 503/E	Laurel Centre Mall, all shared stops, Greenbelt Metro
87: Laurel Express	Laurel/Rt. 1 and Main St., Middletowne Apartments, Laurel Shopping Center, Laurel Centre Mall, Laurel Lakes Shopping Center, South Laurel Park and Ride Lot, Greenbelt Metrorail Station, New Carrollton Metrorail Station	Weekdays only <u>Southbound</u> 9 a.m. and 6 p.m. <u>Northbound</u> 6 a.m. and 11 p.m.	<u>AM and PM</u> 30 minutes	<u>AM peak</u> 4:46 a.m. - 8:25 a.m. <u>PM peak</u> 3:10 p.m.- to 7:05 p.m.	302/G, 301/A, 409/Purple, 502/B, 503/E	Towne Centre at Laurel, all shared stops, Greenbelt Metro
B-30: BWI Marshall	Greenbelt Metro Station, BWI Marshall Airport, BWI Business District Light Rail Station	Weekdays <u>Northbound</u> 6 a.m. and 10 p.m. <u>Southbound</u> 6 a.m. and 10 p.m.	35-40 minutes	6:10 a.m. to 11:19 p.m.	501/Silver	BWI Marshall Airport

Route	Key Stops	Number of trips	Headway	Span	RTA Route Number	Transfer
B-29: Crofton- New Carrollton	Crofton Country Club Park and Ride Lot, Gateway Center, Bowie, Covington, Bowie Town Center, Bowie Park and Ride Lot, New Carrollton Metrorail Station	Weekdays only <u>Westbound</u> 4 a.m. and 6 p.m. <u>Eastbound</u> 2 a.m. and 8 p.m.	<u>AM peak</u> 40 minutes <u>PM peak</u> 30 minutes No midday service	6 a.m. to 8:12 a.m. and 4:15 p.m. to 10:18 p.m.	None	
Z7: Laurel- Burtonsville Express Line	South Laurel Park and Ride Lot, Towne Centre at Laurel, Laurel Regional Hospital, Maryland 95 Corporate Park, Laurel Employment Park, Burtonsville Crossing Park and Ride Lot, Paul S. Sarbanes Transit Center (Silver Spring Metrorail)	Weekdays only <u>Southbound</u> 6 a.m. and 3 p.m. <u>Northbound</u> 2 AM trips and 6 PM trips	<u>AM and PM peak</u> 40 minutes	5:00 a.m. to 8:58 a.m. and 3:22 p.m. to 5:54 p.m.	302/G, 301/A, 409/Purple, 502/B, 503/E	Towne Centre at Laurel

OTHER AREA TRANSPORTATION PROVIDERS

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. (<http://locations.greyhound.com/bus-routes/all-destinations/laurel/md>)

Amtrak

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>)

BWI Marshall Airport

Baltimore Washington International Marshall Airport in Linthicum, Maryland, offers both domestic and international flights. Ground transportation options for BWI Marshall Airport includes 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 RTA, MTA Commuter Bus Route 201. (<http://www.bwiairport.com/en/travel/ground-transportation>)

Taxi and Private Car Service

Central Maryland is served by several taxi and private transportation services. The following providers serve Central Maryland. (http://www.thearcofpgc.org/resources_transportation_arc_prince_georges_maryland.html)

- AA County Cab (Howard, Anne Arundel, Prince George's)
- A Absolute Airport Taxi and Sedan (Howard, Anne Arundel, Prince George's)
- All American Ambulance Transport (Anne Arundel, Prince George's)
- American Limousines (Howard)
- Anne Arundel Taxi Inc. (Anne Arundel)
- Associated Cabs (Glen Burnie Taxicab Co.) (Howard, Anne Arundel, Prince George's)
- Bayshore Taxi (Anne Arundel)
- Beltway Transportation Service (Howard, Anne Arundel, Prince George's)
- BWI Airport Taxi (Howard, Anne Arundel, Prince George's)
- Carroll Cab (Howard, Anne Arundel, Prince George's)
- Elk Cab (Howard, Anne Arundel, Prince George's)
- Independent Taxi Association Inc. (Howard, Prince George's)
- Jeff's Transportation (Howard, Anne Arundel, Prince George's)
- Mini Star Cab (Howard)
- Morningstar Transportation (Howard, Anne Arundel, Prince George's)
- Uber – Greater Maryland (Howard, Anne Arundel, Prince George's)
- 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.

National Security Agency (NSA) Transportation Services

NSA Transportation Services runs two in-house shuttles for employees.

Home Life Help Services

Home Life Help Services specialize in wheelchair transport. They provide transportation, for a fee to the general public, primarily for non-emergency medical appointments.

Just 4U Transit, LLC

Just 4U Transit provides accessible door-to-door on-demand transportation for a fee to the general public in Annapolis, Baltimore City, and Anne Arundel, Baltimore, Carroll, Harford, Howard, Montgomery, and Prince George's Counties. Their services are available Monday through Saturday 7:15 a.m. to 5:00 p.m., including holidays.
(<http://just4utransit.com/>)

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, Baltimore City, and Anne Arundel, Baltimore, Carroll, Harford, Howard, Montgomery, and Prince George's Counties.

Para-Med Medical Transportation

Para-Med Medical Transportation provides non-emergency medical transportation to the general public for a fee. Their services are door-through-door. They transport to and from hospitals, nursing homes, rehabilitation centers, cancer centers, dialysis facilities, day care facilities, airports, train stations, schools, work and special events. They offer long distance transport services, and will transport out-of-state. They are open Monday through Saturday from 5:00 a.m. to 8:00 p.m. Sunday service is available with advance notice. They serve Annapolis, Baltimore City, and Anne Arundel, 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 ridesharing 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 Saturday, the shuttle runs from 9:15 p.m. to 11:30 p.m. There are special schedules for Sunday and holidays

(<https://www.bwipartner.org/transportation/millside>).

Annapolis Regional Transportation Management Association (ARTMA)

Founded in 1992, ARTMA is a non-profit member organization that serves as the TMA for southern Anne Arundel County and Annapolis. ARTMA promotes transportation options and transit expansion throughout the county to increase mobility, reduce traffic congestion, and improve air quality. ARTMA members consist largely of businesses, including developers, corporations, commercial property owners, and private and public sector employers. ARTMA provides information and links to available transportation options, including Commuter Connections ridesharing program managed by Metropolitan Washington Council of Governments. The organization is directed by a volunteer Board of Directors.

(<http://www.artma.org/>)

Other 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.

(<http://aahealth.org/programs/uninsured/trans/med-trans>)

The Department of Health contracts out transportation services. They provide rides to methadone treatment centers, one to six days a week; and dialysis three times a week.

- Transportation costs for FY 2016: \$2,396,602.00
- Who is eligible?: Older adults, people with disabilities, people with low incomes, veterans, clients who qualify for Medical Assistance
- Estimated one-way passenger trips provided in FY 2016: 60,880
- Passenger vans: 21 to 25

*Source: MD Human Services Transportation Survey

Anne Arundel County Department of Aging and Disabilities (DOAD)

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, and 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 require 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.

Medical Assistance transportation is provided 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 9:00 a.m. to 5:00 p.m.

- Populations served: Medical assistance recipients
- Service area: Howard County
- Estimated annual people served by agency: 1,300
- Number of people receiving transportation services: 450
- One-way passenger trips in a year: 45,000
- Sedans: 1 to 5
- Minivans: 1 to 5
- Passenger vans: 1 to 5
- Annual estimated transportation costs to agency: \$1,210,000
- Financial sources: Department of Health and Mental Hygiene- \$1,210,000
- Type of transportation provided: Fixed reimbursement rate per trip and mileage determined by contract

*Source: MD Human Services Transportation Survey

Nonprofit Agencies

Active Day of Harford Medical Adult Day Care

Active Day provides adult day care services for older adults and people with disabilities. They provide door-to-door transportation service for clients to medical and recreational destinations.

American Cancer Society

The American Cancer Society 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 age 18 must be accompanied by a legally responsible adult. Four business days advance notice is required.

Angel Wheels to Healing

Angel Wheels to Healing is a non-profit organization that provides non-emergency medical transportation to low-income patients. They provide gas cards, reimbursement for commercial ground transportation and utilize volunteer drivers to assist with medical transportation. Their service areas include Annapolis, and Baltimore City, and Anne Arundel, Baltimore, Carroll, Harford, Howard, Montgomery, and Prince George's Counties.

Arundel Lodge, Inc.

Arundel Lodge, Inc. is a non-profit organization offering multiple services, including residential services, supported employment, and community rehabilitation. They serve adults with emotional or psychiatric disabilities in Anne Arundel County. They own and operate their own vehicles.

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 supported retirement. The Arc provides transportation for clients to their service centers using their own fleet of vehicles and drivers. Transportation expenses for FY 2015 were approximately \$508,500. (<http://www.archoward.org/site/wp-content/uploads/2012/04/FY15-Annual-Report.pdf>)

The Arc of the Central Chesapeake Region

The Arc of the Central Chesapeake Region serves Anne Arundel County 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. (http://www.thearcofpgc.org/adult_transportation_arc_prince_georges_maryland.html)

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.

Care Connection

Care Connection is a privately owned, in-home and onsite psychiatric rehabilitation center. They serve seriously mentally ill adults; provide psychiatric therapy, social services, and vocational training. They have three locations that serve Anne Arundel, Baltimore, Howard, Carroll and Prince George's Counties. Care Connection helps identify and obtain transportation options for clients, reimburses staff for use of personal vehicles, and occasionally uses agency-owned vehicles to transport clients.

(<http://www.mycareconnection.org/index.html>)

Center for Social Change, Inc.

The Center for Social Change is a private non-profit organization that supports children and adults with cognitive disabilities, including autism. They provide residential services, vocational and supported employment, day habilitation and transportation services for most of Maryland.

(<http://www.centerforsocialchange.org>)

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 4:30pm) and weekend transportation shuttle to cultural events throughout Howard County for groups of four or more older adults ages 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 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/>)

Humanim

Humanim provides employment, behavioral health, psychosocial and medical rehabilitation services to older adults, people with disabilities, people with low incomes, and veterans. Their service area covers Howard, Baltimore, Anne Arundel, Carroll and Prince George Counties.

- Number of people served: 4,000 to 5,000
- Number of people receiving transportation services: 250 for day and vocational programs, and programs in the evening and weekends for school and after school.
- One-way passenger trips per year: 80,000. Many clients get 3-4 rides a day as they are also taken to work, work enclaves, and to and from programs.
- Minivans: 1 to 5
- Passenger vans: 11 to 15
- Small buses: 6 to 10
- Annual estimated transportation costs: \$903,567 (FY 2017)
- Financial sources: Received three vans that were 80% funded by MTA through and MTA preventative maintenance grant (80% of \$20,000); and Howard County \$116,000 for employment transportation.
- Type of transportation provided: Provide specialized and employment transportation for clients who reside in Howard County. They have social enterprise businesses providing job training and jobs in several counties other than what they are currently serving with their transportation services. Better county-to-county transportation services would be helpful. Jobs in outlying areas are hard to transport to. They use pickup/drop off points for several geographical areas that are way out.

*Source: MD Human Services Transportation Survey

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 two miles one-way the fare is \$6 round trip. Mileage and fees increase incrementally with a 20 to 35 mile one way trip costing \$35 round trip.

(<http://neighborride.org/wordpress/passengers/frequently-asked-questions/>)

- Populations served: Howard County residents ages 60 and older that are ambulatory
- Service area: Howard County
- Number of people receiving transportation services: 443
- One-way passenger trips per year: 16,500. The average client takes 37 trips per year; the median client trips per year is 14.
- Annual estimated transportation costs: 170,000
- Financial sources: Senior Rides \$33,640; Howard County Community Services Partnership \$44,400; Columbia Association \$10,000; United Way of Central Maryland \$10,000; Community Foundation of Howard County \$11,000
- Type of transportation provided: For local eligible citizens identified through Healthy Howard

*Source: MD Human Services Transportation Survey

Langton Green

Langton Green is a non-profit agency serving over 100 individuals in Anne Arundel County. They offer residential services, supported employment, day habilitation, family and individual support services, community supported living arrangements, and respite services. They provide transportation with their own vehicles and offer training for independent travel. They serve adults with disabilities.

(<http://langtongreen.org/about-us/>)

Omni House Behavioral Health System

The Omni House is a nonprofit mental health clinic, providing psychiatric and rehabilitative services for adults with mental illness. They offer outpatient psychiatric services, residential programs supported living, and day programs. They are based in Glen Burnie. The Omni House owns and operates vehicles. They provide their clients with rides to their day program, medical, and community activities in Anne Arundel County. (<http://omnihouse.org/about/faqs/>)

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. In fiscal year 2014 they provided 13,130 rides. They match volunteer drivers with clients who need transportation. Volunteers use their own vehicles and riders contribute to mileage and/or fuel reimbursement. Volunteers pick up passengers at their front door, drive them to appointments, wait with them, and drive them home again, providing assistance wherever needed. Time commitments range from a few hours to an entire day. Service hours are transferred to “time in the bank,” which volunteers may use when they are in need or donate to seniors to use as “credit in the bank.” Partners in Care has wheelchair accessible buses (funded with Section 5310 funds) for members.

Providence Center

Providence Center is a non-profit agency providing person centered planning, day programs, community inclusion and transportation to adults with cognitive disabilities. They operate a fleet of approximately 50 vans, trucks, and cars, providing transportation Monday through Friday from 6:00 a.m. to 6:00 p.m. They provide transportation to employment, vocational training, and community activities in Anne Arundel County, and to parts of Prince George’s and Baltimore Counties. Their 2015 annual report stated that 17% of expenditures were for transportation (approximately \$1,696,072). (<http://www.providencecenter.com/services/transportation>). (<http://www.providencecenter.com/wp-content/uploads/2016/09/Providence-Center-AnnualReport2015.pdf>).

Way Station Inc.

Way Station Inc. operates in Howard, Frederick and Washington Counties. In Howard County they offer child and adolescent services, community employment, day psychiatric rehabilitation, residential rehabilitation, supported housing and run an outpatient mental health clinic. In 2005, Way Station served more than 3,500 Howard County citizens, 1,053 of whom were children and adolescents.

Way Station Inc. provides group transportation picking up many clients at their homes and transporting them to day programs during the work week. Individual needs such as grocery shopping and doctor appointments are provided by staff using personal vehicles and/or local taxi service.

(<http://www.waystationinc.org/howard-county/>)

- Approximate annual transportation costs: \$700,000
- Small buses: 11 to 15
- Passenger vans: 26 to 30
- Minivans: 11 to 15
- Sedans: 1 to 5
- One- way passenger trips in a year: about 140,000
- Number of people receiving transportation services: 4,000
- Service area: Frederick, Howard, Washington, and Carroll Counties
- Populations served: Older adults, people with disabilities, people with low incomes, veterans

*Source: MD Human Services Transportation Survey

Winter Growth

Winter Growth provides medical day, respite care, assisted living, and assisted transportation for older adults and adults with disabilities in Howard and Montgomery Counties. Winter Growth's Assisted Transportation drivers provide door-through-door services.

(<http://www.wintergrowthinc.org/about-us/>)

- Populations served: Older adults, people with disabilities, people with low incomes, veterans
- Service area: Howard and Montgomery Counties
- One-way passenger trips in a year: 23,000
- Minivans: 6 to 10
- Small buses: 6 to 10
- Annual estimated transportation costs: \$335,000
- Financial sources: Central Maryland Regional Transit, \$4,000
- Type of transportation provided: Door-through-door

*Source: MD Human Services Transportation Survey

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 vehicles, providing rides for clients to adult day care, medical, recreation and shopping.

(<https://woodsadultdayservices.com/woods-adult-day-services-essential-services/faqs>)

PEDESTRIAN/BICYCLE ACCESS

RTA currently has 852 transit stops throughout its service area. The majority (57%) of stops are in Howard County with 20% in Anne Arundel County and 22% in Prince George's County. Of the 852 transit stops, approximately 8.2% have either seating and/or passenger shelter (which generally includes seating on the inside). Over half (62%) of the bus stops are not connected with a sidewalk.



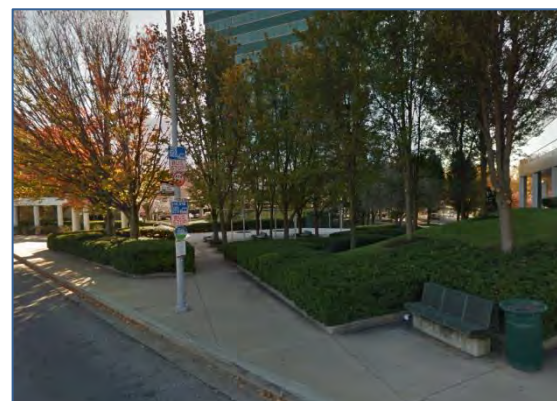


The transit center is located at Columbia Mall outside of Sears's Auto Center. The location has adequate pedestrian connectivity to the mall and space for movement of pedestrians. While there is a parking lane for buses to layover to pick up and drop off riders, there are no assigned bays for the routes which means that riders have to seek out their bus. Passenger amenities include seating, shelters, and localized lighting. Aside from the bus stop signs at the transit center there is little system and route information available.

There are eight RTA Routes that connect at the transit center:

- 401/Green
- 404/Orange
- 405/Yellow
- 406/Red
- 407/Brown
- 408/Gold
- 501/Silver
- 503/E

MTA commuter bus Routes 203, 305, 310, 315, 320, and 325, and MTA Express BusLink 150 stops at Columbia Mall along South Ring Road which is approximately 1,200 feet from the transit center. There is currently a study being conducted to develop a new transit center at Columbia Mall. It is anticipated that the future development of this new transit center will provide more passenger and driver amenities, allow for designated bus bays, improve operations, and provide better connectivity with other operators such as MTA bus service.



Improving the pedestrian and bicyclist infrastructure will help increase the transit mode share and create a safer and more comfortable environment for transit users. Recent studies have been conducted to look at improving pedestrian and bicycle access throughout the region within each county and municipality. These studies include:

Howard County

- 2007 Pedestrian Master Plan – Howard County has been in the process of updating its 2007 Pedestrian Master Plan. The new pedestrian plan, *Walk Howard: Moving Forward*, is in the final review process. The new pedestrian master plan will address necessary improvements in sidewalks, bus stops, and intersection.
- 2016 Bicycle Master Plan – This plan was adopted in 2016 with the purpose of providing a framework to guide Howard County’s future actions to improve conditions for bicyclists and promote bicycling as a safe and convenient travel option.

Anne Arundel County

- 2013 Pedestrian and Bicycle Master Plan – This plan was an update to the county’s 2003 Pedestrian and Bicycle Master Plan. The plan update focused on pedestrian and bicycle improvements within the urbanized area. Recommended improvements included both infrastructure and non-infrastructure improvements.

City of Laurel

- 2016 Bikeway Master Plan – This plan was recently completed and identifies potential new bikeways and makes use of existing roadways in a shared manner to accommodate bicyclists.

EXISTING FLEET

RTA Fleet

Based on an RTA vehicle inventory compiled on August 8, 2017 the overall combined fleet managed by the RTA includes 112 vehicles, of which thirteen are non-revenue vehicles. Table 4-51 provides an overall RTA fleet inventory. As can be seen in the table, twenty-nine vehicles are listed as inactive, including fourteen fixed-route vehicles and fifteen paratransit vehicles.

Current RTA services require a peak pull-out of 35 fixed-route vehicles and eighteen paratransit vehicles. Consequently there is apparently an excessive spare ratio. MTA guidelines call for no more than a 20% spare ratio, but the overall RTA spare ratio appears to be 30% if only the active revenue vehicles are included, and 85% if the inactive vehicles are included. The fact that the spare ratio is well over the guideline limit, and that the RTA did not have a Fleet Management Plan, led to MTA compliance findings regarding fleet management.

As can be seen by user comments, the major service issue for the RTA is unreliable service, and this is largely a result of the fact that of the active revenue fleet, some 46 vehicles, or 46% are eligible for retirement based on their age or mileage. The FTA and MTA have standards for the expected life of a transit vehicle based on the type of vehicle. Another factor contributing to maintenance costs and problems is that the fleet is composed of many types of vehicles ranging from aged MTA transit buses that have retired once already to nearly new hybrid sedans. Also, five vehicles on the inactive list are 2009 Azure hybrid cutaways that have just reached their retirement based on age, but have not come close to reaching the desired mileages due to component failures, lack of manufacturer support, and inability to obtain parts. The miles these vehicles should have provided have been supplied by other vehicles that are well over the mileage standard for retirement, but are still in service.

Finally, fleet management for the RTA is a challenge because of the mixed ownership of the fleet. Portions of the fleet are owned by Howard County, Anne Arundel County, Prince George's County, MTA, Transit Management of Central Maryland (TMCM-the legal name of the contracted RTA), and First Transit (the parent corporation of TMCM. However, the majority of the overall fleet is owned (or leased) by Howard County.

Related to the ownership is the question of service. Although the RTA fleet inventory assigns vehicles to a particular type and jurisdiction of service, it is clear even from the assignments (in the inventory) that vehicles are not operated in completely separate sub-fleets, or the relationship between ownership and vehicle requirements for the jointly funded regional services. For example, Anne Arundel County only owns two vehicles (which are used on Anne Arundel fixed-routes), while six vehicles owned by TMCM are also assigned to Anne Arundel fixed-route services. Also, because of the condition of the fleet, it is likely that any or all operating vehicles are assigned based on daily need, rather than based on ownership. If the

fleet is viewed as regional, and was owned by a regional entity, this would not be an issue. However, when a vehicle is due for replacement, but is owned by a particular jurisdiction or entity there are questions about the responsibility for replacement if it has been consumed in regional service. Currently Howard County has requested capital contributions from the other jurisdictions in proportion to their service hours to fund replacements, but in FY 2017 all replacements were funded by Howard County.

As a consequence of the findings of the MTA compliance review of Howard County, the MTA commissioned the development of a Fleet Management Plan for Howard County. From the MTA perspective the RTA is not a grant recipient, but federal/state grants flow to the individual jurisdictions who then fund the operation of services by the RTA. For that reason, the overall fleet inventory has been separated by ownership in the following tables.

Table 4-51: Overall RTA Fleet Inventory

Status		Fleet Number	Model Year	Vehicle Make	Service Type	Owner	Engine	Length	Current Life Miles as of 7/1/17	Fiscal Year Replacement
RTA Fixed-Route Active										
Active	1	9520	2008	Gillig Hybrid	HCFR	HC/HC	Cummins	35	511,044	2020
Active	2	9521	2008	Gillig Hybrid	HCFR	HC/HC	Cummins	35	389,206	2020
Active	3	9525	2009	Gillig Hybrid	HCFR	HC/HC	Cummins	35	388,941	2021
Active	4	9534	2011	Gillig Hybrid	HCFR	HC/HC	Cummins	35	412,580	2023
Active	5	9535	2011	Gillig Hybrid	HCFR	HC/HC	Cummins	35	405,468	2023
Active	6	9536	2011	Gillig Hybrid	HCFR	HC/HC	Cummins	35	307,275	2023
Active	7	9526	2010	International/ Eldorado	HCFR	HC/HC	International	32	409,794	2018
Active	8	9527	2010	International/ Eldorado	HCFR	HC/HC	International	32	378,799	2018
Active	9	9528	2010	International/ Eldorado	HCFR	HC/HC	International	32	354,228	2018
Active	10	9529	2010	International/ Eldorado	HCFR	HC/HC	International	32	342,512	2018
Active	11	9530	2010	International/ Eldorado	HCFR	HC/HC	International	32	414,620	2018
Active	12	9531	2010	International/ Eldorado	HCFR	HC/HC	International	32	352,707	2018
Active	13	9532	2010	International/ Eldorado	HCFR	HC/HC	International	32	362,120	2018
Active	14	9533	2010	International/ Eldorado	HCFR	HC/HC	International	32	355,850	2018
Active	15	9538	2013	International/ Eldorado	HCFR	HC/HC	International	32	270,079	2021

Status		Fleet Number	Model Year	Vehicle Make	Service Type	Owner	Engine	Length	Current Life Miles as of 7/1/17	Fiscal Year Replacement
Active	16	9539	2013	International/ Eldorado	HCFR	HC/HC	International	32	267,275	2021
Active	17	9540	2013	International/ Eldorado	HCFR	HC/HC	International	32	168,952	2021
Active	18	9541	2013	International/ Eldorado	HCFR	HC/HC	International	32	186,219	2021
Active	19	9542	2013	International/ Eldorado	HCFR	HC/HC	International	32	181,330	2021
Active	20	9544	2002	Gillig	AAFR	TMCM	Cummins	30	404,563	2017
Active	21	9545	2002	Gillig	AAFR	TMCM	Cummins	30	457,267	2017
Active	22	9546	2002	Gillig	AAFR	TMCM	Cummins	30	415,162	2017
Active	23	9547	2002	Gillig	AAFR	TMCM	Cummins	30	406,188	2017
Active	24	9548	2002	Gillig	AAFR	TMCM	Cummins	30	454,658	2017
Active	25	9549	2002	Gillig	AAFR	TMCM	Cummins	30	402,231	
Active	26	8902	1999	NABI	HCFR	HC/HC	Cummins	40	527,516	2016
Active	27	8903	1999	NABI	HCFR	HC/HC	Cummins	40	402,332	2016
Active	28	8907	2000	NABI	HCFR	MTA	Cummins	40	285,179	2016
Active	29	8908	2000	NABI	HCFR	MTA	Cummins	40	285,179	2016
Active	30	8909	2000	NABI	HCFR	MTA	Cummins	40	285,179	2016
Active	31	8910	2000	NABI	HCFR	MTA	Cummins	40	285,179	2016
Active	32	8911	2000	NABI	HCFR	MTA	Cummins	40	285,179	2016
Active	33	9710	2010	International	AAFR	AA	International	32	190,289	2018
Active	34	9711	2010	International	AAFR	AA	International	32	162,750	2018
Active	35	7005	2006	Thomas	CARFR	PG	Mercedes	30	314,935	2016
Active	36	7007	2006	Thomas	CARFR	PG	Mercedes	30	315,166	2016
Active	37	7008	2006	Thomas	CARFR	PG	Mercedes	30	246,215	2016
Active	38	7010	2006	Thomas	CARFR	PG	Mercedes	30	233,636	2016

Status		Fleet Number	Model Year	Vehicle Make	Service Type	Owner	Engine	Length	Current Life Miles as of 7/1/17	Fiscal Year Replacement
Active	39	7011	2006	Thomas	CARFR	PG	Mercedes	30	223,297	2016
Active	40	9550	2002	Gillig	CARFR	HC/HC	Cummins	35	547946	2017
Active	41	9551	2002	Gillig	CARFR	HC/HC	Cummins	35	644954	2017
Active	42	9552	2002	Gillig	CARFR	HC/HC	Cummins	35	565667	2017
Active	43	9553	2002	Gillig	CARFR	HC/HC	Cummins	35	587,665	2017
Active	44	9554	2002	Gillig	CARFR	HC/HC	Cummins	35	542,439	2017
Active	45	9703	2004	Chevy C5500/ Eldorado 290 AeroElite	CARFR	HC/HC	Duramax	35	380,693	2012
Active	46	1701	2016	BYD	HCFR	HC/HC	N/A	35	563	2029
Active	47	1702	2016	BYD	HCFR	HC/HC	N/A	35	431	2029
Active	48	1703	2016	BYD	HCFR	HC/HC	N/A	35	693	2029
RTA Fixed-Route Inactive										
Inactive	1	7009	2006	Thomas	CARFR	HC/HC	Mercedes	30	191,894	2016
Inactive	2	7012	2006	Thomas	CARFR	HC/HC	Mercedes	30	263,044	2016
Inactive	3	8901	1999	NABI	HCFR	MTA	Cummins	40	432,971	2016
Inactive	4	8900	2000	NABI	HCFR	MTA	Cummins	40	416,226	2016
Inactive	5	9706	2009	International 3200 Champion	CARFR	MTA/HC	International	32	331,875	2017
Inactive	6	9707	2009	International 3200 Champion	CARFR	MTA/HC	International	32	262,100	2017
Inactive	7	7003	2006	Thomas	CARFR	HC/HC	Mercedes	30	288,484	2016
Inactive	8	7002	2006	Thomas	CARFR	HC/HC	Mercedes	30	221,240	2016
Inactive	9	7004	2006	Thomas	CARFR	HC/HC	Mercedes	30	224,128	2016
Inactive	10	9515	2006	Freightliner/ Eldorado	HCFR	HC/HC	Caterpillar	32	264,227	2016

Status		Fleet Number	Model Year	Vehicle Make	Service Type	Owner	Engine	Length	Current Life Miles as of 7/1/17	Fiscal Year Replacement
Inactive	11	9537	2013	International/ Eldorado	HCFR	HC/HC	International	32	215,957	2021
Inactive	12	7001	2006	Thomas	CARFR	HC/HC	Mercedes	30	216,419	2016
Inactive	13	7006	2006	Thomas	CARFR	HC/HC	Mercedes	30	260,930	2016
Inactive	14	9708	2009	International 3200 Champion	HCFR	HC/HC	International	32	341,165	2017
RTA Paratransit Active										
Active	1	8	2014	Ford Fusion Hybrid	HCPT	HC/FSL	Ford	16	139,264	2019
Active	2	9	2014	Ford Fusion Hybrid	HCPT	HC/FSL	Ford	16	149,658	2019
Active	3	10	2014	Ford Fusion Hybrid	HCPT	HC/FSL	Ford	16	129,890	2019
Active	4	11	2014	Ford Fusion Hybrid	HCPT	HC/FSL	Ford	16	143,508	2019
Active	5	12	2015	Ford Fusion Hybrid	HCPT	HC/FSL	Ford	16	93,898	2020
Active	6	13	2015	Ford Fusion Hybrid	HCPT	HC/FSL	Ford	16	81,138	2020
Active	7	14	2015	Ford Fusion Hybrid	HCPT	HC/FSL	Ford	16	78,315	2020
Active	8	9543	2014	International/ Eldorado	HCPT	HC/HC	International	32	180,174	2022
Active	9	200	2014	Ford Phoenix	HCPT	HC/HC	Ford	26	169,324	2020
Active	10	201	2014	Ford Phoenix	HCPT	HC/HC	Ford	26	198,948	2020
Active	11	202	2014	Ford Phoenix	HCPT	HC/HC	Ford	26	178,115	2020
Active	12	203	2014	Ford Phoenix	HCPT	HC/HC	Ford	26	174,454	2020
Active	13	204	2014	Ford Phoenix	HCPT	HC/HC	Ford	26	193,668	2020
Active	14	205	2015	Ford Phoenix	HCPT	HC/HC	Ford	26	94244	2021

Status		Fleet Number	Model Year	Vehicle Make	Service Type	Owner	Engine	Length	Current Life Miles as of 7/1/17	Fiscal Year Replacement
Active	15	206	2015	Ford Phoenix	HCPT	HC/HC	Ford	26	86053	2021
Active	16	207	2015	Ford Phoenix	HCPT	HC/HC	Ford	26	95573	2021
Active	17	208	2015	Ford Phoenix	HCPT	HC/HC	Ford	26	85735	2021
Active	18	209	2015	Ford Phoenix	HCPT	HC/HC	Ford	26	94,900	2021
Active	19	210	2015	Ford Phoenix	HCPT	HC/HC	Ford	26	78,245	2021
Active	20	211	2015	Ford Phoenix	HCPT	HC/HC	Ford	26	83,426	2021
Active	21	212	2015	Ford Phoenix	HCPT	HC/HC	Ford	26	82,053	2021
RTA Paratransit Inactive										
Inactive	1	102	2009	Azure Hybrid	HCPT	HC/HC	Chevy	27	50,738	2015
Inactive	2	106	2009	Azure Hybrid	HCPT	HC/FSL	Chevy	27	98,761	2015
Inactive	3	28	2006	Ford E450/ Startrans	HCPT	HC/FSL	Ford	25	284,606	2014
Inactive	4	100	2009	Azure Hybrid	HCPT	HC/FSL	Chevy	27	91,582	2015
Inactive	5	101	2009	Azure Hybrid	HCPT	HC/FSL	Chevy	27	99,021	2015
Inactive	6	9705	2001	Ford E450 Superduel	CARPT		Ford	25		2012
Inactive	7	15	2015	Ford Fusion Hybrid	HCPT	HC/FSL	Ford	16	5,207	2020
Inactive	8	105	2009	Azure Hybrid	HCPT	HC/FSL	Chevy	27	120,600	2015
Inactive	9	7	2007	FORD E450	HCPT	HC/HC	Ford	24	283,990	2013
Inactive	10	22	2009	Ford E450/ Coach Bus	HCPT	HC/FSL	Ford	25	344,228	2015
Inactive	11	9519	2007	Ford E450/ Eldorado/ 240 Aerotech	HCPT	HC/HC	Cummins	25	387,166	2013
Inactive	12	6	2007	Ford E450	HCPT	HC/HC	Ford	24	332,950	2013

Status		Fleet Number	Model Year	Vehicle Make	Service Type	Owner	Engine	Length	Current Life Miles as of 7/1/17	Fiscal Year Replacement
Inactive	13	9516	2007	Ford E450/ Eldorado/ 240 Aerotech	HCPT	HC/HC	Ford	25	314,073	2014
Inactive	14	9517	2007	Ford E450/ Eldorado/240 Aerotech	HCPT	HC/HC	Ford	25	284,806	2014
Inactive	15	9518	2007	Ford E450/ Eldorado/240 Aerotech	HCPT	HC/HC	Ford	25	319,076	2014
RTA Supervisor Active										
Active	1	S10	2005	Kia Sedona	Service	TMCM	Kia	15	133,603	TBD
Active	2	S11	2000	Dodge caravan	Service	TMCM	Dodge	15	121,319	TBD
Active	3	S1	2014	Chevy Malibu	Service	First	Chevy	15	17,873	TBD
Active	4	S2	2014	Chevy Malibu	Service	First	Chevy	15	15,546	TBD
Active	5	S3	2014	Chevy Malibu	Service	First	Chevy	15	14,133	TBD
Active	6	S4	2004	Ford Explorer	Service	HC	Ford	15	108,000	TBD
Active	7	M1	2015	Ford	Service	First	Ford	20	9,955	TBD
Active	8	M2	1998	Chevy	Service	HC	Chevy	20	92,590	TBD
Active	9	M3	2017	Chevy	Service	HC	Chevy	20	1,500	TBD
Active	10	23	2009	Ford E450/ Coach Bus	Service	HC/FSL	Ford	25	345,349	2015
First Transit Leased Vehicles										
Active	1	S7		Ford Escape		First				
Active	2	S8		Ford Taurus		First				
Active	3	S9		Ford Escape		First				

Notes on Table 4-51:

HCFR -Howard County Fixed-Route

HCPT - Howard County Paratransit

CARFR-Connect-a-Ride Fixed-Route (series 300 and 500 routes)

AAFR - Anne Arundel Fixed-Route

TMCM-Transit Management of Central Maryland (contractor)

First- First Transit (parent company of TMCM)

HC- Howard County

AA- Anne Arundel County

PG-Prince George's County

MTA-Maryland Transit Administration (state)

FSL- Federal/State/Local

Howard County

Table 4-52 presents the fleet owned by Howard County as of August 30, 2017. There are 82 vehicles, of which four are non-revenue. Twenty-seven are inactive, leaving 51 revenue vehicles. Thirty are assigned to fixed-route service, and 21 to demand-response service (ADA and general paratransit). Because the 503 (connecting Columbia and Laurel) is 90% in Howard County and connects to the Columbia hub, it is effectively a Howard service, and it would raise the peak vehicle requirement (fixed-route) to 23.

For a peak pullout of 23, a 20% spare ratio would call for a fleet of 28 vehicles (rounding up). So the current active fleet of thirty is only slightly in excess of standards—if one assumes that the inactive fleet is taken off the books. Only one of the inactive fleet has a projected replacement year beyond 2017 (2021)—the rest are eligible in 2016 or 2017; that vehicle is a total loss and should be replaced by insurance.

There are seven heavy-duty 30' transit coaches on order for delivery in late fall 2017. Howard County ordered these vehicles under a lease-purchase agreement. One potential strategy for the near term fixed-route fleet would be to dispose of everything on the inactive list except the 2013 International/Eldorado which is not eligible until 2021 (it was in a major accident, and pending resolution regarding repair or replacement), and then use the new buses to replace the two 1999 NABI coaches (leased from MTA, eligible in 2016), the 2004 Chevy C5500/Eldorado 290 AeroElite (eligible in 2012), and four of the n 2002 Gilligs. The remaining Gillig should also be retired, without replacement. This would bring the active fleet (for Howard services) down to 28 for fixed-route, with the next round of eligible replacements would be the eight International/Eldorado medium duty truck buses, which are eligible for replacement in 2018. If possible, replacing them with the same type of vehicle delivered in 2017 would help standardize the fleet both in terms of maintenance and capacity. With no fixed-route vehicles eligible until 2020, capital expenditures in 2019 could focus on expansion vehicles.

With regard to the paratransit fleet, again there are fifteen vehicles on the inactive list, and all but one are eligible for retirement. The one vehicle not eligible until 2020 is a Ford Fusion Hybrid sedan with only 5,207 miles on it, which is totaled and should be replaced by insurance. Going forward there are four sedans eligible in 2019 (or now, based on mileage), eight more vehicles in 2020, and eight in 2021.

Table 4-52: Howard County Fleet Inventory

Status		Fleet Number	Model Year	Vehicle Make	Service Type	Owner	Engine	Length	Current Life Miles as of 7/1/17	Fiscal Year Replacement
RTA Fixed-Route Active										
Active	1	9520	2008	Gillig Hybrid	HCFR	HC/HC	Cummins	35	511,044	2020
Active	2	9521	2008	Gillig Hybrid	HCFR	HC/HC	Cummins	35	389,206	2020
Active	3	9525	2009	Gillig Hybrid	HCFR	HC/HC	Cummins	35	388,941	2021
Active	4	9534	2011	Gillig Hybrid	HCFR	HC/HC	Cummins	35	412,580	2023
Active	5	9535	2011	Gillig Hybrid	HCFR	HC/HC	Cummins	35	405,468	2023
Active	6	9536	2011	Gillig Hybrid	HCFR	HC/HC	Cummins	35	307,275	2023
Active	7	9526	2010	International/ Eldorado	HCFR	HC/HC	International	32	409,794	2018
Active	8	9527	2010	International/ Eldorado	HCFR	HC/HC	International	32	378,799	2018
Active	9	9528	2010	International/ Eldorado	HCFR	HC/HC	International	32	354,228	2018
Active	10	9529	2010	International/ Eldorado	HCFR	HC/HC	International	32	342,512	2018
Active	11	9530	2010	International/ Eldorado	HCFR	HC/HC	International	32	414,620	2018
Active	12	9531	2010	International/ Eldorado	HCFR	HC/HC	International	32	352,707	2018
Active	13	9532	2010	International/ Eldorado	HCFR	HC/HC	International	32	362,120	2018
Active	14	9533	2010	International/ Eldorado	HCFR	HC/HC	International	32	355,850	2018
Active	15	9538	2013	International/ Eldorado	HCFR	HC/HC	International	32	270,079	2021
Active	16	9539	2013	International/ Eldorado	HCFR	HC/HC	International	32	267,275	2021
Active	17	9540	2013	International/ Eldorado	HCFR	HC/HC	International	32	168,952	2021
Active	18	9541	2013	International/ Eldorado	HCFR	HC/HC	International	32	186,219	2021
Active	19	9542	2013	International/ Eldorado	HCFR	HC/HC	International	32	181,330	2021
Active	20	8902	1999	NABI	HCFR	HC/HC	Cummins	40	527,516	2016
Active	21	8903	1999	NABI	HCFR	HC/HC	Cummins	40	402,332	2016
Active	22	9550	2002	Gillig	CARFR	HC/HC	Cummins	35	547,946	2017
Active	23	9551	2002	Gillig	CARFR	HC/HC	Cummins	35	644,954	2017
Active	24	9552	2002	Gillig	CARFR	HC/HC	Cummins	35	565,667	2017
Active	25	9553	2002	Gillig	CARFR	HC/HC	Cummins	35	587,665	2017
Active	26	9554	2002	Gillig	CARFR	HC/HC	Cummins	35	542,439	2017

Status		Fleet Number	Model Year	Vehicle Make	Service Type	Owner	Engine	Length	Current Life Miles as of 7/1/17	Fiscal Year Replacement
Active	27	9703	2004	Chevy C5500/Eldorado 290 AeroElite	CARFR	HC/HC	Duramax	35	380,693	2012
Active	28	1701	2016	BYD	HCFR	HC/HC	N/A	35	563	2029
Active	29	1702	2016	BYD	HCFR	HC/HC	N/A	35	431	2029
Active	30	1703	2016	BYD	HCFR	HC/HC	N/A	35	693	2029
RTA Fixed-Route Inactive										
Inactive	1	7009	2006	Thomas	CARFR	HC/HC	Mercedes	30	191,894	2016
Inactive	2	7012	2006	Thomas	CARFR	HC/HC	Mercedes	30	263,044	2016
Inactive	3	9706	2009	International 3200 Champion	CARFR	MTA/HC	International	32	331,875	2017
Inactive	4	9707	2009	International 3200 Champion	CARFR	MTA/HC	International	32	262,100	2017
Inactive	5	7003	2006	Thomas	CARFR	HC/HC	Mercedes	30	288,484	2016
Inactive	6	7002	2006	Thomas	CARFR	HC/HC	Mercedes	30	221,240	2016
Inactive	7	7004	2006	Thomas	CARFR	HC/HC	Mercedes	30	224,128	2016
Inactive	8	9515	2006	Freightliner/Eldorado	HCFR	HC/HC	Caterpillar	32	264,227	2016
Inactive	9	9537	2013	International/ Eldorado	HCFR	HC/HC	International	32	215,957	2021
Inactive	10	7001	2006	Thomas	CARFR	HC/HC	Mercedes	30	216,419	2016
Inactive	11	7006	2006	Thomas	CARFR	HC/HC	Mercedes	30	260,930	2016
Inactive	12	9708	2009	International 3200 Champion	HCFR	HC/HC	International	32	341,165	2017
RTA Paratransit Active										
Active	1	8	2014	Ford Fusion Hybrid	HCPT	HC/FSL	Ford	16	139,264	2019
Active	2	9	2014	Ford Fusion Hybrid	HCPT	HC/FSL	Ford	16	149,658	2019
Active	3	10	2014	Ford Fusion Hybrid	HCPT	HC/FSL	Ford	16	129,890	2019
Active	4	11	2014	Ford Fusion Hybrid	HCPT	HC/FSL	Ford	16	143,508	2019
Active	5	12	2015	Ford Fusion Hybrid	HCPT	HC/FSL	Ford	16	93,898	2020
Active	6	13	2015	Ford Fusion Hybrid	HCPT	HC/FSL	Ford	16	81,138	2020
Active	7	14	2015	Ford Fusion Hybrid	HCPT	HC/FSL	Ford	16	78,315	2020
Active	8	9543	2014	International/Eldorado	HCPT	HC/HC	International	32	180,174	2022

Status		Fleet Number	Model Year	Vehicle Make	Service Type	Owner	Engine	Length	Current Life Miles as of 7/1/17	Fiscal Year Replacement
Active	9	200	2014	Ford Phoenix	HCPT	HC/HC	Ford	26	169,324	2020
Active	10	201	2014	Ford Phoenix	HCPT	HC/HC	Ford	26	198,948	2020
Active	11	202	2014	Ford Phoenix	HCPT	HC/HC	Ford	26	178,115	2020
Active	12	203	2014	Ford Phoenix	HCPT	HC/HC	Ford	26	174,454	2020
Active	13	204	2014	Ford Phoenix	HCPT	HC/HC	Ford	26	193,668	2020
Active	14	205	2015	Ford Phoenix	HCPT	HC/HC	Ford	26	94244	2021
Active	15	206	2015	Ford Phoenix	HCPT	HC/HC	Ford	26	86053	2021
Active	16	207	2015	Ford Phoenix	HCPT	HC/HC	Ford	26	95573	2021
Active	17	208	2015	Ford Phoenix	HCPT	HC/HC	Ford	26	85735	2021
Active	18	209	2015	Ford Phoenix	HCPT	HC/HC	Ford	26	94,900	2021
Active	19	210	2015	Ford Phoenix	HCPT	HC/HC	Ford	26	78,245	2021
Active	20	211	2015	Ford Phoenix	HCPT	HC/HC	Ford	26	83,426	2021
Active	21	212	2015	Ford Phoenix	HCPT	HC/HC	Ford	26	82,053	2021
RTA Paratransit Inactive										
Inactive	1	102	2009	Azure Hybrid	HCPT	HC/HC	Chevy	27	50,738	2015
Inactive	2	106	2009	Azure Hybrid	HCPT	HC/FSL	Chevy	27	98,761	2015
Inactive	3	28	2006	Ford E450/Startrans	HCPT	HC/FSL	Ford	25	284,606	2014
Inactive	4	100	2009	Azure Hybrid	HCPT	HC/FSL	Chevy	27	91,582	2015
Inactive	5	101	2009	Azure Hybrid	HCPT	HC/FSL	Chevy	27	99,021	2015
Inactive	7	15	2015	Ford Fusion Hybrid	HCPT	HC/FSL	Ford	16	5,207	2020
Inactive	8	105	2009	Azure Hybrid	HCPT	HC/FSL	Chevy	27	120,600	2015
Inactive	9	7	2007	FORD E450	HCPT	HC/HC	Ford	24	283,990	2013
Inactive	10	22	2009	Ford E450/Coach Bus	HCPT	HC/FSL	Ford	25	344,228	2015
Inactive	11	9519	2007	Ford E450/Eldorado/240 Aerotech	HCPT	HC/HC	Cummins	25	387,166	2013
Inactive	12	6	2007	FORD E450	HCPT	HC/HC	Ford	24	332,950	2013
Inactive	13	9516	2007	Ford E450/Eldorado/240 Aerotech	HCPT	HC/HC	Ford	25	314,073	2014
Inactive	14	9517	2007	Ford E450/Eldorado/240 Aerotech	HCPT	HC/HC	Ford	25	284,806	2014
Inactive	15	9518	2007	Ford E450/Eldorado/240	HCPT	HC/HC	Ford	25	319,076	2014

Status		Fleet Number	Model Year	Vehicle Make	Service Type	Owner	Engine	Length	Current Life Miles as of 7/1/17	Fiscal Year Replacement
				Aerotech						
RTA Supervisor Active										
Active	1	S4	2004	Ford Explorer	Service	HC	Ford	15	108,000	TBD
Active	2	M2	1998	Chevy	Service	HC	Chevy	20	92,590	TBD
Active	3	M3	2017	Chevy	Service	HC	Chevy	20	1,500	TBD
Active	4	23	2009	Ford E450/Coach Bus	Service	HC/FSL	Ford	25	345,349	2015

Notes:

HCFR -Howard County Fixed-Route

HCPT - Howard County Paratransit

CARFR-Connect-a-Ride Fixed-Route (series 300 and 500 routes)

HC- Howard County

MTA-Maryland Transit Administration (state)

FSL- Federal, State, Local Funding

Anne Arundel County

Table 4-53 presents the Anne Arundel County owned fleet. The two medium duty buses are eligible for replacement in 2018. RTA assigns an additional six 2002 Gillig transit buses to Anne Arundel fixed-route service. These vehicles are owned by TMCM, and are eligible for replacement. The two RTA routes operated wholly within Anne Arundel, the 201J and the 202K, have a peak bus requirement of five buses, and Anne Arundel is proportionately 82% of the 502 route (3 buses) and 100% of the 504 (3 buses), for an equivalent peak fleet requirement of eleven. With a 20% spare ratio, that would be thirteen buses needed for service. Based on the RTA fleet inventory, the needs for additional vehicles beyond the two owned by the County and the six TMCM vehicles may be met out of the fleet assigned to “Connect-a-Ride” service, which is five vehicles owned by Prince George’s County (eligible in 2016), and five owned by Howard County (eligible in 2017). To summarize, Anne Arundel RTA services should be supported by thirteen vehicles—the county owns two, and all the vehicles assigned to these services are eligible for replacement.

Anne Arundel operates its services for the aging and persons with disabilities separately, and it has a 44 vehicle fleet maintained by the county’s fleet maintenance garage, which is not included in this discussion. ADA services on the Anne Arundel RTA routes are provided by RTA with the overall RTA paratransit fleet, and there are no dedicated paratransit vehicles for this purpose. There is one inactive paratransit vehicle listed as having provided Connect-a-Ride paratransit, so it would seem logical to consider that there is a need for one Anne Arundel RTA ADA paratransit vehicle or its equivalent.

Prince George’s County

As can be seen in Table 4-54, Prince George’s County owns five Thomas small heavy duty coaches operated by the RTA on the 301A and 302G routes, which together have a peak vehicle requirement of five. With an additional spare (one vehicle equals 20%), and another vehicle to support the county’s share of regional routes, the Prince George’s peak fixed route fleet requirement is estimated to be seven vehicles. The five buses owned by the county are all eligible for replacement based on years, and will be eligible shortly based on miles.

Table 4-53: Anne Arundel County Fleet Inventory

Statue		Fleet Number	Model Year	Vehicle Make	Service Type	Owner	Engine	Length	Current Life Miles as of 7/1/17	Fiscal Replacement Year
Active	1	9710	2010	International	AAFR	AA	International	32	190,289	2018
Active	2	9711	2010	International	AAFR	AA	International	32	162,750	2018

Table 4-53: Prince George's County Fleet Inventory

Statue		Fleet Number	Model Year	Vehicle Make	Service Type	Owner	Engine	Length	Current Life Miles as of 7/1/17	Fiscal Year Replacement
Active	1	7005	2006	Thomas	CARFR	PG	Mercedes	30	314,935	2016
Active	2	7007	2006	Thomas	CARFR	PG	Mercedes	30	315,166	2016
Active	3	7008	2006	Thomas	CARFR	PG	Mercedes	30	246,215	2016
Active	4	7010	2006	Thomas	CARFR	PG	Mercedes	30	233,636	2016
Active	5	7011	2006	Thomas	CARFR	PG	Mercedes	30	223,297	2016

Summary of Existing Fleet

The RTA possesses an overly large fleet with many inactive vehicles on the roster which should be eliminated through appropriate disposal procedures. In addition, much of the active fleet is beyond its expected life and should be retired or replaced. Beyond that, if one views the fleet as having three separate components, there is a need for a fleet management plan that provides for an adequate regional fleet and reflects that there are three separate grant applicants. If one examines the Howard County fleet and that county's investment in new vehicles, it is possible that the overage fleet could be substantially reduced within a relatively short time. It is less clear whether or how Anne Arundel and Prince George's Counties will invest in the fleet to support their services, which is a need. All of the vehicles operated on behalf of these jurisdictions are eligible for replacement or will be by 2018.

ORGANIZATION-REGIONAL TRANSPORTATION AGENCY

The organization of the RTA has evolved over a period of 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. As the operation of these services shifted from a private non-profit organization while a regional facility operations facility was planned and built, the goal of a regional transit authority has not been achieved, but elements of a regional entity have been developed.

Currently each of the three participating counties remains the grant subrecipient for state and federal transit funding, and so the legal responsibility for transit rests with the counties, as there is no regional transit authority that is a legal entity. The current organization is defined by a Memorandum of Understanding of the Central Maryland Transportation and Mobility Consortium" (MOU), 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.

As described in the MOU, Howard County, on behalf of the four jurisdictions, has contracted with a third-party private for-profit firm to manage and operate transit services in the region. Howard County is the contract manager. A somewhat unusual aspect of the arrangement is that the contractor has incorporated a for-profit corporation, Transit Management of Central Maryland (TMC), which is a wholly-owned subsidiary of First Transit. The intention was that this organization would take on most of the administration and management of the transit services, with the county staff role reduced to oversight of the funding, contract oversight and compliance.

The MOU creates a commission with representatives of the four jurisdictions to provide policy direction concerning the 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 by-laws that set forth the mission of the commission as determining the mission and purpose of the RTA, reviewing and overseeing the performance of the RTA and the contractor, “ensuring effective organizational planning and adequate financial resources for the RTA, managing those financial resources effectively” while representing the interests of the parties. The commission is charged with annually approving a proposed budget for the RTA, which is then presented to the jurisdictions for their consideration. The MOU also calls for the commission to evaluate options for legislation to create a public transportation authority or similar organization.

For FY 2018 the MOU requires maintenance of effort in transit funding to the level provided in FY 2017, and calls for maintaining at least that level in future years. It does allow each party to independently evaluate purchasing options for “assets for Transit Services” provided under the MOU. The participants can (and do) lease individually-owned transit assets to TCM, and there are provisions for return of assets upon withdrawal or dissolution. The MOU contains a funding schedule setting amounts required from each party to maintain services through FY 2018, but the agreement holds those levels only through the first quarter of FY 2018, with revisions possible for the remainder of the year based on individual operating budgets. The MOU does not set forth the method of allocating costs though revenue is allocated based on hours times the average hourly fare revenue for the individual route.

TCM staff includes a General Manager, two Assistant General Managers, one for Operations and one for Maintenance and a Paratransit Manager. TCM staff provides grants management, planning, and finance functions. Operations staff include dispatch, operations supervision and the operators. Maintenance functions include purchasing and parts and supplies. Marketing and customer service staff also support the RTA.

Each of the jurisdictions has transportation program staff that coordinates with the RTA. On a day-to-day basis, contacts 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 aspects of the organizational structure that must be understood is that there are in reality four jurisdictions that are working together to share a common brand, a single service contractor, and a single maintenance facility. However, there is no legally constituted regional transit authority—each party remains a separate recipient of federal and state funding, each is responsible for compliance, and each has a separate policy board.